

EMU@10

Successes and challenges after ten years of Economic and Monetary Union

EUROPEAN ECONOMY 2 | 2008



The European Economy series contains important reports and communications from the Commission to the Council and the Parliament on the economic situation and developments, such as the *Economic forecasts*, the annual *EU economy review* and the *Public finances in EMU* report.

Subscription terms are shown on the back cover and details on how to obtain the list of sales agents are shown on the inside back cover.

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Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2008

ISBN 978-92-79-08384-6

DOI 10.2765/39971

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Printed in Luxembourg

European Commission

Directorate-General for Economic and Financial Affairs

EMU@10: successes and challenges after 10 years of Economic and Monetary Union

FOREWORD



A full decade after Europe's leaders took the decision to launch the euro, we have good reason to be proud of our single currency. The Economic and Monetary Union and the euro are a major success. For its member countries, EMU has anchored macroeconomic stability, and increased cross border trade, financial integration and investment. For the EU as a whole, the euro is a keystone of further economic integration and a potent symbol of our growing political unity. And for the world, the euro is a major new pillar in the international monetary system and a pole of stability for the global economy. As the euro area enlarges in the coming years, its benefits will increasingly spread to the new EU members that joined in 2004 and 2007.

Yet important work still lies ahead. In the coming decade, we must build on the achievements of the last 10 years, address the remaining shortcomings and prepare for the challenges of the future. Globalisation, ageing and climate change require a more adaptable and dynamic economy. In the 21st century, European citizens demand that economic competitiveness and flexibility be accompanied by greater opportunities and stronger social cohesion.

I believe that there is scope to strengthen the framework of EMU and draw greater benefits from the euro. Sound macroeconomic policies coupled with a targeted agenda of structural reforms are key to meet our goals for growth and social justice. For countries of the euro area, ensuring good economic policies is a matter for common concern. But we cannot rely on market discipline alone. We need to deepen and broaden macroeconomic surveillance in EMU and encourage structural reforms by integrating them into the process of policy coordination. We must become the global political actor that our economic weight and international currency demands. This will only come with a well defined international strategy and a clear voice to present our positions in the global arena. It will require political will and determination to implement this comprehensive agenda. Moreover, the new Lisbon Treaty, once ratified, will increase the capacity for stronger coordination and surveillance of our economic policies.

Building on the policy agenda put forward in the Commission Communication and the extensive analysis presented in this report I intend to launch, in the second half of 2008, a debate on the future of EMU and promote consensus on the building blocks of such an agenda. The conclusions that we draw from this debate will feed into new, operational proposals to be advanced by the European Commission and will shape a longer term policy roadmap that will ensure EMU continues to flourish in the next decade and beyond.

A handwritten signature in black ink, consisting of a stylized 'J' followed by a large, sweeping 'A'.

Joaquín Almunia
Commissioner for Economic and Monetary Affairs

ABBREVIATIONS AND SYMBOLS USED

Member States

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	The Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

EA-15	European Union, Member States having adopted the single currency (BE, DK, DE, EL, ES, FR, IE, IT, CY, LU, MT, NL, AT, PT, FI, SE and UK)
EU-10	European Union Member States that joined the EU on 1 May 2004 (CZ, EE, CY, LT, LV, HU, MT, PL, SI, SK)
EU-15	European Union, 15 Member States before 1 May 2004 (BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE and UK)
EU-15ex5	EU-15 excluding EL, IE, LU, PT and SE
EU-25	European Union, 25 Member States before 1 January 2007
EU-27	European Union, 27 Member States

Currencies

EUR	euro
BGN	New Bulgarian lev
CZK	Czech koruna
DKK	Danish krone
EEK	Estonian kroon
GBP	Pound sterling
HUF	Hungarian forint
JPY	Japanese yen
LTL	Lithuanian litas
LVL	Latvian lats
PLN	New Polish zloty
RON	New Romanian leu
SEK	Swedish krona

SKK	Slovak koruna
USD	US dollar

Other abbreviations

BEPG	Broad Economic Policy Guidelines
CESR	Committee of European Securities Regulators
EA	Euro area
ECB	European Central Bank
ECOFIN	European Council of Economics and Finance Ministers
EDP	Excessive deficit procedure
EMU	Economic and monetary union
ERM II	Exchange Rate Mechanism, mark II
ESCB	European System of Central Banks
Eurostat	Statistical Office of the European Communities
FDI	Foreign direct investment
FSAP	Financial-Services Action Plan
GDP	Gross domestic product
GDPpc	Gross Domestic Product per capita
GLS	Generalised least squares
HICP	Harmonised index of consumer prices
HP	Hodrick-Prescott filter
ICT	Information and communications technology
IP	Industrial Production
MiFID	Market in Financial Instruments Directive
NAWRU	Non accelerating wage inflation rate of unemployment
NEER	Nominal effective exchange rate
NMS	New Member States
OCA	Optimum currency area
R&D	Research and development
RAMS	Recently Acceded Member States
REER	Real effective exchange rate
SGP	Stability and Growth Pact
TFP	Total factor productivity
ULC	Unit labour costs
VA	Value added
VAT	Value added tax

ACKNOWLEDGEMENTS

EMU@10: Successes and challenges after 10 years of Economic and Monetary Union includes the Commission Communication adopted on 7 May 2008 at the initiative of Commissioner Almunia, and the analytical report issued under the responsibility of the Commission Services.

The analytical report was prepared under the responsibility of Klaus Regling, Director General for Economic and Financial Affairs and Marco Buti, Deputy Director General for Economic and Financial Affairs. It was prepared as part of the project EMU@10, with internal and external contributions appearing in the series *European Economy – Economic Papers* alongside the report. The project was managed by a Steering Group consisting of John Berrigan, Marco Buti, Servaas Deroose, Joost Kuhlmann, João Nogueira Martins, István P. Székely, Heliodoro Temprano Arroyo and Paul van den Noord.

Paul van den Noord, Senior Economic Adviser in the Directorate for Economic Studies and Research, was the global editor of the report and Alessandro Turrini, Heliodoro Temprano Arroyo, Michael Thiel, John Berrigan and Joost Kuhlmann were associate editors.

The report has drawn on substantive contributions by Alfonso Arpaia, Stefan Appel, Magnus Astberg, Joaquim Ayuso Casals, Johan Baras, Johan Bendz, Nicolaas Beinema, John Berrigan, Moreno Bertoldi, Carsten Brzeski, Guiseppa Carone, Zdenek Cech, Declan Costello, Antoine Deruennes, Oliver Dieckmann, Adriaan Dierx, Nuria Diez Guardia, Marie Donnay, Björn Döhring, Per Eckefeldt, Roland Eisenberg, Roberta Friz, Olivia Galgau, Christian Gayer, Christine Gerstberger, Tomasz Gibas, Laura Gonzalez Cabanillas, Martin Hallet, Dermot Hodson, Fabienne Ilzkovitz, Jan In't Veld, Lars Jonung, Christian Just, Daisuke Karakama, Joost Kuhlmann, Paul Kutos, Sven Langedijk, Martin Larch, Karolina Leib, Julia Lendvai, Staffan Linden, Luis Angel Maza Lasierria, Mihai-Gheorghe Macovei, Ulrike Mandl, Carlos Martinez Mongay, Mary McCarthy, Kieran McMorrow, Gilles Mourre, Gaëtan Nicodème, João Nogueira Martins, Moisés Orellana Pena, Manuel Palazuelos Martinez, Dario Paternoster, Marga Peeters, Lucio Pench, Stefan Pflüger, Karl Pichelmann, Esther Perez Ruiz, Werner Röger, Eric Ruscher, Andrea Schaechter, Nikolaos Sdrakas, István P. Székely, Heliodoro Temprano Arroyo, Michael Thiel, Georges Tournemire, Sirpa Tulla, Nuno Sousa, Massimo Suardi, Alessandro Turrini, Clairette Van der Lans, Errikos Velissaratos, Lucio Vinhas de Souza, Joachim Wadefjord, Max Watson, Rainer Wichern, Javier Yaniz Igal and Marcin Żogała.

The report benefited from extensive comments by a staff referee group led by István P. Székely, Director for Economic Studies and Research, with contributions by Ronald Albers, Stefan Appel, Johan Baras, Tassos Belessiotis, Heinz Jansen, Lars Jonung, Nuno Sousa and Lucio Vinhas de Souza. Helpful comments were also received from Elisabetta Capannelli, Francesco Contesso, Vitor Gaspar and Gabriele Giudice.

The responsibility for the lay-out of the report was in the capable hands of George Alexakis, Greta Haems, Virginia Giovannelli, Anita Ivan and Adam Kowalski.

Comments on the report would be gratefully received and should be sent, by mail or e-mail to:

Paul van den Noord
European Commission
Directorate-General for Economic and Financial Affairs
Directorate for Economic Studies and Research
Office BU-1 05-198
B-1049 Brussels
e-mail: paul.vandennoord@ec.europa.eu

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COMMUNICATION FROM THE COMMISSION TO THE
EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN
ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF
THE REGIONS AND THE EUROPEAN CENTRAL BANK

EMU@10: successes and challenges after 10
years of Economic and Monetary Union

EMU@10: successes and challenges after 10 years of Economic and Monetary Union

A HISTORIC STEP

On 2 May 1998 Europe's leaders took the historic decision to introduce the single currency, the euro. The move to the last phase of EMU – Economic and Monetary Union – on 1st January 1999, marked a watershed in European integration. Although economic in substance, it sent a very powerful political signal to European citizens and to the rest of the world that Europe was capable of taking far-reaching decisions to cement a common and prosperous future for a continent that had all too often suffered from wars and economic and political instability. The launch of EMU – the most important monetary reform since Bretton Woods – was a bold move without precedent in modern European economic history and one that changed the global economic landscape.

Ten years into its existence, the euro is a resounding success. The single currency has become a symbol of Europe, considered by euro-area citizens to be amongst the most positive results of European integration together with the achievement of free movement within the EU and peace in Europe. One in two people in the euro area asserts that for them, the EU means the single currency. EMU has secured macroeconomic stability and boosted cross-border trade, financial integration and investment. The number of countries that share the euro has increased from the original eleven to fifteen at the beginning of 2008 and is set to increase further. EMU is an achievement of strategic importance for the EU, and indeed for the world at large, in which Europe has become a pole of macroeconomic stability, especially welcome in the present times of financial turbulence.

While the euro is a clear success, so far it has **fallen short of some initial expectations.** Output and particularly productivity growth have been below those of other developed economies and concerns about the fairness of income and wealth distribution have grown. In addition, a number of significant challenges which had not yet emerged or were only starting to become apparent when EMU was devised are now more pressing. Globalisation is progressing apace and natural resources are becoming increasingly scarce. Climate change and the effects of population ageing will place additional strains on the capacity of our economies to grow. Moreover, unwinding global imbalances are putting pressure on the exchange rate of the euro and the functioning of our financial systems. At the same time, while the progressive enlargement of the euro area will add dynamism to its economy, it will also increase the diversity of EMU, making stronger demands on its adjustment capacity.

This Communication and the accompanying Report **assess the experience of the first decade of EMU, identify the goals and challenges facing the euro area and put forward a policy agenda** for EMU's continued success.

THE MAJOR SUCCESSES OF THE FIRST TEN YEARS

The launch of the euro represented a **sea change in the macroeconomic environment** of its participating Member States and beyond. A single monetary policy combined with national but

coordinated fiscal policies has fostered macroeconomic stability. The exchange rate realignments that periodically traumatised the European economies have become a thing of the past. The European Central Bank (ECB), to which the euro area's monetary policy is entrusted, quickly established its credibility. Budgetary discipline has improved significantly, strengthened by the Stability and Growth Pact (SGP). The euro-area economy has pursued a faster track of economic and financial integration than the rest of the EU and its resilience in the face of external shocks has become stronger. Overall, progress has been made on many fronts, as the following highlights illustrate.

Monetary policy has anchored long-run inflation expectations at close to the ECB's definition of price stability. Inflation averaged just over 2% in the first decade of EMU, falling from 3% in the 1990s and a range of 8 to 10% in the 1970s and 1980s. Nominal interest rates have declined to an average of around 5% since the inception of the euro, down from 9% in the 1990s and 12% in the 1980s. In real terms, interest rates in EMU have come down to levels not seen for several decades, even in those countries which enjoyed the highest degree of stability before the adoption of the euro. Admittedly, inflation has increased recently, mainly due to soaring oil and commodity prices, while the turbulence in financial markets has led to tighter credit conditions for households and businesses. But a return to low inflation and more normal credit conditions is expected once these external pressures unwind – even though oil and commodity prices may continue to trend up with strong demand from fast-growing developing countries.

Fiscal policies have supported macroeconomic stability in EMU. Progress in fiscal consolidation has been impressive over the last few years and culminated in a deficit of only 0.6% of GDP in 2007 compared to an average of 4% in both the 1980s and 1990s. The reform of the SGP in 2005 not only contributed to greater discipline, but also promoted a more sustainable correction of excessive deficits by discouraging recourse to one-off measures. While not fully eradicated, pro-cyclical fiscal policies have also become less common. As a result, and thanks to windfall gains in tax revenues in the last few years, no euro-area country ran a deficit in excess of 3% in 2007 and the overall deficit for the euro area (at 0.6% of GDP in 2007), was the lowest in several decades. Indeed ten out of the fifteen euro-area countries either recorded a budget surplus in 2007 or were very close to balance.

EMU has **fostered economic and market integration**. The disappearance of exchange rate risk and lower cross-border transaction costs has helped develop the Single Market and integrate product markets. Intra-area trade flows now account for one third of the area's GDP, up from one quarter ten years ago, and available estimates indicate that the elimination of exchange rate volatility can explain up to half of this increase. What is more, intra-area foreign direct investment now stands at one third of GDP as compared to an initial one fifth. Here estimates suggest that up to two thirds of this increase can be directly attributed to the creation of the single currency. These developments have in turn produced major economies of scale, spurred competition and had noticeable effects on productive efficiency. Likewise, the decline in risk premia built into capital cost has boosted capital formation, which has now reached almost 22% of GDP – a level unseen since the early 1990s. Overall, through these various channels, the single currency is estimated to have boosted labour productivity per hour worked by as much as 5% since the launch of the euro.

The euro has acted as a **powerful catalyst for financial market integration**. Interbank money markets in the euro area have fully integrated, while cross-border interbank transactions have expanded steadily since 1999. Cross-border consolidation among banks has accelerated, with the sixteen largest banking groups now holding more than 25% of their EU assets outside their home country. A significant market in euro-denominated private-sector bonds has emerged, with an annual gross issuance of more than €1 trillion now substantially exceeding the approximately €800 billion raised through public sector issuance. Equity markets too have integrated faster than elsewhere, with the share of equity held in other euro-area countries rising from 20 to 40%. Financial market infrastructure has advanced, and progress has been made in cross-border wholesale financial services, while the Single Euro Payments Area is set to eliminate differences between national and cross-border

retail payments. In parallel, a certain degree of regulatory and supervisory convergence has been achieved via the implementation of the Financial Services Action Plan and the operation of the Lamfalussy committees.

EMU has **improved the euro area's resilience against adverse external developments**. In its first decade the euro area has been exposed to a series of external shocks associated with the global business cycle, the most significant being the bursting of the dotcom bubble and subsequent downturn in the US in the early 2000s. Nevertheless, the ensuing slowdown in the euro area at the beginning of the decade was considerably more muted than in comparable episodes prior to the adoption of the single currency. Today once again, the euro area appears protected from the worst of the present global financial turbulence. The anchoring of inflation expectations has contributed to this improved resilience, as have the reforms carried out under the Lisbon Strategy for Growth and Jobs and the renewed budgetary discipline since the SGP reform.

EMU has brought **significant benefits to its member countries engaged in a catching-up process**. The environment of macroeconomic stability and low interest rates coupled with the support of the cohesion policy and its Structural and Cohesion Funds have created the conditions for accelerated catching up; the positive effects of sound economic policies have been reinforced by the development and integration of national financial markets with the rest of the euro area. Not surprisingly, therefore, participation in EMU is very appealing to the twelve Member States that entered the EU since 2004; indeed three have already successfully joined the euro area and Slovakia is ready to enter in 2009.

The euro has firmly established itself as **the world's second international currency**. Euro-denominated international debt securities surpassed those of the US dollar in 2004, while the percentage of bank loans issued by euro-area banks to non-euro-area borrowers which are denominated in euro now stand at 36% as compared to 45% in US dollars. The euro is the second most actively traded currency in foreign exchange markets worldwide, and is used in more than a third of all foreign exchange transactions. The official use of the euro has increased, with the worldwide share of disclosed reserves denominated in euro rising from 18% in 1999 to over 25% in 2007. Likewise, its role as a trade invoicing or settlement currency has risen, to reach more than 50% of the euro area's external trade. The euro has also become very important in many third countries, notably euro-area candidate and neighbouring EU countries, around 60% of whose trade is now invoiced in euro.

The euro area has become a **pole of stability for Europe and the world economy**. Thanks to the euro's rising international status and the sheer size of the euro-area economy, economic policies within EMU increasingly have a global impact. With an external position in balance, a credible macroeconomic framework and a sound financial system, the euro area has been contributing to an orderly evolution of the global economy, even during the highly turbulent period of the last few months.

The euro area has developed a **sound structure of economic governance**. While major economic policy responsibilities remain at the national level, a common understanding has developed among EMU Member States that sound public finances and flexible and integrated product, labour and financial markets are necessary for EMU to function efficiently. The reform of the Stability and Growth Pact in 2005 increased national governments' "ownership" of the budgetary governance framework. And the revised Lisbon Strategy for Growth and Jobs, the key instrument for the co-ordination of EU economic policies, spells out in Guideline No. 6 that Member States should "contribute to a dynamic and well-functioning EMU". **The Eurogroup has served as the key forum** for euro-area finance ministers to address issues relating to the single currency going beyond the Treaty-based surveillance and coordination tasks. As its informal character encourages open and frank debates, the Eurogroup is well placed to develop common understandings and clear positions on macroeconomic issues pertaining to the euro area. Over time it has gained visibility and relevance,

particularly since it appointed its first permanent President in January 2005. On the international front, collective action taken by the euro area has led to greater external influence, as demonstrated by the engagement of the Eurogroup troika – the Eurogroup President, the President of the ECB and the Commissioner for Economic and Monetary Affairs – in bilateral dialogues with China and other countries, and by last year's IMF-led multilateral consultations on global imbalances.

All these positive developments have culminated in the creation of **a record 16 million jobs during the first decade of EMU** in the euro area. Employment has risen by almost 15% since the launch of the single currency while unemployment has fallen to about 7% of the labour force, the lowest rate in more than fifteen years. Importantly, job growth outpaced that of other mature economies, including the United States. The bulk of these improvements reflect reforms of both labour markets and social security systems carried out under the Lisbon Strategy for Growth and Jobs and the coordination and surveillance framework of EMU, as well as the wage moderation that has characterised most euro-area countries. This clearly demonstrates that Europe's workforce is capable of rising to new challenges and making necessary changes that will ultimately result in further job creation and higher economic growth.

EMU'S REMAINING CHALLENGES AMPLIFIED BY NEW GLOBAL TRENDS

The overall picture of the first decade of EMU is thus a very positive one. However, not all expectations have been fulfilled.

At around 2% per annum, **potential growth remains too low**. Although employment has soared, and despite the positive impact of the single currency, productivity growth has slowed from 1 1/2% in the 1990s to around 1% this decade. As a result, the euro area's per capita income has stalled at 70% of that of the United States. While most of the smaller euro-area economies have done exceptionally well, potential growth should have been significantly higher in some of the largest Member States.

Moreover, **there have been substantial and lasting differences across countries** in terms of inflation and unit labour costs. The tendency for persistent divergences between euro-area Member States has been due in part to a lack of responsiveness of prices and wages, which have not adjusted smoothly across products, sectors and regions. This has led to accumulated competitiveness losses and large external imbalances, which in EMU require long periods of adjustment. Essentially, this protracted adjustment reflects the fact that structural reforms have been less ambitious than in the run-up to the euro. As is the case within the EU as a whole, product markets within the euro area are still only partially integrated and cross-border provision of services remains underdeveloped.

As an international currency the euro is a major asset for all euro-area members and for the EU at large. However, the **lack of a clear international strategy** and the absence of a strong voice in international fora implies costs for the euro-area in an increasingly globalised world. The global economic imbalances that have built up since the mid-1990s are starting to take their toll, with exchange rates excessively volatile and financial stability arrangements under heavy strain. The emerging economies' rapidly growing demand for scarce energy and other primary resources are hitting supply constraints, sending oil, food and other commodity prices soaring as a result. In this turbulent environment, the single currency provides a shield and can put the euro area in a unique position to play a key role in the global political arena in stemming the associated risks. However this potential is insufficiently exploited as the euro area has neither a properly defined international strategy nor effective international representation.

Finally, **the public image of the euro does not fully reflect EMU's successful economic performance**. The euro is often used as a scapegoat for poor economic performances that in reality

result from inappropriate economic policies at the national level. Furthermore citizens in some countries believe that prices significantly increased because of the euro. Indeed, even if overall inflation was only marginally affected at the time of the changeover, occasional abusive price increases in specific sectors and countries have tarnished the image of the euro and continue to do so. At the same time, the lack of development of the economic leg of EMU, compared with the monetary leg, has also fed the concern that the euro area is incapable of addressing the key challenges facing it, further weakening its public image. Clearly important work still lies ahead. But beyond the fulfilment of initial expectations, the EMU policy agenda for the next decade will be marked by the emergence of new global challenges which will have an amplifying effect on the weaknesses of EMU outlined above.

- **Globalisation is progressing apace**, with emerging economies competing with developed economies in lower-skilled industrial activities and increasingly in higher value-added activities too. Globalisation offers major opportunities for market growth, yielding lower prices and greater choice for consumers, and efficiency gains for producers. However, it also puts strong demands on the adjustment capacity of the euro-area members as new activities will need to replace declining industries, and as research, innovation and human capital become ever more important drivers of economic dynamism. Moreover, globalisation further compels the euro area to take an effective role in global economic and financial governance.
- **Food and energy prices are on the rise**, spurred by fast growth of the global economy and changing consumption patterns in emerging economies. Climate change is also having a growing economic impact. These developments may act as a constraint on growth and could impair the distribution of income and wealth given that it is the least well-off who may be disproportionately affected. A complicating factor is that the tasks of containing climate change and keeping a lid on food and energy prices may not be easily achieved simultaneously. These problems can affect euro-area countries differently, adding to the need to ensure smooth adjustment to shocks.
- Meanwhile, the population of the euro area, as elsewhere, is **rapidly ageing**. As a result, the portion of the population dependent on pensions will increase, simultaneously reducing the economic growth potential. Indeed, the ratio of working-age to older people is projected to halve over the next four decades and on unchanged policies, the potential output of the area will slow to just over 1% per annum from around 2% at present. Ageing will also make relatively large demands on public spending, and unless reforms are made to pension and health systems it will increase the share of public expenditure in GDP by an estimated 4 percentage points over the next four decades. Ageing populations pose a serious challenge to the euro area's capacity to adjust and put the sustainability of its public finances and, more generally, its welfare systems at risk.

These longer-term trends, whose effects are increasingly being felt, will pose challenges for the performance of all advanced economies in terms of growth, macroeconomic stability, adjustment capacity, the sustainability of social security systems and the distribution of income and wealth. But they will produce **policy challenges that are particularly compelling for the euro area** considering its relatively low growth potential, its weaker adjustment capacity, high public indebtedness and the strong interdependence of its economies.

A THREE-PILLAR POLICY AGENDA FOR THE SECOND DECADE

The experience of the first decade of EMU, while overall very successful, reveals a number of shortcomings that need to be addressed. It will be necessary to consolidate the hard-won macroeconomic stability while: **(a)** raising potential growth and safeguarding and increasing the welfare of euro-area citizens; **(b)** ensuring a smooth adjustment capacity as EMU expands to take in new members; and **(c)** successfully protecting the interests of the euro area in the global economy.

Importantly, these efforts will have to be made in a global environment that has changed considerably since the euro was launched, and failure to do so will be much more costly now.

To address these challenges, **the Commission proposes a three-pillar agenda:**

- The domestic agenda aims to deepen fiscal policy co-ordination and surveillance, to broaden macroeconomic surveillance in EMU beyond fiscal policy and to better integrate structural reform in overall policy co-ordination within EMU.
- The external agenda aims to enhance the euro area's role in global economic governance.
- Both agendas will require a more effective system of economic governance.

I. THE DOMESTIC POLICY AGENDA: BETTER CO-ORDINATION AND SURVEILLANCE

Deepening and broadening surveillance

The corrective arm of the Stability and Growth Pact (SGP) should continue to be applied rigorously and **surveillance under the SGP's preventive arm should be improved**. Fiscal policy coordination should better guide national budgetary behaviour over the whole cycle, i.e. in both good and bad times. Budgetary surveillance should be deepened to cover two main areas:

(i) **securing the sustainability of public finances** for the benefit of future generations. At the national level, the adoption of medium-term fiscal frameworks could go a long way towards achieving stable and sustainable public finances. To be effective, such frameworks should encompass well-designed expenditure rules, which would allow the automatic fiscal stabilisers to operate within the limits of the SGP while attuning the composition of public expenditure to the structural and cyclical needs of the economy. At the euro-area level increased attention should be put on monitoring public debt developments, while medium-term budgetary objectives should be strengthened to address implicit liabilities. Moreover, long-term budgetary projections which identify the impact of ageing on public finances can support the preparation of national sustainability strategies and promote measures to reform pension and health systems and increase employment rates.

(ii) **enhancing the quality of public finances**. In other words, ensuring better value for public money, by channelling public expenditure and taxation systems towards growth-friendly and competitiveness-enhancing activities. Reforms of social expenditure programmes that offer better income protection while strengthening incentives to work – the flexicurity approach – would also greatly help to enhance the sustainability and quality of public finances while ensuring that budgets support macroeconomic stability.

But beyond budgetary surveillance, there is a clear need to **broaden surveillance to address macroeconomic imbalances**. Developments within Member States such as the growth of current account deficits, persistent inflation divergences or trends of unbalanced growth need to be monitored given that the occurrence of spillover effects and the growing interdependence of euro-area economies mean these developments represent a concern not just for the country in question but for the euro area as a whole. The evidence of the first ten years of EMU indicates that while market integration, particularly in financial services, is beneficial overall for EMU – as it can help absorb macroeconomic disturbances by providing risk-sharing opportunities and fostering reallocation of resources – it can also, if not accompanied by appropriate policies, amplify divergences among the participating countries. While some of these divergences can be benign – reflecting the catching-up process or even normal adjustment – they may also be harmful and the result of inefficient adjustment. In this case,

enhanced surveillance would help the affected countries to devise early responses before divergences become entrenched.

Finally, a broader **surveillance of euro-area candidate countries**, akin to that proposed for current euro-area members, will be crucial to help them prepare for the challenges of sharing a single currency. Many future euro-area members are experiencing large capital inflows (reflecting expectations of continued fast income growth) and rapidly developing financial sectors, both of which can boost credit (typically from a low base) and result in external imbalances. Currently surveillance of prospective euro-area countries takes place via the assessment of Convergence Programmes. But there is scope to provide stronger policy guidance and closer surveillance of economic developments in particular for the countries participating in the Exchange Rate Mechanism (ERM) II framework, which is both an element of the euro adoption criteria and an instrument to foster sustainable nominal and real convergence. This should not mean imposing any additional constraints on euro-area entry.

Surveillance must build on the existing instruments. The key instruments for fiscal policy surveillance and economic policy coordination are clearly anchored in the Treaty and the SGP. The enforcement of the corrective arm of the SGP will remain a key pillar in dissuading non-compliance with the Treaty. The SGP provides for the definition and assessment of medium-term budgetary strategies through Council opinions on national Stability Programmes. Article 99 of the Treaty states that "Member States shall regard their economic policies as a matter of common concern" and "shall coordinate them within the Council". The euro-area and country-specific recommendations of the Lisbon process are key instruments for guidance and surveillance. There is, however, scope to improve the way such instruments are used. The analysis of the first 10 years reinforces the case for strengthening the preventive part of the SGP, as endorsed by the ECOFIN Council,¹ to support the achievement of sustainable budgetary policies and address broader issues which may affect the macroeconomic stability of a country and the overall functioning of EMU. These Treaty-based instruments are complemented by the Medium-Term Budgetary Review process undertaken by the Eurogroup in the spring of each year. While it has so far focused on budgetary surveillance, this peer review mechanism should broaden its scope to make the Treaty-based surveillance more effective.

Better integrating structural policies in the co-ordination process

The euro area has a **special interest in the success of structural reform**. Stepping up reforms – of course welcome in the EU as a whole – is an absolute must for the euro area. Importantly, improved market responses will pay a double dividend – by boosting growth in living standards over the longer haul while allowing better adjustment to shocks and fostering macroeconomic stability. Empirical evidence from our analysis indicates that structural reforms in countries sharing the single currency have higher "multipliers" than elsewhere: that is, those countries undertaking structural reforms can accrue more benefit while those falling behind may pay a higher price for their inaction. The Lisbon Strategy for Growth and Jobs, which has been instrumental in putting structural reform on the policy agenda, provides the basis for identifying the most pressing areas for action through Guideline No. 6 on the euro area and the euro-area-specific recommendations. In a partnership approach between the Commission and the Member States, the Lisbon Strategy forms the basis for steering the reform process in both the euro area and the individual countries.

Removing remaining barriers to product market integration is essential for a well-functioning euro area. Yet despite the boost given by EMU and the Single Market Programme to the creation of more open and competitive economies, low productivity growth and entry barriers, especially in services, are still hampering efficient adaptation to changing economic circumstances in the euro area and are

¹ COM(2007) 316

keeping up pressure on prices. Innovation and technology diffusion, important elements for enhancing both competition and productivity, are lagging behind in euro-area member states. The market monitoring system proposed in the Single Market Review should be used to specifically target these shortcomings.

Better-functioning labour markets are needed in the euro area to underpin adjustment in a globalised economy and raise growth potential in the face of ageing populations. Greater wage flexibility and differentiation across industries, occupations and regions, and investment in human capital are instrumental in boosting competitiveness and allowing the smooth reallocation of resources in the event of shocks. Numerous reforms to raise labour utilisation have been undertaken in the framework of the Lisbon Strategy – and have paid off. However, progress has been uneven across countries and should therefore remain at the core of reform strategies in the next decade. Reforms of social expenditure programmes and active labour market policies should aim to offer better income protection while strengthening incentives to work.

The euro area can draw **comparatively large benefits from promoting EU financial integration**. Significant progress has been made in integrating EU financial markets but further efforts are required to enhance the efficiency and liquidity of euro area financial markets. This would facilitate economic adjustment through risk sharing and promote a more uniform transmission of the single monetary policy across the euro area. In particular, increased effort is required to promote the cross-border provision of retail financial services, to improve the efficiency of corporate and government bond financing and ease regulatory and supervisory costs for financial intermediaries operating in a multi-jurisdictional environment. Given the shared responsibility of the Eurosystem and participating Member States to safeguard financial stability in the euro area as a whole, there is a growing need for stronger cross-border cooperation in arrangements for crisis prevention, management and resolution as financial integration proceeds. In light of these specific efficiency and stability considerations and taking on board the lessons of the current financial turmoil, the euro area should take a strong role in fostering the EU agenda for financial integration and in enhancing EU financial stability arrangements.

To reap the full potential of EMU, there is therefore a need to **strengthen the incentives to pursue reform** in the euro area. Integrating structural policies in the euro area coordination process can provide support via three avenues: (a) The recommendations to the euro area as a whole together with the country-specific recommendations made within the Integrated Guidelines of the Lisbon Strategy provide the backbone for the coordination of structural reforms; a closer monitoring of their implementation needs to be organised. (b) The reform of the SGP in 2005 created the possibility, when assessing progress towards the medium-term budgetary objectives, to take account of structural reforms that are fiscally costly in the short run but yield longer-term gains in terms of growth and fiscal sustainability. To ensure compliance with the commitments enshrined in the SGP, a peer review mechanism could be established based on the analytical framework developed under the Lisbon Strategy and ex ante information provided by Member States. (c) To achieve a better sequencing of reforms, particular priority should be given to improving the functioning of financial markets. This would not only have favourable effects on growth and adjustment, but would also help boost the incentives for other structural reforms to follow by bringing forward their longer-term benefits and allowing capital to flow to the new investment opportunities generated by these structural reforms.

II. THE EXTERNAL POLICY AGENDA: ENHANCING THE EURO AREA'S INTERNATIONAL ROLE

The international status of the euro brings **advantages, responsibilities and risks**. It helps develop the financial industry in Europe, yields seignorage gains from the use of the euro as a reserve currency and reduces exposure to exchange rate volatility as pricing and invoicing in euros develops. But the sheer size of the euro area means that policy decisions and economic developments within EMU are

felt elsewhere, not least because global financial markets are acting as an ever-stronger international transmission channel. And there are risks, as the growing international status of the euro exposes the euro area to disruptive portfolio shifts between key international currencies and asset classes. All in all, the growth of the euro as an international currency and the combined strength of the euro-area economy have changed the rules of the game for the members of EMU and for their international partners.

The euro area must therefore **build an international strategy** commensurate with the international status of its currency. Following a successful first decade, the euro area, which already provides a stability anchor for its neighbours, is now called upon to develop a clear and all encompassing strategy on international economic and financial affairs. It has to play a more active and assertive role both in multilateral fora and through its bilateral dialogues with strategic partners. It has to improve coordination and define common positions and – when appropriate – common terms of reference on all these issues. It has to speak with a single voice on exchange rate policies and assume its responsibilities in financial stability and macroeconomic surveillance issues. The risk that the unwinding of global imbalances disproportionately harms the competitiveness of the euro area and its members is adding to these needs.

The most effective way for the euro area to align its influence with its economic weight is by **developing common positions and by consolidating its representation, ultimately obtaining a single seat** in the relevant international financial institutions and fora. This is an ambitious aim and progress on the external agenda will depend first and foremost on a more effective system of euro area governance. Even though the EU and euro area are often seen by other countries as over-represented in international organisations (in terms of both seats and voting power), the euro area still punches below its economic weight in international fora. Consolidating the euro area's representation would strengthen its international negotiating power and reduce the costs of international coordination, both for the euro area and for its key partners. It would also free up much needed space for emerging market countries to increase their participation in international financial institutions.

III. PROMOTING EFFECTIVE GOVERNANCE OF EMU

EMU's system of **economic governance must rise to the challenges** facing the euro area. That said, the current division of responsibility between the institutions and instruments that govern the conduct of economic policy in EMU is sound overall. Nevertheless, there is a clear need to adapt institutions and practices to tackle the emerging policy challenges.

A **strong involvement of all EU Member States within the ECOFIN Council** is key to ensuring that EMU functions effectively. From the outset the ECOFIN Council has been the forum for economic policy decision-making in the EU and, in view of the evolving overlap between the euro area and the EU, it should remain centre stage in EMU's system of economic governance by integrating EMU issues more thoroughly in its work. In particular, it could push for a more consistent approach within its own fields of competence – i.e. macroeconomic policy, financial markets and taxation – so as to ensure positive synergies between them. The current Treaty provides ample scope for more comprehensive coordination and surveillance along these lines across the whole EU. Moreover, while the new Lisbon Treaty, once ratified, will strengthen the role of euro area finance ministers on questions affecting the functioning of EMU, all discussions on these issues will take place within the ECOFIN Council.

The **Eurogroup should continue to serve as a platform for the deepening and broadening of policy coordination** and surveillance in EMU. In terms of fiscal surveillance, ex ante coordination of budgetary policy through the Mid-Term Budgetary Review should be geared to guiding fiscal behaviour over the cycle as a means to address any pro-cyclical bias. In view of the ageing challenge,

a major task is to increase the effectiveness of the preventive arm of the SGP in fostering the achievement of ambitious medium term objectives. To avoid the build-up of imbalances and excessive divergences between euro area countries, the Eurogroup should exchange views, develop policy guidelines and monitor Member States' compliance in areas that foster adjustment capacity and macroeconomic stability. "Peer reviews" – multilateral discussions on relevant developments in one or several countries – should be strengthened to encourage ministers of finance to consider national issues and policies within a euro-area perspective. Moreover, the Eurogroup should devote greater attention to monitoring the euro-area Lisbon recommendations in order to increase potential growth and strengthen competitiveness through structural reforms.

The Commission should play a strong, supportive role to ensure the effective functioning of EMU. It is called upon to foster the coordination of policies while internalising the EMU dimension in its policy proposals. It should step up its fiscal and macroeconomic surveillance and promote further economic and financial integration. In its surveillance role, it should deepen the assessment of economic and financial developments of the euro area, focusing in particular on the spillovers of national policy measures. Work to improve the accuracy of cyclical and structural fiscal indicators should continue, in cooperation with the Member States. As to the international agenda, the Commission needs to enhance its role in international dialogues and fora. In sum, the Commission must support efforts to improve the functioning of EMU both domestically and internationally by assuming the responsibilities assigned to it by the Treaty as the guardian of sound economic policies. To this end it should endeavour to better exploit the instruments provided by the Treaty.

The new Treaty, once ratified, will provide scope to strengthen coordination and surveillance of economic policies within the euro area. Article 136 of the resulting Treaty on the functioning of the European Union would offer the possibility to "adopt measures specific to euro-area Member States: to strengthen the coordination and surveillance of their budgetary discipline; and to set out economic policy guidelines for them, while ensuring that they are compatible with those adopted for the whole of the Union and are kept under surveillance". Furthermore, the Treaty would enhance the Commission's role as an independent "referee" in the context of multilateral surveillance, with Article 121 giving the Commission the possibility to issue direct warnings to a Member State when its economic policies are not consistent with the broad guidelines or risk jeopardising the proper functioning of EMU.

EMU's governance system must **ensure that euro-area enlargement continues smoothly**. Over the next decade, the euro area is set to expand to encompass most current EU Member States and ensuring that this process proceeds appropriately will safeguard the effective functioning of the euro-area economy in the future. During participation in ERM II, countries should capitalise on the environment of enhanced macroeconomic stability to adopt sound macroeconomic and structural policies. As specified in the Treaty, the Commission should provide a regular, fair assessment of sustainable progress in the convergence process. The Eurogroup and ECOFIN in turn have a special responsibility to build trust, survey economic developments and provide the necessary guidance in terms of the policies and reforms necessary for prospective euro-area members' nominal and real convergence.

There is also a need to **improve the dialogue concerning EMU among the EU institutions and with the public at large**. The Commission should develop its dialogue and consultation with the European Parliament in particular, as well as other European and national stakeholders. In a similar vein, the Eurogroup should pursue dialogues with the ECB, the European Parliament and the social partners in the euro area. All these institutions, starting with the Commission, should improve communication on EMU issues to the wider public. In particular, there is a need to better explain the euro's significant macro- and microeconomic advantages, such as its role as a protective shield during the recent financial turmoil, and the significant, beneficial contribution of economic policies in EMU.

CONCLUSION

EMU is a resounding success. Ten years into its existence, it has ensured macroeconomic stability, spurred the economic integration of Europe – not least through its successive enlargements –, increased its resilience to adverse shocks, and become a regional and global pole of stability. Now more than ever, the single currency and the policy framework that underpins it are proving to be a major asset. Nevertheless, there is potential to reap further benefits from EMU. This -- coupled with the pressing challenges of globalisation, scarce natural resources, climate change and population ageing, -- calls for improved co-ordination of economic policies, further progress with structural reforms, a stronger global role for the euro area and an unwavering commitment by Member States to achieving these goals. The fact that the effects of these global trends are already being felt in high energy, food and commodity prices, financial turbulence and global exchange rate adjustment only underscores the importance of timely action.

Achieving the domestic and external policy agenda and improving governance as set out here will go a long way towards meeting the challenges that the euro area and the global economy are facing. It will also bring important positive benefits for all EU members:

- **EMU remains a milestone of EU integration.** Although its objectives and achievements are predominantly economic, EMU has never been solely an economic project. From the outset EMU was conceived as a crucial step in the process of EU integration. This role has become even stronger since the EU's enlargement from 15 to 27 Member States since 2004, with all newly acceded EU member countries preparing for euro adoption. The prospect of euro-area accession has been one of the main drivers of those countries' convergence with the EU's standard of living.
- **A well-functioning EMU is a major asset for the EU as a whole,** not least since the overwhelming majority, if not all, of EU countries will eventually become members of EMU. A thriving euro-area economy will contribute to the wealth and dynamism of the whole EU, reinforcing public support for EU integration both within and outside the euro area.
- **A strong EMU will also foster the EU's leadership in the global economy.** A well-functioning euro area lays the foundations for EMU to play a strong role externally, both in the macroeconomic sphere and in the area of global financial supervision and regulation. Proving its ability to strengthen the euro area's external role and assume its global responsibilities will have positive spin-offs for other policy areas where the EU aspires to global leadership, e.g. sustainable development, development aid, trade policy, competition and human rights.

Political will and determination is required to implement this comprehensive agenda. The very success of EMU shows that political initiative and ambition can generate considerable economic, social and political benefits. But to fully deliver these benefits, the continued involvement of all parties is crucial. Hence the Commission will encourage a wide discussion on these topics in the second half of 2008 and promote a broad consensus on the building blocks of this agenda with other EU institutions as well as a range of relevant bodies and stakeholders. Drawing on this discussion, the Commission will come forward with appropriate operational proposals.

Part I

Assessing the first 10 years

SUMMARY OF MAIN FINDINGS

A leap forward

On 1 January 1999 eleven EU Member States – Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland – adopted the European Union's single currency, the euro, in what may be considered to be the world's most radical monetary reform since Bretton Woods. This move established the second largest single currency area in the world (after the United States), which now produces two thirds of the EU's GDP and one fifth of the world's. Four other EU Member States have joined the euro area since its inception: Greece in 2001, Slovenia in 2007 and Cyprus and Malta in 2008. The area is set to expand further as most EU Member States currently outside the euro area are preparing to join at some point in the future. ⁽²⁾

The establishment of a single currency for Europe has been a leap forward in the process of European economic integration. Although the origins of the single currency go back to the 1970s, the process accelerated in the early 1990s when the lifting of the Iron Curtain and the ensuing political uncertainties prompted the perception that stronger common goal setting in Europe was needed. Among the related political events of the early 1990s was the reunification of Germany, which had serious macroeconomic ramifications and contributed to tensions and turbulence in the European Exchange Rate Mechanism (ERM). This eventually led to the go-ahead for monetary union in Europe, as laid down in the Maastricht Treaty signed in 1992. From then onwards EU Members willing to join the euro area in the first wave engaged in a process of convergence towards the reference values enshrined in the Treaty regarding price stability, exchange rate stability, interest rates, government net borrowing and government indebtedness.⁽³⁾ Eventually the eleven countries

mentioned above qualified for participation in the first wave.

Initial expectations, goals and challenges

Before it was created there was a lively academic and political debate on the viability or desirability of a monetary union for Europe. There was a very broad spectrum of views on the subject: some predicted a bumpy start or even collapse, while others were more sanguine. However, many tended towards a pessimistic view and this may have adversely affected perceptions of the euro area's performance in its early years. The assessments were coloured also by the global economic downturn in the early 2000s and the depreciation of the euro against the US dollar in the period 1999-2002, both roughly coinciding with the run-up to and introduction of euro coins and notes in 2002. This is in contrast with the assessment in Part I of this Report, from which emerges a predominantly favourable picture of the first ten years of the euro – even if weaknesses, shortcomings and unfinished business are also highlighted.

Aside from the political motivations for the creation of a single currency for Europe, the euro was intended to serve a number of *economic goals*, which can be grouped under the following three headings:

- *Macroeconomic stability.* As noted, the single currency was a response to the episode of financial turbulence in the early 1990s. The use of the exchange rate and monetary policy instruments had lost much of their efficacy, especially in smaller countries. The underutilisation of resources stemming from this source of volatility was deemed to be costly in terms of both efficiency and equity – and hence its removal beneficial.

⁽²⁾ The following countries are committed to join the euro area once they fulfil the convergence criteria established in the Treaty: Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Sweden. Denmark and the United Kingdom have opted out of the single currency.

⁽³⁾ Specifically, in order to qualify a country needed to satisfy the following criteria: inflation must be equal to less than the average of the three countries with the lowest inflation rates plus 1½ percentage points, the

long-term interest rate must be less than 2 percentage points above the average for those three countries, the general government deficit must be below 3% of GDP and public debt below or trending towards 60% of GDP and the exchange rate have been within the bands of the ERM II system of exchange rates for a continuous period of two years. Often the term "nominal convergence" is used to indicate fulfilment of these criteria (as opposed to "real convergence" which usually refers to convergence of per capita GDP).

- *Growth and jobs.* The single currency was deemed to be a decisive move towards the completion of the European single market established in 1992. The reduction in transaction costs and risk premiums associated with the single currency were expected to boost intra-area trade and finance. As the exchange rate risks and currency transaction cost would diminish or disappear, a better use of scarce resources could be achieved, not least because greater transparency would foster competition.
- *Cohesion and convergence.* It was hoped that by fostering integration real economic convergence towards the best-performers would receive a boost. Moreover, as economies would become more similar, policies would become easier to co-ordinate as the importance of national desiderata diminished.

But even its fiercest proponents saw the creation and management of the single currency in Europe as a *major challenge*, essentially for the following two reasons:

- *First*, the European Economic and Monetary Union (EMU) is unique in that it comprises a single currency in combination with fiscal policies conducted at national level – albeit within a common framework – by its participating Member States. This is unlike federal monetary unions, like the United States, where a federal government is endowed with sovereignty to tax and to provide common public goods. The US federal budget acts as a powerful stabiliser, enabling fiscal transfers to automatically flow from booming to slumping states, whereas the euro area has no such transfer mechanism.
- *Second*, alternative mechanisms of adjustment in the euro area were deemed to be comparatively weak. Low labour mobility within and across borders, weak responsiveness of prices and wages to the business cycle, and the limited degree of integration of financial markets – along with the absence of cross-border fiscal transfers – were considered to create a risk of tensions

between participating countries building up if their economies failed to move in sync. In such an environment the loss of the possibility of exchange rate adjustment could prove costly and the effectiveness of the single monetary policy – which by its nature could only be geared towards the needs of the area as a whole – questionable.

The use of fiscal policies to stabilise the national economies was seen as possible to some extent, but the experience of previous decades had given rise to growing scepticism. Indeed, from the outset it was recognised that countries would be tempted to "free ride" in the absence of the disciplining effect of exchange-rate risk premiums, by running budget deficits while neglecting longer-term considerations of fiscal sustainability. The adverse effects of fiscal profligacy would be all the more damaging as they risked spilling over, thus inflicting instability onto the area and squeezing productive capital formation in other participating countries. It would also hinder the newly created European Central Bank (ECB) in doing its job of maintaining price (and by extension macroeconomic) stability.

These concerns led to the development of the convergence criteria for inflation, exchange rate stability, interest rates and public deficits and debt, which were enshrined in the 1992 Maastricht Treaty, and which countries must comply with to qualify for euro-area accession (see above). It also led to the adoption of the Stability and Growth Pact in 1997 which fixes rules for fiscal policy and penalties if those rules are breached. Concretely, countries are required to move towards and sustain a fiscal position 'close to balance or in surplus' over the medium term and will be subject to corrective measures if the fiscal deficit exceeds 3% of GDP and/or if public debt fails to converge towards or below 60% of GDP, unless 'special circumstances' can be demonstrated. Participating countries submit annually a Stability Programme which contains a record of current and expected fiscal outcomes and on which the assessment of compliance by the competent EU authorities (the European Commission and the European Council) is based.

The concerns over the weak adjustment capacity of the countries participating in the euro area also

Table I.1:

Macroeconomic performance indicators		Period averages					
		Euro area		Denmark, Sweden, UK		United States	
		1989-1998	1999-2008	1989-1998	1999-2008	1989-1998	1999-2008
Real GDP	% rate of change	2,2	2,1	2,0	2,7	3,0	2,6
Real GDP per capita	% rate of change	1,9	1,6	1,7	2,2	1,8	1,6
Real GDP per capita	index, US = 100	73	72	74	76	100	100
Employment	% rate of change	0,6	1,3	0,1	0,9	1,5	1,0
Labour productivity	% rate of change	1,6	0,8	1,9	1,8	1,5	1,6
Unemployment	% of labour force	9,3	8,3	7,9	5,2	5,8	5,0
Inflation	%	3,3	2,2	3,4	1,7	3,3	2,8
Fiscal balance	% of GDP	-4,3	-1,7	-3,6	-0,9	-3,3	-2,5
Gross public debt	% of GDP	68,6	68,6	48,7	43,0	67,8	60,7
Long term interest rate	%	8,1	4,4	8,6	4,9	7,1	4,8
Real long term interest rate	%	4,7	2,4	4,2	3,3	4,3	2,4

Source : European Commission, OECD

led to a growing role for the EU's Lisbon Strategy, which was adopted in 2000 to orchestrate structural reform in product, labour and financial markets. While the Strategy was designed to boost growth and jobs over the longer haul in the whole EU, there has been mounting evidence that structural policies also have favourable knock-on effects on the economic adjustment capacity of the countries participating in the euro area. Structural reform within the Lisbon Strategy therefore became instrumental to enhancing the adjustment capacity of the euro-area Member States – both present and future. As well, the integration and development of financial markets is seen to create opportunities for risk sharing and consumption smoothing, thus easing the stabilisation role of macroeconomic policies.

A promising start

It is against this backdrop that Part I of this Report will take stock of the performance of the euro area during its first ten years. The economy has gone through approximately a full business cycle, moving from the peak of the cycle at the advent of the euro to its trough in the wake of the dotcom bust, followed by a – first slow and then decisive – recovery. This makes it easier to avoid wrongly attributing observed economic tendencies to permanent, as opposed to cyclical, developments. At the same time the assessment is complicated by the fact that many of the changes in governance structures and policy orientations prompted by the single currency were already ongoing in the run-up phase, including – importantly – the pursuit of the Maastricht convergence criteria. Moreover, many

participating countries were clearly not entering the euro area under 'steady state' conditions, but were still grappling with past economic disturbances.

Even so, the upshot of the analysis is that in many respects the euro area has performed better since the creation of the single currency than before, also in comparison with comparable economies, even if that performance has varied across countries. For example, while economic growth has been around 2% since the creation of the single currency, similar to its prior level, employment growth has been strong, fiscal performance has improved and real interest and inflation rates have fallen (Table I.1) As well, the euro very quickly established its role in foreign exchange and international security markets and has become an important reserve currency. As a result, the global economy has begun to move away from a unipolar dollar-based financial system and as such the euro has become a valuable public good, both inside and outside the euro area. The sections below discuss these findings in somewhat more detail.

Macroeconomic stability, jobs and growth

The inflation performance of the euro area has decisively improved in comparison with previous decades, and this has been accompanied by greater stability also of GDP growth. The bulk of the disinflation in the euro area actually occurred in the 1990s as a result of the efforts to meet the Maastricht inflation criteria. Average inflation in the first ten years of the euro area has been broadly on a par with the ECB's benchmark of price stability of close to but below 2%. And

even if inflation is currently well above this mark due to hikes in energy and food prices, various gauges of long-term inflation expectations remain consistent with the price stability goal, suggesting that this goal is well anchored and credible. The long-term decline in inflation is observed also in other developed countries, and hence the euro area is not unique in this respect. Even so, the institutional changes that have accompanied the creation of the single currency – such as the establishment of an independent central bank with a clear price stability mandate – have been instrumental in anchoring price developments in the euro area.

Another tangible economic achievement in the first ten years of the euro area has been *massive growth in employment* – with the creation of 16 million jobs and the unemployment rate plummeting from 9% in 1999 to an estimated 7% in 2008. This has occurred in spite of growing numbers of people approaching or exceeding retirement age, showing that labour market participation has soared. Indeed, on a per capita basis, job growth has by far outpaced that in other mature economies with generally more favourable demographics, including the United States. It would be inappropriate to attribute this achievement solely to the economic conditions generated by the single currency, and there is indeed evidence that labour market reforms have facilitated the labour market participation of 'marginal' workers (e.g. with low skills or limited job histories). But it is unlikely that job gains would have been as impressive under the more volatile monetary conditions and fiscal instability that used to prevail under the previous system.

However, the flipside of this development has been a significant *productivity slowdown*, with growth in output per worker halving from 1½ % in the period 1989-1998 to an estimated ¾ % in 1999-2008. This is in sharp contrast with the rapid pace of productivity growth observed in the United States over the same period. It largely explains why the euro area has seen its growth rate stalling at around 2% per annum, the same as in the preceding decade – despite a much faster growth in labour utilisation. Even so, there is evidence that the introduction of the single currency has favoured productivity as it has offered firms even greater opportunities to trade and specialise. Without it, labour productivity

would have been even weaker in the euro area than it has been. Nevertheless, the euro area continued to lag behind US living standards, with per capita income having stalled at 70% of the US level ever since the 1970s. Obviously it is tempting to assume the recent jobs 'miracle' itself has caused the productivity slowdown. A trade-off between more jobs and productivity may indeed emerge if faster employment growth leads to a lower capital use per worker and if greater numbers of low-skilled workers are employed. But this combined effect is found to be small, indeed tiny in comparison with the impact of the slow development and diffusion of new technologies and best work practices. A number of euro-area countries are not yet fully reaping the benefits of the information technology revolution and the spurt in the global division of labour.

The euro area has historically been characterised by slower recoveries from economic downturns than the United States, with the underutilisation of resources typically being more protracted. The main culprit behind this *lack of resilience* is the comparatively greater rigidity of prices and wages in the euro area which inhibit a rapid adjustment of supply and demand towards equilibrium. However, the euro area's record on this score has improved over the recent cycle, with the 2001-2003 downturn having been shallower than comparable episodes in previous cycles. This is partly a reflection of a tendency towards smoother business cycles globally – the so-called "great moderation" – possibly owing to better macroeconomic management, international risk sharing and consumption smoothing across the industrialised world. But the stability-oriented macroeconomic policy framework adopted by the euro area itself has undoubtedly helped.

A growing concern is that the exchange rate of the euro vis-à-vis key currencies has appreciated well beyond its fundamental value. While this partly reflects the relative strength of the euro-area economy and the widening interest differential between euro-area and US short-term interest rates, this is also being driven by the unwinding of global imbalances, in particular the large deficit on the US current account (see Part II of this Report). Overall, however, the volatility of the effective exchange rates of the euro-area

member economies has been relatively muted by historical standards.

Cohesion and convergence

One precondition for the favourable effects of monetary union to materialise was always considered to be that the business cycles of the participant countries must be more or less in sync. Otherwise, the one-size-fits-all monetary policy would be less effective – i.e. too loose for buoyant economies and too tight for the others. This Report examines the euro area's record on this score. It finds that:

- Business cycles have become more synchronised between participating countries during the decade preceding the creation of the single currency – possibly driven by the establishment of the Single Market in 1992 and the joint policy efforts in the run-up to the euro.
- The analysis also provides evidence that intra-area synchronisation is particularly strong when the business cycle turns down, but remains weak in the recovery. This suggests that the single monetary policy may be effective in choking off activity in the face of overheating, but is not uniformly effective in boosting countries out of the slump.
- Interestingly there have been no major further synchronisation gains since the single currency was created. In contrast, synchronisation between the euro area and the rest of the world has clearly accelerated. This suggests that the euro area as a whole has been moving more in step with an emerging global business cycle.

Despite the greater synchronisation of business cycles at higher frequencies, there is evidence of a more differentiated behaviour over the *medium term*. Two of the three largest countries in the euro area (Germany and Italy) have posted considerably weaker growth than the average. In the case of Germany this reflects the fact that it still had to work off the consequences of unification and the associated real appreciation of its exchange rate. Italy's sluggish performance has been due to continued losses in

competitiveness associated with weak productivity growth and an industrial structure that is particularly prone to competition from low-wage countries. By contrast, in the euro-area periphery a strong growth momentum had been building up prior to the introduction of the euro, owing to sharp declines in real interest rates along with successful structural reform and an associated strong growth potential.

Moreover, at the time of the admission to the euro area, several participating countries had not yet fully completed the catching-up towards EU-average living standards that was seen as a precondition for a well-functioning monetary union. The performance of three of the four "cohesion countries" (Spain, Ireland and Greece) have since shown a satisfactory development overall, while the fourth (Portugal) has disappointed. The strong performers have been thriving on investment booms, spurred by capital inflows attracted by comparatively high rates of return, with the single currency and the integration of financial markets acting as a catalyst. Key to the much weaker performance of Portugal has been the comparatively poor fiscal management, with the tax burden increasing while public expenditure has been growth-unfriendly – i.e. diverted away from productive public capital formation.

Overall, the divergences in growth and inflation among the euro-area countries have been long-lasting, involving major shifts in intra-euro-area real effective exchange rates, which in some cases have gone beyond their longer-term equilibrium values. This has been reflected in divergent current-account positions across countries. Some, but not all, elements of these differences in inflation, growth and external positions can be attributed to structural convergence in living standards (real convergence). Even so, not all inflation differentials are harmful; some are merely a sign that competitiveness realignment is doing its job as an instrument of intra-area adjustment in the absence of exchange rates. Better functioning labour and product markets have helped strengthen this channel while the integration and development of financial markets have also helped smooth divergences by spreading their impact on broader groups of consumers and investors.

Macroeconomic policies

As noted, the adoption of the single currency implied a radical change in the macroeconomic policy framework. Monetary policy was henceforth centralised whereas fiscal policy remained in the remit of the participating countries, albeit subject to rules, surveillance and co-ordination at the EU level. The fiscal rules attributed a strong role to automatic fiscal stabilisers, which are deemed to be powerful in the euro area owing to the extensive public social safety nets and progressive taxes. Meanwhile discretionary fiscal policy should be geared to the 'close to balance or in surplus' target over the medium run. The Stability and Growth Pact, arguably the core of EMU's fiscal framework, was reformed in 2005, which reconfirmed and strengthened its "corrective arm" after difficulties were experienced with its enforcement during the economic downturn of 2001-2003.

The experience with this policy framework has been positive. Monetary policy has been largely successful in broadly maintaining price stability and providing stimulus to activity when cyclical conditions were weak and removing it as the economy recovered – even though monetary activism has generally been less pronounced in the euro area than in e.g. the United States. Notwithstanding recurrent difficulties in enforcing the fiscal rules, budget deficits have declined significantly in comparison with previous cycles – and in the euro area more so than in non-euro EU members. Fiscal policy has continued to be somewhat pro-cyclical in 'good times', but less so than previously. The mechanisms underlying this behaviour appear to be quite complex, with the relatively long lags before boom conditions and the associated fiscal windfall gains are recognised as being unsustainable the main culprit. This initially led to breaches of the 3% of GDP deficit ceiling in some countries when the economy turned down and difficulties in enforcing the Stability and Growth Pact. However, after its 2005 reform member countries regained ownership of the fiscal rules and enforcement has since considerably improved.

The early debates highlighted the risk of unbalanced policy mixes, with participating countries' fiscal policies working against, rather

than supporting, monetary policy. In theory a succession of unbalanced policy mixes, already undesirable on its own account, also risks triggering volatile movements in the external value of the currency – with strong appreciations during upswings if monetary policy tightening is not supported by fiscal restraint. According to the analysis in this report these fears have in fact proved to be largely unfounded, with fiscal and monetary policies supporting each other, aside from a short spell of pro-cyclical fiscal policies during the ICT boom.

Structural policies and financial integration

The single currency was expected to spur governments to undertake structural reform, as this was seen as the only way to enhance the market-based adjustment capacity so as to offset the loss of the exchange rate instrument of intra-area adjustment – so that the so-called TINA (There Is No Alternative) hypothesis would apply. Some, however, argued that the disappearance of the exchange rate risk would rather weaken the incentives for structural reform. The evidence is not very conclusive, but it is clear that on balance the single currency has had little discernible effect on the pace of structural reform, which invalidates the TINA hypothesis. Notably, progress in the cross-border integration of services has been more muted than expected, which is particularly problematic. It is notably in this area that price rigidities persist. It appears that the political incentives to pursue rigorous reform in EMU are relatively weak. This has been recognised by the European authorities, such as the Eurogroup and the European Commission, which in turn has led to intensified surveillance of national structural policies in the euro area in the framework of the Lisbon Strategy for Growth and Jobs, which was revamped in 2005.

Meanwhile, there is strong evidence that the creation of the single currency has spurred the integration of financial markets in the euro area. This has supported the financial sector's adjustment role in several ways: by encouraging the movement of cross-border capital towards its best uses; by diminishing the risk of local credit crunches; and by promoting risk diversification and associated cyclical smoothing. However, financial integration remains a work in progress.

While it has progressed substantially since – and partly owing to – the introduction of the euro, several markets are still fragmented and the pace of integration varies from one country to another. The remaining fragmentation represents an opportunity cost for the euro-area economy, which needs a high degree of financial integration not only to raise productive potential but also to improve its capacity to adjust to country-specific shocks.

The international role of the euro

At the outset there was a consensus that the euro would be well received internationally but would not match the US dollar's dominant position. In practice, the euro quickly emerged as the second most important international currency alongside the US dollar and continues to consolidate this position. The euro has become a prominent currency of denomination in international debt markets and its role as an invoicing and reserve currency has been growing as well. It plays an important role as an anchor or reference currency in the managed exchange rate regimes of about 40 countries. Even so, the US dollar remains the first global currency in many areas, in part due to incumbency effects, and the euro's international role remains relatively concentrated in the regions neighbouring the euro area. This suggests that there is considerable scope for the euro to continue expanding its role as a global currency.

Despite the growing global role of the euro, attempts to improve the external representation of the euro area on financial and monetary matters have not made much progress. More generally, Europe's external representation in international financial fora – such as the Bretton Woods institutions – remains fragmented, reducing the actual influence of the euro area despite the large number of seats that EU (and euro-area) countries hold in them. Bilateral dialogues are held with strategic partners, but this involves the EU as a whole rather than the euro area as an entity in its own right – with one exception represented by the dialogue with China (where the Presidents of the ECB and the Eurogroup are involved together with the Commissioner for Economic and Financial Affairs).

Governance issues

The governance structure in EMU has helped deliver macroeconomic stability in many dimensions: low and stable inflation, greater resilience to adverse shocks, major efficiency gains associated with strong integration in financial and product markets, and better fiscal behaviour. It builds on a strong tradition of "subsidiarity", which leaves policy responsibilities to the Member States wherever possible. It has clearly helped promote a common understanding among euro-area policy makers of the importance of sound public finances and flexible product, labour and capital markets for the smooth functioning of EMU. Even so, EMU's governance arrangements have also suffered from a deficit of political and national ownership, with some Member States reluctant to translate a common understanding of policy challenges into policy-making at home. Decisive steps to improve this situation were taken in 2005, notably a reform of the Stability and Growth Pact, the revamping of the Lisbon Strategy for Growth and Jobs, the appointment of a President of the Eurogroup – the informal gathering of euro-area Finance Ministers that traditionally precedes the meetings of the Council of Economics and Finance Ministers (ECOFIN) – for a term of two years.

The dissuasive effect of the fiscal governance set-up embodied in the Stability and Growth Pact initially turned out not to be as effective as anticipated. Underlying budgetary imbalances were still built up during good times. There were sizeable deviations from agreed adjustment paths of the fiscal position and attempts to comply with the 3% of GDP reference value for budget deficits in some cases led to a preoccupation with cosmetic improvements. In March 2005 a reform of the Stability and Growth Pact was adopted by the ECOFIN Council. Concerning the "preventive arm" of the Pact it introduced a focus on structural balances and the possibility of adopting medium-term budgetary objectives that are better tailored to a country's specific circumstances along with some flexibility in the pace at which this objective should be achieved, depending on a country's structural reform efforts (notably pension reform). Concerning the "corrective arm", the economic circumstances that could lead to a

waiver of the excessive deficit procedure were reinterpreted and clarified. The implementation of the corrective arm now runs much more smoothly, although further progress concerning the preventive arm would be desirable; proposals to this effect are made in Part III of this Report.

Structural reform has remained largely under the remit of the Member States, but the need for enhanced structural reforms in the euro area has been widely accepted from the outset. For example, Article 99 of the EC Treaty requires Member States to "regard their economic policies as a matter of common concern and shall coordinate them within the Council". The importance of structural reform for the functioning of the euro area has led to including references to the euro-area dimension in the Broad Economic Policy Guidelines (BEPGs) to which the Treaty has assigned a central role in the coordination of economic policies. Importantly, the BEPGs now help to internalise euro-area priorities – notably the need for flexible and effective adjustment of prices and wages in the absence of internal exchange rates – into Member States' reform priorities.

Another important area of EMU governance concerns the conduct of exchange rate policy. Formal or informal agreements on exchange rates with partners outside the euro area require a decision by the Council.

The Eurosystem (the system of euro-area National Central Banks and the ECB), holds the euro area's foreign exchange reserves and has sole responsibility for exchange rate intervention. In practice the conduct of exchange rate policy has not encountered major problems.

However, the views of Ministers in the Eurogroup do not always converge and this has occasionally led to inconsistencies in public statements. The 2005 decision to appoint the Eurogroup President for a term of two years and his expanded participation in G7 meetings along with the use of Terms of reference on this topic has improved the situation in this regard.

Finally, the proper functioning of EMU requires a comprehensive information system to provide the statistical data on which to base surveillance, coordination and policy decisions. An action plan on EMU statistics was endorsed by the ECOFIN Council in September 2000 which identified the statistical areas where progress was urgent. This boosted the development of high-frequency statistics, although more can be done to increase the timeliness and scope of EMU statistics.

1. INTRODUCTION

Economic and Monetary Union (EMU), arguably the most important monetary innovation since Bretton Woods, has been a recurring ambition for the European Union because it promised stability and an appropriate macroeconomic framework that would foster growth and employment. When the EU was founded by the Treaty of Rome in 1957, the Member States concentrated on building a 'common market' for trade and the Treaty contained no provisions on a single currency, although it mentioned the need for economic coordination. Over time, it became clearer that closer economic and monetary cooperation was needed for the internal market to develop and flourish further, and for the whole European economy to perform better.

The origins of EMU can be traced back more clearly to 1970 with the publication of the Werner Report (Werner 1970), which set out a process to achieve EMU within ten years. However, a fresh wave of currency instability on international markets squashed any hopes of success. As a result, in 1979, the European Monetary System (EMS) was launched, restricting the fluctuation of intra-EU exchange rates and coordinating monetary policies between the Member States. This system operated successfully for over a decade, but the project of a single currency could not be completed in the 1970s and only fully revived at the end of the 1980s.

In June 1988 the European Council set up a committee chaired by the then President of the European Commission, Jacques Delors, to study economic and monetary union. The committee's report, submitted in 1989, proposed the introduction of economic and monetary union in three successive stages (Delors 1989). In 1991, the Member States approved the Treaty on European Union (the Maastricht Treaty), which included these three stages, deciding that Europe would have a single currency for the 21st century. Finally, after a decade of preparations, decisions on the move to the final stage of EMU were taken in May 1998 and on 1 January 1999 the euro became the official currency of 11 countries: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Subsequently

Greece, Slovenia, Malta and Cyprus have adopted the euro.

Ten years after the decisions that led to the introduction of the single currency, the time seems ripe for a first comprehensive assessment of its functioning to date. This assessment is greatly facilitated by the fact that the euro area has now gone through a virtually complete business cycle, coming from a cyclical peak in 1999-2000, followed by a downturn in 2001-2003 and a – initially hesitant but subsequently firm – recovery in 2004-2008. A new turning point may be nearing as the recession in the United States could spill over into weaker activity globally and hence also in the euro area.

Any assessment has to consider a benchmark against which the performance is valued. In this Report, an attempt is made to measure the euro area's performance against a combination of the following three benchmarks, dependent on the availability of information:

- *Previous business cycles*, with the most recent one prior to the launch of the single currency roughly coinciding with the ten-year period 1989-1998. For example, if inflation is on average lower in the period 1999-2008 than in the period 1989-1998, this provides an indication that the inflation performance has structurally improved.
- *Control groups* of economies at a comparable stage of development, either inside the EU (United Kingdom, Sweden and Denmark) or outside it (United States). Similarly, a negative inflation differential over the period 1999-2008 between the euro area and its peers points to a better inflation performance.
- *Counterfactuals*, i.e. reconstructions of the possible evolution of the economies that now constitute the euro area had there not been the single currency. The objective is not the counterfactual itself, but rather the impact assessment against this counterfactual based on modeling or econometric techniques.

Two other methodological remarks are in order. *First*, although the economic development for

the whole year of 2008 is unknown at this stage, the available projections should be converging to the actual outcomes. Therefore any numbers for 2008 are estimates based on the latest available European Commission forecast. *Second*, any euro-area aggregates reported for the period prior to the launch of the single currency are obviously ex post constructs used only for illustrative purposes. *Third*, as noted euro-area membership has been expanding over time, so in order to achieve comparable data sets over time decisions had to be taken to include the bulk but not all of the current euro-area countries. Unless indicated otherwise, euro-area aggregates always refer to the eleven countries that joined the euro area in the first wave plus Greece.

Finally, it is also useful to underscore at this point that the majority of the ex ante assessments of EMU prior to its launch have been rather sceptical (Buti and Sapir 1998 and 2002). A number of prior concerns have been advanced, including the following:

- The euro area risked being not an 'Optimal Currency Area'. The diversity of the euro area was deemed to result in cyclical divergences. With the loss of the exchange rate mechanism the adjustment to country-specific disturbances would be sub-optimal.
- Fiscal policies, which remained in the hands of the member countries, would risk being pro-cyclical due to the 3% of GDP fiscal deficit ceiling imposed by the EU fiscal rules. This would exacerbate the allegedly weak adjustment capacity at the country level and produce a suboptimal mix between monetary and fiscal policies at the aggregate level.
- Real interest rates would tend to behave pro-cyclically at the country level as well, going down as inflation rises in cyclical upturns and vice versa and again exacerbate the adjustment gap (the Walters critique).

The relevance of these ex ante concerns – which as presented here are far from exhaustive – have been extensively studied as EMU evolved, most recently in the 2006 issue of the *EU Economy Review* (European Commission 2006a).

The Review concluded that, while adjustment problems definitively exist, they have also been cushioned by offsetting developments triggered by the single currency and monetary policy, including the greater synchronisation of business cycles across countries, the better anchoring of inflation expectations (and perceived real interest rates), the more stable macroeconomic environment overall as well as the integration of financial markets and the associated opportunities for risk sharing and consumption smoothing. Even if the euro area may not have started off as an optimal currency area, it has clearly developed in that direction.

Aside from the adjustment issue, the creation of the euro impinges on many more features of the economy it has helped shaping, including the incentives to implement structural reform and boost the growth potential of the economy in interaction with the EU *Lisbon Strategy for Growth and Jobs*, the structural convergence of per capita income levels, the challenge of economic governance and co-ordination in a multi-jurisdictional framework and the role of the euro in the global financial system. This is reflected in the structure of Part I of this Report, which starts off with a discussion of the overall macroeconomic performance of the euro area since its advent (Chapter I.2). This is followed by an examination of the degree of synchronisation of business cycles across the participating countries and its development over time (Chapter I.3), complemented by an analysis of the adjustment experience (Chapter I.4). The policy mix issue is addressed (Chapter I.5) as well as the development of structural policies (Chapter I.6), financial market integration (Chapter I.7) and structural catching up of lagging countries (Chapter I.8). The final chapters examine the growing global role of the euro (Chapter I.9) and the development of EMU's governance structure (Chapter I.10).

2. MACROECONOMIC PERFORMANCE

2.1. INTRODUCTION

The creation of the single currency in 1999 established a low inflation environment amid financial stability and also brought lower transactions cost for cross border trade. This was hoped to act as a lever for the single market by creating economies of scale and stimulating competition.

What was less appreciated at the outset was that the removal of the exchange rate risk and the associated reduction in macroeconomic volatility might produce additional growth effects by reducing the cost of capital alongside with the lower transaction cost of trade. It was, moreover, not obvious initially that the creation of a single currency, by acting as a catalyst for financial market integration and development, could produce opportunities for risk sharing and consumption smoothing in the face of economic disturbances. Such forces have nevertheless been at work, as the analysis in later chapters bears out. They contributed to growth and resilience of the euro-area economy, along with lower and more stable inflation.

Against this backdrop, this chapter will start off with a discussion of the inflation performance in the euro area in comparison with the pre-euro history and that in other advanced economies. The following section will look at the growth and employment performance in the euro area and its main determinants, including the adoption of the single currency itself. The subsequent section assesses the cyclical variability of activity in the euro area and its resilience against adverse disturbances. The final section looks at the development of the exchange rate of the euro in comparison with its legacy currencies.

2.2. INFLATION PERFORMANCE

All participating countries in the euro area have been required to fulfil the Maastricht criteria. One of these criteria refers to countries' inflation performance. Not surprisingly, the macroeconomic policy framework in the euro area is geared to maintain price stability, with the European Central Bank to deliver on this goal.

The inflation performance of the area thus naturally provides *prima facie* evidence on the effectiveness of the institutional setup in terms of delivering on one of its key objectives.

2.2.1. The benefits of low inflation

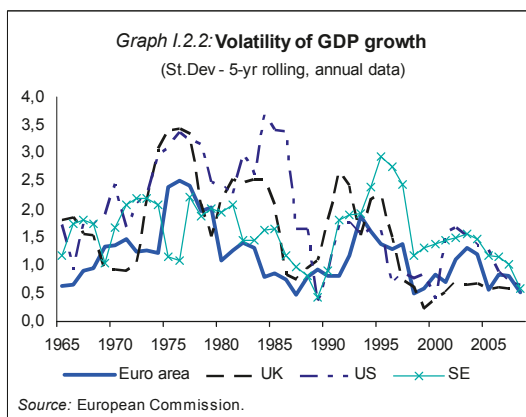
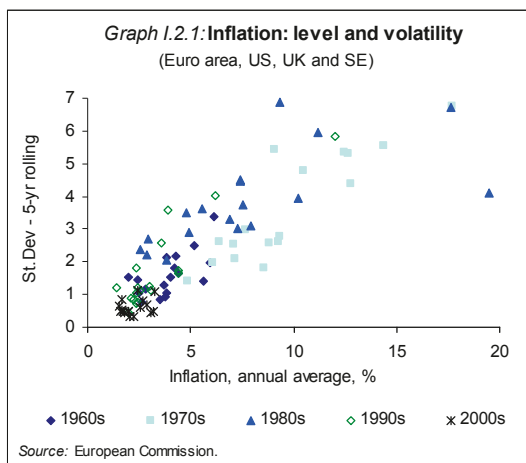
High inflation is potentially costly, and its removal beneficial. This is the case because high inflation is associated with high inflation volatility (see Graph I.2.1 which shows a strong positive correlation between the level and standard deviation of inflation). Three sources of costs of inflation volatility are generally advanced:

- Inflation uncertainty gives rise to an inflation risk premium embedded in long-term interest rates. This increases the real cost of capital and lowers the equilibrium stock of capital. Lower capital means lower output for a given level of labour input, hence lower productivity. Inflation volatility can thus adversely affect the growth prospects of the economy.
- Greater inflation uncertainty makes it more difficult to disentangle relative and absolute price changes. Greater variability in the price level thus tends to blur the price signals to consumers and producers, jeopardising the efficient allocation of resources.
- Inflation volatility leads to greater volatility in output and employment. Recurrent slack and underutilisation of resources is costly, not least since resources may be withdrawn for good (hysteresis effects).

Inflation volatility has sharply declined since the turbulent 1970s, 1980s and early-1990s and this has been accompanied by a similar decline in the volatility and the volatility of GDP growth. For example Graph I.2.2 shows the familiar moderating pattern for the standard deviation of GDP growth in the euro area, the US and the UK. ⁽⁴⁾ From a period of low growth volatility in

⁽⁴⁾ The European Commission's Quarterly Report on the Euro Area N°1 provides an assessment of the reduced volatility of output growth in the euro area (European Commission 2008a).

the 1960s, the following decade saw a marked rise in output growth volatility, with a nearly trebling of the standard deviation in the euro area and doubling in the US and UK. While this development was reversed in the 1980s, there was a resurgence of volatility in the first half of the 1990s. Growth volatility has since subsided, with further declines in the past decade.



There is a growing body of literature examining the reasons behind the observed marked decline in growth volatility, particularly in the US, which is often labelled the “Great Moderation” (Bernanke 2004). Although no consensus has yet been reached on the deeper causes, it is clear that there is a strong positive correlation between the paths of inflation volatility and growth volatility over the last 50 years. This suggests that the move away from irregular discretionary policy responses to economic events towards regimes targeting a clear inflation objective is likely to have contributed to the decline in the volatility of both inflation and growth (Blanchard and Simon

2001). But obviously there are also other factors that have reduced the volatility of inflation and growth. These include the reduced energy intensity of production, increased risk sharing via financial markets and smaller disturbances.

2.2.2. The inflation record to date

An overall characterisation of inflation performance during the first ten years of the euro area and the preceding decades is shown in Table I.2.1. As can be seen in the first column, the euro area registered a gradual improvement in terms of the level of inflation over the last four decades. Inflation more than doubled in the 1970s compared to the 1960s, as a consequence of the two oil price shocks and the policy responses to them. Subsequently, however, average inflation declined from above 9% in the 1970s to 2% in the first ten years of the single currency -- one of the lowest on record in post-war history.

Table I.2.1:
Inflation performance in the euro area

	Average inflation	Standard deviation of inflation	Maximum inflation	Date of max. inflation
1960s	3,7	0,9	5,1	1963
1970s	9,3	2,8	13,6	1974
1980s	7,5	3,8	12,8	1981
1990s	2,8	1,2	5,0	1990
2000s*	2,0	0,3	2,4	2001

*Corresponds to the period since the start of Stage III of EMU, of which the last 2 years are forecast values.
 Source: European Commission.

The bulk of the disinflation occurred in the 1990s, when average inflation dropped by some 4½ percentage points. This was largely the result of the efforts consented by euro-area candidates to meet the Maastricht criteria, which turned out to be a powerful incentive for making considerable progress towards low and stable inflation. Key among the efforts of the time was an improvement in monetary policy making, which involved the granting of independence to national central banks.

Average inflation in the first ten years of the single currency has been broadly on par with the ECB's benchmark for price stability of (close to but below) 2%. This was achieved in spite of a series of inflationary shocks that hit the euro-area economy. In the first two years this included a

hike in oil and food prices, the depreciation of the euro and strong increases in indirect taxes and administered prices in several euro-area countries associated with fiscal consolidation efforts. Further down the road, geopolitical tensions and supply concerns have led to further sharp increases in energy prices, which now play a dominant role in short-term inflation dynamics (Graph I.2.3).

Even more striking than the reduced level is the reduced volatility of inflation. Using the standard deviation to gauge inflation volatility, the period since the launch of the euro displays more stable inflation than in any other period of comparable duration in post-war history. As shown in Table I.2.1, the standard deviation of inflation peaked in the 1980s at close to 4 percentage points. It declined to nearly one fourth of that during the run-up to the single currency and still further progress has been achieved since.

It is also striking that inflation has converged significantly across the participating countries in the run-up period to the launch of the euro. In most euro-area countries inflation peaked in the 1970s, with the most substantial declines registered mainly in the 1990s, except for Germany, Austria and the Netherlands where this took place already in the 1980s. The initial dispersion of inflation rates was very large. In Germany and Austria inflation never went beyond 10%, but in Belgium, France, Luxembourg, the Netherlands and Finland, inflation rates in the range of 10-20% were occasionally reached and in Ireland, Greece, Spain, Italy and Portugal inflation rates in excess of 20% have been no exception. Obviously countries in the latter group registered the most pronounced disinflation since, on average three times that recorded in the other countries. Accordingly, the cross-country convergence of inflation volatility has also been very pronounced.

2.2.3. An international comparison

As shown in Table I.2.2, the US and non-euro-area EU countries feature the same overall patterns as those described for the euro area, which is therefore not unique. Many of the institutional changes that matter for achieving an environment of low and stable inflation – such as

granting independence to the central bank, giving it a explicit and clear mandate for achieving price stability, and wide recognition by policy makers and the public at large that price stability is a key policy objective – also took place elsewhere.

Table I.2.2:

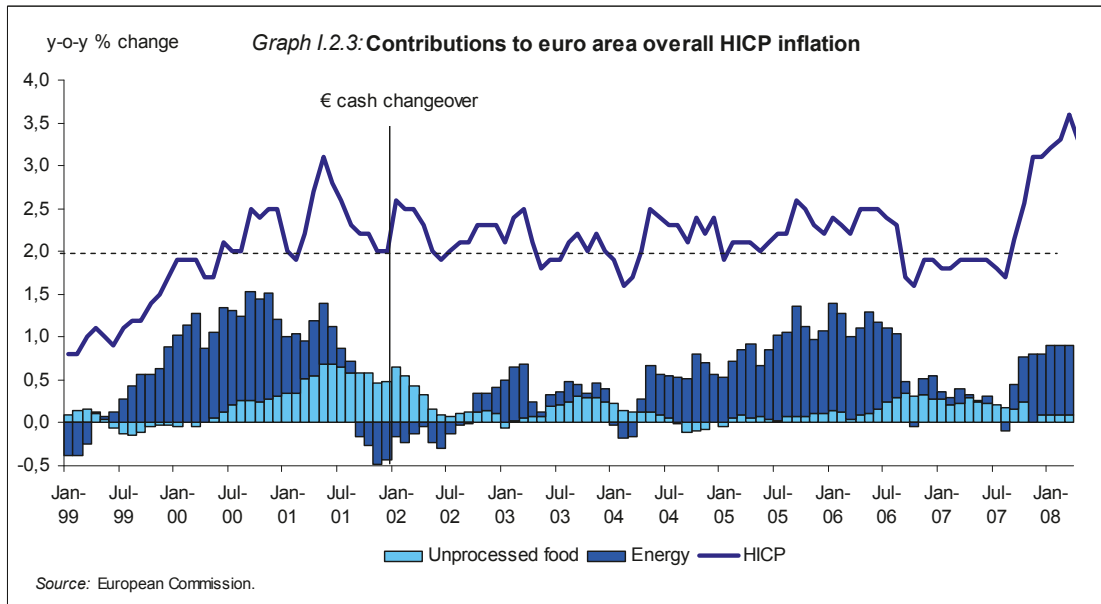
Inflation performance by decade: UK, SE and US

	Average inflation	Standard deviation of inflation	Maximum inflation	Date of max. inflation
UK				
1960s	3,8	1,0	5,4	1969
1970s	12,5	5,3	24,2	1975
1980s	7,4	4,5	18,0	1980
1990s	3,9	2,6	9,5	1990
2000s*	2,7	0,5	2,4	2007
SE				
1960s	3,7	1,3	6,3	1966
1970s	8,6	1,8	11,4	1977
1980s	7,9	3,1	13,6	1980
1990s	3,5	3,6	10,5	1990
2000s*	1,4	0,7	2,7	2001
US				
1960s	2,4	1,5	5,4	1969
1970s	7,1	2,5	11,3	1979
1980s	5,5	3,6	13,5	1980
1990s	3,1	1,1	5,4	1990
2000s*	2,6	0,6	3,4	2000

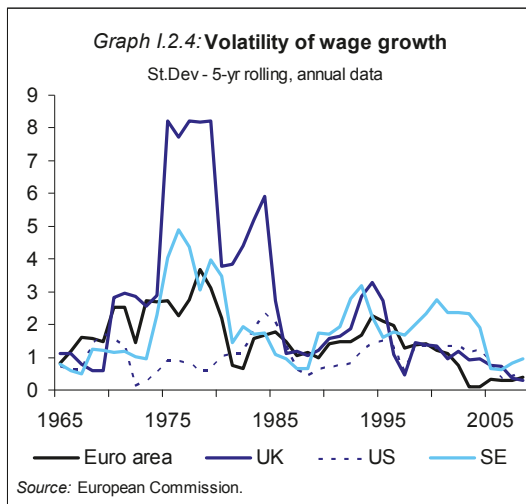
*Corresponds to the period since the start of Stage III of EMU, of which the last 2 years are forecast values.
Source: European Commission.

Over the last two decades there has been a conscious and systematic move to stability-oriented frameworks. This stemmed from a better understanding of the importance of expectations and the credibility of monetary policy. By committing credibly to achieving a low inflation objective, it convinced the public that the authorities will act to prevent inflation. With a credible commitment to price stability, the public will not change their expected inflation in the face of an upward price shock.

This is not only reflected in price developments, but also in wage developments, which are likely to have responded to the improvements in the macroeconomic policy framework and the corresponding changes in expectations as well. As shown in Graph I.2.4, wage growth volatility tripled in the 1970s in the euro area and Sweden and rose by a factor of eight in the UK, while it gradually edged up in the US, to peak in the first half of the 1980s, at roughly twice the standard deviation of the 1960s. In the 1980s and 1990s

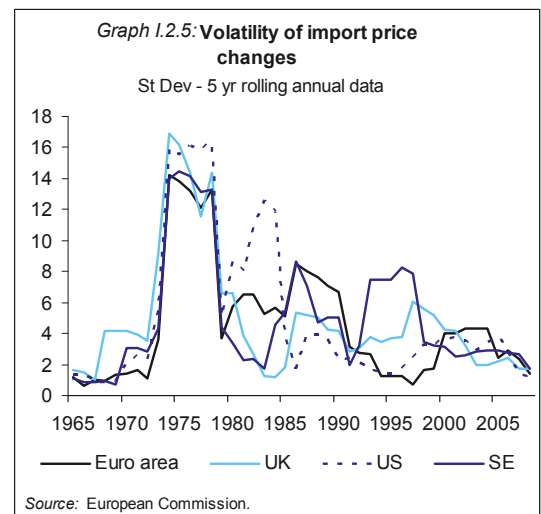


wage growth volatility returned to standard deviations mostly between 1 and 2 percentage points, a pattern prolonged into the. In the 2000s further reductions in volatility were recorded.



It is also fair to acknowledge that the favourable inflation performance of the euro area has clearly benefited from the better inflation record elsewhere via developments in import prices. Graph 1.2.5 shows that the volatility of import prices declined markedly in the last three decades across industrialised countries. Import price inflation volatility was very low in the 1960s, mostly below 2 percentage points,

reflecting the predominance of fixed exchange rate regimes at the time. In the 1970s, with the break-up of Bretton Woods and the oil price shocks, the volatility of import price inflation surged, reaching double-digit standard deviations. In the next decade the volatility of import price inflation went back to single standard deviations, but remained considerably higher than in the 1960s. The pattern visibly changed in the 1990s and 2000s, when import price inflation volatility reverted to levels unseen since the 1960s. This suggests that reduced volatility in global price impulses also contributed to the decline in the volatility of inflation.



In addition, the literature provides ample evidence to suggest that the pass-through of import prices onto domestic inflation may have declined in advanced countries, owing to the increased use of pricing-to-market strategies (see Taylor 2000, McCarthy 2000, and Faruquee 2006). This in turn feeds back onto global inflation, thus creating a virtuous circle of low and stable inflation across the world.

Meanwhile, the drive towards lower global inflation did not come without a cost in terms of rather radical shifts in relative prices that are not often well perceived. In particular, the relative prices of frequent expenses of local services have generally risen while those of less frequently purchased big-ticket consumer durables and services that are globally traded steeply fell. This may help explain the rather negative public perceptions of the euro in many participating countries, as its introduction roughly coincided with this change in relative prices (Box I.2.1).

2.3. GROWTH, JOBS AND PRODUCTIVITY

Inflation is one among many other factors that impinge on overall growth performance. These include structural policies (which will be discussed in later chapters) alongside with secular trends such as economic integration and ageing populations. There has also been an impact of the single currency itself on growth, over and above the effects of lower inflation volatility, via stronger competition and economies of scale as markets integrate. Despite these favourable effects it may be somewhat puzzling that a sizable gap in living standards between the euro area and the most advanced economy in the world – the United States – has remained, stalling at around 30% despite a welcome surge in the number of people at working age participating in the labour market. This section will give some clues.

2.3.1. The record so far

Graphs I.2.6 and I.2.7 show the average annual (per capita) growth rates in the euro area and its participating countries alongside with those of a comparator group of economies in the periods 1989-1998 and 1999-2008. Countries that are located above the 45° line have seen growth

accelerating and *vice versa*. For the euro area both the weighted (EA) and arithmetic averages (AV) are shown to provide an impression of the contribution of country-composition effects. For example, if small countries grow faster than large ones, the arithmetic average will exceed the weighted one and *vice versa*.⁽⁵⁾ A number of stylised facts can be inferred from these graphs.

First, the area has been growing by slightly over 2% per annum in both periods. But the arithmetic average growth rate amounted to almost 3% in both periods – *i.e.* close to the US record – which indicates that smaller countries have on average been growing faster than the larger ones in both periods.

Second, two of the three largest countries have posted considerably weaker growth after the inception of the euro than before it. Notably Germany slowed down from the 2½ to 3% range in the decade preceding the creation of the single currency to a mere 1½ % while Italian growth remained weak all along at around 1½ %. A number of explanations have been advanced. Germany has had to work off the consequences of unification and the ensuing real appreciation of the Deutschmark in the early-1990s. Adjustment was clearly not completed when Germany entered the euro area, which led to protracted wage moderation and weak domestic demand. Italy's sluggish performance is attributable to unabated losses in competitiveness associated with weak productivity growth not being matched by equivalent wage moderation. In addition, Italy's industrial structure is more strongly exposed to competition with low-wage emerging economies. It has been rapidly losing international market shares as a result.

⁽⁵⁾ For a similar approach, see Pisani-Ferry *et al.* (2008).

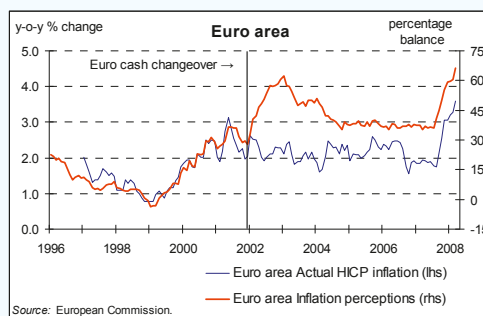
Box 1.2.1: Public perceptions of inflation in the euro area

With the introduction of euro banknotes and coins in January 2002, the euro has become one of the most tangible symbols of European integration for European citizens who use it. Since the euro cash introduction, the European Commission has conducted regular opinion polls to monitor citizens' attitudes towards the euro (Eurobarometer). These polls show that people are overall supportive for the single currency and that they adjusted rather rapidly to the euro. They also show that citizens are aware of the benefits which the euro has brought about, at least the microeconomic benefits such as the reduction of transaction costs, the ease of travel and the increase in price transparency. On the other hand, the public remains more sceptical about the euros' positive impact on growth and employment and sound public finances.

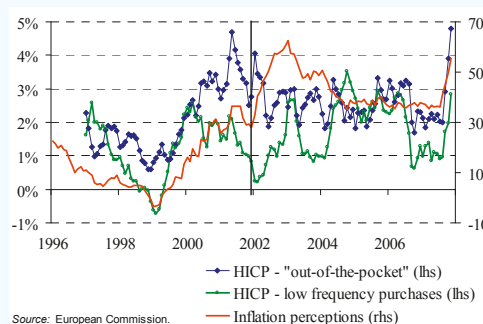
The Eurobarometer show that citizens are more positive on the usefulness of the euro for Europe than for their individual country. Around two-thirds of citizens consider the euro to be "a good thing for Europe"; but less than half consider it to be a "good thing for their country". When citizens are asked about the usefulness of the euro for their country, support rates are highest in Ireland, Luxembourg, Belgium and Slovenia and lowest in Greece, Germany, Italy and Portugal. In terms of socio-economic groups, men are on average more positive than women, younger people more than older ones and citizens with higher education and higher incomes more than those with lower education levels or lower income levels (Jonung and Conflitti 2008).

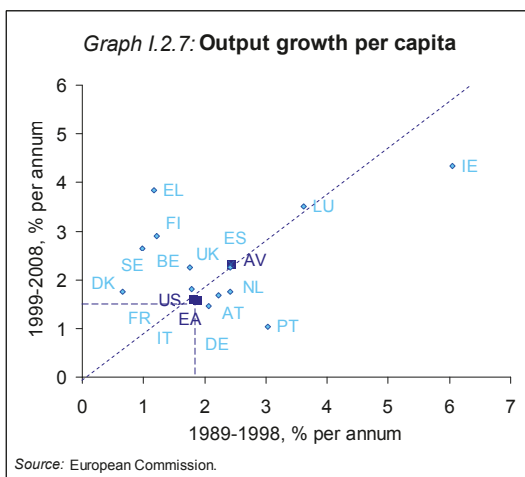
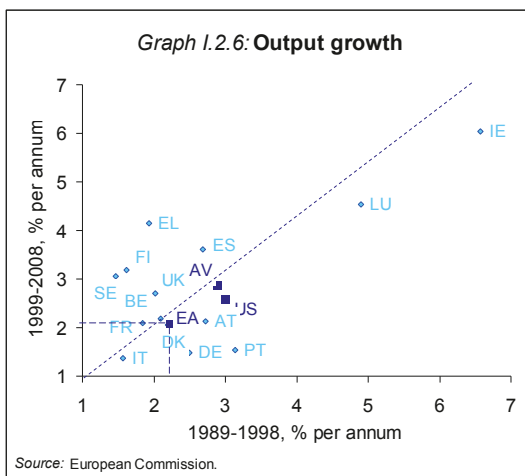
Recent research carried out by the Commission services suggest that, aside from the socio-economic factors discussed above, popular support for the euro is correlated with inflation. More specifically, price perceptions seem to be an important determinant of people's perception of the single currency. Although there were on average no major price increases associated

with the cash euro introduction, many citizens seem to hold a different view. Inflation perceptions, as measured by the European Commission's Consumer Surveys, increased significantly with the euro cash changeover in 2002 (graph below).



A number of factors have been identified which could explain the perception gap in the euro area countries. These include the relatively price increases for frequently purchased goods (food, energy; see graph), the steep increase in house prices in many countries, low increases in disposable income and various psychological factors. The perception gap has also to be seen against the rather low awareness of the actual inflation rate. According to the latest Flash Eurobarometer results, two thirds of the respondents in the euro area either had a too high estimate of the actual inflation rate or admitted not to know it. This gap remains a challenge for researchers to interpret although it is expected to diminish over time.





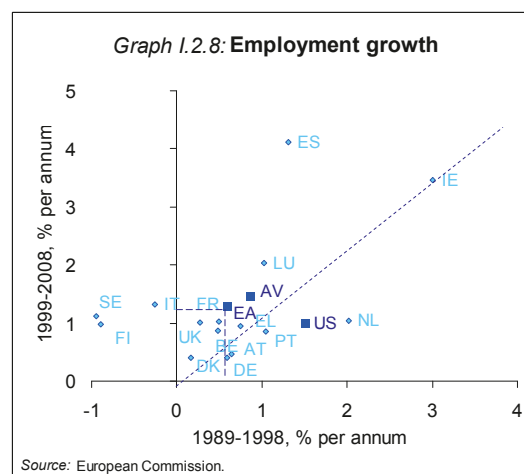
Third, the comparatively rapid growth in Spain – the fourth-biggest economy in the euro area – has been driven by a boom in residential construction spurred by declining interest rates, an easing of credit constraints on households and strong migration inflows. Growth thus relied heavily on the non-tradable sector, and the current account deficit widened progressively (see Chapters I.3 and I.7) – a situation that may be reversed at some stage as the economy is cooling down sharply.

Fourth, within the group of smaller countries there have also been striking differences. Greece and Finland sharply accelerated while Ireland has been growing rapidly in both periods, even if slowing down slightly. These countries have all outpaced the US, the UK and Sweden since the launch of the euro. Among the smaller countries, Portugal's performance has been weak as macroeconomic imbalances built up in the 1990s

boom – which saw current account deficits, household indebtedness and underlying fiscal deficits soaring – had to be worked off (see Chapter I.8).

This overall picture is broadly similar in per capita terms (see Graph I.2.7), except for Spain. Spain has performed well on this measure in both periods, but it did not show any acceleration in its per capita GDP, as rapid population growth (mostly on account of immigration) rather than productivity growth has become the main growth engine.

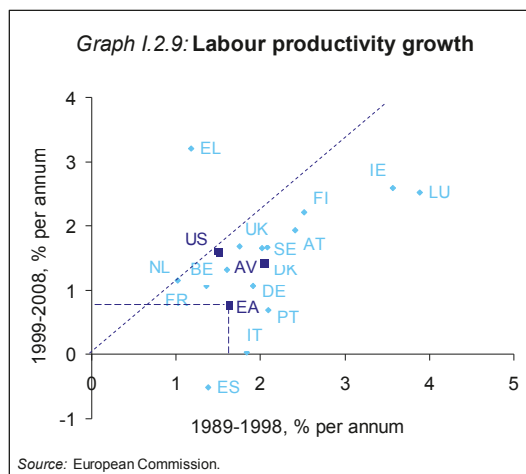
A decomposition of GDP growth into changes in employment and labour productivity gives some insight in the approximate causes of these developments. Graph I.2.8 reveals that job creation in the euro area has overall been buoyant since the launch of the single currency, and slightly more so than in countries outside the area, including the US, accelerating from ½ to around 1¼ % per annum. The pick-up in job growth has been widespread, with only the Netherlands backsliding.



The boost to job growth in Spain has been particularly impressive, explaining approximately half of the jobs surge in the area as a whole. The jobs boost owes mostly to growing numbers of female workers as well as falls in the structural rate of unemployment – from over 9% in 1998 to 7% at present (see Chapter I.6). A recent study (Mourre 2006) detects a structural break in aggregate employment in the euro area in the late-1990s, and explains this by lower tax rates, less strict

employment protection legislation (EPL) and a shift in the production structure towards more labour intensive services. As well, wage moderation during the 1990s, possibly in response to trade integration in the wake of the internal market initiative and efforts to comply with the Maastricht convergence criteria, may have contributed.

The flipside is that area-average labour productivity growth slowed down from 1½ to ¾ % (Graph I.2.9). This compares rather poorly with the US record of 1¾ % productivity growth in both periods. The main culprits of the slowdown have been the sluggish performances of Italy – which has been showing no productivity growth at all since 1999 – and Spain – where output per worker has even declined since the inception of the euro. Portugal also posted weak labour productivity growth.



The deeper causes of the productivity slowdown have been studied extensively – most recently in the *EU Economy 2007 Review* (European Commission 2007a). The thrust of the findings is that the bulk of the productivity slowdown (relative to the US performance) is attributable to sluggish developments in only a handful of industries. Detailed sector-by-sector analyses reveal that the differential stems mainly from the information and communication technology (ICT) equipment industry, wholesale and retail trade, real estate and other business services and financial services. The low level of private ICT and R&D expenditure in comparison with the US is mostly due to the smaller size of high tech industries in Europe. Regulatory issues,

especially entry and exit rules, appear to be playing a role in business and financial services, while the weak productivity performance of Europe's retail and wholesale industries is in part explained by constraints to the use of scale economies.

While it is tempting to assume that the recent jobs surge has caused the productivity slowdown, the evidence points in the opposite direction. A trade-off between more jobs and higher productivity may emerge under some conditions, notably if faster employment growth entails a lower capital use per worker and if greater numbers of low-skilled workers are employed. But this combined effect is small and dwarfed by the impact of skill formation and the development and diffusion of new technologies and best work practices.

2.3.2. The impact of the euro

Even if productivity growth in the euro area has been weak, the elimination of exchange rate uncertainty may be expected to boost productivity through a number of channels. Openness to trade and investment enables a country to specialise in more efficient production processes, and thus raise the level of output per unit of input. It is also plausible that increases in competition brought about by the removal of barriers to trade and cross-border investment raise productivity. The single market programme is generally found to have been instrumental in this regard, but participation in the euro area may have provided further impetus.

Trade effects of the single currency are expected to materialise via three main channels:

- Elimination of transaction costs associated with operating in multiple currencies like currency conversion charges, banking fees and in-company resources for currency management.
- Elimination of exchange-rate volatility and associated currency risk. Although firms can hedge themselves against currency risk, hedging is costly and never complete (Döhning 2008). It forces less productive

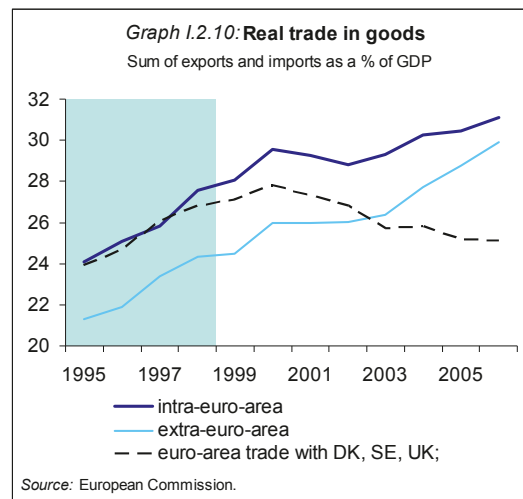
firms, mainly small ones, to stay on their domestic market.

- Price transparency, which would increase goods arbitrage between countries, enhances competition and, in turn, raise trade flows.

In the run-up to the launch of the single currency, euro-area countries' trade flows, both within the euro area and with the rest of the world, increased rapidly (Graph I.2.10). Extra-area trade has increased slightly more rapidly than intra-euro-area trade and it is difficult to discern a euro effect. Comparisons between intra- and extra-euro-area trade should, however, be interpreted with care. Emerging economies like China, India or Brazil have been rapidly integrating into the global economy, boosting trade between them and other countries. Additionally, a secular fall in transport and communication costs generated the development of new forms of trade and production management. It triggered companies to break up the production process internationally and 'offshore' production stages to make a better use of countries' competitive advantage. This so called "unbundling" of the production process (Baldwin 2006a) has tended to boost trade between advanced and emerging economies and to reduce the relative size of intra-area flows in total euro-area trade. The enlargement of the EU created similar opportunities for companies based in the euro area in their proximity.

A positive euro effect on trade is easier observable when restricting the analysis to EU countries (Graph I.2.10). Since the late 1990s, trade within the euro area has clearly expanded more rapidly than trade between euro-area countries and other EU countries. Barring a few exceptions (e.g. Berger and Nitsch 2005), this is confirmed in most econometric studies and they generally attribute this to the euro. According to recent reviews of the literature, the euro has increased trade between euro-area countries in a range of 5 to 15% so far and there may be more to come (Baldwin 2006b, 2008). Importantly, the increase in trade flows between euro-area countries has not been at the expense of trade with non-euro-area countries, pointing to a genuine trade creation effect. Indeed, the better allocation of production across euro-area countries made euro-area goods more

competitive and resulted in increased extra-euro-area trade (Flam and Nordstrom 2003, Yi 2003, and Baldwin, Skudelny, Taglioni 2005).



A priori the effect of monetary union on *foreign direct investment* (FDI) is less straightforward. There are also complex interactions between FDI and trade. If cross-border transaction costs fall, it may be less urgent or profitable to set up production facilities in destination countries, reducing "horizontal" FDI. A priori this will entail a concomitant increase in trade of final products. On the other hand, if transaction costs fall the unbundling of production process becomes more profitable, thus raising "vertical" FDI. Trade in intermediate products will also increase as a result and this will be largely intra-sector or intra-firm. So, whether on balance FDI will be positively or negatively affected by the single currency is a purely empirical issue.

Most studies find a positive euro effect on intra-euro-area FDI flows in the range of 14% and 36% (Petroulas 2006; Sousa and Locharde 2006). Other studies find a diversion of FDI away from non-euro-area EU countries into the euro area (Taylor 2007). Available studies also find a positive effect of the euro on FDI flows between the euro area and the rest of the world, both in terms of FDI flows into the euro area and of euro-area firms' investment abroad (Petroulas 2006, Foad 2006).

Box I.2.2: The impact of the single currency on labour productivity

The ability to trade enables countries to specialise in production that is better attuned to their comparative advantages. This raises labour productivity and in addition increases in competition brought about by the removal of trade barriers may raise productivity further through faster diffusion of technology. EU membership and the single market programme are thus potentially powerful growth boosters. Econometric research carried out by National Institute for Economic Research (NIESR) has tested the hypothesis if EMU membership has a positive impact on labour productivity over and above these factors, owing to better price transparency, reduced transaction costs and smaller exchange rate and related risks (Barrell et al. 2008). This is done in a two-step approach.

In a first step a panel error correction model is estimated on a sample of seven EMU countries (BE, FI, FR, DE, IT, NL, AT), three EMU-out countries in the EU (UK, SE, DK) and the US. The dependent variable is output per hour worked adjusted for skills, i.e. the component of labour productivity that can be attributed to other factors than the quality of human capital. Both stocks of Research and Development (R&D) and Foreign Direct Investment (FDI) are included as explanatory variable in the equation along with the user cost of capital and a measure for risk (the volatility of output growth). Dummies are included for participation in the European single market (or NAFTA in the case of the United States), EU entry and adoption of the single currency. A proxy for trade openness is also included. The database used is EUKLEMS.

The key finding of the estimates is that EMU effects are positive and significant in five 'core' countries DE, FR, IT, NL and BE.

The finding that the single currency effect is constrained to only five countries (which comprise 80% of the euro area), stems from a rigorous process of elimination and checking and is quite robust. It suggests that the most integrated part of the euro area has drawn most benefits from euro introduction in terms of its productivity. In addition, decreases in the user cost of capital and volatility of output have a significant positive effect on productivity in all countries. Single market effects are significant and positive in BE, DK, DE, FR, IT and NL. EU entry dummies have a significant impact on productivity in SE and AT. The effects of R&D vary across countries and only in FR and BE are significant effects of FDI found.

In a second step it is tested if there are additional indirect effects of the single currency on productivity through reduced output volatility feeding into the risk premium on capital. This is tested with an equation for output volatility in which a single currency dummy is included alongside with controls for the volatility and levels of inflation, EU entry and the single market. The single currency effect on volatility turns out significantly negative in most countries, with the strongest effects found in the smaller countries. This confirms that there may be indirect effects of the euro on the level of productivity via the volatility channel, over and above the specialisation and competition channels. Concerning the controls, both inflation and inflation volatility are positive and significant in all countries and the EU entry dummy is significant in FI and AT with a negative sign.

The direct and indirect (volatility) single-currency effects on productivity are estimated to be 3% and 2%, respectively, in the long run.

Moreover, a downward trend in the share of intra-euro-area mergers and acquisitions (M&A) in total M&A by euro-area companies was reversed after the introduction of the euro (European Commission 2007b), suggesting that the euro has had a positive impact on M&A activity.

A study carried out by the National Institute of Economic and Social Research (see Box I.2.2) in

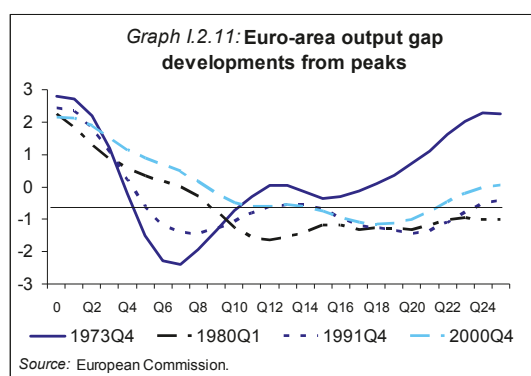
preparation of this Report provides evidence of a significant impact of the euro on productivity growth via the trade and FDI channels, over and above the impact of the single market programme. The study distinguishes two types of single currency effects, notably (i) via economic integration and associated scale economies and competition pressure, and (ii) via reduced output volatility and an associated decline in risk premiums built into capital cost. The first

channel appears to be strongest in the three largest countries (Germany, France and Italy) as well as the Netherlands and Belgium. This may be somewhat surprising in view of the relatively poor productivity performance of notably Italy. However, the analysis controls for R&D and human capital effects on productivity growth and these appear to more than offset the positive EMU effect. The second channel turns out to be relevant for all euro-area countries.

A priori it is possible that the single currency has had effects on employment as well. The main channel would be the effect of stiffer competition in product markets onto wage bargaining. However, the study does not find any evidence on this. Meanwhile, it does find evidence of a moderating effect of trade integration onto wage formation, but this is attributable to the single market rather than the single currency.

2.4. RESILIENCE IN THE FACE OF SHOCKS

Observers have expressed concerns that the euro area may lack "resilience". This concept covers two dimensions: the degree to which the economy can dampen the initial impact of a shock and the speed with which it rebounds to trend after the shock. With EMU having been place for a full economic cycle (going from a peak in 1999-2000, via a downturn in 2001-2003, to recovery in 2004-2008), this issue can be examined in some detail.



The euro-area economy has experienced four major downturns over the past four decades. These downturns followed cyclical peaks in, respectively, 1973Q4, 1980Q1, 1991Q4 and 2000Q4. Graph I.2.11 compares the

developments in the output gap following the cyclical peak for a period of 24 quarters.⁽⁶⁾ With the exception of the recession of the mid-1970s, these downturns share strong similarities. All were characterised by a long period of output gap falls, 'false dawns' and delayed recoveries and, altogether, protracted periods of output below potential.

While the most recent cycle is similar to its two predecessors on a number of counts, the downturn of the early 2000s was comparatively shallow, with the trough less deep and the negative gap absorbed faster (Table I.2.3). As a result, the cumulated output gaps totalled less than 3% of GDP in the downturn of the early 2000s against 6-7½ % in the two previous cycles. It could indicate that the negative shocks hitting the euro-area economy have been milder in the early 2000s than in the past or it could be evidence that the economy's resilience has improved.

Table I.2.3:
Two indicators of the severity of downturns (1)

	1980s	1990s	2000s	Average
Number of consecutive quarters with a negative gap				
EA	26	26	16	23
US	11	27	15	18
Sum of consecutive negative output gaps (in % of GDP)				
EA	-7.6	-5.8	-2.7	-5.4
US	-8.5	-7.1	-3.0	-6.2

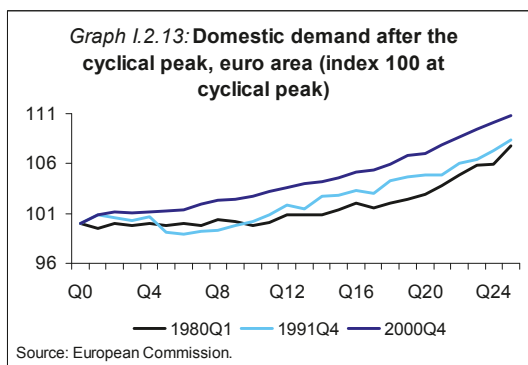
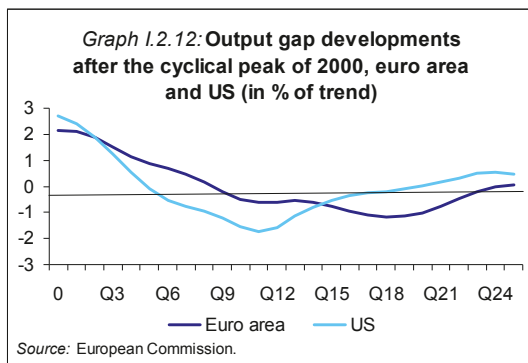
(1) Downturns following peaks in, respectively, 1980Q1, 1991Q4 and 2000Q4.

Source: European Commission.

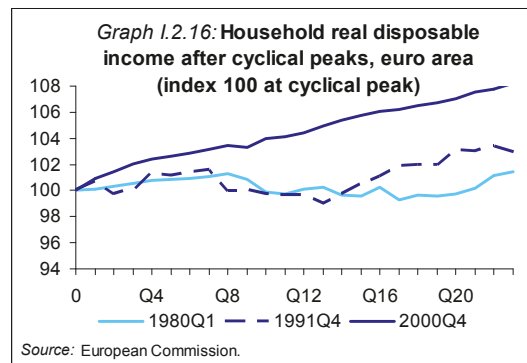
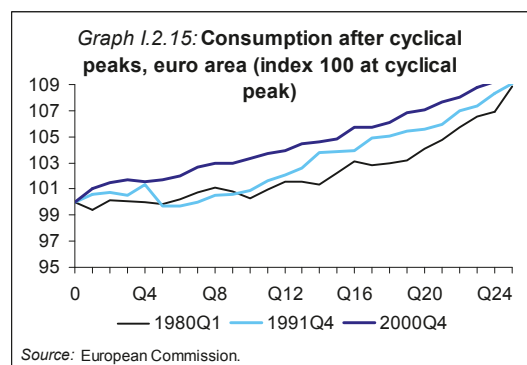
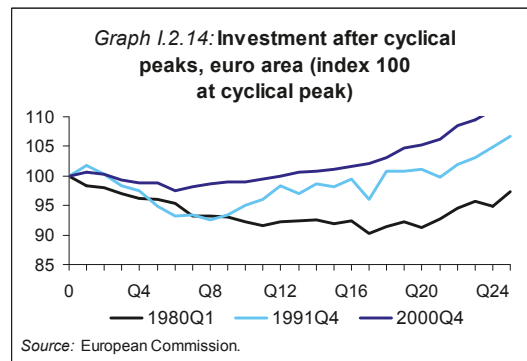
Graph I.2.12 shows that the fall in the output gap was sharper and significantly more rapid in the US than in the euro area. Moreover, the trough of the cycle was reached earlier in the US and was followed by a stronger recovery and the US cycle was not subject to 'false dawns', which appear to be a typical feature of the euro-area cycle. This reflects that the US, while benefiting from faster and stronger recoveries than the euro area, has seen deeper cyclical troughs. Comparing previous cycles along with the present one, Table I.2.3 shows a convergence of the cumulated output losses as well as the number of

⁽⁶⁾ Caution should be exercised in comparing cycles over time for the euro area as a whole since it only existed as an economic entity during the most recent cycle.

consecutive quarters with a negative gap between the two economies.

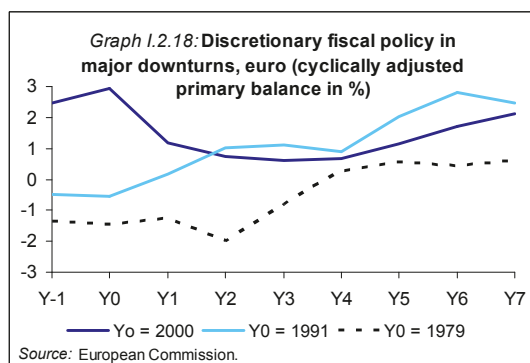
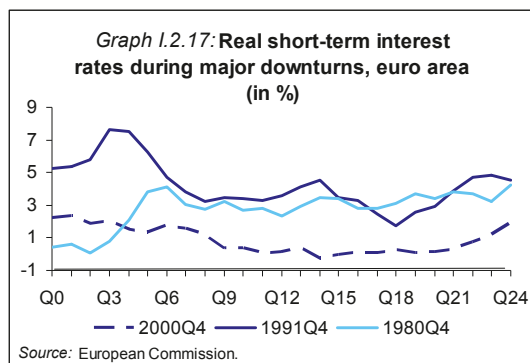


A striking feature of the latest downturn in the euro area was that domestic demand was less affected (Graph I.2.13). This apparent resilience of domestic demand can be largely traced back to the behaviour of investment, which was less hit in the contraction phase of the cycle than in similar stages of previous cycles and it also recovered faster (Graph I.2.14). Consumption also behaved somewhat differently during the latest cycle in the euro area. Growth in household spending was slightly stronger during the early stages of the downturn than during similar stages of previous cycles. However, the opposite holds for the upturn and, six years after the cyclical peak, average consumption looks very similar for the three cycles (Graph I.2.15). This is striking in view of the comparatively strong growth in employment over the latest cycle (see above) and the associated buoyancy of household disposable income (Graph I.2.16). However, positive developments in disposable income were offset by a pro-cyclical rise in the households' savings ratio.



One element which has helped dampen output losses in the euro area in the recent cycle is the more supportive macroeconomic policy stance. The ECB's success in anchoring inflation expectations has allowed the stance of *monetary policy* to be more expansionary in the downturn, with short-term real interest rates about 2 to 3 percentage points lower than in previous recessions (Graph I.2.17).

This stimulus was reinforced by the more benign financial market conditions, in part owing to the single currency, with comparatively low long-term interest rates and the absence of swings in intra-area nominal exchange rates. This combination of factors may help explain the comparative resilience of investment.



To a lesser degree, *fiscal policy* in the euro area was also more supportive in the latest downturn in comparison with previous such episodes. Many participating countries went into earlier recessions with high (sometimes two-digit) budget deficits as a share of GDP. Hence, in order to contain the deficit and debt snowball and in view also of turbulent conditions in exchange markets, fiscal policy was forced to tighten. Graph I.2.18 suggests that the discretionary component of fiscal policy was pro-cyclical during the recessions of the early 1980s and early 1990s in the euro area as a whole (see Chapter I.5 for further evidence and a country-by-country analysis). In contrast, fiscal policy was mildly counter-cyclical in the latest downturn – although as explained in Chapter I.5 this was largely fortuitous in the sense that the easing was a lagged response to the previous upswing and

the associated tax windfalls amid an exceptionally busy election calendar.

It is usually assumed that rigidities in labour and product markets dampen the initial impact of a shock but lengthen the ensuing adjustment phase. For example, strict employment protection may delay the response of employment to a shock, thereby mitigating its initial impact on consumption while delaying the necessary adjustment process (Duval et al. 2007). In this case, the trough would be less pronounced than in a more flexible economy and the period of negative output gaps would be longer and the cumulated loss in output larger

While these findings fit the stylised euro-area cycle pretty well, it is generally does not find strong support in model simulations. However, there is an important exception -- the response of activity to (adverse) productivity shocks (see Box I.2.3). In that case an economy with more rigid prices shows a lower degree of resilience: output growth returns to trend more slowly and cumulated deviations of output from trend are bigger. Employment is relatively resilient as real wages stall, but its effect on private consumption muted by offsetting developments in the savings ratio.

Summing up, the seeming lack of resilience of the euro area should be viewed in a historical perspective. There has been a secular decline in volatility of growth and this results in milder downturns globally. Moreover, while the euro area and the US have differed in the pace of their recoveries from major downturns, they typically suffered similar cumulated losses in the output gap. Meanwhile, the resilience of the euro area has increased, which may be the fruit of the improved macroeconomic policy framework following the inception of EMU. Anchored inflation expectations, low real interest rates and stable nominal intra-area exchange rates have supported domestic demand, notably investment, in the latest downturn. There is also some evidence that fiscal policy has become less pro-cyclical in downturns. Market rigidities are still clearly weighing on the economy's production potential, but their impact on the economy's resilience seems to depend both on the nature of the shocks and the type of rigidities considered.

Box 1.2.3: How do structural rigidities affect adjustment to shocks?

Grenouilleau *et al.* (2007) use estimated DSGE models for the euro area and the US to analyse how differences in rigidities in the euro area affect its adjustment to shocks. This is done by simulating the response of the euro-area to shocks and comparing these simulations with those resulting from a modified model where structural parameters are set sequentially to their (less rigid) US values. The exercise focuses on three main rigidities: (i) differences in labour adjustment costs (e.g. associated with employment protection legislation); (ii) differences in labour supply responsiveness (e.g. due to difference in effective marginal tax rates on labour); and (iii) differences in price rigidity. In order to illustrate the role played by these rigidities, simulation experiments are conducted for stylised shocks to total factor productivity (supply shock) and global demand (demand shock).

The simulation experiments show that differences in **labour adjustment costs** mainly affect the response of employment and real wages but have little impact on the size and speed of adjustment of GDP. For example a positive productivity shock reduces employment temporarily. Employment falls more when adjustment costs are smaller. On the other hand, real wages increase more with lower adjustment costs. Therefore the net effect on disposable income and consumption is similar and there is no significant difference in the GDP response. In the case of a positive shock to world trade, employment will be affected positively. This effect will be stronger with lower labour adjustment costs. Also real wages will be higher with lower adjustment costs. Both effects lead to a slightly stronger rise in domestic demand when labour demand is less rigid and therefore to slightly higher GDP.

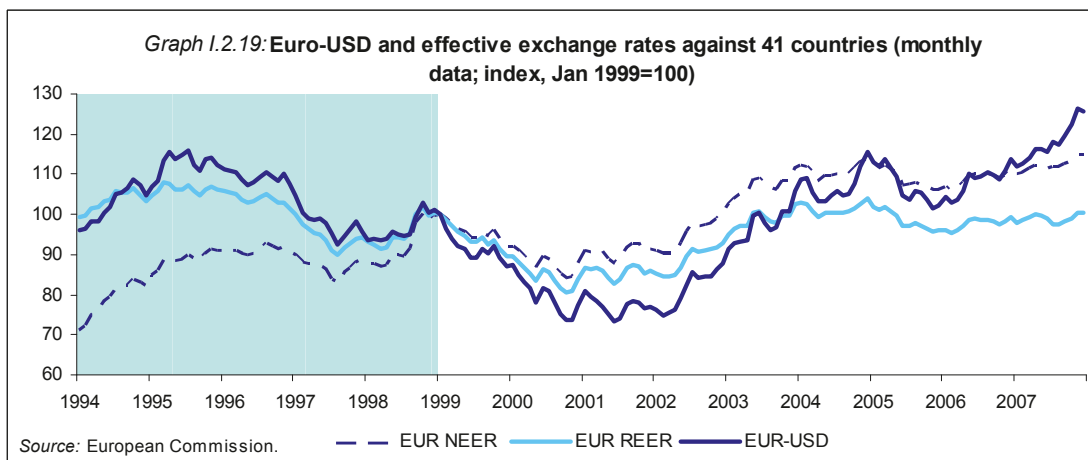
Overall, however, differences in labour adjustment costs only entail only modest differences in the impact of world demand shocks on GDP.

Differences in **labour supply responsiveness** have also little effect on the size and speed of adjustment of GDP. In the US-type economy, real wages respond less to a productivity shock because labour supply acts less as a constraint. Meanwhile, employment decreases more in the case of the stronger labour supply responsiveness because the smaller increase in real wages leads to a more muted increase in consumption. However, lower real wage growth increases investment and compensates the shortfall in consumption. The net effect on GDP is negligible. In the case of a positive global demand shock, the higher labour supply elasticity results in wage inflation responding less strongly to the boost in employment. However, the effect is small and does not show up in the GDP response.

By contrast, differences in **price rigidity** can explain significant differences in the adjustment pattern of GDP in the case of productivity shocks. A fast price reaction can cushion the negative initial employment response and therefore allow the supply shock to be more expansionary on impact. A rapid fall in prices leads to a faster increase in real wages which in turn supports an increase in aggregate demand. With stiffer price rigidities, the adjustment of employment is delayed since it takes longer for prices to decline to their new equilibrium level, leading to a shortfall of aggregate demand over the transition period.

For instance, price rigidities may reduce economic resilience in the face of supply shocks but this is not necessarily the case for other rigidities and shocks.

Differences in price rigidities in the face of diverging productivity developments (faster in the US, slower in the euro area) may help explain why the US economy returned to potential faster than the euro area after the downturn of the early 2000s.



2.5. THE EURO EXCHANGE RATE

After the launch of the euro on 1 January 1999 the exchange rate quickly fell against other major currencies (Graph I.2.19). Against the US dollar, it reached a low in June 2001, at 0.85 dollar per euro. The exchange rate started to recover in mid 2002 and even if the appreciation came to a temporary halt in 2005 it quickly resumed its upward trend, with a temporary high reached of close to 1.60 against the US dollar in March 2008.

The initial depreciation triggered reactions from policy-makers which culminated in foreign exchange market interventions. These interventions successfully reintroduced a two-way risk in the euro exchange rate (Begg *et al.* 2002) in line with the received wisdom that interventions have the best chance of succeeding if they are i) done when there is evidence – shared by market participants – that exchange rates are clearly misaligned with fundamentals, ii) accompanied by clear communication, iii) undertaken in a coordinated manner, and iv) in line with the stance of monetary and fiscal policies (Taylor 2004, Dominguez 2003, Sarno and Taylor 2001).

With hindsight, interest rate differentials explain the movements of the dollar-euro exchange rate fairly well in certain periods, but less so in others (Nautz and Ruth 2005, Graph I.2.20). During the episode of euro depreciation, short-term interest rates were higher in the US than in the euro area. Actual GDP growth and the estimated growth

potential in the US also exceeded that of the euro area, suggesting higher returns on investment more generally. To this added the "New Economy" paradigm with the expectation that strong productivity growth would allow sustained fast output growth at low inflation (Corsetti and Pesenti 1999, Corsetti 2004, European Commission 2004). When the interest rate differential was reversed and the New Economy lost much of its shine with the bursting of the dotcom bubble and with growing concern about the widening US current account deficit the exchange rate of the euro started its ascent. By 2005, US short-term rates had again started to exceed those in the euro area, and the euro depreciated again against the US dollar.

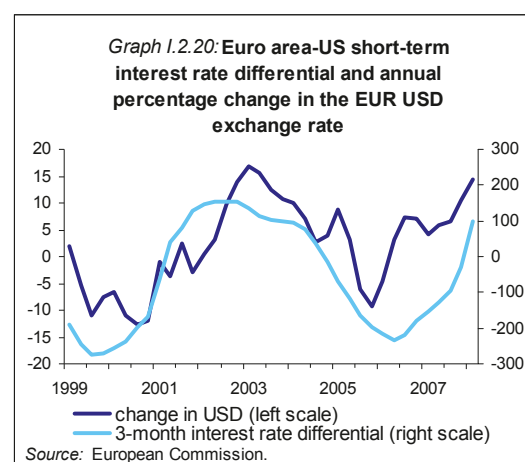
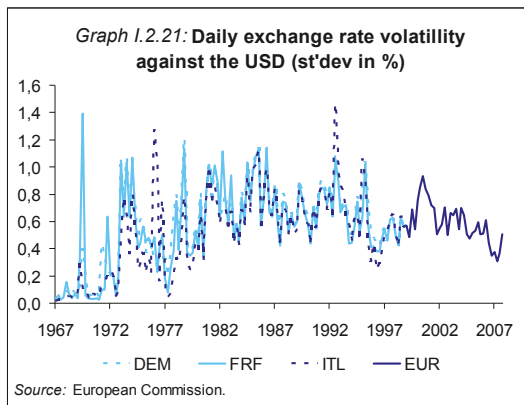


Table I.2.4:
Volatility of quarterly nominal effective exchange rates against 24 industrial countries
 (Standard deviation in %)

Euro area and Member States												
	EUR	BLF	DEM	GRD	ESP	FRF	IEP	ITL	NLG	ATS	PTE	FIM
80-89	3,1	1,6	1,9	3,5	2,3	2,0	1,9	1,7	1,5	1,2	2,5	1,6
90-98	2,5	1,3	1,6	1,7	2,1	1,3	2,0	3,2	1,2	1,0	1,4	3,0
99-07(q2)	2,4	0,9	1,2	1,1	0,9	1,1	1,5	1,1	0,8	0,7	0,8	1,1
Non euro area												
	GBP	USD	JPY	CHF	SEK	DKK	NOK	TRY	CAD	MEX	AUD	NZD
80-89	3,8	3,5	4,2	2,8	2,6	2,0	1,6	6,7	1,6	9,9	5,0	4,2
90-98	3,1	2,9	5,3	2,4	3,4	1,6	1,5	6,9	1,7	6,9	3,9	2,7
99-07(q2)	1,5	2,2	3,4	1,4	1,8	1,0	2,2	8,8	2,6	2,9	2,9	3,7

Before 1999, euro refers to synthetic euro.
 Source: European Commission.

The strong euro appreciation since 2006 set in while the interest rate differential in favour of the US was narrowing. However, by that time the euro area had finally emerged from the protracted period of sluggish growth and concerns about the persistent and rising US current account deficit were becoming more acute. The sustainability of this imbalance became more questionable and its unwinding may now have started with the US economy entering recession. The sharp acceleration of the appreciation of the euro in recent months can be explained by this development along with a reversal of the interest rate differential as monetary policy in the US was significantly eased.



Econometric analysis suggests that the euro appreciation has not acted as a major drag on the recovery. On average in the 2001-2006 period, 0.8 percentage point was shaved off euro-area exports each year by the appreciation of the euro. Over the same period, strong world demand contributed 6 percentage points to annual euro-area export growth (European Commission 2007c). As well, the euro area's trade balance has

been slightly positive every year since the inception of the euro in 1999. But obviously a conjunction of further euro appreciation and a slowdown of the global economy could weigh more heavily on euro-area exports in the near term.

Occasionally there have concerns over excessive volatility of the euro exchange rate, but this is not born out by the actual developments. The amplitude of quarterly swings in the nominal effective exchange rate (NEER) of the countries participating in the euro area decreased from the 1980s to the 1990s, and with the introduction of the euro it decreased further for all of them (Table I.2.4) ⁽⁷⁾ A decrease of similar magnitude is also visible in the effective exchange rates of non-euro-area EU countries. The daily volatility of most currencies against the US dollar has also been trending down (Graph I.2.21). The 1990s saw a jolt of volatility in 1992 (the time of the last EMS crisis), but thereafter the volatility among the euro legacy currencies quickly abated and, by 1997, it had reached the lowest level in 20 years. The daily volatility of the euro since 1999 has broadly matched this record. In sum, the development of the euro exchange rate appears to have been broadly in line with the fundamentals such as interest rate and growth differentials. Moreover, to date the volatility of the exchange rate has not been atypical and has even been relatively muted by historical standards.

⁽⁷⁾ While, by definition, all euro-area Member States experience the same bilateral exchange rate movements after the adoption of the euro, their effective exchange rate movements can still differ, given the different geographical orientation of their exports, which enters the calculation of the effective exchange rate.

3. BUSINESS CYCLE SYNCHRONISATION

3.1. INTRODUCTION

The conduct of a common monetary policy in EMU calls for a sufficient degree of business cycle synchronisation of economies. A theme that has received considerable attention since the launch of the single currency pertains to the effects of the euro on economic structures and performance. The question is whether the euro has fostered some virtuous processes that have brought its participating countries closer together over time.

In terms of the theory of Optimum Currency Areas (OCA, see Box I.3.1) this translates into the question whether the OCA rating of euro-area countries has improved. Frankel and Rose (1998) have kick-started a rich literature on the so-called "endogeneity of optimum currency areas", focusing on the effects of increased trade integration once a currency union is created. They present empirical evidence that higher bilateral trade is associated with more correlated business cycles through the cross-border transmission of demand shocks. Corsetti (2008) shows that convergence in consumption (and spending) patterns reduce the costs of participating in a currency area.

On the other hand, trade integration may foster inter-industry trade specialisation and therefore increase the probability of country-specific sectoral shocks. A similar theoretical ambiguity emerges for the effects of financial integration on business cycle synchronisation. While financial integration encourages cross-border portfolio diversification and thus promotes area-wide synchronisation of aggregate demand through consumption, it may also have an important causal effect on industrial specialisation by allowing countries to specialise without being subject to higher income volatility (Kalemli-Ozcan *et al.* 2004).

Engel and Rose (2002) identify a direct causal effect of currency unions on cross-country business cycle synchronisation, while Darvas, Rose and Szapáry (2005) conclude that countries with similar budget positions tend to have more correlated business cycles. Therefore, the convergence in macroeconomic policies entailed

by the Maastricht criteria and the Stability and Growth Pact as the coordination framework of EMU might have led to a reduction of policy-driven asymmetric shocks, and thus to higher cross-country synchronisation. Hence, there may be more sources of endogeneity of OCA at work than trade and financial integration.

Close to ten years after the launch of the euro, one can start taking stock of the effects the common currency has had on business cycle synchronisation in the euro area. However, several caveats apply. First, the launch of the euro still represents a relatively recent regime shift, whose effects may not yet have fully unfolded. Second, it is very difficult to disentangle the effects of the euro from other important developments such as the Internal Market Programme, the IT revolution, the liberalisation of international capital markets or globalisation in general.

3.2. MEASURING BUSINESS CYCLE SYNCHRONISATION

Various methods have been proposed in the literature to investigate the issue of business cycle synchronisation. The first question is how to measure the business cycle in the first place. A prominent view rests on the assumption that economic time series can be decomposed into the sum of trend, cyclical and irregular components. The cyclical component as the deviation of the smoothed series from its trend is then referred to as the "growth cycle".⁽⁸⁾ An alternative view rejects the decomposition into trend and cycle and defines the business cycle in terms of the turning points of the original time series. The resulting "classical cycle" is thus a binary series of zeros and ones, denoting states of contraction and expansion, respectively.⁽⁹⁾ The analysis of euro-area synchronisation in this chapter will be based on growth cycles, following the dominant

⁽⁸⁾ However, there is no consensus on how to estimate the trend from the data, such that a multitude of different growth cycles can result empirically.

⁽⁹⁾ Empirically, this approach also depends on some parameters to be chosen, particularly the censoring rule stipulating the minimum duration of the business cycle phases.

Box 1.3.1: The Optimum Currency Area theory and its implications for business cycle synchronisation

The theory of Optimum Currency Areas (OCA, Mundell 1961)* weighs the benefits of adopting a common currency against the costs of abandoning independent monetary policy. The benefits of monetary integration consist first and foremost in reduced transaction and information costs and increased price transparency, boosting trade and fostering competition. These benefits (efficiency gains) are higher when the countries willing to join the currency union are highly integrated. On the other hand, the costs increase the more asymmetric the countries' business cycles are, and the less flexible the economies are in terms of adjustment to asymmetric shocks. These costs are mainly macroeconomic in nature and arise as the common monetary policy design cannot effectively accommodate diverging cyclical positions across the economies involved. Countries sharing a high level of either economic integration, business cycle synchronisation or overall flexibility (in terms of prices, wages and factor mobility) will find it beneficial *ceteris paribus* to share a single currency. The position of the group of countries along these three dimensions defines its OCA-rating.

(*) For a re-assessment of the debate on OCA, see Corsetti (2008) and Mongelli (2008).

The degree of economic integration and cyclical synchronisation in a monetary union evolve over time. While it is quite undisputed that economic integration is likely to increase among countries forming a currency union, there is disagreement as to the effects on business cycle synchronisation. While the endogenous OCA theory due to Frankel and Rose (1998) predicts higher synchronisation due to increased trade acting as a conduit for the transmission of common demand shocks, the alternative Krugman (1993) view argues in favour of less synchronisation due to higher specialisation promoting asymmetric, sector-specific shocks. Finally there may be institutional forces at play, increasing the flexibility of the economies involved in the currency union. More specifically, the existence of the monetary union and its coordination framework might foster ongoing structural reforms, including product and labour market reforms. As far as the latter help to absorb shocks more rapidly, the propagation of shocks across countries might become more symmetrical, constituting another potential source of endogeneity of OCA.

approach in the literature.⁽¹⁰⁾ One attraction of the decomposition approach is that the implied growth cycle is conceptually close to the "output

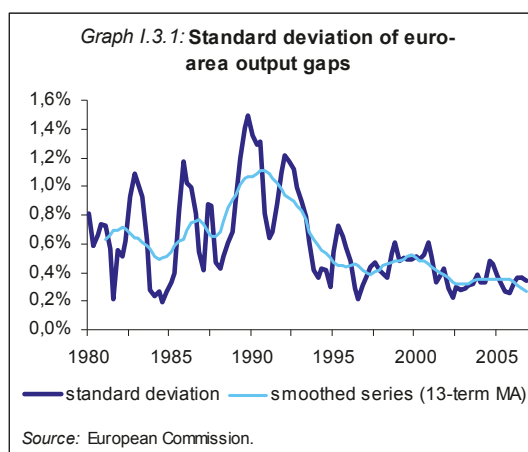
gap", which measures the percent deviation of aggregate output from its potential and which plays an important role in monetary and budgetary surveillance. Besides, a continuous measure of the cycle invariably incorporates more information than a binary series of cycle phases. Synchronisation measures based on the growth cycle should therefore encompass results derived from the classical cycle.

⁽¹⁰⁾ See e.g. the studies by Artis and Zhang (1997, 1999), Inklaar and de Haan (2001), Massmann and Mitchell (2002, 2004), Kaiser (2005). Confirming Canova's (1998) conclusion that the properties of the business cycle depend on how it is measured, Massmann and Mitchell (2004), examining measures of both the growth and the classical cycle, find that euro-area countries' cycles display different properties depending on the identification approach used. However, their subsequent examination of convergence of euro-area business cycles points to substantial similarities across alternative measures of the cycle.

The second question is how to measure aggregate output. Here, both GDP and industrial production (IP) will be used. Given its historically close correlation with GDP, its

monthly frequency and the fact that the industry sector accounts for the bulk of cyclical variation, most studies use the cyclical component of IP. On the other hand, the greater exposure of trade-intensive manufacturing to external shocks might be a source of bias towards de-synchronisation across countries compared to the broader, services-dominated GDP.

The third question is how to gauge the degree of synchronisation, or comovement, between business cycles. Suggestions include analysing the dispersion between individual business cycles or their correlation over time. Others look for evidence of an increase in importance of a common factor driving individual business cycles.



The analysis of dispersion entails looking at the evolution of the standard deviation between euro-area countries' output gaps over time. The smaller the standard deviation at a given point in time, the closer the individual cycles cluster together. Given its importance for common monetary policy, the closeness of output gaps is a very relevant measure to gauge the degree of cyclical convergence in the euro area. It is important to note, however, that the measure is scale-dependent. For a given level of association of cyclical series, the standard deviation across countries will rise (fall) proportionally with a rise (fall) in the magnitude of the individual cycles.⁽¹¹⁾ As shown by Graph I.3.1, the

⁽¹¹⁾ This follows directly from the mathematical properties of the standard deviation as the positive square root of the variance. If X contains the cross-section observations

dispersion of output gaps in the euro area has narrowed considerably since the early nineties and has been standing at historically low levels since around 2002. Yet, this observation seems to reflect a general decrease in the amplitude of cyclical fluctuations across industrialised countries rather than a continued increase in business cycle synchronisation in the euro area.⁽¹²⁾ The correlation coefficient does not depend on the scale of the series under scrutiny and is thus better suited to measure the genuine synchronisation dimension of business cycle convergence, i.e. whether the cycles display a common periodicity and phase, disregarding possible changes in amplitude.⁽¹³⁾ Bilateral correlation coefficients can be computed over a small number of sub-periods or over a series of rolling windows of a fixed length. The latter provides a continuous track of developments over time. To summarise all possible bilateral correlation coefficients of a group of countries, the mean can be computed. A rise in mean correlation may then be considered as evidence of increased synchronisation.

This correlation based approach is a standard set-up in the literature to investigate the issue of business cycle synchronisation, in the euro area and elsewhere. However, the correlation measure suffers from drawbacks, too. The results can be rather sensitive to the length of the rolling window chosen, see e.g. European Commission (2006a). While longer windows tend to be more reliable since they are based on more data points, there is the danger of smoothing out important medium-term changes in synchronisation. Correlations based on shorter windows tend to be more sensitive to short- and medium-term deviations and, since they can be computed closer to the end of the data sample, allow for an analysis of very recent developments. However,

(output gaps) at time t and a denotes a constant scaling factor inflating their magnitude, then $\text{Var}(aX) = a^2 \text{Var}(X)$ and thus $\text{stdev}(aX) = a \cdot \text{stdev}(X)$.

⁽¹²⁾ For a recent analysis of the reduced volatility of output growth in the euro area see European Commission (2007d).

⁽¹³⁾ This follows directly from the definition of the correlation coefficient. If $\text{cor}(x,y) = r$ and a is a constant inflating the series' amplitude, then $\text{cor}(ax, ay) = \text{cov}(ax, ay) / (\text{Var}(ax)\text{Var}(ay))^{1/2} = a^2 \text{cov}(x,y) / (a^2 \text{Var}(x) a^2 \text{Var}(y))^{1/2} = \text{cov}(x,y) / (\text{Var}(x)\text{Var}(y)) = r$

if the window is shorter than the mean length of the cycle itself, small phase shifts between otherwise identical cycles can lead to systematic, but artificial, drops in the association measure at the turning points of the cycle.

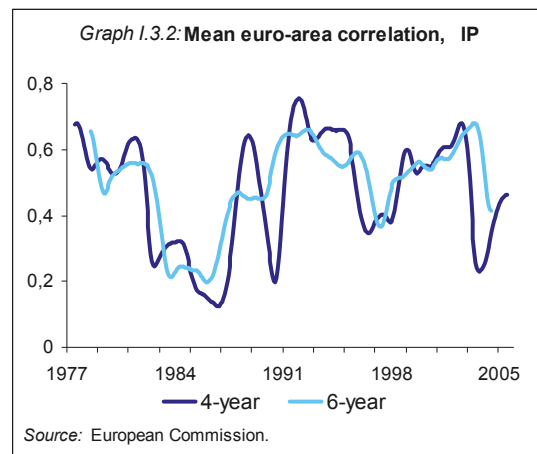
A third approach to the study of business cycle synchronisation that has gained some prominence in recent years is built around dynamic factor models. Common euro-area trends and cycles are estimated from large multi-national databases and used to assess comovements with national developments. Eickmeier's (2005) results regarding changes in importance of common euro-area factors in explaining national GDP growth between 1981 and 2003 are mixed between countries. In case of aggregate euro-area GDP growth, the importance of common factors seems to be high but rather stable across the whole sample. Bruneau, de Bandt and Flageollet (2006) find their estimated common euro-area cyclical component to have a higher correlation with growth cycles in Germany, France and Italy in the period 1992-2003 than in 1980-1991. They interpret this as evidence of countries having become more sensitive to common euro-area shocks, consistent with the convergence process occurring in the 1990s.

To have a closer look at the sources of desynchronisation between euro-area business cycles, structural models may be used to decompose cross-country heterogeneity into exogenous sources of variation, i.e. country-specific shocks, and heterogeneous responses to common shocks. The relative importance of the different types of shocks can be monitored using variance decomposition and impulse response analysis. Using different modelling strategies, Giannone and Reichlin (2006) and Eickmeier (2006) consistently conclude that common shocks are most important in explaining euro-area countries' output and price fluctuations, while persistent country-specific shocks are mainly responsible for remaining cross-country heterogeneity. The asymmetric transmission of common shocks seems to play a minor role.

In the remainder of this chapter, the focus will be on the descriptive analysis of correlation developments within the euro area and between the area and outside countries.

3.3. RECENT CORRELATION DEVELOPMENTS AND STYLISED BUSINESS CYCLE FACTS

Graph I.3.2 shows the evolution of mean bivariate correlation between euro-area IP cycles computed over rolling windows of four and six years.⁽¹⁴⁾ The initial four-year window covers the period 1975:7-1979:7 (1981:7 for the six-year window); the last window estimates cyclical synchronisation in the period 2003:7-2007:7 (2001:7-2007:7 for the six-year window). To provide a timely impression of synchronisation developments readily attributable to specific events, the correlations are centred on the *midpoints* of these windows. Thus, the last midpoint of the six-year window characterises euro-area synchronisation around mid-2004, while it is mid-2005 for the shorter window.



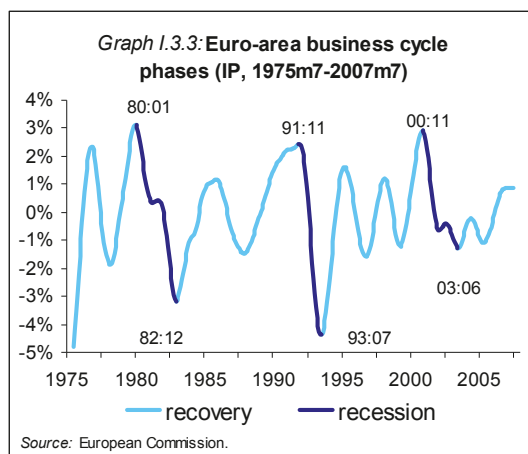
Reading the graph, it is interesting to relate the developments in correlation to the policy framework and/or specific economic events. The period of falling correlation in the early eighties until 1986 can be characterised as a period where the EMS was rather unstable, with a number of exchange rate re-alignments taking place. At the same time, the fall in cross-country correlation could be more directly attributed to the asymmetric effects of the second oil price shock.

The marked increase in mean correlation in the later eighties occurs in a period when the EMS

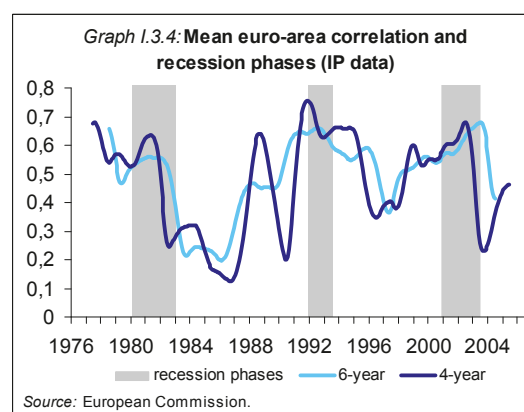
⁽¹⁴⁾ Monthly IP data is available from 1975m7 to 2007m7 for eleven euro-area countries (excluding Luxembourg and Slovenia). A band-pass version of the Hodrick/Prescott filter is used to extract the business cycle-related fluctuations from the logarithms of the series.

was relatively stable and credible, with no realignments taking place. The more sensitive four-year window indicates temporary phases of de-synchronisation following German reunification in 1990 and around the ERM turmoil in 1992-93. The next significant decrease in correlation around 1997 coincides with the Asian emerging markets crisis, and reflects the differentiated effects the crisis had on individual euro-area countries.⁽¹⁵⁾ The subsequent Stage 3 of EMU is characterised by a rather steady increase in cyclical synchronisation until 2003, when a sudden decline in business-cycle association sets in. While the rise in correlation since the late nineties might be due to the effects of enhanced trade and financial integration in the wake of the Internal Market programme and EMU as well as closer macroeconomic policy coordination in the euro area, there is no obvious explanation for the subsequent drop in synchronisation around 2003. The extent of this de-synchronisation is considerable according to the four-year correlation window. However, from 2004 onwards, the graph clearly points to a rebound in euro-area synchronisation

In order to possibly link the evolution of synchronisation to stylised business cycle facts, Graph I.3.3 displays the euro-area business cycle phases, identified using a HP bandpass filter.⁽¹⁶⁾



It emerges that, while euro-area business cycle recessions are typically short and steep, recovery phases tend to stretch out over a longer period and evolve in (mini-) cycles. Given different adjustment speeds across countries following a recession, one can argue the case of a general pattern of higher cyclical dispersion across countries during cyclical recoveries. Duval and Elmeskov (2006) e.g. argue that smaller and open economies are more flexible and recover faster from recession through spontaneous accommodation via endogenous changes in competitiveness and external trade. On the other hand, structural rigidities can lower the speed of adjustment to shocks. Furthermore, small countries are on average found to undertake more and faster structural reforms, while slower reforms in larger countries may restrict their adjustment mechanisms.



Against this background, Graph I.3.4 reconsiders the moving correlations of Graph I.3.2 by cross-plotting them against the recession phases from Graph I.3.3. Indeed, the three recession phases seem to be characterised by a higher degree of cross-country correlation, and thus higher synchronisation of business cycles. After a recession, cross-country correlations typically decline.

⁽¹⁵⁾ Furthermore, the decrease reflects the beginning of a phase of severe divergence between Greece and the rest of the euro area; see below for a country-wise analysis of synchronisation developments.

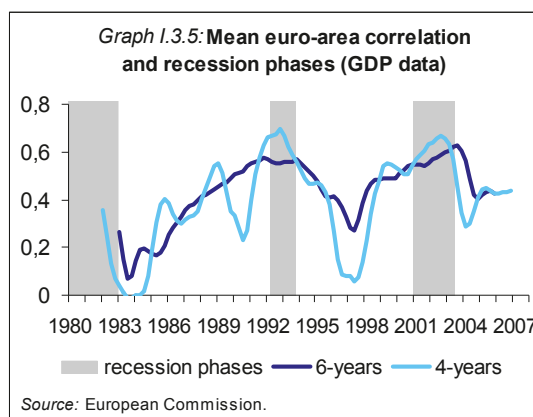
⁽¹⁶⁾ See Gayer (2007) for details.

Table I.3.1:
Mean euro-area business cycle correlation in recoveries and recessions

	correlation window	
Mean correlation	6-years	4-years
in recovery	0,46	0,44
in recession	0,59	0,57
overall	0,50	0,47

Table I.3.1 quantifies the extent of this pattern by showing the mean levels of area-wide correlation during recession and recovery phases. It emerges that mean euro-area correlation is on average 13 percentage points lower in recoveries than it is in recessions. In relative terms, this corresponds to a reduction of business cycle synchronisation during recoveries by slightly more than 20% compared to the level during (the previous) recession.

There is thus some evidence, though based on three euro-area cycles only, that the observed decline in business cycle synchronisation after the latest turnaround in mid 2003 can be partly ascribed to a recurrent pattern of temporary de-synchronisation in cyclical recoveries, owed to cross country differences in the speed of adjustment to common shocks.



Complementing the so far industry-related analysis, Graph I.3.5 displays the mean of pairwise country correlations of quarterly GDP series.⁽¹⁷⁾ A marked increase in mean

⁽¹⁷⁾ Quarterly GDP is available from 1980q1-2007q2 for eight euro-area countries: Belgium, Germany, Greece, Spain, Finland, France, Italy, and the Netherlands. For Austria, Ireland and Portugal a partial analysis is carried out using shorter series. All quarterly GDP series are augmented by six forecasts for 2007q2-2008q4 from the

correlation is observable from the mid-eighties to the early nineties followed by a stabilisation thereafter. Again, the correlations computed over the four-year window are more responsive to short-run divergence (e.g. German re-unification in 1990). After diminishing until around 1997, synchronisation increases again until 2003. In 2003-2004, business-cycle association declines rather sharply but recovers and stabilises at a level around 50% since 2004/2005. An analysis of GDP components shows that the decrease in cross-country correlation is led by decreases in correlation of private consumption and investment and by a de-coupling of net exports that set in already around 2000/2001. Importantly, for all components including exports and imports (but not net exports) the partial recovery of cyclical synchronisation starting around 2004 is reproduced in the respective correlations.

Looking at the recession phases, based on the turning points of the cyclical component of euro-area GDP,⁽¹⁸⁾ Graph I.3.5 again suggests a general pattern of decreasing mean euro-area correlation just after the recession phases of the cycle have come to an end, i.e. after the trough has been passed. If this pattern was to persist in the current business cycle, then an increase in cross-country correlations should be expected in the further course of the recovery and the ensuing downswing.

A country-specific analysis of correlation developments shows that the larger countries seem to continue to stick reasonably well together, despite some signs of transitory de-synchronisation in the case of France and Spain. Looking across all countries, the picture of a relatively widespread but temporary de-synchronisation of cyclical forces across the euro area emerges, spurred by peculiar developments in some periphery countries (Greece, Finland and Ireland).

Commission's Spring 2007 forecast. The last midpoint of the six-year window characterises euro-area synchronisation around 2005q4, while it is 2006q4 for the shorter window.

⁽¹⁸⁾ The turning points of the HP-filtered quarterly GDP series (peaks in 80:1, 92:1 and 00:4, troughs in 82:4, 93:3 and 03:2) are fully congruent with those derived from the correspondingly filtered monthly IP series.

3.4. HAS THE COMMON CURRENCY SPURRED SYNCHRONISATION IN THE EURO AREA?

The question of whether the launch of the common currency has had an impact on business cycle synchronisation in the euro area can be approached from two angles. First, synchronisation within the area can be compared prior to and after the introduction of the euro. Second, the level of synchronisation within the euro area can be compared to that of important outside countries.

The first question is thus whether the synchronisation of business cycles in the euro area has been higher over the period following 1 January 1999 in comparison with a relevant reference period. Based on the identified pattern of recurrent ups and downs in synchronisation in the course of the business cycle, one may compare mean intra-euro-area correlation in the period 1999–2008 with mean correlation in the corresponding ten-year period of the previous cycle. As discernible from Graph I.3.5, the start of the euro in 1999 occurred approximately four and a half years ahead of the latest cyclical trough in 2003q2, when cycles started to diverge. Correspondingly, the appropriate reference period around the previous trough in mid-1993 runs from 1989 to 1998, fully in line with the economic rationale that has been given in Chapter I.1 for comparing the first ten years of EMU with the ten preceding years.

Table I.3.2:

Mean intra-euro-area correlation in consecutive cycles			
GDP	-	1989-1998	1999-2008
	-	0,56	0,60
IP	1978-1986	1989-1997	1999-2007
	0,48	0,59	0,61

Source: European Commission.

Table I.3.2 compares the mean of cross-country correlations computed over the two ten-year periods. Mean correlation between euro-area countries has increased from 0.56 in 1989-1998 to 0.60 in 1999-2008 based on GDP cycles. However, some caution is needed, since the last six data points of the post-euro period (2007:3-2008:4) are still based on GDP forecasts. Furthermore, Portugal and Ireland had to be

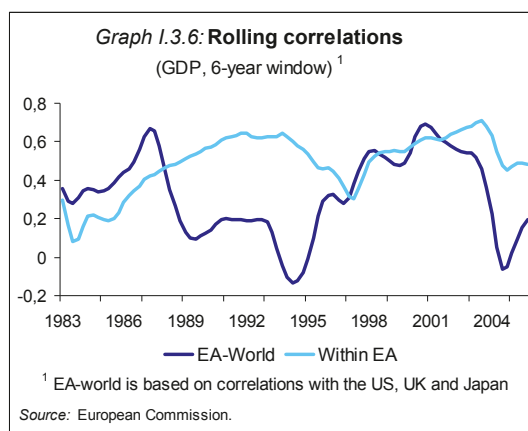
excluded from the computations, since quarterly GDP data is not available before the mid-nineties. As to the IP-based country cycles, which end in 2007m7, no reliable forecasts are available for the remainder of 2007 and 2008. Therefore, the comparisons are based on the slightly truncated periods 1999:1-2007:7 and 1989:1-1997:7. However, given the earlier start of the IP data, one can go back one more cycle and calculate mean euro-area correlation over the earlier reference period starting in mid-1978. This again corresponds to four and a half years before the cycle reached its trough in 1982:12. As Table I.3.2 shows, correlation between euro-area countries' IP cycles has risen considerably from the first period 1978-1986 (0.48) to the second period 1989-1997 (0.59), and has increased somewhat further to 0.61 in the post euro-period 1999-2007.

Even though correlation results may depend crucially on the chosen periods, the general picture is quite unambiguous. In line with the previous results based on continuous correlation developments, cross-country synchronisation in the euro area seems to have risen considerably between the late eighties and the late nineties, pointing to the effects of the Internal Market programme on trade and financial integration. Since the launch of Stage 3 of EMU in 1999, cross-country synchronisation has risen further, albeit at a significantly reduced pace. The apparent stabilisation at a high level might reflect the circumstance that the stimulating effect of lower trade barriers has already largely played itself out. Overall, it is difficult to disentangle the euro-specific effects from underlying integration effects related to the Internal Market programme. In any case, the analysis does not support the view that the common currency might have promoted persistent asymmetries between countries, be it through specialisation effects or divergent effects of common monetary impulses.

Turning to the comparison of euro-area with outside developments, specific euro-area and European trends have to be disentangled from global trends. Over the past decade, OECD countries have experienced a marked cyclical convergence on the back of rising trade and financial integration as well as forceful common shocks. Correspondingly, Artis (2005) finds

evidence of an emerging "world business cycle", implying that where increased business cycle synchronisation is found, it is not clear whether this is due to area-specific forces or global trends. Likewise, the finding of a recent dip in synchronisation in the euro area could simply mirror similar developments at the world level.

Graph I.3.6 displays the mean of rolling correlations between the euro area on the one hand and important outside countries on the other (*EA-World*) along with intra-euro-area correlations (*Within-EA*). The gap between the two curves from the late eighties to the late nineties points to a euro-area specific process of cyclical synchronisation during that period. As suggested by Mélitz (2004) and Kalemli-Ozcan *et al.* (2004) this increase in the symmetry of business cycles in the euro area during the 1990s might reflect the closer economic integration and policy coordination in the run-up to, and early stages of, EMU.



At the same time, the rapid convergence of world cycles since the mid-nineties and the ensuing high level of euro-area-world synchronisation attained around 2000 suggest that synchronisation within the euro area might have benefited from synchronisation tendencies at the world level, driven by forceful common shocks such as the universal IT boom of the late nineties and the ensuing dotcom bust and 9/11 terror attacks. Between 1997 and 2002, business cycle association was as high on average between the euro area and the US, UK and Japan as it was within the euro area.

The ensuing decline of both intra-euro-area and euro-area-world correlation since 2003 shows that the temporary de-coupling of business cycles in the currency union is accompanied by a parallel, but far more pronounced de-coupling of the euro aggregate from the rest of the world. Mean euro-area-world correlation temporarily falls to below zero and remains in insignificant territory until the end of the sample. The observation of a transitory but rather pronounced decline in synchronisation of euro-area business cycles thus has to be partly qualified by a much more pronounced decline in synchronisation between the area and the rest of the world. The implied relative closeness of cycles within the monetary union points to a sustained distinct euro-area business cycle affiliation.

The empirical evidence does thus not support the hypothesis of increased synchronisation in the euro area being a mere side-product of globalisation. While world-cycle synchronisation rose steeply from the mid-nineties to match euro-area synchronisation later in the decade, the more recent experience points to the temporary nature of this development. Euro-area cycles hold together relatively more closely again than cycles on the world level.

Table I.3.3:

EA-correlation with outside countries

	EA-JP	EA-UK	EA-US	Average	Intra-EA
1989-1998	0,46	0,06	-0,18	0,11	0,56
1999-2008	0,56	0,65	0,35	0,52	0,60

Source: European Commission.

Table I.3.3 compares the level of correlation between the euro area and the US, the UK and Japan in the two ten-year sub-periods before and after the launch of the euro. As expected from the rolling correlations in Graph I.3.6, the euro area can be seen to be significantly closer aligned to the US, the UK and Japan since 1999 than during the previous ten-year period. Given the already very high level of intra-euro-area synchronisation prior to 1999 and the relatively minor further increase thereafter, the gap between intra- and extra-euro-area synchronisation has narrowed significantly.

However, a large part of this development is due to a markedly closer euro-area affiliation of the UK, raising its correlation with the currency zone

from practically zero prior to 1999 to 0.65 thereafter. The US and Japan, on the other hand, are still markedly less synchronised with the euro area. The results of Table I.3.3 would therefore point to further "Europeanization" rather than globalisation of business cycles since the introduction of the euro. This supports the view that the high level of synchronisation reached in the euro area might still have as much to do with the EU's Internal Market programme as with the specific effects of the euro on product and financial market integration. Additional synchronisation effects due to the monetary union's policy coordination framework and its impact on structural reforms might still be largely forthcoming.

3.5. CONCLUDING REMARKS

Looking back on ten years of EMU experience, one can start taking stock of the effects the common currency has had on business cycle synchronisation in the euro area. The dispersion of output gaps across Member States has reached historically low levels since around 2002. Yet, this observation seems to reflect a general decrease in the amplitude of cyclical fluctuations rather than a continued increase in business cycle synchronisation. Using cross-country correlations, the mean level of synchronisation of national cycles within the currency union since 1999 is found to be overall high, though not much higher than in the previous ten-year period.

Around 2003, the level of cross-country synchronisation experienced a quite abrupt decrease, with a rebound and partial recovery indicated from around 2004 onwards. The dip in synchronisation appears to be a transitory phenomenon, partly rooted in a recurrent pattern of falling business cycle synchronisation in early recovery phases.

As to the question whether the launch of the euro has spurred the synchronisation of cycles in the currency zone, the difficulty lies in disentangling euro-specific effects from EU-wide developments on the one hand and global trends on the other. While the analysis is supportive of a distinct euro-area specific as opposed to a global process of business cycle synchronisation, the separation of euro-area specific and EU-wide effects on synchronisation remains an open issue. Business cycles in the euro area were already highly synchronised at the time the euro was launched in 1999, both compared to previous periods and to outside countries. Since then, mean correlation between Member States has edged up a little further. Given the interdependence of EU-wide integration and the (perspective of a) common currency, it is very difficult to determine whether, to what extent and since when the observed developments in euro-area synchronisation can be attributed to the actual launch of the euro. That being said, the analysis clearly rejects the view that the common currency might have led to increased desynchronisation between participating countries.

4. THE ADJUSTMENT EXPERIENCE

4.1. INTRODUCTION

The findings in the previous chapter suggest that business cycles have converged across euro-area countries at high (quarterly) frequencies. Even so, over longer time horizons there has been a tendency of growth, inflation and current account positions to diverge across countries and these divergences prove to be rather persistent. This issue was addressed in detail in the 2006 issue of the *EU Economy Review* (European Commission 2006a).

The main findings of the Review can be briefly summarised as follows:

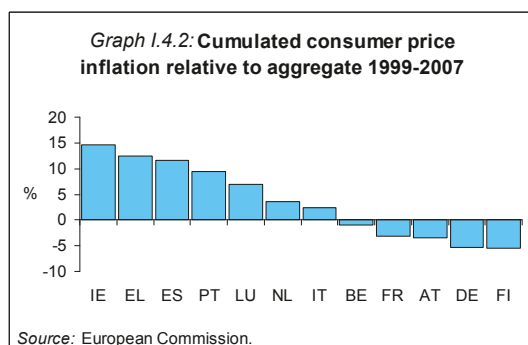
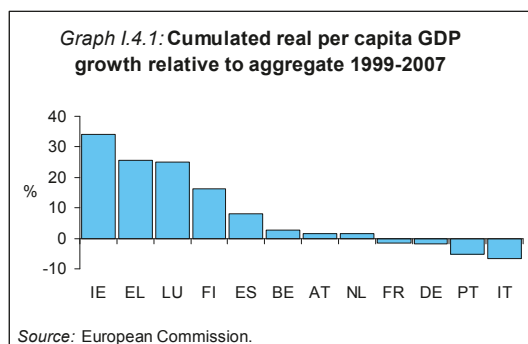
- As the participating countries are no longer able to adjust the stance of monetary policy to steer non-inflationary growth, the burden of macroeconomic adjustment in principle shifts to fiscal policy. However, the limitations of discretionary budgetary policy as an instrument for stabilisation are well known, notably the tendency toward pro-cyclicality due to long response lags and/or biases linked to the political cycle (see Chapter I.5 of this Report). Moreover, several countries entered EMU with budget deficits of close to the 3% upper limit which confined their room for manoeuvre until such time as compliance with the medium term objectives enshrined in the Stability and Growth Pact has been achieved.
- The constraints imposed by the EMU macroeconomic policy framework along with the disappearance of intra-area exchange rates highlights the need for compensating adjustment mechanisms. The smooth adjustment in the participating countries' economies henceforth depends crucially on the adjustment of intra-area real exchange rates and factor (labour) mobility, which in turn depends on the conduct of appropriate microeconomic policies. Once these policies have delivered the necessary degree of flexibility, EMU can be said to be in a steady state where constraints on macroeconomic stabilisation in the participating countries are no longer a major concern.
- During a transitional period, however, risks remain of a less efficient adjustment to disturbances. In this context, it was recognised from the outset that, during the early years of EMU, some countries would be vulnerable to imbalances, not least since the launch of EMU itself has given rise to adjustment needs – including the sharp fall in interest rates in some countries and the adoption of conversion rates of national currencies to the euro that in several cases were either too high or too low from a medium-term point of view. In the long run the impact of these disturbances will peter out as real exchange rates tend towards their new equilibrium values. However, a concern is that pro-cyclical behaviour of real interest rates (falling if buoyant activity boosts expected inflation and vice versa) may complicate the adjustment, even if ultimately the competitiveness channel will inevitably overtake the real interest rate channel.
- The experience in the early years of EMU confirmed that these are indeed main challenges. The divergences in growth and inflation among the participating countries have been long-lasting, involving major shifts in intra-euro-area real effective exchange rates, which in some cases probably went beyond their longer-term equilibrium values. For example, Germany has relied primarily on the external sector as a driver of growth, supported by a continuation of disinflation and increases in cost competitiveness. The adjustment may have gone too far as domestic demand failed to take over the helm of growth and a large current account surplus built up. Conversely, domestic demand has been the key growth factor in other countries, and entailed current account deficits. Some elements of these differences in inflation, growth and external positions can be traced to the dynamics of structural convergence in living standards ("real convergence"), but definitely not all of it (see Chapter I.8).

Against this backdrop this chapter takes stock of the adjustment experience in the first (almost) ten years of the euro area, thus extending the coverage since the 2006 *Review* by another year and a half or so. The chapter starts with a brief

discussion of the stylised developments, followed by an analysis of the key mechanisms behind these developments. The final two sections examine in some depth the determinants of the main transmission channels involved – *i.e.* the real exchange rate and real interest rate channels.

4.2. STYLISED DEVELOPMENTS

Graphs I.4.2 to I.4.7 depict the accumulated price increase and unit labour cost (relative to the aggregate) and the current account positions, the real interest rates, residential investment and real house prices in the participating countries. From this the following stylised developments can be inferred:



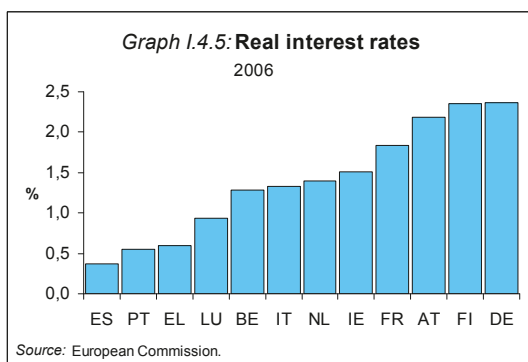
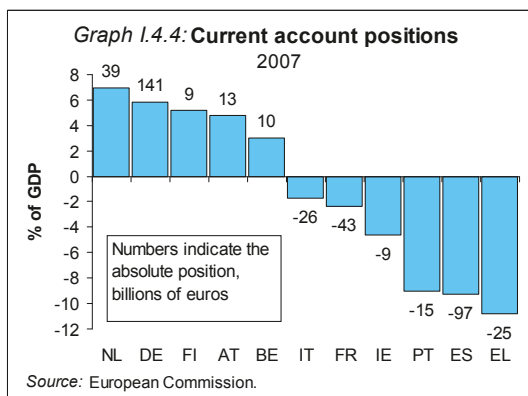
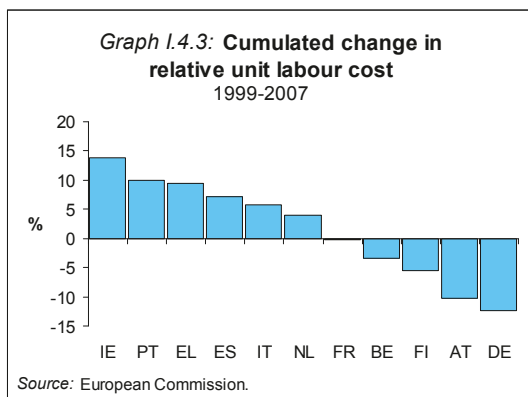
- At one extreme, the largest economy in the euro area, Germany, has portrayed a sharp fall in its relative unit labour cost and price level, including house prices. This is a legacy of Germany's reunification boom in the early 1990s. When the euro was introduced, the German economy was still grappling with the unwinding of the boom. The shifting back of resources from the construction industry to the tradable industries still had a long way to

go when the euro conversion rates were fixed and the only way by which this could be achieved was via further competitiveness gains and associated disinflation. In the boom episode Germany had built up a current account deficit and this has now turned into a large surplus.

- At the other extreme, three of the four "cohesion countries" (Ireland, Greece and Spain, see Chapter I.8) have seen output grow rapidly (although in the case of Spain less so on a per capita basis) while inflation persistently exceeded the euro-area average. In these countries strong growth momentum had been building up prior to the introduction of the euro – owing to sharp declines in real interest rates and an associated surge in real housing prices and residential construction, rapid growth in labour supply and powerful "catching-up" dynamics (see Chapter I.8). Not surprisingly, the relative unit labour cost has shown a secular increase and so have their current account deficits.
- There is a third group of countries that have also portrayed higher inflation rates than the average, but whose activity has on average been rather sluggish (Italy and Portugal are the prime examples). These are countries where both fiscal and structural policies were less well managed and which, along with Spain, have shown weak growth in labour and total factor productivity (see Chapter I.2). As a result they have seen their cost competitiveness and external positions erode. While in Spain this loss in competitiveness may be seen as benign up to a certain degree, this is not the case in e.g. Italy, where domestic demand has also stayed weak. Apparently, its decline in cost-competitiveness is more of a cost-push than a demand-pull nature.

In sum, there are countries that have seen tendencies towards excess demand (Ireland, Spain, Greece) and where inflation and cost developments have been above average, there are ones that show roughly a mirror image (Germany) and there are ones that have combined comparatively high and persistent

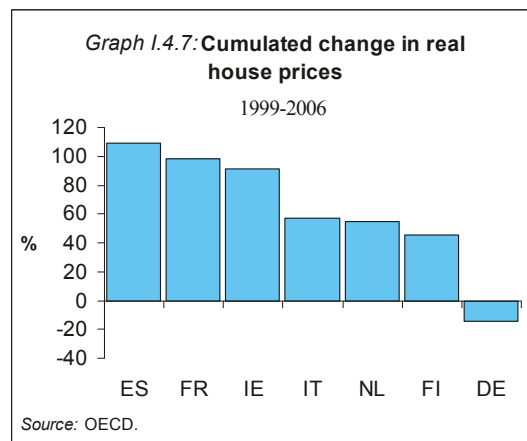
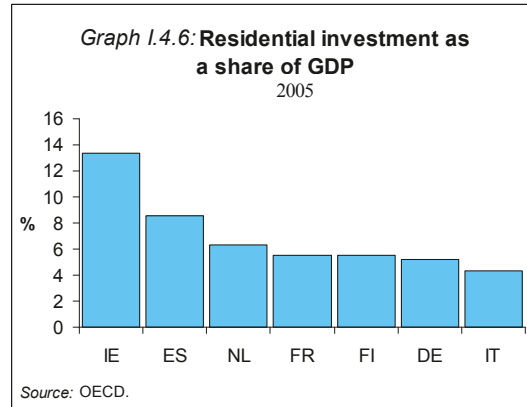
inflation, competitiveness losses and current account deficits with sluggish growth (Italy, Portugal). Other countries have shown less pronounced tendencies, in some cases combining one or several of the above positive and negative features. But the overall picture is relatively clear-cut.



In the majority of countries the ongoing adjustment may be characterised as benign – i.e. pushing real exchange rates towards their new equilibrium. A growing concern though is that there may be a risk of overshooting in some countries. The large current account deficit in

Spain may not be sustainable. The counterpart of this deficit is a rapidly growing indebtedness of households due to the ongoing residential investment boom. This boom now seems to be cooling as household balance sheets have become overstretched and excess supply in the residential construction sector is building up. So, a correction appears to be in store, with resources possibly shifted back to exporting industries away from residential construction. First signs of such a correction are also emerging in Ireland, but here the conditions for adjustment look more favourable owing to the much faster rate of growth of labour and total factor productivity.

Conversely, the current account surplus in Germany may have overshoot in the other direction, reflecting a persistent imbalance between booming exports, sluggish household and the construction industry being in a protracted slump. So far there have been scant signs of domestic demand taking over the growth baton.



4.3. THE CORE MECHANISMS AT WORK

The broad tendencies identified in the previous section can largely be replicated by modelling exercises, as reported in Box I.4.1. The simulations suggest that indeed most euro-area countries that have been hit by some permanent "shock" in the run-up to the euro need a period of five to ten years to adjust. The adjustment is inherently stable, *i.e.* the relative price level will converge to a new equilibrium and the inflation and growth differentials (other than those resulting from different initial conditions and "real convergence" towards the best performers) between countries will eventually disappear. This process can be shorter or more drawn out dependent upon the empirical sensitivities. Specifically, if the responsiveness of inflation to the buoyancy of economic activity and/or of the composition and level of output to changes in competitiveness (which together form the so-called *competitiveness channel*) is weak, adjustment will be lengthy. This is particularly costly for countries whose real exchange rate is overvalued, since their cumulative output loss will be large – and may be further exacerbated by adverse spill-over effects of persistent high inflation in other countries via a tighter stance of monetary policy.

In addition, there is a potential source of short-run instability stemming from what has been dubbed the *real interest rate channel*. If inflation expectations are weakly anchored in the area-wide price stability goal and hence respond strongly to the country-specific past inflation record (inflation persistence), the perceived real interest rate will fall if a country is going through an upward adjustment of its price level (be it after a positive demand shock or adverse supply shock).⁽¹⁹⁾ As a result domestic demand will be boosted and the external imbalance will overshoot. The real interest rate channel is unavoidable to some extent, but if it is too strong and persistent, it risks overshooting due to its interaction with asset (notably housing) markets.

In a monetary union the cyclically most advanced countries experience, and indeed should experience, above-average inflation rates – and *vice versa*. However, differences in cyclical position are just one of the explanatory variables of inflation differentials which, as noted in the previous section, may therefore not always be benign. For example, there is a concern that several countries see their cost competitiveness deteriorate due to weak productivity along with upward price adjustment. This is particularly damaging if the source of inflation is structural, *e.g.* spurred by upward pressure on public wages, indexation mechanisms or malfunctioning labour and product markets. A particular problem associated with supply driven inflation in some countries is that it spills over into the area wide interest rate (see Box I.4.1).

Empirical investigations reported in the 2006 *EU Economy Review* suggest that adjustment via the competitiveness channel is strong enough to offset such possible destabilising effects stemming from pro-cyclical real interest rates over the longer haul. Even so, it also identified scope for a better balance between the two channels so as to smooth adjustment. Importantly, a combination of a weak competitiveness channel and strong real interest rate channel will produce persistent inflation and growth differentials along with short-run cyclical instability. In this context it is useful to revisit in more detail the overall strength of these channels and their determinants.

4.4. GAUGING THE COMPETITIVENESS CHANNEL

Measuring the strength of the competitiveness channel is not as straightforward as it might seem. There is a plethora of indicators available, each providing different types of information about international price and cost competitiveness:

- The most straightforward indicator is the effective exchange rate deflated by export

⁽¹⁹⁾ The model simulations reported in Box I.4.1 assume that actual inflation is only to a limited extent built into the perceived real interest rate – *i.e.* households are forward-looking.

prices.⁽²⁰⁾ This directly measures the international relative price of a country's exports in a common currency. However, to the extent that the prices of internationally tradable goods are subject to the "law of one price" (*i.e.* for each traded good there is only one global price), this indicator may be somewhat misleading.

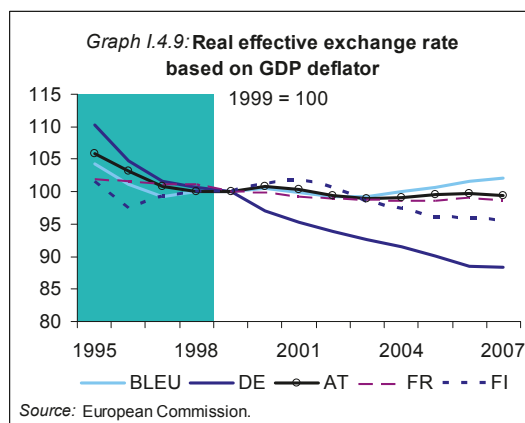
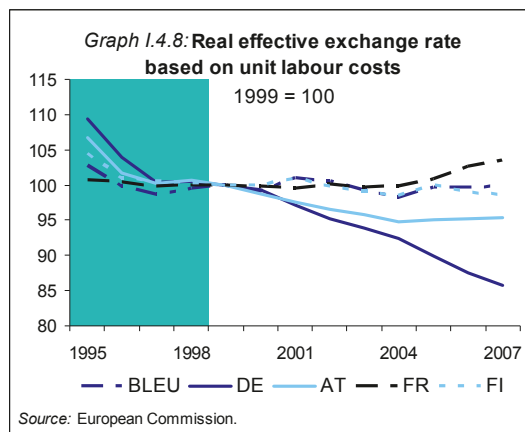
- An effective exchange rate measuring the comparative unit labour cost in a common currency suffers less from the 'law of one price' bias and its interpretation is rather straightforward too. An increase in the effective exchange rate using relative unit labour cost indicates a profit squeeze in a country's economy relative to partner countries and *vice versa* which is not necessarily picked up by the competitiveness indicator based on export prices.
- A third approach is to use the relative GDP deflator to compute a country's real effective exchange rate. If the law of one price holds, an increase in a country's comparative GDP deflator would indicate a relative price increase in non-traded output. Hence it points to resources being attracted towards non-traded industries, thus reducing a country's potential to cut or service its external liabilities.⁽²¹⁾

Graphs I.4.8- I.4.11 plot the development of two broader competitiveness indicators – the real effective exchange rate deflated by the GDP deflator and unit labour cost, respectively – and points to the following developments which are largely in line with the stylised assessment in the previous sections:

- A first group of euro-area countries – Germany and to a lesser extent Finland – has steadily improved its competitiveness position *vis-à-vis* the rest of the euro area

since 1999. In the case of Germany, the real depreciation trend does not yet seem to have come to an end. In the case of Finland the improvement is only significant in terms of the GDP indicator.

- A second group of countries – Austria, France and Belgium – maintained their competitiveness positions *vis-à-vis* the rest of the euro area in terms of the GDP indicator and, with the exception of France, also in terms of the unit labour cost indicator. The latter suggest a modest loss in the cost competitiveness of the French exporting industries.



⁽²⁰⁾ For a detailed description of the information content of the various price and costs' competitiveness indicators, see European Commission 2006a), Chapter 6.

⁽²¹⁾ However, in order to make a proper assessment the real effective exchange rate based on the GDP deflator should be adjusted for differences in the rate of productivity growth between the tradable and the non tradable sectors.

Box I.4.1: Standard adjustment channels and cross-country spillover effects

The 2006 *EU Economy Review* discusses a series of simulations to capture the "shocks" that accompanied (and were partly triggered by) the creation of the euro area:

- The disappearance of the exchange rate premium in e.g. Spain, Portugal and Ireland and the associated fall in interest rates is predicted to produce a boom in housing investment, which overshoots and then falls back, along with real GDP growth. Consumption remains at a higher level all along, which induces a persistent current account deficit.
- An easing of credit constraints for households boosts the demand for owner-occupied housing, which further fuels the housing boom. Housing investment is strongly affected initially as house prices inflate. Real interest rates fall further which sustains the housing boom until it overshoots. Excess supply then triggers a downturn in housing investment.
- Several countries entered the euro area with an overvalued exchange rate – Germany being the most prominent case. The associated sustained increase in the terms of trade and real interest rates is found to have a strong initial adverse effect on housing investment and GDP growth and produces disinflation. The current account first turns into deficit, but this is subsequently reversed as competitiveness is restored. Economic growth then also picks up.
- Some countries experienced a favourable shock to total factor productivity (TFP) in the tradeables sector (Ireland). This initially boosts inflation owing to the *Balassa-Samuelson effect*: wages accelerate in the tradables sector and this subsequently spills over to wages and prices in the non-tradable sector. The real interest rate falls and housing demand picks up strongly. The current account is little affected as the strong demand for non-tradables produces only small import leakages.

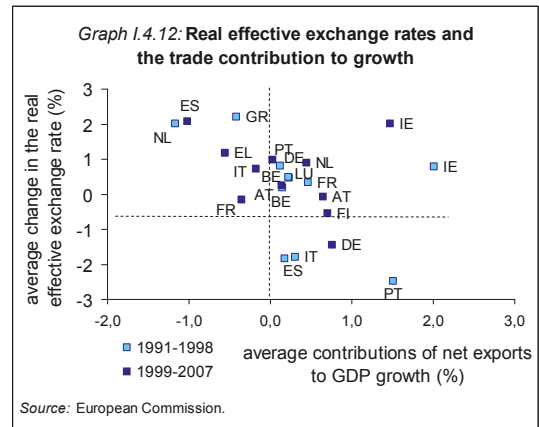
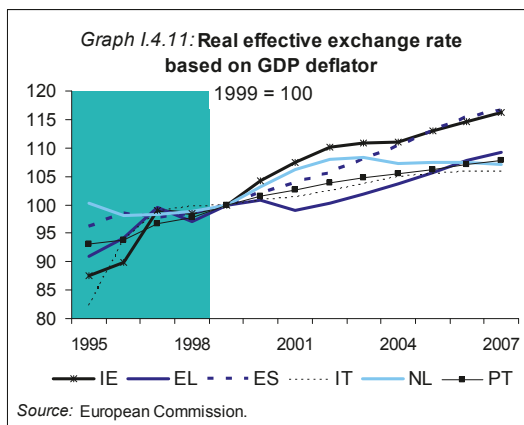
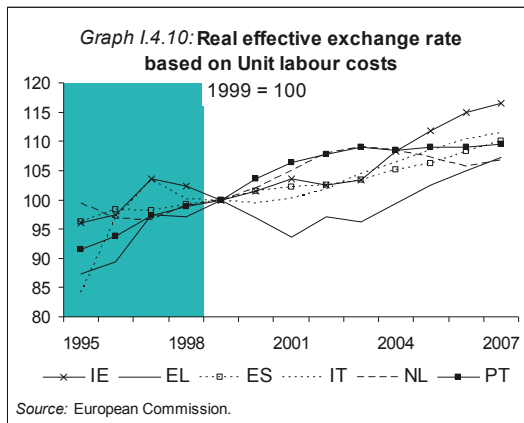
- Conversely, some countries experienced an adverse shock to TFP in the non-tradeables sector (Italy, Spain and Portugal). This produces higher prices in the non-tradeable sector, low real interest rates and a housing boom, akin to a positive TFP shock in the tradeables sector. The difference is though that now competitiveness suffers, growth slows and the current account deficit widens.
- In some countries occurred an immigration shock (Spain, Ireland), which has a powerful effect on the demand for non-tradeables and housing investment and an associated increase in house price inflation. The current account deficit deteriorates.

The simulations also suggest spill-over effects onto the economies of the other participating countries. Aside from the implied variations in the real exchange rate, there are effects via the income and interest rate channels:

- A negative TFP shock to the non-tradeable sector has a relatively strong spillover effect due to the monetary policy response. The central bank is forced to raise interest rates, which dampens aggregate demand and inflation in the other countries of the area country.
- A positive TFP shock to tradeables produces smaller negative spillovers, because the positive income effect (i.e. the increase in the demand for tradeables in the country that experiences the shock) partly offsets the adverse interest rate effect.
- An increase in housing demand has comparatively large negative spillover effects because the demand shifts from tradeables to non-tradeables in the country experiencing the shock. Therefore import demand is weakened, which exacerbates the interest rate spill-over effect.

- A third group of countries – Greece, Ireland, Italy, Portugal, the Netherlands and Spain – experienced a significant decline in their competitiveness position *vis-à-vis* the rest of the euro area. With the exception of the Netherlands, where the situation has improved somewhat (or at least stabilised) since 2003, all countries in this group were still on an appreciation trajectory at the end of 2007. Spain and Ireland portray the biggest competitiveness losses, although in the case of Spain this is true only for the GDP-based indicator.
- The maximum competitiveness loss recorded amounts to about 15% (Spain, Ireland) and the maximum gain 15% as well (Germany). These do not point to dramatic gains and losses on average per annum, but the striking feature is their persistence.

A critical issue is to what extent these competitiveness developments have been reflected in international market shares. Graph I.4.12 shows that generally countries that have seen their real effective exchange rate appreciate also portrayed a negative net export contribution to growth – and *vice versa* for countries whose real effective exchange rate has been appreciating.



As may be expected, the former group includes Spain, Greece and Italy, while in Portugal the net trade contribution to growth has been practically nil as imports slumped along with weak domestic demand. Ireland managed to sustain export-driven growth despite a loss in cost competitiveness, possibly due strong comparative advantages in a number of specific (mostly hi-tech) industries. The negative correlation between the real exchange rate and net trade also holds for the decade prior to the creation of the single currency, and the slope does not seem to have changed much.

A related and even more crucial issue is how sensitive the area's internal real effective exchange rates are to the relative cyclical positions of the participating countries, and whether this has changed with the introduction of the single currency. As highlighted in the previous section a weak responsiveness of real effective exchange rates to comparative excess supply or demand conditions will tend to prolong the adjustment process.

Box 1.4.2: Competitiveness as an adjustment mechanism in the euro area

Building on earlier work by Honohan and Lane (2003), econometric tests were carried out to test whether the responsiveness of the real effective exchange rate has changed after the introduction of the euro.

In a first step the year-on-year change in the real effective exchange rate (REER) was regressed on its own lag, its lagged level and the lagged output gap differential. The first two explanatory variables capture inertia and mean reversal effects. The regressions are based on annual data and include country fixed effects. A control for differences in income per-capita (low income countries should exhibit appreciating REERs) appeared insignificant (see table below).

Real effective exchange rates and cyclical divergence: evidence from panel regressions

Dependent variable: $\Delta \log \text{REER}$	1970 - 2006		1999 - 2006	
	GLS	GMM	GLS	GMM
Explanatory variables:	(1)	(2)	(3)	(4)
$\Delta \log \text{REER}(-1)$	0.205 (4.40)***	0.238 (6.72)***	-0.054 (0.61)	-0.162 (1.58)
$\log \text{REER}(-1)$	-0.122 (6.20)***	-0.162 (5.03)***	-0.049 (2.42)**	-0.037 (1.77)*
Relative output gap(-1)	0.667 (6.11)***	0.714 (5.87)***	0.458 (5.91)***	0.556 (9.58)***
Observations	385	374	99	99

Notes: Sample includes 11 countries (the first wave plus EL less LU). GLS estimation includes fixed effects (not displayed) and allows for heteroskedasticity and auto correlated standard errors. The REER is calculated using the GDP deflator. The relative output gap is constructed as the difference between the national and the GDP-weighted output gap of the remaining countries. GMM are estimates obtained with Arellano-Bond) procedure; relative output gap considered as predetermined. The absolute value of z statistics is reported in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Separate estimations are reported for the periods 1970-2006 and 1999-2006. The real exchange rate reacts positively to differences between the domestic and rest-of-area output gap, indicating that competitiveness provides an effective channel of adjustment.

The effect is non-negligible: an output gap higher (lower) by one percentage point compared with the rest of the euro area implies a REER appreciating (depreciating) by about half a percentage point per year. The real exchange rate is stable in the long run, owing to the negative and significant coefficient on the lagged REER. However, after 1999 the speed of adjustment has fallen.

In a second step the regression was re-run on the relative GDP deflator (P) in stead of the REER, while the change in the intra-area nominal effective exchange rate (NEER) is included as an explanatory variable (which is obviously zero from 1999 onwards). The purpose is to examine if the responsiveness of the relative GDP deflator increased with the launch of the euro. This appears to be the case across two dimensions (less inertia and stronger mean reversal), indicating that relative prices have assumed a stronger role in the adjustment. The response to the relative output gap is also stronger but the difference is not statistically significant.

"Pure" price competitiveness and cyclical divergence: evidence from panel regressions

Dependent variable: $\Delta \log P$	1970-2006		1999-2006	
	GLS	GMM	GLS	GMM
Explanatory variables:	(1)	(2)	(3)	(4)
$\Delta \log P(-1)$	0.626 (20.69)***	0.546 (8.62)***	0.11 (1.22)	0.182 (2.18)**
$\log P(-1)$	-0.017 (7.54)***	-0.019 (2.87)***	-0.063 (3.01)***	-0.1 (2.78)***
Rel. output gap(-1)	0.265 (5.53)***	0.222 (3.23)***	0.386 (4.92)***	0.358 (5.65)***
$\Delta \log \text{NEER}(-1)$	-0.093 (4.57)***	-0.094 (2.75)***		
Observations	385	374	99	88

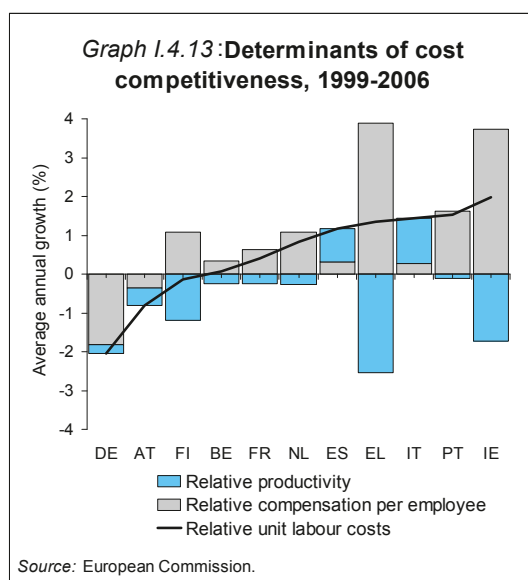
Notes: Same sample, estimation methods and variables as in the previous table, except $\log P$ computed as $\log \text{REER} - \log \text{NEER}$. * significant at 10%; ** significant at 5%; *** significant at 1%.

Econometric work reported in Box I.4.2 tackles this question and yields the following stylised findings:

- The first-round responsiveness of real effective exchange rates to output gap differentials has remained largely intact (even if having fallen slightly) after the introduction of the single currency. However, the speed of adjustment of real effective exchange rates towards their equilibrium has slowed down with the irrevocable fixing of nominal exchange rates. This implies that inflation and output differentials in response to shocks have tended to become more persistent. This is obviously not surprising in view of the disappearance of the nominal internal exchange rates.
- By contrast, looking at the 'pure' price effect (thus abstracting from the nominal effective exchange rate effect) suggests that the competitiveness channel has become stronger after the introduction of the single currency. While encouraging, this greater sensitivity of prices does not yet suffice to fully offset the loss of adjustment capacity through the more flexible nominal exchange rates.

There are at least three other main reasons for concern:

- *First*, as noted above, several countries that have been experiencing a persistent deterioration in their competitiveness also saw their comparative productivity decline along with an increase in relative wages (Graph I.4.13). This has notably been the case in Italy and Spain. This confirms that adverse supply shocks impinging on productivity have been a main driver of the adverse competitiveness developments in these countries. This is potentially costly as it weighs on structural profitability and may depress potential growth for sustained periods. As noted, it also produces adverse spill-overs onto economic activity in other euro-area countries via the area-wide interest rates.
- *Second*, the experience over the past decade has shown that the response of the real effective exchange rate to cross-country differences in cyclical positions is asymmetric, it responding more strongly to excess demand than to excess supply. This is costly also since it implies that to achieve price stability of the euro area as a whole, monetary policy needs to be tighter and aggregate slack larger, than it would otherwise need to be.
- *Third*, while the analysis of competitiveness developments naturally focuses on tradable industries, the non-tradable sector potentially plays an important role in the competitiveness channel. A country which experiences overheating and an external deficit needs to shift resources from non-tradable to tradable industries and *vice versa*. However, this mechanism is still blurred in the euro area as prices in services are sticky.



With regard to the third concern, a secular price increase in services relative to goods is to an extent to be expected due to the higher labour intensity in production (and typically lower productivity growth) and limited international competition, reflecting a low degree of tradability, of many services. In addition, long-term demand shifts towards services consumption, related to real convergence and to changes in lifestyles (particularly evident in recreational services), may play a role. In some countries, Balassa-Samuelson effects are likely to have contributed and services prices also tend to be influenced by changes in administered prices, sometimes linked to policy (for instance healthcare reforms).

Beyond these factors, however, high and persistent services price rises also reflects shortcomings in market functioning (notably inefficiencies in regulation and lack of competition) that call for policy responses. In most participating countries there are services sectors that operate in a regulatory environment not conducive to low inflation. Some examples are: professional services, where entry barriers and price regulations put upward pressure on prices; wholesale and retail trade, where factors partly related to non-economic considerations, such as shop-opening hours, zoning restrictions and restrictive labour regulation put a brake on productivity growth and competition; retail financial services, where EU integration is less advanced than in the wholesale financial sector and some domestic markets appear insufficiently competitive; and traditionally regulated sectors, where the scope for liberalisation has not yet been exploited, such as railway transport or postal services.

In sum, the "competitiveness channel" has been operational in the euro area, pushing real effective exchange rates towards equilibrium, but there is considerable scope for it to be strengthened.

4.5. GAUGING THE REAL INTEREST RATE CHANNEL

At the outset there were fears that the real interest rate channel would act as a destabilising factor. This was based on the well-known

Walters critique which predicted that countries with buoyant economic activity and higher than average inflation rates would enjoy further stimulus by below average real interest rates, while weaker economies with a lower than average inflation rates are further weakened by higher than average real interest rates. This would seem to imply that the single monetary policy unavoidably produces economic divergence across countries in the euro area. By now it should be clear that this line of argument disregards the operation of the competitiveness channel. It also disregards the fact that measuring real interest rates, and by extension the real interest rate channel, is not as straightforward as it may seem.

Measuring real interest rates raises a number of methodological issues. Prominent among them is that the expected inflation rate which is used to 'deflate' the nominal interest rate is unobservable. The two main approaches are to use inflation premiums built into the rate of return on financial assets such as indexed bonds or to use surveys such as those reported by Consensus Economics (the method applied here). This yields a so-called *ex ante* real interest rate. An alternative is to use observed actual inflation, which results in an *ex post* real interest rate. Looking at both types of real interest rates yields valuable information on the extent of anchoring of inflation expectations. This has been identified as crucial for the degree of pro-cyclicality of the real interest rate channel (the less forward looking inflation expectations are, the more destabilising will the real interest rate channel be).

Most convergence in real interest rates had already occurred during the run-up to the single currency as exchange rate risk premiums disappeared, markets became more integrated and liquid and inflation rates converged in the pursuit of the Maastricht criteria. *Ex post* real interest rates declined from an average of 6% in the early 1990s to below 3% in 1998. On *ex ante* basis the decline was somewhat more pronounced from 7% to 2½ %, indicating some inertia in inflation expectations. Meanwhile, the spread between the country with the highest and the lowest real interest rate fell both in *ex ante* and *ex post* terms from around 10% in 1994 to 7½ % in 1998, with the standard deviation falling from 3 to 2%. Not surprisingly, the sharpest falls

in real interest rates were observed in countries that had previously had high real interest rates -- with Portugal, Finland, Spain, Ireland and Italy at the top of the league.

Further sharp declines in real interest rates were observed after the introduction of the single currency in Greece, Ireland and Spain. More generally, two groups of countries can be distinguished – with Germany, Austria, France and Belgium registering above-average real interest rates since 1999 and the other countries recording mostly below-average real interest rates. Meanwhile *ex post* real interest rates show more dispersion than *ex ante* real interest rates, indicating that the dispersion of expected inflation rates is less pronounced than that of observed inflation – although the difference is small.

Given that nominal interest rates have largely converged, the bulk of the dispersion in real interest rates reflects inflation differentials. Inflation differentials are not an exclusive feature of the euro area and observed in other monetary unions as well. It is indeed quite similar across metropolitan areas in the United States (see Box I.4.3). However, what is specific to the euro area is the rather strong persistence of these differentials across countries (Altissimo *et al.* 2006). Such inertia in inflation differentials is damaging since it heightens the pro-cyclicality of the real interest rate channel. As mentioned earlier sticky prices in services industries is likely to be one of the main culprits.

Aside from the persistence in real interest rate differentials, asymmetric transmission of monetary policy can be another source of divergences via the real interest rate channel. Studies covering the early years of monetary union did not find strong evidence of such asymmetries (Peersman 2004, Van Els *et al.* 2003). However, empirical studies concerning the interest rate pass-through into bank interest rates do point to asymmetries – both in terms of the equilibrium interest margin and the speed of adjustment towards equilibrium. For example, according to calculations by Angeloni and Ehrmann (2003), for the years 1999-2002 the impact of money market rates on bank lending and deposit rates (within one month) varied between 0.387 in Germany and 0.621 in France.

The main culprits are differences in the legal and regulatory in markets structure (concentration and size) systems (Sander and Kleimeier 2004, Maudes and Fernández de Guevara 2004).

4.6. CONCLUDING REMARKS

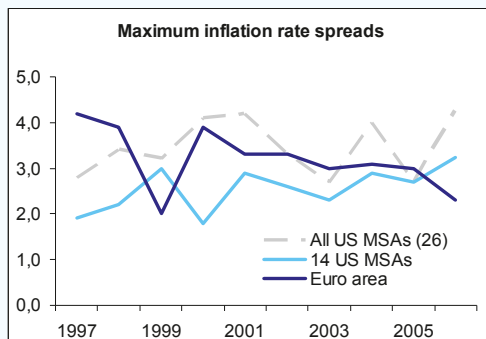
Summing up, the competitiveness channel appears to be rather powerful in the euro area, even if further progress towards enhancing this channel is possible and desirable. Meanwhile, there is some reason for concern that the real interest rate channel is still rather prominent in several countries and this may entail some short-run macroeconomic instability as real exchange rates overshoot. The main challenges arising in this context can be summarised as follows:

- A better functioning of labour and product markets would help strengthen the competitiveness channel. This would make adjustment faster and smoother and limit the risk of the real interest rate channel to kick in as a source of short-run macroeconomic instability. Importantly, it would pay a double dividend by also helping to raise the economic growth potential.
- The integration and development of financial markets could help smooth adjustment and ease divergences further by spreading their impact across a broader group of investors and consumers. Again, this favourable effect would come on top of the positive impact integrated financial markets potentially have on the allocation of capital and longer-term economic growth.
- However, a combination of integrated financial markets and inflation persistence risks sustaining divergences across countries. Inflation persistence exacerbates the real interest rate channel and, with the current account constraint being removed, it can result in asset booms which will have to unwind at some stage. This makes the call for microeconomic reforms in product and labour markets even stronger.

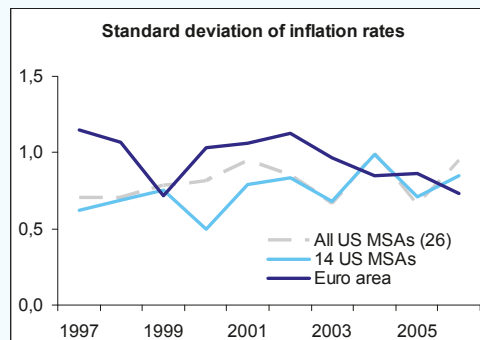
Box I.4.3: Real interest rate differentials: a comparison with the United States

The analysis of real interest rate differentials in the United States suffers from limited availability of data. For the United States, the US Bureau of Economic Analysis (BEA) publishes consumer price inflation data for metropolitan statistical areas (MSAs), but not for the states, unlike output data which are available for the states. For three MSAs monthly data are published and for another 11 bimonthly data (seven in even months, four in odd months) are available, but for a total of 26 metropolitan areas, annual CPI data for at least five years are published. Therefore many existing studies derive conclusions on the basis of just 14 of the 27 MSAs (e.g. ECB 2003a). Others studies, like that of Arnold and Kool (2004), use deflators of gross output per state.

Most studies find that the diversity of inflation rates in the euro area has become more or less similar to that among metropolitan areas in the United States. Spreads between maximum and minimum inflation rates have been quite similar, while standard deviations have remained slightly higher in the euro area, with most of the difference due to Ireland.



However, a main difference between euro-area countries and US regions is the stronger



persistence of inflation differentials in the euro-area. Observations support this view as some countries have accumulated a substantial positive inflation differential (e.g. Ireland, Greece, Spain and Portugal) while others have accumulated a negative differential (e.g. Germany). Based on a comparison with a sample of 14 US metropolitan areas the ECB (2003a) concluded that persistence is indeed weaker in the United States, but the difference is less striking when all US metropolitan areas are taken into consideration. In this case, the accumulated differentials on both sides of the Atlantic appear to be quite similar.

Arnold and Kool (2004) have found evidence that changes in real interest rates due to movements in state inflation rates do affect differences in activity across states in the United States. This effect would initially outweigh the offsetting effect of price movements through the competitiveness channel: it would take three to four years for the competitiveness channel to dominate the real interest rate channel. However, other studies have shown that risk sharing provides an offset by smoothing the impact of state-specific shocks to a substantial degree (e.g. Asdrubali, Sørensen and Yosha 1996).

5. MACROECONOMIC POLICIES AND THE POLICY MIX

5.1. INTRODUCTION

EMU assigned monetary policy to a single independent central bank but left the participating countries a large degree of political sovereignty in most other areas. Notably fiscal policy has remained a national responsibility, which allows participating countries to pursue domestic stabilisation goals, albeit within certain bounds. Specifically, the participating countries have committed to conduct their fiscal policies in a manner that takes account of cross-border spillover effects and is consistent with the goals of ensuring sustainability of public finances and maintaining price stability. Chapter I.10 of this Report contains a detailed account of the experience with fiscal policy co-ordination in EMU.

From the outset this assignment of policy responsibilities has given rise to debate, with a majority of observers expressing scepticism. One fear was that with the loss of national monetary policy, and with fiscal policy constrained by rules and commitments, national stabilisation policy would be stifled and economic activity would be left at the mercy of the vagaries of the business cycle. As may be concluded from the analyses in Chapters I.2 and I.3 of this Report, this fear now looks misplaced to the extent that:

- Business cycles are increasingly synchronised across countries, and hence the need for national stabilisation policies over and above the stabilising impact of the single monetary policy has been diminishing. Moreover, as will be discussed in some detail in Part II of this Report, alternative insurance mechanisms to stem the risk of recurrent income loss due to cyclical fluctuations in economic activity have been emerging, such as the opportunities of risk sharing and consumption smoothing offered by the rapidly integrating financial markets.
- The macroeconomic imbalances that have built up in the euro area in its first ten years – with wide-ranging disparities in current account positions, real interest rates and housing markets – largely have structural rather than cyclical roots. In particular, a high

degree of nominal rigidities (inflation persistence) along with real rigidities in labour and product markets appears to have contributed to overshoots and undershoots in the real effective exchange rates. It would be more appropriate to assign structural policies the role of removing these rigidities, rather than burdening fiscal policies with addressing their symptoms.

Another fear that popped up regularly in the debate is that of an imperfect co-ordination of macroeconomic policies at the European level. One risk that has been repeatedly evoked is that of an unbalanced policy mix, due to attempts to alleviate some of the symptoms of structural rigidities in product and labour markets (*i.e.* sluggish growth) by fiscal activism. This would entail a systematic aggregate deficit bias and force monetary policy to be tighter than it otherwise would be – *i.e.* fiscal and monetary policy would be working against rather than support each other. The fiscal rules in place stem this risk to some extent, but given their inherent asymmetry (*e.g.* ceilings for deficits and debt) this may be less the case in economic "good times".

The analysis in this chapter indeed finds evidence of an asymmetric response of fiscal policy in good times – although less so in EMU than in previous economic upswings.⁽²²⁾ But the mechanisms underlying it turn out to be rather complex. The complicating factor is that fiscal policy has severely suffered from long recognition lags regarding the actual cyclical position of the economy. For example, during the dotcom bubble in the early years of EMU fiscal policy was still responding to recession fears in the wake of the Asian crisis. It thus failed to stem the upswing and – despite extremely favourable conditions – to consolidate budgets. In the subsequent downturn fiscal policy was eased on the back of windfall gains stemming from the dotcom boom, and while with hindsight this

⁽²²⁾ This is in line with the seminal work of Gali and Perotti (2003), and also confirms the findings reported in the 2006 issue of the *Public Finance Report*, European Commission (2006c), as updated in Turrini (2008). Von Hagen and Wyplosz (2008) also find evidence that fiscal policies became more clearly less procyclical.

looks like a countercyclical response to weakening activity, in reality this was largely unintentional. In the event, fiscal positions deteriorated and a long and painful consolidation ensued.

Against this backdrop, this chapter assesses the evolution of the stances of monetary and fiscal policies, respectively in the first ten years of EMU. The assessment will be both against "real time" developments – *i.e.* the data as perceived at the time – and the actual "ex post" developments as perceived with hindsight. The final section of the chapter then provides an assessment of the policy mix.

5.2. THE CONDUCT OF MONETARY POLICY

5.2.1. The policy framework

Monetary policy is conducted independently by the European Central Bank (ECB). It fixes its main policy rates in the pursuit of price stability in the euro area as a whole over the medium run. The ECB does not pursue an explicit inflation target, but it has put forward a quantitative definition of price stability – *i.e.* a rate of change of the Harmonised Index of Consumer Prices (HICP) (close to, but) below 2% per annum. ⁽²³⁾

The implementation of the policy framework has evolved over time as experience was accumulating. Notably, in May 2003 the ECB published a review of its strategy. ⁽²⁴⁾ Initially the ECB pursued a two-pronged strategy consisting of: (i) a "first pillar" assigning a prominent role to broad money (M3) for which a reference value of 4½ % annual growth was formulated; and (ii) a "second pillar" referring to a broadly-based evaluation of risks to price stability, using a wide array of economic and financial variables, geared towards a quantitative definition of price stability of less than 2% HICP inflation per annum. ⁽²⁵⁾

Both benchmarks have been subject to criticism. Since the advent of the single currency the year-on-year growth rate of M3 had persistently exceeded the reference value of 4½ % which the ECB used as the benchmark for a prudent, non-inflationary expansion of the money stock. Meanwhile, M3 was severely distorted by the impact of *e.g.* non-resident use of euro notes and coins, portfolio shifts and mergers and acquisitions. This threatened to undermine the credibility of the reference value. Concerning the quantitative definition of price stability, its interpretation as a "ceiling without a floor" came under intense scrutiny in view of the economic downturn and the Japanese deflation experience.

The review reiterated the aforementioned quantitative definition of price stability, but it highlighted that the ECB would aim to keep the inflation rate *close to* 2% over the medium term, as arguably had been its strategy all along. A somewhat different role was attributed also to the analysis of money aggregates, which was henceforth focussed on long term price developments and aimed to "cross-check" the findings stemming from the analysis of short-term economic developments. *De facto* this means that less prominence is given to the analysis of M3 *per se*, while more emphasis is put on its counterparts, including credit growth ⁽²⁶⁾. Even though the ECB stressed the continuity of its strategy and stated that the decisions taken were merely about clarification, these decisions have been widely interpreted as a downgrading of the (previous) first pillar.

5.2.2. Achieving the price stability goal

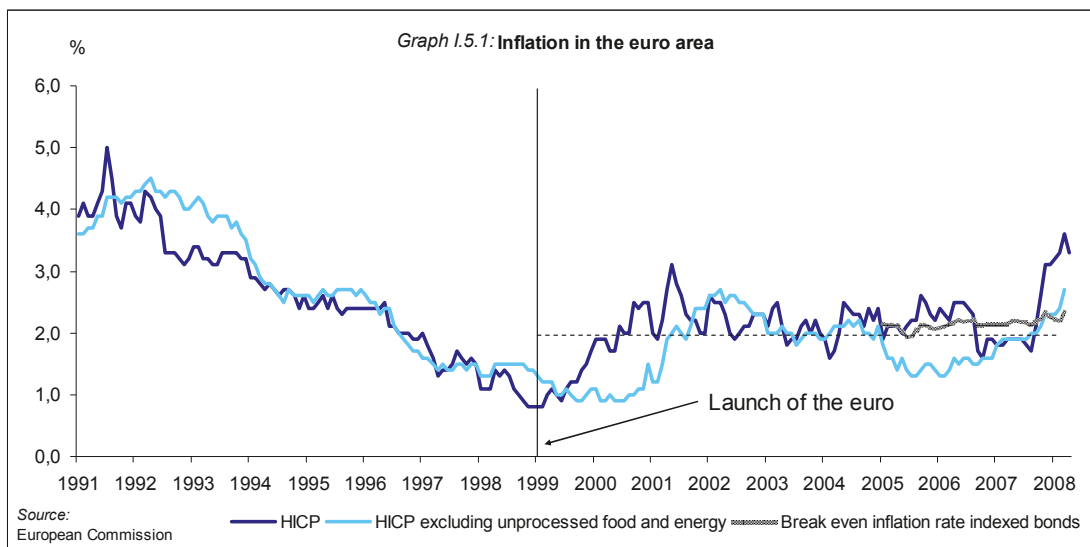
As discussed in Chapter I.2, the move towards low and stable inflation was already largely achieved when the euro was launched in 1999, mainly as a result of the nominal convergence process in the 1990s motivated by the desire to qualify for euro accession in the "first wave". Since then, inflation has been hovering in a narrow range around the ECB's gauge of price stability and it has been below this mark in 42 out of 110 months (Graph I.5.1). Financial market-based measures of inflation expectations, as for example derived from French inflation

⁽²³⁾ Scheller (2006). The qualification "close to, but" was introduced in a review of the monetary policy framework in 2003 – see below.

⁽²⁴⁾ ECB (2003b).

⁽²⁵⁾ Issing et al. (2001).

⁽²⁶⁾ Beyer and Reichlin (2008),



index-linked bonds, have consistently been close to (even if mostly slightly above) 2% and have hardly responded to the recent pick-up inflation following sharp price increases of food and energy. Long-term inflation expectations, as measured for example by Consensus Economics forecasts or the ECB Survey of Professional Forecasters, have also been continuously at a level broadly consistent with the ECB's gauge for price stability. Apparently, markets and private agents perceive the ECB as being fully committed to maintaining price stability.

As also discussed in Chapter I.2, inflation volatility has been greatly reduced as well, which is of particular importance for the risk premiums built into bond yields and hence investment and growth. The volatility of quarterly changes of HICP inflation in the euro area (measured as its standard deviation) fell from around 0.6 percentage point during the 1980s to around 0.3 percentage point in the 1990s, again mainly as a result of the nominal convergence process in the 1990s. Since the launch of the euro, inflation volatility has only been 0.2 percentage point, in spite of major (food and energy) price shocks during this period. The average volatility of long-term Consensus inflation expectations has also declined substantially, from almost half a percentage point in the 1990s to less than 0.1 percentage point in recent years. This lower volatility of actual and expected inflation has contributed to the lower volatility of long-term interest rates. In the 1990s, for example, the standard deviation of long-term interest rates (on

the basis of monthly data) was around 2 percentage points; in the past seven years, this measure has fallen to around 0.7 percentage point.

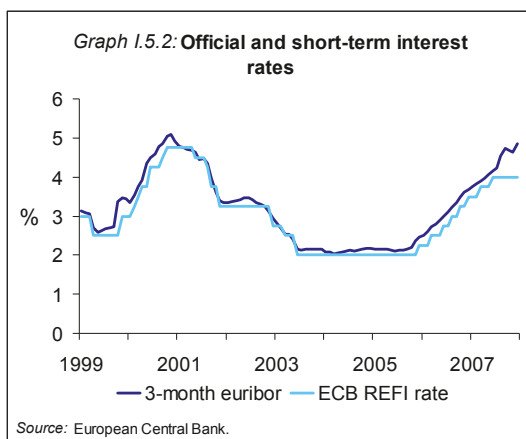
5.2.3. Monetary policy in action

The early years after the launch of the euro were a turbulent episode in which monetary policy had to respond to an unusual string of adverse economic disturbances. These included the aftermath of the Asian and Russian crises, the unwinding of the dotcom bubble, disruptive terrorist attacks, geopolitical strains associated with the Afghan and Iraqi wars, and soaring food prices due to hostile weather conditions and animal diseases. At the current juncture monetary policy again faces difficult times, with inflation accelerating due to soaring oil and food prices associated with rapid growth in demand from emerging Asia, while financial market turbulence stemming from the subprime crisis entails downside risks to activity along with risks to financial stability.

With the benefit of hindsight, four policy episodes can be distinguished since the launch of the euro:

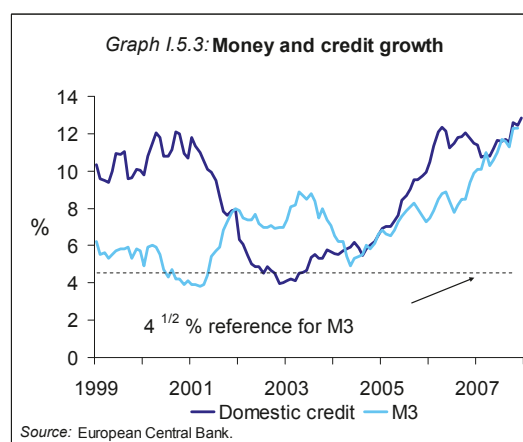
- At the start of EMU, the ECB fixed its main policy rate at 3% (Graph I.5.2). While maintaining this rate unchanged until April 1999, it then cut the rate to 2½%. The ECB explained this decision as a response to the reduced inflation risk implied by

deteriorating growth prospects in the wake of the Asian and Russian currency crises. However, this risk did not materialise and official rates were restored to their initial level in November 1999.



- From then onwards, the ECB gradually moved its official interest rate up to a peak of 4¾ % in October 2000. This aimed to stem upside risks to price stability amid a buoyant economy. The inflationary impact of higher oil prices and the depreciation of the exchange rate (see Chapter I.2) emerged as the main sources of concern. Moreover, as noted, broad money growth persistently breached the 4½ % reference value in line with a rapid expansion of credit (Graph I.5.3). The ECB left interest rates on hold at 4¾ % until May 2001, against the background of the bursting of the dotcom bubble, weakening economic growth and accelerating rates of consumer price inflation -- which peaked at 3.1 % in May 2001. Measures of core inflation (HICP excluding unprocessed food and energy) remained, after increasing from 1 percent, slightly above 2 percent.
- Starting in early 2001, the deteriorating economic outlook in the world economy triggered a series of interest rate cuts in the major economies. The ECB cut rates cuts between May 2001 and June 2003 by a cumulative 275 basis points to 2% -- the lowest rate ever adopted by a national central bank in the euro area. Two factors muted the impact of the ECB's interest rate cuts on economic activity. Firstly, rising risk

premiums prevented capital costs for enterprises from declining by a comparable amount. Secondly, the euro appreciated from its end-2000 lows. From June 2003 until December 2005, the key official interest rate was kept at 2%. In this period nominal and real long-term interest rates were at historical lows as well. Although credit growth slowed down appreciably in this period, M3 initially accelerated as increased uncertainty led to greater risk aversion.



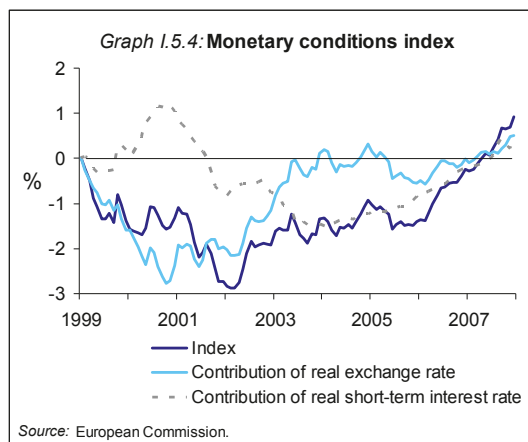
- As the economy gradually recovered, the ECB raised its policy rate by a total of 200 basis points from December 2005 to its current 4% in a drive for interest rate "normalisation". Money and credit accelerated in step as economic prospects recovered, with mortgage lending associated with soaring house prices across most of the area being a main driver. Next policy moves are difficult to predict as inflation has been picking up to well above the 2% mark (exceeding 3½ % in March 2008) while economic prospects are very uncertain in view of the downturn in the US. Meanwhile, liquidity hoarding by banks sparked by the subprime crisis has significantly widened the spread between the three-month interbank and official rates, thus making credit dearer. Frontloading and lengthening the maturity of financing by the ECB have contained the spread to some extent, but it has remained sizeable.

All in all, although monetary policy in the euro area has had to face a number of (external) shocks since 1999, inflation and inflation

expectations have been kept reasonably low. While initially the ECB has been criticised for a policy of a “wobbling hand”, it built up a reputation for the policy of a “steady hand” over time. During the recent period of interest rate normalisation the ECB also earned credit by market participants for better transparency and clearer communication. For example, it now publishes its staff projections underpinning the interest rate decisions four times a year and the language that is consistently used in the monthly press releases following the policy decision is now well-understood in financial markets.

5.2.4. The stance of monetary policy

There is no single best way to examine the stance of monetary policy, *i.e.* the impulse it provides to economic activity. Since there are pros and cons to each measure it is best to look at a range of indicators. The ones used here are the monetary conditions index, the Taylor rule and the “neutral” rate approach.

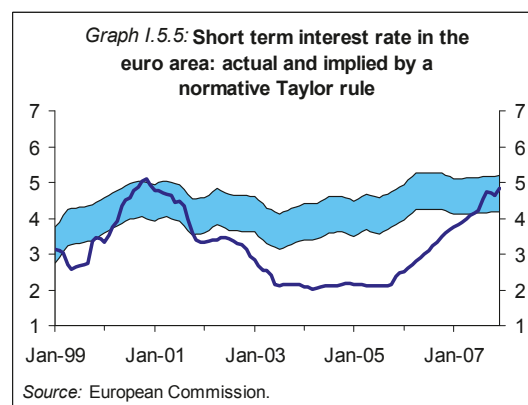


The Commission's Monetary Conditions Index (MCI) is a composite of the real short-term interest rate and the real effective exchange rate relative to their value in a base period, with the weights reflecting the effects of these variables on aggregate demand (Graph I.5.4).⁽²⁷⁾ According to the MCI, monetary conditions

⁽²⁷⁾ Obviously there are many caveats to be borne in mind when interpreting indicators of monetary conditions. For example, if high inflation boosts the real exchange rate and hence the index, it would signal a need to ease monetary policy, which would be clearly at odds with the price stability goal.

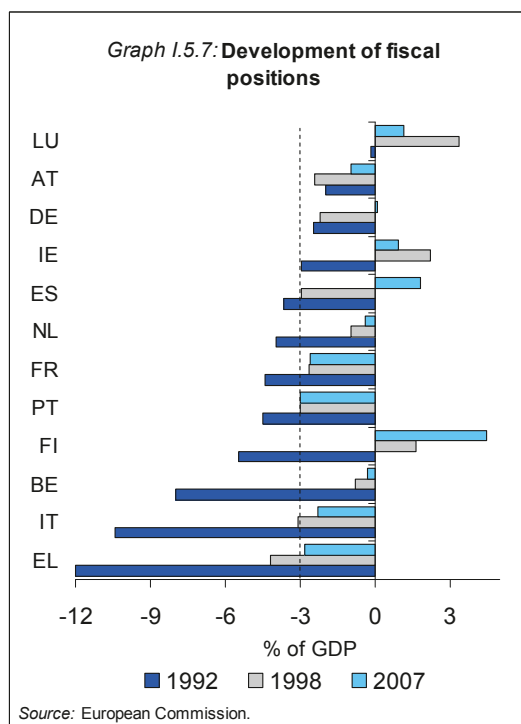
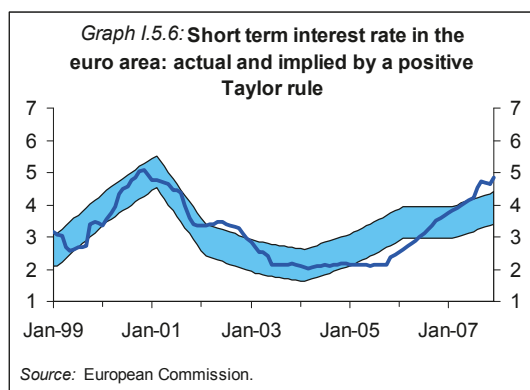
loosened between 1999 and the beginning of 2002, initially on account of the falling exchange rate and subsequently driven by the fall in real interest rates. Since then monetary conditions have gradually become tighter, initially driven by the appreciation of the real exchange rate, which more than offset the fall in the real interest rate, and subsequently also by the pick-up in the real interest rate.

Taylor rules can be interpreted as a response rule for the policy rate, helping to understand how a central bank might conduct monetary policy if it was to follow such a rule (which the ECB does not). The arguments in the rule are typically the deviation of inflation from the “target” and the real-time output gap. Deviations from the rules-based policy rate could be interpreted as a tightening or easing of monetary policy. Taylor rules can be “normative” or “positive” (based on an estimated equation describing actual average behaviour). The normative rule suggests monetary policy ease in 1999 and the first half of 2000, a tight stance in the next year and half and a long stint of easy policy in the period 2002 to 2006. (Graph I.5.5) However, according to a positive Taylor rule monetary policy has been mostly within a reasonable range of the rule, *i.e.* neutral (Graph I.5.6). Even so, the overall time profile of the stance development is broadly similar.



Another way to assess the monetary stance is to benchmark it against the so-called “neutral” real interest rate. A rule of thumb – going back to an 1898 paper by the Swedish economist Wicksell – suggests that, in the long run, the neutral interest rate should be at around the growth rate of real GDP, which roughly corresponds to the 1½ to

2% gauge (or a 3½ % to 4% range in nominal terms).⁽²⁸⁾ Since January 1999, short term interest rates in the euro area were almost constantly below this benchmark, except for stints in 2000-2001 and in 2007, which is consistent with the findings on the basis of the normative Taylor rules.



5.3. THE CONDUCT OF FISCAL POLICIES

5.3.1. Progress with fiscal consolidation ⁽²⁹⁾

EMU's fiscal policy framework has contributed to a marked improvement of fiscal positions. Most of the improvement materialised in the run up to the euro, as adjustments were needed to qualify for EMU in 1998. In 1992 virtually none of the eleven countries that joined the euro area in the "first wave" qualified for the deficit criterion (3% of GDP) enshrined in the Treaty while by 1998 all of them did (Graph I.5.7).

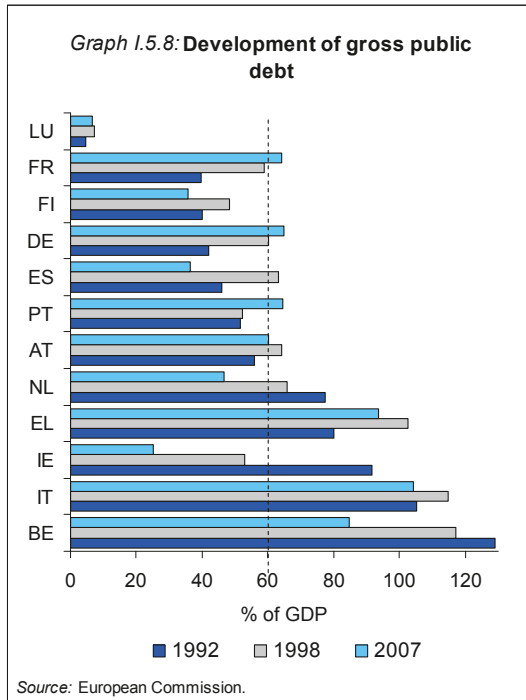
However, progress in the immediate aftermath of the launch of the euro disappointed. After having qualified for the single currency, several countries failed to make progress towards the

medium-term budgetary objective of "close to balance or in surplus". Initially, this failure was masked by the favourable economic conditions prevailing at the time, but it surfaced during the economic slowdown in 2001-2003 when the gap between the budgetary plans and their realisations became increasingly evident. Unsuccessful attempts to enforce the provisions of the preventive arm of the Stability and Growth Pact (SGP) – the main coordination mechanism for fiscal policy in EMU (see Chapter I.10) – were followed by the breach of the 3% of GDP threshold by a number of countries and, in turn, by a discord over the enforcement of the corrective arm of the SGP. Progress has been more impressive recently, spurred by the correction of excessive deficits. Even so, some countries still portrayed sizeable deficits in 2007, despite the favourable cyclical conditions overall, which runs counter to the goal of sustainable public finances in the face of the ageing challenge (see Part II of this Report). In some countries debt to GDP ratios also moved up and only a minority of countries now post ratios below 60% (Graph I.5.8) – the other main reference value enshrined in the Treaty. Moreover, in some countries the 'headline' deficit and debt records have been biased in a favourable direction by the inclusion of 'one-off'

⁽²⁸⁾ The neutral rate varies over time and across countries. Studies on the euro area (Giammarioli and Valla 2003 and Crespo-Cuaresma, Gnan and Ritzberger-Gruenwald 2004) suggest that since the mid-1990s the neutral rate has come down, to around 2¼ per cent by 2000 and to about 1½ to 2%.

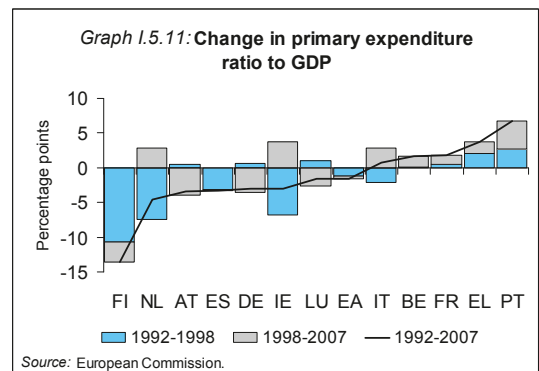
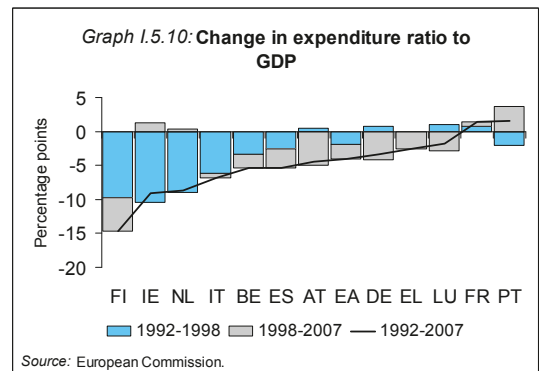
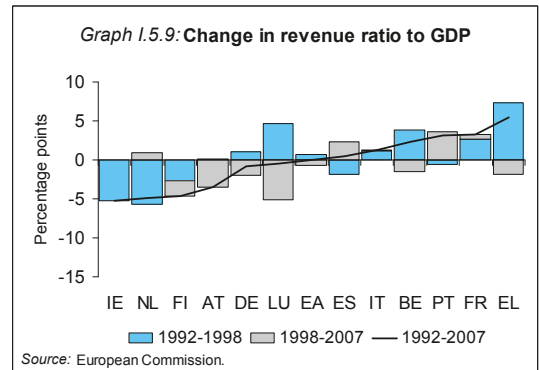
⁽²⁹⁾ For thorough analysis of the developments of fiscal policies and the budgetary coordination framework, see the various issues of the annual *Public Finance Report* of the Commission published since 2000.

windfall gains and 'creative accounting'.⁽³⁰⁾ These evident difficulties eventually led to the aforementioned revision of the EU fiscal surveillance framework in 2005. A more detailed account of the revised Pact is provided in Chapter I.10.



Although the EU fiscal framework contains no explicit provisions on the composition of the fiscal adjustment (in terms of tax and spending), it is nonetheless useful to examine this. As the tax burdens in most EMU members are widely considered to be too high in view of the distortions they entail amid stiffening international competition and greater factor mobility, the bulk of the fiscal consolidation would preferably come from expenditure restraint. Fiscal consolidation that is based on expenditure restraint (as opposed to tax increases) is also more likely to be sustained – especially if it is supported by a government commitment to adhere to an "expenditure rule" (see European Commission 2006c).

⁽³⁰⁾ Koen and van den Noord (2006) and Gordo and Nogueira Martins (2007).

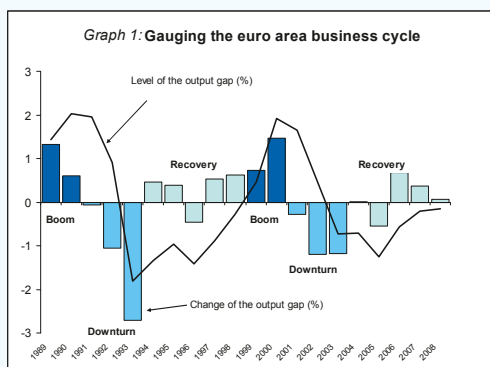


Since 1992 fiscal consolidation in most participating countries has indeed been expenditure based. Some countries that pursued successful fiscal consolidation even managed to orchestrate a fall in the tax burden -- the Netherlands, Ireland and Finland being prominent examples (Graph I.5.9). Most countries saw their expenditure ratios to GDP fall, with the exception of France and Portugal (Graph I.5.10). However, expenditure consolidation in countries where debt burdens are high (Italy, Belgium and Greece) was largely based on lower interest expenditure, owing to falling interest rates in the run-up to the euro and the low interest rates since then.

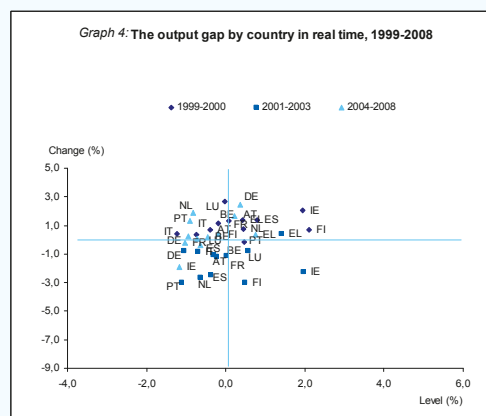
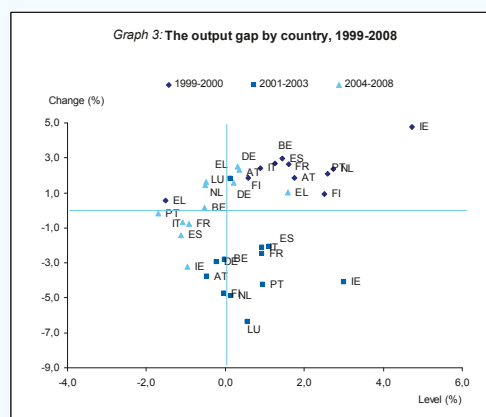
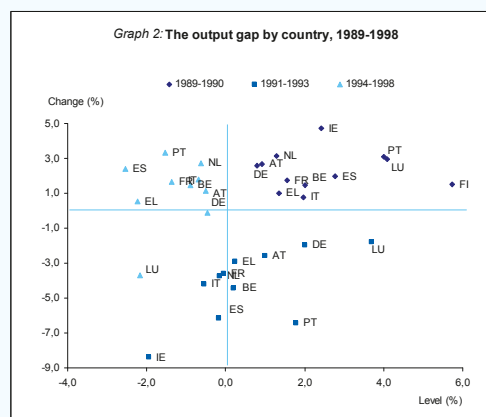
Box I.5.1: Assessing the cycle by country

This section examines the development of the levels and changes of the output gaps on a country-by-country basis following the methodology discussed in the main text.

As noted, the two last euro area business cycle have portrayed similar patterns, with a pronounced short-lived boom followed by a sharp downturn and a drawn-out recovery (see Graph 1). Virtually all countries fit this aggregate pattern quite well, with output gaps positive and expanding in the booms of 1989-1990 and 1999-2000, contracting (and turning negative) in the downturns of 1991-1993 and 2001-2003 and then closing again in the recoveries of 1994-1998 and 2004-2008 (see Graphs 2 and 3).



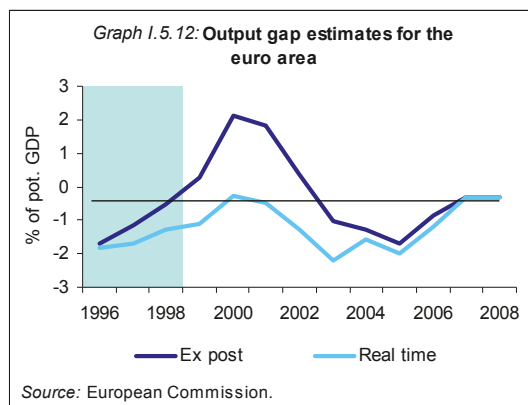
For the assessment of the stance of fiscal policy it is important to consider also the output gaps in real time (Graph 4). It suggests a much smaller variation of the level and changes of the output gap, a phenomenon that is common to virtually all participating countries. Apparently, most countries failed to perceive the relatively volatile swings going on at the time. More specifically, many countries did not recognise the positive values and saw much smaller increases of the output gap in 1999-2000, and they were also largely unaware of the extent of the 2001-2003 downturn.



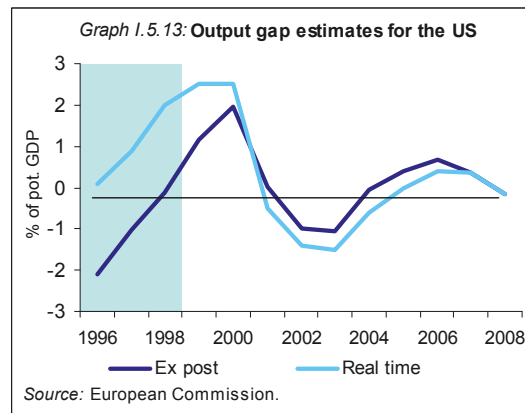
Primary expenditure restraint (excluding interest on public debt) has been considerably less impressive in these countries (Graph I.5.11).

5.3.2. The stance of fiscal policies

Assessing the stance of fiscal policies is complicated since the cyclical position of the economy is not always clear. From the point of view of fiscal policy the most common measure of the cyclical position of the economy has traditionally been the output gap, and this convention is also followed here. The first ten years of EMU then roughly coincides with a full cycle, consisting of three phases, dubbed “boom” (or “good times”), “downturn” and “recovery”. A boom is defined here as an episode in which the gap is positive and increasing. A downturn is called if the gap is falling and turning negative and a recovery is called when the negative gap is closing. ⁽³¹⁾ As shown in Box I.5.1 there is a strong resemblance with the previous cycle, which according to the same criteria also spanned ten years (1989-1998) and portrayed a similar time profile for the output gap.



⁽³¹⁾ The output gap showed another decline in 2005. However, this decline was comparatively small and in terms of changes in the output gap the trough had clearly been attained in 2003.



For the assessment of the stance of fiscal policy it is important to consider that governments may have been led by quite different perceptions of the cyclical position of the economy than suggested by the output gaps as estimated ex post. Graph I.5.12 compares the actual (ex post) evolution of the output gap in the euro area with that observed in real time. It suggests a much smaller variation of the level and changes of the output gap ex ante than ex post, a phenomenon that is common to virtually all participating countries, as analysed in Box I.5.1. Apparently, most countries did not perceive the relatively hefty cyclical swings going on at the time. More specifically, many countries did not recognise the positive values and saw much smaller increases of the output gap in 1999-2000, and they were also largely unaware of the extent of the 2001-2003 downturn. The record of euro-area countries with respect to the errors in assessing the cyclical position of the economy over this period compares unfavourably with that of the United States where revisions of the output gap have been relatively small since 2000 (Graph I.5.13). ⁽³²⁾

⁽³²⁾ On the other hand, there is a substantial difference between real-time and ex-post estimates for the US prior to 2000. This reflects that forecasters ex post attributed a bigger share of the expansion in the second half of the 1990s to stronger potential growth as opposed to the cycle (which led to smaller output gaps).

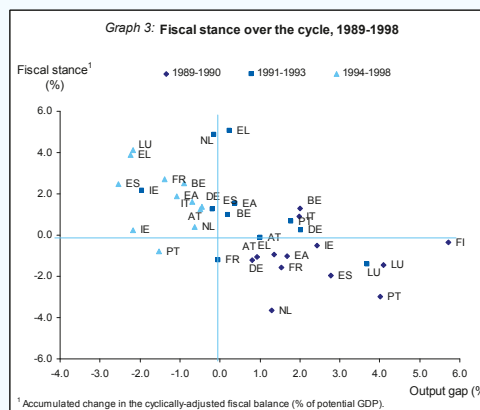
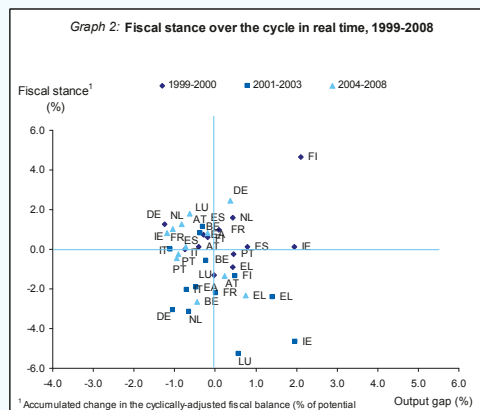
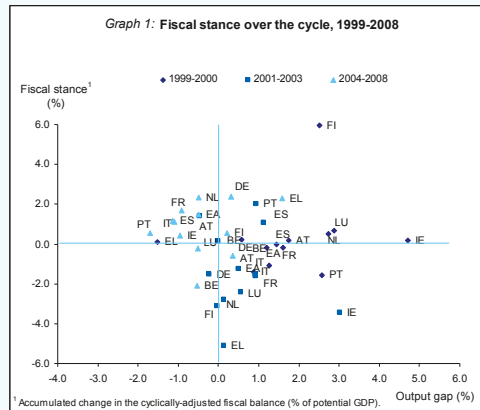
Box 1.5.2: The fiscal stance by country

The approach to derive the fiscal stance from nominal budget numbers and the output gap is based on the officially accepted methodology developed at the OECD (van den Noord 2000 and 2002). The approach starts of from the observation that economic activity influences tax bases and unemployment, which in turn determine tax proceeds and public expenditure. The method proceeds in three steps. First, the elasticities of the relevant tax bases and unemployment with respect to (cyclical) economic activity, gauged by the output gap, have been estimated through regression analysis. Next the elasticities of tax proceeds or expenditure with respect to the relevant tax bases are extracted from the tax code or otherwise estimated. These two sets of elasticities are combined into reduced-form elasticities that link the cyclical components of taxes and expenditures to the output gap. The cyclically-adjusted primary balance (a measure of the stance of fiscal policy) is derived by re-calculating the relevant items on the government account which would be obtained if output were at its potential level (i.e. the output gap is zero).

Based on this methodology the following can be inferred:

- During the 1989-1998 cycle the fiscal stance was mostly stimulatory in the boom (but Italy and Belgium are outliers), tightening in the downturn and again tightening in the recovery (Graph 1).
- During the 1999-2008 cycle the fiscal stance was mostly close to neutral in the boom, stimulatory in the downturn and tightening in the recovery (Graph 2).

However, in real time, the pattern is different and overall less clear-cut (Graph 3). There was a slight tightening bias in the boom years and some easing bias in the downturn. The pattern is less clear for the recovery period, with some countries tightening and some easing. Since three of the four largest countries tightened fiscal policy (Italy being the exception), the overall ex ante stance was contractionary.



Political economy factors play a role in explaining why official macroeconomic forecasts in EMU display systematic optimism about medium-term economic growth and – by extension – of potential output during upswings.

While most forecasters – private sector and government alike – had a tendency to overstate growth prospects in the early 2000s, in a number of large euro-area countries the macroeconomic scenarios underpinning budget plans exhibited a rather persistent upward bias (see Jonung and Larch 2006). These optimistic growth projections biased the estimated trend growth upward and as a result potential output was overestimated and the real time output gap accordingly underestimated. This bias may be partly the result of the incentives generated by the SGP itself. Indeed, an overestimation of potential output is "convenient" in the sense that it puts a favourable gloss on the annual stability programmes by easing the move towards the close to balance or surplus requirement over the medium term (since a bigger share of fiscal deficits will be labelled "cyclical"). Ex post, however, it causes budgetary slippages as expenditure levels are typically not immediately adjusted in the face of lower than projected economic growth and the associated lower than projected revenues.

The issue then becomes how fiscal policy, as gauged by the change in the cyclically-adjusted primary balance as a share of GDP, behaved during the cycle, both in real time and ex post. Differences between the two largely reflect the assessment of the output gaps as revisions in the nominal budget numbers themselves have been comparatively minor.⁽³³⁾ Looking at the record in more detail (see Box I.5.2 and Tables I.5.1, I.5.2 and I.5.3), the following can be inferred:

- In an *ex post* sense, although procyclicality has not been widespread in the 1999-2000 boom, on aggregate the stance was slightly stimulatory. This does not compare unfavourably with the boom of 1989-1990, when fiscal policy was clearly eased in a procyclical manner in the vast majority of

countries – with the notable exceptions of Italy and Belgium where high debt levels and an associated surge in debt servicing forced fiscal consolidation upon them. However, the ex post observed neutrality was not in the plans in most countries *ex ante*, with the real time measure suggesting that on average the fiscal stance was tightening – *i.e.* counter-cyclical. As noted, this reflects the underestimation of the extent of the boom and hence the cyclical component of fiscal gains.

- In the 2001-2003 downturn the fiscal stance was stimulatory in most countries (except for Spain, Portugal and Austria) in an *ex post* sense – *i.e.* counter-cyclical. This may have been motivated by stabilisation considerations, but it is more likely to have been driven by the mechanism described above: governments were responding as if there had been a structural improvement in the fiscal position. This tendency may have been reinforced by the unusually busy electoral calendar at the time – notably in the larger countries (Buti and van den Noord 2004). The *ex ante* stance also suggests counter-cyclical fiscal stimulus in this episode, but again this was probably accidental. It is in contrast with the 1991-1993 downturns when many countries tightened their budgets, possibly in response to sustainability concerns and financial market turbulence.
- In the 2004-2008 recovery governments were forced to correct the past excesses, with several countries facing Excessive Deficit Procedures (see Chapter I.10). The fiscal tightening eventually leaned against the wind of the recovery, but this was prompted more by the fiscal consolidation needs imposed by the SGP than by a desire to choke off the upswing. This drive to consolidate budgets is confirmed by the real time measure, which also indicates a tightening stance of fiscal policy. This behaviour is quite similar to the previous cycle, when fiscal policy was tightened in the recovery phase in a vast majority of countries (France is a notable exception). This reflected the measures taken to qualify for euro adoption subsequent to the

⁽³³⁾ This is with the exception of cases where accounting issues gave rise to major revisions – see Chapter I.10.

Maastricht Treaty. Electoral considerations may have played a role as well: qualifying for the single currency was seen to raise the odds of re-election unlike in normal times when governments tend to ease fiscal policy during the election campaign (Von Hagen 2002).

Building on the past experience, the macroeconomic projections underpinning budgetary plans seem to have become more cautious in recent years. However, at this stage there is still considerably uncertainty around the size of the output gap. There have recently been downward revisions of the macroeconomic projections and this may be reflected again in lower potential output, in which case the output gaps may well turn out higher (and the structural fiscal positions worse) than initially thought.

Table I.5.1:

Fiscal policy stance ex post, 1999-2008

	Boom 1999-2000	Downturn 2001-2003	Recovery 2004-2008
Austria	Contr.	Contr.	Stim.
Belgium	Stim.	Contr.	Stim.
Germany	Contr.	Stim.	Contr.
Greece	Contr.	Stim.	Contr.
Spain	Stim.	Contr.	Contr.
Finland	Contr.	Stim.	Contr.
France	Stim.	Stim.	Contr.
Ireland	Contr.	Stim.	Contr.
Italy	Stim.	Stim.	Contr.
Luxembourg	Contr.	Stim.	Stim.
Netherlands	Contr.	Stim.	Contr.
Portugal	Stim.	Contr.	Contr.
Euro area	Stim.	Stim.	Contr.

Note: Pro-cyclical stance is bolded.

Source: European Commission.

In addition, the structural fiscal positions may be biased upward due to the (now maturing) housing booms in many countries (see Chapter I.4). The experience of the end of the 1990s has shown that upswings in asset prices go along with buoyant inflows of tax revenues going well beyond the expansion of aggregate economic activity, which lead to a temporary increase in implicit tax elasticities with respect to the output gap.⁽³⁴⁾

Table I.5.2:

Fiscal policy stance ex post, 1989-1998

	Boom 1989-1990	Downturn 1991-1993	Recovery 1994-1998
Austria	Stim.	Stim.	Contr.
Belgium	Contr.	Contr.	Contr.
Germany	Stim.	Contr.	Contr.
Greece	Stim.	Contr.	Contr.
Spain	Stim.	Contr.	Contr.
Finland	Stim.	Stim.	Contr.
France	Stim.	Stim.	Contr.
Ireland	Stim.	Contr.	Contr.
Italy	Contr.	Contr.	Contr.
Luxembourg	Stim.	Stim.	Contr.
Netherlands	Stim.	Contr.	Contr.
Portugal	Stim.	Contr.	Stim.
Euro area	Stim.	Contr.	Contr.

Note: Pro-cyclical stance is bolded.

Source: European Commission.

Table I.5.3:

Fiscal policy stance ex ante, 1999-2008

	Boom 1999-2000	Downturn 2001-2003	Recovery 2004-2008
Austria	Contr.	Contr.	Stim.
Belgium	Contr.	Stim.	Stim.
Germany	Contr.	Stim.	Contr.
Greece	Stim.	Stim.	Stim.
Spain	Contr.	Contr.	Contr.
Finland	Contr.	Stim.	Contr.
France	Contr.	Stim.	Contr.
Ireland	Contr.	Stim.	Contr.
Italy	Contr.	Stim.	Stim.
Luxembourg	Stim.	Stim.	Contr.
Netherlands	Contr.	Stim.	Contr.
Portugal	Stim.	Stim.	Stim.
Euro area	Contr.	Stim.	Contr.

Note: Pro-cyclical stance is bolded.

Source: European Commission.

In several countries – notably those that have been in a catching up phase (see Chapter I.8) – the convergence towards the euro unleashed a set of events that is likely to have led to higher than normal government revenues, which in turn may mislead fiscal policy makers to believe in a structural increase in available resources. This risk is further heightened by the fact that during the upswing the composition of output itself is comparatively tax-rich, with home pressure of demand and competitiveness effects squeezing VAT-exempt exports and boosting VAT-liable imports. During the 1999-2000 boom these types of mechanisms led to the conclusion that the high tax content of growth was likely to be

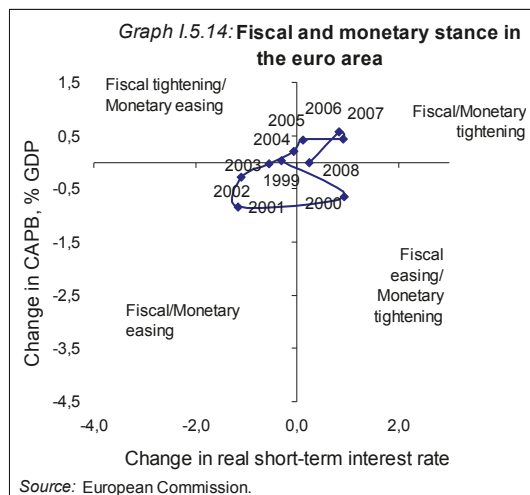
⁽³⁴⁾ The increase in the stock of wealth had a beneficial effect on government revenues through a number of channels: (i) via the wealth effect and high consumption on indirect taxes; (ii) via capital gains on taxes on

income; (iii) via transactions on assets on turnover taxes (see Eschenbach and Schuknecht 2004).

permanent, and the policy response was to reduce taxes or to increase expenditure plans at a time when the economy was *de facto* operating above potential. The same type of errors may well turn out to have been repeated at the current juncture.

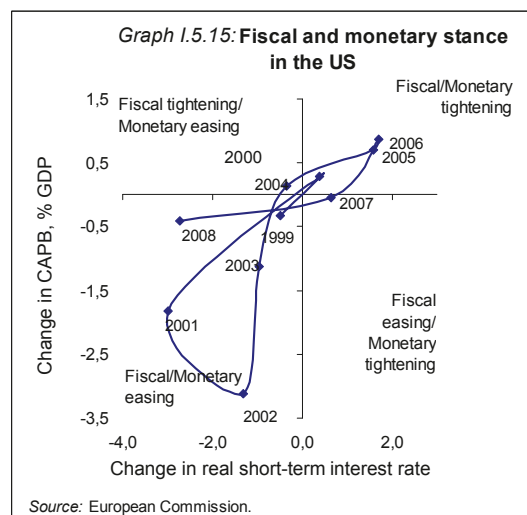
5.4. THE MACROECONOMIC POLICY MIX

After the launch of the euro the stances of fiscal and monetary policies have most of the time been consistent in terms of their direction -- i.e. they were either both tightening or easing (see Graph I.5.14). In 1999 fiscal and monetary policies were both mildly pro-cyclical, and in 2000 fiscal policy was again pro-cyclical, but since then both have been countercyclical. Both monetary and fiscal policies were eased during the economic downturn following the dotcom bust in 2001. Fiscal policies were tightened (especially in the large countries) in the recovery so as to comply with the provisions of the corrective arm of the SGP and so was monetary policy. As a result, since 2001, the thrust of fiscal and monetary policy have been well aligned overall.



Even so, a striking feature of macroeconomic policies in the euro area, compared to the US, is that it has been significantly less prominent. As becomes evident from inspecting Graph I.5.15 below, both the fiscal and the monetary stance produced markedly smaller impulses to aggregate demand than on the other side of the Atlantic. In the euro area the fiscal stance was

never tightened or expanded by significantly more than 1% of GDP per year and the monetary stance, as measured by the annual change in the real short-term interest rate (deflated by the annual price increase of GDP), never changed by significantly more than plus/minus 1 percentage point. By contrast, the macroeconomic policy stances in the US recorded much more pronounced shifts. Both the fiscal and the monetary stance loosened sharply and in tandem during the 2001-2003 downturn and tightened forcefully afterwards. The same behaviour is being observed most recently, with a sharp cut in official interest rates accompanied by a fiscal stimulus package in response to the subprime crisis and the associated growing risk of slowing economic activity.



There are several rationales for the observed different degrees of policy activism. As regards the fiscal stance, budgetary policy making in the euro area is constrained by the provisions of the SGP, which sets out clear restrictions for discretionary measures. This is rooted in a growing scepticism towards the effectiveness of discretionary fiscal policy making. As regards the US, the quick and sharp shift in fiscal policy towards an expansionary stance at the beginning of the 2000s was not solely a response to the economic slowdown following the dotcom bust in 2001. Rather, the move resulted from (i) overseas military engagements and the ensuing increase in defence spending and (ii) tax cuts with primarily an electoral motive rather than aimed to serve the output stabilisation goal. The rationale for the recent stimulus package must be

seen against the background of an economy in which automatic stabilisers play a relatively minor role. In a way, part of the stimulus package is a surrogate to cope with weak social safety nets during a marked slowdown, while in Europe stronger automatic stabilisers mostly play that role.

As regards the monetary policy stance, the stronger activism in the US may reflect the greater flexibility of its economy, with prices and wages responding more strongly to slack, thus creating greater leeway for monetary policy to provide stimulus in a downturn (and vice versa in an upturn). Moreover, apparently the Fed attaches a lower implicit cost to strong fluctuations in interest rates than the ECB does. However, the more aggressive monetary policy response in the US in the 2001-2003 downturn cannot only be attributed to a presumed different reaction pattern. It also reflected a sharper deterioration of activity and a more benign inflation environment in the US at the time than in the euro area.⁽³⁵⁾ The same may hold true again at the current juncture, with the epicentre of the subprime crisis clearly being located in the United States.

When assessing the policy mix it may be worthwhile to recall also that not only are perceptions of the cycle changing over time, but also fiscal and monetary authorities may not always share the same real-time assessment of the prevailing cyclical conditions.

There is indeed frequent anecdotal evidence in the financial press that in the euro area fiscal and monetary policy decisions are based on such diverging economic assessments. This point was raised by Balboni *et al.* (2007) arguing that different views about the position in the cycle would lead to conflicting policy steps affecting the macroeconomic outcomes. However, this does not seem to have been the case in the early years of EMU. Whenever fiscal and monetary authorities were misled by wrong perceptions of the cycle, this affected them both and, as noted, both moved in concert in practice, albeit that this was to some extent accidental in the case of fiscal policy.

So, with hindsight, the initial fears that fiscal and monetary policies would work against each other in EMU turn out to be unfounded. A more serious concern is that the underlying fiscal positions in many participating countries are still not consistent with the goal of sustainable public finances in the face of ageing (see Part II). This sustainability risk, rather than an alleged imbalance in the policy mix, is the true cost of the fiscal profligacy in the early years of EMU.

⁽³⁵⁾ See Grenouilleau *et al.* (2007), Sahuc *et al.* (2006) and Christiano *et al.* (2007). Monetary reaction functions are found to be broadly similar, but there is some evidence that US monetary policy has benefited from a more powerful housing transmission channel. The comparative strength of housing investment and private consumption in the US in the latest upswing lends support to this conclusion. However, the recent US experience also suggests that a stronger housing channel may contribute to a housing bubble and associated financial turbulence.

6. REFORMS OF SOCIAL SYSTEMS AND LABOUR AND PRODUCT MARKETS

6.1. INTRODUCTION

The euro area is among the most advanced economies in the world, yet its per capita income is around 30% below that of the leading economy, the United States. This gap has persisted since the 1970s, thus defying economic theories predicting that lagging economies catch up as innovations spread and economic structures converge. This persistent income gap points to structural impediments, including structural policy stances in product and labour markets. As has been discussed in Chapter I.2, the creation of the single currency has been a major structural change. It has had sizeable favourable effects on trade, output and productivity in the euro area. However, these favourable effects have been overshadowed by lack of progress with structural reform on other fronts such as innovation, human capital formation, product market competition and labour market participation.

The structural policies that determine the potential growth rate of the economy largely overlap with those that improve the capacity of the euro-area Member States to adjust to country-specific disturbances. Nominal rigidities (lack of wage and price adjustment) are found to slow down the equilibrating “competitiveness channel” and to reinforce the potentially destabilising “real interest rate channel” (Chapter I.4). Real rigidities (lack of response of production factors such as labour to changing economic conditions) reinforce these nominal rigidities. This may in part explain the comparatively sluggish per capita income growth of the area highlighted in Chapter I.2 as well as the adjustment worries discussed in Chapter I.4. Populations are aging fast in the euro area (Chapter II.2) and social security systems (including pensions and health care) become costlier, thus weighing on the capacity of wages to adjust and public finances to be sustainable. Therefore progress with structural reform is of particular importance for the euro area – as has been acknowledged in the Lisbon Strategy for Growth and Jobs, the overarching co-ordination framework for structural policies in the EU (see Chapter I.10).

Against this backdrop, this chapter first examines the need for and progress with structural reform in, respectively, labour markets and social security systems as well and product markets, leaving the discussion of financial markets to Chapter I.7. Ten years after the launch of the euro, it appears natural to examine if the actual pace of progress with structural reforms has actually increased in EMU, and if it has not, what might explain this. This is the focus of the final section of this chapter.

6.2. LABOUR MARKET REFORM

6.2.1. The role of labour markets in EMU

The impact of labour market institutions on unemployment and employment performance in Europe has been subject to vast academic research. ⁽³⁶⁾ Most analysis carried out since the mid-1990s has made use of aggregate indicators of the strictness of labour market arrangements developed by *inter alia* the OECD and, more recently, incorporated in the Commission's database on Labour market reforms (LABREF). The findings suggest that some labour market institutions and social safety nets that are too closely knitted, while pursuing important social objectives, can create obstacles to labour market participation and job creation.⁽³⁷⁾

Labour market institutions are often found to have a negative impact on the adjustment capacity of euro-area countries along with their employment rates and GDP *per capita*. Specifically:

- If unemployment compensation systems offer too high benefits and, in particular, entitlement of long or indefinite duration, they impede the adjustment of real wages to changing labour market conditions by reducing job-search intensity and lowering

⁽³⁶⁾ The main results of this research are summarised in Arpaia and Mourre (2005).

⁽³⁷⁾ See Arjona *et al.* (2002) and OECD (2005, 2006a).

the opportunity costs of not working.⁽³⁸⁾ If well designed, activation policies may help to offset these adverse incentives to some extent, as suggested by the experience in the Nordic economies.

- Disability programmes offer early labour market exit routes. As a result, the high numbers of disabled in several countries have less to do with their health situation than with their disability benefit coverage.⁽³⁹⁾ Retirement systems also offer early exit routes to workers, underpinned by powerful financial incentives. Promoting labour market exit of older workers in the pursuit of low unemployment, while expensive, is likely to be ineffective: low participation of older workers typically goes along with high unemployment.⁽⁴⁰⁾
- Notably the southern euro-area countries are characterised by comparatively strict employment protection legislation (EPL) such as firing laws both for regular and temporary employment contracts. Strict EPL is deemed to worsen the job prospects of new labour market entrants and, a fortiori of the young, by reducing job turnover and hiring. Low job turnover also slows down the transmission of human capital and innovation across industries and professions.
- Collective wage bargaining, notably if set up on an industry-by-industry basis (as opposed to nation-wide or company-based bargaining), may not sufficiently internalise the spillover effects of wage bargains onto the macroeconomic or the individual firm level. Moreover, minimum wages can drive a wedge between productivity and real pay levels and cut down the employment prospects for low skilled workers. As a result,

structural unemployment is high social exclusion entrenched.

- Some features of labour market institutions tend to boost public expenditures. These need to be financed and econometric research provides evidence that high labour tax wedges further reduce labour resource use.⁽⁴¹⁾ Euro-area countries also exhibit higher marginal tax rates on labour and fewer hours worked than other countries. The interaction of social benefits and taxes on labour can create unemployment or inactivity traps, notably for low-productivity workers who qualify for social benefits and have very little financial incentives to enter employment.⁽⁴²⁾

Econometric panel studies generally confirm that tight labour market regulation and extensive social safety nets potentially result in high unemployment and low labour resource use, and therefore complicate the trade-offs between equity and efficiency policy makers are facing. They also confirm that these features produce a strong persistence of high unemployment and below-par activity after an economy has been hit by an adverse shock.⁽⁴³⁾ If such shocks are asymmetric, i.e. hit some countries but not others, the pace of adjustment in EMU will be affected as cross-country differentials in capacity utilisation and inflation rates will tend to persist (see Chapter I.4).

⁽³⁸⁾ See for instance Bassanini and Duval (2006), Nickell *et al.* (2005), Nunziata (2003), Jimeno and Rodriguez-Palanzuela (2002) and Elmeskov *et al.* (1998).

⁽³⁹⁾ For cross-country empirical evidence see OECD (2003) and Bonato and Lusinyan (2004).

⁽⁴⁰⁾ This finding does not imply causality running from participation of older workers to unemployment. Rather, the correlation is likely to reflect political economy linkages in the opposite direction. See Duval (2003), Bassanini and Duval (2006) and OECD (2006b).

⁽⁴¹⁾ See for example Bassanini and Duval (2006), Jimeno and Rodriguez-Palanzuela (2002), Blanchard and Wolfers (2000), Daveri and Tabellini (2000), and Elmeskov *et al.* (1998).

⁽⁴²⁾ See OECD (2006c). In-work benefits and tax relief may help to unlock these traps and promote participation for low-paid work, see Immervoll *et al.* (2005). A drawback is that those already in work may reduce their work efforts at pay levels in the phase-out range of the benefits or relief.

⁽⁴³⁾ Blanchard and Wolfers (2000) find that higher replacement rates, stricter EPL and a higher tax wedge lead to significantly persistent high unemployment in the wake of an adverse shock. Similarly, Scarpetta (1996) finds a statistically significant effect on persistence from unemployment benefit rates and EPL. These results have been confirmed in recent reassessments and updates reported by Bassanini and Duval (2006) and Duval (2006).

6.2.2. Labour market reforms since 1999

Labour market reform has been widespread in the euro-area countries in the 1990s, and this appears to have had a noticeable impact on job creation. However, since the launch of the euro initiatives to reform labour markets have been more piecemeal or targeted onto relatively small groups of (potential) labour market participants. Moreover, it has not always been clear that the budgetary costs justified the benefits.

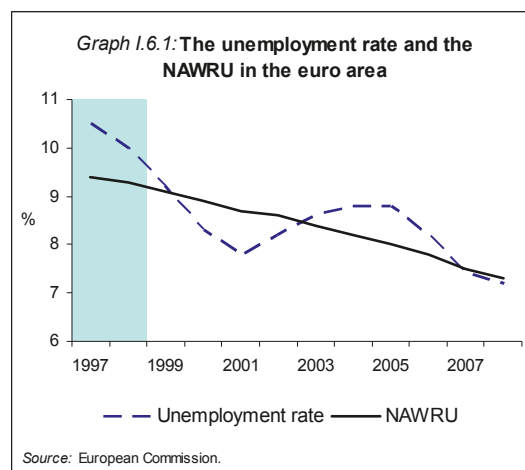
The main initiatives since the launch of the euro have been in the areas of labour taxation, unemployment benefits, public employment services and measures that aim at increasing labour market flexibility and mobility:

- The average tax wedge has fallen in most euro-area countries over the period under review. ⁽⁴⁴⁾ Tax cuts were mostly targeted on lower incomes or specific disadvantaged groups such as long-term unemployed, low paid, young and older workers.
- Almost all countries have taken measures in the field of unemployment and other benefits. These were geared to increasing activation (e.g. stricter work availability criteria, sanctions for repeated non-compliance and control mechanisms) and improving the incentives for labour market participation (e.g. adjustment of in-work benefits and means-tested benefits in Germany in 2004). Efforts have been undertaken in almost all countries to reinforce the role and means of the public employment services and to boost activation measures. However, improvements in training have been piecemeal.
- Legislation concerning part-time jobs and flexible working hours has been eased in most countries. Several countries have liberalised employment protection legislation for temporary contracts. Dismissal compensation cost has been cut and converting temporary into permanent contracts has become easier in some countries.

⁽⁴⁴⁾ See Chapter I.5.

6.2.3. The impact of labour market reforms

As highlighted in Chapter I.2 of this Report, employment growth in the euro area has been relatively buoyant, suggesting that labour market reforms have been delivering results. The numbers of persons employed has increased on average by almost 1% per year (over ½% annually in terms of hours worked). Apparently, the job-intensity of growth has increased, with econometric studies identifying a structural break in the mid-1990s.⁽⁴⁵⁾ Accordingly, the employment rate has risen from 62% in 1998 to an estimated 68% in 2008, only a whisker away from the official Lisbon target of 70% for the EU as a whole (see Chapter I.10). Most of the increase is attributable to greater participation of female and older workers, which suggests that these groups – rather than prime-age male workers – have been most affected by labour market reform. Over the same period, the unemployment rate fell from 10% to an estimated 7.2%, with the bulk of the decline being of a structural nature as reflected in an equivalent fall in the estimated NAWRU (Graph I.6.1).⁽⁴⁶⁾

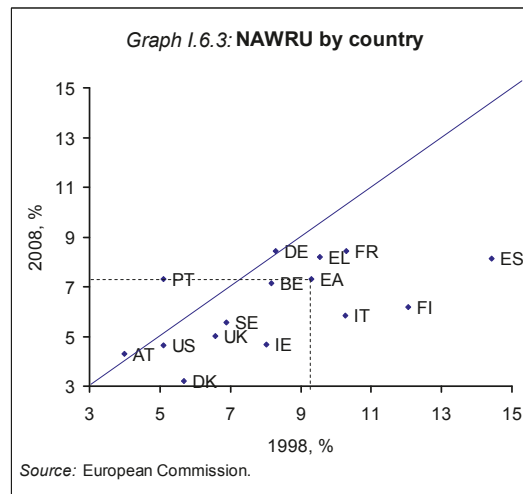
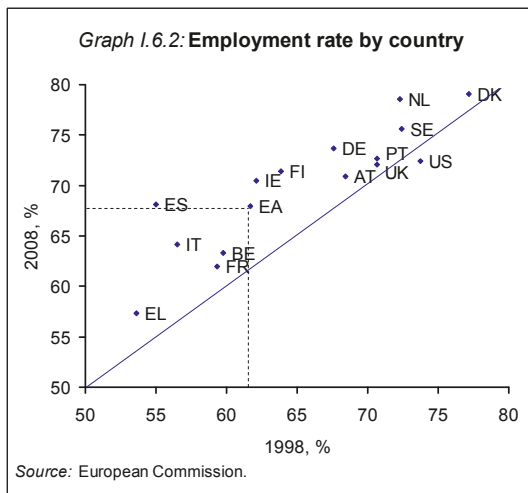


Looking at the individual Member States, the employment rate is currently higher than it was just before the launch of the euro in all cases. The increases have generally been stronger than

⁽⁴⁵⁾ Decressin *et al.* (2001) and Mourre (2006).

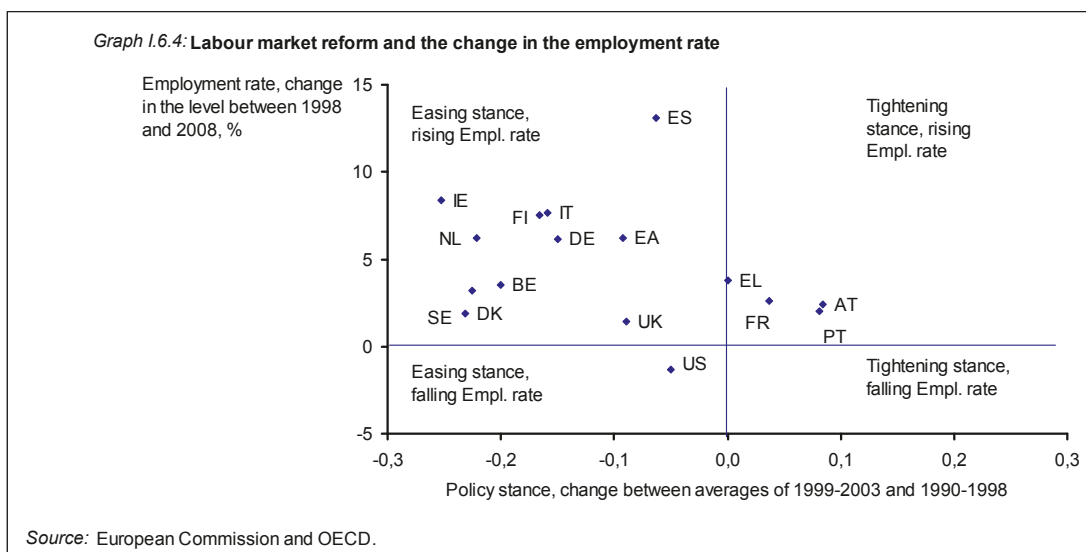
⁽⁴⁶⁾ European Commission (2006d) The NAWRU (Non-Accelerating Wage inflation Rate of Unemployment) provides a rough gauge of structural unemployment – i.e. the rate of unemployment below which wages accelerate.

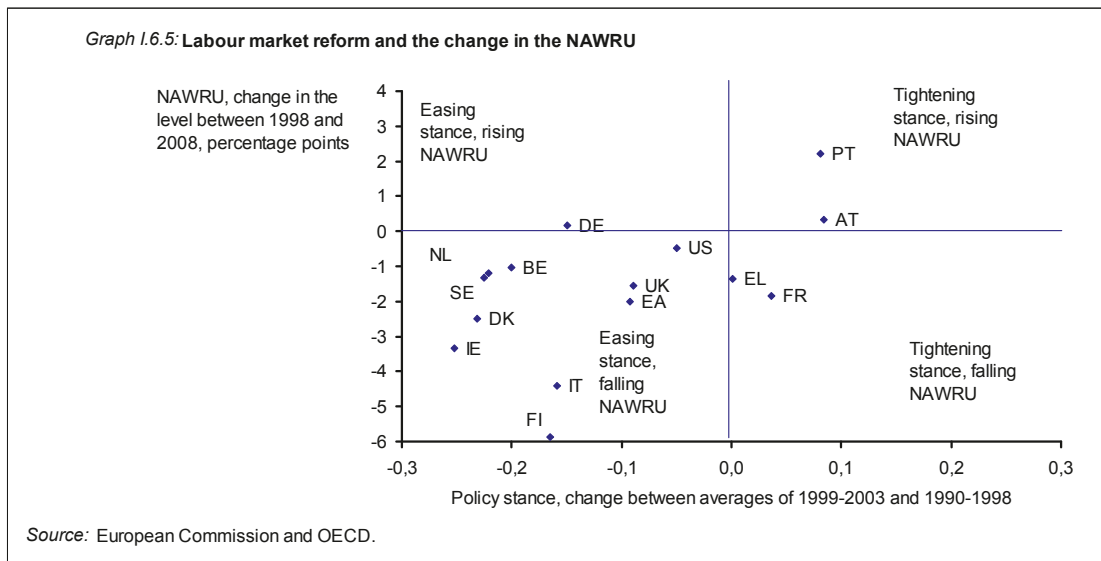
those recorded by the EU-15 Member States that do not participate in the euro area (UK, Sweden and Denmark), while the US saw a fall in the employment rate (Graph I.6.2). A broadly similar picture emerges for the NAWRU, which in most participating countries has shown a sizeable decline (Graph I.6.3) – with only Portugal registering a sharp increase.



As illustrated by Graphs I.6.4 and I.6.5, a tight stance of labour market policies (i.e. more rigidity) is generally associated with rising (or smaller declines of) structural unemployment as well as falling (or smaller increases in) the employment rate. ⁽⁴⁷⁾ While most countries have seen increasing flexibility of labour markets combined with rising employment rates and falling structural unemployment rates, a few countries have bugged this trend, with France, Portugal and Austria scoring unfavourably on some or all of these counts.

⁽⁴⁷⁾ The structural reform indicators shown in these graphs are taken from Duval (2006). The indicator is calculated as the sum of normalised OECD indicators in four fields (unemployment benefits, tax wedges, employment protection legislation and early retirement incentives).





Obviously these overall positive outcomes are no reason for complacency: employment rates and structural unemployment rates still look worse in most euro-area countries than in those of the comparator group of countries. There is evidence that reform efforts have slowed down since the launch of the single currency. Econometric studies (Mourre 2006) attribute the bulk of the improvements in labour market performance to the implementation of reforms during the 1990s, with the more recent reforms being less far-reaching and piecemeal. More progress is needed.

6.3. AGEING-RELATED REFORM

6.3.1. Pensions

The ageing of populations will have wide-ranging effects on euro-area economies, including their growth potential, fiscal sustainability, labour and financial markets functioning, and the distribution of income and wealth. Demographic trends, including low fertility rates, increases in life expectancy and the nearing retirement of the baby-boom generation impose dramatic changes in the size and age structure of the population. These developments will result in a fall of the working-age population, constrain potential growth and living standards and boost future pension expenditure. Past patterns of early retirement further

aggravate the economic burden on active workers.

Reform of pension systems in the euro area started in the 1990s, well before the launch of the single currency, with fiscal consolidation in the pursuit of the Maastricht criteria being the main driving force (OECD 2000). Since the launch of the single currency the need to achieve long-term sustainability of public finances has become a major motivation for further reform efforts. The reforms have taken a variety of forms, ranging from smaller changes to far-reaching reforms that have changed the entire structure of the pension system (OECD 2007a).

A majority of euro-area countries have introduced reforms that reduce the long-term pension promise for individuals and thereby contain the increase in future pension expenditure. Such reforms have been undertaken in existing public pension schemes while preserving the basic structure of the pension scheme. Pension promises have been altered through a number of changes in the pension parameters – so-called parametric reforms – such as the retirement age, the replacement rate, the pensionable earnings measure and the indexation rules. Common features include increases in the statutory retirement age, changes in the pension accrual rate, changes in the way how the pensionable wage is calculated (as lifetime earnings instead of the last or best years' earnings) and valorised (indexed on overall wage

developments) and changes in the indexation of pensions in payment (moving from wage indexation towards a partial or full indexation of prices). A recent innovation, introduced by Germany, is the adjustment of the pension index to changes in the dependency ratio, aimed at ensuring a balanced evolution between wages and pensions.

The focus of many reforms has been on scaling down early retirement provisions through: (i) tightened eligibility rules for early retirement, (ii) phasing out early retirement schemes, in particular those based on labour market reasons, and (iii) the introduction of actuarially more neutral adjustment of early or deferred pensions. More recent reforms have introduced flexibility regarding the statutory retirement age, to bring it in line with the longer life expectancy. For instance, Germany, along with Denmark and the United Kingdom, have raised the statutory retirement age beyond the current common 65 years, while Finland and Portugal have abolished a fixed retirement age. Also Spain and Ireland have introduced flexible retirement ages and reward for additional years in work. France will adjust the number of the contribution years required for a full pension. Countries with (notional) defined-contribution schemes (Italy in the euro area and Sweden outside the euro area) have introduced built-in mechanism of adjusting the pension level to the expected period in retirement. ⁽⁴⁸⁾

Projected increases in pension expenditure have forced to review more closely the financing method of pension schemes. While there has been some overall increase in the contribution rates, the balance between lifetime contributions and lifetime pensions has become more transparent and prefunding in public pension schemes increased. Italy (along with Sweden), introduced the actuarial principle of matching the lifetime contributions to lifetime benefits in their public notional defined-contribution schemes in mid-1990s. Moreover, countries with substantial occupational pension schemes such as the

Netherlands, as well as the United Kingdom and Denmark, have introduced defined-contribution elements. Partial pre-funding is an essential feature only in a few public pension schemes, notably in Finland and Luxemburg (as well as in Sweden). These countries have accumulated substantial assets to meet the future increased pension spending. In addition, several European countries have established particular pension reserve funds with the aim of accumulating reserves for future needs. However, in most countries such funds are still small in size relative to future expenditure increases.

Rebalancing pension provisions between public and private sectors has also featured prominently in pension reforms in the EU, but less so in the euro area. Many countries have taken measures to encourage occupational or private supplementary pension schemes in order to reduce pressure on public pension provision. The most notable shift has occurred in countries which have switched a part of their public pension provisions to statutory fully-funded private schemes. Such reforms have been undertaken in Sweden and most new Member States. Among the euro-area countries, only Germany has taken steps in this direction.

These reforms have prompted a sizeable increase in the employment rate of older workers (aged 55 to 64). After reaching a low of 35.7 % in the EU-15 Member States in 1994, the employment rate of older workers has shown an unabated increase, exceeding 45% in 2006. This represents considerable progress towards the Lisbon goal of a 50% by 2010. Recent projections completed in early 2006 indicated a much smaller increase in public spending on pensions compared with similar projections made in 2001. ⁽⁴⁹⁾ However, the projected increase in public pension expenditure remains substantial in most European countries (see Chapter II.4 of this Report). As well, the projected increase in employment rates of older workers will not be sufficient to compensate for the increase in life expectancy (Carone *et al.* 2006). The pension reform agenda is clearly unfinished business.

⁽⁴⁸⁾ Notional defined-contribution schemes provide benefits that are based on actual contributions augmented by a notional rate of return. The scheme and rate of return are notional because the contributions are not actually invested but are used for the funding of current pension expenditure.

⁽⁴⁹⁾ These simulations were not conducted for the euro area. Results are expected to be comparable for the euro area. Muenz, R. (2005).

6.3.2. Health and long-term care

Health and long-term care are particularly important for EMU since its participating countries are generally aging comparatively fast. Although the health status of populations has improved over past decades, spending on health care per capita has increased faster than GDP per capita in most countries, spurred by rising living standards and technological developments (Häkkinen and Joumard 2007). Institutional factors, such as a broad and universal coverage of health insurances have facilitated the increase in demand for services while costs increased. Ageing populations has not been a main driving factor so far, but will bring about increases in the future, although this contribution is likely to be moderate since a large share of health spending is linked to the final years of life rather than to the age itself (Oxley and MacFarlan 1995, Batljan and Lagergreen 2004, and Oliveira Martins 2006).

The fastest growing segment of the population is the group of very old people: in the euro area and in the EU as whole, the share of persons over 80 years old will have almost tripled by 2050. This will drive up the demand for long-term care. In addition, socioeconomic developments -- in particular the increase in female employment -- will shift demand from care provided by family members to formal care. Many governments are already now confronted with an inadequate supply of long-term care services. In future, while services need to be increased, there is also need to consider the right mix of services, including informal, home and institutional care, residential and community services, as well as the right balance of public and private provision or funding⁽⁵⁰⁾.

Health care reforms over the past two to three decades have addressed mainly three broad areas: the improvement of health care systems, macro-economic efficiency and microeconomic efficiency⁽⁵¹⁾. As a result, all EU Member States have now achieved universal access to health care services via public insurance, although

disparities remain regarding the coverage of public services and insurance as well as regarding the quality of services. EU Member States rely heavily on public financing of health care and some also on public provision of services while others rely on contracted services.

The growth in health expenditure has been a major concern since the mid-1970s and a variety of reforms have been undertaken aimed at containing health care expenditure. Reforms between the mid-1970s and mid-1980s emphasised direct and indirect control mechanisms, such as controls of drug prices, doctor and service fees, controls of manpower, hospital beds and facilities as well as investments in capital and technology. In the mid-1980s the emphasis shifted to budget setting mechanisms, including budget ceilings and target budgets for public health care and its sub-sectors, introduction of performance-related payment systems and increases in patient's co-payments.

Since the mid-1990s, reforms have attributed a greater role to market mechanisms, including user charges and restrictions for reimbursements, voluntary health insurance and activity-related payments, along with a shift from hospital care to out-of-hospital care. Accordingly, the focus in recent health care reforms has been to achieve better cost efficiency and effectiveness. Building appropriate incentives into the payment and services provision system aims at producing more value for money while helping to ease budgetary pressures. These reforms aim i.e. to separate public purchasers and providers while organising the provision of services better, improving contracting and payment systems, increasing competition among service providers and insurers and introducing benchmarking practices as well as modifying financing arrangements to better align the incentives of services providers and patients.

Recent measures regarding long-term care services have included applications of needs-based eligibility rules, more user charges, shifts towards greater reliance upon community-based care and a tendency to separate the financing of long-term care from health care and to link it to social services. However, the primary concern in most EU countries has been to increase the supply of these services in order to meet the

⁽⁵⁰⁾ Comas-Herrera and Wittenberg (eds.) (2003). European Council (2007).

⁽⁵¹⁾ See, e.g. Mossialos and LeGrand (1999). Docteur and Oxley (2004).

growing demand for a variety of services needed at old age. The trend is to develop services supporting longer living at home instead in institutions but this is still at an early stage in many countries. A mix of services demanded with more care than cure-intensive services has also raised the question whether the risk of long-term care should be covered in a special insurance. Initiatives to introduce cost-sharing mechanisms along the tax financing of long-term care, including public or private insurance, are relatively few and in early phases.

6.4. PRODUCT MARKET REFORM

6.4.1. The importance of product market reform in EMU

Regulations that limit the role of competitive forces in product markets may stifle market functioning, resource allocation and productive efficiency, and have been found to have adverse effects on productivity and growth (Nicoletti and Scarpetta 2003).

Innovation and technology diffusion have been shown to be a particularly important element of the link between competition and productivity (Aghion *et al.* 2001; Gust and Marquez 2002). Market contestability puts pressure on firms to innovate and favours the turnover of firms by prompting competitive businesses to enter the market and less competitive ones to exit. Concerns that intense competition would deter firms from innovating because pressure on profit margins would make it difficult to generate the required funds appear to be unfounded, even though the evidence suggests that the most innovative firm in a market is usually the dominant one.

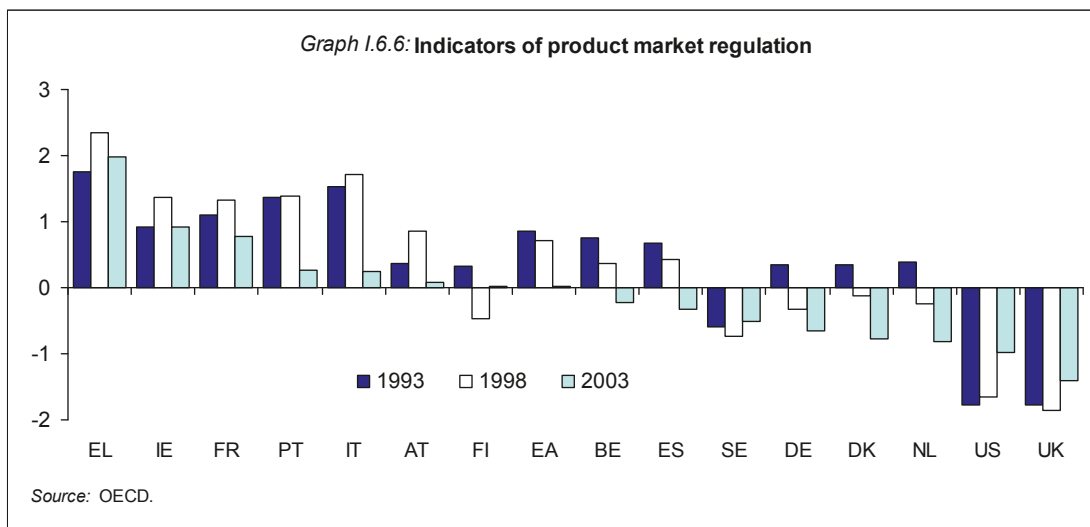
Enhanced product market competition can also affect GDP per capita via its impact on labour resource use (Blanchard and Giavazzi 2003). Research suggests that easier regulation of entry into product markets has statistically positive effects on employment (Haefke and Ebell 2004; Nicoletti and Scarpetta 2004). As restrictions are eased and competition increases, firms earn lower product market rents, activity is expanded and employment rates rise – even if employment is adversely affected initially to the extent that

previous regulations were conducive to overmanning. Empirical studies have also found that regulatory reforms, especially those that liberalise entry, spur investment (Alesina *et al.* 2003).

Competitive conditions in product markets in the euro-area Member States have considerably changed over the 1990s. The Single Market Programme and the preparation for the introduction of the euro led to an increased openness of economies, which is a major determinant of competitive pressure on product markets.⁽⁵²⁾ The estimated macroeconomic gains from the internal market are sizable, amounting approximately to 1.8 % of EU GDP and 1.4 % of total employment. Globalisation and the diffusion of information and communication technologies have added to the competitive pressure on product markets. Accordingly, indicators of product market regulation point to a fall in regulatory impediments to product market competition since the late-1990s – with the most regulated countries moving towards the more liberal countries (Graph I.6.6). However, a hard core of regulations persists concerning barriers to entry in services.

Progress towards the completion of the single market for goods and services has helped boost competitive pressures and scale advantages arising from cross border activities, and there is evidence that this has contributed to economic growth (Chapter I.2) as well as to a greater synchronisation of business cycles across countries (Chapter I.3). Still more remains to be done in view the mediocre productivity performance of the euro area, as was highlighted in the 2007 issue of the *EU Economy Review* (European Commission 2007a). Regulatory impediments to product market competition have been reduced since the mid-1990s in network industries, and this is reflected in productivity growth of those industries. However, when the euro was launched the agenda of unfinished business was still vast and more reform was underway, mostly in the areas of competition policy, public interventions and technology

⁽⁵²⁾ For a recent analysis of the economic effects of the Internal Market, see Ilzkovitz *et al.* (2007).



creation and diffusion. The sections below review the reform initiatives that have been taken since.

6.4.2. Competition policies

Competition policy is crucial for a well-functioning EMU as it helps to make prices more responsive to demand and supply conditions and thus facilitates the adjustment to shocks in the absence of intra-area exchange rates. Ambitions to strengthen competitive pressures in poorly contested markets have led to a multitude of structural reforms, including:

- Competences and resources of competition authorities and regulatory bodies have been expanded. Most countries amended their competition law to align it with European legislation. National competition and regulatory authorities have gained independence, necessary powers and resources to carry out their functions.
- As noted earlier, network industries have been liberalised since the mid-1990s. In view of large market shares of incumbent operators, reforms have been directed towards both opening market access and improving competitive conditions. Major steps have been taken in the areas of electricity, gas, telecommunication, postal and transport services. Further measures are under way.

- Barriers to competition in services have been eased. There have been initiatives to reform or prepare to reform certain professional services and trades as well as the retailing and distribution sector, including extensions of shop opening hours.

There still remains unfinished business regarding the deepening of the single market. Many countries still have a backlog in the transposition and implementation of Internal Market rules. Moreover, gains from the single market could be substantially larger if the services market were fully opened up to cross-border competition.⁽⁵³⁾ Since services are responsible for less than 20% of intra-area trade, but account for over 70% of value added and employment, the adoption of the Services Directive in 2006 represented a notable progress, although the implementation at the country level is not completed.

The impact of opening up competition in the network industries since the 1990's may serve as an example of what may be achieved. The pro-competitive European regulatory framework in place in the telecoms sector has increased the number of market players and reduced the dominance of incumbents. Competitive pressure is translating into price falls: since 1996, the

⁽⁵³⁾ See Ilzkovitz *et al.* (2007) for the results of the latest calculations made with the Quest model in the framework of the Internal Market exercise. There is currently no simulation available for the euro area. Gains in the euro area can be expected to be in a comparable order of magnitude.

price of communication services in the euro area has fallen by around 40% in real terms. Similar experiences have been recorded for other sectors. For example, between 1996 and 2005, energy deregulation helped cut the real price of electricity in the euro area by 8%.⁽⁵⁴⁾ Airline deregulation not only cut real prices over the period (the price of promotional fares is estimated to have fallen by 30% between 1992 and 2000⁽⁵⁵⁾ -- but also increased employment in the industry by 19% between 1996 and 2002.⁽⁵⁶⁾ Further regulatory reforms in the EU electricity sector are estimated to lead to price reductions of about 20%. According to model simulations this would yield an increase of GDP of another 0.5 % after five years.

6.4.3. Improved public intervention

A number of reforms have been aimed at reducing market distortions caused by public interventions, including taxation, state aid and regulation:

- *Corporate tax reforms* have aimed at removing or easing distortions. Statutory rates of corporate tax have been cut and the tax base broadened. Tax discrimination of corporate ownership or private (as opposed to public) service provision has been removed in some cases. A number of countries have taken measures to simplify corporate tax compliance.
- *Cuts in state aid* have been implemented. While the decline in the share of state aids in GDP has been slower than in the 1990s, it continued to fall in the majority of euro-area countries.⁽⁵⁷⁾
- *Regulatory burdens have been reduced.* The majority of countries pursue a "better regulation" strategy, including a cut in the number of laws, the establishment of

systematic impact assessments measuring the burden of regulation imposed on business.⁽⁵⁸⁾ In some countries an institutional body dedicated to better regulation has been created and several have launched a simplification programme. Impact assessment of all relevant aspects of new legislation is now compulsory in several countries and independent bodies have been set up for this purpose in some cases.

- *Efforts have been made to improve the efficiency of public administration.* The increasing spread of on-line government services can be considered a useful device in this respect.
- *Public procurement markets have been opened up.* Measures to simplify rules and increase transparency and thereby competition in public procurement have been undertaken in several countries. Public procurement contracts now represent 16% of GDP. However, some countries have yet to transpose the European rules into national law.

There is evidence to suggest large gains from these types of actions. For example the long-run effect of a reduction of the administrative burdens for businesses by 25% is estimated at over 1% of GDP, which mainly results from boosting labour efficiency as workers undertaking such administrative tasks are freed up to carry out more productive activities.⁽⁵⁹⁾

6.4.4. Research and knowledge building

The observed trend decline in productivity growth in Europe has been a matter of policy concern for EMU since it inter alia complicates the competitiveness channel of adjustment (see Chapter I.4) and weighs on potential growth. The focus rightly has been on policy measures to

⁽⁵⁴⁾ The Copenhagen Economics (2005) study suggests that prices have been 8% lower in 2001 compared to the level they would have been at without the market opening that occurred over the 1990-2001 period.

⁽⁵⁵⁾ Martin, Roma and Vansteenkiste (2005).

⁽⁵⁶⁾ European Commission (2005a).

⁽⁵⁷⁾ It remained approximately constant in Slovenia over this period at 1.5%.

⁽⁵⁸⁾ Progress has been made in Slovenia in 2006 following the adoption of a programme aiming at introducing better drafting of regulations and decision.

⁽⁵⁹⁾ Simulations with the Worldscan Model yielded an increase of 1.3%. With Quest, a reduction of administrative costs increases GDP by 0.9 if no additional market entry is assumed and 1.6% if it is allowed.

target investment in research and new technologies. Support for business start ups, the promotion of risk capital and education and training have been the main policy levers:

- *Financial incentives for R&D* have been created or expanded in all euro-area countries. Tax incentives to stimulate R&D expenditure have been implemented or strengthened, notably in the southern European countries.
- *Links between research and business have been tightened.* Almost all participating countries aim at improving the diffusion of knowledge via public-private partnerships, for example through the creation and development of innovation poles and networks or improvement of innovation support services or facilitation of university spin-offs. Some countries have made it easier for smaller companies to access the patent system.
- *Measures to upgrade general education have been undertaken in the majority of participating countries.* Almost all Member States achieved to increase the number of scientists and engineers. Some promoted targeted aid to centres of excellence in academia or created tax incentives to attract high-skilled workers from abroad.
- *The use of information and communication technology (ICT) is stimulated,* following the experiences in the Nordic countries. Measures included the promotion of ICT use in education and training, online government services and e-commerce and the build-up of broadband internet infrastructure.
- *Support for young and small enterprises has been strengthened.* Most euro-area countries have introduced programmes to facilitate access to risk capital and reduce the bureaucratic and legal obstacles for setting-up new firms.

Product market reforms are closely monitored documented by the European authorities, including via the European Commission's Implementation Reports of the Broad Economic

Policy Guidelines. Since 2005, moreover, the National Reform Programmes and the Commission's Annual Progress Report keep track of reform efforts in the EU. National Reform Programmes are supported by Cohesion Policy Programmes that channel about € 86 billion for improving the above mentioned policy lever. A databank on product market reforms (MICREF) is currently under construction. ⁽⁶⁰⁾

Overall, the evidence on the benefits stemming from these reforms is still scant. Labour productivity rebounded in 2006, but this is mostly of a cyclical character. In ex ante terms, though, model simulations suggest that higher R&D expenditure can lead to a marked improvement in economic performance. In spring 2006, member countries committed to country-specific targets for R&D expenditure amounting to 2.8 % of euro-area GDP by 2010 from the current level of 1.9 %. ⁽⁶¹⁾ If these targets are achieved, GDP would be boosted by 2½ to 4½ % even on conservative assumptions. ⁽⁶²⁾

6.5. THE DETERMINANTS OF STRUCTURAL REFORM IN EMU

The single currency was hoped to produce incentives for governments to undertake structural reform in the pursuit of market flexibility (see e.g. Bean 1998). This argument has become known as TINA ('There Is No Alternative'). As highlighted in Chapter I.2, the single currency itself is likely to have been a driver of efficiency gains. But on the other hand the disappearance of the exchange risk may have tended to weaken the incentives for reform, notably in labour markets (see e.g. Calmfors 2001). On balance, what is the evidence on this issue ten years down the road?

⁽⁶⁰⁾ Comprehensive information on European measures in favour of entrepreneurship and competitiveness until 2002 is available by the Commission at http://ec.europa.eu/enterprise/enterprise_policy/charter_directory/index.htm.

⁽⁶¹⁾ So far statistics do not show an increase in private R&D.

⁽⁶²⁾ Again simulations are only available for EU-15.

6.5.1. Findings in the literature

A number of institutions, including the European Commission, have assembled data on reform measures (Table I.6.1). From these sources composite indicators can be derived, and the changes in these indicators can be interpreted as reform activity. The most commonly used datasets are the ones constructed by the IMF and the OECD. A weakness of these indicators is that the weights used to aggregate the rankings of various features of institutions are ad hoc and uniform across countries. Other criticisms relate to their dependence on the theoretical priors of those that establish them and the loss of information due to their aggregate nature.⁽⁶³⁾

Two approaches have been used in the economic literature to assess the impact of EMU on the pace of structural reforms based on these aggregate indicators. The first consists in comparing the amount of reforms before and after 1999, i.e. when the euro was introduced. The problem with this approach is that the reform pace might have changed over time independent from EMU, which may distort the picture unless relevant controls are introduced to capture these other factors. The second approach compares the pace of reforms in euro-area countries with a control group of countries outside the euro area. This may give a biased picture if the reform needs are different across country groups, but appropriate controls can again be introduced. Most studies combine both approaches by pooling time series over a sample of countries.

From the available studies emerges that EMU has had no statistically significant impact on the pace of overall reforms, be it positive or negative, although with results varying across reform areas and countries.⁽⁶⁴⁾ Duval and

Elmeskov (2006) see no acceleration of reforms in EMU and Duval (2005) even a slowdown in reforms in 1999-2004 relative to 1994-1998. Bertola and Boeri (2002) detect stronger reform efforts for non-employment benefits and EPL. Their result is confirmed in ECFIN (2006) using the same data source. The number of reforms was higher in 1999-2002 than in 1994-1998 in the areas of income replacement benefits, EPL and migration, but not in the area of pensions. European Commission (2006e) found reform intensity to have been higher in six countries in the period after 1999 than before (DE, ES, FR, IT, NL, PT). This differs from the assessment in Debrun and Annett (2004), who note stronger reform effort in only three euro-area countries (DE, ES and IT).⁽⁶⁵⁾

Assessing the euro area against a control group of other OECD countries, Van Poeck and Borghijs (2001) find that in the 1990s, EMU countries undertook fewer labour market reforms than non-EMU countries. A more nuanced picture emerges from Duval (2005), who finds that euro-area countries implemented more reforms than other OECD countries in both 1994-1998 and 1999-2004, but fewer than non-euro-area EU countries. Debrun and Annett (2004) for a panel of 17 OECD countries over the period 1975-1998 find that EU Membership fostered reforms, which they interpret in that EU helped to overcome domestic reform resistance. However, while EU Membership had a statistically significant positive effect on incentives to conduct labour market reforms, being in the ERM with narrow fluctuation bands had a statistically significant negative effect on labour market reforms.⁽⁶⁶⁾

⁽⁶³⁾ For a critical evaluation of reform indicators, see Campos and Horváth (2006), specific on indicators of labour market institutions, see Ochel (2005) and Arpaia and Mourre (2005) and Crafts (2006) and Schiantarelli (2005) of product market indicators.

⁽⁶⁴⁾ When EMU is considered to have begun with the start of phase II in 1994, rather than with the introduction of the euro (phase III) in 1999, there was an increase in the frequency of product market reforms and pension reforms compared to 1990-93 (Deroose and Turrini 2005) and of labour market reforms compared to 1971-1993 (Buti *et al.* 2007).

⁽⁶⁵⁾ The difference is likely due to a different method in combining marginal and structural reforms in both studies. European Commission (2006e) reports the numbers of both marginal and substantial reforms. Annet and Debrun (2004) weigh substantial reforms three times higher than marginal reforms. Moreover, they concentrate on the years 2000-2002, i.e. since the launch of the Lisbon Strategy, compared to the sample 1999-2002 in European Commission (2006e).

⁽⁶⁶⁾ The IMF WEO indicators for product and labour market reforms were used in this exercise.

Table I.6.1:

Reform data

Source	Record	Coverage			Special features
		Areas	geographic	time	
Rodolfo De Benedetti foundation reform data base	Description of reform events	EPL, employment benefits, pensions, migration	14 EU countries	1985-2005	Distinguishes marginal and structural and direction of reform
Bertelsmann foundation International reform monitor	Description and assessment of reforms	Pensions, and social security health care, labour market, industrial relations	10 EU countries	1997-2004	Analysis from research institutes located in countries concerned. Discontinued.
ECFIN LABREF	Description of reform events	8 labour market areas	25 EU countries	2000-2006	accessible on DG ECFIN website
ECFIN MICREF	Description of reform events	7 product market areas	27 EU countries	2004-2006	will be made public in summer 2008
EU Implementation reports (BEPGs, NRP)	Assessment of measures that address reform priorities	Public finances, product markets, labour markets, Capital markets (partly)	All EU countries	2000-2005	Reports on policy measures that address EU recommendations to MS
OECD regulation indicators	Index of product market regulation	7 networks	21 OECD countries	1985-2003	
	Index of labour market regulation	7 policy areas	OECD countries	1994-2004	
Frazer indicators of economic liberty	Assessment of tightness of regulation	10 policy areas with various sub-indicators	165 countries (123 countries for older vintages)	5 yr intervals 1970-2000, annual 1995-2007	(Change in methodology 2005 backcast to 1995)
Nickell Nunziata data base	Indicators of labour market institutions	Employment protection, Labour union density	20 OECD countries	1960-1995	
IMW WEO indicators of structural reforms	Summarises OECD and Nickell/Nunziata data	Financial sector, labour market, product market, tax, trade	20 industrial countries	1975-20000	

Source: European Commission.

6.5.2. A crosscheck

The overall picture seems to be that being in or out of EMU, or the launch of the single currency itself, has not been a stimulus for structural reform – which is a concern in view of the stronger reform needs of the euro area. It appears therefore useful to crosscheck this finding with alternative sets of reform indicators. Two approaches are pursued.

Table I.6.2:

Recommendations and implementation scores in the Broad Economic Policy Guidelines 2000-2005

	EA12	Non-EA control group (DK, SE, UK)	Top 3 EA performers	standard deviation EU15
Number of recommendations	22,8	15	14,3	6,7
- Labour market	10,3	5,3	4,3	4,5
- Product market	12,4	9,7	10	2,6
Implementation score*	1,4	1,7	1,6	0,2
- Labour market	1,3	1,7	1,5	0,3
- Product market	1,4	1,6	1,6	0,2

* score encompasses 0 (no measures) via 1 (partial, limited), 2 (in progress) and 3 (complete)

Source: European Commission.

The first approach is to analyse whether euro-area countries fared better or worse than non-euro-area countries in terms of respecting the recommendations addressed to them by the EU under the Broad Economic Policy Guidelines (BEPGs) – a Treaty-based tool for policy co-ordination. From 2000 onwards, the BEPGs provide the basis for the European Council, upon proposal by the European Commission, to issue recommendations for economic reform in the EU countries (see Chapter I.10 for a discussion). Every year the European Commission has assessed progress in the Member countries with the implementation of policies to address these recommendations. Though the assessment is mainly of qualitative nature, progress with each recommendation has been classified in four categories (3 = complete, 2 = in progress/partial, 1 = limited, 0 = none). Scores are computed in the policy areas of product markets and labour markets coded.⁽⁶⁷⁾ The data set comprises the

⁽⁶⁷⁾ Other policy areas covered by the BEPGs were fiscal policy and in some years capital markets. Recommendations on social security, including pension reforms were included in this exercise as labour-market

period 2000-2005, with annual recommendations and implementation reports available from 2000 to 2002 and multi-annual recommendations available for the 2003-2005 period. This yields four observations per country. The analysis reported in Table I.6.2 does not cover the period since the re-launch of the Lisbon Strategy in 2005, when it was revised significantly. The BEPGs now form part of the Integrated Guidelines which brings together policy recommendations in the areas of macroeconomic, microeconomic and employment policies, and is based on a "partnership" approach between the Commission and national authorities.

The upper panel in Table I.6.2 compares the average scores of the 12 euro-area Member States with those of the three countries that have not joined the euro area. Over the period reviewed, there were more recommendations addressed to the average euro-area Member State than to the average other country, suggesting that EMU Member States were considered to have higher reform needs. No systematic difference emerges for the three out-countries in comparison with the three best countries in the euro area in terms of number of recommendations issued. Differences in the follow up to the recommendations between EMU and non-EMU countries are shown in the lower panel of Table I.6.2. The average score for all EMU countries was about one standard deviation worse than for the three out countries. Moreover, the score in each of the three out countries is higher than the euro-area average, although again the three best performers in the euro area had only a slightly smaller score than the three out countries.

While the latter findings point to a negative impact of EMU Membership on the structural reform efforts, it is well possible that this effect is driven by a negative correlation between the number of recommendations and the policy effort devoted to each recommendation. Such a negative correlation is plausible -- if governments have limited political capital and administrative capacity to reform, their average

reforms and those on the knowledge-based economy as product-market reforms.

achievement will decline with the number of targets. The estimates in Table I.6.3 show, however, that the correlation of structural reform with membership in EMU remains negative even if controls are introduced for the number of recommendations and the size of the economy. ⁽⁶⁸⁾ It needs to be born in mind that, as noted, the analysis does not cover the period since the re-launch of the Lisbon Strategy. The Commission in its recent Strategic Report of December 2007 concluded that considerable progress has been made since the re-launch of the Lisbon strategy in 2005, with visible progress made with reforms in key priority areas.

The result reported in Table I.6.3 also suggest that the size of the economy has a positive impact on reform scores, which is contradicting the widely held belief that small countries in the euro area are more active reformers. ⁽⁶⁹⁾ However, more detailed analysis suggests that the significance of the positive coefficient is due to the relatively low scores in the assessment for Ireland and Luxembourg.

Table I.6.3:
Determinants of structural reform scores based on BEPGs

	Constant	No	Size	EMU
1. Average 2000-2003/05	1.56 (0.16)***	-0.02 (0.005)***	0.07 (0.02)***	-0.20 (0.08)**
	R ² = 0.76 Obs. = 15			
2. Individual years	1.46 (0.25)***	-0.07 (0.03)**	0.09 (0.04)**	-0.20 (0.12)
	R ² = 0.23 Obs. = 60			
3. Individual years with year fixed effects	1.43 (0.22)***	-0.05 (0.03)**	0.08 (0.03)**	-0.22 (0.11)**
	R ² = 0.42 Obs. = 60			

No - Number of recommendations, size - ln(GDP in PPS, average 1999-2005), EMU - dummy for EMU Member States, OLS estimate, standard errors in brackets, *, **, *** significance at 10, 5, 1% level, respectively. Source: European Commission.

The second approach is to check progress with reforms based on reform data for a larger group of industrialised countries. Table I.6.4 summarises the results of estimations from

⁽⁶⁸⁾ However, the small number of observations and especially the fact that only three countries outside the euro area are included in the panel warrants caution in interpreting the results. For example, when Greece is considered a non-EMU country before 2002, the EMU effect is no longer significant in the third estimate.

⁽⁶⁹⁾ Duval and Elmeskov (2006), for example, yield a significantly positive impact of a "small-country dummy" on the probability of reforms.

different time periods and indicators established by the Fraser institute, the OECD and Eurostat. For all indicators, the change in the indicator is regressed on its starting position and a euro-area dummy. When both CEEC countries and other OECD countries are included, a further dummy is introduced for the former as transition countries are expected to portray a different reform pace than other countries.

Fraser indices describe the degree of economic liberty as the aggregate of sub-indicators in 10 different areas.⁽⁷⁰⁾ A high level of the indicator signals a more lenient stance of structural policy. While the indicator is available for 122 countries, the panel was restricted to 36 industrial countries. For the aggregate Fraser indicator as well as for most of the subcomponents shown below, the euro-area variable shows up significantly in a statistical sense and negatively, suggesting that membership in the euro area has slowed down liberalisation. However, the share of the cross-country variation in changes of "economic freedom" explained through this estimate is in some cases very small, especially in the sub-period 2000-2004. In contrast to other studies,⁽⁷¹⁾ the starting position is not significantly (in a statistical sense) negative in any of the estimates. That is, the estimate does not provide evidence of convergence.

According to the estimates on the basis of the OECD regulatory indices (Panel B), the starting position of regulation has a statistically significant impact on the pace of product market deregulation with the expected negative sign. Euro-area membership has a positive impact on structural reform. Although it is statistically insignificant in most cases, this result dismisses other findings that membership in the euro area slowed down progress with reforms. The results reported in Panel C, with varying compositions of control groups, show that euro-area Member

States progressed more in some areas and less in others.

To sum up, the assessment of whether the single currency led to less or more progress with structural reforms depends largely on the data source used. OECD and Eurostat data do not replicate the negative impact of the single currency emerging from the BEPGs and Fraser indicators. Obviously, the small size of the control groups constitutes a severe handicap, and no sweeping conclusions can be drawn. Even so, from the findings can be safely inferred that there is no overwhelming evidence of the "TINA" argument that giving up of the exchange rate and interest rate instruments in EMU would spontaneously produce incentives for structural reform so as to heighten the flexibility of markets in the pursuit of alternative adjustment mechanisms. There is no evidence that this has occurred, which is of concern given the sizable reform needs.

Apparently the political incentives to pursue rigorous reform in EMU are comparatively weak. To the extent that sluggish adjustment in participating countries produces adverse spill-over effects onto the area as a whole, stronger co-ordination may be necessary to overcome these disincentives. Structural reform is largely in the remit of the individual member states of the European Union and, *a fortiori*, the euro area, with the EU playing a co-ordinating role (see Part III of this Report). This implies that the surveillance of structural reform at the EU level is crucial, otherwise the co-ordination would fail. This has been recognised by the European authorities, such as the Eurogroup and the European Commission, and motivated intensified surveillance of national policies in the euro area in the framework of the Lisbon Strategy.

⁽⁷⁰⁾ For a description of the construction of the Index of Economic Freedom, see Beach and Kane (2007).

⁽⁷¹⁾ The initial level is for example significantly negative in the estimates in Belke et al. (2005), which shows a positive correlation between changes in the Fraser index and a fixed exchange rate regime, controlling for the starting level, inflation, growth, openness, policy constraints and government changes. Their panel consists of 178 countries over the period 1970-2000.

Table I.6.4:

Determinants of structural reform scores based on alternative sources

A. Changes in Fraser indicators of economic freedom								
	1995-2004				2000-2004			
	Euro	CEEC	Level	R2	Euro	CEEC	Level	R2
Fraser index	- *	+ *	-	0.69	- *	+ *	+	0.79
- Government size	- *	+	-	0.35	- *	-	+	0.19
- Legal system	-	-	-	0.05	-	+	-	0.04
- Labour market regul.	- *	+	-	0.22	+	-	-	0.01
- Business regulation	- *	-	-	0.47	- *	+	-	0.53
B. Changes in OECD deregulation indices								
	1995-2003				2000-2003			
	Euro	CEEC	Level	R2	Euro	CEEC	Level	R2
Product market.	+	-	+ *	0.56	+	-	+ *	0.61
- Airlines	+	-	+	0.17	+	-	+ *	0.28
- Telecom	+ *	-	+ *	0.91	+	-	+ *	0.47
- Electricity	+	-	+ *	0.48	+	-	+ *	0.47
- Gas	+	-	+ *	0.31	+	-	+	0.38
- Post	+	-	+ *	0.40	+	-	+ *	0.68
- Rail	-	-	+ *	0.44	+	-	+	0.02
- Road	-	-	+	0.17	-	-	+	0.09
EPL (1998-2003)	+	-	+ *	0.22	-	-	-	-
GRR	- *	-	+ *	0.50	- *	-	+ *	0.42
LTU (2001-2004)	-	-	-	-	-	-	+ *	0.39
C. Change in Eurostat structural indicators								
	Period	Coverage						
			Euro	CEEC	Level	R2		
Tax wedge on low wage earners	2000-2005	REU+6	+ *	-	-	0.35		
Unemployment trap	2001-2005	REU+5	+ *	+	-	0.15		
Low wage trap	2001-2005	REU+5	+	+	-	0.12		
Spending on education	1995-2001	REU+5	- *	- *	-	0.38		
Life-long learning	2001-2005	REU+4	-	+	-	0.30		
Average exit age	2001-2005	REU+3	- *	-	-	0.23		

Level is the initial level in 1995 and 2000, respectively. Periods are determined by data availability. A +/- means that the factor has a positive/negative impact on deregulation. A * indicates significance at 5% level. For the Fraser indicators, the non-EMU group consists of the remaining EU countries plus Australia, Canada, Iceland, Japan, South Korea, Mexico, New Zealand, Norway, Switzerland, USA. For the OECD product market indicators, the control group are the non-EMU EU-15 countries plus Australia, Canada, Japan, New Zealand, Norway, Switzerland and the USA, EPL - employment protection legislation index, GRR - gross replacement rates, i.e. summary measure of benefit entitlements, LTU - net replacement rate of long-term unemployed. Life-long learning is share of participants, REU+X means all other countries of the EU-25 plus x non-EU countries. Source: European Commission.

7. FINANCIAL MARKET INTEGRATION

7.1. INTRODUCTION

EMU and the process of financial integration enjoy a symbiotic relationship. The introduction of the euro eliminated currency risk on the bulk of intra-EU capital flows and on all capital flows within the euro area. In this way, the euro has stimulated both the supply of and the demand for cross-border financial services and so acted as a powerful catalyst for financial integration. Meanwhile, the integration of Member-State financial markets fosters financial development and so raises the efficiency of the EU economy. The euro-area economy benefits from these efficiency gains, even more so because a single-currency environment provides scope for deeper financial integration. In addition, the euro-area economy benefits from integrated financial markets as a channel for managing asymmetric shocks.

This chapter assesses the impact of EMU on financial integration and development, focusing on trends in the main markets and among the main intermediaries and infrastructures. This assessment covers both the progress achieved in integration, as well as the remaining priorities for action in moving the process of integration forward. The main finding is that financial integration remains a work in progress for the EU and the euro area. While integration has progressed substantially since, and in part owing to, the introduction of the euro, many markets are still fragmented and the pace of integration varies among Member States. The remaining fragmentation in EU financial markets represents an opportunity cost for the EU economy. This opportunity cost is even greater for the euro-area economy, which needs a high degree of financial integration not only to raise productive potential but also to improve its capacity to adjust in the event of asymmetric shocks.

7.2. SOME MEASUREMENT CAVEATS

Progress in financial integration can be measured in terms of price and quantity variables, which reflect inter alia the effects of diversification in investor portfolios, competition and consolidation among intermediaries and

infrastructures and convergence in the regulatory and supervisory environment. In considering EU financial integration since 1999, price-based indicators generally suggest that substantial progress has been made, while quantity-based indicators offer more varied evidence.⁽⁷²⁾ While EMU and the euro have undoubtedly been at the source of much of the progress in financial integration over this period, several caveats apply. First, cyclical trends in many of the relevant variables may obscure or distort evidence of underlying structural changes linked to integration. Second, the impact of EMU on integration cannot be easily isolated from global factors such as liberalisation of capital flows, deregulation, advances in technology and innovation. Third, other EU-specific factors (e.g. the integration of product markets and competition policy) may also have played a role in promoting financial integration. With these caveats in mind, progress in financial integration is reviewed for the main markets, intermediaries and infrastructures in the EU, with an emphasis on the specific role of EMU where appropriate.

7.3. THE IMPACT OF EMU ON FINANCIAL MARKETS

The most immediate and extensive impact of EMU on financial integration has been felt on the euro-area markets for unsecured money and derivatives. Almost from the outset of EMU, interest rates on inter-bank deposits and derivative contracts across the euro area converged fully on the benchmark Euribor and Eonia rates (Graph I.7.1).⁽⁷³⁾ This rapid convergence reflected early acceptance of the single monetary policy among market participants and was facilitated by the availability of interconnected systems for real-time settlement of large-value payments in the

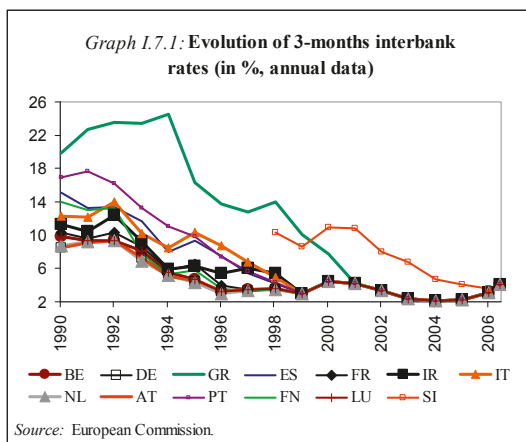
⁽⁷²⁾ Regular analysis on the progress of European financial integration is notably performed by the European Commission and the ECB; see e.g. European Commission (2007e) and ECB (2007e).

⁽⁷³⁾ Euribor (i.e. the Euro Interbank Offered Rate) is a composite of interest rates provided by about 50 European and international banks. Eonia (Euro Overnight Index Average) is an effective overnight rate computed as a weighted average of all overnight unsecured lending transactions in the interbank market.

form of TARGET⁽⁷⁴⁾, which has recently been replaced by the more integrated (i.e. single-platform) TARGET2. The successful integration of these unsecured markets was crucial to establishing ECB credibility in the very early period of EMU and has provided the basis for a smooth-functioning single monetary policy thereafter. Over time, the euro-area interbank market has acquired a two-tier structure in which larger banks exchange deposits on a cross-border basis, while smaller banks exchange deposits with these larger banks within national boundaries. Meanwhile, the markets for euro-denominated derivatives have expanded significantly beyond the size implied by the legacy currencies, partly reflecting an explosive growth trend in such instruments on a global level but also the absence of liquidity in underlying cash securities (see discussion of euro-area government bond markets below). Interestingly, the vast bulk of activity in euro-denominated derivatives markets takes place outside of the euro area in London.

national borders. Although a source of inefficiency, segmentation in these markets was not considered to be a major opportunity cost for the euro-area economy so long as the interbank market functioned smoothly. However, the liquidity problems experienced in the euro-area inter-bank market since August 2007 amid the ongoing international financial turmoil have highlighted the importance of access to efficient collateralised money markets and suggest a need for further efforts in integrating these markets.

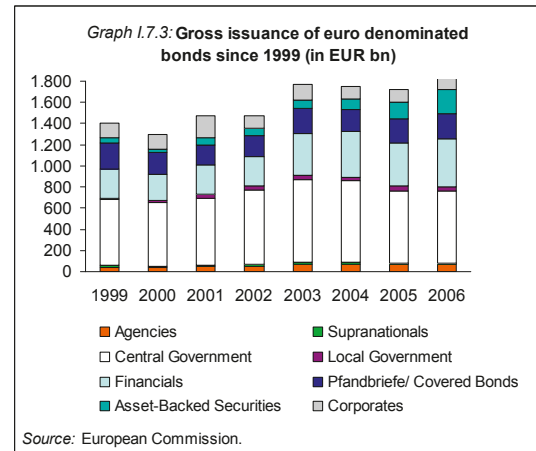
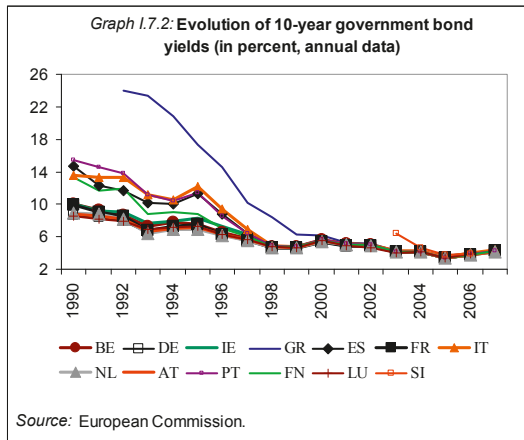
EMU also had a very substantial impact on the integration of the market for government bonds, which are important not only as a source of government financing but also in providing reference pricing for other financial instruments. Well ahead of the launch of EMU, there was a process of sustained convergence in yields on bonds issued by the euro-area Member States (Graph I.7.2). This convergence in yields reflected the elimination of currency risk implied by the introduction of the euro, so that residual yield spreads progressively reflected only credit and liquidity risk.⁽⁷⁵⁾ The result was the creation of a substantially homogenous euro-denominated government bond market in 1999, where the various national issues of similar maturity now trade as close substitutes with yield spreads typically below 50 basis points in all cases. This market is now comparable in size – both in terms of issuance flows and outstanding amounts – to the other major government bond markets in the United States and Japan. Quantity-based indicators of the distribution of government bonds confirm significant cross-border holdings within the euro area, while a more extensive participation of large international banks as primary dealers has facilitated global distribution, notably to the United States and increasingly Asia. Government debt issuers from outside of the euro area have also benefited from the integrated government bond market. In particular, the recently acceded Member States have been able to exploit a broader investor base and comparably low financing costs by complementing their domestic issuance with issuance denominated in euro.



Integration has been less complete in secured money markets within the euro area, such as the markets for T-bills, commercial paper and certificates of deposit, as well as the private repo market. National differences in legal and tax frameworks and continued fragmentation in national clearing and settlement infrastructures (see discussion below) hinders the cross-border movement of collateral within these markets, so that they have remained more segmented along

⁽⁷⁴⁾ The Trans-European Automated Real-time Gross settlement Express Transfer system.

⁽⁷⁵⁾ See Codogno, Favero and Missale (2003) and Favero and Giavazzi (2008).



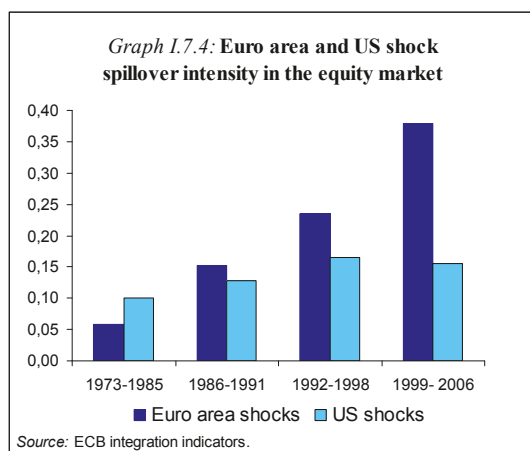
The availability of an integrated cash market for government bonds in the euro area has spurred the development of markets for other related asset classes, such as corporate bonds, covered bonds, asset-backed securities and a range of derivative instruments. While the amount of gross issuance of government bonds in the euro area has not changed significantly since 1999, issuance of these non-government bonds has expanded significantly over the period (Graph I.7.3). Empirical analysis⁽⁷⁶⁾ suggests that the expansion in these market segments can be attributed to a range of economic and technical factors (e.g. economic growth, global episodes of M&A, securitisation trends etc), but the euro is found to have affected corporate-bond issuance both directly through the elimination of currency risk and more indirectly via higher financing needs due to euro-related corporate restructuring. The number and type of issuers of non-government bonds in the euro area have gradually expanded, including a small but growing cohort of below-investment grade issuers. The typical size of issuance has also increased, confirming the growing maturity of these market segments in terms of liquidity and depth. Nevertheless, the non-government segments remain relatively under-developed, when compared to the corresponding segments in the US market.

The impact of EMU on integration of equity markets has been less pronounced than in other markets. This reduced impact reflects the significance of obstacles – other than currency risk – to cross-border trading in equities, due to their greater heterogeneity as an asset class and the fact that they are issued under often very different national company laws. These obstacles are even more evident in market for post-trading services (see below). Nevertheless, several developments, which facilitate equity-market integration, have been identified, including a substantial increase in equity-market participation since the mid-1990s (despite the correction of 2000), a reallocation of investment toward equity markets as interest rates converged downward, a number of EU directives removing barriers to international equity investment, the growth in investment funds offering enhanced opportunities for portfolio diversification and a shift from county selection to sector selection in international asset allocation linked to the introduction of the euro.⁽⁷⁷⁾ Price-based evidence of an EMU effect on integration can be found in a significantly higher weight of euro-area shocks relative to global shocks in explaining price volatility in equity markets within the euro area in the period 1999-2006 (Graph I.7.4). This evolution suggests that equity-market integration in the euro area has proceeded faster than at the global level, particularly since the introduction of the euro.⁽⁷⁸⁾

⁽⁷⁶⁾ See De Bondt and Lichtenberger(2003) and Biais *et al.* (2006)

⁽⁷⁷⁾ See Baele *et al.* (2004).

⁽⁷⁸⁾ See ECB (2007a, 2008).



The impact of EMU on equity market behaviour appears to have been strongest at the level of the investor, with some overall reduction in “home bias” and a re-orientation of asset managers’ investment strategies towards a more euro-based or EU-based approach. Evidence on equity market holdings between 2001 and 2004 suggests that home bias in EU Member States declined from 80% to 60% on average over the period.⁽⁷⁹⁾ Between 1997 and 2006, euro-area residents almost doubled their holdings of equity issued in another euro-area country (as a share of their total portfolio of shares issued in their own country and elsewhere in the euro area) to reach 29%, whereas the share of euro area equity assets held outside the euro area remains much lower and increased only slightly.⁽⁸⁰⁾ On the other hand, there is less evidence of a euro impact on the behaviour of issuers, with cross-border listings still relatively unusual in the EU.

7.4. THE IMPACT OF EMU ON FINANCIAL-MARKET INFRASTRUCTURES

Consolidation in financial-market infrastructure since 1999 has been driven both directly and indirectly by EMU. The most obvious direct impact of EMU has been on payments systems, where the introduction of the euro necessitated integrated systems with area-wide coverage. As already indicated, the rapid integration of unsecured money markets in the euro area was facilitated by the prior establishment of the

ECB’s TARGET system, which linked the large-value payment systems of the participating Member States and has now been replaced by the single TARGET2 platform. In addition to TARGET, several other large-value payments systems now operate in the euro area, including EURO 1 operated by the European Banking Association, PNS operated by the Banque de France, POPS operated by the Bank of Finland and CLS, which is a global system in which the ECB acts as operating agent for euro payments. These large value payments systems are crucial to the smooth functioning of monetary policy operations, large volume securities transactions and the foreign-exchange markets in the euro area.

In contrast, retail payment systems (which cater only for small value payments) in the euro area remain much less integrated. Currently, there are 15 retail payment systems but only one of these operates on a cross-border basis (Graph I.7.5).⁽⁸¹⁾ Efforts to integrate these systems have been concentrated in the SEPA (Single European Payments Area) project. SEPA will allow customers to make non-cash euro payments to any beneficiary located anywhere in the euro area using a single bank account and a single set of payment instruments, so that retail payments in euro will become essentially domestic transactions. SEPA is run by the euro-area banking industry and is being implemented in consultation with other stakeholders. The project will be phased into operation between 2008 and 2010.

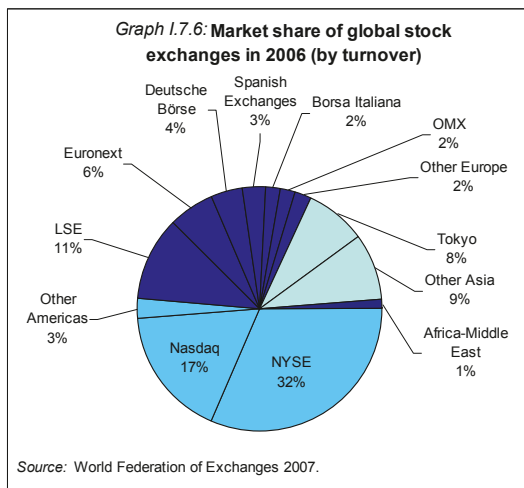
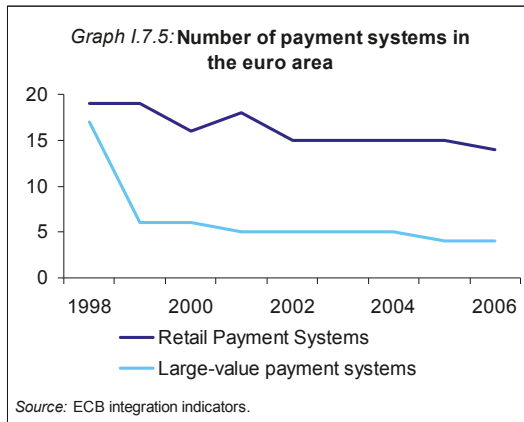
There has been considerable integration and consolidation in securities-market infrastructure in the EU since 1999, but there is no discernible pattern linked specifically to EMU.

On the trading side, the most notable example of integration/consolidation has been the merger of the Paris, Brussels and Amsterdam stock exchanges to become Euronext in 2000 (Graph I.7.6).

⁽⁷⁹⁾ See Delgado (2006).

⁽⁸⁰⁾ See ECB (2007a, 2008).

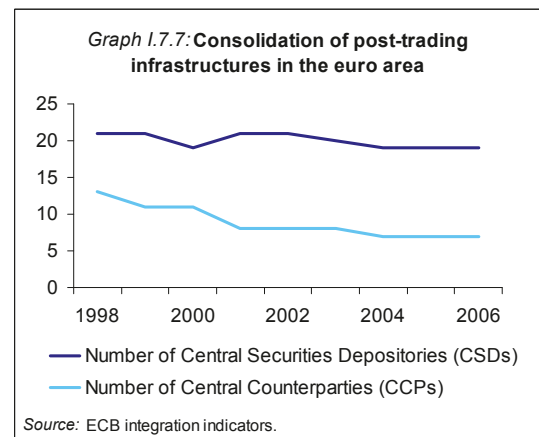
⁽⁸¹⁾ The only cross-border retail payments system is STEP2, operated by the European Banking Association.



While each of these exchanges was located in the euro area, Euronext soon expanded to include the London-based Liffe derivatives exchange in 2001 before expanding once more to include the Lisbon stock exchange in 2002. Other examples of integration/consolidation have also involved both euro-area and non-euro-area infrastructures (e.g. the links between the Vienna stock exchange and various exchanges in central and south-eastern Europe, the link between the Milan and London stock exchanges and the failed merger attempt between the London stock exchange and Deutsche Boerse) or have occurred outside of the euro area altogether (the creation of OMX, which was formed in 2003 and combines seven stock exchanges across Scandinavia and the Baltic countries and the failed OMX takeover of the London stock exchange in 2005). The prospect of a mega stock exchange for the euro area emerged briefly in 2006 with the proposed merger of Euronext and Deutsche Boerse. However, the merger attempt

failed when Euronext shareholders opted to merge with the New York stock exchange instead, reflecting a growing trend toward global integration in equity trading.

There has also been integration/consolidation in post-trading infrastructure in the EU, but again no EMU-related pattern is discernible (Graph I.7.7). Progress in integration/consolidation has been impeded by the existence of competing models, including the multilateral linkage of existing national CSDs, horizontal integration of clearing and settlement functionalities respectively and the vertical integration of trading, clearing and settlement functionalities in silos. The most notable examples of vertical consolidation are Deutsche Boerse and Clearstream Frankfurt, while the most notable example of horizontal integration/consolidation is Euroclear, which is constructing a single settlement platform for France, Belgium, the Netherlands and the United Kingdom.



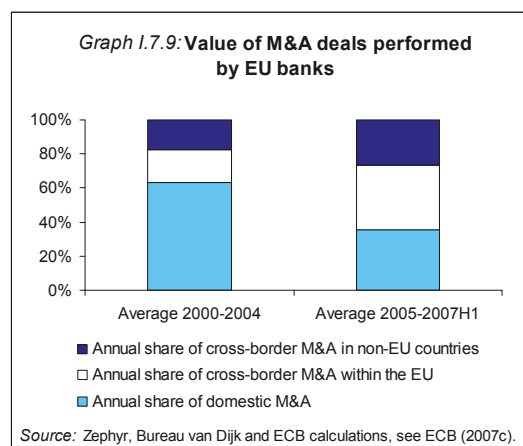
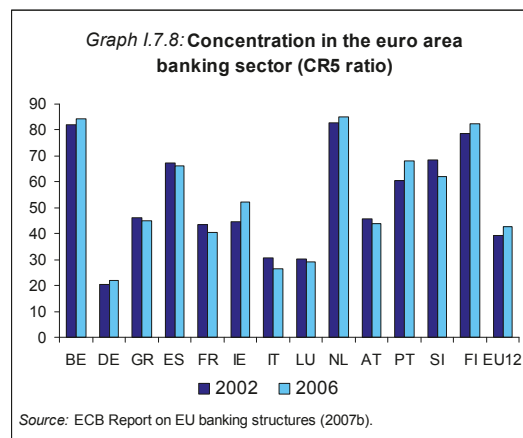
While the pattern of integration/consolidation in EU securities market infrastructure cannot be directly linked to EMU, it is clear that the creation of a single-currency environment in the euro area triggered a critical mass of demand for cross-border trading in equities (see above). In this way, EMU can be seen as a catalyst for integration/consolidation that has, however, been mainly driven by attempts to exploit economies of scale amid more global phenomena such as increased capital flows, technological advances, more intense competition among traditional and non-traditional service providers etc. This global aspect is confirmed by similar integration/consolidation in securities trading infrastructure

outside of the euro area and notably in the United States.

7.5. THE IMPACT OF EMU ON THE BANKING SECTOR

One of the more anticipated effects of EMU on the euro-area financial sector was a rapid growth in cross-border retail banking and a wave of cross-border consolidation among banks at both wholesale and retail levels. However, the outcome was not as expected. Cross-border retail banking remains rather limited within the euro area. Meanwhile the initial wave of consolidation in the euro-area banking sector occurred almost exclusively within national borders. Indeed, there were more examples of cross-sector consolidation than cross-border consolidation, as a number of bancassurance groups came into existence. Accordingly, concentration ratios within the domestic banking systems of euro-area Member States have mostly slightly increased over recent years (Graphs I.7.8 and I.7.9).

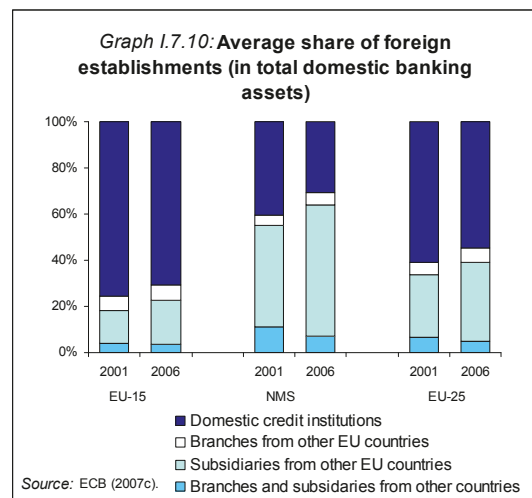
Various factors have been cited in explaining the preference for domestic consolidation among euro-area banks. First, the desired scale and scope economies could be exploited at lower cost and lower risk within domestic banking systems. Second, the existence of barriers – other than currency risk and relating to regulation, taxation, labour laws and cultural factors – made the business case for cross-border consolidation relatively less convincing. Third, there was a desire to acquire sufficient size at the domestic level before venturing into mergers and/or acquisitions at the euro-area level. Finally, there may have been tacit support among national authorities for the idea of creating national champions, as a means to limit the possibility that substantial parts of their domestic banking systems could become foreign-owned. Whether all of these factors played a significant role in the nature of banking consolidation in the early years of EMU is unclear, but their cumulative effect was to limit integration/consolidation among euro-area banks.



To the extent that integration/consolidation has been evident among euro-area banks, it has been concentrated in specific regions (e.g. the Benelux countries) or has crossed euro-area boundaries (e.g. Scandinavia and the Baltic countries, Austria and the countries of central and south-eastern Europe). More recently, there has been renewed merger and acquisition activity involving banks from the more established EU Member States. Among the more notable examples is the merger of UK-based Abbey National with Banco Santander of Spain in 2005, the acquisition of the Netherlands-based ABN AMRO by a consortium of the UK-based Royal Bank of Scotland, Banco Santander and Belgian-based Fortis Bank in 2007. It has been suggested that this more recent pick-up in cross-border consolidation reflects the extent to which concentration in domestic banking systems has reached levels that might impinge on competition.

A growing cross-border presence among euro-area banks is also evident in the evolution of their branch and subsidiary structures (Graph I.7.10). While the share of assets held by euro-area banks on cross-border basis remains relatively low, it has been rising in recent years with more assets held in their subsidiaries than in their branches. After a slow start, the pace of cross-border integration and consolidation in the EU banking system has accelerated in recent years. Between 2001 and 2006, the average share of branches and subsidiaries from other EU countries in total domestic banking assets has increased from 20.5 % to 26.6 % for the "old" EU Member States, while the respective figure for the "new" Member States increased from 50.4 % to 62.4 %.⁽⁸²⁾

While there is no discernible pattern related to EMU in the merger and acquisition activity of banks, recent analysis of the bilateral foreign assets and liabilities of banks suggest a clear euro-related effect.⁽⁸³⁾ Using BIS data for banks in the OECD countries during the periods 1995–1998 and 1999–2005, a positive and significant impact of the euro on bilateral financial linkages has been found. This effect is stronger and more robust for banks' foreign assets than for their foreign liabilities. The result for bank foreign assets is found to be robust against the inclusion of different sets of explanatory variables, although it is smaller – but still significant – when restricting the sample to the EU countries only. The result is less robust for bank foreign liabilities. In terms of the potentially offsetting effects of lower transaction costs and reduced diversification potential inside the euro area, the results support the dominance of the transaction costs effect, in particular for banks' foreign assets.



There are now 46 EU banking groups – from a total of 8,000 banks – with significant holdings of cross-border assets and liabilities.⁽⁸⁴⁾ However, these cross-border banks hold more than 68% of the total assets of the EU banking sector.⁽⁸⁵⁾ These cross-border banks operate in a multi-jurisdictional environment and often on a basis where their operational and legal structures diverge significantly. The need to interact with multiple national supervisors can create important deadweight costs for these cross-border banks, particularly if inconsistencies in national prudential frameworks imply duplication in reporting or inefficient use of capital. Moreover, the cross-border banks have corresponding cross-border exposures and are likely to share common exposures to shocks from pan EU financial markets in which they operate. Given the potential for inefficiency and systemic stability risk relating to any inadequacies in the prudential framework and crisis management procedures at the EU level, there is a crucial need to ensure adequate co-operation among national supervisors in crisis prevention, management and resolution.

⁽⁸²⁾ See ECB (2007c).

⁽⁸³⁾ See Blank and Buch (2007).

⁽⁸⁴⁾ These figures refer to the ESCB Banking Supervision Committee's (BSC) biannual survey of banking groups with significant cross-border activity, which was conducted for the years 2001, 2003 and 2005. The next survey with 2007 figures is forthcoming.

⁽⁸⁵⁾ Of these banks, 16 groups could be labelled the "key cross-border players" in the EU: they hold at least 25% of their EU assets outside their home country and were present in at least 25% (i.e. six) of the other 24 Member States. See ECB (2007c).

7.6. PROMOTING FURTHER FINANCIAL INTEGRATION IN EMU

In reviewing progress in financial integration since 1999, it is evident that integration is more advanced in those market segments where the impact of the euro has been accommodated by the existence of common definitions, conventions and infrastructures. In the other market segments, the elimination of currency risk implied by the euro has spurred integration but has also revealed the significance of other barriers linked either to national differences in regulation, taxation and legal frameworks or to more fundamental factors such as distance, culture and language. The first set of barriers is more relevant in explaining differential rates of progress in market integration at the wholesale level. The wholesale market segments most affected by such barriers are those involving collateralised transactions, where there is a need to transfer ownership of securities across national borders. Meanwhile, more fundamental barriers can explain the generally slow pace of integration in retail market segments, where national preferences are reflected in consumer protection laws that have proven very difficult to harmonise even in minor respects. With the impact of the euro now largely exhausted, these remaining barriers have become the priority for action at both the EU and national levels.

The main blueprint for creating a common regulatory framework for the EU financial sector has been the Financial Services Action Plan (FSAP) 1999-2005. The launch of the FSAP coincided with the third stage of EMU and the launch of the euro and so reinforced the impetus for financial integration in the EU. The original FSAP comprises 42 legislative and non-legislative measures, applying to a wide range of financial activities at both wholesale and retail levels.⁽⁸⁶⁾ While the focus of the FSAP may appear somewhat scattered, the main measures can clearly be aligned with the main functions of a modern and developed financial system – for example by improving the inter-operability of

national clearing and settlement systems (Communications on clearing and settlement), establishing common rules for integrated securities and derivatives markets (the Market in Financial Instruments Directive), facilitating the raising of capital on an EU-wide basis (the Directive on Prospectuses), ensuring legal certainty in the cross-border use of collateral (the Directives on Settlement Finality and Financial Collateral Arrangements), setting common standards for financial reporting (the Regulation on International Accounting Standards), promoting investor confidence and market integrity (Directive on Market Manipulation) and promoting the creation of a Single Payments Market Capital (the Directive on Payments services in the internal market).⁽⁸⁷⁾

The FSAP was almost fully implemented at EU level by the 2005 deadline and the Member States are now in the process of transposing the legislative measures into national law. Rates of transposition vary by measure and by Member State, but it is clear that substantial progress has been made in putting a common regulatory framework in place. A greater concern is the number of national discretions that have been retained within the legislative measures and the tendency for Member States to over-implement measures (i.e. gold-plating). If deviations from the legislation agreed at EU level become excessive in the process of national transposition, there is an obvious risk that the common regulatory framework provided by the FSAP will not be sufficiently effective in promoting an integrated EU financial market. For this reason, timely and consistent implementation of the FSAP has become a main priority in EU financial services policy (see section 4.1).

Implementation of the FSAP has implied a major effort from financial-market participants and has resulted in a degree of “regulatory fatigue”. In following on from the FSAP, the Commission White Paper on Financial services policy 2005-2010 has avoided another a large-scale regulatory programme and focuses on implementation and enforcement of existing

⁽⁸⁶⁾ For further information on the FSAP, including a full list of measures and their transposition by Member States see: http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm

⁽⁸⁷⁾ See Jappelli and Pagano (2008) for a discussion of how regulatory reform led to financial integration, and how the latter spurs growth and investment.

regulation and on delivering targeted improvements in the existing regulatory and supervisory frameworks.⁽⁸⁸⁾ The targeted improvements in the existing frameworks are designed to help in closing the remaining gaps in the process of financial integration. Among the priority areas identified in the White Paper that are particularly relevant for EMU are:

- *Implementation of the Market in Financial Instruments Directive (MiFID)*

The MiFID, which came into effect on 1 November 2007, is a cornerstone of the EU financial integration process and establishes a common regulatory framework for financial trading and intermediation in the EU.⁽⁸⁹⁾ The key elements of the MiFID are strengthened rights for investment firms in providing services across the EU (based on a single authorisation process and high levels of home-state control) and free competition between securities exchanges and other non-exchange providers of equivalent services. Within this new more competitive environment, investment firms must comply with a range of organisational requirements relating, inter alia, to risk management, personal dealing by employees, outsourcing and conflicts of interest. A set of conduct-of-business rules will also apply to investment firms, relating mainly to the provision of information and advice to clients, to the (best) execution of client orders, and to the provision of inducements among firms and transaction reporting. Securities exchanges and equivalent service providers are required to provide greater price transparency.

The MiFID is expected to transform the structure of EU securities markets by encouraging cross-border competition among service providers based on high levels of market transparency and integrity. By lowering costs for issuers of and investor in securities, the MiFID will increase trading volumes and information flows and so facilitates the emergence of larger and more liquid capital markets. The MiFID will also act as a catalyst for innovation and structural change

in EU securities markets, notably by making full electronic trading more attractive. In these ways, the MiFID will further promote financial integration, not only raising the efficiency of securities markets but also increasing the possibilities for portfolio diversification and risk sharing in the relevant markets – both of which effects are specifically relevant for EMU (see sections 3.1 and 3.2). Some effects related to the MiFID are already evident. A range of new trading venues and services have already been announced, the quality of existing services is being improved and a further wave of consolidation among exchanges is underway.

Implementation of the MiFID is a significant challenge and, despite the threat of litigation in the European Court of Justice and “name-and-shame” efforts by the Commission, not all of the Member States have managed to meet the deadline of 1 November 2007. With this in mind, CESR has stated that investment firms must be allowed to operate freely in late-transposing Member States, while firms based in late-transposing Member States will have transitional arrangements. All Member States are expected to have transposed the MiFID by early 2008, but the Commission will need to monitor this situation in the context of broader efforts to ensure timely and consistent implementation of the FSAP measures (see Chapter III. 2)

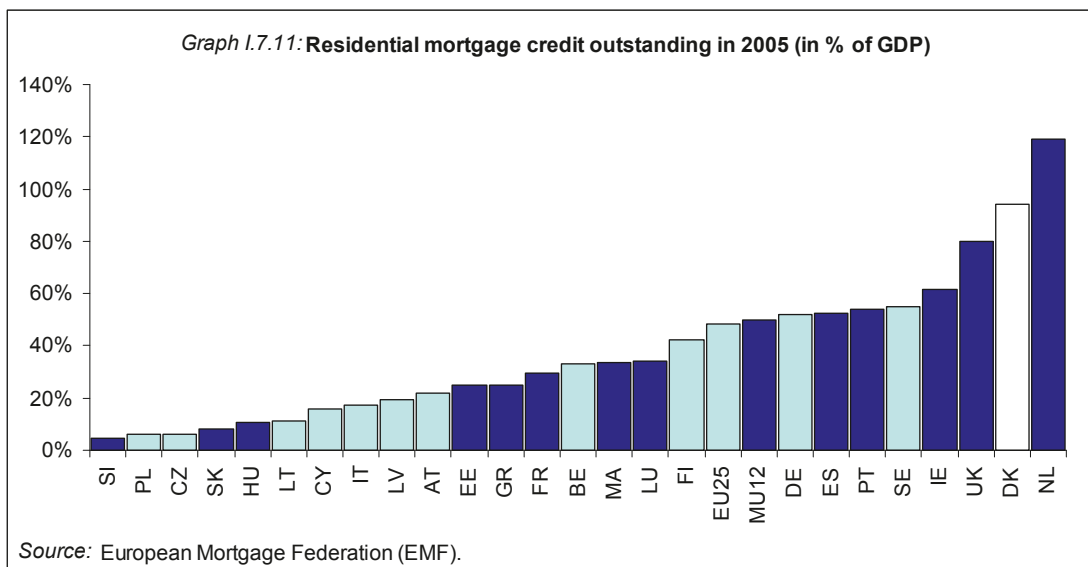
- *Integration of clearing and settlement industry*

Fragmentation in the EU market for post-trading services (i.e. clearing and settlement) limits progress in integrating securities markets and particularly the market for equities. Accordingly, significant progress in integration in this market segment is essential to the success of MiFID. The EU clearing and settlement industry became a focus of policy with the publication of two reports by the Giovannini Group in 2001 and 2003 respectively.⁽⁹⁰⁾ These reports highlighted significant cost differentials between the clearing and settlement of cross-border and domestic

⁽⁸⁸⁾ See European Commission (2005b).

⁽⁸⁹⁾ The MiFID replaces the Investment Services Directive of 1993, extending its coverage and bringing its provisions more in line with the functioning of a modern financial system.

⁽⁹⁰⁾ The Giovannini Group is a group of capital-market experts, under the chairmanship of Alberto Giovannini, which advises the European Commission on matters relating to financial integration.



securities transactions. These cost differentials were linked to a set of barriers to integration in the EU clearing and settlement industry that relate to national differences in technical specifications, market practices, taxation and legal frameworks. The removal of the so-called Giovannini barriers is seen as a prerequisite for efficient integration/consolidation.

Progress in integrating/consolidating the EU clearing and settlement infrastructure is also being driven by the implementation of the MiFID at the trading level, by agreement on industry-sponsored code of conduct (covering price transparency/comparability, access/interoperability and unbundling of services/segregation of accounts) and by the (possible) adoption of common regulatory standards proposed by the European system of central banks (ESCB) and the Committee of European Securities Regulators (CESR). A further driver of integration/consolidation in the EU clearing and settlement industry, which is more euro-area specific, is the creation of TARGET2-Securities (T2S) as single settlement platform by the ECB. While the platform will provide multi-currency services, the main rationale for the project is to provide a more efficient settlement infrastructure for the euro area.

- *Integration of retail markets for mortgages*

EU mortgage markets have been identified as another priority for action. Outstanding

residential mortgage credits represented close to 50% of GDP in both the EU and the euro area, although there are wide variations across Member States (ranging from less than 20% of GDP in Italy to nearly 120% of GDP in the Netherlands, see Graph I.7.11). Efficient mortgage markets are central to a modern financial system at both the wholesale and the retail level and impact positively on macroeconomic performance via implications for re-financing, housing equity withdrawal, reverse mortgages etc. Efficient and integrated mortgage markets can also be expected to support a smoother functioning of EMU via wider opportunities for income smoothing and improvements in monetary policy transmission (see Chapter III.2). In December 2007, the Commission's White Paper on Mortgage Credit Markets highlighted importance of facilitating to cross-border funding and supply of mortgage credit, increasing diversity, improving consumer confidence, and facilitating customer mobility for the competitiveness and efficiency of EU mortgage credit markets. The White Paper presented a range of policy options that will be further developed in close cooperation with all stakeholders and based on cost-benefit analysis.⁽⁹¹⁾

⁽⁹¹⁾ European Commission (2007f)

- *Creation of a Single Market for Payments*

Improving the efficiency of retail payments is a further priority in delivering the benefits of financial integration and is of particular relevance to EMU. As the functioning of the internal market is still impeded by fragmented nationally based payment systems, which are estimated to cost around 2–3 % of GDP. The Directive on payment services in the internal market establishes the modern and harmonised legal framework necessary for the creation of an integrated payment market which would enable electronic payment within the EU – in particular credit transfer, direct debit and card payments – to become as easy, efficient, and secure as domestic payments within a Member State payments to become more quickly and easily throughout the whole EU. In doing so, this directive provides the legal foundation to make the Single Euro Payments Area (SEPA) possible. The SEPA, which will eliminate differences in the euro area between national and cross-border retail payments. The SEPA is a natural complement to the use of the euro as a single currency and is strongly supported by the Eurosystem. It is expected that banks will be able to make the first SEPA products available starting 1 January 2008, and are aiming to make SEPA a reality for everyone by the end of 2010.

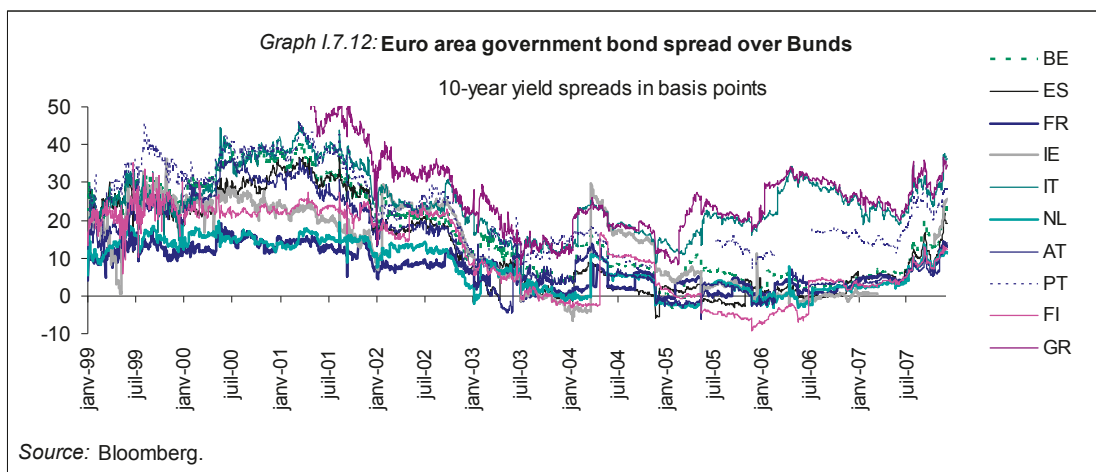
- *Improved functioning of euro-denominated government bond markets*

One area of importance for EMU, which was not identified in the White Paper, is improved functioning of the euro-denominated government

bond market. On the basis of both economic and market measures, this market can be classified as highly integrated. The price of the various different national issues has been highly convergent since the introduction of the euro, even though the spread of euro-area sovereign issuers over German bonds has again increased recently (Graph I.7.12). Holdings of different national issues are well diversified across euro-area investors and this large euro-area investor base allows national issues to be bought and sold without significantly interfering with price. On closer inspection, however, it is clear that the market could be more efficiently integrated – particularly from the supply side.

Fragmentation in the supply of euro-denominated government bonds reflects the unique construction of EMU, where there is a single monetary policy but responsibility for fiscal policy remains at the national level. Each Member State is responsible for the management of its own public finances, including the issuance and management of public debt. However, fragmentation in supply has meant that the euro-denominated government bond market cannot compete with the corresponding US and Japanese markets in terms of liquidity. Recent studies⁽⁹²⁾ have highlighted the inefficiency implied by this market fragmentation, citing as evidence relatively low levels of turnover in the cash market and the migration of liquidity to the derivatives markets based predominantly on the German bund. These studies have argued for

⁽⁹²⁾ See Dunne *et al.* (2006) and Persaud (2006).



further reforms to improve the functioning of the market via changes in trading arrangements and issuance practices.

An efficient and liquid government bond market is essential in providing the euro area with a modern and developed financial system, providing a risk-free asset class and a benchmark for pricing other higher risk assets. In this way, it provides the basis for a diversified financial structure, facilitating the financial system in performing its essential functions of allocating resources, intermediating savings to investment and managing risks.

An efficient and liquid government bond market is also important in making the euro area an attractive location for investment and in allowing the euro to play the role of international currency. For these reasons, it is essential to address any remaining shortcomings in the efficiency of the euro-area government bond market (See Chapter III.2).

8. CATCHING-UP WITHIN THE EURO AREA

8.1. INTRODUCTION

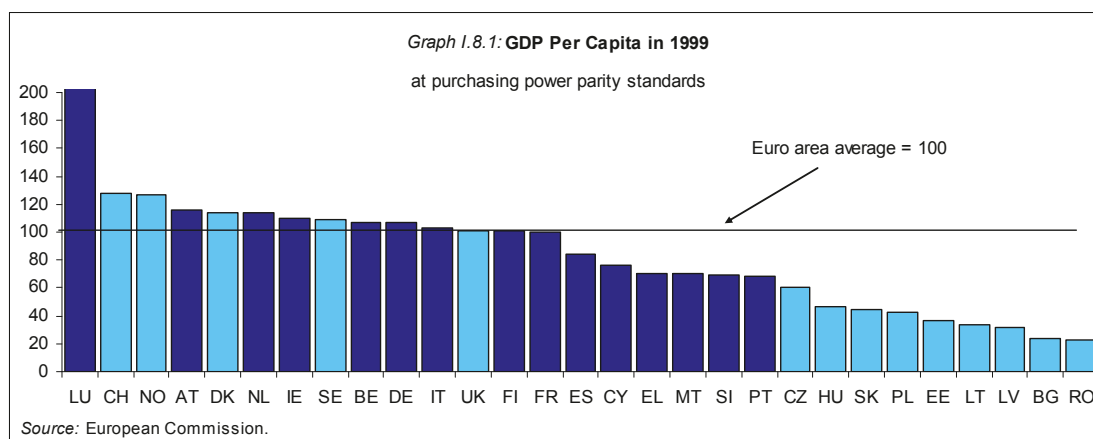
When the single currency was launched, the per capita income levels across countries in the euro area differed significantly. Among the countries that joined the euro area in 1999 and 2001, four (Spain, Ireland, Greece and Portugal) were still considered to be "cohesion countries", i.e. countries that qualified for structural support from EU funds so as to speed up their convergence to EU per capita income levels. By the same token, the EU countries that have acceded the euro area recently (Malta, Cyprus and Slovenia), are also considered as catching-up economies.

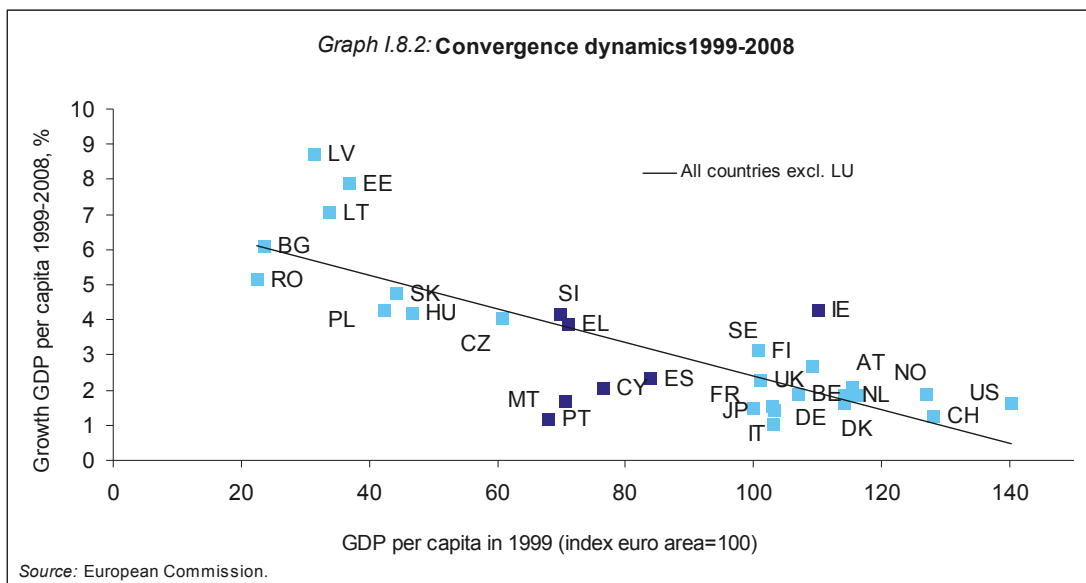
This chapter provides evidence that EMU has been a driver of real convergence. A strong process of growth, based on the mobilisation of labour and capital resources and building on earlier nominal convergence prior to, and consolidated within, EMU, has contributed to a relatively strong pace of catching-up among the majority of catching-up countries, with Portugal being notable exception. The successful catching-up countries pursued policies geared to harnessing the benefits opened up by the reductions in risk premia, financial market integration and budgetary consolidation. However, there are risks attached to the sustainability of the housing-driven growth processes in several of these countries, not least since the efficiency of capital allocation associated with it is questionable.

Given the very short time the most recently acceded countries have spent in EMU, this chapter will mostly focus on the experience of Spain, Ireland, Greece and Portugal. The first section presents some stylised facts pertaining to the catching-up process in EMU. The next section applies standard growth accounting techniques to determine the relative contributions of capital, labour and technology to the observed catching-up (and falling-behind) processes in the euro area. The following sections look at the contributions of general and country-specific shocks and policies, including the effects of the fall of risk premia and the role played by fiscal policy. The final section provides a more elaborate comparison of the cases of Spain and Portugal, which in spite of their geographical proximity and other similarities are found to have fared very differently.

8.2. THE STYLISED FACTS OF CONVERGENCE

Measured in purchasing parity standards (PPS), the 1999 GDP per capita (GDPpc) levels in Greece, Spain, Cyprus, Malta, Portugal and Slovenia were 71, 84, 77, 71, 68 and 70% of the euro area average, respectively (Graph I.8.1). At that stage Ireland's GDPpc already stood at 110% of the euro area average. During the ten first years of EMU, Greece and Spain, along with Cyprus and Slovenia, have shortened the distance with the euro area, although at different speeds. In none of them the catching-up process has been completed. In Spain, now the richest of the four "cohesion" countries aside from Ireland, GDPpc in PPS is still at about 94% of the euro





area, followed by Greece (90%), Slovenia (84%) and Cyprus (83%). In contrast, the Portuguese and Maltese relative income stalled at 66% and 70%, respectively, of the euro area average (Graph I.8.2). Portugal thus behaved in a similar way as a number of "core" euro area countries that have also been lagging behind the euro area average. Although, at 103%, the relative GDPpc recorded in Italy in 1999 was comparable to that of Germany, France or Belgium, ten years later the figure had gone down to 91%. In sharp contrast, Ireland saw its income soar to about 133% of the euro area average.

There are similarities with the development of the Recently Acceded Member States (RAMS) to the European Union, where convergence is also taking place at different speeds.⁽⁹³⁾ During the last ten years or so, income has grown in relative terms by about 30 points in the Baltic countries and by 17 points in the Czech Republic, Slovenia and Slovakia.

Benchmarking the performance of the catching-up performance over the past ten years against that predicted by a simple regression (see Graph I.8.2) suggests that catching-up processes have been somewhat slower in EMU than

outside it, even when considering differences in the initial levels of GDPpc. But obviously more sophisticated approaches are required to set benchmarks for "appropriate" convergence. In this respect, the extended neoclassical growth framework predicts that growth depends on the relationship between the initial output of a country, y , and its steady-state or 'target' level, y^* , which, in turn, depends on government policies and household behaviour with respect to savings, work, and fertility. For given determinants of y^* , the growth rate varies inversely with y (conditional convergence), while, given y , growth varies directly with y^* . Overall, changes in the steady-state income would explain why the catching up process has accelerated in some countries and apparently reversed in others. Government policies influencing growth include fiscal policies, in particular the tax mix and the composition of public expenditures, and monetary policy, as well as institutional choices (Barro 1990 and 1997, Barro and Sala-i-Martin 1992 and 1995, Kneller, Bleaney and Gemmell 1999, and Chalk and Tanzi 2002, and the references therein). Therefore, growth may be relatively sluggish even if the initial level of output is low if the steady-state GDPpc is also comparatively low.

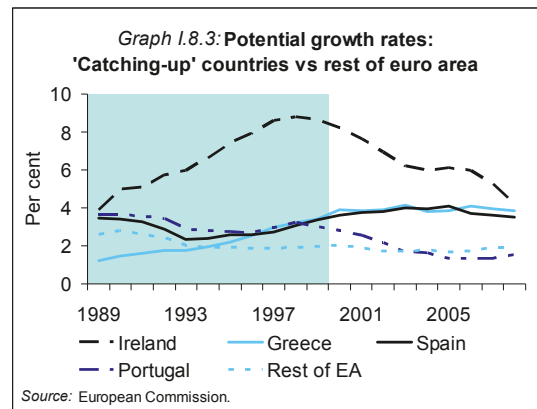
Some of the factors that might have raised the steady-state income and/or the speed of adjustment in catching-up countries are EMU-specific, such as the fall of risk premia or the

⁽⁹³⁾ Aside from Cyprus, Malta and Slovenia this group includes the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland and Slovakia, which acceded the EU in 2004, and Bulgaria and Romania, which joined in 2007.

fiscal policy framework conducive to fiscal consolidation and falling debt ratios. The price-stability oriented monetary policy of EMU might have affected long run growth, especially in traditionally high-inflation countries, since inflation expectations have become much lower and stable, which would allow economic agents to take intertemporal decisions over longer planning periods with less uncertainty. Also fiscal consolidation might be growth enhancing, provided it is of the right composition (see European Commission 2003 and 2007g). Expenditure-based fiscal consolidations may lower potential growth if they take place through trimming productive expenditure. Revenue-based fiscal consolidations are less detrimental for growth if they entail a shift to indirect taxes away from direct taxes on labour and/or capital, which are more distortionary. These EMU-specific factors have worked jointly with Cohesion policy in sustaining the process of convergence in Europe. The following sections examine these growth factors.

8.3. GROWTH ACCOUNTING EVIDENCE

The twenty years from 1989 to 2008 have been marked by strong divergences in potential growth both between the four cohesion countries and over time (Graph I.8.3). In the case of Ireland, this period has been characterised by a strong upward growth momentum over the first ten years (1989-1998) and a steady deceleration after the adoption of the single currency. Starting from potential growth rates of the order of 4%, Ireland experienced a more than doubling in its growth performance (to close to 9%) over the years to 1999, with a reversal to rates of 4% in the most recent years. Without doubt, the experience of Ireland constitutes a prime example of the speed with which income differentials can be closed if the correct framework conditions are set in place. In the cases of Spain and Greece, both have performed well over the period as a whole, with Greek potential growth rates almost doubling from around 2% over 1989-1998 to close to 4% for 1999-2008. The one disappointment came from Portugal, with a steady deterioration in its underlying growth rate from 3½ % in the early 1990's to an average of only 1½ % over recent years.



With regard to the sources of growth, all four countries had higher contributions from labour and capital compared with the rest of the Euro area over the two ten-year periods, which are reported in Table I.8.1. This is not the case however for total factor productivity (TFP), on which only Ireland has consistently outperformed the rest of the euro area, with Greece having done so only over the period 1999-2008. The Spanish and Portuguese TFP performances have been, consistently weak, with both countries recording TFP growth rates which were only marginally positive over the last ten years. These overall patterns are not necessarily at odds with the expected convergence pattern, if it is based on a greater supply of labour and capital, rather than on fast TFP growth. In the specific case of Spain the large contribution of labour also reflects the fall in structural unemployment as a result of a series of labour market reforms (Ayuso *et al.* 2005).

Table I.8.1:

Potential growth and its components							
	EA	EA4	EA8	IE	EL	ES	PT
Potential Growth, annual % change							
1989-1998	2,3	3,0	2,2	6,5	2,1	2,9	3,1
1999-2008	2,2	3,8	1,8	6,5	3,9	3,7	1,9
Contributions to Potential growth							
Labour							
1989-1998	0,2	0,8	0,1	1,3	0,4	1,0	0,3
1999-2008	0,5	1,6	0,3	1,9	0,6	2,0	0,7
Capital							
1989-1998	0,8	1,2	0,8	1,1	0,8	1,3	1,3
1999-2008	0,8	1,5	0,6	1,8	1,3	1,6	1,0
TFP							
1989-1998	1,3	1,1	1,3	3,8	0,8	0,6	1,4
1999-2008	0,8	0,7	0,9	2,6	1,9	0,1	0,2

Source: European Commission.

A priori EMU is expected to contribute to economic convergence via financial market integration, spurred by the elimination of

exchange risk premia. As stated in the convergence literature (see Barro and Sala i Martin 1995), financial constraints, which restrict international capital flows, are regarded as an important barrier for convergence of open economies. A regression analysis reported in Table I.8.2 indeed shows that the responsiveness of investment of the four countries under review to economic fundamentals has increased, as indicated by the positive sign of the gap of capital productivity and capital cost interacted with a EURO dummy.⁽⁹⁴⁾ As a result, with the launch of the euro the difference in the elasticity of investment to fundamentals has disappeared. Therefore, it is not surprising to see a rising contribution of capital to growth of formerly less financially integrated economies when the prospects for EMU became concrete after signing the Maastricht treaty at the beginning of the 1990s. The cross border holdings of assets indeed increased considerably in the case of Spain and Portugal from low levels and also from the mid 1990s in the case of Greece. Investment in these countries has indeed soared. This has led to an asset boom, especially in the housing market, which is likely to unwind at some point – it being driven largely by one-off factors, including the fall in risk premia.

8.4. THE RISK PREMIUM SHOCK

Catching-up countries have traditionally recorded large and persistent inflation differentials with the euro area. For instance, at the end of the eighties, the inflation rates in Greece, Spain and Portugal were 14%, 7% and 13%, respectively, compared with about 4% in the euro area (and Ireland). Ten years later, inflation rates had gone down to 1¾ % in Ireland, 2½ % in Greece and 2¼ % in Spain and Portugal, compared with 1.1 % in the euro area. Therefore, although the inflation differentials with the euro area average have persisted in the EA4 group, the inflation rates are overall much lower nowadays than in the nineties.

⁽⁹⁴⁾ Dummy variable with zero before 1999 and 1 from 1999 onwards.

Table I.8.2:
Explaining the investment-capital stock ratio

Explanatory variable	Coefficient	t-Statistic
Constant term	-0,016	- 5,2 ***
Catch-up x (marginal product of capital - user cost of capital)	0,120	7,4 ***
Catch-up x (marginal product of capital - user cost of capital) x euro	0,014	5,0 ***
Catch-up x lagged dependent variable	0,494	7,6 ***
Catch-up x output gap	0,040	2,4 **
Rest OECD x (marginal product of capital - user cost of capital)	0,138	10,6 ***
Rest OECD x euro x (marginal product of capital - user cost of capital)	-0,001	- 0,9 **
Rest OECD x lagged dependent variable	0,641	19,2 ***
Rest OECD x output gap	0,061	5,3 ***
R-squared	0,960	

Note: Panel Least Squares estimates, 1988-2006, 16 OECD countries
 Catch-up: ES, GR, IR, PT, Rest OECD: OECD without ES, GR, IR, PT
 euro = dummy, 0 before 1999 and 1 since 1999
 *** and ** denote significance at 1% and 5% level, respectively
 Source: European Commission.

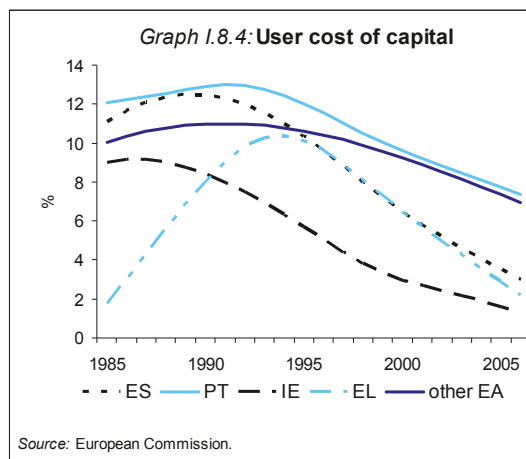
The reduction in inflation may have had a direct impact on growth but it is more likely that the main transmission has been through interest rates.⁽⁹⁵⁾ In line with the Maastricht criteria, the fight against inflation during the nineties led to a steady reduction of nominal interest rates and, concomitantly, in real interest rates (see Chapter I.2). Indeed the fall was particularly significant in high-inflation countries.⁽⁹⁶⁾ In parallel with the fall in risk premia, capital costs in the EA4 have sharply fallen and except in Spain are now below to level in the rest of the euro area (Graph I.8.4).⁽⁹⁷⁾ Intertemporal analysis, such as discussed by Fagan and Gaspar (2007), predict a strong and positive reaction of initial output to risk premia followed by a slow adjustment towards the new equilibrium, with households savings falling as percentage of GDP. This has indeed been the experience in most EMU countries, especially in catching-up economies. Consequently, private consumption

⁽⁹⁵⁾ A survey carried by Briault (1995) and empirical work by Barro (1997) suggest that, after controlling for other factors, there is no evidence of a positive relationship between inflation and economic growth.

⁽⁹⁶⁾ For instance, real interest rates fell in Spain by almost 600 basis points (bp) until 1998 and by other 260bp after 1999. Similarly, real interest rates fell in Ireland by 460bp during the nineties and by other 100bp to date. Albeit with a certain lag, real interest rates also fell in Greece, by more than 800bp between 1998 and 2006.

⁽⁹⁷⁾ Real capital cost are defined as the sum of real interest rates (nominal long term interest rate minus investment price inflation) plus depreciation multiplied with the ratio of investment to GDP prices. This is a standard measure for the user cost of capital which is used in investment regressions

levels rose on a permanent basis. These effects were magnified in countries where the fall in interest rates came with a substantial financial market liberalisation, as was the case in Spain, with market rates significantly falling and credit conditions easing without precedent in their recent economic history.⁽⁹⁸⁾



As discussed in European Commission (2006a), and Martinez-Mongay, Maza and Yaniz (2007), the demand shock induced by a reduction in the risk premium has led to an additional stimulus due to an increase in prices in the non-tradable sector. The housing market was particularly affected: a property worth 100 in 1995 would have been sold at almost 300 in Spain and 500 Ireland in 2006⁽⁹⁹⁾, as compared to 90, 220 and 180 in Germany, France and Italy, respectively. This sharp increase in prices came with a surge in residential construction, which multiplied by a factor three in both countries.⁽¹⁰⁰⁾ Equity markets also boomed. The Spanish IBEX 35, which was around 3,500 points in 1995, had jumped by about 380% in 2006.⁽¹⁰¹⁾ Analogously, the Irish ISEQ index grew by 400%. As suggested by developments in the stock exchange market indices, equity markets have also been buoyant in Greece, where the

⁽⁹⁸⁾ Interestingly, in Italy, which also recorded a sizeable reduction of risk premia since 1989 (by about 500bp), the reduction in market rates was much lower
⁽⁹⁹⁾ See Yaniz (2005) for a more detailed discussion about the Spanish housing market.
⁽¹⁰⁰⁾ As a result, the number of dwellings built in Spain and Ireland in the recent past is higher than in Germany, France and Italy taken together.
⁽¹⁰¹⁾ See www.bolsamadrid.es.

Athens index rose from 100 in 1995 to 480 in 2006. Comparatively, developments in the indices of the three largest countries in the euro area are much more modest (280% the German DAX 30 and the French CAC 40, and 260% the Italian MIB 30). In line with sluggish economic activity over most of the EMU period, the corresponding index in Portugal grew by "only" 220%.

8.5. THE ROLE OF PUBLIC FINANCES

Since the launch of the single currency public finances have been on a consolidating path in Spain and, to a lesser extent, in Greece (Table I.8.3). In Spain the public deficit posted about 3% of GDP in 1998 and turned into a surplus exceeding 1% of GDP ten years later. Meanwhile the Greek budget deficit was cut from 4% in 1998 to below 3% at present, albeit after having peaked at 8% of GDP in 2004. By contrast, although currently declining, the deficit in Portugal has persistently been hovering above 3% for most of the EMU period. In Ireland, where fiscal consolidation had already started in the late eighties, the fiscal surplus fell somewhat. In parallel the size of the public sector, as measured by the share of total expenditures in GDP, was reduced in Greece and Spain (though mostly due to falling interest payments), but expanded in Portugal and remained broadly constant in Ireland.

Along with the size of the public sector, the composition of expenditures and the tax mix can be relevant for growth. Notably investment in human, knowledge and physical capital affects long-run growth, providing scope for fiscal policy to play a role in the catching up process (Barro 1990, Barro and Sala-i-Martin 1992 and 1995, and Mendoza *et al.* 1997). As well, certain taxes would be detrimental -- i.e. those taxes that affect human, physical and knowledge capital decisions. Direct taxes on both labour and capital, as well as other taxes, such as social contributions, that enter the labour-tax wedge are considered as typically distortionary, unlike indirect taxes. Higher surpluses could be used to finance cuts in distortionary taxes and/or higher productive expenditures at a later stage.

As shown in Table I.8.3., fiscal consolidation in Ireland (in the nineties) and Greece (in the EMU decade) took place on the expenditure side, while government receipts fell in terms of GDP. Fiscal consolidation in Spain has been achieved through both expenditure restraint and higher revenues. In parallel (Table I.8.3), the relative weight of less-distorting taxes in the total tax burden remained broadly unaltered in Spain and Portugal between 1999 and 2008. In Ireland, however, part of the tax burden was shifted away from tax on income to less distorting indirect taxes, the share of which increased from about 40% in 1999 to around 41% in 2008. By contrast, indirect taxes in Greece grew by less than the total tax burden, thus moving towards a more distorting tax-mix.

Table I.8.3:

Fiscal consolidation and the size of the public sector

Budget balance ^{(1),(2)}			
	1989	1999	2008 ⁽³⁾
Euro area	-4,3	-1,4	-0,9
Ireland	-2,6	2,6	-0,2
Greece	-12,4	-3,2	-2,1
Spain	-3,5	-1,4	1,3
Portugal	-2,9	-2,7	-2,6
Revenues ⁽²⁾			
	1989	1999	2008 ⁽³⁾
Euro area	45,6 ⁽⁴⁾	46,7	45,3
Ireland	35,8	36,6	36,3
Greece	27,0	42,1	40,0
Spain	37,3	38,4	40,0
Portugal	31,4	40,5	42,8
Expenditures ⁽²⁾			
	1989	1999	2008 ⁽³⁾
Euro area	50,6 ⁽⁴⁾	48,1	46,2
Ireland	42,5	34,0	36,6
Greece	41,4	45,2	42,1
Spain	36,8	39,9	38,7
Portugal	33,6	43,2	45,4

(1) Deficits (-) or surpluses(+)

(2) In % of GDP

(3) Autumn forecasts 2007

(4) Data from 1995

Source: European Commission.

Meanwhile, the share of public investment in total expenditures has exhibited an upwards trend in Ireland, Greece and Spain, while its share in GDP also increased, except in Greece. However, in the case of Portugal, public investment has declined measured in terms of both total expenditures and GDP. Developments in public investment have been influenced by the Community budget through capital transfers from the regional, social and cohesion funds

(Table I.8.4). Overall, EU transfers from the structural funds have amounted to 25% to 50% of public investment carried in the catching-up countries since the early nineties. Therefore, by raising public investment, and depending on how the additional national funds associated to such transfers have been financed, EU transfers may have had a significant positive impact on growth.

Table I.8.4:

The tax mix, public investment and structural funds

	Indirect taxes ⁽¹⁾		Public investment ⁽³⁾		Structural funds	
	1999	2008 ⁽²⁾	1999	2008 ⁽²⁾	89-98 ⁽⁴⁾	99-05 ⁽⁴⁾
Euro area	32,1	33,0	2,5	2,6	-	-
Ireland	40,3	41,0	3,1	4,4	1,7	0,6
Greece	39,1	37,3	3,2	3,0	2,3	1,7
Spain	33,5	32,9	3,3	4,0	0,7	1,1
Portugal	41,0	41,2	4,1	2,2	2,4	2,2

(1) In % of total tax revenues

(2) 2007 Autumn forecasts

(3) In % of GDP

(4) Annual averages over the period in % of GDP

Source: European Commission.

Owing to fiscal consolidation and falling interest rates, debt levels as a share of GDP have generally fallen in most euro area countries since 1999 as compared with the previous decade. According to Chalk and Tanzi (2002) debt affects long-run growth through six channels. First, high public debt puts pressure on interest rates, which reduces private investment and thus growth. Second, high debt increases public deficits through higher interest expenditures, which eventually will raise taxes and lower investment and growth. Third, if the total debt ratio is constant, a rising public debt crowds out private debt, which makes private accumulation and growth to fall. Fourth, preferential tax treatment of public debt would lead to a sub-optimal allocation of investment, which negatively affects growth. Fifth, compulsory acquisition of public debt would distort the functioning of financial markets lowering growth. Finally, rising public debt may be associated to shorter debt maturity, which complicates the working of monetary policy and may lead to an inadequate policy mix. Chalk and Tanzi (2002) indeed find evidence of a positive relationship between debt and interest rates, which would imply a negative effect on investment and, thus, on growth.

Debt-to-GDP ratios have declined significantly in Ireland, Greece and Spain, but, in contrast, rose in Portugal during the last decade

(Table I.8.5). The reductions recorded in those three catching up countries are among the largest in the euro area. The reduction of debt levels in combination with the fall in risk premia led to a significant reduction of interest payments, which was used for different purposes in different countries. In Ireland, the fall in interest payments (about 1½ % of GDP) almost entirely mirrors the increase in public investment, while, in Spain, 1/4 of the 2% of GDP reduction was devoted to finance public investment. Similarly, in Greece the substantial reduction of interest payments, about 4% of GDP, was almost fully saved. By contrast, the debt increase recorded in Portugal practically offset the potential impact of the fall in risk premia on interest payments, which remained broadly constant in terms of GDP.

Table I.8.5:
Public debt and its burden (% of GDP)

	Debt ratios			Interest payments		
	1989	1999	2008	1989	1999	2008
Euro area	55,4	71,8	65,2	4,7	4,1	2,9
Ireland	99,2	48,0	26,9	7,7	2,4	0,9
Greece	65,7	102,5	91,1	6,8	7,7	4,2
Spain	40,9	61,5	34,6	3,8	3,5	1,5
Portugal	53,6	51,4	64,7	5,7	3,0	2,9

Source: European Commission.

8.6. A CLOSER LOOK AT SPAIN AND PORTUGAL

Although Portugal and Spain shared many institutional and economic features at the start of EMU, these economies exhibited a strikingly different performance, with Spain growing strongly and Portugal being in a protracted slump. Since such differences in economic performance might be linked to EMU-specific causes and/or different policy responses, a closer look at both economies may provide interesting lessons for other catching-up EU economies in the run up to euro adoption.

8.6.1. Similar, yet drifting apart

Both countries joined the EU in 1986, entered the Exchange-Rate Mechanism (ERM) of the European Monetary System (EMS) some years later, and adopted the euro on 1 January 1999. Since the early 1990s both economies embarked on a strong disinflation process and recorded a sharp and significant fall of risk premia. Already

since the late eighties or early nineties, and in line with general international trends, the financial markets of Spain and Portugal underwent rapid and effective international integration, coupled with a decisive domestic liberalisation, which significantly eased financial conditions. Moreover, both economies implemented strong fiscal consolidation to meet the fiscal Maastricht criteria by 1998.

By the early 2000s, both countries had outperformed most of their EU partners, with Portugal having done even better than Spain. The Portuguese GDP had grown at an annual average rate of 3¾ % between the late eighties and the late nineties, which compares with about 3½ % in Spain. On the other hand, Spain created jobs at a faster rate than Portugal. The relative economic performance of both countries has radically changed since then. Portugal has grown by just about 1½ %, compared with 3¾ % in Spain. Employment growth has also been much higher in Spain (3½ %) than in Portugal (¾ %). As a result, the unemployment rate went below 8% in Spain, but rose to the same figure from a lower level in Portugal.

In both countries output strongly reacted strongly to the reduction of the risk premia in a context of financial market integration and liberalisation (Fagan and Gaspar 2007). The adjustment path was largely determined by the adjustment of the private sector, especially households. Household savings fell in terms of GDP in both Spain and Portugal during the nineties, which boosted consumption on a permanent basis. Therefore, growth in both countries was fully driven by domestic demand. Financial integration and domestic liberalisation brought capital costs down, and, consequently, investment played an important role in sustaining domestic demand, with construction, and especially residential investment, being particularly buoyant.

Although the credit impulse was of a comparable magnitude in both countries, the expansion was much faster in Portugal, where annual credit growth attained 30% in the late nineties, as compared to up to maximum 20% in Spain. Moreover, the bulk of this credit went to finance household spending (including housing) in Portugal, while in Spain, the credit impulse was almost equally shared by households and the

corporate sector. As might be expected, the domestic expansion led to a worsening of the current account in both countries, but it was much faster in Portugal, where the external deficit was close to 10% of GDP already in the late nineties while it remained less than half that figure in Spain. The fall in remittances from nationals working abroad and the increase in the external-debt service are also behind this faster deterioration of the external account in Portugal. Since 1999, credit growth in Spain accelerated to an annual rate of 30% by 2006, while its current account continued worsening to close 10% of GDP due to a combination of dynamic domestic demand and deteriorating competitiveness. In contrast, credit growth decelerated in Portugal to below 10%, while despite a protracted economic downturn its current account remained at about 10% of GDP.

8.6.2. Some tentative explanations

A number of elements may help explain this difference in performance, notably: (i) the euro conversion rates at EMU entry, (ii) fiscal policies and fiscal institutions, (iii) the functioning of labour and product markets, and (iv) the adjustment in some key sectors.

The conversion rates of legacy currencies to the euro were irrevocably fixed based on the market exchange rate at the last trading day of 1998. Given the similarities between the Spanish and Portuguese economic histories at that point it is interesting to compare their respective conversion rates. By the early nineties, 128 Spanish pesetas were equivalent to 1 euro. The parity was fixed at about 166 pesetas per euro, which represents a devaluation of about 30%. Interestingly, the bulk of it took place over less than one year, between the late 1992 and the mid-1993. The parity of the Portuguese escudo was fixed at about 200, which compares with the nominal exchange rate of 179 escudos per euro prevailing in 1991, and represents a devaluation of around 12%. Due also to fast wage increases, the real effective exchange rate (REER) appreciated by about 15% in Portugal in the 1990s. In contrast, the REER of Spain depreciated by a comparable amount until the mid-nineties. Since then, both countries have recorded comparable competitiveness losses. However, the REER of Spain is at present just at

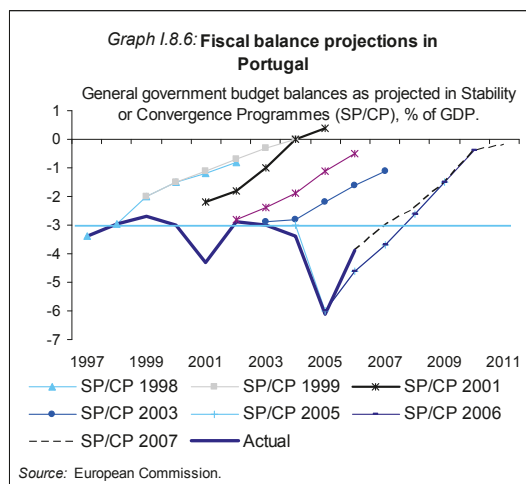
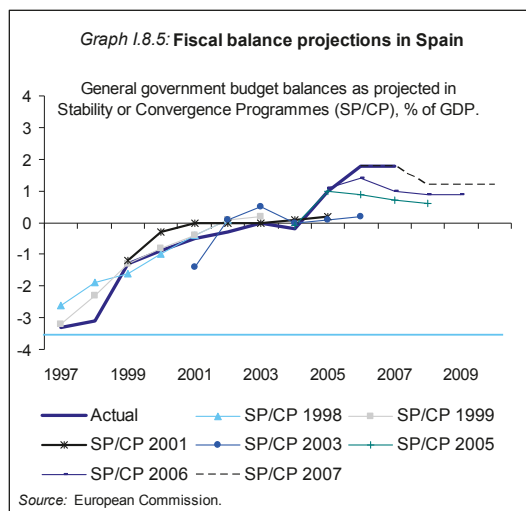
the level it posted at the beginning of the nineties, while that of Portugal is more than 20% higher. This suggests that both countries were exposed to very different exchange rate start-up shocks associated with euro area entry. While this is by itself not a satisfactory explanation (not least since the comparative position of the Spanish current account deteriorated rather than improved since the euro adoption), it does suggest that the two countries did face different starting conditions in external trade when entering the euro area.

Spain and Portugal both embarked on fiscal consolidation during the nineties. By 1993, the Portuguese fiscal deficit stood at about 7½% of GDP, one percentage point higher than in Spain. By 1998, both countries had reduced their deficits to close 3% of GDP. However, fiscal consolidation was sustained in Spain, with the general government budget posting a surplus of 2% of GDP in 2007, while the fiscal position deteriorated in Portugal with the general government deficit peaking at 6% in 2005. As measured by the changes in the cyclically-adjusted primary balance net of one-offs, the fiscal policy stance was pro-cyclical in Portugal between 1998 and 2001, while it had been overall neutral in Spain. Sustained and credible fiscal consolidation in Spain provided room for the private sector to borrow without overburdening the current account. In contrast, fiscal profligacy in Portugal led to a steady increase in public debt, thus squeezing the corporate sector.

This different fiscal policy behaviour reflects a failure to improve fiscal governance in Portugal, while, already since the mid-nineties, Spain had implemented substantial changes in the budgetary process and put in place the adequate fiscal institutions to tackle the deficit bias and a void pro-cyclical behaviour. This is reflected by differences in the budgetary planning in the medium term. Judged by the successive updates of their stability programmes, the medium-term budgetary plans have remained a moving target in Portugal whereas the medium-term targets have been consistently achieved and were even outperformed in Spain (Graphs I.8.5 and I.8.6). In addition, Portugal has frequently reverted to one-offs, in some years by up to 2% of GDP, in order to keep the deficit below the 3% reference

value, while one-offs have been negligible in Spain.

According to the assessment by the European Commission (2006c), Spain had made stronger progress than Portugal in terms of fiscal governance, including the commitment capacity and power of the Minister of Finances, as well as the introduction of a rules-based budgetary process and control. Although Portugal is currently taking steps in the direction of controlling expenditures and improving the long-term sustainability of public finances, its budgetary process still needs a reform towards more transparent rules and enforcement, as well as a stronger role of the Finances Minister.



The expansionary stance of fiscal policy in Portugal is likely to have added fuel the initial expansion and also precipitated the subsequent

downturn by prompting a boom-bust cycle. Even so, simulations by Gaspar and St. Aubyn (2008) suggest that the fiscal mistakes would explain just a small part of the differences between both countries in terms of their economic performance in EMU. Even if such simulations may not take full account of the negative effects of large deficits on expectations, the results point to the need to consider other factors as well.

As shown in the growth accounting exercise above, the most striking differences between Spain and Portugal lie in the growth contribution of labour. Indeed, the contribution of TFP to potential growth has been negligible in both countries in the EMU decade, and, compared with the pre-EMU decade, the contribution of capital has increased by just $\frac{1}{4}$ of a percentage point in Spain and decreased by the same amount in Portugal. However, labour has contributed 2 percentage points in Spain, but just $\frac{3}{4}$ of a percentage point in Portugal, thus largely explaining growth differentials between both countries. The growth contribution of labour in Spain is almost equally accounted for by the growing working-age population, higher participation and lower unemployment, while unemployment has contributed negatively in Portugal and the working-age population did not increase significantly. While the rise in participation in Spain is largely due to socio-demographic factors, notably the massive entry of women in the labour market, and the expanding working-age population mainly reflects massive immigration, the fall in unemployment is likely policy-induced. Specifically, as discussed above, the Spanish unemployment rate was reduced thanks to a series of labour market reforms implemented since the late eighties. According to the OECD's synthetic indicators of stringency of employment protection legislation (EPL), EPL reforms have been much more far-reaching in Spain than in Portugal, especially for temporary contracts (see Scarpetta 2007) -- although Portugal has been catching up in recent years. This adds to Portugal having one of the most restrictive regulatory frameworks of product markets in the OECD, on which it also scores significantly worse than Spain (see Scarpetta 2007). The combination of a more flexible EPL and a large positive labour supply shock seem to be behind the unprecedented wage moderation recorded in

Spain in the 2000s, where, overall, real wages have lagged (weak) productivity growth. In contrast, real wages per unit of output in Portugal outpaced the euro area average. Inadequate wage behaviour would partially explain the faster deterioration of competitiveness in Portugal,

Finally, other structural factors, such as the size and specialisation pattern of the economy, could also help understand the differences between Spain and Portugal. First, since the Portuguese economy is smaller and more open than that of Spain has exposed it more to the less favourable external developments in the beginning of this decade. Second, the specialisation pattern of the Portuguese economy was still largely based on low-skill intensive industries such as textiles, footwear and apparel – concentrated in its Northern region. These sectors had to undergo significant restructuring following the integration of large low wage countries in the world trade system (e.g. China and India), a process that induced significant labour market adjustment costs and is likely to have had non-negligible macroeconomic effects. Indeed, over the past decade, the North of Portugal has been clearly the worst performing region of the country, both in terms of output per capita and unemployment dynamics. The magnitude of such (unavoidable) adjustment process has been unparalleled in Spain. More recently, however, the Spanish housing sector has been contracting, and it remains to be seen how smoothly the economy will adjust to this shock in an environment of financial turmoil and soaring commodity prices.

8.7. CONCLUDING REMARKS

The EMU years can be characterised as displaying a typical convergence pattern, with the catching-up phenomenon heavily geared towards a greater use of the factors of production, labour and capital. All four of the catching-up countries in EMU (almost) from the outset posted potential growth contributions from labour and capital equal to or in excess of the average for the other euro area countries. Whilst this pattern of growth was accompanied by relatively disappointing TFP performances in Spain and Portugal, the outturns for Ireland, and to a lesser extent Greece, showed that gains in

efficiency could also be part of the secular convergence trend.

In the specific case of Spain, the large contribution of labour is partially explained by the fall in structural unemployment based on successive labour market reforms over the 1990s. With respect to Ireland, strong productivity gains were achieved through the absorption of technology brought about by large FDI inflows into the country, as well as by intensive investment in human capital. Greece also managed to produce strong productivity growth during the EMU years. The benefits of EMU with regard to catching-up have been reinforced by EU cohesion policy. Structural and Cohesion Funds have contributed to the convergence of the four catching-up countries by supporting public investment targeted at growth enhancing factors, thereby facilitating their structural adjustment within EMU. The big disappointment amongst the group was undoubtedly the marked deterioration in the outturn for the Portuguese economy, especially over the last decade, with its potential growth rates now pointing to divergence, rather than convergence, relative to the living standards in the rest of the Euro area.

One of the direct ways in which a monetary union can contribute to economic convergence is via financial market integration and the elimination of the exchange risk premium. In particular, the fight against inflation during the nineties led to much lower and more stable inflation expectations in many traditionally high inflation countries and consequently to a steady reduction in nominal interest rates and, concomitantly, in real rates. In parallel, capital costs fell in the group of catching up countries to levels below those seen in the rest of the euro area. This combination of low real interest rates and easier credit conditions fed directly into domestic asset markets, as reflected in the buoyant conditions experienced in housing and equity markets, most notably Ireland and Spain.

Another supportive feature of EMU was undoubtedly the strong incentives for fiscal consolidation and compositional shifts in the budget (i.e. towards non-distortionary taxes and productive expenditures) in the run-up phase. Debt levels measured in terms of GDP recorded a significant fall in Ireland, Greece and Spain,

leading to significant reductions in the burden of interest payments. However, debt levels increased in Portugal, offsetting the potential impact of the fall in risk premia, with overall interest payments, as a share of GDP, remaining broadly constant over the period as a whole.

Overall, a closer look at the Spanish and Portuguese cases confirms that implementing right economic policies is paramount for a successful catching up. The successful fiscal consolidation, underpinned by solid fiscal institutions and continuous improvements in the regulatory framework of labour and product markets in Spain contrast sharply with procyclical policies, high deficit biases and worse regulatory frameworks in Portugal.

9. TRENDS IN THE INTERNATIONAL ROLE OF THE EURO

9.1. INTRODUCTION

From the outset, the launch of EMU triggered a vivid debate about the potential for the euro to challenge the role of the US dollar as a global currency. On balance, there was a consensus that the euro would be well-received internationally but would emerge as international currency only gradually and not rival the US dollar's dominant position. Those who argued that the dominant role of the dollar would not diminish, or that the euro would at most become an important regional currency, emphasised *inter alia* the size and strength of the US economy, its broad, deep and liquid financial markets, and the dollar's incumbency advantages stemming from the existence of network externalities, whereby a good or service becomes more valuable as more people use it (Frankel 1995). Others instead predicted that the euro eventually would develop into an international currency whose importance and use would be commensurate to that of the US dollar (e.g. Bergsten 1997, and Alogoskoufis and Portes 1997). These predictions were based on factors such as the relative size of the euro-area economy and its important trade links across the world, as well as a conviction that EMU would stimulate the integration, growth and development of euro-area financial markets while providing for monetary stability. Some also argued that the euro area would maintain a much sounder external position than the US and pointed to the needs and opportunities for portfolio diversification.

Against this backdrop, this chapter reviews the evolving use of the euro beyond the borders of the euro area. It looks in some detail into the trends of the international use of the euro since its introduction in 1999, first by function and then by region. It confirms that the euro quickly emerged as the second most important international currency and that it continues to consolidate this position. The prominence of the euro extends to most of the different functions that a global currency can play in its use by private sector participants and official institutions. For instance, the euro is extensively used in international debt markets and its role as an invoicing and reserve currency has been growing gradually. But almost 10 years after its

introduction, the internationalisation of the euro is characterised by a strong regional and institutional pattern: with the exception of some functions (notably its use as an international financial currency), the international use of the euro is concentrated in countries neighbouring the euro area, in other countries with special economic and political links to the EU, and in transactions directly involving euro-area economic agents. The US dollar remains the first international currency in many areas – partly because of inertial forces that create a bias in favour of the incumbent international currency – but its dominance has declined.

9.2. TRENDS IN THE INTERNATIONAL USE OF THE EURO BY FUNCTION

An international currency can be defined as one that is used outside its home country as a unit of account, medium of exchange or store of value. Table I.9.1, based on Kenen (1983), provides a simple decomposition of the various functions of an international currency, distinguishing among private and public sector usage. In practice, there are close relationships and interactions between the different functions of an international currency. Even so, from the decomposition can be inferred that it is useful to distinguish the use of the euro in international financial markets, foreign exchange markets, trade and as a parallel currency, along with its official foreign use. ⁽¹⁰²⁾

9.2.1. International debt security markets

The euro quickly established its role as a store of value in international financial markets and now accounts for a substantial share of the outstanding stock of international debt securities, both in long-term maturities (bonds and notes) and in short-term maturities (money market instruments). Compared to the combined share of the euro's legacy currencies, the euro gained noticeably in this market segment after the launch of EMU, reflecting the opportunities created by more integrated, deeper and more

⁽¹⁰²⁾ This chapter draws partly on data and results from the ECB's annual reviews of the international role of the euro.

Table I.9.1:

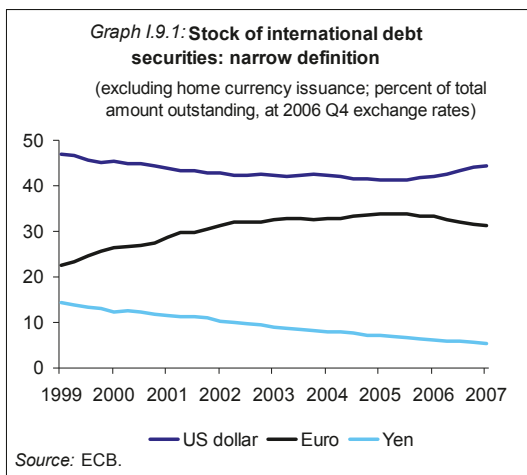
Functions of an international currency

Function	Private sector	Public sector
Unit of account	Invoicing of international trade; quotation of international commodity, prices; denomination of international financial transactions; parallel currency	Anchor or reference currency in exchange rate regimes
Medium of exchange	Vehicle currency in the foreign exchange markets; settlement of international financial transactions; parallel currency	Official interventions in the foreign exchange markets; official financial flows
Store of value	Holding of international financial assets; parallel currency	Foreign exchange reserve currency

Source: European Commission.

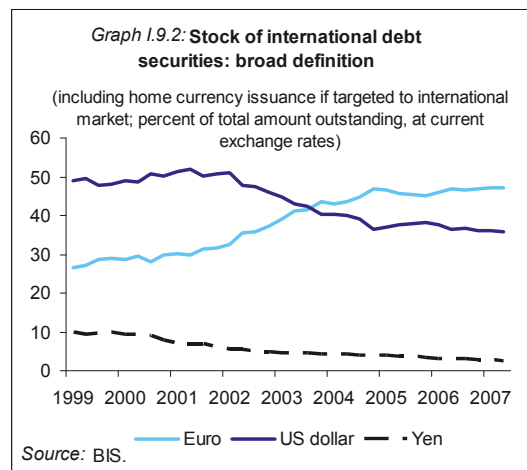
liquid capital markets in the euro area as well as portfolio diversification considerations.

Using a narrow concept of international issuance, which includes only issuance in a currency other than the currency in which the borrower resides, the euro's share in the stock of international debt securities increased from about 22% in early 1999 to 32% at the end of 2006, which is still below the 44% share of the US dollar (see Graph I.9.1).⁽¹⁰³⁾



However, on a broad measure, which includes home-currency issuance provided that it targets the international financial market, the amount of outstanding euro-denominated international debt securities actually surpassed that of the US dollar

in 2004.⁽¹⁰⁴⁾ Since then, the gap between the euro share and the dollar share has continued to widen, with the euro accounting in June 2007 for 48% of the world's stock of international debt securities, compared to 36% for the dollar (see Graph I.9.2).



9.2.2. International loan and deposit markets

The shares of major currencies in international loans and deposits have been rather stable since 1999 but the prominence of the euro varies with respect to different segments. In cross-border transactions dominated in a currency that was neither the home currency of the borrower nor that of the lender, the euro's share at the end of 2006 stood at around 18% in both the international loan and the international deposit markets. In contrast, whenever one of the counterparts to a loan or deposit is located in the

⁽¹⁰³⁾The data just mentioned were measured at constant (fourth quarter of 2006) exchange rates to remove valuation effects from changes in exchange rates. The data at market exchange rates tell a broadly similar story, however.

⁽¹⁰⁴⁾For a discussion of the implications of alternative definitions of the international issuance of debt securities, see ECB (2007d), Box 1, pp. 13-14.

euro area, the euro features prominently. For instance, since 1999 the euro has been the second currency of denomination of loans by euro-area banks to non-bank borrowers outside the euro area, with a share of 36% by end-2006 (compared to 45% for the US dollar). Most of these loans are extended to developed country borrowers, located mainly in the UK. The euro was the main currency of denomination of loans made by euro-area banks to non-bank borrowers in developing and emerging Europe, Africa and the Middle-East, and Asia and the Pacific. In particular, developing Europe is playing a growing role in attracting euro-denominated loans, confirming the increasingly dominant role of the euro in neighbouring countries.

9.2.3. Foreign exchange markets

The most actively traded currencies in foreign exchange markets are those that are used as vehicle currencies, i.e. as a means to exchange one relatively illiquid currency into another. Bilateral trades in illiquid currencies often carry high transactions costs and it is more cost efficient to go via a currency with low transactions costs as a medium of exchange. In the foreign exchange vehicle function, the US dollar's incumbency advantages are particularly strong and so it has the highest turnover in foreign exchange markets.

According to the latest Triennial Survey of the Bank for International Settlements (BIS), published in late 2007, the currency composition of turnover in traditional foreign exchange markets has changed only slightly over the past three years. The euro was the second most actively traded currency in foreign exchange markets worldwide, after the US dollar and ahead of the Japanese yen and the pound sterling (see Table I.9.2). The euro was on one side in 37% of all foreign exchange transactions, a stabilisation compared to 2004 and a slight decrease of about one-half of a percentage point when compared with the 2001 survey. Due mainly to valuation effects, the shares of the other two main currencies – the US dollar and the Japanese yen – continued to fall compared to 2004 and 2001.

The euro continued to be traded predominantly against the US dollar in global markets. The

euro/US dollar currency pair represented 74% of foreign exchange turnover involving the euro. The euro/US dollar currency pair also remained the most actively traded pair, accounting for 27% of global turnover. The combined market share of other currency pairs involving the euro remained small (around 10% of global turnover, compared with more than 60% for the US dollar), suggesting a limited role for the euro as a vehicle currency in foreign exchange markets. Overall, the 2007 BIS Triennial Survey confirms that the US dollar remains the principal international currency in traditional foreign exchange markets, but its dominance has declined since 2001.

Table I.9.2:
Currency distribution of foreign exchange market turnover
Percentage shares of average daily turnover in April ⁽¹⁾

Currency	US dollar	Euro ⁽²⁾	Japanese yen	Pound sterling
1992	82,0	39,6	23,4	13,6
1995	83,3	36,1	24,1	9,4
1998	87,3	30,1	20,2	11,0
2001	90,3	37,6	22,7	13,2
2004	88,7	37,2	20,3	16,9
2007	86,3	37,0	16,5	15,0

Notes: ⁽¹⁾ Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%; ⁽²⁾ Before 1999, it refers to the Deutsche mark.

Source: BIS Triennial Central Bank Survey 2007.

In the market for over-the-counter (OTC) foreign exchange derivatives, 14% of the reported turnover took place in contracts denominated in euros, compared to 80% in US dollars. Within the interest rate segment of the OTC derivatives market, however, the euro was the leading currency. The single currency accounted for 39% of global daily average turnover compared to 32% for the US dollar.

9.2.4. International trade

A consequence of the euro area's importance in world trade is that the euro is used extensively to invoice and settle international trade transactions between the euro-area and third countries and, in some cases, also between third countries.

The role of the euro as a trade invoicing or settlement currency by *euro-area countries* has risen notably since 2000 (ECB 2007d). During the period mid-2005 to end 2006, the use of the

euro for euro-area exports of goods levelled off while it declined for euro-area imports of goods. However, this partly reflected rising energy and commodity prices, which are traditionally quoted in US dollars. Euro invoicing of exports and imports of services, which is not affected by the increase in commodity prices, continued to show an upward trend.

Table I.9.3:
Share in international trade invoicing/settlement (1)

	Exports of goods		Imports of goods	
	EUR	USD	EUR	USD
Euro area countries (2)				
Trade outside euro area	56,7	31,5	50,7	40,2
Trade outside EU	49,7	44,0	35,2	55,7
Non-euro area EU countries (3)	58,8	20,9	57,4	25,2
EU candidate countries (4)	61,1	34,3	63,3	33,3
Africa (5)	23,3	75,5	52,9	n.a
Asia (6)	5,3	80,1	5,2	76,4
North America				
Canada	n.a	70,0	n.a	n.a
US	n.a	n.a	2,0	90,3

Notes: (1) Simple averages of shares of countries in the group.
 Data for the most recent available year, mostly in the period 2003-06.

(2) Excluding Austria, Finland and Ireland.

(3) Cyprus, Czech Rep, Denmark, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, UK.

(4) Bulgaria, Croatia, Romania, Turkey.

(5) Algeria, Morocco, South Africa, Tunisia

(6) Indonesia, Japan, South Korea, Malaysia, Thailand.

Source: ECB (2007d) and Kamps (2006).

In most of the euro-area countries for which data are available, the share of euro-denominated merchandise exports was above 55% (see Table I.9.3), exceeding 60% in some cases (Germany, Luxembourg, Spain). With some exceptions, similarly high euro shares are observed in exports of services. For imports (of both goods and services), the shares range from 35% and 55% (ECB 2007d). The euro share in the euro area's trade with countries outside the EU is somewhat lower than its share in trade with EU countries outside the euro area, but it is still dominant (about 50% for exports and 35% for imports). The divergence between currency denomination in extra-EU exports and imports is partly explained by the prevalence of the US dollar in the denomination of imports of energy and raw materials.

The US dollar remains the major currency of denomination of *trade between third parties*, while the euro is only beginning to emerge in this role. Indeed, the use of the euro in international trade between third countries is

limited beyond its use in countries with institutional links to the EU. However, the euro is the dominant currency of invoicing and settlement in non-euro-area EU Member States as well as in EU membership candidate countries, with its shares exceeding the trade shares of these countries with the euro area (ECB 2007d). Again, this suggests a strong regional and institutional pattern in the international use of the euro.

In *international commodity markets* the impact of the euro has so far been very limited. The US dollar is the established standard currency for the quotation, invoicing and settlement of oil and other key commodities. This reflects tradition and inertia but also, as underlined by the theories of trade invoicing, the advantages of having a single "numéraire" for the quotation of homogeneous goods such as oil and other basic commodities.⁽¹⁰⁵⁾ While oil and other commodity producers have from time to time declared their intention to denominate their goods in other currencies⁽¹⁰⁶⁾, those factors have supported the maintenance of the status quo, i.e. the predominant use of the dollar as the numéraire for commodities. Furthermore, with a few exceptions, the EU is not an important producer of primary products. Some authors see nonetheless some potential role for the euro in the quotation of gas prices given the more regionally segmented nature of this market, the importance of the EU as a consumer of Russian and Northern African gas reserves and EU efforts to create an integrated regional gas market (Papaioannou and Portes 2008).

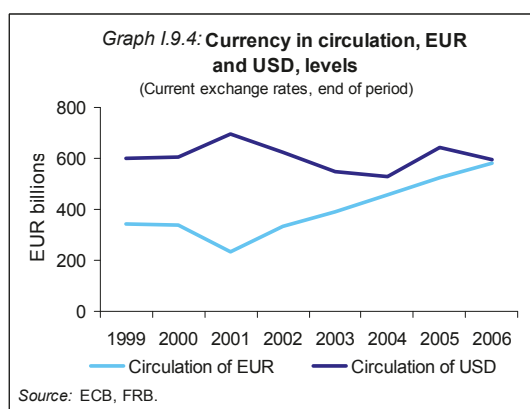
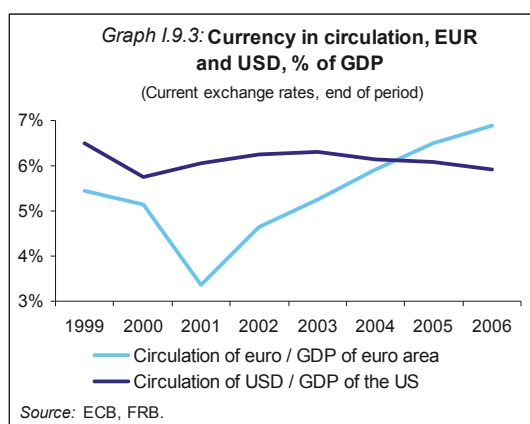
9.2.5. Parallel currency in third countries

Residents in several emerging, transition and developing countries hold part of their domestic financial assets in foreign currency-denominated assets, such as cash and bank deposits.

⁽¹⁰⁵⁾ See, for example, McKinnon (1979) and Goldberg and Tille (2005)

⁽¹⁰⁶⁾ This tends to happen in particular during periods of dollar weakness. For example, in late 2007, the decline in the dollar led some OPEC producers to consider quoting oil in other currencies. See *Financial Times* (19 November 2007).

Due to the stability and wide acceptance of the single currency, *euro banknotes* circulate in a large number of countries outside the euro area, particularly in its neighbourhood. Since 2002, the ratio of euro banknotes in circulation to euro-area nominal GDP has followed a continuous upward trend and is now higher than the equivalent ratio for the United States (see Graph I.9.3). In fact, in 2006, the value of euro banknotes in circulation nearly overtook that of dollar banknotes (Graph I.9.4).



Nevertheless, the share of total cash circulating abroad is estimated to be lower for the euro than for the dollar. While difficult to measure accurately, the amount of US dollar banknotes circulating abroad is estimated at about USD 450 billion, which compares to an estimated value of euro banknotes held by non-residents of around 100 billion (ECB 2007d). As noted by the ECB, these estimates imply much higher per capita holdings of cash by euro-area residents (USD 1,600) than by US residents (USD 870), which reflects the fact that banknotes have greater importance inside the euro area than inside the

US as a means of payment and a store of value.⁽¹⁰⁷⁾

The euro is also used significantly as currency of denomination of *domestic bank and deposits* in some countries outside the euro area, particularly in non-euro-area EU countries, the EU candidate countries and the Western Balkans (see below). Recent survey data (ECB 2007d) show that the share of the euro in the bank assets and liabilities of most of these countries is increasing. The credit boom being experienced by many of the recently acceded EU Member States is being accompanied by a significant increase in the share of foreign currency loans (mostly euro loans) in the banks (Darvas and Szapáry 2008). Some European countries outside the EU (notably Iceland) have also seen a marked increase in the share of domestic bank loans denominated in euros.⁽¹⁰⁸⁾

9.2.6. Official use of the euro

The internationalisation of a currency includes its official usage in foreign countries' monetary and exchange rate policies as an anchor currency (unit of account), foreign exchange reserve currency (store of value) and intervention currency (medium of exchange). The anchor function is particularly important for the internationalisation of a currency, because it has significant spillover effects on the use of the same currency in official foreign exchange reserves and in foreign exchange market interventions.

The euro plays an important role as an *anchor or reference currency* in the managed exchange rate regimes of about 40 countries (see Table I.9.4 for details). Most of these countries are geographically close to the euro area, including most non-euro-area EU Member States, or have special institutional arrangements with the EU, notably candidate countries, potential candidate countries and the countries of the CFA franc zone.

⁽¹⁰⁷⁾ The large implied gap between per capita holdings may also reflect an underestimation of euro cash circulating abroad, however.

⁽¹⁰⁸⁾ Papaioannou and Portes (2008) discuss the case of Iceland, which they refer to as "creeping euroisation".

Table I.9.4:
Countries and territories with exchange rate regimes linked to the euro
 (as of 1 January 2007)

Region	Exchange rate regimes	Countries/territories
European Union (non-euro area)	ERM II	Cyprus, Denmark, Estonia, Latvia, Lithuania, Malta, Slovakia
	Euro-based currency boards	Bulgaria
	Peg arrangements with fluctuation band based on the euro	Hungary
	Managed floating with the euro as reference currency	Czech Republic, Romania
	<i>Pro memoria:</i> Independent floating	Sweden, United Kingdom, Poland
Candidate and potential candidate countries	Unilateral euroisation	Montenegro
	Euro-based currency boards	Bosnia and Herzegovina
	Peg arrangements or managed floating with the euro as reference currency	Croatia, FYR Macedonia, Serbia
	<i>Pro memoria:</i> Independent floating	Albania, Turkey
Others	Euroisation	Republic of San Marino, Vatican City, Principality of Monaco, Saint-Pierre-et-Miquelon, Mayotte
	Unilateral euroisation	Andorra, Kosovo
	Peg arrangements based on the euro	CFA franc zone ⁽¹⁾ , French overseas territories, Cape Verde, Comoros
	Peg arrangements and managed floats based on the SDR and other currency baskets involving the euro (share of the euro)	Seychelles (37.7%), Russian ⁽²⁾ Federation (40%), Libya, Botswana, Morocco, Myanmar, Tunisia, Vanuatu

Notes : 1) WAEMU (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) and CAEMC (Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon).
 2) The euro share in Russia's operational basket was increased to 45% in February 2007.

Source: ECB, Review of the International Role of the Euro, June 2007.

Russia's currency is also pegged to a trade-weighted basket of currencies with a substantial weight of the euro.

The choice of denomination of *official foreign exchange reserves* depends inter alia on the country's exchange rate regime and anchor, the direction of trade flows and invoicing currency, the currency denomination of debt, and risk diversification strategies (Dooley *et al.* 1989; Eichengreen and Mathieson 2000). For the euro, as with the choice of anchor currency, these factors also tend to produce a strong regional bias in its use as a reserve currency.

The phenomenal accumulation of official foreign exchange reserves since the beginning of this decade is well-documented (see e.g. De Beaufort Wijnholds and Søndergaard 2007). By mid-2007, the stock of reported official foreign exchange reserves stood at USD 5.7 trillion. Reserve accumulation, particularly in emerging market and developing countries, has increased

substantially over the past years, while it has remained moderate in industrial countries. In reality, however, total reserve holdings are even higher as an increasing amount is held in sovereign wealth funds (SWF), which raises new issues (see Box I.9.1).

Full data on the currency breakdown of reserves is not available. The IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) data are the most comprehensive but they are only published at an aggregate level and only include reserves held by central banks that actually disclose the currency composition of their reserves to the IMF. This means that some major reserve accumulators, most notably in Asia including China, are not included in the COFER data.

Box 1.9.1: Sovereign Wealth Funds

Partly reflecting undervalued exchange rates, the accumulation of official reserves in recent years, in particular among developing and emerging market economies, has gone far beyond established benchmarks of reserve adequacy (see e.g. De Beaufort Wijnholds and Søndergaard, 2007). An increasing number of countries that have accumulated more reserves, e.g. by running a current account surplus, than what is necessary for intervention or balance-of-payments purposes have established separate Sovereign Wealth Funds (SWF) to manage those excess reserves. Today, more than 20 countries have such funds and others are considering establishing them (see Deutsche Bank, 2007).

While there is no universally accepted definition of SWF, they are, broadly speaking, government investment vehicles that are funded by commodity exports or foreign exchange assets, and which manage those assets separately from the official reserves of the monetary authorities. Their objective is often to seek higher expected returns, by tolerating higher risk in the portfolio, than under traditional official reserve management.

According to IMF estimates (see Johnson, 2007), the value of assets that SWF manage today amounts to USD 2-3 trillion and could rise to USD 10 trillion within five years, based on projected developments of current accounts. As such, the rise in SWF can be seen as a manifestation of the global imbalances that have plagued the international economy in the last several years. This compares to roughly USD 5.7 trillion accumulated in traditional foreign exchange reserves and an estimated USD 2 trillion in private hedge funds. The holdings of SWF currently appear to be fairly concentrated. By some estimates, five funds account for around 70% of total assets.

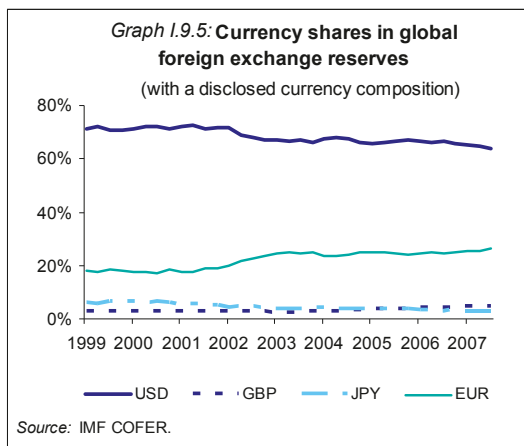
SWF fall into two broad categories. Commodity-funds are established through commodity exports and serve a variety of purposes, inter alia, stabilising fiscal and export revenues, and generating inter-generational saving. Non-commodity funds are generally established through asset transfers from official foreign exchange reserves. For some non-commodity exporters, particularly in Asia, large current account surpluses have permitted transfers of excess foreign exchange reserves into SWF. It is generally believed that approximately two-thirds of SWF assets are held by commodity funds while one-third is held by non-commodity funds.

Public disclosure of investment management objectives and strategies varies widely among SWF, but is rather limited. With a few exceptions, notably Norway's Government Pension Fund - Global, most SWF do not publish information about their investment strategies, assets or liabilities, let alone the currency composition of their balance sheets. Given their sometimes explicit objective to increase returns, on balance, their investments are likely to be more diversified than traditional reserves invested by central banks, both with respect to asset class and currency composition. For instance, Norway has decided to gradually increase the equity portion of the Government Pension Fund – Global to 60% from the previous 40% benchmark, and there are ongoing discussions whether to include real estate as a separate asset class. In September 2007, assets denominated in euro accounted for almost 40% of the Fund's total assets whereas the share of US dollar-denominated assets was just above 30%.

In February 2008, the Commission put forward a common approach to SWF based on the principles of greater transparency and good governance (European Commission 2008b), which was endorsed by the European Council in March 2008.

With these limitations in mind, the data indicate that by mid-2007, around 25½% of disclosed reserves were denominated in euros, up from around 18% in 1999 (see Graph I.9.5). In the same period, the dollar's share declined from 71% to 65%. There also appears to have been a general diversification away from the yen while the pound sterling now stands as the third largest reserve currency, although well behind the euro.

As noted by Masson (2007), the aggregate COFER data published by the IMF are more likely to underestimate than to overestimate the increase in the share of the euro in world reserves. This is because the share of countries that do not report the currency composition is much higher among developing countries than among industrial countries, because developing countries are known to hold on average a higher share of their reserves in euros than industrial countries and because they already account for about three fourths of global reserves.



The role of the euro as a reserve currency is most prominent in countries in the geographical neighbourhood of the euro area and in countries with an institutional link to the EU. The ECB (2007d) shows that in most EU neighbouring economies that disclose the currency composition of their reserves, the share of the euro ranges from 40% to 85%.

The idea that the diversification out of US dollars and into euros has been more pronounced among countries with close economic and institutional links to the euro area and less important in Asia, the Americas and countries with dollar pegs finds further support in Lim (2006). Lim argues

that "dollar zone" countries diversified out of yen (rather than US dollars) into euros, while countries neighbouring the euro area (or those with economic and institutional links) diversified out of US dollars and into euros. At the same time, while data show that the euro and the US dollar are dominant within their domains, in relative terms, the US dollar is more dominant in the "dollar zone" than is the euro within its domain.

Overall, therefore, the US dollar has comfortably retained its position as the main currency of denomination of global foreign exchange reserves but there has been a significant diversification towards the euro, and official data may underestimate the extent of that diversification. Moreover, the euro is already playing an important reserve currency role in the neighbourhood of the euro area.

9.3. REGIONAL PATTERNS

As noted in the previous section, the emergence of the euro as an international currency has not been happening to the same degree worldwide but has been more manifest, particularly for some functions, in certain regions neighbouring the euro area or with special links to it. The use of the euro is particularly notorious among many of the EU countries that remain outside the euro area, especially the new Member States. As discussed above, many of these countries use the euro as exchange rate anchor (normally as members of ERM II), as the dominant trade invoicing, international borrowing and reserve currency, and as parallel cash and domestic banking currency. Close economic and financial links with the euro area, EU membership and, in most cases, the prospect of euro area entry contribute to this.

This section provides an additional regional perspective on the international use of the euro by focusing on five non-EU regions, namely the Western Balkans and Turkey, the countries covered by the EU's neighbouring policy, Sub-Saharan Africa, Asia and Latin America.

9.3.1. The Western Balkans and Turkey ⁽¹⁰⁹⁾

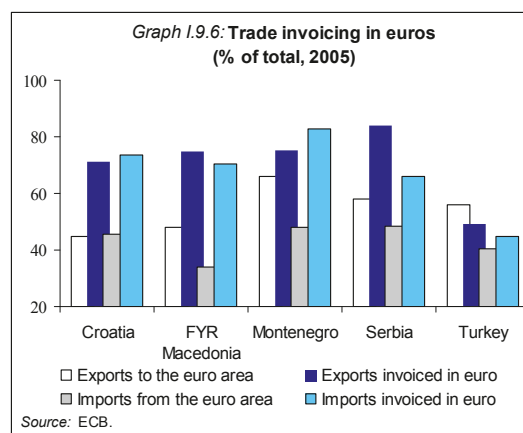
After the EU countries that are outside the euro area, *the Western Balkans* is the region in the world where the euro plays a more important role. All these economies show a high degree of "de facto" euroisation and many use the euro as external anchor, which is partially a legacy of the hyperinflation and financial crises that they experienced in the 1990's. These crises undermined confidence in domestic currencies and banks and resulted in a widespread domestic use of foreign currency, initially the Deutsche mark and, since its introduction, the euro. This situation, the fact of being small and open economies, their strong economic and institutional links with the EU and their prospect of further integration with the EU all argued in favour of adopting fixed exchange rate solutions based on the euro.

In the case of *Turkey*, there is not the same history of currency substitution and the use of the euro has been lower. Also, the larger size and relatively less open nature of its economy have made it less interested in using the euro as exchange rate anchor. But its close economic and institutional links with the EU, including the customs union, migration and tourism, are likely to encourage a wider use of the euro in the future, and there is evidence of a rising use of the euro as trade invoicing and financial currency.

With the EU accounting for about 60% or more of foreign trade in the Western Balkans and for about 50% in Turkey, the *use of the euro as trade invoicing currency* in all these countries is high and shows an upward trend.⁽¹¹⁰⁾ Available data for Croatia, FYR of Macedonia, Montenegro and Serbia show that the share of trade invoiced in euro is even higher than what the shares of trade with the euro area would suggest, ranging from 60% to over 80% (Graph I.9.6). In the case of Turkey, the euro accounts for the invoicing of about 50% of its exports and

about 40% of its imports (with an upward trend detectable in both cases since 2002).⁽¹¹¹⁾

A cursory look at the exchange rate arrangements in the Western Balkans shows that *the euro is widely used as exchange rate or monetary anchor* (see Table I.9.4). Montenegro and Kosovo use the euro as legal tender and Bosnia and Herzegovina has a euro-based currency board that has functioned smoothly since 1997. Croatia and FYR of Macedonia, for their part, peg "de facto" their currencies to the euro, although officially their exchange rates are managed floats. Albania and Serbia are the only countries in the region that have allowed their currencies to float more freely, as they have both moved towards an explicit inflation targeting regime. Reflecting the predominance of euro-based exchange rate regimes as well as the strong trade and financial links with the euro-area, central banks of the region hold large shares of their *foreign exchange reserves in euro-denominated assets*. As of the end of 2006, the euro share was 55% in Albania, 82% in FYR of Macedonia, 86% in Croatia, and nearly 100% in Bosnia-Herzegovina (reflecting its euro-based currency board arrangement).



Turkey, by contrast, has had since 2001 a floating *exchange rate*, combined since 2006 with a formal inflation targeting regime. The Turkish central bank however monitors closely developments in a real exchange rate index in which the euro and the dollar each carry a 50% weight. Data on the share of the euro in Turkey's

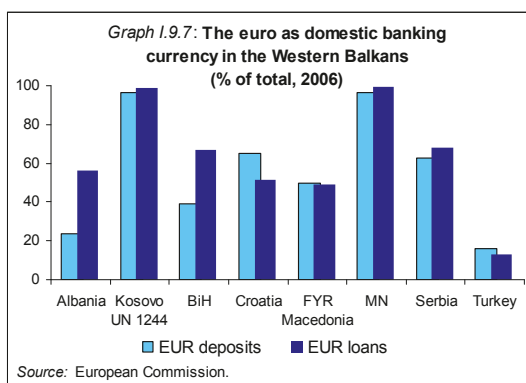
⁽¹⁰⁹⁾ The following Western Balkan countries are covered in this section: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic (FYR) of Macedonia, Montenegro, Serbia and Kosovo (UN 1244). All these countries, as well as Turkey, are either candidate or potential candidates for EU membership.

⁽¹¹⁰⁾ The strong inflow of FDI from the EU received by these countries in recent years may have also played a role.

⁽¹¹¹⁾ Kamps (2006).

foreign exchange reserves are not publicly available. However, official declarations in the past have suggested that it tends to exceed 50%.⁽¹¹²⁾

The *use of the euro as domestic financial currency* is widespread in the Western Balkans, partly reflecting the process of financial deepening and integration between the region and the euro area, but also inertia in currency substitution following the financial crises that shook the region in the 1990s. In 2006, about 60% of total deposits and 70% of total loans, on average, were denominated in, or indexed to, the euro in the economies of the region (Graph I.9.7). In most countries, bank deposits denominated in euros rose markedly in 2001, in the run-up to the cash change-over⁽¹¹³⁾, but they have shown a mild downward trend more recently. The share of euro-denominated and indexed loans, by contrast, has continued to rise in recent years in several countries, reflecting a strong and growing presence of banks from euro-area countries. They have been supporting credit growth in the form of euro denominated lending, also helped by an interest rate differential favouring lending in euro over domestic currencies.



In Turkey, the euro's share in foreign currency deposits and loans has shown an upward trend in recent years, reaching 39% and 33%, respectively, at the end of 2006. However, the

euro's overall role in bank deposits and assets is significantly smaller than in the Western Balkans (see Graph I.9.7), reflecting the lower weight of foreign currency deposits and loans in total bank deposits and loans. In fact, the share of foreign currency deposits and loans has declined markedly since the financial and currency crisis of 2001, reflecting progress with macroeconomic stabilisation as well as constraints on foreign currency lending to households in a context of rapid household credit growth (ECB 2007d).

Regarding the use of the euro as *currency of denomination for foreign debt*, available data show a growing share of euro-denominated debt in the total foreign debt of Western Balkan countries. This ratio stood at 45% in Croatia, 61% in FYR of Macedonia and 75% in Serbia in 2006. In Turkey, the dollar continues to be the main currency of denomination of foreign debt, accounting at the end of 2007 for about 56% of the central government external debt stock, but the euro's share has been rising in recent years, reaching about 30% at the end of that year (Undersecretariat of the Treasury of Turkey 2008).

Hard data on *the use of the euro as parallel cash* outside the euro area are sparse. However, surveys and other studies suggest a relatively widespread use of the euro as cash in the Western Balkans. The results obtained by Feige (2003) pointed to relatively high holdings of the deutsche mark cash in several Western Balkans immediately before the introduction of euro banknotes. Also, according to a survey conducted by the Austrian central bank since 1997⁽¹¹⁴⁾, households in the countries of former Yugoslavia have the highest volumes of foreign cash holdings among European transition economies, with the share of the euro being well above that of the dollar. In Turkey, the use of foreign currencies as parallel cash has been less widespread and, before the introduction of the euro, was dominated by the dollar. However, partial and anecdotal evidence suggest that geographical proximity, sizeable worker remittances from euro area countries and inflows from tourism may be favouring some replacement of dollar cash by euro cash.

⁽¹¹²⁾ See Erçel (2000).

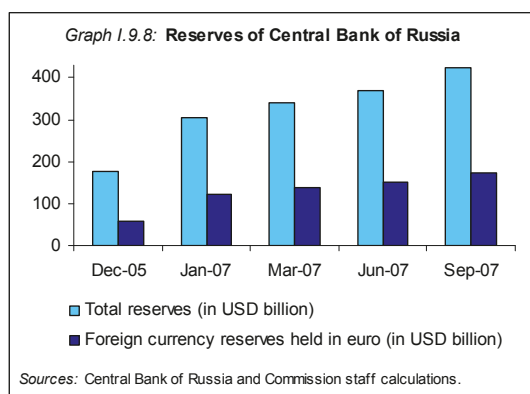
⁽¹¹³⁾ At that time, the authorities had encouraged households to deposit the foreign cash kept "under the mattress" into foreign currency accounts, rather than exchange it directly into new euro banknotes. See Padoa-Schioppa (2003).

⁽¹¹⁴⁾ See Backé *et al.* (2007).

9.3.2. EU neighbourhood countries

In the countries covered by the EU's neighbourhood policy – the three countries of the Caucasus, Ukraine, Moldova and the Northern Mediterranean countries – and Russia, despite geographical proximity to the euro area, the role of the euro has not surpassed that of the dollar. This partly reflects historical inertia, the advantages (in terms of liquidity and transaction costs) of using the dollar and the importance of energy exports in many of them. Nonetheless, strong trade, financial and migration links with the EU, portfolio diversification considerations, and a possible shift towards euro invoicing for gas exports could favour a more important use of the euro in the future.

Russia has become the third largest holder of *international reserves* in the world after China and Japan, and is also likely to be one of the largest holders of euro-denominated reserves. The reserves held by the Russian central bank reserves and the share of them held in euros has increased consistently in recent years (Graph I.9.8). By September 2007, the euro accounted for over 40% of its central bank's reserves.



The euro has also been playing an increasing role in the formulation of *Russia's exchange rate policy* since February 2005, when its central bank started targeting a currency basket including the US dollar and the euros with weights of, respectively, 90% and 10%. The euro share has been progressively increased to reach 45% in February 2007, which is broadly in line with the share of euro area in Russia's trade.

Regarding the currency of denomination of *trade invoicing*, about 86% of Russia's exports are

invoiced in US dollars. This partly reflects the predominance of oil and gas sector, which, as noted, uses the dollar as "numéraire". In recent gas supply contracts signed with Baltic countries, however, Gazprom (Russia's main gas conglomerate) has moved to euro invoicing, which might be indicative of a new trend.

Regarding the use of the euro as *financing currency*, Russia's outstanding external public debt is also mainly (about 80%) denominated in US dollars, while foreign borrowing by the private sector has also been mainly in dollars, including from euro-area banks. The same pattern is visible in portfolio investments made abroad by Russian residents, where the euro share was 4.6% against 91.6% in dollars at end-2005. In the Russian banking sector, the euro share in the currency composition of foreign assets and liabilities has increased somewhat in recent years, from 11% of total foreign assets in the beginning of 2004 to 16% in 2007. For foreign liabilities, the euro share is lower but is also growing. The parallel decline in the dollar shares over this period is also accounted for by the increase in rouble-denominated foreign assets and liabilities.

Elsewhere in the EU's eastern neighbourhood⁽¹⁵⁾, both the official and private use of the euro remains minor compared to that of the dollar. Ukraine pegs de facto its currency to the dollar and also in the smaller economies of the region (which have managed floating regimes) the dollar remains the main informal reference for exchange rate policy. De facto partial dollarisation (of banks' balance sheets and of cash) is still prevalent in one form or another as a legacy of the transition-related instability of the 1990s. Foreign currency denominated bank deposits range from 38% in Ukraine to 69% in Georgia. In Moldova, euro deposits are as common as dollar deposits (most likely linked to remittances), but elsewhere the available information suggest that the preference is for dollars. External public debt is also largely dollar-denominated (on average over 70%). Having mostly traded with Russia, in recent years these countries have sought to diversify exports towards the EU markets. So far,

(15) Armenia, Azerbaijan, Georgia, Moldova, and Ukraine.

however, no major change in the use of the euro for trade invoicing has been reported.

In the *EU's southern neighbourhood*, there are significant differences between the countries in their trade and other economic relations vis-à-vis the EU and therefore also in their relative use of the euro. Morocco, which shipped off 63% of its exports to the EU in 2006, pegs the dirham to a trade-weighted currency basket in which the euro has a dominant share. Tunisia also trades mainly with the EU (74% of its exports in 2006) and targets a stable real exchange rate based on a basket of currencies in which the euro carries 2/3 of the weight. Both Libya and Jordan peg to the SDR (which includes the euro), although Jordan de facto stresses stability against the US dollar. Other Mediterranean countries with smaller shares of their trade with the EU either peg their currency to the US dollar (Jordan, Lebanon) or have adopted floating arrangements (Algeria, Israel and, since July 2007, Egypt). The limited available information on trade invoicing also indicates wider use of the euro in the Maghreb compared to other countries in the region.

The main currencies in the composition of public external debt in Middle East and North Africa are the US dollar (44%), the euro (31%) and the yen (9%). Morocco and Tunisia have the largest shares of euros (40-50% of total outstanding public external debt) followed by Algeria and Egypt (30-40%).

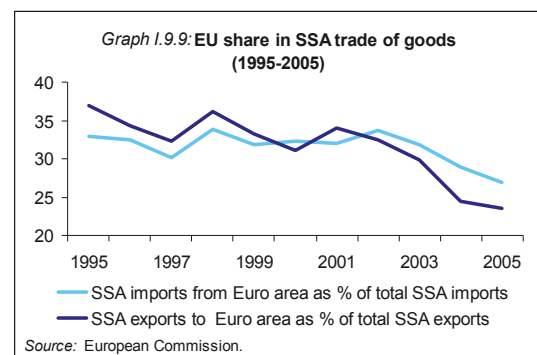
9.3.3. Sub-Saharan Africa (SSA)

Strong trade, migration and Official Development Assistance (ODA) flows from the EU, historical links with the EU and, in the countries of the CFA zone, exchange rate arrangements based on the euro, have tended to support the use of the euro in SSA. But in most countries, particularly in Southern Africa, the dollar remains the most commonly used international currency.

Trade invoicing of South African exports of goods in 2003 was 52% in US dollar, 25% in South African rand and 17% in euro (Kamps 2006). For the whole of SSA, information on trade invoicing was not available and can only be inferred from trade data by assuming that its trade with Europe is largely invoiced in euros.

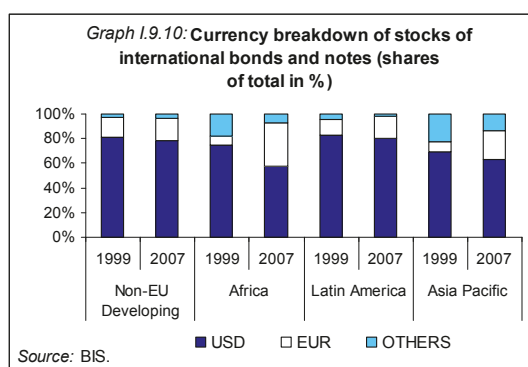
Following the colonial period, Europe has remained the main trade partner for SSA countries. While trade with SSA represents only around 1.5% of total euro-area external trade, the share of the euro area in SSA's total trade is about 25% (Graph I.9.9). This is followed by Asia, which is becoming an increasingly important trading partner for the region, mainly due to China's rising importance in global trade. This latter trend caused a reduction of about 10 percentage points in the euro area's share in SSA trade between 1999 and 2005.

The use of *the euro as reference currency for exchange rate arrangements* in SSA varies considerably among subregions. In southern Africa, the South-African rand plays an important role as a reference currency whereas in eastern Africa currency arrangements tend to be heterogeneous while giving little importance to the euro. However, the euro is an important anchor currency in western and central Africa. Eight countries of the West African Economic and Monetary Union (WAEMU) and six countries of the Central African Economic and Monetary Community (CAEMC) have as currency the CFA franc, which is pegged to the euro (see Table I.9.4). Although being two separate currency unions, they use the same exchange rate to the euro. Similarly, the Comores pegs its currency to the euro. These fifteen countries – with a population of more than 120 million – are referred to as the CFA franc zone and their exchange rate arrangements are backed by the French Treasury within certain limits. In addition, Cape Verde has an exchange rate cooperation agreement with Portugal since July 1998 which ties the Cape Verdian escudo to the euro.



At the end of 2002, Africa held reserves of US\$69 billion, which corresponded to 3.1% of all estimated *foreign reserve holdings* in the world, up from US\$40 billion and 2.6% respectively at the end of 1998 (ECB 2003c). In a survey of central bank reserve asset management carried out in summer 2002, participating African central banks reported that an average of 18% of their reserves was in euro.

The role of *the euro as financial currency* in Africa appears to show an increasing trend. Its share in the stock of outstanding international debt securities rose from 6% at the end of 1999 to 35% at the end of 2006, although it remains below the share of the dollar (58%) (see Graph I.9.10). About half of long-term debt in SSA is denominated in US dollar and around 20% in euro.

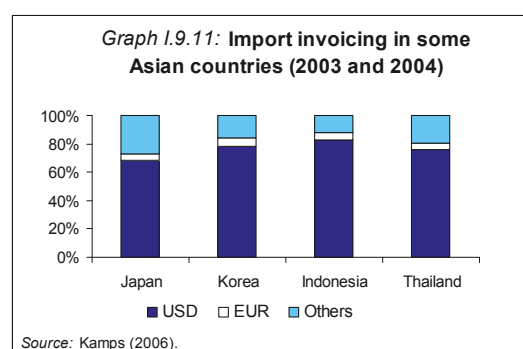


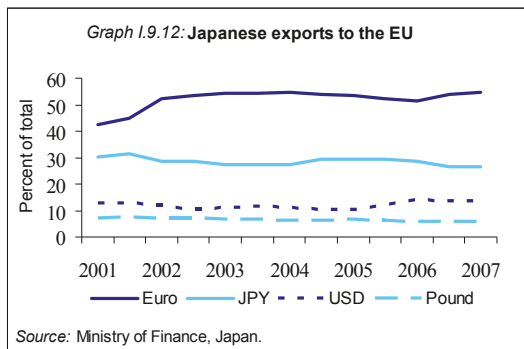
Evidence on the use of *the euro as parallel currency* in SSA is scarce but large remittances and ODA flows and, for some countries, significant receipts from tourism may be supporting a significant circulation of euro banknotes in the region. A study financed by the European Commission (Jiménez-Martín *et al.* 2007) estimated that in 2004, out of the €20 billion remitted by migrants in the EU-27 to their home countries, €3.2 billion were flowing into SSA. According to data from the Central Bank of West African States, the euro area is the origin of about half of the remittances sent to WAEMU. Travel and tourism is another potential channel for the use of the euro as parallel currency in SSA. However, the main tourism destinations for Europeans in SSA are in eastern and southern Africa, which have a weaker affiliation to the euro. ODA from the EU is likely to involve some cash transactions in

euro which may then further circulate. According to data from the OECD Development Assistance Committee, the aid provided by the EU to SSA between 2003 and 2005 accounted for about 56% of all aid received by SSA and for over 5% of SSA's GNI.

9.3.4. Asia

Compared with the regions near the euro area, the role of the euro in Asia is limited, even if Asia as a whole is an important trading partner of Europe. The EU accounts for about 16% of East-Asian exports (compared with 18% for the US market), and this is reflected to some extent in the use of the euro in the *invoicing of Asian trade* (see Graph I.9.11). However, the share of the euro as an invoicing currency in Asia remains well below its share in trade. The US dollar remains the main currency of choice for trade invoicing and settlement. On the other hand, the EU's share in Asian trade is gradually catching up with that of the United States and this could encourage Asia to use more frequently the euro in trade invoicing. In this respect, data from the Japanese Ministry of Finance show that, in recent years, the euro has been partly replacing the dollar and the yen in Japan's bilateral trade with the EU and already accounts for the denomination of 55% of Japan's exports to the EU (see Graph I.9.12) and for 35% of its imports from the EU.





East Asian economies account for close to 60% of the world's official foreign exchange reserves. China and ASEAN-4 (Indonesia, Malaysia, Philippines and Thailand) together held 28% of world reserves at the end of the third quarter of 2007. Japan and the newly industrialised economies (Hong Kong, Korea, Singapore and Taiwan) held another 29% of global reserves. Asian central bank decisions on the currency composition of reserves could therefore significantly influence the role of the euro as international reserve currency in the future. As noted above, IMF COFER data on the currency composition of official reserves do not cover many Asian countries. However, given the high share of Asian countries in world reserves and the fact that COFER data show that the share of the euro has been rising in developing countries but it has remained stable in industrial countries, it can be inferred that the share of the euro in the Asian countries reporting to COFER is probably rising. Also, reserve data disclosed by the Bank of Japan in November 2006 surprised observers by showing a larger than expected share of the euro (30%, compared with 65% for the dollar).

At the same time, the importance of SWFs is rising in East Asia. Some market estimates suggest that the combined asset value of East Asian SWFs could be close to USD 1 trillion (see Deutsche Bank 2007). Singapore and China alone manage SWFs with an estimated asset value in the order of USD 700 billion. In their search for higher yields, Asian SWFs might follow a more diversified investment strategy, both across instruments and currencies, than central banks. This could result in some shift in their portfolios towards the euro.

No Asian country currently uses the euro as anchor for their exchange rate regimes.⁽¹¹⁶⁾ Following the 1997-98 financial crises in East Asia, most of them have flexible or managed regimes in which the dollar remains however the most watched reference. China⁽¹¹⁷⁾ and Hong Kong continue to de facto or de jure peg to the dollar. The euro, however, serves as a point of reference for discussions on the regional monetary integration in Asia. For some time, the ASEAN+3 have been discussing the concept of introducing a benchmark currency basket, so-called the Asian Currency Unit (ACU), which takes inspiration on the ECU composite unit, the predecessor of the euro. The ACU would be a virtual basket currency defined as a weighted average of the currencies of Asia's key trading partners, including the euro area. It would allow market participants to monitor both the collective movement of Asian currencies against major world currencies and their individual movement against the ACU.

The use of the euro as international *financial currency* in Asia remains limited, with Japan standing out as the only country holding significant amounts of euro-denominated debt securities. At the end of 2005, 20% of Japanese foreign debt securities were held in euro-denominated debt instruments while 44% were held in dollars (ECB 2007d). However, the share of the euro in Asia's issuance of international securities has been rising since 1999 (see Graph I.9.10).

9.3.5. Latin America

The US dollar remains the dominant international currency in Latin America, albeit with some differences within the region. The geographical proximity and economic links to the United States, a heavy dependence on

⁽¹¹⁶⁾ Myanmar has a dual exchange system in which the official rate is pegged to the SDR (which includes the euro) but the dominant exchange rate used in the economy is determined in the parallel market

⁽¹¹⁷⁾ On 21 July 2005, China reformed its exchange rate regime from a US-dollar peg into a managed floating regime that uses as reference an undisclosed basket of currencies that is thought to include the euro. In practice, however, the daily fluctuation in the USD-RMB exchange rate has been limited.

international commodity exports and historical inertia (including hysteresis in dollarisation processes) help explain this.

Table I.9.5 displays the shares of trade with the US and with the euro area for the main Latin American subregions. It shows that while Mexico, Central America and the Andean Community trade much more with the US than with the euro area, the opposite is true for Mercosur and Chile. Given the higher orientation of trade of the former group of countries towards the US, and the fact that many of them are also heavily dependent on international commodity exports, one should expect the euro's role as *trade invoicing and currency* in these countries to be relatively low. In the case of Mercosur and Chile, by contrast, the use of the euro for invoicing and settlement could be expected to be somewhat higher, reflecting the stronger orientation of their trade towards the euro area. The substantial FDI inflows received by these South American countries since the early 1990s should also contribute to this. ⁽¹¹⁸⁾

Table I.9.5:
Direction of Trade in Main Latin American Regions, 2006
(share of total trade)

	Trade conducted with		
	Rest of the subregion (1)	USA	Euro area
Andean Community (2)	10.9	35.1	10.4
Central America	11.9	32.0	10.0
Mercosur	15.4	16.6	17.5
Mexico	72.9	69.1	6.9
Chile	13.5	15.6	19.1

Notes : (1) For Mexico, refers to trade with its NAFTA partners (Canada and the US). For Chile, refers to trade with Mercosur. (2) Includes Venezuela, as its application to join Mercosur has not been ratified yet.

Source: IMF Direction of Trade database.

The general trend in Latin America over the last decade has been to move away from currency pegs towards more freely floating exchange rates. As previous fixed exchange rate regimes were mostly using the US dollar *as an anchor*, the trend towards flexible exchange rates has implied a relative shift away from the US dollar

⁽¹¹⁸⁾ It should also be noted that there is currently a pilot project under way to allow daily settlement in local currency of all trade transactions between Argentina and Brazil without the involvement of the US dollar. If it proves successful, the mechanism is to be expanded it to the rest of Mercosur.

in the region's exchange rate policies. However, three countries (Ecuador, El Salvador and Panama) have officially dollarised monetary regimes, while several other countries (notably in Central America but also some in South America, notably Bolivia and Peru) exhibit high rates of *de facto* dollarisation (see Temprano-Arroyo 2003). The euro, by contrast, is not currently used as anchor currency in any Latin American country. ⁽¹¹⁹⁾

In recent years, Latin American countries have been accumulating substantial *foreign exchange reserves*, reflecting relatively strong current account balances and a surge in capital inflows. Available data (ECB 2007) suggest that the share of the euro in these reserves is small compared to that of the US dollar, with the former varying from 1% in Uruguay to 26% in Chile and the latter from 67% to 99%, based on a sample covering Chile, Colombia, Peru and Uruguay.

Finally, regarding the *use of the euro as international financial currency*, World Bank data on the currency composition of external debt of Latin America show that, in 2005, the share of the dollar was still eight times higher than that of the euro, which accounted for only about 10% of total external debt. Moreover, there has been a significant increase in the dollar share over the last two decades. BIS data on the stock of international debt securities issued by Latin America provide a similar picture, although they show a somewhat larger euro share (18%).

9.4. CONCLUDING REMARKS

Before its introduction, the euro was expected to become the second most important international currency after the US dollar. Indeed, the euro quickly and firmly established itself in this position. In many key functions, the euro plays a

⁽¹¹⁹⁾ It should be noted, however, that, between July 1992 and September 1999, Chile had a crawling band regime defined over a basket of currencies of major trading partners that included first the deutsche mark and, since January 1999, the euro. Also, in April 2001, Argentina announced a plan to modify its currency board arrangement by shifting from a peg to the dollar to a peg to a dollar/euro basket. The currency board collapsed, however, before this plan was implemented.

more important role than the Deutsche mark and the other legacy currencies combined used to play. The rise of the euro as international financial currency, where on some measures it has already surpassed the US dollar, has been particularly impressive. In other functions, however, progress has been largely limited to certain regions with specific economic and political links to the EU, revealing a strong regional and institutional pattern in the internationalisation of the euro. This is the case of its use as exchange rate anchor, trade invoicing currency and parallel currency. Finally, in certain functions where incumbency advantages strongly favour the dollar, notably as foreign exchange vehicle and as pricing currency for international commodities, the euro's inroad has been very limited.

A regional analysis of the euro's international role confirms a relatively strong presence in the immediate neighbourhood area, particularly among non-euro-area EU countries, candidate countries and the Western Balkan countries, and a relatively weak use in far away regions with weaker economic and institutional links (such as Asia, Northern and Central America and Southern Africa). In between lie other regions such as Northern Africa, the CFA zone, the CIS countries and, perhaps, South America. In this third group of regions the role of the euro is much less developed than in the euro area's immediate neighbourhood, but relatively important trade, financial and institutional links, in combination with other factors that may affect the euro's international currency potential (discussed in Chapter II.7), could support a more important use of the euro in the future.

10. THE EVOLUTION OF ECONOMIC GOVERNANCE

10.1. INTRODUCTION

EMU's unique economic governance structure was set up by the Maastricht Treaty to ensure the proper functioning of the monetary union, where (i) a single monetary policy is entrusted with an independent central bank, the ECB, (ii) a range of common policies is decided by the European Council (notably the Council of EU Economics and Finance Ministers, ECOFIN) and (iii) many other economic policies remain in the hands of national actors. It was further shaped as events unfolded, priorities changed and new challenges emerged.

Since not all EU Member States participate in the euro area from the outset, a separate body – the Eurogroup – was created to deal with co-ordination at the euro-area level. The Eurogroup consists of the Ministers of Finance of the euro-area Member States alongside with the Commissioner of Finance and Economic Affairs and the President of the European Central Bank. From the outset the Eurogroup has had an informal status in the sense that it does not venture into voting on policy, but it does play a useful role in preparing such voting by the ECOFIN Council. Moreover, the Eurogroup has no role in the conduct of monetary policy which is in the remit of the fully independent European Central Bank. The role of the European Commission in this framework is two-pronged: (i) to pursue surveillance of economic policies that are in the remit of the ECOFIN Council and the Eurogroup so as to facilitate its decision making; and (ii) to initiate policy decisions in the form of recommendations or propositions to the Council whenever it considers this to be appropriate and in line with the Treaty rules (right of initiative).

Against this backdrop this chapter discusses the co-ordination experience to date in four important areas: fiscal policy co-ordination under the Stability and Growth Pact (SGP), the co-ordination of structural policies under the Lisbon Strategy, exchange rate policy and the representation and coordination of euro-area positions in the international arena and the co-

ordination of economic statistics.⁽¹²⁰⁾ The co-ordination of financial market integration and development under the Financial Services Action Plan is not covered here since it has been discussed extensively in Chapter I.7.

10.2. FISCAL GOVERNANCE

The euro area is unique in its kind in that it adopted a single currency while preserving national fiscal policies of its participating countries, albeit within a common framework. Specifically, fiscal policies are subject to common rules and co-ordination. The Treaty defines "excessive deficits": deficits that exceed 3% of GDP or fail to ensure convergence towards gross public debt of 60% of GDP. This commits participating countries to fiscal discipline while allowing them to respond, within certain bounds, to the business cycle.

The fiscal provisions in the Treaty are detailed in the Stability and Growth Pact (SGP), which contains a "preventive" and a "corrective" arm⁽¹²¹⁾:

- The *preventive arm* stipulates that governments achieve and maintain budgetary positions close to balance or in surplus over the medium term. Sticking to this rule allows automatic stabilisers to play unfettered while respecting the 3% of GDP deficit ceiling stipulated in the Treaty. The annual updates of the "Stability Programmes" submitted by the governments to the European Commission take stock as to how far they have progressed in moving towards close to balance or in surplus and provide a policy trajectory in the pursuit of this goal over the medium term.⁽¹²²⁾

⁽¹²⁰⁾ This chapter draws on a more detailed account prepared for this *Report* published separately – see van den Noord *et al.* (2008).

⁽¹²¹⁾ For an early account of the rationales and features of the Stability and Growth Pact, see Brunila *et al.* (2001).

⁽¹²²⁾ EU Member States that have not yet adopted the single currency annually submit "Convergence Programmes" which essentially have the same coverage as the Stability Programmes.

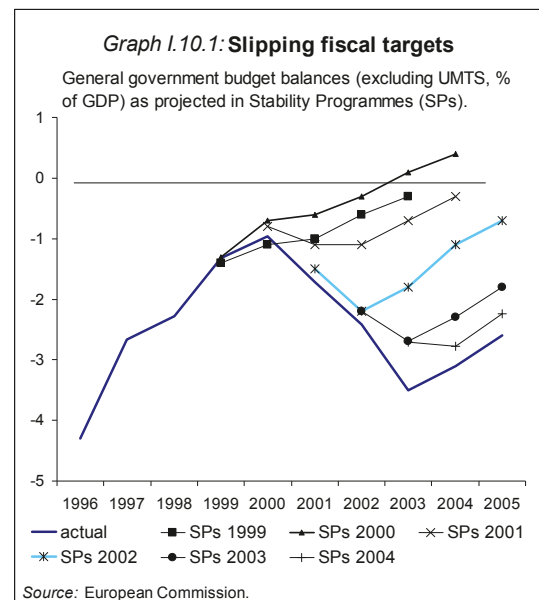
- The *corrective arm* details the "Excessive Deficit Procedure" (EDP) embedded in the Treaty. It specifies when a waiver due to "exceptional circumstances" may be granted.⁽¹²³⁾ It also details the timetable countries should respect towards ending the EDP, and the sanctions to be imposed when a country fails to respect the timetable.⁽¹²⁴⁾

The Stability and Growth Pact took effect when the euro was launched. From the outset it was seen as vital to underpin the single currency. It was designed to address a key concern, namely that once exchange rates within the area had ceased to exist, financial markets would no longer act as a discipline on fiscal policy. Growing deficits in one country, rather than being reflected in wider yield spreads, would spill over into area wide interest rates and crowd out economic activity in other member countries. There was a related concern that widespread fiscal profligacy could result in tighter monetary policy to neutralise the associated demand impulses to keep inflation in check. Each individual country would probably not feel the threat of such monetary policy "sanction" since its own impact on the area-wide fiscal stance would be small. This would give rise to a sub-optimal policy mix, with fiscal and monetary policy working against rather than supporting each other.

⁽¹²³⁾ The SGP stipulated that as a rule a deficit above 3% is not excessive if real GDP has fallen by 2% or more. The Ecofin Council could also grant a waiver if GDP has fallen if the downturn is abrupt or large relative to past trends, but member states have committed not to invoke this possibility if the drop in GDP is less than ¾ %. These provisions have been modified in 2005 – see below for details.

⁽¹²⁴⁾ The excessive deficit should be corrected in the year following its identification by Eurostat unless there are special circumstances. If, in the opinion of the ECOFIN Council, a member state fails to take sufficient measures to correct an excessive deficit, and after giving a further notice it may impose measures, including the obligation of a deposit with the Commission of initially 0.2% of GDP plus one tenth of the difference between the actual deficit and the reference value, with an upper limit of 0.5% of GDP. If the next year shows again an excessive deficit, another deposit according to the same formula for the variable amount can be required. If after two years the excessive deficit is still found to exist, the deposit will "as a rule" be converted into a fine, to be distributed among the other member states according to their share in the area wide gross national product.

This dissuasive effect turned out not to be as effective as foreseen. The SGP proved ineffective in preventing expansionary policies in the years 1999 and 2000 when economic growth peaked (see Chapter I.5). Persistent sizeable deviations from planned adjustment paths and a deterioration of the economic climate implied that the achievement of a budgetary position close-to-balance or in surplus became a moving target (Graph I.10.1). As a consequence, in the largely unanticipated protracted economic downturn that followed, deficits rose again above the 3 percent of GDP reference value in a number of countries, notably in the largest ones (see Box I.10.1). Moreover, attempts to comply with the 3 percent of GDP deficit reference value led to a preoccupation with cosmetic improvements. This was already evident in the run-up to EMU when budgetary policies in the vicinity of the 3 percent deficit ceiling often led to creative accounting – an issue that was left unaddressed by the SGP.⁽¹²⁵⁾ The reliability of EMU's key fiscal indicators for the excessive deficit procedure was also put into question by episodes of large upward deficit revisions of the deficit outcomes.

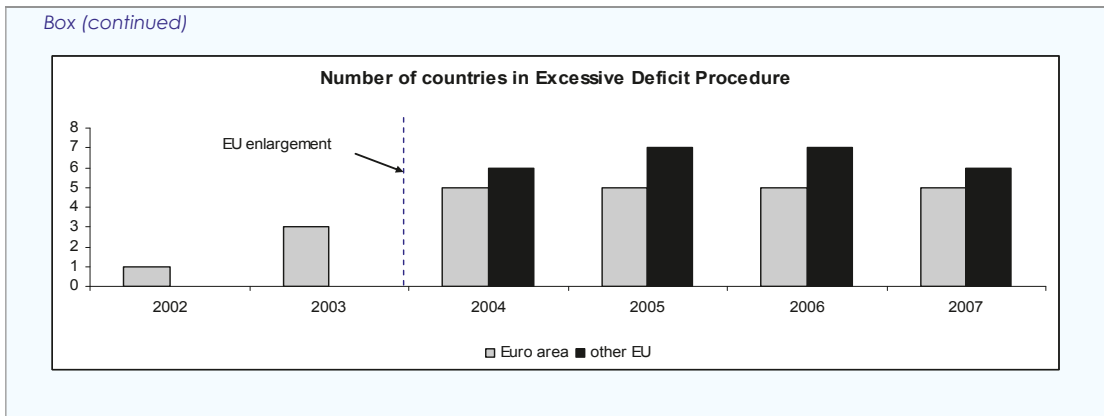


⁽¹²⁵⁾ Koen and van den Noord (2005) review the accounting tricks and 'fiscal gimmickry' in the context of the SGP and their determinants. Buti, Nogueira Martins and Turrini (2007) explore the political incentives for a strategic use of stock-flow adjustment under a SGP-type fiscal rule.

Box 1.10.1: Implementation of the SGP

July 1998	Council regulation (EC) 'on the strengthening of the surveillance of budgetary positions and the surveillance and co-ordination of economic policies' (1466/97) enters into force.
January 1999	Council regulation (EC) 'on speeding up and clarifying the implementation of the excessive deficit procedure' (1467/97) enters into force. SGP is fully operational.
January 2002	European Commission (EC) recommends the Council to address an early warning to Portugal and Germany.
February 2002	Council rejects the EC's recommendation to give an early warning to Portugal and Germany. The countries' commitment not to breach the 3% threshold is considered to suffice.
November 2002	EC recommends the Council to address an early warning to France. Council decides that an excessive deficit exists in Portugal, on the basis of deficit outcome in 2001.
January 2003	Council addresses an early warning to France. Council decides that an excessive deficit exists in Germany, on the basis of deficit outcome in 2002.
June 2003	Council decides that an excessive deficit exists in France, based on deficit outcome in 2002 and forecasts for 2003.
November 2003	Council does not step up excessive deficit procedure (EDP) vis-à-vis France and Germany and decides instead to adopt conclusions addressing recommendations while declaring the EDP in abeyance <i>for the time being</i> .
April 2004	The Commission recommends the Council to address an early warning to Italy.
May 2004	Council abrogates the EDP for Portugal.
June 2004	Council decides that an excessive deficit exists in the Netherlands, on the basis of deficit outcome in 2003.
July 2004	Council decides that an excessive deficit exists in Greece and in the following recently acceded Member States: Hungary, Malta, Czech Republic, Cyprus, Slovakia and Poland. Council rejects the Commission's recommendation to give an early warning to Italy. The country's commitment to take measures for the deficit not to breach the 3%-of-GDP threshold is considered to suffice. European Court of Justice judgement annuls November 2003 Council conclusions on France and Germany.
February 2005	Council steps up EDP vis-à-vis Greece
March 2005	Council adopts a report on the revision of the SGP.
June 2005	Council abrogates the EDP for the Netherlands.
July 2005	Amended regulations of the Stability and Growth Pact (1055/2005 and 1056/2005) enter into force. Council decides that an excessive deficit exists in Italy, on the basis of 2003 and 2004 data.
September 2005	Council decides that an excessive deficit exists in Portugal, on the basis of the deficit forecast for 2006 in the stability programme.
January 2006	Council decides that an excessive deficit exists in the United Kingdom, on the basis of deficit outcomes for financial years 2003/2004 and 2004/2005.
March 2006	Council steps up EDP vis-à-vis Germany
July 2006	Council abrogates the EDP for Cyprus.
January 2007	Council abrogates the EDP for France.
June 2007	Council abrogates the EDP for Malta, Greece and Germany.
October 2007	Council abrogates the EDP for the United Kingdom.
May 2008	Commission recommends to abrogate the EDP for Italy, Czech Republic, Portugal and Slovakia.

(Continued on the next page)



In 2002 the Commission adopted a five-pronged proposal to improve the implementation of the SGP:

- to establish medium-term budgetary objectives that are measured in cyclically-adjusted terms and net of one-off measures;
- for countries that have not yet realised a budgetary position of ‘close to balance or in surplus’ to achieve an annual improvement of the underlying budget position of at least 0.5% of GDP;
- to avoid pro-cyclical policies in economically good times;
- to ensure the consistency between the Pact rules and the goals of the Lisbon strategy (see next section), by allowing for small and temporary deviations from the underlying budgetary position of ‘close to balance or in surplus’ or the adjustment path to it; and
- to attach greater weight to public debt and the sustainability of public finances. Moreover, the Commission pointed to a need to take complementary measures in order to foster the overall fiscal and statistical governance.

In March 2003, the ECOFIN Council endorsed most of the Commission proposals, yet agreed that there was no need for legal changes to the current EU fiscal rules. However, acute difficulties arose in November 2003 when the Council decided not to endorse the Commission recommendation to step up the ongoing excessive deficit procedures against France and Germany (Box I.10.1). The Commission

challenged this outcome for the European Court of Justice, which ruled that the Council could not be forced to take a decision against its will. In response, the Commission presented its Communication on “Strengthening economic governance and clarifying the implementation of the Stability and Growth Pact” in September 2004. The Commission considered several elements for strengthening the SGP (Buti and Franco(2005): (i) placing more focus on debt sustainability in the surveillance of budgetary positions; (ii) introducing the concept of “protracted slowdown” in the exceptional circumstances clause; (iii) allowing for country-specific elements in the correction of excessive deficits (i.e. an appropriate adjustment path); (iv) allowing for more country-specific circumstances in defining the medium-term objective of “close to balance or in surplus”; and (v) ensuring earlier actions to correct inadequate budgetary developments.

Based on the Commission's Communication the EU Heads of State and Government endorsed in March 2005 a report of the ECOFIN Council entitled ‘Improving the implementation of the Stability and Growth Pact’. The report reconfirmed the Treaty’s reference values for government deficit and debt, but also updates and complements the Stability and Growth Pact along the lines of the Commission Communication (see Box I.10.2).

Box 1.10.2: The 2005 reform of the SGP

The revision of the SGP reaffirms the rules-based framework, especially the 3% of GDP deficit and 60% of GDP debt thresholds of the Treaty, whilst enhancing economic rationale and national ownership.

The following changes were introduced to the **preventive arm** of the Pact:

- *Medium-term budgetary objectives (MTOs):* Rather than being uniformly set at close-to-balance or in surplus, the MTOs now are differentiated across countries. They can be revised when a major structural reform is implemented and in any case every four years. For euro area and ERM II Member States (see Chapter II.6), the country-specific MTOs should be between -1% of GDP and balance or surplus.
- *Annual structural adjustment:* For countries in the euro area or the ERM II which have not achieved their MTO, the revised SGP requires an annual improvement of their structural balance by 0.5% of GDP as a benchmark. This adjustment can be modulated depending on economic conditions. As well, the implementation of major structural reforms positively affecting long-term sustainability can be invoked to allow a temporary deviation from the adjustment path or from the MTO itself provided that the deviation remains temporary and that an appropriate safety margin with respect to the deficit reference value is preserved. Special attention is to be paid to pension reforms introducing a mandatory, fully-funded pillar alongside a pay-as-you-go pillar, whereby the deviation should reflect the net budgetary cost.

The following changes were introduced to the **corrective arm** of the Pact:

- *Annual structural adjustment of EDP countries:* the annual adjustment should always be of at least 0.5% of GDP in structural terms.
- *Revision of deadlines in the EDP* can be granted if there are unexpected adverse economic events with major unfavourable consequences on government finances.
- *Re-definition of a 'severe downturn'* which may lead to abrogation of the EDP. In the SGP mark I a 'severe downturn' required a negative annual growth rate of GDP of at least 0.75%. Under the revision an economic downturn may be considered 'severe' in case of a negative growth rate or accumulated loss of output during a protracted period of very low growth relative to potential.
- *Other relevant factors* may also be taken into account, but only if the general government deficit remains close to the reference value and its excess over the reference value is temporary. Special consideration is again given to the implementation of pension reforms. Specifically, the net cost of the reform to the publicly managed pillar is set against the deficit on a linear degressive basis for a period of five years, and this is taken into account also for the abrogation of the EDP provided the deficit has declined substantially and continuously and has come close to the reference value.

The Report furthermore highlights the importance of national budgetary rules and their surveillance to complement countries' commitments under the SGP so as to strengthen national ownership and enhance enforcement.⁽¹²⁶⁾ In this context the Report

suggests a greater involvement of national parliaments in the EU fiscal surveillance process. It also recognises that the credibility and implementation of the fiscal framework rely

budgetary policies when it calls on Member States to 'ensure that national procedures in the budgetary area enable them to meet their obligations'. Budgetary institutions should appropriately reflect the country-specific institutional set up.

⁽¹²⁶⁾The Treaty also recognises the importance of national budgetary institutions and procedures in delivering sound

crucially on the availability of correct and reliable fiscal data. Section I.9.4 discusses in detail developments in statistical governance in EMU.

Since the 2005 Reform of the SGP the implementation of the corrective arm has clearly improved. A weakening of implementation as feared by media and other commentators did not materialise. In fact, since the SGP reform, all deficits in excess of 3 percent of GDP have been considered excessive, triggering the excessive deficit procedure, confirming that the SGP remains an effective rules-based framework.⁽¹²⁷⁾ However, the situation is less clear for what concerns the preventive arm of the Pact. In this context, the Commission issued in 2007 a Communication on 'Ensuring the effectiveness of the preventive arm of the SGP', including a number of proposals to strengthen the implementation within the reformed SGP framework. Further proposals to improve the fiscal surveillance are contained in Part III of this *Report*.

10.3. GOVERNANCE OF STRUCTURAL POLICY

10.3.1. The BEPGs and the Lisbon Strategy

Although largely remaining in the remit of the Member States, the need for enhanced structural reforms in EMU has been widely accepted from the outset. For example, the Treaty, Article 99, 1 requires Member States to "regard their economic policies as a matter of common concern and shall coordinate them within the Council". This is evident in e.g. the references to the euro area in the Broad Economic Policy Guidelines (BEPGs), to which the EU Treaty, Article 99, 2 has assigned a central role in the co-ordination of economic policies. Over time, references to structural reform needs in the euro area have gained importance and have become more visible in the texts of the BEPGs and later Integrated Guidelines. Initially they remained fairly general, referring to a need to step up

⁽¹²⁷⁾ Moreover, for the first time, Notices on insufficient progress in accordance with Treaty Article 104(9) have been issued to Greece and Germany in 2005 and 2006, respectively, setting a precedent and strengthening the credibility of the full set of instruments under the SGP.

structural reform in view of a low growth potential and a lack of resilience. But since the 2007 Integrated Guidelines specific reform areas have been mentioned, including the room for fiscal manoeuvre, quality of public finances, competition in services, financial market integration, labour market flexibility and wage developments (See Box I.10.3). The actual governance of structural reforms in the euro area has remained subject to the "open method of co-ordination" under the Lisbon Strategy⁽¹²⁸⁾, which is mostly oriented towards learning effects, benchmarking and peer pressure. Initially the progress with structural reform under the Lisbon agenda has been mixed (see Chapters I.2 and I.6) A report on progress towards achieving the Lisbon objectives, drawn up in 2004 by a high-level experts group chaired by the former Dutch Prime Minister Wim Kok, attributes mixed progress to "a lack of sense of political urgency among the EU Member States". Apparently the "open method of co-ordination" adopted by the Lisbon Process has had limited success. The adoption of recommendations specific to the euro-area Member States to address structural reform gaps made clear that there is a euro-area specific structural reform agenda to be pursued for the area as a whole. For example, the euro-area recommendations target the strengthening of adjustment capacity in the euro area, encompassing the fiscal room for manoeuvre, wage rigidities, price stickiness, efficiency of financial adjustment and the reallocation between the tradable and the non-tradable sector. These are euro-area specific issues that go beyond the "traditional" Lisbon agenda for higher growth and more jobs, since they deal with mechanisms to adjust more efficiently within the euro-area in the absence of internal exchange rate adjustment and with a single monetary policy.

⁽¹²⁸⁾ At a Summit in March 2000 in Lisbon, EU governments signed up to the goal of making Europe "the most competitive and dynamic knowledge-driven economy by 2010". The main goals included 1) boosting innovation and research and development (R&D) including setting a target for R&D at 3% of GDP, (2) faster structural reform; including completing the internal market, (3) modernising the social model (for thorough labour market reform and tackling exclusion with a goal of an employment rate of 70% (60% for women and 50% for older workers); (4) cutting red tape and (5) a sound macroeconomic policy mix.

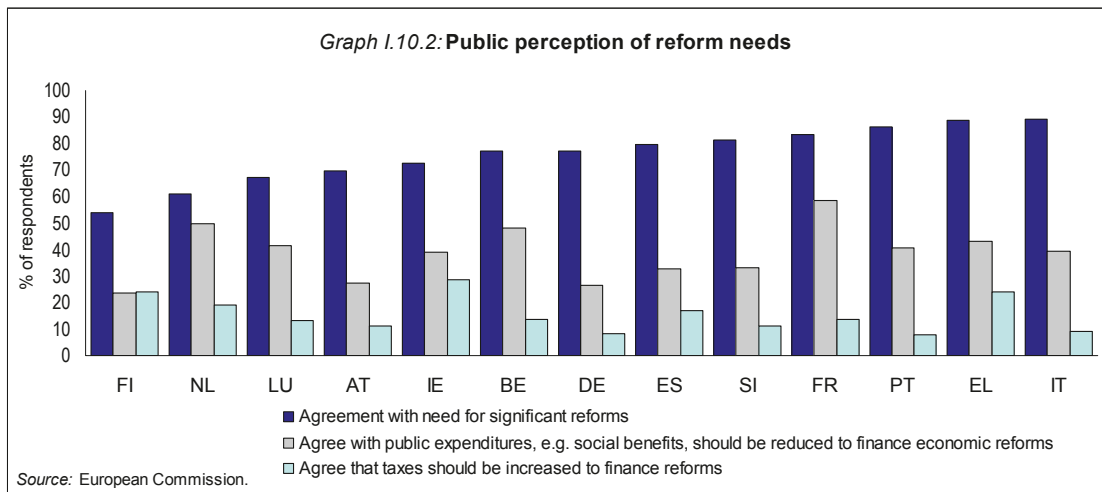
Box 1.10.3: Evolution of the Broad Economic Policy Guidelines

The Broad Economic Policy Guidelines (BEPGs) are key policy documents, covering both macroeconomic and structural policies. They aim at fostering consistency across policy areas and they are based on forging consensus, while relying largely on peer pressure for their implementation. The BEPGs were introduced as early as 1993, but country-specific recommendations have only been included since 1999. Since then they have evolved as follows:

- The 1999 BEPGs, in its general part, describes the policy-mix in the euro area to consist of four elements. These are next to fiscal policy, monetary policy and wage bargaining "a commitment from the Member States to press ahead with front-loaded, coherent and comprehensive reforms with a view to enhancing the adaptability and efficiency of product, capital and labour markets" (Council recommendation of 12 July 1999).
- The 2001 BEPGs include for the first time a reference to the euro area in the country-specific economic policy guidelines addressed to each euro-area Member State. However, this referred only to budgetary policy and not to the recommendations on structural policies (Council recommendation of 15 June 2001).
- The BEPGs for the period 2003-2005 included for the first time specific recommendations to the euro area. Five recommendations were addressed to policy actors at national level related to the policy-mix, budgetary positions, inflation differences, external representation and governance of structural reforms. The latter one asks Member States to "improve the efficiency of existing coordination procedures in the area of structural reforms that aim at strengthening the euro area's growth potential and resilience to shocks (Council recommendation of 25 June 2003).
- The Integrated Guidelines for the 2005-2008 period (which merged the BEPGs with the Employment Guidelines) includes a specific chapter on a "dynamic and well functioning euro area" that culminates in a recommendation to Member States to "ensure better co-ordination of their economic and budgetary policies". The recommendation made four more detailed points of which the third one demands to "press forward with structural reforms" (Council recommendation of 28 June 2005).
- In the 2007 update of the Integrated Guidelines, the Council issued four specific recommendations to the euro-area Member States, which they should consider together with their specific country recommendations. They concern (1) budgetary consolidation, (2) quality of public finances, (3) competition in services and financial market integration, (4) labour market flexibility and wages.

In 2005 the strategy was re-launched and became more clearly focussed on growth and jobs. At the 2006 Spring European Council Member States identified four priority areas and agreed upon concrete actions to achieve progress; investing more in knowledge and innovation, unlocking business potential especially for small and medium size business; greater adaptability of labour markets and guaranteeing secure and stable energy supply. Aside for tighter priority setting, governance of the strategy was improved through a clearer partnership and division of responsibilities at the community and national levels. Member States were asked to draft National Reform Programmes setting out their

policy intentions for 2005-08 and to appoint national co-ordinators. Member States have submitted reports on the implementation of their National Reform Programmes and achievements in the four priority areas. Importantly, the Integrated Guidelines now help to internalise euro-area priorities into Member States' domestic reform priorities. The lack of adjustment capacity does not naturally emerge as an obvious problem at the national level, but does so at the euro-area level.



Moreover, the fact that the euro-area recommendations are now much more precise than in earlier BEPGs may contribute to public awareness of reform needs. It is, for example, evident that measures to improve financial integration are rarely discussed by the wider public other than in emergency situations. Similarly, the benefits of more integrated and more competitive service markets for adjustment in the euro area have hardly played a role in the controversy surrounding the Service Directive several years ago.

A political consensus has emerged among euro-area Member States on both the need for structural reforms and the advantage of coordinating reforms. In this context, the conclusions of the Spring 2006 European Council are worth noting: "The European Council recognises the special importance of enhanced structural reforms in Member States of the euro area and stresses the necessity of effective policy coordination within this areas, i.a. as a requirement to more effectively deal with asymmetric developments within the monetary union." Even so, there is still a rather loose link between euro-area reform needs and concrete reform undertakings in Member States.

Observers have identified three main reasons for reluctance to reform:

- *Lack of public support.* Status quo bias, loss aversion and uncertainty about distributional consequences have been identified as important obstacles.⁽¹²⁹⁾ A recent Eurobarometer survey in the euro-area suggested that while a large majority of respondents considered economic reforms necessary, enthusiasm for them strongly dwindled if they were associated with higher taxes or a downgrading of social transfers or public services (see Graph I.10.2).⁽¹³⁰⁾
- *Reform resistance from well-organised interest groups.* Reforms typically involve costs to those who benefit from the pre-reform policy regime. These groups can mobilise and exert pressure against such reforms. This pressure has usually no counterbalance since reform gains tend to be spread thinly across the population.
- *Inefficiencies inherent in policy making.* The capacity to pursue reforms also depends on the level of technical and administrative competence.

Clearly, a picture emerges to suggest that carrying out desirable or even necessary reforms

⁽¹²⁹⁾ These issues were identified in Heinemann *et al.* (2007), which applied approaches used in behavioural economics to study psychological reasons behind reform resistance.

⁽¹³⁰⁾ Eurobarometer (2007), Public attitudes and perceptions in the euro area, Flash Eurobarometer No 216.

are perceived as unpopular by policy makers. However, under certain conditions the electoral cost of structural reform may be limited as voters may reward, rather than reject governments that carry out structural reforms. Notably, income insurance provided by financial markets and/or a strongly redistributive social welfare net may help to overcome the political resistance to structural reform since both factors tend to lengthen households' time horizons (Bertola 2007). Social insurance does so by offering the "losers" of structural reform generous compensation. Financial market development would do so by removing liquidity constraints and also by allowing to "front load" future gains stemming from structural reform via capital markets and growth in "permanent income". Recent work at the European Commission reported in Chapter II.4 provides empirical evidence that these channels are indeed active. The upshot is that advanced financial market development and/or the presence of wide social safety nets indeed diminish the political resistance to structural reform in labour and product markets.

10.4. INTERNATIONAL GOVERNANCE

The Treaty (Article 111) foresaw procedures covering exchange rate policy, the conclusion of exchange rate arrangements with third countries, and position taking and external representation on issues of particular relevance for EMU. The ECOFIN Council was identified as the main policy actor and the Commission was given the right of initiative, to be shared with the ECB on exchange rate policy matters.

10.4.1. Exchange rate policy

The Treaty envisaged the possibility of entering a system of fixed exchange rates with countries outside the EU as well as the formulation of general orientations for exchange rate policy. The latter are generally understood to cover informal agreements with partners outside the euro area as well as unilateral position-taking by the euro area. Formal agreements require a unanimous decision by the Council, following a proposal by the ECB or the Commission and consultation of the ECB and the European Parliament. In the case of informal agreements,

the Council acts with qualified majority, either on a recommendation from the ECB or on a recommendation from the Commission and after consulting the ECB. The Eurosystem (the system of National Central Banks and the ECB), which holds the euro area's foreign exchange reserves, is the sole responsible for carrying out interventions. As an additional safeguard for the independence of the ECB, exchange rate policy, and in particular general orientations, may not jeopardise the primary objective of price stability.

In practice, the rules governing the conduct of euro exchange rate policy have largely evolved in an informal manner. The instruments provided by the Treaty have never been used for the purpose of exchange rate policy so far. The regular exchange-rate surveillance by the Eurogroup (based on a decision by the ECOFIN Council in 1997) results in "terms of reference" on the exchange rates of the euro against the major currencies and in agreed language for the participation of the Eurogroup President in the discussion on exchange rates at the G7 meetings of Finance Ministers and Central Bank Governors. Even when preparing the ground for the foreign exchange interventions in the autumn of 2000, the Eurogroup formulated its position in its regular communiqué rather than adopting general orientations on the basis of Article 111. The ECB has also occasionally issued written statements and press releases on the euro exchange rate.

The interdependence of exchange rate and other economic policies has given rise to an arrangement whereby the President of the European Central Bank attends the meetings of the Eurogroup, and the Eurogroup President as well as the Commissioner for Economic and Monetary Affairs are invited as observers to the meetings of the ECB's Governing Council. A pragmatic approach is also followed for the IMF missions in preparation of the Article IV consultations on the euro area, where – despite the euro area itself not being a member of the IMF – IMF staff meets with the ECB, the Commission and the Eurogroup Working Group.

While some ambiguities remain, the practical conduct of exchange rate policy in the euro area has not encountered major problems. The

coordinated interventions in September and November 2000 to stem the depreciation of the euro (see Chapter I.2) demonstrate that effective action is possible. The interventions in September 2000 followed an agreement at Eurogroup level, after which the Eurosystem carried out the interventions together with G7 partners. In November 2000, the Eurosystem intervened unilaterally, without another specific agreement at Eurogroup level (based on the "green light" to intervene provided by the Eurogroup in September). In their public statements after the episodes of intervention, members of both the Eurogroup and the Eurosystem tended to emphasise their own role in preparing the decision to intervene.

As highlighted in Part III of the Report, a challenge the Eurogroup is facing is to develop a common view on exchange rate issues that is the precondition for conducting an exchange rate policy, and to stick to the agreed view in their external communication. The lack of transparency often perceived by third countries' authorities is compounded by the fact that the views of Ministers in the Eurogroup do not always converge. This has on occasions led to a lack of consistency in their public statements. The decision in 2005 to appoint the Eurogroup President for a term of two years and his enlarged participation in G7 meetings has increased the transparency of euro-area representation. In the IMF-led multilateral consultations on global current account imbalances, for which exchange rate developments also played a role, a different setup emerged, where the Presidency of the Eurogroup, the ECB and the Commission jointly represented the euro area. In a bilateral dialogue with China in November 2007, this approach was repeated at the highest level, with a Troika of the Eurogroup President, President of the ECB and Commissioner for Economic and Monetary Affairs representing the euro area. A further discussion of euro-area external representation follows below.

10.4.2. External representation

Attempts to formalise the external representation of the EU/euro area on financial and monetary matters have not made much progress. As a result, Europe's external representation in

international financial fora unfortunately remains fragmented, reducing the actual influence of the euro area in them.

The representation of euro-area/EU countries in *the Bretton Woods institutions* remains dispersed among a large number of constituencies (see Table I.10.1 for the situation at the IMF). Moreover, some of them are mixed-constituencies that include non-euro area and even non-EU countries. This fragmented representation would require a strong coordination to be effective. However, and despite the steps in that direction taken since 1999⁽¹³¹⁾, Europe's coordination at the IMF is insufficiently developed. Not only do the topics on which coordination takes place remain limited, but there have also been occasional problems to fully translate the common lines agreed in Brussels into the statements of EU executive directors in Washington.

All this explains why, despite the large aggregate voting share and large number of chairs EU countries have at the Bretton Woods institutions, the EU is seen as less influential in them than the US, which has however a quota about half the EU's aggregate quota. EU countries hold together about 32.5% of the actual quotas⁽¹³²⁾ of the IMF, and exert some influence, by way of leading mixed country constituencies, on an additional 12% of the votes. They also have 6-8 executive directors (of a total of 24) and 7-9 alternate executive directors. The situation at the World Bank is similar. However, insufficient coordination means that the EU's actual voting power is well below its aggregate voting share.

Concerning the *G Groups and other key multilateral economic and financial fora such as the Financial Stability Forum (FSF) and the*

⁽¹³¹⁾ These include the creation of specialised committees in Brussels and Washington to improve the coordination of EU positions at the IMF and World Bank, the appointment every two years of an EU executive Director to represent EU positions at the IMF and the participation of the ECB as an observer at the IMF Board. See van den Noord *et al.* (2008).

⁽¹³²⁾ Each IMF member country is assigned a quota, denominated in SDRs, that is broadly based on its relative position in the world economy. Quotas determine a member's capital subscription, its voting share, and the amount of financial assistance it can obtain from the Fund.

Table I.10.1:
Constituencies in the IMF (as of 13 February 2008)

Country holding chairs	Other EU countries in the constituency	Total voting share of constituency (%)	Total voting share of EU countries (%)
Single country constituencies:			
United States		16,79	
Japan		6,02	
Germany		5,88	5,88
France		4,86	4,86
UK		4,86	4,86
China		3,66	
Saudi Arabia		3,17	
Russia		2,70	
Mixed constituencies including EU countries:			
Belgium	Austria, Czech Republic, Hungary, Luxembourg, Slovak Republic, Slovenia	5,15	2,15
The Netherlands	Bulgaria, Cyprus, Romania	4,76	0,85
Venezuela (1)	Spain	4,45	1,39
Italy	Greece, Malta, Portugal	4,11	0,75
Canada	Ireland	3,64	0,39
Sweden (2)	Denmark, Estonia, Finland, Latvia, Lithuania	3,44	1,52
Switzerland	Poland	2,79	0,63

Notes:

⁽¹⁾ Chair rotates between Spain, Mexico and Venezuela

⁽²⁾ Chair rotates between Denmark, Finland Sweden and Norway

Source: IMF.

OECD, only a few large euro-area/EU countries are represented, while the presence of the Community or euro-area institutions in them remains inadequate:

- In *the G-7*, Community institutions are partly excluded from the preparatory meetings at Deputy or "Deputy Deputy" level and the Commission only participates in certain issues of the agenda of the ministerial meetings, being often excluded from issues in which it has Community competence and expertise (e.g., trade, financial market issues, development cooperation and global imbalances).
- The Commission is also excluded from *the G-20* ministerial meetings and, despite its role in financial regulatory issues, from *the FSF*.⁽¹³³⁾ The partial exclusion of Community institutions from these fora

prevents them in some cases from having more meaningful discussions and reaching agreements on certain issues as part of the relevant players are excluded.

- The representation of the EU and the euro area at *the OECD* is also far from optimal. Only 19 EU countries are currently members of the OECD, with three new euro-area countries (Cyprus, Malta and Slovenia) remaining outside this institution. While the Community, represented by the Commission, enjoys a special status with practically all membership rights and obligations, it does not have the right to vote. And, despite the existence of some coordination infrastructure in Brussels (mainly through the so-called 133 Committee, which however deals only with some of the issues addressed by the Paris-based organisation), coordination among the EU countries that are OECD members often leaves to be desired.

⁽¹³³⁾At their meeting of 28 January 2008 in London, the Prime Ministers of the European G-7 countries reiterated their wish to see the Commission participate as observer in the FSF. However, this proposal has yet to be agreed by the other members of the G-7.

In recent years, a number of economists and policy makers have argued that the existence of a single monetary and exchange rate policy provides a strong argument for the full

consolidation of euro-area (or EU) representation at *the IMF* through the adoption of a single chair.⁽¹³⁴⁾ For some observers (Ahearne and Eichengreen 2007), the homogeneity of preferences on macroeconomic and monetary issues among EU countries (and not just euro-area countries) is such that it may warrant even a consolidation of the representation in the IMF of all EU countries. The argument here is clearly weaker, however. A full consolidation of euro-area (or EU) constituencies would probably require amending the IMF's Articles of Agreement since they limit the size of elected constituencies to 9% of the total votes and do not foresee the joint membership of a group of countries.⁽¹³⁵⁾

Recent research suggests that the euro area could increase its actual voting power in the IMF by consolidating representation even if its aggregate voting share declines. Thus, by applying voting power analysis authors such as Leech (2004, 2005) and Bini-Smaghi (2006b) show that the actual voting power of the EU/euro area is significantly below its aggregate voting share while that of the USA exceeds its voting share.⁽¹³⁶⁾ More recent analysis by the Commission staff confirms these findings, also suggesting that the euro area/EU could gain actual voting power with a partial regrouping of its constituencies (see Bertoldi, Just and Wichern 2008).

The objective of having a single chair at the IMF has so far not received sufficient political support from euro-area countries. In particular, some euro countries that find themselves in a privileged situation, holding the Chair or the Alternate Executive Director position of their constituencies, may fear a loss of influence from a consolidation of chairs. Some feel that, despite the existence of a common monetary and exchange rate policy, their participation in the

IMF should remain in the realm of their national foreign economic policy.

In the case of *the G groups*, there have also been proposals aimed at reforming them by consolidating European representation while allowing the entry of some systemically important emerging market economies. Thus, for example, Ahearne and Eichengreen (2007) propose collapsing the G-7 into either a G-4, comprising the United States, China, Japan and the euro area, or a G-5 including also the UK. Bergsten (2006), for his part, proposes to build on the existing G-20 but consolidate EU participation by dropping the four individual EU members, creating a G-16 (Bergsten 2006).

For some economists the G-20 is too large and unwieldy. For others, a core group such as the G-4/G-5 would be too small to be representative. As Bergsten (2006) stresses, in reforming the G group structure, an appropriate balance should be found between legitimacy and relevance (which argues for including more countries) and efficiency of decision-making (which argues for keeping the total membership small). The consolidation of European representation would help form a G group that is both efficient and has a wide coverage of relevant players. So far, however, there has not been sufficient support for this type of reform among either European or other members of G-7.

Finally, in the case of *the OECD*, the Commission launched in 2007 a reflection process to assess the implications of the new strategy adopted by this institution (which has decided to enlarge its membership to some key emerging market economies and to increase its involvement on globalisation issues) and the role the Community should play in it. The objective is to ensure that all EU countries are effectively represented in the OECD (notably through the Commission's participation), considering that some of them will not be able to join for a relatively long period, and that the Community's voice in this institution is commensurate with its economic and regulatory importance. But concrete measures to attain these objectives have yet to be adopted.

Long-term trends in the world economy, and in particular the rising weight of emerging market

⁽¹³⁴⁾ See Bini-Smaghi (2004 and 2006a), Truman (2006) and Pisany-Ferry *et al.* (2008)

⁽¹³⁵⁾ On the legal implications of adopting a single chair at the IMF, see Mahieu, Ooms and Rottier (2003).

⁽¹³⁶⁾ An actual voting power index is defined as the probability a shareholder has of being able to change the outcome of a vote by joining or withdrawing from possible coalitions with other voters. A voter's power is measured as the fraction of all swing votes that he could cast.

economies (notably in Asia) and the declining weight of the euro area, are likely to further weaken the influence of euro-area countries in international financial institutions and fora.⁽¹³⁷⁾ This will add to the problems caused by the fragmentation of their representation.

10.4.3. Bilateral dialogues

Over the last 20 years, the EU has developed regular dialogues on macroeconomic and financial issues with a significant number of countries and regions, both at high level and at technical level. With the exception of the troika dialogue for China, these dialogues are held by the EU rather than the euro area.⁽¹³⁸⁾

From the EU's point of view, these dialogues are not an alternative to those conducted within multilateral fora but, rather, a useful complement. The dialogues cover three main types of issues: i) *global issues* that are salient in the discussions taking place in the multilateral financial fora (e.g., global imbalances, IMF/World Bank reform, financial globalisation, energy efficiency and security, development financing); ii) *regional issues* of interest to both parties or in which the EU's experience is relevant (e.g., financial and monetary integration among Asian or Gulf Cooperation Council partners); and iii) key *bilateral issues*, including macroeconomic policy challenges, structural reform strategies, EIB lending, and the impact of free trade agreements between the EU and the country or region in question.

From a global surveillance point of view, the focus of the high-level dialogues is being put on a limited number of strategic partners, namely,

Brazil, China, India, Japan, Russia, South Africa, and the United States. These countries together account for nearly 70% of non-EU world GDP measured at purchasing power parities and for 46% of EU trade with third countries. With China, India, Japan, and Russia, annual dialogues on macroeconomic matters are already taking place, in most cases jointly with financial regulatory dialogues. Similar dialogues with Brazil and South Africa are being considered. With the US, priority has been given to the financial regulatory cooperation, including in the context of the new Framework for Advancing Transatlantic Economic Integration⁽¹³⁹⁾, while discussions on macroeconomic issues have not been formalised and generally take place in the margins of the multilateral fora.

These bilateral dialogues with strategic countries normally take place, on the Commission side, at the level of Director General/Deputy Minister but are in some cases upgraded to ministerial level. The ECB is invited to participate in the dialogues and is often represented by a board member. In the case China, a bilateral dialogue with a euro-area troika including the president of the Eurogroup, the president of the ECB and the European Commissioner for Economic and Monetary Affairs was, as noted, organised in November 2007. It has also been agreed to explore ways to enhance the dialogue with China on a more permanent basis.⁽¹⁴⁰⁾

With all these countries, the EU has also agreed to establish strategic partnerships, which imply an intensified cooperation and dialogue on political and economic matters, including the regular organisation of Heads of State summits and other high-level meetings.

⁽¹³⁷⁾ Thus, for example, long-term growth projections undertaken by Commission staff (Moreno, Just and Wichern, 2008) suggest that the aggregate calculated quota share of the euro area could decline from 23% in early 2008 to 21% by 2020 and to 12% by 2050. Bénassy-Quéré *et al.* (2007) also project a significant decline in the euro area's quota in the period up to 2030.

⁽¹³⁸⁾ The discussion below does not cover the dialogues with the countries that are formally considered candidate for EU membership (currently Croatia, the former Yugoslav Republic of Macedonia and Turkey) or potential candidates (Albania, Bosnia and Herzegovina, Montenegro and Serbia, including Kosovo - UN1244), since they have a different institutional and political framework and somewhat different objectives.

⁽¹³⁹⁾ At the EU-US Summit of 30 April 2007, both parties agreed to engage into a closer regulatory dialogue on trade, financial markets, investment and intellectual property rights. The Summit established a Transatlantic Economic Council at ministerial level to guide and oversee the implementation of the measures envisaged in the Framework agreed at the Summit.

⁽¹⁴⁰⁾ The US and China have also decided to strengthen their bilateral economic dialogue. In 2006, they established a six-monthly Strategic Economic Dialogue with China at ministerial level, which covers, in addition to macroeconomic and financial issues, other areas such as energy and the environment.

The EU also conducts macroeconomic and financial dialogues at high level with certain regions or country groupings. In particular, EU finance ministers meet regularly with their Asian partners under the so-called Asia-Europe Meetings (ASEM) ⁽¹⁴¹⁾, with the EFTA countries (Iceland, Liechtenstein, Norway and Switzerland) and with the Mediterranean countries ⁽¹⁴²⁾. The macroeconomic dialogue with the Latin American countries has been limited and occasional (for example, ad hoc meetings with ministers of finance of the Mercosur countries ⁽¹⁴³⁾). With the Gulf Cooperation Council countries, the dialogue on macroeconomic matters has so far remained mostly of a technical and sporadic nature.

10.5. HIGH-QUALITY STATISTICS FOR EMU

The proper functioning of EMU, effective surveillance and co-ordination of economic policies and more in general the running of modern-day democracies requires a comprehensive information system to provide policy-makers with the data on which to base their decisions. ⁽¹⁴⁴⁾ Timely statistics are a prerequisite for an effective assessment of the economic situation and prospects. As Alexander Lamfalussy argued, “*nothing is more important for monetary policy than good statistics*” (EMI 1996); and his case can be extended to other macroeconomic policies. Moreover, the private sector also uses these statistics, and in turn drives markets (Trichet 2004).

In 1998 the EU Member States already had a long experience in the compilation of

macroeconomic statistics, but the quality varied considerably. Several initiatives had been taken since the adoption of the Maastricht Treaty in 1992 to promote the co-operation among compilers of macroeconomic data, and improve statistics. ⁽¹⁴⁵⁾ Among the most important statistical legislation adopted or prepared in the run-up to the euro were (i) the adoption of the European System of National and Regional Accounts (ESA95) and its transmission programme of national accounts data; ⁽¹⁴⁶⁾ (ii) a series of regulations on the compilation of harmonised indices on consumer prices (HICP); (iii) the regulation governing the reporting of government deficit and debt data for the purpose of the excessive deficit procedure; (iv) the regulation on short-term economic statistics, and (v) a regulation on the organisation of a labour force sample survey in the EU. ⁽¹⁴⁷⁾

However, in the inaugural meeting of the Eurogroup (known at the time as the Euro-11 group) on 4 June 1998, Ministers called attention to important gaps in the available euro-area statistics that needed to be addressed urgently. In response, the EU's Monetary Committee prepared a report on statistical requirement in EMU, which was endorsed by the ECOFIN Council in January 1999. The report identified the five priority areas: (i) quarterly national accounts; (ii) statistics on public finances; (iii) labour market statistics; (iv) short-term business statistics and (v) balance of payments and trade.

An *Action plan on EMU Statistics* was endorsed by the ECOFIN Council in September 2000. The *Action Plan* identified the statistical areas and the Member State where urgent progress had to be made. Focus concentrated on the above mentioned statistics and actions were subsequently directed towards improving

⁽¹⁴¹⁾The ASEM include representatives from the 27 EU countries, the Commission, China, India, Japan, Pakistan, South Korea, Mongolia, seven Asian countries that are members of the ASEAN (Brunei-Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) and the ASEAN Secretary.

⁽¹⁴²⁾The meetings with Mediterranean partners, launched in 2005 under the so-called Barcelona EuroMed process, involve the following 10 Mediterranean countries: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia and Turkey.

⁽¹⁴³⁾The Mercosur countries include Argentina, Brazil, Paraguay and Uruguay. Venezuela has applied for full membership of Mercosur.

⁽¹⁴⁴⁾Almunia (2007), ECB (2000, 2001, 2003a)

⁽¹⁴⁵⁾On earlier experiences of co-operation on macroeconomic statistics in the run-up to the monetary union, see van Wijk (2001) and Bull (2004).

⁽¹⁴⁶⁾ESA95 replaced the ESA, second edition of 1979. ESA95 was amended, complemented and clarified on several occasions, and its transmission programme was also strengthened since 1996.

⁽¹⁴⁷⁾There were also several initiatives by the ECB and its predecessor the European Monetary Institute (such as guidelines and compilation guides) on money and banking statistics, which are not further discussed in this section (see Bull 2004).

timeliness and coverage and to improve or set up the necessary legal framework.

The *Action Plan* boosted the development of short-term economic statistics in the euro area but quickly faced the limit represented by the late availability of statistics for some Member States. The *Action Plan*, although very substantial, was not enough to match the US and best practices worldwide. A list of more focussed intra-annual macro-economic indicators, the principal European economic indicators (or PEEIs) has therefore been set up in 2003. ⁽¹⁴⁸⁾

PEEIs had more challenging target release dates for the euro-area indicators, different quality objectives and milestones. The accent passed from efforts for Member States to efforts towards the release of European aggregates. The PEEI approach innovated the way of deriving European short-term indicators, asking for strong and efficient co-ordination of statistical information and compilation practices at European level.

In a process driven by the main institutional users, Commission and ECB, and starting from a benchmarking exercise with the US (Öberg 2001) the PEEIs project characterised the most recent years of short-term economic statistics in the euro area. Table I.10.2 lists the principal European economic indicators and indicates the timeliness of each variable in 1998, 2001 and 2007, as well as the targets established by the European Commission (2002b).

In order to fulfil their role, official statistics must be produced and disseminated according to common standards guaranteeing compliance with the principles of impartiality, reliability, objectivity, scientific independence, cost-effectiveness and statistical confidentiality. At the same time, in the last decade, the role of European statistics become increasingly important in the context of the EMU, the Lisbon Strategy, the integrated guidelines for growth and jobs, to monitor and review the implementation of other key policy initiatives at European level such as the sustainable

development strategy, or even the common immigration and asylum policy, etc. Statistics of good quality, but also the framework to produce them, are therefore a necessity for the EU.

Reflecting these concerns the national statistical institutes and Eurostat put forward a *European Statistics Code of Practice*. ⁽¹⁴⁹⁾ The *Code* has the dual purpose of improving trust and confidence in statistical authorities by proposing certain institutional and organisational arrangements, and reinforcing the quality of the statistics by promoting the application of best international statistical principles, methods and practices. The *Code* consists of 15 principles that mirror to a large extent the United Nations' Fundamental Principles of Official Statistics. The principles are organised in three groups on institutional environment, statistical processes and outputs. The monitoring of the *Code* implementation includes self assessments and regular peer reviews. Moreover, in 2008, the European Parliament and the Council established a European Statistical Governance Advisory Board ⁽¹⁵⁰⁾, with the mission of providing an independent overview of the European Statistical System regarding the implementation of the *Code*. The board will also be complemented by a European Statistical Advisory Committee ⁽¹⁵¹⁾ which will gather users of statistics, such as the scientific community, social partners and the civil society, and institutional users. It will play an important role in ensuring that user requirements as well as the response burden on information providers and producers are taken into account in developing the European statistical policy (Bohatá 2007).

⁽¹⁴⁸⁾ Joint Report of the Council and the Commission on Eurozone statistics and indicators, 18 February 2003.

⁽¹⁴⁹⁾ The European Statistics Code of Practice was adopted by the Statistical Programme Committee on 27 February 2005 and promulgated in the Commission Recommendation of 25 May 2005 on the independence, integrity and accountability of the national and Community statistical authorities (COM (2005) 217).

⁽¹⁵⁰⁾ Decision No. 234/2008/EC of the European Parliament and of the Council (OJ L 73, 15.3.2008, p. 13).

⁽¹⁵¹⁾ Decision No. 235/2008/EC of the European Parliament and of the Council (OJ L 73, 15.3.2008, p. 17).

Table I.10.2:

Timeliness of economic indicators	Euro area timeliness (days)			Target in Commission (2002b)
	2007	2001	1998	
Set 1: Consumer Price Indicators				
1.1. Harmonised Consumer Price Index: flash estimate	0 (~96.5% EA)	2	-	0
1.2. Harmonised Consumer Price Index: actual indices	14 (100%)	17	30	17
Set 2: Quarterly National Accounts				
2.1. Quarterly National Accounts: First GDP estimate	45* (~95% EA, ~87% EU)	-	-	45
2.2. Quarterly National Accounts: GDP release with more breakdowns	61 (~97% EA, ~94% EU)	70-120	70	60
2.3. Quarterly National Accounts: Household and Company Accounts	121 (90% EA, 88%EU)	-	-	90
2.4. Quarterly National Accounts: Government Finance Statistics	99 (120 EU) (100%)	-	-	90
Set 3: Short-term business indicators				
3.1 Industrial production index	42 (~93%)	48	-	40
3.2 Industrial output price index for domestic markets	33 (~96%)	35	-	35
3.3 Industrial new orders index	53 (~97%)	-	-	50 (40)
3.4 Industrial import price index	[44]	-	-	45
3.5 Production in construction	48 (~95%)	75	-	45
3.6 Turnover index for retail trade and repair	30 (~99%)	60	-	28
3.7 Turnover index for other services	60 (~87%)	-	-	60
3.8 Corporate output price index for services	-	-	-	60
Set 4: Labour Market Indicators				
4.1 Unemployment rate (monthly)	32 (~81% EA, 78% EU)	34	-	30
4.2 Job vacancy rate (quarterly)	75 (67% EA, 78% EU)	-	-	45
4.3 Employment (quarterly)	73 (~85% EA, ~75% EU)	-	-	45
4.4 Labour cost index (quarterly)	75 (78% EA, 82% EU)	90	-	70
Set 5: External Trade Indicators				
5.1 External trade balance: intra- and extra-MU; intra- and extra-EU	48	51	-	46

Source: European Commission.

Part II

Goals and challenges

SUMMARY OF MAIN FINDINGS

Achievements so far

The picture of the first ten years of the euro area depicted in Part I of this report is favourable. Job creation has been impressive. Inflation has fallen and become less volatile while monetary policy has established its credibility, trade and foreign direct investment have grown beyond what could have been expected as a result of globalisation, there has been considerable integration of financial markets, business cycles have converged, fiscal behaviour has improved and the macroeconomic policy mix has become better aligned with the cycle. Overall, EMU has brought the macroeconomic stability it was hoped it would – and more.

But there have also been setbacks. From the outset it was hoped that stronger exposure to intra-area competition and the removal of the exchange rate and monetary policy instrument would motivate participating countries to pursue their structural policy agendas and stimulate integration of product and labour markets. However, while the removal of the exchange risk premium and associated falls in the cost of financing have acted as a growth driver, and to a greater extent than expected, this effect has not been strong enough to offset the productivity slowdown going on at the same time, which is in fact largely related to timid structural reform. Moreover, as wage and price rigidities have persisted, intra-area movements in competitiveness positions have been slow or in some cases perverse, with external deficit or surplus positions ballooning in some cases. Hence there is much unfinished business that remains to be tackled, while new challenges are looming on the horizon.

A changing world landscape

Looking ahead, the global landscape is different from that at the launch of EMU:

- **Globalisation** has been progressing apace. Emerging economies have become a powerful engine of growth and current projections indicate that their role in the world economy will increase still further. Financial markets are becoming increasingly integrated, with cross-border financial flows outpacing trade flows and financial markets

in the emerging world gaining global importance. Meanwhile, the export-driven growth strategies in emerging economies along with dissaving in the United States have contributed to the build-up of global current account imbalances. The risk of a disorderly unwinding of these imbalances has been lurking for some time and while the downturn in the US and the recent depreciation of the dollar go some way towards easing the pressure, they continue to pose a threat for the stability of the world economy.

- The growing **scarcity of natural resources** and climate change may become more acute and act as a constraint on non-inflationary growth in the developed world. The possible end of the period of "great moderation" and substantial changes in relative prices caused by climate change and tensions on natural resources markets, which manifest themselves in temporarily higher inflation; are likely to present an increasingly stiff challenge to monetary policies. Moreover, this not only makes a strong call on the capacity of economies to adjust, it is also a concern in terms of the adverse income redistribution effects that stem from commodity price inflation – which come on top of the redistribution effects of globalisation combined with technological developments, via a shift in labour demand away from low-skilled work.
- The rapid **ageing of populations** is bound to leave its mark on the growth potential and public finances of the advanced economies. It calls for policies to reinvigorate labour market participation, raise labour productivity and strengthen fiscal governance. The lower adaptability of an ageing population will make adjustment to shocks more difficult. Upward pressure on age-related expenditures, and consequently on public finance positions, reinforces the need to keep fiscal policies in check and maintain a focus on the longer-term sustainability of public finances.

Repercussions for the euro area

These global trends will pose challenges for the performance of all advanced economies in terms of growth, inflation, macroeconomic stability, adjustment capacity, the sustainability of social security systems and the distribution of income and wealth. However they will also produce a number of policy challenges that are even more compelling for – if not unique to – the euro area.

- *First*, from the outset the occurrence of country-specific demand shocks was seen to be a main concern in the absence of internal exchange rates in EMU. This proved to be less of a concern in the first ten years, partly because macroeconomic stability at the national level improved with the adoption of the single currency, and partly also because the global macroeconomic environment has been relatively benign. Going forward, however, this environment is set to become more challenging, with sizeable shocks, including exchange rate fluctuations, changing terms of trade associated with swings in energy and raw material prices, and shifting comparative advantages becoming more prominent. These common shocks affect participating countries differently due to differences in exposures to trade, raw materials and finance and in the absence of internal nominal exchange rates, and with fiscal policies constrained by the need to safeguard sustainable public finances and the commitments enshrined in the Treaty and Stability and Growth Pact, the onus of internal adjustment falls on relative wages and prices along with real flexibility in labour and product markets.
- *Second*, the relatively greater prominence of adverse supply shocks heightens the risk of conflicts between fiscal policies and monetary policy. Policy makers may seek to offset the adverse income redistribution effects that stem from commodity price inflation by fiscal stimulus, protectionist measures or other quick fixes. However, this would ultimately jeopardise distribution goals, endanger the sustainability of public finances and overburden the single monetary policy. This risk is present in most developed economies, but in the euro area it is even more compelling in view of the potential spillover effects on euro-area wide interest rates and the euro exchange rate of national fiscal policies and the recurrent difficulties to enforce member countries' fiscal commitments. Hence countries will be called on to demonstrate their willingness to fully embrace the objective of macroeconomic stability and support the ECB in its conduct of monetary policy.
- *Third*, there is a unique and pervasive link between the single currency and financial market integration. In the absence of nominal adjustment via internal exchange rates it is essential that other channels of shock absorption are developed; financial markets are a particularly important one as they facilitate risk sharing and consumption smoothing, and can also make the transmission of monetary policy more powerful whereas fiscal policy will become less effective. In addition, financial integration can leverage the benefits of structural reforms, allowing capital to flow freely to its best uses in an environment where current account constraints and exchange risk premiums have disappeared and home biases have weakened. Moreover, by helping bring forward the benefits of structural reforms; well functioning financial markets increase the political constituency in favour of reforms. Conversely, it makes slow structural reform more damaging because capital will be diverted to less productive activities, for example housing, or to other countries. Therefore, while financial integration enhances the economic performance of the euro area as a whole, it also tends to exacerbate divergences between the participating countries in the event of differentiated reform ambitions.
- *Fourth*, the euro area has limited natural resources, is rapidly ageing while public indebtedness is high, and its diffusion of technical progress has been slow. Therefore many euro-area countries tend to be more exposed, and less equipped to respond, to the emerging challenges. A new impetus for structural reform, building on the Lisbon Strategy for Growth and Jobs, is undoubtedly

welcome in the EU as a whole, but an absolute necessity in EMU. Structural policies will pay a double dividend in terms of enhancing the adjustment capacity of the participating countries while raising their growth potential and hence easing the concerns over fiscal sustainability and adverse developments in the distribution of income and wealth. Importantly, all these considerations apply to current and future euro-area members alike.

- *Fifth*, as an international currency the euro is a major asset which is shared by all euro-area members. The euro may become a rival to the US dollar if it is backed up by a single financial market that is appropriately deep and liquid. At the same time the euro provides a unique opportunity for the development and integration of the European financial industry. The euro can help to stem, share or provide a shield against the risk of disruptive global shocks and macroeconomic instability. It also puts EMU members in a unique position (relative to non-euro EU members) by allowing them to play a key role in the global political arena. Globalisation, coupled with the emergence of the euro as a global currency alongside the dollar, is irrevocably altering the role of euro-area currency diplomacy.

In sum, Europe shares with most other developed economies a rapidly changing global landscape, ageing populations and rising concerns about energy and climate change. These global trends have major implications for the euro area over the next ten years and call for determined efforts to promote growth and jobs, ensure efficient intra-area adjustment, improve the quality and sustainability of public finances, secure a smooth enlargement of the euro area and carefully manage the euro area's global role.

Promoting growth and job creation

As noted, while job creation has been impressive productivity growth has stalled. If left uncorrected this tendency could be very costly in terms of slowing down income growth, jeopardising fiscal sustainability amid ageing populations, complicating the achievement of price stability as primary commodity prices soar,

hampering competitiveness in a globalising world economy, and ultimately putting a brake on employment growth. The available longer-term projections indicate that it will result in a further reduction in euro-area potential growth, to around 1% per annum, roughly half its present level.

A crucial challenge will thus be to ensure that productivity growth rebounds as global comparative advantages shift. Financial integration – itself fostered by the euro – would clearly help in this respect as it increases the responsiveness of investment to cross-country differences in the marginal return on capital, which will thus more abundantly flow to countries where structural conditions are most favourable. This will tend to accentuate intra-area differences in growth performance, and make it even more important for countries where structural conditions lag to catch up. This will require those countries to ensure that their firms are better able to compete at the technological frontier. This calls for better human capital formation, the availability of financial instruments to reward projects with high returns and risk, a policy framework supportive of R&D investments, and a growth-friendly regulatory environment, notably with respect to start-up firms and would-be market entrants.

Reforms in labour markets and welfare systems geared towards removing distortions in individual incentives regarding labour supply decisions would also be welcome. This would help contain the reduction in labour inputs associated with ageing, where the larger euro-area countries in particular are lagging. Encouraging the labour participation of older and female workers would also be beneficial, as would a smoother transition from education to work. Reducing the costs associated with workers' relocation across economic activities and regions would enable a better match between supply and demand in the labour market. "Flexicurity" arrangements that facilitate flexible labour market responses in exchange for income security would support this further.

Ensuring efficient intra-area adjustment

The working of the intra-area adjustment channels may improve over time as a result of

trade integration and a better anchoring of inflation expectations and an associated decline in nominal (wage and price) rigidities. Increased financial integration would also help by increasing risk sharing, thus permitting a more stable pattern of consumption over time and across countries. However, growing tensions cannot be ruled out, especially for those euro-area countries that are more exposed to increasing competition from emerging economies or to external exchange rate shocks. Structural policies are therefore required as an insurance against shocks with an asymmetric impact. Reducing nominal rigidities, especially in the services sector, will help adjust price competitiveness in a stabilising fashion. The costs associated with the reallocation of labour will have to be reduced, including by reforms of employment protection, and strengthened active labour market policies and incentive-compatible safety nets.

Aside from risk sharing, increased financial integration will help adjustment by facilitating the reallocation of investment across activities and national boundaries. However, financial markets act as accelerators of both benign and perverse developments. Hence, the potential for increased resilience against shocks and consumption smoothing needs to be weighed against the increased risk of contagion, bubbles, and boom-bust cycles associated with enhanced financial integration, issues that require an adequate response in terms of national and supra-national prudential and regulatory policy.

Advancements in terms of risk sharing via financial markets weaken shock absorption via fiscal policy, as economic agents become more forward-looking ("Ricardian") and thus increasingly see through the longer-term debt implications of short-term fiscal relief. The impact of ageing on public budgets will call for an accelerated public debt reduction, and this constraint will bite harder as financial markets become more developed. Against this backdrop, it will be important to correct any pro-cyclical fiscal stance in upturns so as to remove deficit bias over the longer haul and support macroeconomic stability. Improved national-level governance, enhanced fiscal indicators, and effective budgetary surveillance within the framework of the revised Stability and Growth

Pact would help in this regard. This will also help to prevent inconsistencies in the fiscal-fiscal and monetary-fiscal policy mixes at the euro-area level.

Improving the quality and sustainability of budgets

Extensive social safety nets have been a hallmark of most countries participating in the euro area. The financing and management of these safety nets is a main driver of the budgets of participating countries in the euro area. It is thus important that they deliver value for money and can be funded without compromising the macroeconomic stability of the country concerned or the area as a whole. With ageing kicking in soon, the last window of opportunity for participating countries to get their fiscal house in order without major disruptions is rapidly closing. On the expenditure side, public funds need to be used more efficiently and the growth-friendliness of programmes needs to be enhanced. The same holds true for taxation, as well as for the interaction between tax and benefit systems which still tend to discourage labour market participation. Overall, progress in improving the quality of public finances is uneven across participating countries.

While measures have been taken to address the economic and budgetary effects of ageing, further policy responses are required in many countries. Fiscal rules should cater for long-term sustainability, enhanced adjustment capacity of the economy, a better allocation of scarce resources and macroeconomic stability. Containing the level and enhancing the quality of public expenditure and taxation alongside sustainable fiscal positions is crucial.

Enlarging the euro area smoothly

From a longer-term perspective all new EU Member States will eventually be members of the euro area. In the process, the composition of the area is changing and becoming more diverse. Although the economies of the new Member States are comparatively small, their entry into the euro area would clearly widen the spectrum of economic development levels across the area. For some time, these countries will continue to grow faster and remain more vulnerable to

shocks, overheating and rapid reversals of capital flows.

Against this background, it is important that euro adoption strategies go beyond the achievement of "nominal" convergence (in respect of the Treaty criteria) at the point of entry. The nominal convergence criteria set out by the Treaty were mainly concerned with preserving price stability, which is an indeed necessary but not sufficient condition for macroeconomic stability. Although they have made substantial progress in achieving greater resilience via flexible product and factor markets – arguably more so than some current euro-area members – the first major stress test is still to come.

Challenges ahead of euro adoption are to some extent specific to the exchange rate regime adopted by each candidate euro-area member. While the overall track record of policies in the new Member States with exchange rate pegs has been largely reassuring, the policy responses to the recent overheating episodes have not always been appropriate. Challenges are likely to remain significant, as in some cases these countries have incurred large liabilities denominated in euros, while policy instruments to smooth the unwinding of these positions remain limited. Against this backdrop, fiscal policy needs to be geared towards countering overheating and containing external imbalances, including by increasing private sector incentives to save. Structural and supervisory policies have an important role to play in safeguarding growth potential and macro-financial stability. Those countries that still avail themselves of exchange rate flexibility should strive to maintain an orderly trajectory towards euro adoption.

Managing the euro area's international role

The single currency also has a global dimension, which will undoubtedly gain strength as economies and financial systems become more intertwined. The creation of a new economic entity matched in size only by the US, the emergence of the euro as a key international currency, and EMU's powerful effect on the integration and development of the euro area's financial markets are likely to have far-reaching consequences for the world economy and the international financial system. While the longer-

term role of the euro is thus clearly a global one, there are inertial forces that are restraining the euro's international expansion for now. The US still offers a broad and deep financial market for international investors and the euro area's ability to keep pace with global financial market developments may be somewhat constrained by the European regulatory and supervisory patchwork. But portfolio diversification considerations, the euro area's prudent policy framework and the gradual integration and broadening of its financial markets will continue to support a rising international use of the euro in the future.

An enhanced international role of the euro carries benefits and costs. On the one hand, greater use of the euro by non-euro-area residents brings seigniorage and competitive advantages for euro-area exporters and financial institutions. On the other, it could lead to a possible increase in macroeconomic volatility. In the medium term, however, the advantages of having an international currency are likely to outweigh the costs.

By promoting macroeconomic and financial stability inside the euro area, EMU works in favour of global stability, particularly in neighbouring regions. By providing deep and liquid euro-denominated financial instruments, the euro facilitates international risk sharing and consumption smoothing not only among euro-area countries but also among third countries. At the same time, a wider use of the euro worldwide may amplify the impact of euro-area developments on the rest of the world, which increases the relevance of macroeconomic policy decisions in the euro area for financial markets worldwide. The international status of the euro and the increasing global relevance of euro-area economic developments thus bring with them new global surveillance responsibilities and raise the issue of an adequate formation, representation, and communication of common euro-area positions in the main multilateral fora.

Scope for policy synergies

Most of the policy objectives that appear worth pursuing are not mutually conflicting; indeed some are even mutually reinforcing. Policies aimed at raising potential growth would also help

to ensure that public finances evolve on a stable footing. Reforms aimed at improving price signals in goods and factor markets and at reducing the costs of reallocating labour across economic activities and regions will contribute to employment and productivity growth and also make euro-area economies more resilient to shocks. Improved supervision and regulation of financial markets would limit the risks of boom-bust dynamics, thus contributing to macroeconomic stability in euro-area incumbents, and would at the same time ease some of the trade-offs likely to arise on the convergence path for the countries that have yet to join the euro.

A concern may be that the price to pay to accelerate the growth potential is a more unequal distribution of income. No clear-cut answer to this dilemma exists, but if policies that pursue redistribution goals are carefully designed so as to minimise distortions and disincentives there is not likely to be a conflict. Policies aimed at reducing long-term unemployment reduce inequality at the bottom of the income scale. Similarly, policies intended to improve the stock of human capital, provided that they are designed to enhance the skills of the least-skilled workers, tend to lift the economy's production potential while reducing income disparities. Incentive-compatible distribution schemes ease the hardship of labour relocation resulting from globalisation or skill-biased technical change, and foster efficiency and growth in the longer term. As well, financial market development and integration supports growth and may reduce inequality in purchasing power by easing credit constraints on medium to low-income households. Finally, strong fiscal discipline, by allowing a fall in public debt, improves intergenerational fairness.

Trade-offs and synergies exist not only between policy objectives, but also, for any given objective, between countries participating in the euro area. This is the case whenever the effects of policies carried out in one country have significant implications for the rest of the area. The typical case is that of budgetary policy: the risk of countries neglecting the impact of their behaviour on area-wide interest rates justifies the presence of a rules-based framework for fiscal policy. Since asymmetric shocks in one country do produce effects on the rest of the area, the same case could be made for policies that improve adjustment capacity and economic resilience.

However, while awareness of economic spillovers in the realm of budgetary policy has led to the development of an extensive co-ordination rules-based framework for fiscal policy, co-ordination in other areas, notably structural policies, financial market supervision and regulatory policies, has so far remained relatively loose or nearly absent. To some extent this may reflect the actual or perceived high cost of coordination. However, this begs the question of whether, in specific fields, there is room for reaping coordination benefits that have not been fully exploited so far. And this in turn raises issues concerning the governance of the euro area, which is discussed in Part III of this *Report*.

1. INTRODUCTION

The key challenges as perceived in the early days of the single currency have changed (in some respects radically). Globalisation has proceeded at a rapid pace, with emerging Asian economies having become the world's growth engine and European economic and social institutions and practices increasingly being tested (and contested). Current account imbalances have built up globally and their unwinding may be costly, with exchange rates moving fast and recurrent financial markets turmoil. As well, energy and other commodity prices have been soaring as supply fails to keep pace with demand, and environmental constraints are palpable. In such a rapidly changing global landscape existing governance structures and policies may come under strain and need to be revisited. In this context the single European currency underpinned by its stability-oriented policy framework and a solid economic base can only prove to be major assets. Even so, it also calls for a careful examination of the remaining weaknesses and unfinished business associated with the construction of EMU, especially to the extent these potentially weaken the capacity of the euro area to grapple with these global trends.

In the next ten years the global economy may enter a less benign phase, and signs of this are already tangible. External macroeconomic developments, with sizeable shocks, including exchange rate fluctuations, changing terms of trade associated with swings in energy and raw material prices, and shifting comparative advantages seem likely to increase in relative importance. These issues affect all countries and regions of the world to varying extents, but they have a particular significance for the euro area. The reason is that these common shocks may affect euro-area countries differently due to differing domestic economic structures. The onus of adjustment will therefore be on relative wages and prices along with flexibility in labour and product markets – precisely the areas in which the euro area has unfinished business to settle.

The likely greater relative prominence of adverse supply shocks heightens the risk of conflicts between domestic fiscal policies and the single monetary policy. One source of tensions may stem from policy makers seeking to offset the effects emerging from commodity price inflation

and international competition by fiscal stimulus or protectionist measures. These measures would be damaging as they would endanger the sustainability of public finances, overburden the single monetary policy and ultimately jeopardise distribution goals. This risk is common to most developed economies, but it is even more compelling in the euro area due to the spill-over effects on euro-area interest rates and the recurrent difficulties to enforce member countries' fiscal commitments.

There is a unique and pervasive link between the single currency and financial market integration. In the absence of nominal exchange rate adjustment between euro-area members, it is essential that other channels of adjustment are developed. Financial markets are becoming ever more important for risk sharing and consumption smoothing. In addition, financial integration can leverage the benefits of structural reforms, by bringing forward in time their longer-term benefits and allowing capital to flow freely to its best uses. Conversely, the removal of credit constraints coupled with slow structural reform results in capital being diverted to less productive activities, for example housing. Therefore, while financial integration enhances the economic performance of the euro area as a whole, it also tends to heighten divergences between the participating countries if structural reforms proceed at different speeds.

The challenges that the euro-area economy will need to face ahead are significant also because it has limited natural resources, public indebtedness is high, and productivity growth slow. Therefore, many euro-area countries tend to be more exposed and less equipped to respond to the emerging challenges. Renewed structural reform impetus, taking the lead in implementing the Lisbon Strategy for Growth and Jobs, is a necessity in the euro area. Structural policies will pay a double dividend by enhancing the adjustment capacity of the participating countries while raising their growth potential and hence easing the concerns over fiscal sustainability and adverse developments in the distribution of income and wealth.

The euro is a major asset which is shared by all euro-area members. It provides a unique

opportunity for the development and integration of the European financial industry. If euro-area members pursue consistent and coordinated policies, the euro can help to provide a shield against the risk of disruptive global shocks and macroeconomic instability. Moreover, the euro's rising international dimension and the increasing relevance of euro-area developments and policy decisions for the world economy puts EMU members in a unique position (relative to non-euro-area EU members), allowing them to play a key role in the global political arena.

Against this backdrop, Part II of the Report provides an inventory of goals and challenges facing EMU in the next ten years. It starts with a stocktaking of the main changes that are likely to unfold in the global economic landscape in the next ten years and how these impinge on the euro-area economy (Chapter II.2). Ageing populations are shaping the future trends of growth, jobs and productivity, and conversely faster job and productivity growth can help easing the ageing challenge. This is highlighted in the next chapter (Chapter II.3).

The following chapter underscores that the changing typology of economic shocks, with the "classical" country-specific demand shocks giving way to rapid shifts in comparative advantages and common shocks associated with the unwinding of global imbalances and commodity price inflation, will make a strong call on the adjustment capacity of the euro-area economy (Chapter II.4). In this new economic environment sustainable and high quality public finances are essential but also challenging, which is the topic of the subsequent chapter (Chapter II.5). As discussed in the following two chapters, the enlargement of the euro area is likely to be gradually completed in the next ten years and bring its own challenges and opportunities (Chapter II.6), as does the likely growing global footprint of the euro area (Chapter II.7). Many of these goals and challenges are tightly intertwined. As discussed in the final chapter, there may be synergies between them but also potential conflicts, which call for an efficient coordination of policies (Chapter II.8).

2. A CHANGING WORLD LANDSCAPE

2.1. INTRODUCTION

The global landscape has changed considerably compared with that at the onset of EMU and is set to change further over the next ten years. World trade has expanded at an unprecedented pace, with emerging economies having become an engine of growth. Financial markets are increasingly integrated, with cross-border financial flows outpacing trade flows. Meanwhile growth constraints are beginning to bite in the developed world, as populations are aging, scarcity of primary resources is becoming acute and climate change is starting to kick in. Those developments are now clearly seen as more pertinent than when EMU was conceived.

While these global trends affect all developed economies to some extent, they pose unique challenges to the euro area. The interplay between globalisation, ageing and environmental challenges may curb potential non-inflationary growth at a level which is already modest by global standards. Moreover, the sustainability of public finances is at risk and tensions in income distribution – traditionally at the core of economic policy making in euro-area Member States – may aggravate. While euro-area membership creates advantages in terms of macroeconomic stability, it also raises joint responsibilities in the face of these challenges. The absence of intra-area exchange rates and the associated need to develop alternative internal adjustment mechanisms, the fact that fiscal and structural policies along with the regulation and supervision of financial markets have remained largely decentralised and the fact that a single diplomacy of the euro – potentially rivalling the US dollar as a global currency – is still in its infancy, make a strong call on Member States' willingness to co-ordinate their policies. Against this backdrop, the next section highlights the main global trends with particular relevance to the euro area. The subsequent sections examine the repercussions of these trends onto the internal and external challenges facing the euro area.

2.2. LONGER-TERM GLOBAL TRENDS

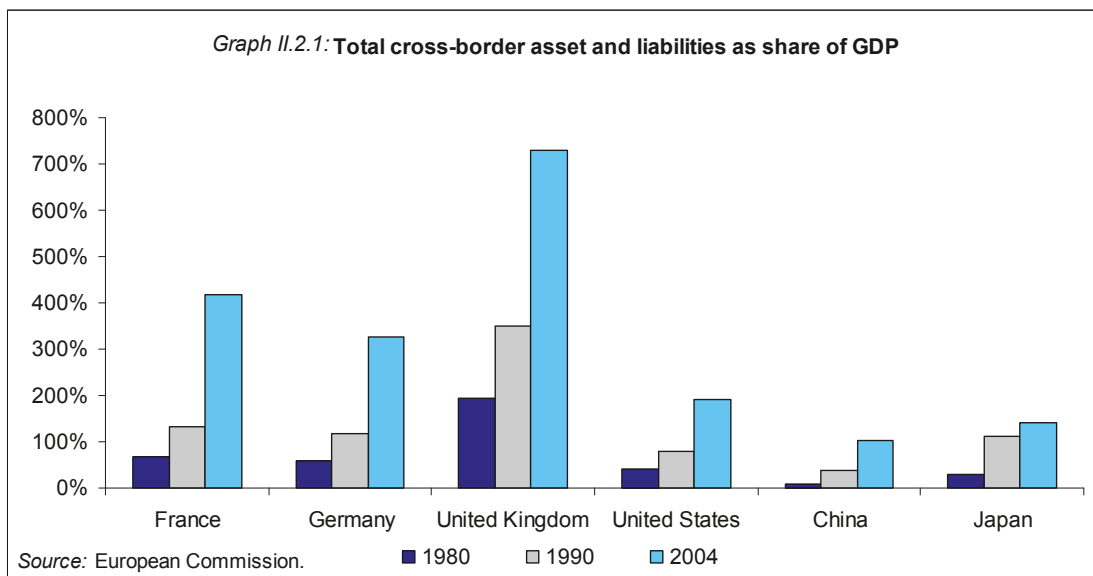
Three longer-term global trends may be identified as key to the euro area in the next ten years and beyond: globalisation, ageing and the impact of natural resource and environmental constraints.

2.2.1. Globalisation

The world economy is becoming an ever more integrated place, with each economy increasingly subject to influences from abroad. Geopolitical and technological developments are key drivers of globalisation.⁽¹⁵²⁾ The fall of communism has allowed new entrants into the world market. A changing attitude towards international trade led emerging nations to move from import-substitution to export-led growth strategies. Multilateral negotiations permitted cuts in tariffs – for manufacturing, agriculture, investment and intellectual property – as well as in non-tariff protection. Trade liberalisation on a preferential basis (including the EU Single Market) accompanied multilateral trade arrangements. Cross-border investment flows, including foreign direct investment (FDI) and portfolio investment, have been liberalised. All these developments have been compounded, and to an extent triggered, by changes in technology. Falling costs of transportation and communication facilitated international contacts, transactions and settlements. This led to the organisational change of firms, with production facilities increasingly relocated across the border and the production process unbundled to exploit local advantages in terms of market potential and cost savings.

Globalisation is manifestly shaping the world economy. The share of trade in GDP has been on an upward trend, with FDI even outpacing world trade. Financial markets have become increasingly integrated, as shown by the rising stock of cross-border assets and liabilities and domestic savings are increasingly decoupled from investment (Graph II.2.1). The value of worldwide daily financial transactions has risen dramatically, with financial instruments

⁽¹⁵²⁾ See, e.g., Baldwin and Martin (1999) for a survey on globalisation in historical context.



becoming increasingly sophisticated. Substantial increases in migration flows have complemented the soaring trade and investment flows. The share of developing countries' exports in the total imports of advanced economies has grown from below 10% in the 1970s to 45% at present. ⁽¹⁵³⁾

Although history has witnessed an earlier relapse to protectionism, falling trade and financial flows, and stagnation following a previous globalisation wave, globalisation in its present does not look easily reversible.⁽¹⁵⁴⁾ Accordingly, the share of emerging countries in the world economy is likely to grow further. China and India, which now account for more than half of the world population, already account for roughly a quarter of world GDP at purchasing power parity (PPP). On this measure China is already the second largest economy in the world and to overtake soon the US. The share in world GDP of Western countries and Japan will shrink accordingly.

⁽¹⁵³⁾ Sapir (2005)

⁽¹⁵⁴⁾ An acceleration of world integration similar to the current one took place prior to the outbreak of World War I. Like now, international trade and finance expanded rapidly; migration flows were massive. However, while in the first wave of globalisation Europe was at the "core" of the world economy, in the current globalisation "wave" emerging economies are rapidly catching up. Financial globalisation is also more advanced now than in the first period of globalisation due to far-reaching improvements in financial technologies, giving rise to broad and deep financial markets all over the world.

2.2.2. Ageing

With life expectancy rising and fertility rates low, Europe is greying (European Commission 2006f). Of course, higher life expectancy is a sign of progress and of a Europe that has not been plagued by war. As well, low fertility is partly a natural response to the development of universal social insurance. However, the post-War baby boom generation will be retiring in the years to come and the working age population is thus expected to start shrinking in the near term. Employment may still continue to grow as participation rates rise, but detrimental growth and fiscal implications will begin to be felt. Meanwhile, the euro area will go from the current situation of four people of working age for every elderly to a ratio of two to one, with potentially far-reaching economic and social ramifications. Migration may mitigate these tendencies to a minor extent, but will not be sufficient to stop the (working-age) population from shrinking. ⁽¹⁵⁵⁾ Even so, and importantly from the perspective of intra-area adjustment, aging affects Member States in the euro area rather differently. In some countries, notably the Benelux countries, France and Ireland, population will still be growing, while in others,

⁽¹⁵⁵⁾ According to Eurostat estimates, net inward migration inflows to the euro area, currently amounting to 1.2 million people (0.4 per cent of the population) per annum, are in fact projected to fall to 700.000 persons by 2010 (0.2 per cent of the population).

mainly Mediterranean countries and Germany, populations are set to shrink or are already shrinking.

2.2.3. Natural resource constraints

With the global economy rapidly growing, natural resource constraints are now starting to bite in earnest. Fast growth in emerging economies is putting strain on energy markets, with oil prices climbing to historical highs. Supply constraints are being felt in other commodity markets as well. Meanwhile, current trends of greenhouse emissions and other polluting substances are not sustainable. Extreme weather conditions are raising the risk of natural disaster and will require investment for prevention or reparation. The health costs of pollution will be rising. Already now, the pollution-related health costs incurred by China are estimated to amount to over 4 % of its GDP (IDA 2005). Desertification, reduction in the water supply, and other trends related to climate change are progressively reducing the land available for crop production, thus adding to price tensions.⁽¹⁵⁶⁾ According to recent studies, the overall, worldwide health and non-health costs of climate change at unchanged policies could grow to the equivalent of 5 to 20 % of household consumption by 2050 (Stern 2007). The increased awareness of environmental costs is changing the policy attitude among advanced nations and developing countries alike. More action is thus likely, but this will also be costly. For example, the annual average cost of stabilising the stock of greenhouse emissions would be between 1% and 3 % of GDP (Intergovernmental Panel on Climate Change 2007), Stern 2007).

2.3. ECONOMIC IMPLICATIONS

2.3.1. Growth

A priori globalisation is beneficial for economic growth by increasing efficiency and opening up

new markets.⁽¹⁵⁷⁾ Deepening international trade triggers a self-selection whereby reallocation to more efficient firms raises overall total factor productivity (Ottaviano *et al.* 2007). Expanding possibilities of international trade and investment is likely to raise R&D and innovation (Keller 2002). Meanwhile, advanced economies lose markets for unskilled labour-intensive manufactures and for higher value added segments as well. Outward FDI is no longer mostly aimed at establishing presence in expanding markets or at exploiting local raw material supplies, but increasingly to exploit cost advantages in the performance of unskilled labour intensive parts of the production process. Increasingly, offshoring to low wage economies also concerns white collar work (Grossman and Rossi-Hansberg 2006). As a result, competition among advanced economies increasingly takes place at the technological frontier, with innovation and quality improvements being key competition factors (Sapir *et al.* 2004; Aghion and Howitt 2006).

If economies fail to adapt production structures in line with evolving comparative advantages and the capacity to innovate is weak, stiffer global competition may endanger competitiveness and result in terms of trade losses and unemployment⁽¹⁵⁸⁾. The euro area has not a strong recent track record in this respect and the ageing population is likely to be conducive to less rather than more flexibility. The euro area will also be comparatively hard-hit by the increases in commodity prices as it is less endowed with natural resources. Overall, therefore, the euro area may be faced with a severe challenge to adapt to globalisation, ageing and resource constraints.

2.3.2. Price stability

The adoption of stability-oriented monetary strategies has contributed to two decades of low inflation. However, globalisation also played a role, even if the extent to which is still subject to

⁽¹⁵⁶⁾ See, e.g. Bosello *et al.* (2006) and Parry and Williams III (1999).

⁽¹⁵⁷⁾ See, e.g., European Commission (2005c) for a model-based analysis of those effects applied to the EU.

⁽¹⁵⁸⁾ For a seminal paper see for instance, Krugman (1979) who shows that if advanced economies do not keep innovating at a sufficiently high pace, imitation from low-wage countries could be damaging.

debate (see Rogoff 2006). The emergence of low-cost producers like China, India and Eastern Europe put downward pressure on prices through lower import prices, increased competition, changing labour market responses in developed economies, and outsourcing and unbundling of production. The flipside has been an increase in the demand and prices for energy and other natural resources. On balance, so far, the task of monetary policy to keep inflation low has been facilitated by globalisation, but as supply constraints on natural resources become tighter and labour supply constraints in emerging countries may start to bite at some point as well, the upward pressure on prices may dominate. Ageing, by itself, will have ambiguous effects on price stability. The common argument goes that the "demand for price stability" increases in an ageing society as pensioners are more dependent on fixed incomes. But on the other hand, by withdrawing labour and running down wealth, the same older generations also generate upward price pressure. On balance, the price pressure stemming from long-term trends is likely to be upward, which is challenging for monetary policy.

2.3.3. Adjustment and stabilisation

Global trends require advanced economies to adapt to changing comparative advantages and shift towards skill-intensive activities. Global financial markets become more integrated. In addition, the increased mobility of financial capital and the accumulation of global current account imbalances requires resilience against the risk of large swings in exchange rates and financial markets turbulence. All in all, globalisation implies that domestic economies are exposed to an increased pressure to transform and adjust to international developments.

This has implications for the capacity of the euro area as a whole to adjust to global shocks. Interest rates are increasingly driven by dynamics originating in emerging economies, and the issue arises whether, when, and in which way the recent period of low rates and abundant international liquidity will come to an end as a result of falling saving rates in fast-growing Asian countries.

Financial globalisation appears to have raised the potential of far-reaching financial crises with major ruptures in the growth process, stimulating discussion about financial supervision at the EU and the global level.

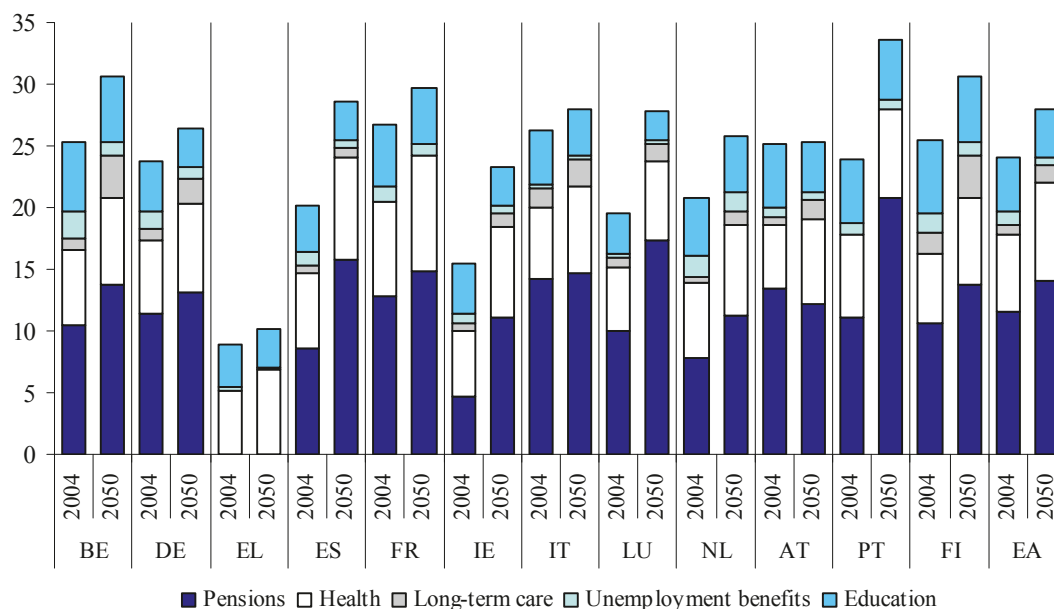
Global shocks will also entail an issue of adjustment within the euro area. The exchange rate implications of unwinding global imbalances, shifting comparative advantages, adverse terms of trade tendencies related with rising prices for energy and commodities, all produce effects that are to some extent country-specific, since different euro-area countries are differently exposed to such common shocks. Globalisation would also impinge on the working of the adjustment mechanism, by changing trade elasticities and thereby affecting the competitiveness channel and by further reducing the relevance of national real interest rates for decision-making, with implications for the working of the real interest rate channel. At the same time, financial markets become an increasingly relevant vector of risk-sharing opportunities but also raise systemic risk issues related to contagion and boom-bust dynamics.

2.3.4. Public finances

Euro-area countries are increasingly aware of the consequences of ageing for the sustainability of their public finances. Age-related expenditures will rise considerably in most euro-area countries in the coming decades. Available projections indicate that for the euro area as a whole these expenditures will rise by 4 percentage points of GDP up to 2050.⁽¹⁵⁹⁾ While in some countries the increase will be moderate, in countries with stronger ageing pressures and less sustainable social security systems the increase could be much higher, up to almost 10 percentage points of GDP (Graph II.2.2). Most of the projected increase in public spending will be on pensions and, to a lesser degree, on health care and long-term care. The potential offsetting savings in terms of projected public spending on education and unemployment benefits are likely to be limited.

⁽¹⁵⁹⁾ The detailed projection results are provided in European Commission (2006f).

Graph II.2.2: Age-related expenditure in the euro area (% of GDP)



Note: Data on pensions for Greece not available
Source: European Commission.

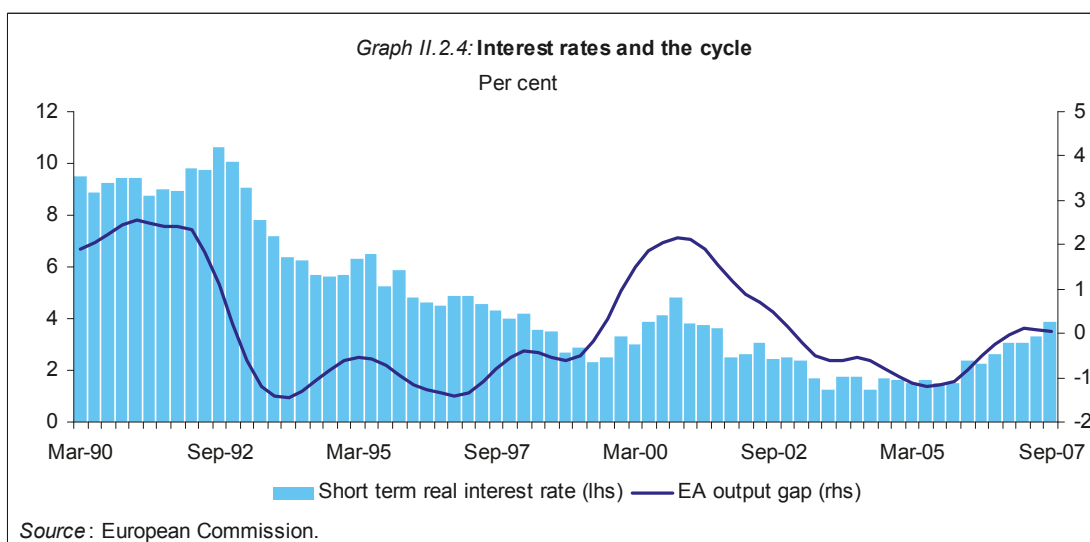
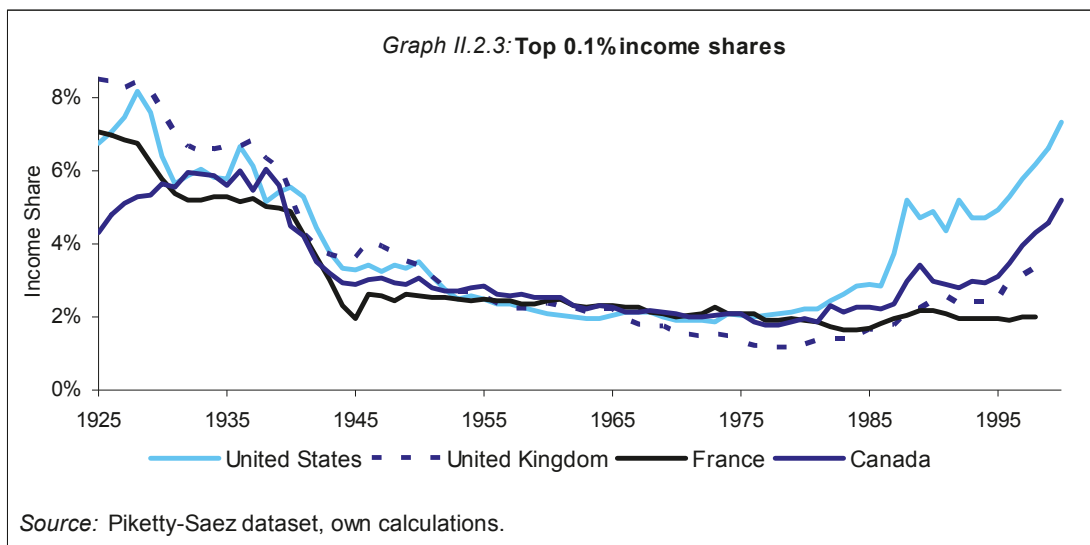
Such tendency for age-related expenditures to increase will make it difficult for Member States to maintain sound and sustainable public finances in the long-term. At unchanged policies, and without the medium-term budgetary consolidation planned in the Stability Programmes of euro-area countries, debt/GDP ratios for the euro area as a whole are projected to start rising at explosive rates around 2025, where the budgetary impact of ageing starts to take hold more firmly.

Securing sustainable public finances is a key policy challenge that, consistently with the priorities agreed at the 2001 Stockholm Economic Council, requires steadfast policy responses by euro-area member along three lines:

- First, euro-area members need to consolidate their public finances so as to run down public debt rapidly before the full impact of ageing unfolds. Consolidating public finances towards current medium-term budgetary objectives of euro-area countries will help, but in some cases, even more ambitious medium-term budgetary objectives will be needed.

- Second, successfully implementing policy measures that increase employment and productivity, in line with the goals of the Lisbon strategy, would contribute to create resources to finance social security systems and to provide room for budgetary reallocation in the future.
- Third, appropriate reforms of pension, health-care systems are key. However, pockets of resistance and inertia can be expected. Cuts in the generosity of pension benefits, extensions in working lives and constraints on health expenditure are not a sinecure for aging societies.

Several euro-area members have made progress down these three routes, by resolutely implementing often difficult policy choices. They have shown that reforms and ambitious fiscal policies pay off. However, more needs to be done and without delay, since postponing inevitable policy choices will increase their costs.



2.3.5. Income distribution

Like any other major economic transformation, globalisation creates winners and losers. Traditional trade theory predicts that the major winners from globalisation in the advanced world are skilled workers, while the unskilled would see their earnings reduced due to the rising supply of unskilled labour-intensive products originating from low-wage emerging countries. About a decade ago, a debate raged among academics and policy makers aimed at disentangling how much of the increase in wage inequality between skilled and unskilled workers observed in many advanced economies, notably the US and UK, was related to globalisation and how much to technological change.

The assessment given in early analyses was that globalisation had a fairly marginal role in shaping income inequality, while the main culprit was identified to be skill-biased technological change.⁽¹⁶⁰⁾ More recent assessments tend to put a somewhat larger weight on the role of globalisation, for several reasons (e.g., Krugman 2007). First, from a forward-looking perspective, it appears increasingly evident to many observers that the process on integration of low wage emerging countries in the world economy is taking place on a massive scale and will be long-lasting. Second, the falling wage share in GDP in a

⁽¹⁶⁰⁾ See, for instance, Lawrence and Slaughter (1993), Krugman (1995).

number of advanced economies suggests that a wider mass of workers, not only the least skilled, but also those with medium levels of skilled are at risk of being displaced by a supply of rapidly rising medium-skilled workforce in emerging economies. Third, intra-industry trade, outsourcing, offshoring, and the international fragmentation of production processes are redistributing income via channels different than those foreseen by the traditional trade theory and across different workers' groups within broadly defined skilled categories.⁽¹⁶¹⁾ In particular, it appears that inequality has widened in many countries especially because the share of income going to the absolute top income earners has increased (see Graph II.2.3). Moreover, there are estimates showing that, starting from the nineties the skill categories losing income have been especially those at middle of the skill ladder; evidence consistent with the hypothesis that those skills are increasingly substitutable with those supplied by low income economies via outsourcing and offshoring (Autor, Katz, and Kearney 2006).

In parallel, there is rising awareness that the impact of globalisation on income inequality is to a large extent driven by the specific institutional settings available in the different countries. Consistently, it appears that there is no unique income distribution pattern across Europe, suggesting that national diversities and experiences are significantly different from each other and that domestic policies and institutions are prime drivers behind the distribution of income.

The inequality implications of rising trade with low wage economies, outsourcing and offshoring will be compounded by the impact of other long-term trends. The terms of trade deterioration associated with rising prices for energy and commodities will put downward pressure of real wages, and may effect lower income groups

relatively more heavily. The constraints to public finances posed by ageing populations will narrow the margins available to offset rising inequality at the bottom with widespread and generous government transfers. Hence, in perspective, combining the gains offered by free markets with equitable distribution patterns will be a major challenge for euro-area governments.

2.4. EMERGING POLICY ISSUES

Euro-area countries are well-equipped to adapt to a globalising world. European trade integration and monetary unification were major leaps forward towards globalisation and the perception that past challenges were successfully dealt provides comfort for the future. Euro-area economies have since long been relatively open economies not only towards other euro-area and EU countries but also towards other advanced, emerging and developing trade partners. The trade orientation of the euro area appears as an advantage in the current context, with its share of exports towards dynamic Asian economies larger than in other world regions, notably the US. The size and the accessibility of the internal market as well as the quality of the institutional framework are key assets in the face of globalisation. Firms in the euro area benefit from major scale economies, which permit them in turn to perform better in the global arena. As well, firms located outside the euro area have greater incentives to carry out FDI in the euro area, which may produce technological spillovers.

Euro-area participation also offers a clear advantage in terms of stable macroeconomic conditions. Inflation in the euro area is credibly under control. Large swings in nominal exchange rates and currency speculation have stopped being an issue for euro-area economies. The euro area as a large economic entity and the issuer of one of the two most important currencies has more options than issuers of smaller currencies. This allows the EU and particularly the euro area taking an active role in shaping the world economic landscape. Finally, larger and more mobile international trade and financial flows together with a wider use of the euro on a global scale will act in the sense of strengthening the interdependencies between euro-area macro-

⁽¹⁶¹⁾Feenstra and Hanson (1996) show that outsourcing can increase wage inequality both in high and in low-wage economies. Haskel and Slaughter (2007) and Barba Navaretti *et al.* (2003) show that FDI activity rises labour demand elasticities, which could contribute to lower union wage mark-ups. Manasse and Turrini (2001) show that wage inequality can increase also within broad skill categories as a result of intra-industry trade.

policies and those of the other major economic areas.

Euro-area membership, however, also raises challenges, by raising the costs of wrong policies and badly-functioning markets. EMU membership reduces the room for short-term fixes to address domestic problems, notably nominal depreciation to deal with worsening price competitiveness or fiscal expansions to stimulate domestic demand. By the same token, EMU raises the stakes to carry out the reforms necessary to adapt specialisation patterns to changing comparative advantages and to improve economic resilience, and to put public finances on a sustainable footing.

The long-term trends outlined above also pose challenges also to the euro-area framework for macroeconomic policy. The likely increased frequency and magnitude of inflationary supply shocks could worsen the trade-off between output and price stabilisation faced by monetary policy. Monetary policy in the euro area (Graph II.2.4), has become more closely correlated with the business cycle as compared with the 1990s. The strong counter-cyclicalities of interest rates suggests that the trade-offs between inflation and growth objectives have so far remained limited in the euro area, possibly as a result of a prevalence of demand over supply shocks. Moreover, in the past decade, many euro-area countries benefited from a substantial improvement in the conduct of monetary policy which also contributed to mitigate the trade-off between inflation and output stabilisation (Cecchetti *et al.* 2006). However, in the future not only inflationary supply shocks may become more frequent, but comparable gains in the conduct of monetary policy are unlikely.

The margins available for using fiscal policy as a stabilisation tool could also narrow. Age-related expenditures will be on the rise in a number of euro-area countries, thus creating a tendency for the budget balance to worsen at unchanged policy.

In case reforms will not be sufficient to contain the budgetary impact of ageing, gearing fiscal policy towards stabilisation objectives may face rising constraints in future years. The effectiveness of fiscal policy in the face of inflationary supply shocks is also more limited, or it may even be counter productive if it postpones or hampers structural adjustment.

An additional element that needs to be considered in this context is the increase in diversity among euro-area countries. The new Member States acceded in 2004 are characterised lower income per capita compared with the current euro-area Members and are catching up. Productivity, notably in the tradable sector, is expected to grow faster in most of these economies, implying higher inflationary pressures in the non-tradeable sector and an associated real appreciation. Most new Member States are also characterised by less developed financial markets compared with existing euro-area countries, which may have implications for the working of the euro-area monetary transmission mechanism. Moreover, uncoordinated structural reforms could lead to increased heterogeneity also among current euro-area Members, especially if reforms are more ambitious in the already agile economies rather than in the rigid ones.

In sum, the possible tightening of the trade-off between output and inflation for monetary policy, narrowing margins for fiscal policy stabilisation, and rising heterogeneity of the euro area will further raise the necessity of well functioning markets and may require initiatives at euro-area level to improve the intra-area adjustment mechanism. Moreover, increasingly developed and integrated real and financial markets and a growing international status of the euro raises an issue of an adequate involvement of the euro area in global surveillance and policy coordination.

3. PROMOTING GROWTH AND EMPLOYMENT

3.1. INTRODUCTION

As discussed in the Part I of this Report, economic growth in the euro area has average around 2% per annum, roughly the same as in the preceding ten years. While EMU's primary objective has been to establish macroeconomic stability, it was hoped that trade and financial market integration would, via heightened competition and innovation, boost productivity and output. Financial and product market integration spurred by the single currency, along with increases in labour participation, has indeed acted as a growth driver, and probably more so than expected. But other factors have acted as impediments, most notably weak progress with structural policies. Had there been more progress with structural reform, growth would have been substantially more buoyant.

Looking ahead, a gradual reduction in the fraction of population in working age is expected due to ageing populations. This would lead the contribution of labour inputs to potential growth to first taper off and subsequently turn negative. This will already be felt in the next decade, with potential growth expected to fall below 2% per annum as growth. Further down the road potential growth could *halve* to about 1% per year, half the rate projected for the US. Such weak long-term growth prospects need to be internalised in EMU policy making now.

Against this backdrop, the first section of this chapter examines the medium and long-term growth prospects for the euro area in more detail. The next sections then look at the scope for policies to enhance growth via, respectively, higher active labour market participation and stronger growth in productivity.

3.2. LONG-TERM PROJECTIONS

The most salient feature of potential economic growth in the euro area since the inception of the single currency has been the combination of a strengthening contribution to growth from labour – notwithstanding the secular decline in hours worked per person – and a falling contribution from labour productivity. This tendency, which

has in fact been in the data since the mid-1990s, is in stark contrast with developments in the United States, where labour productivity accelerated while growth in labour utilisation slowed down (but from a higher level). The bulk of the euro-area productivity growth gap is due to a divergence in total factor productivity (TFP), suggesting that a slow pace of diffusion of new technology is the main culprit.

Using a production function-based medium term extension to 2012, the euro area would continue to record potential growth of roughly 2-2¼ % per annum over the next five years (Table II.3.1). A progressive recovery in TFP growth rates in the euro area from an annual rate of 0.8 % at present to 1.1 % is assumed. Even so, the euro area's potential growth rate would decline from 2010 onwards, with rates falling to below 2 % by 2012 as the predicted recovery in productivity growth rates would be more than offset by a smaller contribution from labour inputs as growth in the working age population slows down and structural unemployment and labour force participation rates are not expected to change much.

From "unchanged-policy" projections regarding demography, participation rates, capital-deepening, and TFP up to 2050 emerges that the area's potential growth rate would be cut by almost half. This will occur in spite of the assumption that TFP growth would "normalise", and is due to the negative labour supply implications of the most recent Eurostat's population projections. The long-term demographic differences between the euro area and the US are stark, with the US continuing to record potential growth rates of around 2½ %. If the recent pattern of slow TFP growth in the euro area do not turn out to be an aberration, potential growth would obviously be even lower in the euro area.

As noted, these longer-term scenarios assume "unchanged policies". Hence it would be useful to examine the scope for policy to push up the utilisation of labour resources further and to address the TFP slowdown in the euro area.

Table II.3.1:
Long-term potential Growth Rates and their Components

	Potential Growth (%)	Labour Input (%)			Hourly Labour Productivity (%)		
		Total	Employment	Hours Worked	Total	Capital Deepening	TFP
Euro Area							
1989-1998	2,3	0,3	0,7	-0,4	2,0	0,7	1,3
1999-2008	2,2	0,8	1,2	-0,3	1,3	0,5	0,8
2009-2012	2,1	0,4	0,8	-0,4	1,7	0,7	1,0
2013-2020	1,9	0,1			1,8	0,7	1,1
2021-2030	1,3	-0,4			1,8	0,7	1,1
2031-2050	1,2	-0,5			1,7	0,6	1,1
US							
1989-1998	3,1	1,6	1,6	0,0	1,5	0,3	1,2
1999-2008	2,8	0,8	1,2	-0,4	2,0	0,8	1,2
2009-2012	2,4	0,5	0,6	-0,1	1,9	0,8	1,0
2013-2020	2,2	0,3			2,0	0,8	1,1
2021-2030	2,0	0,2			1,8	0,7	1,1
2031-2050	2,4	0,7			1,7	0,6	1,1

Source: European Commission.

3.3. RAISING EMPLOYMENT RATES

In the first ten years of EMU, labour productivity growth slowed down while labour utilisation accelerated. As reported in Chapter I.5, the expansion of employment observed since 1999 was based both on reductions in the unemployment rate and increases in the labour market participation rate. As well, changes in the working age population still added about half a percentage point to overall employment growth. Based on the recent experience, the following sections examine the role that policies could play in boosting participation and cutting unemployment. It also looks at the determinants of hours worked and how policies impinge on them.

3.3.1. Encouraging participation

Participation in the labour market is determined in part by social, cultural, institutional and demographic factors, such as the duration of education, the roles of men and women, the decline of fertility rates, the age structure of the population and the normal age of retirement.

Economic factors also play a role, in particular employment expectations, household income levels, the share of part-time employment in total employment and the share of the services sector in the economy.

A more precise account of the change in the aggregate participation rate, including a long-term projection consistent with the growth projection, is reported in Table II.3.1, based on a "shift-share" analysis (Box II.3.1).⁽¹⁶²⁾ It shows that demographic developments will turn unfavourable in the future, with the share of people in their late working years, and who are less likely to participate, rising. Participation is nevertheless projected to rise from about 72% at present to 76% by 2050 as a greater share of young, prime-age females, and older workers are expected to join the labour market. This is not sufficient to maintain potential output growth at current rates, calling for policies to raise labour market participation even further.

⁽¹⁶²⁾ Shift-share analysis decomposes the change in the participation rate into a composition effect, i.e. the part of the change in participation due to variation in the weights of the different groups in the working age population, the effect of changes in the age specific participation rates and a residual effect stemming from the interaction between the two other effects.

Box II.3.1: The impact of pension reform on older workers' participation rates.

This Box assesses the impact of pension reform on older workers' participation rates. The dating of pension reform is derived from the LABREF database. The reforms considered are those that reduce the incentives to early retirement by changing the eligibility conditions or the eligibility conditions and one or all of the following: level, coverage, tax treatment and contributions. To capture the effect of reforms a dummy variable, taking the value of 1 in the years of reforms and 0 otherwise, is used in a panel regression, with as the explanatory variable the change in the participation rate of the 55-59 and 60-64 age groups. The reform dummy is entered with six lags. Country fixed effects control for unobserved heterogeneity across countries, and the unemployment rate is included to capture labour market tightness.

Moreover, an EMU dummy is interacted with the reform dummy to identify specific breaks related to the effects of pension reforms within and outside, as well as before and after, EMU.

The introduction at various lags of the reform dummy allows testing whether the maximum impact of the reform is reached when those belonging to a specific age group of older workers approach the average exit age from the labour force.

Thus, the participation behaviour of those that are approaching the retirement age changes after the reform. The table below reports the results.

As expected, the participation rate varies positively with labour market tightness and pension reforms. The effect of pension reform is stronger for the EMU than for the non-EMU sample. The estimated coefficients suggest that for the 55-59 age group a pension reform has the largest impact on the participation rate after six years. For the 60-64 age group the maximum effect is achieved after about three years. As might be expected the effect of a pension reform on participation is stronger for the 55-59 age group than for the 60-64 age group.

Table 1:
Change in the Older workers' Participation rate and pension reforms

	55-59 age group			60-64 age group		
	All countries	Outside EMU	EMU	All countries	Outside EMU	EMU
Unemployment rate (-1)	-0.09*** (-4.0)	0,02 (0.5)	-0,16 (-1.56)	-0.09*** (-2.9)	-0,02 (-0.36)	-0,02 (-0.26)
Dummy for reforms years(-1)	0.49*** (3.27)	0.80*** (4.01)	0.36*** (2.75)	0,12 (0.62)	0,24 (1.24)	-0,14 (-0.71)
Dummy for reforms years(-2)	0,02 (0.16)	0,18 (1.13)	0,26 (1.21)	0.35* (1.9)	0,19 (0.62)	0,12 (-1.54)
Dummy for reforms years(-3)	-0,001 (-0.009)	0,16 (0.7)	0,19 (1.1)	0.61*** (3.01)	0.71*** (2.93)	0.71*** (2.85)
Dummy for reforms years(-4)	0.56*** (2.69)	0.46* (1.8)	0,39 (1.57)	0.33** (2.08)	0,17 (0.89)	0,12 (0.68)
Dummy for reforms years(-5)	0.70*** (3.61)	0,07 (0.47)	1.20*** (4.37)	0.41** (1.96)	0.61*** (3.2)	-0,02 (-0.08)
Dummy for reforms years(-6)	1.16** (2.12)	0.74*** (2.3)	1.38*** (3.12)	0,6 (0.82)	-0,17 (-0.85)	0.79* (-1,81)
Country Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observation	285	285	285	285	285	285
R ² (adjusted)	0,19	0,2	0,28	0,14	0,28	0,28

OLS regression controlling for country specific heteroskedasticity and contemporaneous correlation. Absolute values of T-statistics in parentheses; *significant at 10%; ** significant at 5%; *** significant at 1%.

From Table II.3.2 can also be inferred that:

- Almost two-thirds of the increase in participation since 1999 is explained by a sharp increase in the participation of female prime-age workers. The increase in female labour market activity has been particularly sizeable in countries where their participation rates were initially low, which is an indication of convergence. This is driven by socio-economic and cultural changes while also policies and changes in labour market institutions played a role.
- The increase in the employment of older workers has been marked as well, explaining more than a third of total job creation since 1999. Reforms in pension systems have been instrumental in this regard, lifting the statutory retirement age in some cases and reducing the incentives for early retirement. But, as indicated in Chapter I.5, further progress is warranted.

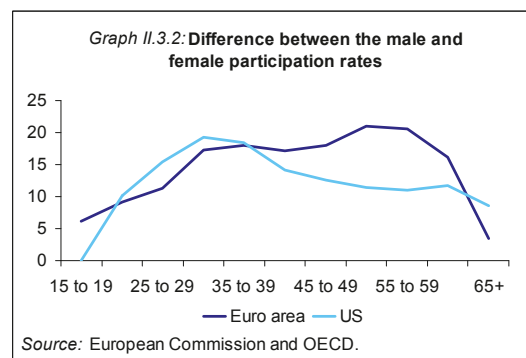
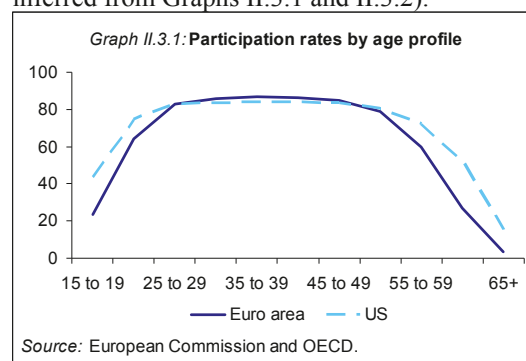
Table II.3.2:
Decomposition contributions to participation rates

	1995 - 1998	1999 - 2006	2007- 2050
Participation rate and of period	66,6	70,6	75,6
% change	1,1	3,3	4,9
Contribution from shifts in employment rates of:			
TOTAL	0,8	3,1	5,9
Young (15-24)	-0,1	0,0	0,0
Prime age (25-54)	0,7	1,7	2,8
Older (55-65)	0,2	1,3	3,0
MALE	0,1	0,6	1,9
Young (15-24)	0,0	0,0	0,0
Prime age (25-54)	0,0	0,0	0,7
Older (55-65)	0,1	0,5	1,2
FEMALE	0,7	2,5	3,9
Young (15-24)	-0,1	0,0	0,0
Prime age (25-54)	0,7	1,7	2,1
Older (55-65)	0,2	0,8	1,8
Contribution from demographic effect:			
TOTAL	0,3	0,2	-1,6
Young (15-24)	-0,4	-0,4	-0,2
Prime age (25-54)	0,6	0,5	-3,2
Older (55-65)	0,0	0,1	1,9
Interaction effect	0,0	0,0	0,6

Source: European Commission.

The participation of the young has shown no increase since 1999. This is not necessarily problematic for those who are in education, but in several countries the share of the young that is

neither in education nor in employment is high -- above 20% in Italy and Greece, and above 10% in France, Germany, Ireland, the Netherlands and Spain (Quintini *et al.* 2007). This is symptomatic of a need to reduce school drop-out rates and promote a smoother entry of the young in the labour market. The participation rate of prime-age men has shown no increase since 1999, but this is already relatively high in the euro area, also compared with the US (as can be inferred from Graphs II.3.1 and II.3.2).

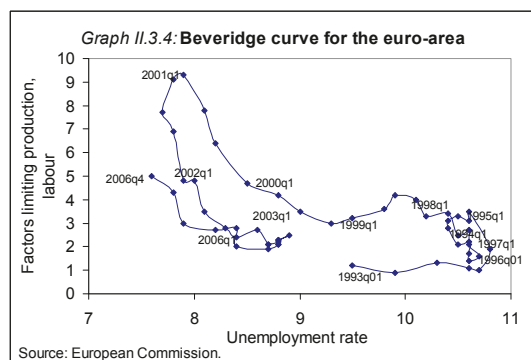
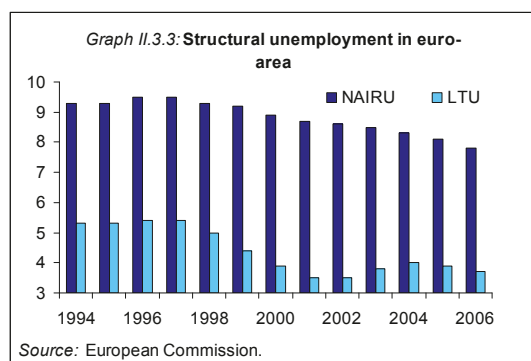


Although it has reportedly significantly risen, female participation in the euro area is still relatively low. Low participation is largely concentrated among women above 40 years and probably reflects a combined effect of persistence of social habits', difficult transitions from inactivity to work after a period of child care and disincentives to work created by the interaction of tax and benefit systems. While policies could usefully focus on this group, there may be scope to raise the labour market participation of females also at younger ages as well. Young women's labour market entry decision strongly depends on factors such as access to institutionalised childcare (Del Boca and Vuri 2006), government support for families with children, parental leaves, flexibility of

working-time arrangements, preferences regarding choice of reduced working hours to care for children (Kramarz *et al.* 2006, Jaumotte 2003). On all these fronts progress is feasible.

3.3.2. Reining in unemployment

As discussed in Chapter I.5, the decline structural unemployment since 1999 has been sizeable. It has been accompanied by a fall in the long-term unemployment rate (Graph II.3.3) and a better qualitative match between supply and demand on the labour market as suggested by a downward shift of the "Beveridge curve" (Graph II.3.4). The introduction of more flexible working arrangements, the strengthening of incentives to work embedded in tax and benefit systems, a greater link with activation policies and a stronger reliance on preventive and targeted active labour market policies, the (modest) reduction of the tax burden on labour, especially for the low-skilled, and more generally, widespread wage moderation, are all factors that have contributed.



However, unemployment rates remain high and strongly persistent in certain regions, pointing to a tendency towards "polarisation", as would be

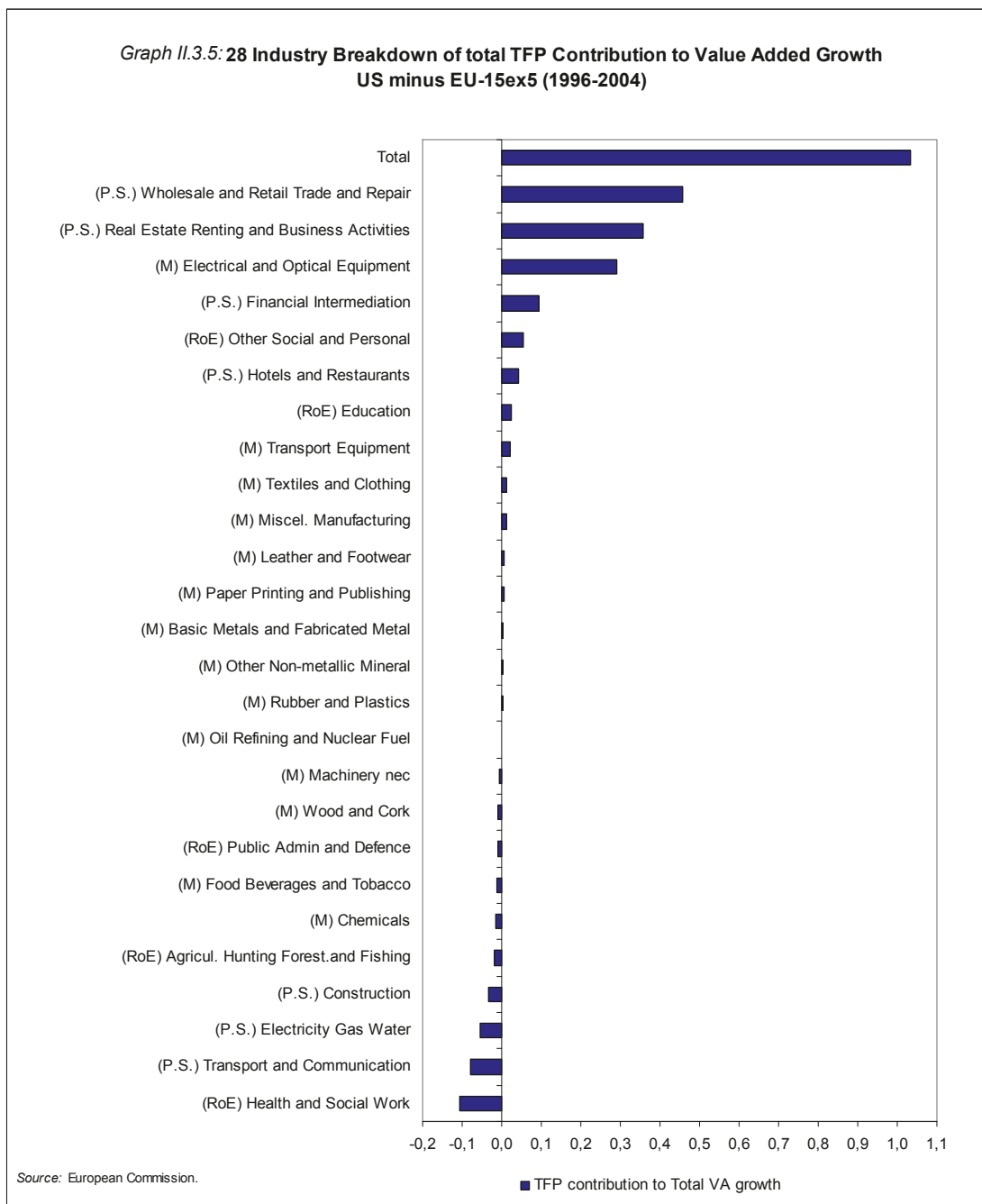
predictable for an economic environment where product and financial market integrate while labour markets remain spatially segmented. Specialisation and agglomeration effects induced by EMU may reinforce these tendencies and policies to encourage the adjustment of real wages and facilitate labour mobility would thus be beneficial.

3.3.3. Boosting hours worked

Average hours worked per employee have been falling in most developed economies, but the fall has been particularly sizeable in the euro area. A proximate explanation is a compositional effect implied by the rising incidence of female employment, as this is often part-time (OECD 2007b). However, the deeper explanation may reside in the distortions created by the tax and benefit systems (Prescott 2004). Labour market rulebooks and institutions constitute another explanation, and some argue that this is driven by unions' preference that would be biased in favour of prime-age male workers (Alesina *et al.* 2005). Another explanation points to a revealed preference to convert productivity gains into leisure (Blanchard 2004, Gordon 2007). However, these different explanations are not mutually exclusive. High marginal tax rates influence the decision to enter the labour market on a part-time basis mostly for non-working spouses (OECD 2007). Wage compression, which is comparatively pronounced in the euro area, is found to have a negative effect on hours worked (Faggio and Nickell 2007) and may also weaken the incentives for women to work full-time. Policies could thus usefully aim to create proper incentives for women to supply more hours of work, thus reinforcing the call for heightened female labour market participation.

3.4. RAISING PRODUCTIVITY GROWTH

In several places in this Report the importance of decisively addressing the euro area's relatively poor TFP performance is highlighted, which is key to offset the adverse impact of ageing on growth. The orientation of policies in this regard needs to be rooted in a proper analysis of the forces shaping TFP growth. Several issues stand out: the role of industry structures, catching-up versus growth at the frontier, the impact of



product market competition and the role of education and R&D.

3.4.1. The role of industry structures

The analysis of industry level TFP trends shows that the bulk of the EU-US TFP growth differences over the last decade have been confined to a small group of industries: wholesale and retail trade, other business

services, electrical and optical equipment and financial intermediation.⁽¹⁶³⁾ This suggests that the euro area is not suffering from a generalised TFP slowdown across all industries but rather from difficulties in shifting resources to areas where TFP growth is high, notably ICT, and to a

⁽¹⁶³⁾ Analysis based on the EU KLEMS databank.

comparatively weak performance in reaping TFP gains in some private services sectors.

A number of studies have examined what part of aggregate TFP growth can be accounted for by TFP taking place within firms or sectors and what part is instead associated with resource reallocation towards more productive activities. Bartelsman *et al.* (2006) using firm-level data for 24 countries quantified that the size of the reallocation effect could amount to up to half of aggregate productivity growth.⁽¹⁶⁴⁾ Interestingly, it appears that market exit of low-productivity enterprises matters more for aggregate productivity performance than market entry of new firms. Moreover, the bulk of the contribution of reallocation effects to TFP growth appears to take place within rather than between sectors. While somewhat speculative, these findings suggest that lack of firm mobility are a main culprit of slow TFP growth in the euro area.

3.4.2. Catching up vs. "growth at the frontier"

There is also a growing consensus that while catch-up countries would gain from institutions and policies favouring the cost efficient adoption of existing technologies, countries operating at the technology frontier would profit instead from policies that promote excellence in higher education and R&D, financial markets that reward risky projects, and regulations that do not put an excessively heavy burden on either incumbent firms or on potential entrants. The European productivity slowdown could thus be understood in part as a slow adaptation of institutions to a context in which TFP growth is increasingly driven by innovation rather than adoption of existing technologies (Sapir *et al.* 2004).

Various studies have aimed to capture this distinction and generally support the view that

⁽¹⁶⁴⁾Recent studies on the US, Canada and Germany support the notion that reallocation may be more important than earlier studies obtained (e.g., Foster *et al.* 1998; Baldwin and Gu 2006 and Cantner and Krueger 2006). Fukao and Kwon (2006) attribute to slow reallocation of resources between low-productivity firms to high productivity firms the TFP slowdown in Japan in the past decades. However, results are not fully robust to the specific analytical approaches, see Foster *et al.* (2005).

catching up and innovation ("growth at the frontier") both contribute to TFP developments in most advanced countries, but at a degree that is largely country-specific and that changes over time. A recent study carried out at the European Commission (2007a) suggests that since the mid-1990s TFP growth in Europe was mostly driven by growth at the frontier, with a non-significant impact from the technology gap variable. This finding is thus consistent with the view that across Europe growth is increasingly being driven by innovation activity and less by the adoption of existing up-to date technologies.

3.4.3. Market forces shaping TFP growth

TFP growth taking place within sectors and firms is affected by the regulation of *product markets*. Product market regulations and institutions can affect TFP growth via the impact that competition and market structure have on innovation. Recent empirical evidence suggests that the relation between the extent of competition and innovation is hump-shaped (Aghion and Howitt 2005): innovation is harmed by either too little or too harsh competition. If competition is too weak, firms have few incentives to innovate and an increase in competition would stimulate innovation. At the other extreme, excessively intense competition reduces the incentives for innovation because the innovating firm would not be able to accrue any rents. There is also evidence to suggest that the relationship between competition and innovation is strongest in countries or industries that operate close to the technology frontier (Griffith *et al.* 2006). Evidence also shows that product market regulation, notably legal entry barriers, and including in network industries, may play a relevant role in shaping the extent to which TFP growth can benefit from resource reallocation.

Labour market regulations can also shape TFP growth, not only by affecting the extent of reallocation towards high-growth activities, but also by having an impact on the incentives by firms to innovate. In particular, strict employment protection legislation may discourage the pursuit of risky projects and reduce the likelihood of firms carrying out radical innovation (Saint-Paul 2000, Scarpetta and Tressel 2002).

Box II.3.2: Financial market integration and capital allocation

Enhanced financial integration among euro area countries was one of the notable achievements of EMU. However, while research on the impact on financial integration on growth in EU (e.g., Guiso *et al.* 2004) or on risk-sharing (e.g., Kalemli-Ozcan *et al.* 2004) are quite abundant, much less work has been so far carried out with the aim of assessing the impact of the integration of financial markets on the allocation of capital. However, improved capital allocation across productive activities is a key channel through which financial development and integration can deliver higher growth (higher TFP growth associated with a more productive distribution of resources across alternative uses).

Against this background, this box provides analysis aimed at assessing the impact of financial integration on the responsiveness of capital to changing productivity and cost conditions. To this end, an investment variable was regressed against a measure of the "net marginal product of capital", namely, the difference between the marginal product of capital and the user cost of capital. The elasticity of investment to this variable measures by how much capital grows (falls) in response to a positive (negative) difference between its marginal product and its cost. A higher (lower) elasticity is interpreted as characterising a more (less) efficient allocation of capital, i.e., one in which there is a more (less) effective response of capital whenever the (static) conditions for an efficient capital allocation are violated. This elasticity is allowed to vary depending on whether countries are in EMU and depending on the degree of financial markets development and integration. Although such a specification is based on a static model of investment and constrains the reaction of capital to be the same to its marginal product and its cost and requires assumptions for the computation of the marginal product of capital, it is highly desirable in that it reduces considerably the number of parameters to be estimated and permits to convey synthetic results regarding the impact of EMU and financial market conditions on the efficiency of capital allocation.

Data on investment, capital productivity, and costs are taken from the EUKLEMS database. Data on financial integration are taken from Lane and Milesi Ferretti (2006). Data vary across sectors, countries and time. The sample includes 7 euro-area countries (DE, ES, FR, NL, IT, AT, FI) and 3 non-euro area countries (DK, UK, US). For these countries, a full set of variables including capital stock, investment, TFP etc. is available. Data range from 1980 to 2004 and cover 28 manufacturing and services sectors. To measure the marginal product of capital, the standard assumption is made that the production function exhibits constant returns to scale and is of Cobb-Douglas type. The measure of the user cost of capital makes use of sector specific data on depreciation rates and investment good deflators.

In order to capture a persistent element in investment, the estimated equation also includes the lagged dependent investment variable with a 1-year lag. To capture the impact of possible omitted variables, country, sector and year fixed effects are included. Since variables are expressed in logarithms, the regression coefficient of the net marginal product of capital measures the elasticity of investment. The impact of financial integration on capital allocation is obtained by interacting the net marginal product of capital with indicators of integration of debt and equity instruments.

Table 1 reports results on the link between financial integration and capital allocation. The first column of the Table analyse the role of integration in terms of debt instruments, while column (2) looks at cross-border holdings of equity assets. The regression coefficient of the (non-interacted) net marginal product of capital variable represents the elasticity of investment for countries/years having an average degree of financial integration. ⁽¹⁾ Results show that a 10 percentage point increase in the difference between the marginal product of capital and its cost raises the share of investment on the capital stock by about 1.25 per cent. Both the integration of debt and equity markets appear to raise significantly the elasticity of investment. The coefficient of the interacted variable represents the difference in the value of the elasticity associated with a one-standard deviation increase in the degree of financial market integration.

⁽¹⁾ This interpretation comes from the fact that financial integration variables are standardised.

(Continued on the next page)

Box (continued)

The impact of financial integration on investment elasticities appears to be about 17 per cent. Since rising financial integration has coincided to some extent with enhanced domestic financial development, the analysis has been repeated by controlling for the share of credit extended on GDP as a measure of financial development (columns (3) and (4)). It appears that the financial integration variables maintain a significant impact on the elasticity of investment also after controlling for the effect of financial development.

Overall, the results support the view that the allocation of capital across sectors and countries benefits from increased financial integration. As illustrated in Part I of the report, in euro area countries the liberalisation of cross-border financial investment and monetary unification acted as major triggers of more open and integrated financial markets.

Table 1: Capital allocation and financial integration

Dependent variable: Investment share	(1)	(2)	(3)	(4)	(5)
Lagged investment share	0.558*** (19.43)	0.557*** (19.49)	0.560*** (19.51)	0.559*** (19.44)	0.557*** (19.44)
Net marginal product of capital (NMPK)	0.125*** (5.43)	0.123*** (5.36)	0.123*** (5.13)	0.123*** (5.11)	0.122*** (0.86)
Debt integration	0.047 (1.13)			0.057 (1.39)	
Interaction of NMPK with debt integration	0.022** (2.52)			0.020** (2.10)	
Equity integration		0.056 (1.17)			0.051 (0.91)
Interaction of NMPK with equity integration		0.024** (2.38)			0.024* (2.00)
Financial development			0.026 (0.93)	0.012 (0.353)	-0.011 (0.29)
Interaction of NMPK with financial development			0.015* (1.86)	0.057 (1.39)	0.006 (0.86)
Observations	4365	4365	4298	4298	4298
R-squared	0.48	0.49	0.48	0.48	0.48

Notes: OLS regression; controlling for sector specific heteroskedasticity; country, year and sector dummies. Absolute value of t statistics in parentheses: * significant at 10%; ** at 5%; *** at 1%.

Investment share: log of the ratio between net real investment and lagged net real capital stock.

Net marginal product of capital: log (marginal productivity of capital) – log (user cost of capital).

Debt Integration: Cross-border holdings of assets and liabilities/GDP, debt instruments. Standardised variable.

Equity Integration: Cross-border holdings of assets and liabilities /GDP, equity instruments. Standardised variable.

Financial development: private sector credit as share of GDP. Standardised variable.

Financial markets play a particularly pervasive role as TFP driver. There is abundant cross-country analysis to show that developed financial markets contribute to growth (e.g., King and Levine 1993; Beck *et al.* 2000) and catching up (Aghion *et al.* 2005). There is agreement arising

also that the major contribution of financial development to growth comes from higher TFP growth rates rather than from investment in physical or human capital (King and Levine 1993; Benhabib and Spiegel 2000). Among the reasons why financial development benefits TFP

growth there are improved scope for reallocating resources towards activities exhibiting high TFP growth rates, enhanced scope for savings and investment in new-vintage capital and risk diversification allowing carrying out risky innovation activities. Some existing studies indeed confirm that financial development has a positive impact on capital allocation towards sectors with higher growth prospects. ⁽¹⁶⁵⁾

Several studies assess the implications of financial markets on the growth performance in the euro area and the EU. Results reported in European Commission (2007a) show that a less burdensome regulation of financial markets is associated with a stronger contribution of TFP growth at the frontier on total TFP growth. The interpretation of the result is that heavy regulations may have anti-competitive effects on market structure or hinder financial innovation, with consequences of the degree of availability of financial resources to carry out risky innovative projects. The analysis reported in Box II.3.2 shows that both the degree of bond market integration and that of equity market integration increases significantly the responsiveness of investment to any difference between the cost and the productivity of capital. This evidence supports the view that EMU increased the efficiency of capital allocation, and hence TFP, by further reducing the segmentation of financial markets (see Part I for additional evidence). ⁽¹⁶⁶⁾

3.4.4. The role of education and R&D

While economic growth through imitation requires primary and secondary education, in economies close to the technology frontier, tertiary education and notably graduates in science and engineering are needed to carry out innovative activities. For example, Aghion and Howitt (2005) present evidence for US states that

the productivity-impact of an increase in the share of the highest educated members of the labour force is greatest the closer the state is to the technology frontier. European Commission (2007a) finds a positive impact of sectoral shares of high-skilled employment on the contribution given by TFP growth at the frontier to total TFP growth. Similarly, also the impact of R&D on TFP growth is found to be higher in countries at the technological frontier and this is indeed confirmed by empirical research. For example, Scarpetta and Tressel (2002) consistently find that the effects of R&D spending on TFP growth are stronger for leader countries and in high-tech industries.

3.5. CONCLUDING REMARKS

Reform aimed at raising the euro area's labour utilisation and productivity is fundamental to maintain the area's long-term growth potential. In spite of recent progress, employment rates and working hours in the euro area are still low by international comparison. Reforms in labour markets and welfare systems geared to remove distortions in incentives for labour supply would help offset the reduction in labour inputs associated with ageing. Pension reforms increasing the statutory retirement age can be effective in rising participation rates among older workers. Labour market policies improving entry flexibility and supportive welfare systems would contribute to raise participation rates among female workers, while a policy framework encouraging the transition from schooling to the labour market would contribute to raise the participation rates of the young. Regarding working hours, flexible working time arrangements between employers and employees may provide incentives to increase hours worked. Progress on the front of reducing sectorally and regionally-concentrated long-term unemployment pools could be achieved by policies that enhance real wage flexibility and reduce the costs associated with workers' relocation across economic activities and regions.

A key challenge to policy makers in perspective is to create adequate framework conditions to achieve a higher and sustained TFP growth in the euro area. Recent empirical analysis supports the

⁽¹⁶⁵⁾ See Fisman and Love 2004 and Hartmann *et al.* 2007). The sectors that benefit more from financial development are those that make relatively higher use of external finance (Rajan and Zingales 1998) and those where growth takes place mostly in small firms (Beck and Levine 2004).

⁽¹⁶⁶⁾ A corollary of this finding is that, in absence of EMU-related financial integration, the euro-area TFP growth slowdown since mid 1990s could have been even more severe.

emerging view that the TFP growth slowdown experienced by a large number of advanced European economies in recent years could be linked to lags in the adaptation of European policies and institutions from the post-world-war-II catching up phase. As convergence leads to a phase in which EU countries join the global technology frontier, a large number of countries are facing growing difficulties in replicating the TFP successes of earlier decades. To face this challenge, the policy response should ensure that the necessary infrastructure for a growing supply of R&D and education, key ingredients to move to an innovation-driven model of TFP growth, is in place. Moreover, developed and well-functioning financial markets should ensure an adequate financing of innovative activities and create the conditions for an efficient allocation of resources towards dynamic sectors.

EMU-related financial integration would help in this respect, as suggested by analysis contained in this chapter. In addition, adequate labour market regulations, notably regarding employment protection, could play a role in ensuring an efficient allocation of resources across sectors and firms. As well, regulations in product markets should be supportive of competition, in particular by not deterring the entry of potential competitors and innovators. Finally, the innovation system in euro-area countries would benefit from improved governance and incentives in universities and research institutions and a better exploitation of synergies among the key players in the innovation system.

In this perspective, a leading role lies with EU policies. In particular, cohesion policy is a key instrument in pushing potential growth and employment while at the same time limiting the emerging regional imbalances and helping countries to keep up with technological change. Through "earmarking" cohesion policy focuses on growth enhancing investment related to the Lisbon Strategy such as research and technological development, innovation and entrepreneurship, the information society, infrastructure and human capital. On the other hand, it fosters a balanced development path by reducing the gap between the European economies and encouraging the widespread use of advanced engines of growth.

4. ENSURING EFFICIENT ADJUSTMENT AND STABILISATION

4.1. INTRODUCTION

Since the onset of the single currency a key concern has been the scope for intra-area adjustment to disturbances. According to Chapter I.4 the competitiveness channel of adjustment, with relative prices taking the baton of nominal adjustment from the exchange rate mechanism, appears to have become more powerful over time, even if further progress is possible and desirable. But some concern was raised that the real interest rate channel, with real interest rates behaving in a pro-cyclical manner (falling when activity and inflation rise and *vice versa*), is still rather prominent.

Chapter I.4 also suggested that a better functioning of labour and product markets would help strengthen the competitiveness channel and limit the risk of the real interest rate channel to kick in as a source of short-run macroeconomic instability. Importantly, it would also help to raise the economic growth potential. The integration and development of financial markets was also seen as helping to smooth adjustment and ease divergences further by spreading their impact across a broader group of investors and consumers. Again, this favourable effect would come on top of the positive impact integrated financial markets have on the allocation of capital and longer-term economic growth.

These adjustment requirements appear even more pertinent in view of the rapidly changing global landscape highlighted in Chapter II.2. It entails a change in the nature of economic disturbances which makes an even greater call on the adjustment capacity of the countries participating in the euro area. Against this backdrop, this Chapter assesses the capacity of, respectively, product, labour and financial markets, as well as budgets, to act as effective shock absorbers.

4.2. A CHANGING TYPOLOGY OF SHOCKS

As highlighted in Chapter II.2, the rapidly changing global landscape is likely to contribute to a changing typology of shocks hitting the economy. The frequency of country-specific

demand shocks, which were a key concern prior to the abolition of internal exchange rates in 1999 and which indeed have been the main source of cyclical divergences across the area to date (Giannone and Reichlin 2006), is set to diminish. Notably, shocks stemming from occasionally misguided national monetary policies and exchange rate shocks have disappeared, fiscal policy shocks are also becoming less frequent owing to the adoption of 'rules' based budgetary frameworks (Darvas, Rose, and Szapáry 2006) and the impact of "start-up shocks" (such as the fall in exchange rate risk premiums in "peripheral" countries participating in the euro area) are likely to peter out. Meanwhile the relative incidence of common shocks related to fluctuations in the euro exchange rate, swings in energy and raw material prices and shifting comparative advantages across the globe may become prominent.

The existing policy framework in EMU is well-suited to address this changing typology of shocks. Monetary policy should continue to be able to deal with common demand shocks at the area-wide level. To the extent these shocks have asymmetric effects, for example due to cross country differences in the exposure to external trade and finance (see for an illustration Box II.4.1), they will have to be met with market responses, possibly assisted by discretionary fiscal policy – if sound budgetary positions permit this. Supply shocks, such as hikes in energy prices, will also have to be met by market responses. Incentive-compatible welfare systems that provide insurance against income loss and yet encourage flexible reallocation of (labour) resources would also be welcome. Improved market responses will thus pay a double dividend in the form of stronger growth and smoother intra-area adjustment.

A much debated issue is to what extent the integration of trade in the euro area could be either a source or an absorber of asymmetric effects of shocks. One argument goes that sectoral shocks, such as for example one hitting the car industry following a sharp rise in fuel prices, could have an asymmetric impact because countries specialise more in certain activities as trade expands.

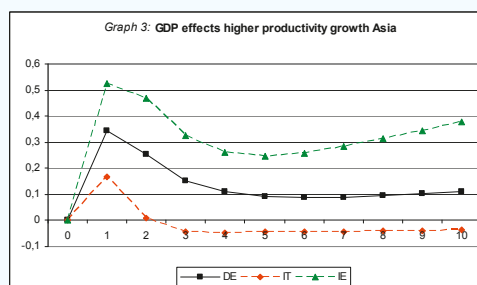
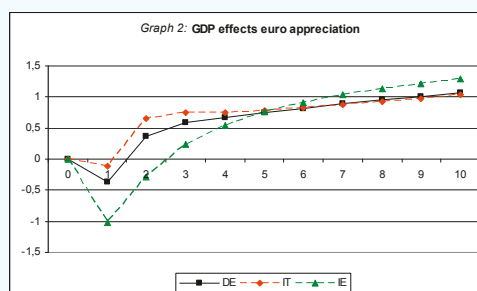
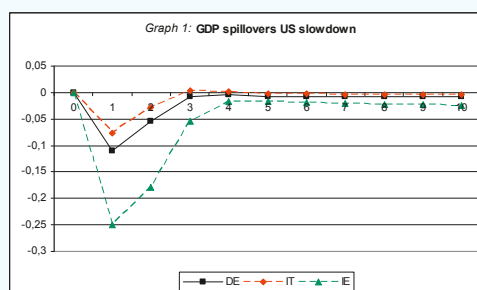
Box II.4.1: Asymmetric effects of common external shocks: model simulations

While the direct exposure of the average euro area country to extra-euro area trade is only about 17 percent of GDP, the diversity is large, which implies that common shocks may have important cross-country repercussions. This is illustrated with simulations with a multi-region version of the two-sector (tradables and non-tradables) QUEST model (European Commission 2006a). Simulations are run for three representative countries: Germany, Italy and Ireland. Germany has a trade exposure to the rest of the world in line with the euro area average, while Italy has a specialisation pattern biased towards more "traditional" sectors and more exposed to competition from emerging markets. Ireland has an above-average degree of openness and a high trade exposure to the rest of the world.

A negative shock to US private demand (both private consumption and investment are assumed to fall by 1%) leads to a reduction in US import demand and exports in euro area countries. Under flexible exchange rates, a more exposed country like Ireland would have depreciated vis-a-vis other less exposed European countries. However, in the euro area, more exposed countries only depreciate in real effective terms and this requires a stronger relative drop in GDP than under a flexible exchange rate regime. As shown in the first graph, GDP in Ireland falls more heavily just after the shock compared with Germany and Italy and undergoes a larger relative price decline for tradables.

A shift in investors' preferences away from dollar-denominated assets towards assets denominated in EU currencies leads to a *risk premium shock*, with the bilateral exchange rate of the dollar with respect to the euro falling by about 10 %. In the first year, the nominal effective exchange rate appreciation amounts to 2.8 % for Italy, 3.7 % for Germany and 5% for Ireland. The shift in investors' preferences raises real interest rates in the US and lowers those of the euro area, which boosts domestic demand in the euro area even if competitiveness deteriorates. The net effect on output is negative in the first stage but becomes positive in the medium run. The initial effects are again strongest in Ireland and weakest in Italy, but the medium run gain is largest in Ireland.

Higher productivity growth in emerging economies in the tradable goods sectors yields lower import prices to the benefit all euro area countries, but harm exporters in countries that exhibit a specialisation pattern biased towards more traditional sectors, like Italy. Lower import prices boost consumption and raise GDP. A more open economy like Ireland benefits more from this shock. Exporters in Italy, however, are more exposed to competition from Asian producers and lose more market share. Italy's GDP fall in the medium run, unlike in Germany and, even more strongly so, in Ireland.



Ireland and Finland are indeed examples of countries that have become more specialised as a function of integration (Midelfart-Knarvik *et al.* 2000. On the other hand, trade integration is increasingly intra-industry, with a rising share of trade flowing within narrow product categories and across different phases of the production process (Baldwin 2006a). This form of specialisation may in fact imply a greater co-movement of output among euro-area countries, in line with the findings by Rose (2000) and the studies that followed.

On balance, however, trade integration is likely to play in favour of intra-area adjustment. It strengthens the competitiveness channel of adjustment, even if some countries that are hit by market losses against low-wage economies may find it hard to arrange competitiveness gains. To the extent that trade integration also entails greater cross-country labour mobility, migration across euro-area economies may also gain importance. As discussed in section 4.4 below, the integration of financial markets further facilitates adjustment by helping to shift resources across countries and economic activities. It also facilitates risk-sharing, thus permitting a more stable pattern of consumption over time. However, there are major challenges ahead for the flexible functioning of product and labour markets.

4.3. THE ROLE OF PRODUCT AND LABOUR MARKETS

Price and wage flexibility are key for efficient intra-area adjustment in the absence of internal exchange rates. If prices move quickly to their market-clearing values, inflation expectations are unaffected and the adverse real interest rate channel weakened.

Price flexibility is also essential to ensure a smooth functioning of the competitiveness channel. Since tradable goods are subject to international competition and arbitrage, and hence obey the "law of one price", the competitiveness channel can only function properly if non-tradable-good prices are flexible.

For example, if a country experiences slack domestic demand, its non-tradables prices will need to fall to induce a shift in resources to the tradables sector. By the same token, the wage level needs to respond appropriately to variations in unemployment so as to ensure that high unemployment does not become entrenched. Relative wages need to adjust as well so as to trigger the required shifts in labour resources across sectors.

Taking stock of the capacity of prices to respond promptly, micro studies indicate that on average prices are fixed for four quarters in the euro area as compared to less than two quarters in the US (Dhyne *et al.* 2006). The differences are smaller for wages (Smets and Wouters 2005, Grenouilleau, Ratto and Roeger 2007, Gali, Gertler and Lopez-Salido 2001). Estimates carried out by the Commission services point to similar results (Table II.4.1). However, since the responsiveness of labour supply is higher in the US than in the euro area, a given shock affecting labour demand requires a larger reaction in wages in the euro area than in the US.

Table II.4.1:
 Average duration over which prices/wages remain fixed (in quarters)

	Euro area	US
Micro studies*	4,3	1,6
Macro estimates**	5,0	2,4
Macro estimates**	5,6	4,2

*Observed frequency in a sample of prices.

Source: (Dhyne *et al.* 2006).

**Bayesian estimates of QUEST DSGE model parameters.

Source: Grenouilleau, Ratto and Roeger (2007).

By how much the estimated differences in price fixing between the euro area and the US matters in the case of demand or supply shocks is discussed in Box II.4.2.

Model simulations indicate that progress towards a level of nominal flexibility comparable to that of the US would imply significantly faster adjustment via the competitiveness channel and less prominence of the adverse real interest rate channel. It would make the response to demand shocks quicker, and that to supply shocks less prone to instability in investment and activity at large.

Box II.4.2: Nominal rigidities and adjustment to shocks

Simulations with the European Commission QUEST DSGE aimed illustrate how nominal rigidities affect macroeconomic adjustment following country-specific demand or supply shocks. The model (see European Commission, 2006a and Langedijk and Roeger, 2007) splits the euro area in a large country (whose parameters correspond to those of Germany) and the rest. Separate simulations are performed for the baseline model and an alternative model which assumes lower nominal rigidities, with the adjustment costs of wages and prices set to US values.

The following demand and supply shocks are considered: a sustained government *consumption shock* of 1% of GDP and a permanent increase by 1% in *TFP in the tradable sector*. For each of the shocks, the behaviour of competitiveness (the inverse of the GDP-deflator-based real effective exchange rate) and GDP are depicted.

In response to the demand shock the real exchange rate appreciates and net exports fall thus forcing GDP back to potential (potential output is unchanged). When nominal rigidities are reduced, competitiveness adjusts more strongly and output converges to potential faster. Moreover, under low nominal rigidities prices initially jump up more strongly and the expectation of falling inflation thereafter drives up the real interest rate and leads to a stronger contraction in investment.

After a TFP shock, the destabilising effect of the real interest rate channel kicks in. Although tradable prices fall with higher productivity, the overall price level increases due to Balassa-Samuelson effect, and competitiveness deteriorates. With reduced nominal rigidities, the loss in competitiveness is even stronger: while prices in the tradable sector fall quicker and further, prices in the non-tradable sector rise faster and further. In both cases GDP overshoots, but the overshooting is less persistent under enhanced nominal flexibility as the perverse real interest rate channel is contained owing to less expected inflation persistence.

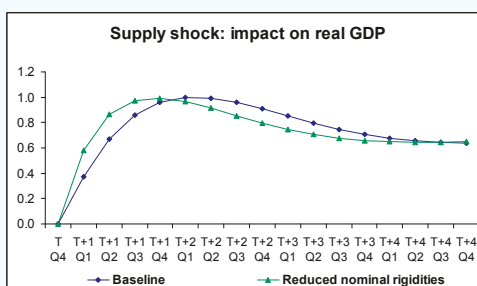
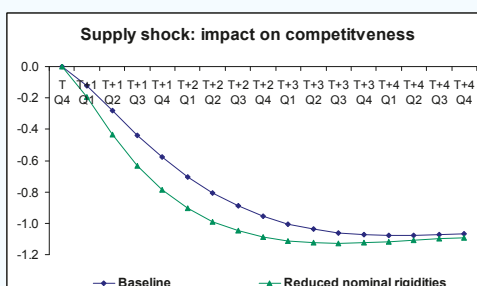
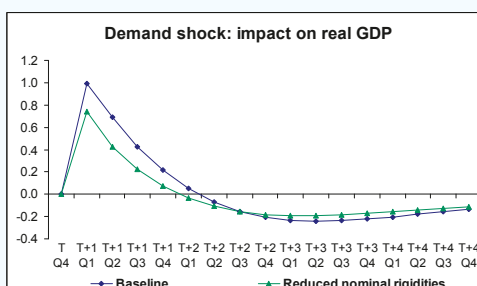
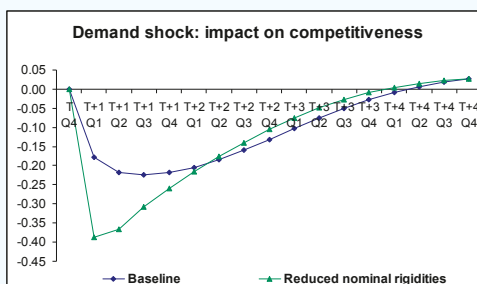


Table II.4.2:
Frequency of consumer price changes by product type (% of prices that change in a month)

Country	Unprocessed food	Processed food	Energy (oil products)	Non-energy industrial goods	Services
Belgium	31,5	19,1	81,6	5,9	3,0
Germany	25,2	8,9	91,4	5,4	4,3
Spain	50,9	17,7	n.a.	6,1	4,6
France	24,7	20,3	76,9	18,0	7,4
Italy	19,3	9,4	61,6	4,8	4,6
Lux	54,6	10,5	73,9	14,5	4,8
The Netherlands	30,8	17,3	72,6	14,2	7,9
Austria	37,5	15,5	72,3	7,4	7,1
Portugal	55,3	24,5	15,9	14,3	13,6
Finland	52,7	12,8	89,3	18,1	11,6
Euro Area	28,3	13,7	78,0	9,2	5,6

Source: Dhyne et al. (2006).

Evidence suggests that prices in the euro area are least frequently adjusted in the service sector (Table II.4.2). Notably, price cuts are less common compared to the rest of the economy (Dhyne *et al.* 2006).⁽¹⁶⁷⁾ Surveys among suppliers indicate three main reasons for keeping prices fixed: long-term relationships with customers, explicit contracts that prevent price changes and cost-based pricing rules. Firms may also prefer to change prices only after their competitors (Fabiani *et al.* 2005). But these are just the proximate causes. The root causes of price stickiness reside in institutions and regulations that inhibit competition. Recent econometric work shows that the reaction of inflation to cyclical imbalances is negatively related to anti-competitive regulations (Cournède, Janovskaia, and van den Noord 2005).

Similarly, labour market institutions are likely to play a role in shaping wage rigidity. Wage contracts set for long pre-determined periods provide insurance against risks in economic variables affecting future real wages, and the higher union density is the longer contracts on average tend to be. The degree of centralisation of collective wage bargaining is also relevant. More centralised wage bargaining is likely to be associated with a stronger extent of coordination, which reduces the likelihood that wages get out of whack with cyclical conditions (Calmfors *et al.* 2001). Conversely, stringent minimum wage legislation or less scope for bargaining at the enterprise level reduces the capacity of wages to

react to changing conditions. Lack of responsiveness of wages to cyclical conditions can also result from institutions and regulations that shield workers from the risk of unemployment. Strict employment protection legislation, strong unionisation protect insiders, and raise their bargaining power during periods of cyclical slack, which reduces the likelihood of wage cuts (e.g., Holden 2004). High unemployment benefits have a similar effect.

To examine the impact of product and labour market institutions on the effectiveness of the competitiveness channel, the regressions reported in Box I.4.2 in Chapter I.3 have been rerun with the responsiveness of the countries' relative inflation rates to their relative output gap and to their own relative inflation records (gauging relative inflation persistence) allowed to vary according to their relative scores on measures of product and labour market institutions. The indicators are taken from OECD data bases (Conway and Nicoletti 2006, Conway, Janod and Nicoletti 2005 and Bassanini and Duval 2006) and the results are reported in Table II.4.3.⁽¹⁶⁸⁾

⁽¹⁶⁷⁾ This is partly because of the relatively low share of raw material costs in total costs (Altissimo *et al.* 2006).

⁽¹⁶⁸⁾ Indicators of labour and products market institutions are standardised to have zero variance and unit standard deviation. Their interaction with the reaction of price competitiveness to cyclical divergences and with the persistence term captures the *additional* impact associated with a one-standard-deviation increase in the value of the institution indicator. A positive interaction coefficient indicates that institutions increase the effectiveness of the competitiveness channel when the interacted variable is the relative output gap, and reduce it when it is the persistence term.

Table II.4.3:

Competitiveness, adjustment, and labour and product market institutions

Institution	Interaction term	Sample		
		All years (1970 -2006)	Year>=1999	Relative Output Gap<0
Product Market:				
		[1]	[2]	[3]
Overall Product Market Regulation Indicator	Relative Output Gap	-0,121 (1,23)	0,008 (0,05)	-0,13 (0,92)
	Persistence	0,084 (0,94)	-0,3 (2.21)**	0,226 (1.80)*
Price Control	Relative Output Gap	-0,149 (2.01)**	-0,281 (2.08)**	-0,069 (1,07)
	Persistence	0,067 (1,44)	-0,083 (2.68)***	0,096 (2.02)**
Labour Market:				
Employment Protection Legislation	Relative Output Gap	-0,118 (2.39)**	-0,214 (1.87)*	-0,009 (0,15)
	Persistence	0,113 (10.11)***	-0,084 (1,46)	0,15 (5.76)***
Minimum wage	Relative Output Gap	-0,097 (0,68)	-0,364 (1,21)	-0,448 (2.08)**
	Persistence	0,213 (4.25)***	-0,023 (0,10)	0,211 (1,50)
Union Density	Relative Output Gap	-0,055 (1,52)	0,148 (6.38)***	-0,3 (3.87)***
	Persistence	-0,109 (1,64)	0,002 (0,03)	-0,14 (1.67)*
Unemployment Benefits Replacement Rate	Relative Output Gap	0,119 (0,96)	-0,305 (4.82)***	-0,002 (0,02)
	Persistence	0,008 (0,18)	0,265 (2.65)***	-0,04 (0,73)
High Corporatism	Relative Output Gap	-0,029 (0,55)	0,112 (1,36)	-0,012 (0,12)
	Persistence	-0,113 (2.49)**	0,151 (1,58)	-0,126 (1.73)*
Intermediate Corporatism	Relative Output Gap	-0,038 (0,63)	-0,106 (1,36)	-0,036 (0,34)
	Persistence	0,098 (2.13)**	-0,143 (1,58)	0,149 (2.18)**
Low Corporatism	Relative Output Gap	0,205 (3.75)***		0,096 (1,25)
	Persistence	0,012 (0,78)		-0,068 (2.85)***

Notes: The table reports the value of the coefficient of the interaction of product and labour market institution indicators with the relative output gap and the persistence variable using the same specification as in columns (2) in Box I.4.2 (GMM estimation). Absolute value of z statistics in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%. Source: European Commission.

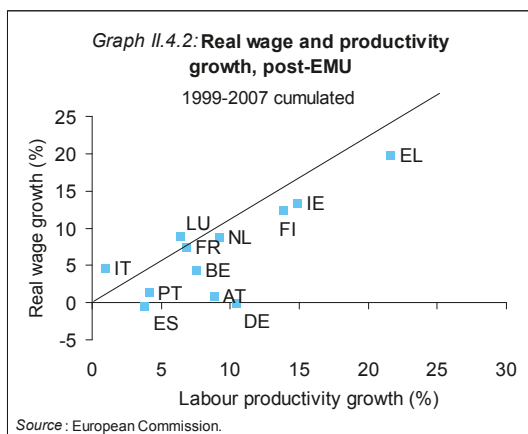
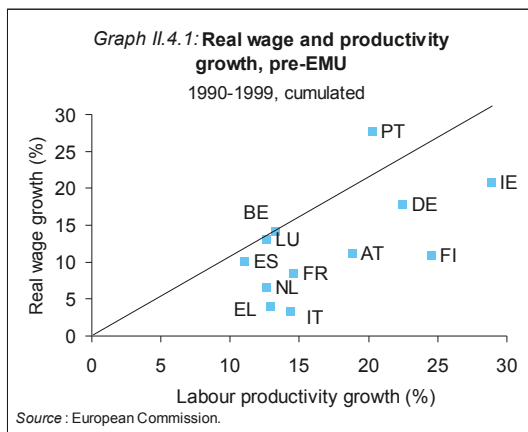
Tight product market regulation, strict employment protection, a high minimum wage, high union density and generous unemployment benefits all appear to either reduce the responsiveness of relative inflation rates to relative slack or raise the persistence of relative inflation (and in some case more so when the output gap is negative). The impact of union density appears to diminish after 1999, which suggests some change in union behaviour in EMU. Another concern, which is separate from the issue of relative price and wage responsiveness to relative slack, is that wage formation itself may be a source of shocks. Misalignments of real wages with productivity

have been occurring in the euro area, as shown in Graphs II.4.1 and II.4.2.

In most countries real wages have lagged productivity both prior and after the adoption of the euro. However, in the run up to the single currency Portugal posted a sharp increase in real wages relative to productivity, and the same occurred in Italy after the single currency was created. This is problematic given that these countries at the same time have posted (growing) external deficits which should normally have called for an improvement in cost competitiveness. At the other end of the spectrum, in Germany real wages have declined, not only against productivity but also in absolute

terms since the advent of the single currency, and this led to a build-up of a large current account surplus. This allowed to gradually correct the appreciation of the real exchange rate that took place in the aftermath of the German reunification.

maintaining competitiveness.⁽¹⁶⁹⁾ One potential source of distortions in wage formation resides in the public sector, as it affects wage dynamics in the private sector via imitation effects and by changing the bargaining power of private sector workers.⁽¹⁷⁰⁾



Aside from the aggregate wage level, flexibility in relative wages is also important in shaping adjustment, to spur the reallocation of labour across sectors, regions and qualifications when shocks are permanent. In view of the greater prominence of sectoral shocks, it becomes indispensable that wage bargaining deliver appropriate relative wage outcomes and a move towards decentralised wage bargaining would be instrumental in this regard. A modest trend in this direction appears to be in place. Several euro-area countries with centralised collective bargaining have introduced opening clauses that permit firms to deviate from centrally bargained wages and other conditions such as standard work time.

4.4. THE ROLE OF FINANCIAL MARKETS

While financial integration is important as a means to enhance economic growth potential in the euro area, it is equally important as a channel of adjustment between the participating countries which no longer access to a national monetary policy and flexible nominal exchange rates.

Financial integration supports adjustment in the euro-area economy primarily via its beneficial effects on income and consumption smoothing and capital re-allocation. It also has implications for the working of other channels of adjustment and stabilisation policies, notably for the monetary policy transmission mechanism, for the effectiveness of fiscal policy and for the incentives to carry out structural reforms that improve the effectiveness of the competitiveness channel.

In some countries, the departure of real wage developments from productivity, rather than a response to intra-area adjustment needs, appears on the contrary to be the result of distortions in wage formation. Econometric analysis in Box II.4.3 suggests that such distortions can have persistent and possible destabilising effects. This raises an issue of cross-country co-ordination so as to achieve consistency of wage developments with the needs of smooth intra-area adjustment. Apparently, the incentives for wage restraint are different across countries, with according to one hypothesis the incentives strongest in the largest countries who internalise the reaction of monetary authorities (Germany being a case in point), as well as in the very smallest countries who, being more open, have a bigger stake in

⁽¹⁶⁹⁾ Posen and Gould (2006) and Marzinotto (2007).
⁽¹⁷⁰⁾ See for example, Demekas and Kontolemis (2000) Christou *et al.* (2007), Friberg. (2007), and Mizala and Romaguera (1995).

Box II.4.3: A Phillips curve for euro-area countries.

Following Blanchard and Katz (1997), a micro-founded wage Phillips curve can be derived from a wage setting model where wages are a function of the unemployment rate, workers' reservation wages (the income from non-working) and labour productivity. Assuming that the reservation wage rises with unemployment benefits, partly indexed to the level of past real wages (a reference for what constitutes a "fair wage"), and the current labour productivity level, and declines with the probability of being unemployed, the wage Phillips curve can be specified as an error correction model as follows

$$\Delta w_t = c + (1 - \lambda_1) \Delta pc_t + \lambda_1 \Delta pc_{t-1} + \alpha \Delta z_t - \delta u_t - \alpha (w - pc - z)_{t-1} + \varepsilon_t \quad (1)$$

where w stand for wages, pc for the consumer price index, z for productivity, and u is the unemployment rate (all variables are in logs). In the short run, wage inflation rises with consumer price inflation, productivity growth and the labour market tightness. In the long-term, wage setters bargain the level of real wages as a function of the level of productivity (i.e. the wage is set to guarantee a constant wage share over the medium term). This formulation implies that when supply shocks erode the level of real consumption wages, the bargained wage is revised upward. These shocks will continue to impact wage inflation in later periods depending of the speed of adjustment captured by parameter α . The parameter λ captures instead the effect of past real wages on the reservation wage. Note that the equation (1) differs from a standard Phillips curve specification only because of the presence of the error correction term $(w - pc - z)_{t-1}$. According to Blanchard and Katz (1997) the the adjustment of wages to their long-term relation is virtually immediate in the US such that the coefficient of the error correction term is not significantly different from zero, unlike the EU.

To test equation (1), in a first step a long-run relationship between the level of wages, the consumer price index and productivity is tested. The estimated relation includes country- fixed effects and to account for a break in this long-run relationship an EMU dummy, taking the value

of 1 after 1999 and zero otherwise, is interacted with the productivity and consumer price index. Disregarding fixed effects, the estimated long-run relationship is as follows.

$$w_t = (0.98 + EMUdummy * 0.07) * pc_t + (0.8 - EMUdummy * 0.08) z_t + ecm_t \quad (2)$$

Thus, in the long-run a permanent increase in the price level is almost entirely transferred in higher wages while for productivity the pass-through is incomplete. In EMU, the effect of prices rises while that of productivity declines. The term ecm represents the error correction term that trigger the adjustment of wages.

In the second step, ecm is included in a dynamic panel specification of wages (i.e. the testing equation 2 is estimated). The estimation of equation (1) yields

$$\Delta w_t = \underset{(10.92)}{0.34} \Delta w_{t-1} + \underset{(10.95)}{0.39} \Delta pc_t + \underset{(3.63)}{0.13} \Delta pc_{t-1} - \underset{(-9.62)}{0.19} u_t + \left[\underset{(14.16)}{0.38} - \underset{(-1.48)}{0.08} EMUdummy \right] \Delta z_t - \left[\underset{(-6.67)}{0.16} - \underset{(1.91)}{0.08} EMUdummy \right] ecm_{t-1} \quad (3)$$

t statistics are in parentheses. The coefficient of unemployment is negative and significant. This is the basic mechanism ensuring that market reactions of wages to changing labour market tightness has a stabilising function in EMU against the occurrence of asymmetric shocks. Consistent with Blanchard and Katz analysis, wage inflation depends on the error correction term, with a relatively slow speed of adjustment: mark-up shocks require more than 6 years to be reabsorbed (the speed of adjustment is obtained as $1/0.16$). This slow adjustment triggers a persistent inflation dynamics. The value estimated is not far from those found in the literature (e.g., Cahuc and Zylberberg 2004). Results also show that after EMU the speed of adjustment roughly doubled, but it remains slow. This slow adjustment stems almost entirely from three countries; Spain, Italy and Portugal. When these countries are excluded from the sample the ecm in the EMU years turns out insignificant.

Table II.4.4:
Financial integration and risk sharing. A survey of recent evidence

Authors (year)	Sample	Risk sharing effect tested	Results
Demyanyk, Ostergaard and Sorensen (2008, forthcoming)	EU countries (and subgroups), 1995-2006, panel data	Income and consumption risk sharing, with portfolio diversification and effect of banking integration	Evidence of income risk sharing, increasing for the latter part of the sample, less clear for consumption risk sharing; often insignificant results
Sorensen, Wu, Yosha and Zhu (2007)	OECD countries, 1993-2003, panel data	Income and consumption risk sharing accounting for equity and debt securities home bias	Risk sharing in OECD with possible debt home bias, equity bias not significant; risk sharing in EU countries not significant but rising over time
European Commission (2007g)	Euro area, EU15 and OECD, 1999-2006, panel data	Income smoothing with decomposition: capital market, international transfers and credit markets	Risk sharing increasing and becoming significant after 1999, capital channel increasing; higher risk sharing in the OECD
Roubini, Parisi-Capone and Menegatti (2007)	Euro area countries, 1980-2007, panel data	Income risk sharing with decomposition: capital market, international transfers and credit markets	Increasing and becoming significant for the later period
Kalemli-Ozcan, Sorensen and Yosha (2004)	US states, 1964-1998; EU countries 1972-2000, panel data	Income smoothing accounting for industry specialization	Not significant for Europe, substantial risk sharing in the US
Sorensen and Yosha (1998)	EU and OECD, 1966-1990, panel data	Income and consumption smoothing with decomposition	Very little, significant
Asdrubali, Sorensen and Yosha (1996)	US states, 1964-1990, panel data	Income smoothing with decomposition	Significant (and substantial) risk sharing

However, financial integration can also present challenges in the economic adjustment process, notably related to heightened contagion risk and pro-cyclical behaviour of financial flows associated with boom-bust dynamics.

4.4.1. Income and consumption smoothing

Financial market integration creates opportunities for income and consumption smoothing. Income smoothing can help the functioning of the euro-area economy by allowing production and consumption decisions to be decoupled over space and time and so enhancing Member States' capacity to absorb idiosyncratic shocks. In this context, the role of financial markets has become increasingly prominent against a background of relatively inflexible labour markets, low cross-border labour flows and still imperfect integration of product markets. This focus on financial markets also reflects evidence from the United States, suggesting a pivotal role for private financial flows in the adjustment to regional-specific shocks.⁽¹⁷¹⁾

Financial market integration allows a smoother pattern of consumption both over time (inter-temporal tradeoffs) and against idiosyncratic risk (risk sharing) by delinking total income flows (i.e., including net financial income flows) from production income. Through inter-temporal trade fast-growing, catching up economies borrow from high-income, low-growth economies. Both types of countries end up with a smoother consumption pattern; catching up countries trade future consumption against current consumption possibilities; high-income countries forgive current consumption in order to increase their future consumption flows. Reduction in risk premia and increased international borrowing possibilities for catching up euro area members were among the most relevant EMU start up shocks. To a large extent these developments were a reflection of expanded opportunities for inter-temporal trade (Blanchard and Giavazzi 2002). Through risk sharing, income is insured against the occurrence of country-specific temporary shocks: agents in countries negatively hit by shocks borrow, those in countries hit by positive shocks lend. Table II.4.4 provides a

⁽¹⁷¹⁾For example, a study by Asdrubali, Sorensen and Yosha (1996) find that across US states capital and credit markets had smoothed respectively over 39 per cent and

23 per cent of shocks to gross state product over the period 1964-90 as compared with less than 13 per cent smoothed by the federal budget.

survey of existing evidence on risk sharing in advanced economies.

Risk sharing and inter-temporal trade can be enhanced by financial integration both via the exchange of market financial instruments (capital-market channel) and the extension of cross-border credit (credit channel). The relative importance of either instrument depends on the nature of the shock.⁽¹⁷²⁾ If capital markets are sufficiently developed and integrated, income can be smoothed relative to domestic output via revenue streams from cross-border ownership of assets. Income smoothing via the capital markets is possible because of an *ex ante* (i.e. prior to a shock) cross-border diversification in assets so as to hedge against possible output variations. Hence, the market instruments provide insurance against persistent as well as temporary shocks. If credit can flow freely across national borders, countries can also smooth their income relative to output through cross-border borrowing and lending. By contrast, the credit channel is only relevant for income smoothing on an *ex post* (i.e. following a shock) and temporary basis, as cross-border lending is unlikely to be a sustainable option if the effects of the shock are likely to persist.

Available evidence indicates that in the EU neither of the two channels had a significant impact on income smoothing until the later 1980s (Asdrubaldi and Kim 2004). More recent analysis however shows that the role of financial markets in smoothing income has increased in the EU after EMU completion, albeit remaining less important than in the US (European Commission 2007g). The same analysis also suggests the capital-market channel has gained in importance relative to the credit channel. This result is consistent with evidence of the growing importance of the wealth channel in monetary policy transmission (as discussed above) and reflects increased securitisation and cross-border portfolio diversification as financial integration proceeds. A more EMU-specific effect on income smoothing is also evident, with estimates of income smoothing overall (i.e. via capital markets, credit markets and international fiscal

transfers) higher for the euro area than for the EU-15.⁽¹⁷³⁾

While income smoothing in the euro area is on a rising trend, there is scope for, and -- in light of a comparatively smaller role of federal budget transfers compared with other monetary unions -- a need for further improvement. Evidence for the United States indicates that inter-state income smoothing has improved after deregulation of the banking sector, with a more pronounced improvement for those states in which small businesses have a relatively important weight in economic production (Demyanyk, Ostergaard and Sorensen 2007). Corresponding analysis for the EU and euro area reveals broadly similar results, inferring a link between cross-border integration among banks and increased opportunities for income smoothing (Sorensen *et al.* 2007). The importance of financial integration is further supported by more general evidence that limitations on cross-border capital flows and differences in national investor protection laws can result in reduced international risk sharing.⁽¹⁷⁴⁾

While the evidence confirms the importance of progress in financial integration for improving income smoothing opportunities in the euro area, it is not the only source of income smoothing. Other forms of integration, for example in product markets where multinational non-financial corporations may set wages and dividends based on consolidated performance, can also play a role in income smoothing. Meanwhile, the scope, and the need, for income smoothing via portfolio diversification within the euro area is likely to have fallen as a result of the replacement of national currencies by the euro, increased synchronisation of business cycles, and

⁽¹⁷²⁾ See Asdrubaldi, Sorensen and Yosha (1996), Sorensen and Yosha (1998), Asdrubaldi and Kim (2004).

⁽¹⁷³⁾ However, this result is sensitive to the inclusion of specific Member States (i.e. Ireland, Luxembourg, Portugal and Spain) and may also be explained by the relative importance of the financial sector in their economies and/or their reliance on fiscal transfers via the EU budget.

⁽¹⁷⁴⁾ Volosovych (2006) shows empirical estimates implying that moving from the lowest quartile in the index of investor protection (a country like Brazil) to the highest quartile (a country like Denmark) should improve the extent of risk sharing from its sample mean of 2 percent to as much as 10 percent.

stronger cross-border correlation between asset returns.

4.4.2. Cross-border capital allocation

As discussed in Chapter II.3, financial integration, by enhancing the scope of reallocation of capital across sectors and firms, can contribute to growth by rising total factor productivity. Such an impact of capital reallocation has implications on the adjustment capacity of countries in the event of shocks with asymmetric impact. As financial integration deepens, capital becomes more reactive to differences in the rate of return on investment in the alternative opportunities available, irrespective of whether these opportunities are within or outside national borders. Whenever a country in the euro area is hit by a shock that depresses demand, production factors would see their rewards reduced compared with what offered in other locations, and would have an incentive to migrate. While the costs to labour migration are high and labour migration choices are hardly reversible, this is less the case for capital migration. Outward financial flows in countries hit by negative shocks directed towards countries experiencing a boom would contribute to reallocate productive investment and supply in such a way to reduce cyclical divergences.

4.4.3. Monetary policy transmission

To the extent that integration stimulates convergence in the structure and behaviour of financial markets across Member States, the transmission of monetary policy should become more homogenous in the euro area. According to recent empirical evidence, the monetary policy transmission mechanism is currently broadly similar among euro-area countries and the remaining differences mostly related to a lack of financial integration and heterogeneity in national financial structures (Angeloni, Kashyap, and Mojon 2003).

Attention has been paid to the interest-rate pass through in explaining the differences in monetary policy transmission across the euro area. Research on euro-area retail bank rates indicates some acceleration in the overall rate of pass-through from monetary policy since the launch of EMU, but confirms a considerable diversity

across Member States in both the rate and the size of the pass-through.⁽¹⁷⁵⁾ Interest rates on corporate loans, mortgage rates and time-deposit rates are found to adjust relatively rapidly, while the adjustment of interest rates on consumer loans and current account deposits is found to be slower. These findings have been linked to a lack of integration in the retail-banking sector, although other factors related to differences in market structure (e.g. concentration, market power, level and distribution of credit risk, banks' excess liquidity and capital, loan demand etc.) are also likely to play a role. Further progress in the integration of retail banking in the euro area could help to reduce even further the remaining differences in monetary policy transmission.

Analysis of euro-area monetary policy transmission also suggests that the importance of the wealth channel has grown relative to the credit channel since the completion of EMU (Visco 2007). This evolution reflects the growing weight of financial and non-financial assets in the balance sheets of euro-area firms and households (either directly or indirectly via pension or investment funds), as well as the reduced importance of bank credit in the economy amid an expansion in securitisation and an increased market share of non-bank providers. Nevertheless, the wealth channel in the euro area is less important than in the United States, the difference being largely attributable to a different marginal propensity to consume from permanent and transitory changes in total net asset wealth. Moreover, wealth effects, and marginal propensity to consume, appear to differ markedly also within the euro area. Further progress in financial integration would be expected to reduce variation in wealth effects across the euro area – and so improve monetary policy transmission – insofar as the correlation between current consumption and current wealth would be reduced due to wider opportunities for income smoothing.

A specific factor influencing the wealth channel in monetary policy transmission is the role of

⁽¹⁷⁵⁾ The diversity relates to both the long-run equilibrium pass-through and the speed of adjustment to the long-run equilibrium.

housing and related mortgage financing. While the response of mortgage rates to changes in monetary policy has become faster in the euro area as a whole since the completion of EMU, the remaining structural differences in national mortgage markets (both on the supply and demand side) still result in asymmetries in monetary policy transmission. In this respect, priority should be attached to progress in mortgage-market integration in the coming years.

4.4.4. Impact on fiscal policy effectiveness

The development and integration of financial markets has also implications for the other main tool for macroeconomic stabilisation, namely, fiscal policy. First, the effectiveness of discretionary fiscal policy depends to a large extent on the degree of financial market participation of firms and households. When agents face strong constraints in their possibility to lend and borrow on financial markets, consumption depends on current rather than permanent income. This is the situation in which discretionary fiscal policy is more effective. Hence, developed and integrated financial markets appear as an alternative tool with respect to discretionary fiscal policy to stabilise income against shocks with asymmetric impact, but also reduce the effectiveness of fiscal policy to play this role (Perotti 2005). In addition, financial markets can substitute to some extent the role played by fiscal transfers in cushioning temporary income losses, thereby acting as a substitute of automatic stabilisers (Bertola 2007). In the above respects, developed and integrated financial markets help to reduce strain on fiscal policy as a stabilisation instrument. It should be added that, among the implications of financial market developments on fiscal policy effectiveness, there are the effects played by financial asset prices on revenue elasticities. Volatile revenues from stock market capital gains are among the factors that explain the large discrepancies between actual and average revenue elasticities observed in some years in the past decade (Eschenbach and Shuknecht 2004, Morris and Schuknecht 2007 and Chapter I.5). Further work is needed to shed more light on the nature and magnitude of financial market implications for revenue elasticities (see Part III, Chapter III.2).

4.4.5. Impact on structural reforms

Integrated financial markets can have an indirect effect on the adjustment capacity of countries by shaping the incentives towards reforming rigid and protected product and labour markets. First, financial market integration raises the perceived expected benefits of reforms. The same reforms that help to remove nominal rigidities (e.g., less anti-competitive regulations in product markets, less restrict regulation on minimum wages and employment protection in labour markets) are likely to contribute to boost employment and productivity (see Chapter II.3). With financial flows easily mobile across borders, reforms in one country will therefore attract capital from abroad, further increasing this way the impact of reforms on growth. Such higher perceived benefits from reforms would translate into higher incentives to carry out adjustment-friendly policies. Second, developed and integrated financial markets could help to lower the perceived cost of reforms. Opposition to reforms in product and labour markets is often associated with the loss of rents by groups that benefit from existing anti-competitive regulations. By easing access to credit, developed and integrated financial markets help to relieve temporary losses of reform losers. Empirical analysis presented in Box II.4.4 suggests that, in the presence of less strictly regulated financial markets, the probability of governments to be re-elected after having implement pro-competitive reforms is significantly higher.

4.4.6. Challenges linked to financial integration

As discussed above, financial integration promotes efficient resource allocation and income smoothing in the euro area, allowing investment and consumption decisions in each Member State to be optimised over space and time. In this way, integrated financial markets act as channels through which financial flows are distributed across the euro area, while the ultimate location and use of these flows are driven by economic fundamentals. While the role of integrated financial markets in this process is per-se neutral, it can, in certain circumstances, contribute to the transmission, propagation and amplification of shocks. In the context of the functioning of the euro-area economy, this less

Box II.4.4: How Politically Costly Are Structural Reforms?

Possible reasons why governments are reluctant to embark on bold structural reforms have been extensively analysed in the theoretical literature (see e.g., Drazen, 1996 for a survey). The main explanations for reform inertia are the inherent "short-sightedness" of governments in the face of the election cycle. The long-run benefits from structural reform are often uncertain whereas its immediate political cost is perceived with greater precision, which is predicted to discourage bold reform.

However, under certain conditions voters may reward, rather than reject governments that carry out bold reforms. Income insurance provided by financial markets and/or income redistribution via the government budget may help to overcome the political resistance to structural reform since both factors tend to lengthen households' time horizons (Bertola, 2007). Moreover, efficient financial markets facilitate the transmission of the longer-term growth enhancing effects of structural reform to the present via capital gains on financial assets held by the public. This, in turn, would tend to build an electoral constituency in favour of structural reform.

This hypothesis has been tested empirically in a recent study by Buti et al (2008). They explain the probability of re-election of incumbent governments in the face of structural reform using a probit model which controls for the degree of development of financial markets and the amount of income redistribution.

The data used covers the history of re-elections of government chief-executives in 21 OECD countries from 1985 to 2004.

Following Duval (2005), a bold reform is called if in a given country, in a given year, a significant change took place in at least one of the structural indicators summarising the policy stance in the following policy areas: unemployment benefit system, labour taxes, employment protection legislation, product market regulations, retirement schemes. Moreover, following Brender and Drazen (2005), controls for country-specific political conditions and structures were included.

The results suggest that, all other things equal, bold structural reforms indeed reduce the probability of re-election for incumbents. However, reforms are found to be less politically costly in this regard in those countries that have less intrusive financial market regulation, consistent with the hypothesis that more developed financial markets make the decisive voter more forward-looking. The results also confirm the hypothesis that income redistribution policies reduce the electoral damage of reforms.

The results are broadly in line with the recent reforms history in advanced economies: countries with more developed financial markets (e.g. English speaking countries) or strong income redistribution (e.g., Nordic countries) score better than others in terms of reform activism.

favourable aspect of financial integration is evident in two main phenomena, i.e. increased contagion risk as national financial systems become more interlinked, and the risk of boom-bust pro-cyclical behaviour of financial flows notably in a setting of economic convergence and in the presence of structural rigidities.

In principle, financial integration reduces the exposure of euro-area economies to financial-stability risks. The larger and more liquid financial markets implied by integration allow even relatively large shocks to be absorbed and diffused across the euro-area financial system as a whole. However, the inevitable counterpart of

this greater capacity to absorb and diffuse external shocks is a heightened risk of contagion between interlinked national financial systems.⁽¹⁷⁶⁾ Systemically important shocks taking place in any euro-area member are more

⁽¹⁷⁶⁾ Although there no established meaning to the word "contagion", it is generally used to refer to episodes in which financial markets in one country react to financial market developments in another country above what would be justified on the basis of market fundamentals. Empirically, contagion has been measured in terms of probability of a crisis in a given country spreading to other countries, cross-country volatility spillovers, or structural breaks in cross-country financial market links. See, e.g., Pericoli and Sbracia (2003) and Forbes and Rigobon (2002).

likely to have significant, and potentially systemic, implications for other Member States. Such channels of contagion operate at a global level, as illustrated by the current turmoil in international financial markets, which originated in the relatively small sub-prime segment of the US mortgage market. However, they are specifically relevant for the EU and the euro area in light of the commitment to create a single market in financial services and more particularly in banking services. ⁽¹⁷⁷⁾

Despite the growing weight of securitisation in the EU and euro-area financial systems, cross-border contagion of systemically important financial shocks is still most likely to occur via banks and credit institutions. The relevant banks are those that are large relative to their domestic financial system and have either significant cross-border operations or face significant common exposures to international financial markets. After a slow start, the pace of cross-border integration and consolidation in the EU banking system has accelerated in recent years (see discussion in Chapter 1.7). In contrast to the accelerating trend in cross-border banking in the EU and euro area, supervisory arrangements remain rather static and predominantly national-based. The result is inefficiency in the framework for supervision and financial-crisis management, implying significant deadweight costs for the financial industry and a potentially inadequate response to contagion risks within an integrated financial system.

While financial integration is clearly beneficial for catching-up economies, it can also bring challenges for them at both the macro-economic and micro-economic levels. At the macroeconomic level, there is a concern that financial markets may "overshoot" during a cycle of economic expansion, insofar as capital inflows through integrated markets may foster pro-cyclical trends in credit growth and asset prices and lead to a rapid expansion of the non-

tradable sector and real appreciation. At the microeconomic level, during strong credit expansions loan quality may deteriorate, together with an unwarranted easing of lending standards. Such financial-sector dynamics pose an obvious risk of speculative excess and macro-prudential risk, which could ultimately lead to a reversal in capital flows and a boom-bust scenario. ⁽¹⁷⁸⁾

The challenges arising from financial integration can be more acute for catching-up economies in the euro area, where a national monetary policy and exchange rate are no longer available as instruments to manage capital in flows and credit expansion. In these circumstances, financial-sector behaviour can become highly pro-cyclical, particularly if rigidities elsewhere in the economy result in inflation expectations that are weakly anchored in the area-wide price stability goal and hence respond strongly to the country-specific past inflation record (inflation persistence). The adverse real interest rate channel would be powerful. As the perceived real interest rate in the converging Member State falls relative to the corresponding area-wide rate, a mutually reinforcing process of rising inflation and increasing capital inflows can ensue. The result is a boom in aggregate demand relative to supply and the risk of possibly unsustainable internal and external imbalances. The stronger the sensitivity of perceived real interest rates to inflation and the stronger the sensitivity of demand to real interest rates, the greater will be the likelihood of such booms appearing. In the euro area, the length of such booms can be extended by the complete absence of currency risk, which reduces the signalling capacity and disciplining effects of financial markets. As a result, the ultimate sustainability of internal and external imbalances can remain in doubt for an extended period of time, allowing these imbalances to reach major proportions and raising the prospect of correspondingly large adjustment costs.

Of course, the boom-bust scenario outlined above is by no means an inevitable outcome. A successful catching-up process is inherently

⁽¹⁷⁷⁾ A second source of contagion would be increased synchronisation in business cycles among Member States, which would imply that any idiosyncratic shock would propagate more rapidly across borders. This source of contagion is particularly relevant for the euro area in light of the evidence presented in Chapter 1.2.

⁽¹⁷⁸⁾ See, e.g., Tornell and Westermann (2002) for a review of the main facts and explanations for boom-bust cycles in middle income economies.

characterised by favourable productivity shocks and declines in risk premia, which result in rising levels of credit and asset prices, an inflow of foreign savings and trend appreciation of the real exchange rate. Steep rises in these variables may well be an equilibrium phenomenon and not a source of policy concern. However, less benign outcomes cannot be excluded and the experience of catching-up Member States in the euro area provides mixed evidence in this regard. The benefits of financial integration for catching-up Member States in the euro area can only be guaranteed if there are flanking measures to reduce nominal rigidities and minimise the risk of resource misallocation.

4.4.7. Avenues to face financial integration challenges

To tackle contagion and boom-bust risks it is essential that financial-stability arrangements in the EU and euro area keep pace with the changing financial environment. Pressure to enhance the cross-border dimension in these arrangements has been mounting from within the financial industry and among policy-makers. Various possible models have been discussed, ranging from intensified use of the decentralised framework currently in place (i.e. the so-called level-3 committees of the Lamfalussy framework), to the establishment of lead supervisors and even the creation of a single EU supervisor.

In considering the relative merits of proposals for reform of financial stability arrangements in the EU and euro area, it is essential to distinguish procedures and practices from institutional arrangements. The current arrangements are characterised not only by national segmentation, but also by major differences in procedures and practices and in the allocation of supervisory responsibilities. These differences exist among supervisory agents and between supervisory agents and other policy agents (i.e. central banks and finance ministries).

Moreover, there is no truly agreed concept of "burden sharing" among EU Member States, so that the allocation of any budgetary costs in managing or resolving a cross-border financial crisis would rely solely on voluntary attitudes. As discussed in Part III of the report, without substantial convergence in supervisory procedures, responsibilities and policy tools, no streamlined arrangements would be able to function efficiently.

Regarding the risks of pro-cyclical behaviour of financial markets in converging Member States, in light of the reduced macroeconomic policy instruments to manage the impact of capital flows, the removal of economic rigidities that encourage the accumulation of imbalances and so create the risk of boom-bust scenarios becomes crucial. Concerning the role of policies in the prudential field, it should be taken into account that their scope is limited by the requirements of regulatory and supervisory convergence. The effectiveness of these policies can also be constrained by the fact that foreign-owned institutions can "work around" regulations so that prudential tightening may in practice affect only the activities of locally-owned institutions. In this respect, the issue of how responsibility for macro-prudential management is allocated between home and host supervisors is a key one. Faced with these constraints, policymakers at both national and EU levels must exploit at best available policy options, step up the quality of surveillance, and show capacity to exercise control on policy variables and reach courageous solutions.

Notably, to contain the risk of boom-bust dynamics after a protracted period of strong growth, measures that could sound counter-intuitive and unpopular might be the required ones: tightening of the fiscal stance when the budget balance is improving; wage restraints at a time when the corporate profit share is growing; pro-cyclical adjustment of prudential ratios, requiring a tightening when credit risk is declining due to strong growth and a relaxation as credit risk rises.

Box II.4.5: Expenditure rules to curb fiscal procyclicality in good times.

The Council Conclusions of March 2005 on the reforms of the Stability and Growth Pact stress the role that national fiscal governance in complementing the EU fiscal framework. A significant and robust disciplinary impact of numerical fiscal rules at national level has been found in recent studies (European Commission 2006c, Ayuso *et al.* 2007). Numerical rules are also likely to produce an impact on the stabilisation function of fiscal policy:

Budget balance or debt rules are commonly presumed to induce pro-cyclical behaviour in bad times. ⁽¹⁾ However, the extent to which this is the case depends on the design of the rules. If specified in cyclically-adjusted terms or for a longer time period for assessing compliance, pro-cyclicality need not be a problem.

Expenditure rules do not stand in the way of the operation of the automatic stabilisers in bad times. Moreover, they help curb the observed pro-cyclical bias in good times related to slow recognition of boom conditions and pressures for additional spending. As in the case of budget balance rules, it matters whether the rule excludes cyclically-sensitive items and what time frame is applied. Moreover, ceilings for the expenditure ratio to GDP may be less effective than ceilings for expenditure growth rates. In the former case, expenditure could grow faster in good times without violating the ceiling, while this is not the case in the latter case.

Revenue rules that define conditions for the use of windfall revenues are potentially effective in curbing pro-cyclicality in good times, but those that target a given amount of tax revenues may induce pro-cyclicality.

Existing evidence supports these priors to some extent, suggesting that expenditure rules are most effective in curbing pro-cyclicality in good times

⁽¹⁾ Existing analyses at sub-national government level for the US find some evidence of an increased pro-cyclicality associated with the operation of numerical debt rules (Poterba 1994; and Sorensen *et al.* 2001). Alesina and Bayoumi (1996) report instead a weak cross-section relation between an index of stringency of state-level debt rules and the sensitivity of US State budget balances to GDP.

(Ayuso *et al.* 2007, Turrini 2008). As a further test, empirical reaction functions for expenditure have been estimated for EU countries, distinguishing between countries with strong or weak expenditure rules, and restricting the sample to good times, i.e. with a positive output gap. ⁽²⁾ Table 1 displays the results.

The coefficient of interest is the constant term: it reveals whether there is any tendency for the ratio of primary-cyclically adjusted expenditure on potential output to grow over and above what is explained by the main determinants of expenditure policy, i.e. it is a measure of expenditure bias in good times. The constant term is significantly positive only for the group of countries with weak expenditure rules, which is suggestive that expenditure rules may indeed help to prevent pro-cyclical expenditure bias in good times.

Table 1:
National expenditure rules and pro-cyclical expenditure bias in good times: evidence from the estimation of fiscal reaction functions

Dependent variable:	Sample: EU-25, 1990-2005, output	
Δ cyclically-adjusted primary expenditure	Weak rule countries	Strong rule countries
Explanatory variables	[1]	[2]
Constant	12.246*** (4.76)	7.907 (5.75)
Lagged cyclically-adjusted	-0.191* (0.1)	-0.162 (0.11)
Lagged debt/GDP ratio	-0.069** (0.03)	0.002 (0.01)
Output gap	-0.203 (0.375)	-0.078 (0.58)
Dummy 1992	-0.85 (0.77)	-0.986 (0.73)
Dummy 1999	0.461 (0.38)	0.361 (0.52)
N. obs.	49	61
R sq. within	0.3	0.16

Notes: Estimations method: fixed effects, instrumental variables regression. The output gap is instrumented with its own lag and a lagged indicator of foreign output gap. The foreign output gap indicator is the export-weighted output gap of the 3 major export markets of each country. All fiscal variables are expressed as shares on potential output.

Coefficient standard errors are reported in parentheses. *, **, and *** denote, respectively, significance at the 10, 5 and 1 per cent level. Coefficients for country fixed effects are not reported.

Source: elaborations on data contained in DG ECFIN AMECO database.

⁽²⁾ The two groups are identified as countries with the average value of the expenditure rule index (as defined in European Commission 2006c) respectively above and below the median value across the whole sample.

(Continued on the next page)

Box (continued)

National fiscal governance frameworks based on medium-to-long term objectives of fiscal policy may provide further help to contain pro-cyclicality in good times. Fiscal Councils have been set up in some countries to provide macroeconomic forecasts to be used in budgetary planning or cross-check the official forecasts (European Commission 2005d; Jonung and Larch 2006).

This helps to shorten identification and implementation lags and contain the strategic use of biased forecast. Fiscal councils may also stimulate the debate and increase awareness among the policy community, academia, and the public opinion on issues relating with the conduct of fiscal policy over the cycle.

4.5. THE ROLE OF FISCAL POLICY

From the outset national fiscal policies were considered as a main instrument for smoothing country-specific shocks within the economic governance framework of EMU. However, as discussed in Chapter I.5 there is evidence that episodes of pro-cyclicality have not been unusual, notably in good times, which is obviously not helpful for a smooth intra-area adjustment – even if countries' track record has slightly improved after the launch of the single currency. A related issue is that fiscal indicators, even if cyclically-adjusted, may give a too rosy picture of the structural budgetary position in the upswing, in particular if it goes along with a boom in asset (including real estate) markets which tend to produce tax windfalls that may not be recognised as temporary. Under those circumstances the true stance of fiscal policy may be too easy, especially if in addition external balances are building up. A study carried out in preparation of this Report by Allsopp and Vines (2008), suggests in this context that budgetary policy might best be used to steer the real effective exchange rate to its equilibrating level so as to avoid overshoots or undershoots and hence facilitate intra-area adjustment.

Research reported in Box II.4.5 indicates that national fiscal rules, and in particular expenditure rules, can stem pro-cyclical fiscal behaviour.

Going forward, fiscal policy as an instrument of stabilisation in EMU is likely to face a number of constraints. First, as noted above, financial market integration acts as a substitute for, and diminishes the effectiveness of, fiscal policy. Second, as noted at the beginning of this chapter, the changing nature of shocks – with supply shocks becoming more prevalent – means that discretionary fiscal policy loses more of its effectiveness. As to the automatic fiscal stabilisers, they also see their effectiveness reduced, but to the extent that they encourage flexible reallocation of labour resources in the face of shocks, they would ease these constraints. Third, the sustainability issue triggered by population ageing will pose a constraint on the room available for fiscal stabilisation policy. This issue will be dealt with in the next chapter.

5. QUALITY AND SUSTAINABILITY OF PUBLIC FINANCES

5.1. INTRODUCTION

The key challenge for policy-makers in the euro area over the medium and long-term will be to transform the European social models so that the challenges of tomorrow can be faced. This challenge has three dimensions:

- First, achieving the budgetary targets set in countries' Medium Term Objectives is a necessary condition for fiscal sustainability and needed to create the buffers required to face difficulties if needed. Sound public finances are even more important for euro-area countries, as large and unsustainable budget deficits in one country hit the entire area via a more restrictive stance of monetary policy.
- Second, the Lisbon strategy for growth and jobs requires economic policy strategies that raise labour utilisation and productivity. While important by itself as a means to raise living standards, higher labour utilisation and productivity are also necessary for sustainable public finances in the face of aging populations. Increases in labour utilisation via enhanced incentives for older workers to stay active longer are a double-edged sword: by stimulating job creation and growth they ease the financing of welfare systems and also reduce their cost.
- Third, a shift in public expenditure and taxation in a growth friendly direction also pays high dividends, by delivering better value for public money, with less distortions, a stronger focus on human capital and infrastructure and heightened incentives for job and business creation.

Short-term political considerations are often working against a longer-term orientation of budgets. The EU fiscal framework helps to offset this tendency, and even more so if supported by strong frameworks of fiscal governance at the national level. Against this backdrop this chapter examines first the fiscal sustainability challenge and then looks at strategies to improve the quality of budgets.

5.2. FISCAL SUSTAINABILITY

As highlighted in various places in this Report, the size and age-structure of the euro area's population will undergo dramatic changes in the coming decades, due to low fertility rates (expected to remain persistently below the natural replacement rate) and continuous increases in life expectancy. Net inward migration inflows provide only limited relief and the area's old-age dependency ratio, that is, the number of people aged 65 years and above relative to those between 15 and 64, is projected to double to 53% in 2050. ⁽¹⁷⁹⁾

Even so, the overall employment rate in the euro area is projected to rise from 65% at present to 67% in 2010. The Lisbon target of 70% would be reached in 2035 (Carone *et al.* 2005). This is driven by increases in the employment rates for females and older workers (see Chapter II.2). The employment rate of older workers is projected to show a particularly sharp increase from close to 40% at present to 47% by 2010 and 59% in 2025. This is well in excess of the 50% Lisbon target which would be achieved by 2013 – with pension reform, including of early retirement schemes, being the main driver. While welcome, this trend will only provide temporary relief. Demographics will eventually force the aggregate employment rate down again.

Consistent with these projections, annual average potential GDP growth is expected to decline from on average around 2% in the previous two decades to 1¾ in the next two decades, and to 1¼ % in the following two decades. As employment growth will gradually taper off and eventually become negative, productivity will become the dominant and, in some countries, the only source of growth over the longer haul. ⁽¹⁸⁰⁾

On current policies, the ratio of age-related expenditure to GDP in the euro area is projected

⁽¹⁷⁹⁾ It should be borne in mind that euro area population will increase until 2025 and then get back to its 2003 level.

⁽¹⁸⁰⁾ Full details on the underlying assumptions and projection methodologies can be found in Economic Policy Committee and European Commission (DG ECFIN) (2005).

to increase by almost 4 percentage points up to 2050. Most of the projected increase will be on pensions and, to a lesser degree, on health care and long-term care.⁽¹⁸¹⁾ The potential for offsetting savings in terms of projected public spending on education and unemployment benefits are likely to be limited.

As part of its surveillance work, the European Commission has developed a "sustainability gap" indicator which measures the required immediate and permanent budgetary adjustment as a share of GDP such that the ratio of public debt to GDP significantly declines, allowing to shift public expenditure from interest payments to ageing-related items.⁽¹⁸²⁾ This indicator can be decomposed in two components: (i) the part that is required to sustain the debt ratio at its current level in any event, i.e. without taking into account the projected increase in age-related expenditure; (ii) the impact of the projected increase in age-related expenditure itself. The sustainability gap is estimated to be about 2½ % of GDP (see Table II.5.1).⁽¹⁸³⁾ The total impact of ageing on the sustainability gap is larger, about 3½ %, but the initial primary fiscal position is large enough to provide an offset of around 1% of GDP. The long-term debt scenario that would evolve on the basis of unchanged policies is shown in Graph II.5.1. Debt would initially dip below the 60% of GDP threshold, but would start rising again in the mid-2020s to reach 120% of GDP in 2050.

The situation varies greatly among the euro-area members. Nearly all euro-area members have sustainability gaps. This implies that based on the 2007 budgetary position and with no changes in fiscal policies, an adjustment is necessary so as to render the public finances sustainable over the long term for most euro-area members.

⁽¹⁸¹⁾The detailed projection results are provided in European Commission (2006f).

⁽¹⁸²⁾A comprehensive analysis of fiscal sustainability and the detailed properties of the sustainability gap indicators are provided in European Commission (2006f).

⁽¹⁸³⁾These calculations, of sustainability gap indicators and debt projections, were made on the basis of: (i) the joint EPC-Commission long-term budgetary projections of the Ageing Report; and, (ii) the medium-term fiscal estimates and plans included in the 2006 updated stability and convergence programmes. More details are given in Part I.4 of European Commission (2007h).

However, in some euro-area countries, public finances are unsustainable even disregarding the long-term budgetary impact of ageing populations.

Table II.5.1:
 Sustainability gap indicators

	2007 scenario			Programme scenario		
	S2			S2		
	IBP	LTC		IBP	LTC	
BE*	2,8	-2,5	5,3	2,5	-2,8	5,3
DE	1,8	-1,3	3,1	0,9	-2,2	3,1
EL*	1,4	0,5	0,9	-0,9	-1,7	0,9
ES	2,7	-3,2	5,9	3,3	-2,7	5,9
FR	3,0	0,4	2,6	1,1	-1,6	2,6
IE	4,9	-1,1	6,0	6,1	0,1	6,0
IT	1,1	-0,8	2,0	-1,3	-3,2	2,0
CY	4,1	-4,4	8,5	6,3	-2,1	8,5
LU	8,1	-0,2	8,3	7,1	-1,2	8,3
MT	-0,6	-0,5	-0,1	-2,4	-2,3	-0,1
NL	3,9	-0,5	4,4	2,8	-1,7	4,4
AT	0,3	-0,8	1,1	-0,3	-1,3	1,1
PT	3,6	0,4	3,2	2,0	-1,2	3,2
SI	7,0	0,0	7,1	6,5	-0,5	7,1
FI	-0,5	-4,6	4,2	1,3	-2,8	4,2
EU27	2,5	-0,6	3,1	1,4	-1,7	3,1
EA	2,3	-1,1	3,4	1,2	-2,2	3,4

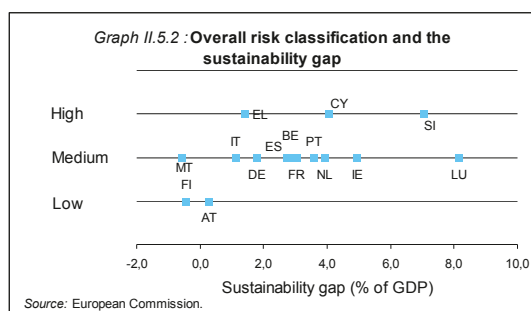
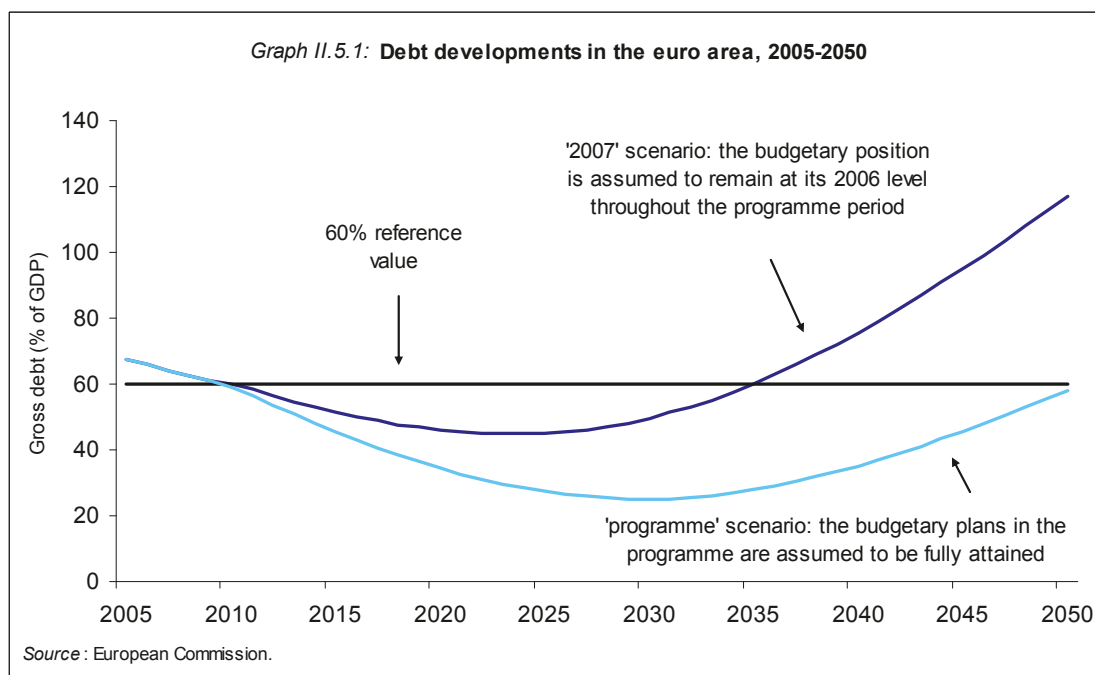
Note: BE has not submitted a 2007 updated stability programme and the figures refer to the 2006 SCP assessment round. No pension projections were available for Greece in the new common projections exercise and the rise in age-related expenditure is therefore underestimated. Pension expenditure in Greece was projected to rise between 2005 and 2050 by 10.2% in the 2002 Greek stability programme.
 Source: European Commission.

To scale countries according to their public finance sustainability challenge, three risk categories are identified: low, medium and high risk. This scaling is based on the estimated sustainability gap along with the current level of debt and an assessment of the quality of the long-term projections embedded in the Stability Programmes. On the basis of the information provided in the 2007 updates of the Stability Programmes, three countries are assessed to be at high risk, ten at medium risk and two at low risk (Table II.5.2).

Table II.5.2:
 Overall risk classification

Risk category	Country
Low	Austria, Finland
Medium	Belgium, Germany, Spain, France Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal
High	Greece, Cyprus, Slovenia

Source: European Commission.



Graph II.5.2 shows that the overall risk categorisation largely corresponds to the sustainability gap. It gives rise to the following additional observations:

- *The high risk countries* (EL, CY and SI) are characterised by a very significant rise in age-related expenditure over the long term. Greece also has a large deficit and a very high initial debt level.
- *The medium-risk group of countries* (BE, DE, ES, FR, IE, IT, LU, MT, NL and PT) has mixed characteristics. Some have relatively strong budgetary positions, but face significant costs relating to ageing, for which structural reform measures are needed. Spain, Ireland, Luxembourg and the Netherlands fall into this group. Others are less concerned with the cost of ageing, typically because

they have already reformed their pension systems, but face comparatively poorer initial conditions. This is the case in Germany, France, Malta, Portugal and Italy. Belgium has characteristics in common with both groups.⁽¹⁸⁴⁾

- *The low risk countries* (AT and FI) have either a strong budgetary position and/or comprehensive pension reforms in place. This does not mean that in these countries there are no risks at all to the sustainability of public finances. In Austria, the situation depends on the successful implementation of the pension reforms. In Finland the projected cost of ageing is high, but it has a very strong initial position.

Ensuring fiscal sustainability is of particular importance in the euro area. In a monetary union there are no exchange rate risk premiums and hence governments face weaker market disciplining effects. At the same time the spill-over effects from fiscal sustainability problems -- via area-wide interest rates and exchange rate -- onto other participating countries is larger in a monetary union. Securing sustainable public

⁽¹⁸⁴⁾ It should be noted that the assessment for Belgium refers to the 2006 SCP round.

finances is thus a key policy challenge that requires steadfast policy responses along three dimensions, namely: (i) reducing debt; (ii) raising employment rates and productivity; and (iii) reforming age-related expenditure programmes.⁽¹⁸⁵⁾ The appropriate mix of these three approached depends on the challenges and policy priorities that the Member States have identified for themselves. Several euro-area members have made progress down these three routes. However, more needs to be done, and soon: postponing these inevitable policy choices will be very costly.

5.3. THE QUALITY OF PUBLIC FINANCES

The quality of public finances has many dimensions, including the degree to which fiscal policy ensures long-term sustainability and supports stabilisation in response to demand shocks, adjustment in response to supply shocks and long-term economic growth.⁽¹⁸⁶⁾ All these aspect of the quality of public finances are tightly intertwined. For example, the task of achieving sustainable public finances would be eased by fiscal policies that are supportive to long-term economic growth. The Lisbon agenda stresses this links between fiscal sustainability, the quality of public finances and long-term growth. Integrated Guideline No.3 of the Lisbon Strategy summarises it as follows: "To promote a growth- and employment-orientated and efficient allocation of resources, Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives, and ensure the overall coherence of reform packages."

The quality of public finances is clearly more encompassing than merely the composition of

public expenditure. Indeed, the relevant trade-offs are not just between different expenditure items, but also between the level of expenditure on the one hand and the tax burden on the other: an effective expenditure programme financed by distorting taxes may on balance not be growth enhancing. Moreover, expenditure programmes and tax systems have been designed to serve many other objectives than purely macroeconomic ones – such as poverty reduction, insurance against income or job loss, enforcement of law, social and cultural cohesion, etc. – and the assessment of their quality needs to take those objectives into account as well. Such goals are in principle not incompatible with the macroeconomic goals of stabilisation, adjustment and growth. But certain design features of expenditure programmes and tax systems may introduce distortions that are economically damaging. Against this backdrop, six dimensions of the quality of public finances are identified: the size of government, the level of deficits and debt, the composition of public expenditure, taxation, fiscal governance and regulation and legislation.

5.3.1. Government size

Big governments can be a burden on the economy to the extent that the high levels of taxation that go with it distort economic behaviour and reduce the economic growth potential (see Graph II.5.3).⁽¹⁸⁷⁾ However, a large public sector also plays an important automatic stabilising role in the face of the business cycle. This feature is particularly relevant for in a monetary union in view of the absence of intra-area exchange rates and the national monetary instrument. Even so, the stabilisation function of a large government sector cannot be taken for granted. Various studies have shown that the high tax burden associated with it may in fact not only break the economy's growth potential, but also negatively affect the economy's adjustment capacity.⁽¹⁸⁸⁾ The estimates are that beyond a size of some 40% of GDP, the automatic stabilisation capacity

⁽¹⁸⁵⁾The three-pronged strategy was decided by the Stockholm European Council in March 2001.

⁽¹⁸⁶⁾For a complementary analysis of the quality of public finances, see European Commission (2008c)

⁽¹⁸⁷⁾Afonso *et al.* (2005), Agell *et al.* (1997).

⁽¹⁸⁸⁾See Martinez-Mongay and Sekkat (2003), Buti *et al.* (2003), Buti and van den Noord (2005) and research carried out for this Report reported in Debrun, Pisany-Ferry and Sapir (2008).

of governments becomes smaller, not larger. Beyond this size automatic stabilisers may add to, rather than attenuate the inflationary impact of demand shocks and also push down activity after an adverse supply shock. The combination of high taxes and generous income replacement that is usually associated with big government size will heighten the resistance of real wages and therefore provoke second round inflationary shocks. Under those conditions, a less costly way of supporting the stabilisation function would be to reduce the weight of the government in the economy. Alternatively, the functioning of social security systems, labour market institutions and tax systems may be adapted so as to ensure that the incentives to which they give rise are consistent with the requirements of flexible labour and product markets to heighten the economy's ability to adapt well to change.

reduce debt levels and ensure long-term sustainability. Sustainability is seen as a precondition for fiscal policy to play its stabilisation role to begin with. If debt levels are high and unsustainable, economic agents are unlikely to respond to temporary fiscal stimulus. To the extent discretionary fiscal policy is used, it needs to be used in a genuine counter-cyclical manner. However, this has not been systematically the case so far, as highlighted in Chapter I.5.

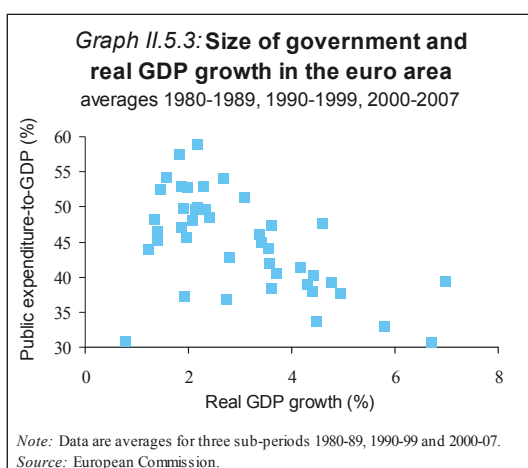
5.3.3. The composition of public expenditure

The composition of public spending matters not only for a country's growth potential, but also for its ability to adjust to shocks. Government can respond more flexibly if the share of discretionary – such as investment and intermediate consumption spending – in its spending envelope is high. Their share in total public spending ranges from 11% in Belgium to 24% in Finland and for the euro area as a whole, it averages to around 16%. In a similar vein, a large share of public wages with longer-term wage contracts complicates a flexible adjustment of the budget, notably if an adverse supply shocks necessitates a downward adjustment of (real) wages (Grenouilleau *et al.* 2007). In contrast, a high share of spending on R&D and education can raise both productivity and the ability to overcome negative shocks. Empirical findings on what type of spending is growth friendly vary, resulting in estimates for the euro area of between 20 and 45% of total outlays (see European Commission 2003 and 2004 for an overview of the literature). Using a wide definition (including public spending on education, health, environment protection and public order and safety) shows a slight increase in the share of growth-friendly public spending since the launch of the euro (Graph II.5.4), but country differences remain significant. Importantly, sustainable public finances avoid that such growth-enhancing spending is crowded by rising pension and other social expenditure (see Mandl *et al.* 2008).

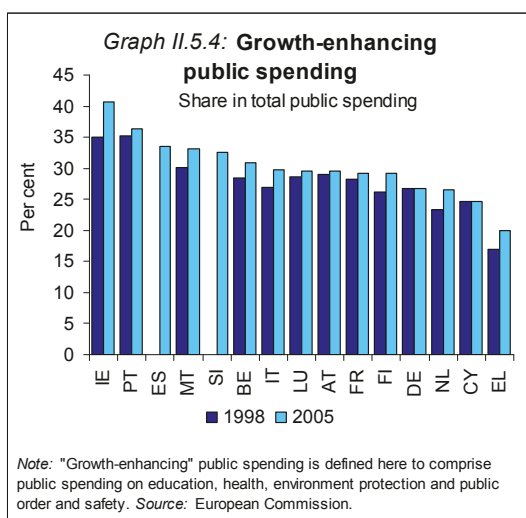
5.3.2. Debt and deficits

EMU's fiscal framework is geared to achieving and maintaining sound budgetary positions over the medium term. It aims at limiting the potential negative spillover effects that inappropriate fiscal policy might have on the common monetary policy, while also ensuring that countries create room of manoeuvre for fiscal policy to act in bad time. Since the revision of the Stability and Growth Pact in 2005 (see Chapter I.10), the participating countries are required to pursue country-specific medium-term budgetary objectives so as to: (i) create a solid starting position in normal times and thereby providing room to stabilise demand shocks while not breaching the 3% deficit threshold; and (ii)

Faced with macroeconomic constraints to public spending, policy makers need to focus increasingly on improving the efficiency and effectiveness of their expenditure programmes. Greater efficiency implies finding solutions that



allow to deliver the same level of public goods with fewer resources (technical efficiency) or providing a better mix public goods at the current level of spending (allocation efficiency). Empirical studies on the efficiency of public expenditure in R&D, education and health indicate great room for improvements in the euro area and Europe in general (see for example Sutherland *et al.* 2007, Afonso and St. Aubyn 2006, Verhoeven *et al.* 2007). Policy options include more results oriented management, more market-based provision, the use of public-private partnerships and outsourcing.



5.3.4. Taxation

The level and mix tax have an impact on the adjustment capacity and long-term growth of economies, mostly by affecting the allocation of labour and capital. In terms of adjustment capacity, the higher the marginal labour tax wedge (the difference between real labour cost and real take-home pay), which could result from strong income tax progressivity, the less elastic is the labour supply and the stronger the volatility that results from supply shocks (Buti *et al.* 2003). In terms of long-term growth, studies find that a relatively higher share of indirect taxes is associated with faster growth resulting from stronger capital accumulation since indirect taxes are neutral with respect to the inter-temporal trade-off between consumption now or in the future – unlike direct taxes which tend to penalise saving and investment (OECD 2007c). Moreover, simple and transparent tax systems reduce compliance and administrative costs

which is also favourable for growth. In EMU, a shift from direct to indirect taxation has occurred and direct taxes on labour have been lowered (Carone *et al.* 2007 and Alworth and Arachi 2008). Overall however, reforms in taxation have been small and piecemeal (see Section I.5).

5.3.5. Fiscal governance

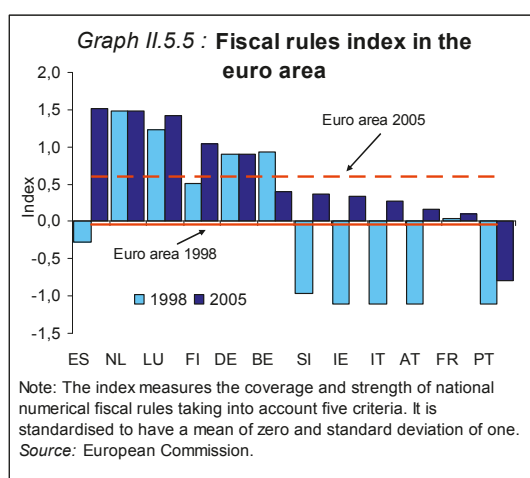
Fiscal governance cuts through all dimensions of the quality of public finances. From the perspective of the euro area, of particular relevance is the role that national fiscal frameworks can play in contributing to greater fiscal discipline and ensuring sustainability so as to avoid spillover effects to other participating countries and which would potentially require monetary policy responses for the euro area as a whole.

Empirical work shows that various elements of fiscal frameworks contribute to better fiscal performance (von Hagen *et al.* 2005, European Commission 2006c and 2007h). Foremost, fiscal rules matter for budgetary outcomes. Work by the European Commission (2006c) shows that strong numerical fiscal rules with a wide coverage improve budgetary performance while strong and broad expenditure rules are associated with lower primary expenditure-to-GDP ratios (Table II.5.3). The scores of countries on the Commission's fiscal rule index (Graph II.5.5) have clearly improved in a number of cases, with the scores clearly converging.

Table II.5.3:
Influence of fiscal rules on the primary cyclically adjusted balance (EU-25, 1990-2005)

Explanatory variables	Dependent variable: primary cyclically adjusted balance (CAPB)
OG	0.09 (1.4)
Constant	-0.90 (-2.0)**
Lagged CAPB	0.63 (15.8)***
Lagged debt/GDP ratio	0.02 (3.1)***
Fiscal rule index	0.25 (2.1)**
Dummy 1992	0.63 (2.0)**
Dummy 1999	-0.53 (-2.9)***
N. obs.	260
R sq. within	0.59
R sq. between	0.94
R sq. overall	0.81

Notes: Estimations method: fixed effects, instrumental variables regression. The output gap is instrumented with its own lag and a lagged indicator of foreign output gap. The foreign output gap indicator is the export-weighted output gap of the 3 major export markets of each market. All fiscal variables are expressed as shares on potential output. "t" values are reported in parentheses. *, **, and *** denote, respectively, significance at the 10, 5 and 1 percent level. Coefficients for country fixed effects are not reported. Source: European Commission.



At the same time, strong medium-budgetary frameworks have supported to better adhere to national medium-term plans. A detailed assessment by the European Commission (2007h) found that in two thirds of the cases the planned improvements in general government balances of the Stability and Convergence Programmes were undershot, mostly because expenditure plans were overrun. An econometric analysis showed that on average countries with stronger medium-term fiscal frameworks have been less susceptible to such behaviour (see Table II.5.4). Strong medium-term budgetary frameworks are those that cover the whole government sector, are well-coordinated among the various government levels, are well mapped onto to the budget, involve the parliament in the preparation and have strong enforcement and monitoring mechanisms.

Table II.5.4:

Difference between the observed and planned increase in real primary expenditure EU-15 explained, 1990-2006

Explanatory variables	Coefficient	t-stat
Constant	0.1 (***)	4.6
Planned change primary-expenditure ratio	-1.0 (**)	-2.3
Initial level prim expenditure ratio	-0.2 (***)	-3.8
Dummy contract (0) delegation (1)	-0.2 (***)	-3.4
Real GDP growth surprises	-0.1	-0.9
Total index medium-term budgetary frameworks or SCP	-0.6 (**)	-2.5
Dummy t+2	0.1 (***)	3.8
Dummy t+3	0.2 (***)	3.5
N. Obs.		282
R. Sq		0.48

Notes: Estimation method: fixed-effect OLS with robust standard errors. *, **, and *** denote, respectively, significance at the 10, 5 and 1 per cent level.
Source: European Commission.

Finally, national fiscal institutions can play an important disciplining role. Experience shows

that governments tend to be overly optimistic in the macroeconomic assumptions that underpin the budget. For that reason, the forecasting function could be delegated to independent institutions or agencies which at the same time would monitor and assess fiscal performance. In practice, the forecasting record of these institutions has been free of the bias that policy makers frequently exhibit (Jonung and Larch 2006). In the euro area, most participating countries have fiscal institutions that serve as advisors and monitor fiscal performance, but only two (Belgium and the Netherlands) rely on independent institutions to provide the macro forecasts for the budget and medium-term budgetary plans.

The Council Report of March 2005 on the reform of the Stability and Growth Pact (see Chapter I.10) explicitly recognised the importance of national rules and institutions. It called on Member States to "ensure that national procedures in the budgetary areas enable them to meet their obligations." More recently (9 October 2007), the ECOFIN Council reconfirmed the importance of national fiscal rules and institutions and acknowledged that national rules-based multi-annual fiscal frameworks could help to adhere to medium-term budgetary plans. It also gives a special place to the European Commission's forecasts in fiscal surveillance, in particular in the assessment of the Stability and Convergence Programmes.

In addition to supporting sound public finances, fiscal governance can also play an important role for raising the efficiency of expenditure. Procurements rules, as specified in the EU Directives on Public Procurements, are one example. These have greatly contributed to enhancing transparency and eliminating corruption. Budgetary procedures which use performance information are another example. They are found to increase efficiency by shifting the focus away from inputs to outputs and outcomes (Currstine *et al.* 2007).

5.3.6. Regulation and legislation

Structural reforms, in combination with an effective regulatory and legal framework, are essential to provide for a smooth functioning of labour, product and services markets. Public

finances play a particular role through their impact on wage setting (e.g., public sector wages and minimum income schemes), labour market participation (e.g., tax and benefits systems), and factor mobility (e.g., labour market regulation and benefits systems), and, more generally, the business environment (e.g., through the provision of a public infrastructure and the functioning of the judicial system). On all counts the euro area is found to be more rigid than the US. Against this backdrop, efforts have been made in the euro area to reduce rigidities but progress has often been delayed and varied strongly across countries (see Chapter I.6).

5.4. OVERALL ASSESSMENT

Overall, progress in improving the quality of public finances has been uneven across dimensions and members of the euro area. The creation of the monetary union has not yet exerted the necessary degree of reform pressure and sustainable public finances have not been ensured across the participating countries. It will be key to not delay reform efforts in strengthening the quality of public finances any further, in particular in light of the subdued longer term growth prospects due to ageing populations and the heightened risk of macroeconomic instability in the near term.

The importance of ensuring sustainable public finances over the long term was emphasised in the reform of the SGP in 2005.

Coping with the sustainability challenge requires forward-looking policies which address budgetary imbalances before the impact of ageing unfolds. Consistency between medium-term budgetary targets and long-term sustainability is thus increasingly at the core of the policy agenda in the euro area. Indeed, in the determination of the medium-term budgetary objectives (MTOs), implicit liabilities related to increasing expenditures in the light of ageing populations should be taken into account⁽¹⁸⁹⁾. However, fiscal policies are not the only means by which sustainability should be ensured. Sound fiscal policies need to be supported by structural reforms that lead to a better functioning of the euro-area economies. The Lisbon strategy for growth and jobs provides an appropriate setting for the reform agenda going forward. Moreover, adapting the social systems in the euro area to be ready for the challenges of tomorrow will be necessary. This involves improving making pensions systems sustainable while securing access to adequate retirement incomes. It also implies a need to review how e.g. health-care and long-term care should be provided and financed in the future in light of a continued rise in living standards, though at a less rapid pace than observed over the last decades.

⁽¹⁸⁹⁾ The European Council endorsed the report of the Council (ECOFIN) of 20 March 2005 entitled 'Improving the implementation of the Stability and Growth Pact' and approved its findings and proposals, notably taking into account implicit liabilities in the determination of the MTOs once the modalities for doing so have been established and agreed by the Council. See Council of the European Union, European Council (2005).

6. ENLARGING THE EURO AREA

6.1. INTRODUCTION

Since the introduction of the single currency in 1999, the euro area has been enlarged from eleven to fifteen countries. Several Member States which joined the European Union as "Member States with a derogation" in 2004 and 2007 are set to follow, as they are committed to adopt the euro once they fulfil the necessary conditions. This process is likely to be largely completed within the next decade or so. Therefore the coming years will be a period of transition.

This chapter explores the major challenges the new euro-area candidate countries are facing to meet the requirements for their successful integration as new euro-area Members. It will also look at the implications for the euro area as a whole, in particular the greater heterogeneity that is likely to ensue. The new Member States are all at different stages of their catching-up process, and the experience of some existing euro-area members provides valuable insights in this respect. The main finding is that a flexible adjustment of prices and wages to asymmetric shocks along with sustainable public finances are crucial for a smooth functioning of these economies in a single-currency environment (see Chapter I.8), which underscores the critical importance of adequate preparation, including through determined efforts in the fiscal and structural domains.

6.2. THE PATH TOWARDS EURO ADOPTION

EU membership implies the requirement to adopt the euro when a Member State fulfils the necessary economic and legal conditions.⁽¹⁹⁰⁾ Until that time, exchange rate policies remain a national competence, though they are a matter of common interest (Art. 124 of the Treaty), linked in particular to the smooth functioning of the single market (no persistent real exchange rate

misalignments and excessive nominal exchange rate volatility ⁽¹⁹¹⁾). Euro-area enlargement is an ongoing process, driven by the progress made by Member States in fulfilling the conditions for entry. Slovenia was the first of the new Member States to qualify for euro adoption, and it became the 13th member of the euro area on 1 January 2007. Following positive convergence assessments in 2007, Cyprus and Malta joined the euro area one year later.

The institutional path towards the euro is based on detailed provisions in the Treaty and broadly comprises three stages:

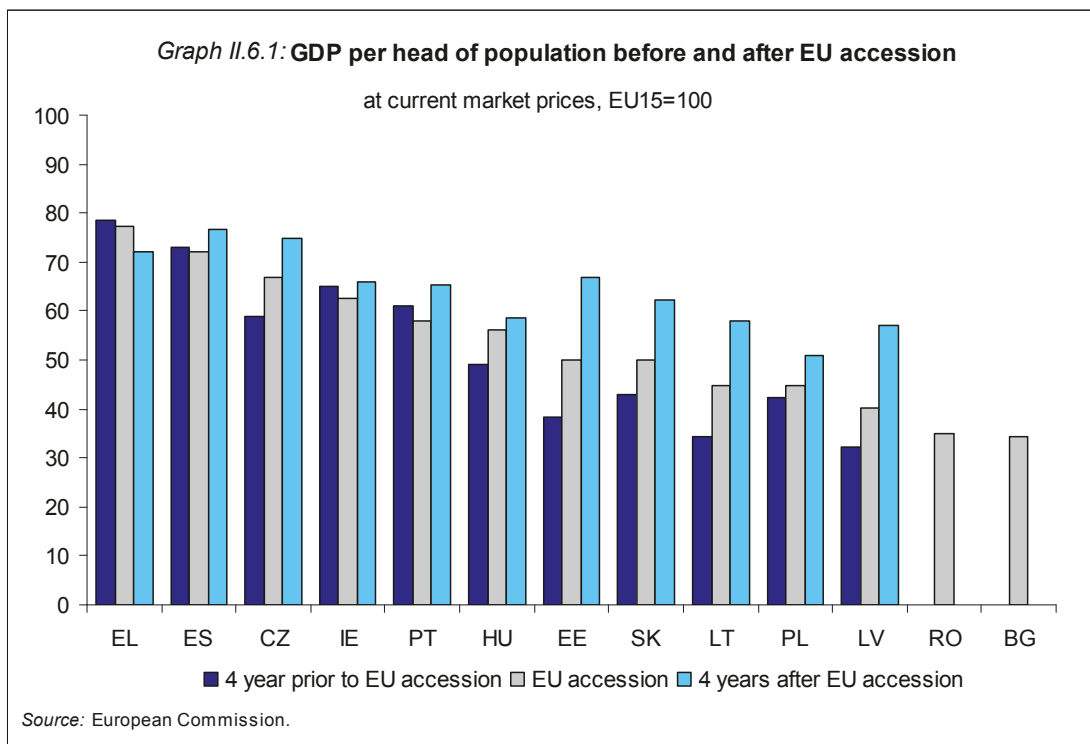
- **First stage: participation in the exchange rate mechanism (ERM II).** ERM II provides a stability-oriented exchange rate framework to "pre-in" countries, supporting the convergence process. The exchange rate mechanism helps to anchor the currencies in the run-up to euro adoption. Participation in the mechanism is voluntary, but Member States are expected to enter at some point. Currencies in ERM II are allowed to float within a range of $\pm 15\%$ with respect to a central rate against the euro. ERM II can accommodate a range of exchange rate regimes, though not a free float.⁽¹⁹²⁾ Currently four of the new Member States participate in ERM II (Estonia and Lithuania since 2004, Latvia and Slovakia since 2005).⁽¹⁹³⁾
- **Second stage: fulfilment of the nominal convergence criteria.** The EC Treaty provides an institutional framework to assess whether a prospective euro-area entrant has achieved a high degree of sustainable convergence. This is measured against a set of formally defined criteria, including price

⁽¹⁹⁰⁾Two protocols annexed to the Treaty grant to Denmark and the United Kingdom the possibility to opt-out from the provisions on Economic and Monetary Union and, thus, to decide whether and when they intend to adopt the euro (provided that they fulfil the requirements).

⁽¹⁹¹⁾Resolution of the European Council, Amsterdam, 16 June 1997.

⁽¹⁹²⁾Crawling pegs and pegs to currencies other than the euro are also not compatible with participation in ERM II. Hard pegs, such as currency boards, can be accepted as unilateral commitments, based on an assessment of the appropriateness and sustainability of the currency board in question.

⁽¹⁹³⁾Denmark has participated in the mechanism since its inception in 1999, but it keeps the exchange rate within the narrower range of $\pm 2.25\%$ against the central rate.



stability, exchange rate stability, sound public finances, and convergence of long-term interest rates.⁽¹⁹⁴⁾ The rules-based character of the framework aims to ensure transparency and predictability, and it puts countries themselves in the driving seat of monetary integration;

- **Third stage: adoption of the euro.** The exchange rate is irrevocably fixed and a country becomes subject to euro-area-wide monetary policy and the euro-related *acquis*. It shares in the joint responsibility for managing the single currency area, notably through participation in the Eurogroup and ECB monetary policy-making.

This legal framework implies that the eventual endpoint of monetary integration is clearly

⁽¹⁹⁴⁾In order to qualify a country needs to satisfy the following criteria: inflation not exceeding by more than 1½ percentage points that of the three best-performing Member States in terms of price stability, and a sustainable price performance; long-term interest rates not exceeding by more than 2 percentage points that of these three countries; not being subject to a Council Decision on an excessive deficit; and observing the normal fluctuation margins of the ERM without severe tensions for at least two years.

defined, but that countries have significant leeway in choosing the timeframe for their efforts to achieve a high degree of sustainable convergence (e.g. through the timing of ERM II entry, fiscal consolidation strategies, etc.).

6.3. PROGRESS WITH REAL CONVERGENCE

Most new Member States are former transition economies that are still undergoing a real convergence process vis-à-vis the euro area, e.g. income levels and economic structures are becoming more aligned.⁽¹⁹⁵⁾ Major progress has already been made, spurred inter alia by the EU accession process. However, completing real convergence will remain a key task for a number of years to come.

⁽¹⁹⁵⁾There is no single and unanimously agreed definition of real convergence. The indicator most commonly used to measure real convergence is per capita income. Other indicators such as productivity, unemployment rate and price level are also used on occasion. Synchronisation of the business cycle and similar structures of the economy are other aspects of real convergence.

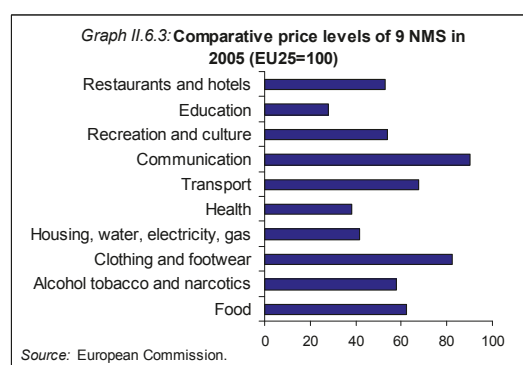
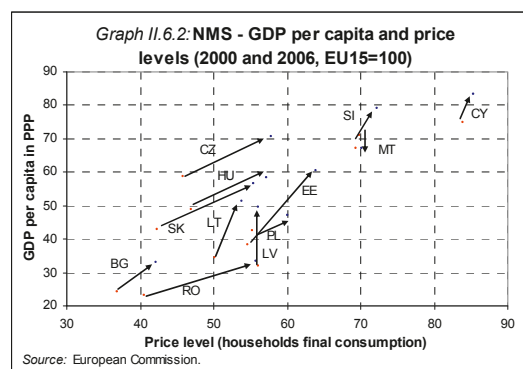
In terms of *income per capita*, the new Member States (NMS)⁽¹⁹⁶⁾ are well below the EU-15 average and also below the values recorded by most 'old' Member States. Within the group of NMS, the picture is mixed, with GDP per capita relative to the EU-15 ranging from 33% in Bulgaria to 71% in the Czech Republic (Table II.6.1).

While the NMS GDP per capita is low also in comparison with the earlier catching-up EU Member States (e.g. Ireland, Spain, Greece and Portugal) prior to their EU accession, it has been increasing faster (Graph II.6.1). As a result, they have quickly approached the levels where the earlier catching-up Member States stood at a similar point in time after EU accession. So there is no reason to believe that the NMS would perform worse than their predecessors. Even so, extrapolations suggest that at current growth rates it will take them more than a decade to reach around 70% of the EU-15 level of per capita GDP on average (Sampo 2007).

The main factor explaining the NMS gap in per capita GDP vis-à-vis the EU-15 appears to be weak labour productivity per hour. In a few NMS this is partly offset by a comparatively strong use of labour resources (notably the Czech Republic and the Baltic countries, see Table II.6.1), but not in the other NMS. The sources of differences in labour productivity can be decomposed into its three main components: capital use per hour of work (or capital intensity of production), total factor productivity (TFP, a measure of technological endowments) and the quality of labour. The first two elements appear to explain the bulk of the productivity gap, with labour quality generally on par with the EU-15 average.

GDP per capita convergence tends to be coupled with *price level convergence* (real appreciation towards equilibrium).⁽¹⁹⁷⁾ Price levels in the

new Member States are still considerably lower than the EU-15 average, but they are converging along with real incomes (Graph II.6.2). The price level gap is particularly pronounced for services, where prices are on average less than half of the EU-15 level, compared to around two-thirds for goods (Graph II.6.3).



A channel through which price convergence in a catching-up context might occur is the well-known Balassa-Samuelson (BS) effect, which predicts that large productivity growth differentials between tradable and non-tradable sectors lead to strong wage-induced inflation in the latter, pushing up the domestic price level.

However, the empirical evidence on the size of the BS effect is not conclusive. Estimates for the NMS have produced a wide range of results,

⁽¹⁹⁶⁾ Unless otherwise noted, the term "new Member States" (NMS) in this chapter means the group of nine Member States who joined the EU in 2004 and 2007 and did not yet qualify for euro adoption. Slovenia, Malta and Cyprus are thus not primarily concerned by this chapter.

⁽¹⁹⁷⁾ Price level convergence implies by definition an appreciation of the real exchange rate, which measures the domestic price level against trading partners in a common currency. As discussed in Chapter I.2 different

deflators are used to measure real exchange rates for different purposes, and not all of them will pick up price level convergence to the same extent. For example, exchange rates deflated by unit labour costs in manufacturing (as a proxy for the tradables sector), which are often used as a measure for cost competitiveness, will not capture a "pure" Balassa-Samuelson effect (which works through the non-tradable sector).

Table II.6.1:
The sources of differences in per capita GDP vis-à-vis the EU15 in 2006

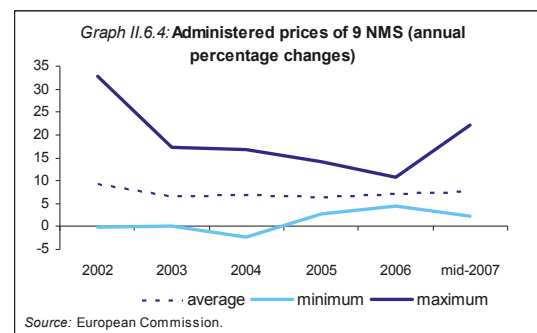
	GDP per capita	Labour resource use	Hourly labour productivity	Capital intensity	Total Factor Productivity	Quality of labour
Malta	-32,8%	-9,1%	-26,1%	13,8%	-28,4%	-9,2%
Cyprus	-16,4%	21,9%	-31,4%	-6,7%	-27,7%	1,7%
Slovenia	-20,9%	10,5%	-28,5%	-15,6%	-16,1%	1,0%
Slovakia	-43,4%	3,1%	-45,1%	-22,3%	-30,1%	1,1%
Hungary	-41,9%	6,5%	-45,4%	-25,0%	-27,9%	0,9%
Czech Rep	-29,4%	29,2%	-45,3%	-20,0%	-31,9%	0,3%
Poland	-52,9%	4,8%	-55,0%	-32,0%	-35,0%	1,8%
Estonia	-39,5%	33,9%	-54,8%	-29,4%	-39,0%	5,0%
Lithuania	-48,6%	12,2%	-54,2%	-34,4%	-33,3%	4,6%
Latvia	-50,3%	22,6%	-59,5%	-34,3%	-39,4%	1,6%
Romania	-66,5%	8,2%	-69,1%	-38,7%	-47,7%	-3,5%
Bulgaria	-67,1%	6,7%	-69,2%	-40,3%	-49,2%	1,5%
EU15 Stand. Dev.	12,2%	9,3%	15,9%	5,9%	10,3%	3,2%

Source: European Commission.

with newer studies tending to find a lower impact. Most recent studies point to an impact of the BS effect on inflation in the NMS of below 1 percent for most countries, with slightly higher levels for large NMS such as Poland (Égert *et al.* 2005). Indeed, some of the preconditions for a significant BS effect may not be fulfilled in all NMS (i.e. a comparatively low productivity growth in services, strong wage equalisation between sectors, the non-tradability of services and the relevance of the "law of one price" for tradables). Looking ahead, there are reasons to expect that the importance of BS effects may become even smaller over time as real convergence approaches its completion. On the other hand, an increase in the share of services consumption could (mechanically) increase the BS effect (Leon-Ledesma *et al.* 2007).

Price level convergence is also likely to be driven by a series of other factors related to structural changes of the new Member States' economies (for overviews see Égert 2007, Leon-Ledesma *et al.* 2007). First, demand patterns may change due to rising incomes, with consumer preferences likely to shift away from food and other basic products to services (which would mechanically raise inflation as services inflation tends to be higher than goods inflation). Second, quality improvements are taking place both in tradable and non-tradable items, leading to an increase in prices.⁽¹⁹⁸⁾ Third, adjustments in administered prices driven by fiscal consolidation (e.g. utilities, health care) are also adding to price increases in the NMS

(Graph II.6.4), though its importance is again likely to diminish over time.



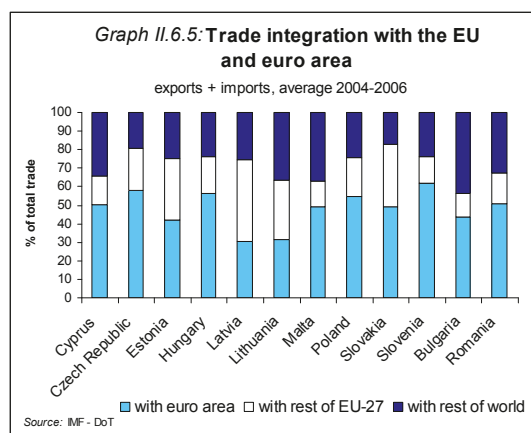
For sure, price level convergence is a longer-term phenomenon, and its pace over a shorter horizon may vary significantly. The local business cycle, fluctuations in nominal exchange rates as well as global commodity and food price swings (amplified by the comparatively large weight of food and energy in the NMS' consumption basket) may push inflation rates away from their convergence trend for some time. Some structural factors may also work towards lowering inflation in catching-up EU Member States; these include in particular the impact of trade liberalisation and EU integration and the associated stronger competition on product markets.

As trade and financial integration with the EU economy are advancing, sectoral structures and cyclical patterns in the NMS are expected to

⁽¹⁹⁸⁾Égert and Lommatzsch (2004), Bruha and Podpiera (2007).

become more aligned with those in the EU and euro area. ⁽¹⁹⁹⁾

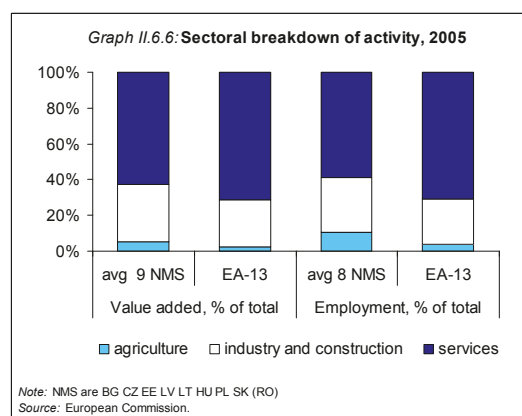
As far as *trade flows* are concerned, the NMS are already well integrated with the euro area (Graph II.6.5). The NMS as a group are already more integrated than previous catching-up euro-area entrants at a similar stage. Importantly, intra-industry trade has gained in importance, though it is still somewhat below the level of the euro area (Backé and Thimann 2004). Even so, the export structure in a number of NMS is still skewed towards raw materials or low value-added products, which may heighten their vulnerability to asymmetric shocks.



There is evidence of a progressive alignment of broad *sectoral structures* of the NMS with the euro area, although some divergence remains (Graph II.6.6). While agriculture loses ground in most of the NMS, their economies generally show a higher share of industry and less services than in the euro area. The divergence of employment shares is still somewhat larger than that of value added, suggesting scope for a further redeployment of labour in the context of structural change.

The evidence on *cyclical correlation* between the NMS and the euro area is not fully conclusive; overall, the NMS have experienced both faster and more volatile growth than the euro area over the past years. Backé and Thimann (2004), using

a combined methodology, find that the NMS' cycles display correlation coefficients vis-à-vis that of the euro area which are broadly comparable to peripheral euro-area economies. The picture is, however, more mixed at the country level (higher correlation for the CEECs, lower for the Baltics). A meta-analysis of available studies undertaken by Fidrmuc and Korhonen (2006) confirms this overall conclusion. Using a cluster analysis to examine the incidence of shocks, Schadler *et al.* (2005) also find that the NMS as a group are "at least as well-prepared" to enter monetary union as the current euro-area periphery was in 1998. Moreover, they note that cyclical divergence seems larger than suggested by structural factors; this would point to a decreasing susceptibility to asymmetric shocks in the future. Clearly, due caution is warranted in interpreting estimation results for the NMS, in view of short data series and structural breaks.

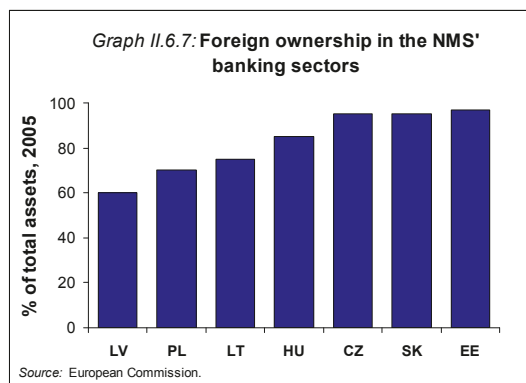


Measures of *labour market flexibility* tend to show the NMS in a better position than the old Member States, which in turn would make them adjust easier to asymmetric shocks in a monetary union. This reflects *inter alia* less strict employment protection legislation and a relatively high degree of wage flexibility in the context of generally decentralised wage-setting (Boeri and Garibaldi 2006, Angeloni *et al.* 2007). However, the evidence is not conclusive and the situation is strongly country-specific. In a number of NMS, high structural unemployment and low employment rates point to weaknesses in the allocation of labour market resources, and sectoral and regional labour mobility is insufficient in some cases (though for some NMS the partial opening of the EU labour

⁽¹⁹⁹⁾ Angeloni *et al.* (2007) find a systematic correlation between income gaps and structural divergence between the NMS and the euro area, though country-specific circumstances obviously have to be taken into account.

market has increased cross-border mobility with a measurable effect on local labour supply). Overall, further progress in ensuring efficient labour market functioning is generally identified as one of the main challenges (see e.g. Bonello 2007, CNB 2007, Rybinski 2007).

Fiscal positions improved considerably over the last years, and the number of countries that are still in a position of excessive deficit is rapidly decreasing. However, while public debt is on average lower than in the euro area, demographic trends pose considerable longer-term challenges in a number of NMS. Automatic stabilisers are somewhat weaker than in the EU-15, but this might be compensated by higher fiscal flexibility (Schadler *et al.* 2005). Cross-country differences in fiscal soundness and the quality of public finances are large. A general issue arising in fast-growing economies undergoing rapid structural change is uncertainty about the underlying fiscal positions, which calls for particular prudence in assessing the fiscal stance (even when headline figures appear benign). On the other hand, the risk of fiscal policy-induced shocks has decreased in the NMS with the adherence to the EU fiscal policy framework (Darvas, Rose and Szapáry 2005).



Significant *financial integration* with the euro-area Member States has taken place, mainly through foreign ownership of financial intermediaries in the NMS. Besides positive effects in terms of access to funds, foreign ownership has helped to foster knowledge transfers and product availability. Compliance with the *acquis communautaire* in the field of financial services was already broadly achieved with the EU accession and good progress has been made in transposing the legislation adopted

under the Financial Services Action Plan. The degree of financial deepening differs from country to country, but it remains weak relative to the EU-15 average in most of the NMS.

Structural differences in the *transmission of monetary policy* to the real economy might lead to suboptimal outcomes even if business cycles are correlated. On balance, however, such differences are diminishing owing to the rapid financial integration (Coricelli *et al.* 2006, Angeloni *et al.* 2007). For the groups as a whole there is evidence of a somewhat weaker interest rate channel of monetary policy transmission due to the lower degree of financial deepening, while the exchange rate channel is comparatively strong -- though decreasing. The interest rate channel is muted by asset holdings being small compared with the more advanced economies, but the rapid credit growth and the high share of investment in GDP bolster the interest rate channel. Looking ahead, an alignment of the financial sectors vis-à-vis the euro area will further reduce differences in monetary transmission (Backé and Thimann 2004).

6.4. BENEFITS FROM EURO ADOPTION

Participation in EMU is likely to spur the integration process further in line with the "endogenous optimal currency area" premise, which predicts that as countries share a currency they become more open vis-à-vis each other and therefore their economies would become more similar: ⁽²⁰⁰⁾

- Additional *trade* may be generated by entering the euro area, although EU membership as such already seems to have significantly boosted trade intensity with the euro-area Member States, possibly limiting the additional impact of euro adoption on trade. ⁽²⁰¹⁾

⁽²⁰⁰⁾ Frankel and Rose (1997) and De Grauwe and Mongelli (2005) and Mongelli (2008).

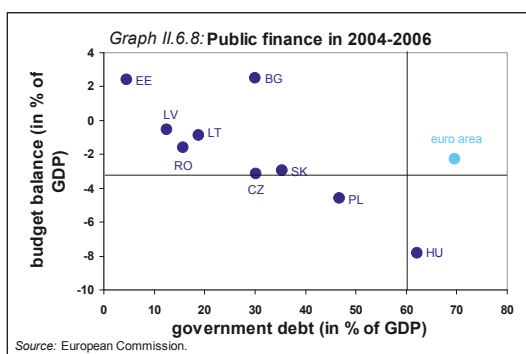
⁽²⁰¹⁾ Schadler *et al.* (2005) derive a long-term trade effect on GDP of around 18-20% for most NMS (and around half for Poland, the largest and most closed NMS). This is broadly consistent with recent findings by Schnabl (2007), who reports a positive correlation between

- As country *risk premia* converge to euro-area levels, easier financing conditions would ensue and would bolster investment activity. For NMS operating a fixed peg, this effect may be smaller as interest rate convergence is more advanced, although spreads vis-à-vis the euro area have widened recently with the global financial turbulence. But even in NMS that pursue more flexible exchange rate regimes (resulting in a combination of exchange rate risk and sovereign risk), EU membership appears to have had a discernible downward effect on risk premia (Luengnaruemitchai and Schadler 2007). Moreover, to the extent credit is denominated in euro the exchange rate risk premium has already disappeared.
- Euro adoption is expected to improve the conditions for foreign direct investment *FDI*, which not only provides a relatively stable way to finance domestic saving-investment gaps (thus enabling a reduction of risks related to current account imbalances, a common feature among catching-up Member States), but also generates technology and knowledge transfer, thereby raising productivity and potential growth. That said, it should be noted that FDI flows have already been large in most NMS well ahead of euro adoption, with the EU accession process serving as an important catalyst. It has been suggested that FDI-related effects may account for a part of the currency effect on trade found in the literature. ⁽²⁰²⁾
- With the adoption of the euro, *the exchange rate would disappear* and no longer act as a shock generator (Gros and Hobza 2003; Borghijs and Kuijs 2004, Darvas and Szapáry 2008). In the debate on euro-area enlargement, a number of authors (e.g. Eichengreen 2003, Buitert and Sibert 2006) see the risks associated with the nominal exchange rate as shock generator as the overriding and decisive argument for advocating early euro adoption by the NMS (even regardless of their fulfilment of the criteria).
- The impact of euro adoption on *financial integration* and financial sector development in the NMS may be quite strong given that their financial sectors are still relatively underdeveloped compared to those of euro-area countries. At the same time, the size of the effect is likely to be smaller than for some of the first-wave catching-up euro-area entrants. Cross-border ownership of financial assets is already significant, related in particular to the dominant presence of EU banks in the NMS' financial sectors. In some NMS, financial sectors are also already heavily euroised, so euro adoption is unlikely to constitute major "shock" for the NMS' financial systems, but it can be expected to strengthen the ongoing integration trend (Brzoza-Brzezina 2005).
- The import of a stability-oriented *monetary policy framework* by euro-area entrants is obviously at the core of the rationale for monetary integration by the NMS. However, the Treaty framework for EMU (in its broad sense, i.e. including the institutional provisions applicable to pre-ins) has promoted the establishment of an institutional framework for monetary policy credibility in the NMS well ahead of euro adoption (central bank independence, price stability objective). This has in turn fostered policy convergence with the euro area, with NMS' central banks generally showing similar policy preferences to those of the ECB (Angeloni *et al.* 2007). In this respect, it might be argued that the NMS already partly reap the benefits of EMU well ahead of euro-area entry.
- It is not obvious that Euro-area membership would exert a broader *disciplining effect on NMS' policies*, notably fiscal policy. With euro adoption, incentives for fiscal discipline may actually lessen somewhat, since residual currency risk – underpinning market discipline – will disappear, calling for caution against 'consolidation fatigue' following euro adoption.

exchange rate stability and growth for countries at the "EMU periphery".

⁽²⁰²⁾SEE Schadler *et al.* (2005). For a comprehensive discussion on the role of FDI in the NMS see Liebscher *et al.* (2007).

- At the microeconomic level, benefits from participating in the single currency area include lower transaction costs and increased price and cost transparency, improving the efficient allocation of resources and enhancing competition. At the same time, increased comparability may speed up price level convergence (through both prices and wages), thus pushing up headline inflation in the converging country.



Overall, the potential benefits from euro are participation for NMS as a group are significant. At the same time, the impact of euro adoption in itself is likely to be somewhat less pronounced than for first-wave countries, since a number of effects have already partially materialised, in a context of close integration with the euro area (and, for some, exchange rate stability vis-à-vis the euro).

6.5. CHALLENGES DURING THE TRANSITION

The NMS face two key challenges in their run-up to the euro: (a) the management of large capital flows and rapid financial integration, and (b) the management of price level convergence.

6.5.1. Managing capital flows

The NMS are receiving significant capital inflows in the context of catching-up and high returns on investment. As capital is still comparatively scarce, this pattern is likely to continue for some time. Large capital inflows may pose a challenge for macroeconomic and financial stability during catching-up, including by creating vulnerabilities to external financing conditions (Begg *et al.* 2003, Lipschitz *et al.* 2005). In the case of the NMS, convergence-

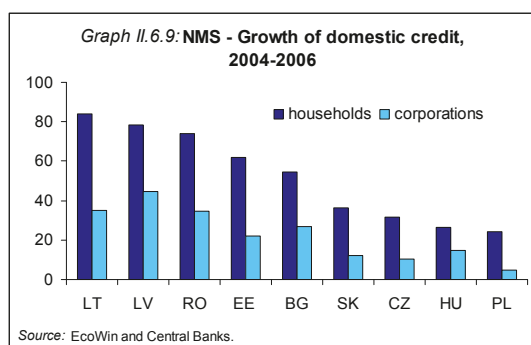
driven dynamics of capital inflows are further exacerbated by rapid progress in financial development and integration in the context of EU accession, diminishing structural impediments to capital mobility. This is in principle a sign of an increasingly well-functioning European financial market, but may accentuate challenges in the short-term.

The potentially distortive effect of large capital inflows crucially depends on the structure and use of the incoming funds. Compared to other emerging market regions (and in particular emerging Asia prior to the 1998 crisis), the *structure of capital inflows* to the NMS provides reassurance. Around two-thirds of capital inflows over the last years have been in the form of FDI, which is generally seen as a comparatively stable (though not entirely risk-free) form of external financing. While FDI was initially strongly related to privatisation, greenfield FDI has gained in importance in recent years. Cross-border lending has also increased significantly over the last years; this is a potentially more volatile form of financing, but in the case of the NMS a large part of the funding stems from EU parent banks, with a longer-term stake in the host economy.

NMS with fixed exchange rates have received larger capital flows (in percentage of GDP), including FDI, than floating countries and they have run higher current account deficits. This may relate to both lower exchange rate risk and a generally favourable investment climate (in terms of macroeconomic and structural policy). Moreover, the 'fixers' among the NMS have generally started their real convergence process from lower output levels, potentially implying higher returns on capital, and therefore larger capital inflows.

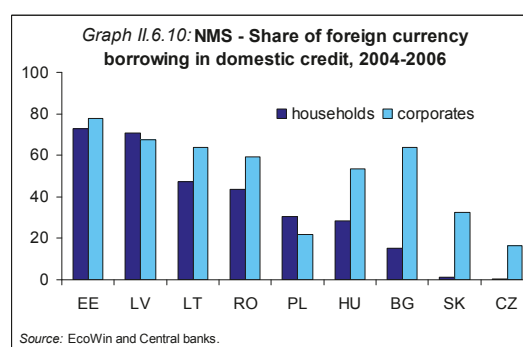
The longer-term impact of large capital inflows on economic performance and vulnerability depends not only on the financing, but crucially also on the *use of foreign capital*. Capital inflows that finance higher investment geared at enhancing the country's productive capacity are indeed beneficial for long-run growth, reflecting an efficient cross-border allocation of resources. High investment rates in most NMS over the last years provide evidence for such an underlying trend. In many cases, this has been associated

with large external deficits, which are, however, not necessarily a cause for concern as long as the net inflows are used to improve longer-term repayment capacity (through productivity growth in the tradables sector). More recently, however, the increasing share of investment in sectors that do not directly add to the productive potential (in particular real estate) has raised concerns with regard to some NMS (e.g. the Baltics).



The corollary to this development has been a massive increase in household mortgage credit (often in foreign currency, i.e. creating indirect exchange rate risk for the banking system). More generally, *credit growth* in both the household and the non-financial corporate sector has been exceptionally high in the NMS over the last years, although starting from low levels of financial deepening. At the end of 2006, private sector bank debt ranged from a high of around 80% of GDP in Latvia and Estonia to less than 30% of GDP in Romania, compared to around 130% of GDP in the euro area. High credit growth in the NMS has reflected structural change in banking sectors (privatisation, foreign entries, higher competition, increasing breadth and sophistication of financial products), further fuelled by an exceptionally low global interest rate environment. The enhancement of supervisory frameworks in the context of EU accession has been a supporting factor for investor confidence in the region (strengthening the supply side of the credit market), while rising demand for credit has reflected buoyant income and profit expectations by households and businesses. Credit growth has been particularly strong in countries with fixed exchange rate regimes (the Baltics and Bulgaria), though these have also started from the lowest levels of financial deepening and recorded particularly high rates of income growth (together with

Romania, which has recorded the highest rates of credit growth among the 'floaters'). Over the last year, credit growth rates have moderated in a number of countries, reflecting tighter liquidity conditions as well as potentially higher risk awareness by lenders and borrowers (supported in some cases by prudential and/or fiscal measures to prevent excessive risk-taking).



Foreign currency lending is widespread in most NMS, with 'fixers' among the NMS recording a relatively higher amount of foreign currency denominated loans for both the household and the non-financial corporate sector. This is likely to be linked to the perceived lower exchange rate risk, due to the credibility of the hard pegs. It is not fully clear to what extent expectations of 'early' euro-area entry by these NMS may have contributed to this trend; the fact that there has been no discernible slowdown in foreign currency lending following the postponement of euro adoption (relative to plans) by Lithuania and Estonia in 2006 may indicate that the direct link is limited. The incidence of foreign currency lending among the 'floaters' within the group of NMS is quite diverse; the large share of foreign currency credit in Hungary suggests that the propensity to borrow in foreign currency is strongly driven by yield differentials (rather than expectations about the medium-term exchange rate path, cf. the low share of euro borrowing in the Czech Republic and Slovakia).

Looking ahead, while credit ratios are likely still below longer-term equilibrium values for most NMS (Backé *et al.* 2006, Kiss *et al.* 2006),⁽²⁰³⁾

⁽²⁰³⁾ Both studies do, however, point to excessive rates of credit growth in some NMS (Estonia, Latvia and – only covered in one study – Bulgaria). Also, in some cases equilibrium credit-to-GDP ratios appear to have been

and household debt remains limited, the rapid expansion of balance sheets poses *challenges for risk management and supervision*, and creates vulnerabilities to a deterioration in financing conditions. Euro adoption itself may not be a very significant shock for the NMS in terms of capital flows⁽²⁰⁴⁾ – particularly for NMS operating fixed pegs to the euro already now – but it may accentuate current trends and patterns by facilitating the financial integration process and removing remaining balance of payments constraints (with country risk transformed into individual credit risks). In terms of managing capital flows ahead of EMU accession, it might be argued that a degree of exchange rate flexibility may help to induce an adequate pricing of country risks, mitigate foreign currency borrowing and contain risks of a disorderly adjustment if financing conditions worsen. At the same time, path dependency needs to be taken into account, limiting the choices of NMS going forward. For instance, in a number of NMS with fixed exchange rates, liability euroisation is predominant, creating a strong exposure of household balance sheets to exchange rate risks.

Overall, while risks related to capital flows and credit expansion should not be underestimated, there are reasons to argue that the NMS are in a stronger position to weather adverse shocks than comparable economies in other regions. Comparative advantages include (a) a stronger institutional framework of financial supervision that has been enhanced in the context of EU accession; (b) a more solid financial sector due to heavy foreign participation and the associated gains in risk management skills; and (c) a more favourable ‘market perception’ due to EU membership (‘the EU shield’ hypothesis). Indeed, recent research suggests that NMS pay between 50 and 100 basis points less on their debt obligations than other emerging markets in a similar macroeconomic position (Luengnaruemitchai and Schadler 2007). The

reached already following several years of rapid credit growth.

⁽²⁰⁴⁾In other words, the impact of euro adoption on balance-of-payments constraints may be less pronounced than for first-wave euro-area entrants, where this factor has played a significant role in explaining post-euro adoption developments (Blanchard and Giavazzi 2002).

role played by prospective euro adoption in this ‘shield effect’ is not fully certain. Direct ‘convergence plays’ seem to be less prominent than for first wave euro-area entrants, given the intrinsic uncertainties on the timing of individual NMS’ euro-area entry (compared to the fixed date for entering into the 3rd stage of EMU). Rather, the institutional framework for convergence – moving countries on an orderly path towards euro adoption and fostering policy discipline – seems to play an important role in underpinning investor confidence. From this perspective, the timing of planned euro adoption would be less important than an orderly medium-term convergence path.

6.5.2. Absorbing price level convergence

As discussed above, the NMS as a group are undergoing a process of price level convergence vis-à-vis the euro area (“real equilibrium appreciation”). This is in principle a transitory phenomenon, but given significant outstanding price level gaps it will have to be taken into account in policy-making for some time to come. Depending on the exchange rate regime and monetary policy strategy, real equilibrium appreciation can be absorbed through *higher domestic inflation and/or nominal appreciation*. Under a fixed exchange rate regime, and *a fortiori* under EMU, the NMS will be experiencing higher trend inflation than the anchor area. It is important to note that higher inflation in the context of equilibrium real appreciation does not in itself imply that the concerned Member States would lose competitiveness. At the same time, obviously not all inflation differentials under catching-up are benign. High inflation driven by unsustainable demand growth, sparked by overoptimistic future income expectations and/or inappropriate economic policies, would be a sign of unhealthy developments that would necessitate a correction at some point.

While it is difficult to distinguish *ex ante* between “equilibrium” and “non-equilibrium” inflation in catching-up NMS, it has been argued that under monetary union it may spill over into

low perceived real interest rates⁽²⁰⁵⁾, leading to high non-equilibrium inflation and excess demand (analogous to the "Walters critique". These may in turn trigger an unsustainable credit boom, which fuels asset prices and excessive domestic investment and consumption. Eventually, a potentially painful adjustment is required (Kröger and Redonnet 2001, Backé and Thimann 2004, Ahearne and Pisani-Ferry 2006). If rigidities persist, countries may enter into protracted cycles of overheating and overcooling (European Commission 2006a and Deroose, Langedijk and Roeger 2004). The duration of the adjustment depends in part on the mix of shocks that produced the boom: the unwinding of booms primarily prompted by easing of credit constraints tend to be more painful than those prompted by a favourable productivity shock in the tradable sector (see Box II.6.1).

In order to assess the implications of these risks for NMS' policy choices, a number of qualifications are warranted.

- Under conditions of perfect capital mobility and an efficient pricing of risk, the expansive effect of trend real appreciation would occur under both a *fixed* and a *floating exchange rate regime*. Foreign borrowing would be attracted through low real interest rates and expected nominal appreciation, respectively (Lipschitz, Lane and Mourmouras 2004). Both preconditions are, however, not fulfilled in practice. Home bias on capital markets is more prevalent among the 'floaters', while risk premia tend to exhibit non-linearities (contracting particularly strongly, possibly below levels consistent with fundamentals, for 'fixers' with credible regimes).
- These *market imperfections/rigidities* suggest that in practice, the expansive effect of trend real appreciation tends to be most pronounced once a country has credibly fixed its exchange rate to the anchor currency. Interest spreads will come down and balance of payments constraints will be removed. At

⁽²⁰⁵⁾ To the extent that cross-border lending is available, the foreign interest rate (for the NMS in most cases the euro area) would become the point of reference which is little if at all affected by local macroeconomic conditions.

the same time, the possible additional leeway for 'floaters' has to be weighed against risks of excess volatility in risk premia and the nominal exchange rate, which may be triggered by exogenous factors. They may also forego potentially beneficial capital inflows.

- To curb the build-up of excess demand pressures due to real interest rate compression, the challenge is therefore in the first instance to foster *efficient risk management* by both borrowers and lenders in the countries concerned (including through prudential an/or fiscal measures that contain excessive risk-taking). The better financial market signals work, the lower are risks of significant resource misallocation and an eventual disorderly adjustment.

More generally, the potentially procyclical effect of trend real appreciation through real interest rate compression puts a premium on supportive domestic policies. This is a key consideration for catching-up countries approaching euro-area accession. The experience of some first-wave euro-area members (such as Ireland, Spain and Portugal) is instructive in underscoring the risks of boom-bust dynamics in the context of euro-area enlargement and outlining possible policy implications.⁽²⁰⁶⁾ While their experience suggests that it seems difficult to avoid a temporary credit-fuelled demand boom altogether, the diverse track record of first-wave catching-up euro-area members points to some key factors that are decisive in shaping how catching-up countries cope with euro-related booms and attendant risks. These are: (i) the efficiency of resource allocation during the boom phase (investment vs. consumption, tradables vs. non-tradables); (ii) the role of fiscal policy in containing or exacerbating demand pressures; and (iii) the ability of labour and product markets

⁽²⁰⁶⁾ Credit and demand pressures related to euro adoption can reflect both the initial shock (related primarily to risk premia) and underlying structural divergences (reflected in 'equilibrium' real interest rates). There is evidence to suggest that for the first-wave catching-up countries the initial monetary expansion upon euro adoption has been the main shock (Langedijk and Roeger 2007), while for the NMS the structural factors may dominate, in view of already more advanced interest rate convergence coupled with larger income gaps.

Box II.6.1: Adjustment to credit and productivity shocks in New Member States

A simulation undertaken with DG ECFIN's dynamic stochastic general equilibrium (DSGE) model examines the impact of two types of shocks on convergence economies, namely a favourable productivity shock in the tradable sector (generating a Balassa-Samuelson-type impact), and a relaxation of credit constraints for households (modelled as an increase in the loan-to-value ratio for mortgage lending).

The simulation results suggest that in the short run, both types of shock are observationally similar. Both lead to persistent current account deficits and a shift of production capacities from the traded to the non-traded sector. These changes imply that in the long run, a higher debt will need to be serviced which requires maintaining current account surpluses and a restructuring towards the traded sector.

The adjustment paths triggered by the supply and the demand shocks differ however, reflecting the differences in the impact of the two shocks on the economy's productive capacity. In particular, following the productivity shock, the service of the higher debt and the restructuring towards the traded sector can be accomplished when productivity levels in this sector have increased. This then allows raising production in both sectors in the long run. Consequently, consumption as well as the capital stock can increase. By contrast, following the credit shock, the higher debt has to be serviced from unchanged income levels.

Therefore, the long-run consumption level falls and the capital stock does not increase either sector.

The relative price adjustment is also different following the two different types of shocks. While the productivity shock in the traded sector leads to a long-run increase in the price of non-traded goods relative to that of the traded goods, the credit boom only implies a temporary increase in the relative prices followed by a subsequent turn-around in this pattern. The real exchange rate follows a similar pattern displaying a long-run appreciation after the productivity shock as opposed to a progressive depreciation after the initial appreciation in the aftermath of the credit shock.

Overall, the simulations suggest that the long-term adjustment required by the credit boom may be more demanding and potentially more protracted than under the supply shock. This is more so, the less factor markets are flexible and/or the more frictions prevent relative prices from adjusting quickly. Deviations from perfect foresight (excessive optimism, underpricing of risk), which are not captured by the model, may well exacerbate the shocks NMS are facing in practice.

The two types of shocks are not mutually exclusive, and it is indeed likely that elements of both are at work in the NMS in practice, as well as some other mechanisms not considered in the analysis.

to ensure a smooth adjustment of the economy towards a sustainable medium-term path.

A crucial difference between the NMS and the first wave euro-area countries appears to lie in the *timing of the real interest rate effect*. In contrast to the first wave entrants, interest rate convergence is already well advanced in the NMS (particularly those with exchange rate pegs) in the context of increased financial integration.

Given the credibility of their pegs, short-term interest rates have moved towards euro-area levels, resulting in very low or negative *ex post* real short-term (and long-term) rates. NMS with more flexible exchange rate regimes also recorded a drop in real interest rates since the beginning of the decade, reflecting increased credibility of monetary policy frameworks, as well as in some cases expectations of continued nominal appreciation. On average, the level of real short-term rates is however noticeably

higher than for the fixers, although foreign currency lending introduces interest rate convergence 'through the back door' in some of the floaters.

Overall, the high existing degree of interest rate convergence implies that challenges comparable to those faced inside the euro area are already relevant for NMS with *fixed exchange rates* (augmented by residual currency risk, which increases vulnerabilities), creating a need to respond by strong fiscal and structural policies regardless of euro adoption. For those NMS that still operate more *flexible exchange rate* regimes, the prospect of rapid interest convergence under a fixed exchange rate well ahead of euro adoption may play a role in determining their strategic choices regarding ERM II, including the degree of exchange rate flexibility to be used inside the mechanism.

6.6. IMPLICATIONS OF ENLARGEMENT FOR THE EURO AREA

Total GDP of the twelve NMS (in euro terms) is around 10% that of the present euro area, ⁽²⁰⁷⁾ so their accession will not have a significant impact on the euro-area economy *on aggregate*. Moreover, given their lower degree of financial deepening, their share in monetary aggregates is even lower. Developments in the new Member States will also not materially affect aggregate growth and inflation rates in the euro area. Higher trend growth rates should lead to a gradual increase in relative weight of the NMS (as had been the case over the last years, with the share of NMS GDP relative to the euro area rising by around 2 percentage points since accession), but the overall effect will remain modest.

However, with NMS entering, the *diversity* of the euro area is likely to increase. Between 1999 and 2006 the unweighted average annual real GDP growth among the NMS amounted to some 5.3%, compared to 2.1% in the euro area. Inflation has been more volatile in the NMS,

reflecting both cyclical and structural factors (e.g. changes in market structures, administered price adjustments, large weight of energy). Sectoral structures have not yet fully aligned, raising the probability of asymmetric shocks. As well, differences in production and consumption patterns may generate a divergent impact of common shocks. For example, the recent surge in global food and energy prices affected inflation patterns in the NMS more strongly, given the larger weight of these items in consumption baskets – some 44% on average, or around 15 percentage points higher than in the euro area.

Such divergences do not, in themselves, signal imbalances that need to be corrected. Rather, they are an inherent feature of a broad-based monetary union, and the policy response should largely be focused on containing related risks and avoiding drifting away from an otherwise benign real convergence path (e.g. by putting particular emphasis on adjustment mechanisms, and on reforms to promote potential growth so as to accelerate completion of the real convergence process).

A potentially more disruptive type of divergence can arise due to suboptimal responses to the regime shift implied by euro adoption. A key role in this respect is played by financial integration. Financial integration facilitates the smooth adjustment to shocks in monetary union through enhanced risk-sharing opportunities (see Chapter II.4). ⁽²⁰⁸⁾ However, lending booms amid rapid financial integration may lead to temporary (non-equilibrium) upward pressure on the real exchange rate, which will eventually have to be reversed (Székely and Watson 2007). If this reversal is hampered by inadequate adjustment (e.g. due to nominal rigidities), countries can become locked in prolonged low-growth that may halt or even revert the real convergence process – the experience of Portugal being a case in point (see Chapter I.8).

⁽²⁰⁷⁾ Around 40% of the NMS total are accounted for by Poland, and another 30% by the Czech Republic and Hungary.

⁽²⁰⁸⁾ See also Asdrubali, Sørensen and Yosha (1996). Note that this concerns the smoothening of cyclical fluctuations. At a more structural level, some authors argue that higher financial integration may lead to more specialisation and therefore more asymmetric macroeconomic fluctuations, see e.g. Kalemli-Ozcan *et al.* (2003).

The increased heterogeneity of countries within the enlarged euro area will need to be reflected in the euro-area dimension of *EU policy co-ordination and surveillance* procedures.

Regarding *fiscal policy*, some of the NMS have traditionally had fiscal positions well within the Treaty thresholds (and in some cases above the medium term objective, or MTO, of close to balance or in surplus). However, the majority became subject to Excessive Deficit Procedures after EU accession. Most countries successfully brought an end to their excessive deficit situations, while others have made significant progress towards this goal. The double function of the SGP (as a policy framework in its own right and an element of convergence assessments) has arguably played a key supportive role in this respect, and it will continue to do so after euro-area entry (which obviously can only be granted once the excessive deficit has been corrected). Two issues may require particular emphasis when formulating and assessing new euro-area entrants' Stability Programmes:

- For countries undergoing a particularly rapid real convergence, reaching their MTOs may not be sufficient to control domestic demand pressures. Hence, efforts may need to go significantly beyond this benchmark. This aspect (which is already increasingly reflected in Convergence Programme assessments and Council Opinions) will thus become a more frequent feature of country-specific fiscal advice within the euro area.
- In a real convergence setting – with large capital inflows and surging asset prices – prudence in estimating underlying fiscal positions is warranted (Jaeger and Schuknecht 2004; Martinez-Mongay *et al.* 2007). This calls for particular caution in calibrating safety margins vis-à-vis the 3% deficit threshold, so as to allow automatic stabilisers to operate effectively in the event of a downturn. In this respect, Portugal's fiscal experience in the years after euro adoption offers a cautionary tale for new euro-area entrants (Chapter I.8).

Regarding *structural policies*, surveillance should address a number of issues. First, the underutilisation of labour resources – often coupled with low geographical mobility – in a number of NMS can lead to tight labour markets and overheating. Second, price deregulation and the completion of administered price adjustments to cost recovery levels, needs to be monitored. There is a need for to promote a knowledge-based economy oriented towards higher value-added, as this is a crucial ingredient of sustained real convergence and competitiveness in the medium-term (see Székely and Watson 2007). Fourth, improvements in the infrastructure and administrative capacity (including through an appropriate use of EU transfers) needs to be scrutinised. Relatively large differences persist in terms of the business environment and investment climate, where some countries (notably among the Baltics) tend to score well in comparative assessments, while others lag behind (see e.g. World Bank 2007). Bringing structural policy priorities together in the context of the National Reform Programmes plays an important role in raising awareness and mobilising a broader range of stakeholders. This will be a helpful tool also after euro adoption. At the same time, the euro-area dimension of the Lisbon process will have to cater for an increasingly diverse array of country-specific challenges.

Finally, *financial stability* issues will deserve full attention in an enlarged euro area, given the rapid financial deepening in the NMS and close capital and credit market integration with the euro area. This may *inter alia* require enhanced cross-border supervisory co-operation among euro-area members (both in a home-host context and among host countries, given regional spillovers). At the same time, the close financial integration of some NMS (e.g. the Baltics) with some non-euro-area Member States will also need to be appropriately reflected, signalling that the broader EU dimension of the issue will remain significant.

6.7. CONCLUDING REMARKS

The preceding analysis has underscored the long-term benefits for the NMS of joining a stability-oriented monetary union, but also pointed to

specific challenges in a catching-up context. In particular, risks of boom-bust dynamics in the context of large capital flows and low real interest rates require stability-oriented policies and flexible product and labour markets.

Against this background, euro adoption strategies should go beyond the fulfilment of the convergence criteria at the point of entry. The nominal convergence criteria set out in the Treaty are concerned with preserving macroeconomic stability in the euro area. While this is clearly a key consideration (providing reassurance of policy convergence to the membership at large), fulfilling the nominal criteria is arguably not sufficient to secure a robust longer-term economic performance of the NMS within monetary union. Euro-area entrants should therefore strive for further progress in fiscal and structural policies along the lines of the SGP (and possibly beyond) and the Lisbon agenda. In this respect NMS should also make the best of the support provided through cohesion policy and which aims at promoting convergence in the structure of EU economies. Doing so, it helps to lower the risk of asymmetric shocks between these economies and contributes to increase the synchronisation of their business cycles, bringing the European economic space closer to an Optimum Currency Area.

Crucially, the evidence suggests that challenges related to large capital flows, rapid financial integration and interest rate convergence are already relevant for the NMS ahead of euro adoption, implying that the impact of euro adoption itself may be less pronounced than it was for some of the existing euro-area members. This holds particularly for those NMS that already follow fixed exchange rate regimes vis-à-vis the euro.

The policy conclusions to be drawn from the analysis for individual NMS are somewhat nuanced in respect to prevailing exchange rate regimes.

While the overall track record of the NMS with *exchange rate pegs* provides some reassurance about their capacity to manage the constraints of a fixed exchange rate regime, past performance may not be a reliable guide to the future. Challenges are likely to remain significant as they face large (and in some cases rising) imbalances, while policy instruments remain limited (and choices are path-dependent, e.g. in view of heavily euroised balance sheets). In terms of policies, no quick fix is available. Rather, policies to contain imbalances and facilitate adjustment (strong fiscal position, flexible markets) remain key, calling for sustained policy discipline. Euro adoption will not remove the underlying imbalances. In this respect, apart from the residual risk of currency crises, the present policy challenges for the 'fixers' already resemble those they are likely to face once they are within the euro area.

Those NMS that still avail themselves of a degree of *exchange rate flexibility* should strive to maintain an orderly trajectory towards euro adoption, but may want to put the emphasis on good preparation rather than timing. Keeping a medium-term convergence perspective is important to underpin financial market confidence, including through the pursuit of stability-oriented policies. Desirable policy objectives include ensuring balanced policy-mix (implying in particular a stability-oriented fiscal stance, as monetary policy frameworks are generally credible and well-functioning) and enhancing domestic adjustment mechanisms, including wage and labour market policies. The potential leeway offered by monetary autonomy should be coupled with a sustained strengthening of policy frameworks.

7. MANAGING THE EURO-AREA'S GROWING INTERNATIONAL ROLE

7.1. INTRODUCTION

As outlined in Chapter I.9, the euro has rapidly gained recognition since its introduction and has become the second international currency behind the US dollar. In combination with the large economic and financial size of the euro area, and the existence of a single monetary and exchange rate policy and coordination frameworks for other policies, this is making euro-area policy decisions and economic developments increasingly relevant for the world economy.

In the new world landscape that is emerging, characterised by increasing competitive pressures from emerging market countries and rising financial globalisation, the euro area's new global role brings both opportunities and challenges. This chapter assesses the potential for a further expansion of the euro's international role, its possible costs and benefits for the euro area, and the implications of EMU for global stability. It finishes by drawing the main policy challenges these developments pose for the euro area.

7.2. THE EURO'S INTERNATIONAL POTENTIAL

7.2.1. What makes the euro a global currency?

The potential international role of a currency in general, and of the euro in particular, is rooted in the following four features:⁽²⁰⁹⁾

- *The size of the economy.* Computing GDP at market exchange rates, the euro area accounted in 2006 for about 22 percent of world GDP, well above the shares of Japan and China although below the 27 percent share of the US (see Table II.7.1). However, the share of the EU in world GDP was, at 30 percent, somewhat larger than that of the US, and with euro-area enlargement expected to continue in the coming years, the euro's share in world GDP should thus move closer

to that of the US. In terms of population, the euro area amply exceeds the US, though obviously not China.

- *The significance of its foreign trade flows.* The euro area is already the largest trading power in the world. Excluding intra-euro-area trade, the euro area accounted in 2006 for over 13 percent of world trade in goods and services, a share slightly above that of the United States, twice the size of that of Japan and well above that of China (Table II.7.1).

Table II.7.1:

Key characteristics of main economies, 2006

	Population (million)	Share of world GDP (%) (a)	Share of world trade in:	
			goods (%) (b)	goods and services (%) (b)
EU	493	30,3	16,9	17,4
Euro area	317	21,9	12,9	13,3
USA	300	27,3	16,1	13,1
UK	61	5,0	2,3	6,1
Japan	128	9,1	6,7	7,1
China	1314	5,5	9,6	NA

Notes: a) GDP measured at market exchange rates, 2006 estimates; b) average share in world imports and exports excluding intra-euro area (or intra EU) trade.

Source: IMF World Economic Outlook Database, October 2007, WTO, European Commission.

- *Confidence in the currency's external value.* In this respect, the euro area is also well positioned. The ECB, with its high degree of statutory autonomy and clear mandate to maintain price stability, has kept euro-area inflation low and stable since it took charge of the single monetary policy in 1999 (see Chapters I.2 and I.5 – see also Table II.7.2). Moreover, the EU's fiscal policy framework helps to ensure that euro-area countries pursue prudent fiscal policies that do not threaten their common monetary policy. In addition, the euro area's current account has been in surplus or balanced since 1999 while its net international debt position amounts to only 12% of its GDP (Graphs II.7.1 and II.7.2). This compares favourably with the external position of the United States, which has had a sizeable current account deficit in the recent past and has moved from being the

⁽²⁰⁹⁾ This set of criteria largely draws on Bergsten (1997) and Eichengreen and Frankel (1996).

largest net creditor in the world in the early 1970s to being its largest net debtor.

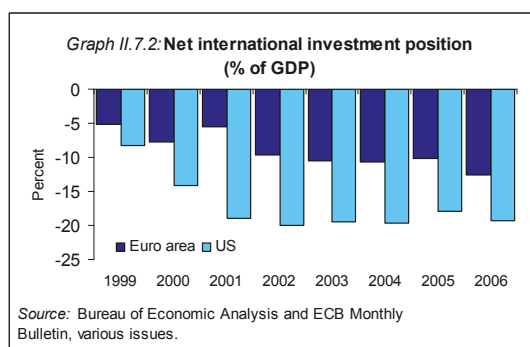
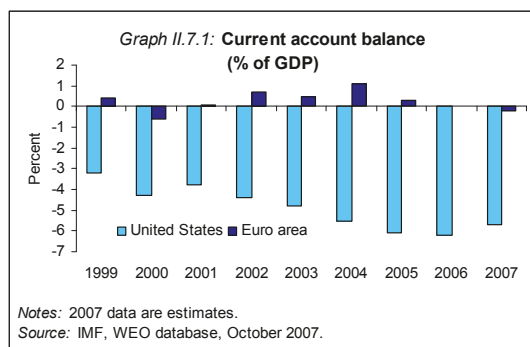


Table II.7.2:

Inflation, Fiscal Balance and Current Account Balance
(Average 1999-2007)

	Inflation (variance)	General Government Balance (% of GDP)	Current Account Balance (% of GDP)
EU	2,0 (0,1)	-1,8	-0,3
Euro area	2,0 (0,2)	-2,0	0,3
USA	2,6 (0,6)	-2,2	-4,9
UK	1,5 (0,3)	-1,5	-2,3
Japan	-0,4 (0,2)	-6,3	3,2
China	0,4 (3,9)	-1,6	4,6

Notes: 2007 figures for general government and current account balances are IMF WEO estimates; inflation measured by HICP for EU, euro area and UK and by CPI for others.

Source: EcoWin, IMF, World Economic Outlook Database, October 2007. Statistical Yearbook of China.

Table II.7.3:

Selected Indicators on the Size of the Capital Markets, 2006

(in billions of U.S. dollars unless noted otherwise)

	Stock Market Capitalisation	Total Debt Securities	Commercial Bank Assets	Equity, Debt, and Bank Assets	Bonds, Equities and Bank Assets (% of GDP)	Geographical distribution of foreign exchange market turnover (% of total)
European Union	13069	23203	36642	72914	534,4	49,0
Euro area	8419	18768	25838	53269	503,1	10,8
United States	19569	26736	10205	56509	428,3	16,6
Japan	4796	8719	6415	19931	456,5	6,0
United Kingdom	3794	3298	9213	16305	680,9	34,1
China	--	--	--	--	--	0,2

Source: IMF, Global Financial Stability Report, September 2007a (Statistical Annex) and BIS Triennial Central Bank Survey 2007.

- *The breadth, liquidity and efficiency of its capital markets.* As shown in Table II.7.3, the size of the euro area's financial system (USD 53 trillion at end-2006), as measured by the sum of its stock market capitalisation, debt securities and commercial bank assets, is roughly the same as that of the US (USD 57 trillion) and much larger than that of Japan (USD 20 trillion).⁽²¹⁰⁾

Concerning the role of capital markets in underpinning the euro area's international role some further qualifications are in order. *First*, the size of the equity and debt securities markets is more relevant than the size of the banking system whereas as Table II.7.3 shows, the US stock market capitalisation is more than twice the size of that of the euro area. This reflects the fact that euro-area companies overwhelmingly finance their activities through bank loans rather than through bond and equity finance, whereas the US corporate sector relies more heavily on bond and equity financing. *Second*, as Table II.7.3 shows, the euro's share of global foreign exchange market turnover is well below that of the US (which in turn is dwarfed by the foreign exchange turnover in the UK).

Third, while before the launch of EMU the euro area lagged significantly behind the US in terms of financial market efficiency – as measured by indicators such as average spreads reported by

⁽²¹⁰⁾ The corresponding figure for the EU as a whole is much higher (USD 73 trillion), substantially exceeding that of the United States. This largely reflects the addition of the UK, whose stock market is the third largest in the world, suggesting that the size of the euro area's financial markets could be importantly affected by a UK decision to join it.

dealers and bond market turnover ratios ⁽²¹¹⁾ – this has dramatically changed since the adoption of the euro. As discussed in Chapter I.7, the euro is contributing to the integration of the euro area’s financial markets, thus helping to increase their depth, liquidity and efficiency. This process, which is being reinforced by the implementation of the EU’s legislation in the area of financial services, supports the internationalisation of the euro. Conversely, as the international role of the euro develops, this encourages investment and borrowing in euros by foreigners and thus further improves the efficiency and depth of the euro area’s financial markets. Recent evidence suggests that euro area financial markets are indeed catching up in efficiency and liquidity with those of the US. ⁽²¹²⁾

Finally, while the euro-area’s financial markets would considerably gain in size, liquidity and sophistication with the entry of the UK into the euro zone, the City’s financial centre is already considerably contributing to the development of euro-denominated financial markets. ⁽²¹³⁾ UK-based banks have access to the euro’s wholesale payments system (TARGET) and play an active role in the interbank market for euro deposits. They account for about 75% of all euro deposits held by non-euro banks outside the euro area. Also, UK issuers account for a substantial share of euro-denominated international debt securities (ECB 2007d). The City’s foreign exchange and derivatives trading in euros represent about one third and one half, respectively, of total turnover (BIS 2007).

⁽²¹¹⁾ See, for example, Portes and Rey (1998).

⁽²¹²⁾ According to Galati and Wooldridge (2006) the US dollar markets still maintain an edge over euro markets in terms of size, credit quality and liquidity. Even so, Dunne *et al.* (2006) find that bid-ask spreads in the euro-denominated government bond markets are not much higher than those in the US Treasuries market, while Biais *et al.* (2006) find that spreads in euro-denominated corporate bond markets are below those for corresponding dollar-denominated bonds. Some recent studies also indicate that transaction costs for the euro in the foreign exchange markets have converged to those for the dollar (Papaioannou and Portes 2008).

⁽²¹³⁾ See Townsend (2001), Ardy *et al.* (2002) and HM Treasury (2003).

7.2.2. Will the euro overtake the dollar?

Historical experience shows that incumbency advantages and inertia tend to prolong the international role of a currency even after the circumstances that led to its international expansion have changed. A well-known example is the pound sterling, which remained the dominant international currency until the 1930s, well after the loss of the UK’s economic hegemony.

Due to economies of scale and network externalities, agents are more likely to use a currency in their transactions if everyone else is doing so. Network externalities tend to drive one currency toward market dominance and, once achieved, to keep it in that position. They are particularly important for the foreign exchange vehicle function. Similarly, the advantages of using a single unit of account in the international commodity markets make it, as noted, very difficult for this role to be shared by more than one currency. Inertia might also arise from legal and administrative restrictions in the operations of central banks or large banks (Truman and Wong 2006). ⁽²¹⁴⁾

These inertial forces are likely to favour, at least for some time, a continued international use of the dollar above what would be justified by the structural features of the U.S. economy. These inertial forces, however, must be set against the advantages of currency diversification by both public and private agents. Prior to the creation of the euro, network externalities favoured a single international currency because the market size and liquidity of the alternative currencies was too low.

However, as noted by Papaioannou and Portes (2008), this is no longer the case since liquidity and transaction costs in euro-denominated financial markets are converging towards those of the dollar. Fears about a hard landing of the

⁽²¹⁴⁾ As stressed by Krugman (1984) and Alogoskoufis and Portes (1997), the importance of network externalities means that the choice of key international currency(ies) is characterised by the existence of multiple stable equilibria, with history and institutions playing a key role in determining which equilibrium will prevail and the transition path from one equilibrium to another.

US economy may also make diversification to other currencies more appealing. In the case of the reserve currency function, where network externalities are less important and the gains from diversification more obvious, the trade off between holding assets in just one currency and diversifying risks among several monies may indeed be changing (see Box II.7.1).

Obviously the relative shares of the euro and the dollar in the steady state are hard to predict at this stage. But, as documented by Eichengreen (2005) and Papaioannou and Portes (2008), pre-war historical experience suggests that there can be more than a single international currency. Even at the peak of Britain's world economic hegemony, sterling shared its international role with the Deutschmark and the French franc. A move towards a bi-polar (or multi-polar) monetary system with a shared predominance of the dollar and the euro is therefore a distinct possibility.⁽²¹⁵⁾

7.3. BENEFITS AND COSTS OF AN INTERNATIONAL CURRENCY

Having an international currency is often considered to bring economic benefits to the issuing country or region. These gains arise, inter alia, from seigniorage revenues, from the issuer's capacity to borrow easily in its own currency, and from possible competitive advantages for domestic enterprises and financial institutions operating abroad. However, issuing an international currency also carries with it some costs, such as its possible impact on the stability of money demand and a potential increased responsibility of the monetary authorities of the issuing area as lenders of last resort. This section discusses the main benefits and costs that the euro area may draw from the internationalisation of the euro.

7.3.1. International seigniorage

International seigniorage is the implicit income received by a country's monetary authorities from the fact that non-residents hold large quantities of domestic cash, which bears no interest. This allows the country that issues the currency to obtain real resources (net imports) in exchange for almost costless notes. These seigniorage gains are moderate. Available estimates for the United States (Alogoskoufis and Portes 1991, Rogoff 1998) put the flow of international seigniorage at about 0.1 % of GDP. These estimates are based on conventional estimates that the stock of US dollars circulating abroad is 50-60% of GDP.

As was noted in Chapter I.9, while total euro cash in circulation has been consistently rising since its introduction and has in recent years overtaken dollar cash both as percentage of GDP and in absolute terms, this largely reflects growing per capita domestic holdings of currency in the euro area. The ECB (2007d) estimates the value of euro banknotes held by non-residents at about €100 billion (or 1.2 % of the euro area's GDP), compared to about US\$ 450 billion (or 3.6 % of US GDP) for the US dollar. Based on the estimates of seigniorage revenues for the US and the different ratios of cash held abroad over GDP, seigniorage gains for the euro area should amount to only 0.03 % of GDP. These gains would obviously move closer to those accrued to the US, should the international use of the euro as parallel cash rise in the future.

Another component of seigniorage accruing to the issuer of an international currency stems from the fact that central banks and international investors place a high share of their balances in its government securities, which contributes to increase their liquidity. This allows the Treasury of the country in question to pay a lower interest rate on its securities. Portes and Rey (1998) estimated that this "liquidity discount" can be worth between 25 and 50 basis points. Given the stock of non-resident holdings of US government debt, they estimated that this liquidity discount could yield an annual flow of a similar magnitude than the currency component of seigniorage.

⁽²¹⁵⁾For example, Chinn and Frankel (2005) consider a scenario where all non-euro EU Member States adopt the euro by 2020 and predict that the euro would overtake in that case the US dollar as the main international currency a few years later.

Box II.7.1: Investor diversification away from the dollar: a survey of the literature

Concerns over the sustainability of the US current account deficit and portfolio diversification considerations, notably on the part of central banks or Sovereign Wealth Funds (SWF), could lead international investors, either gradually or abruptly, to shift from the dollar to the euro and possibly other currencies. There is, however, no consensus on this and, as the data in Chapter I.9 showed, not much diversification away from the dollar has taken place so far.

Those that underline the likelihood of a shift from the dollar to the euro point out that the sustainability of the US large current account deficit depends on the willingness of foreign investors to continue increasing the share of the dollar in their portfolios, which seems implausible (Mussa 2005). Gourinchas and Rey (2007) note that the US may soon be in a position where it will have to make net income payments to the rest of the world. Reaching that "tipping point" could undermine the credibility of the dollar as a stable international currency. Eichengreen (2005) argues that incumbency advantages are less important for the reserve currency function and that, as euro-area financial markets continue to gain liquidity and efficiency, this will facilitate diversification of reserves away from the dollar.

It has also been noted in this context that a large share of the US current account deficit is financed by foreign central banks and that central banks face an increasing "concentration risk" and may want to diversify away from the dollar to other currencies.¹ Moreover, as noted in Chapter I.9, since reserve levels in some large reserve holders are more than adequate to cover their intervention needs, there has been a tendency to establish SWF to manage the excess of reserves in a more efficient manner so as to increase average returns. While official reserves must be kept in liquid and safe assets denominated in a currency with low foreign exchange conversion costs (which tends to favour the dollar), SWF have more freedom to choose their investments. If, as discussed in Chapter I.9, SWF continue to expand and do increase the average share of euro assets in their portfolio when compared to central bank reserves, they will contribute to a partial shift out of US dollars (De Beaufort Wijnholds and Søndergaard 2007).

Other observers argue, however, that a diversification away from the dollar is unlikely or will be moderate and slow. They contend that financial globalisation and the associated increase in the global pool of funds that can be invested make it easier for the US to finance its large current account imbalance. For example, OECD model simulations suggest that, under reasonable assumptions, a continued large US current account deficit could be consistent with the US retaining broadly the same share of world foreign liability holdings in 2050 as in 2005, despite persistently large capital inflows (OECD 2007a). Dooley *et al.* (2003, 2005), for their part, argue that today's international monetary and financial system can be seen as a revived Bretton Woods system in which central banks in countries with large reserve holdings and current account surpluses, especially those in Asia, collaborate with their governments in pursuing export-led growth strategies and keep their currencies stable vis-à-vis the dollar. They also have a vested interest in avoiding a disorderly downward correction in the dollar because of their high exposure to dollar assets. This type of central bank behaviour, it is argued, helps maintain the dollar's dominant international role and the current constellation of global imbalances. This story is complemented by the "global asset shortage" argument (Caballero 2006, Rajan 2007 and Mendoza *et al.* 2007), which notes that both central banks and the private sector outside the US have an interest in putting their excess savings in dollar assets because of lack of better alternatives. This, it is argued, reflects the US comparative advantage in offering highly liquid tradable securities.

¹Roubini and Setser (2005) argue that in particular Asian central banks, for several reasons, have strong incentives to reduce their pace of reserve accumulation in US dollars. In recent years, several central banks, including from large reserve holders such as Russia, the United Arab Emirates, and Sweden, have publicly declared their intention to diversify the currency composition of their reserves away from the dollar. Chinese officials have also hinted at this possibility more recently. For a review of recent reserve management policies, see Rietveld (2007).

(Continued on the next page)

Box (continued)

Hence the literature assessing the likelihood of a substantial additional diversification of international portfolios towards the euro is inconclusive. For some, the current model of large global imbalances and rapid accumulation of dollar assets by surplus countries has its days counted. For others, the existing model can last indefinitely, it being a reflection of financial globalisation, the superiority of the dollar-denominated financial markets and the incumbency advantages of the dollar.

With non-resident holdings of US government securities having increased markedly since Portes and Rey published their study, the gains stemming from the liquidity discount should have risen significantly.

7.3.2. The "exorbitant privilege"

A broader approach for measuring the gains from having an international currency, which includes the liquidity discount factor but also other considerations, has been proposed by Gourinchas and Rey (2007). These authors refer to it as the "exorbitant privilege", a term President De Gaulle is believed to have used in 1965 to refer, more generally, to the advantages the US derived from issuing the world's dominant international currency. The "exorbitant privilege" can be defined as the excess returns a country issuing an international currency may earn on its gross foreign assets over its gross foreign liabilities. It can be decomposed into a return effect (stemming from higher returns within each asset class) and a "composition effect" (due to the fact that the structure of the external balance sheet is asymmetric, with more low yielding assets on the liability side).

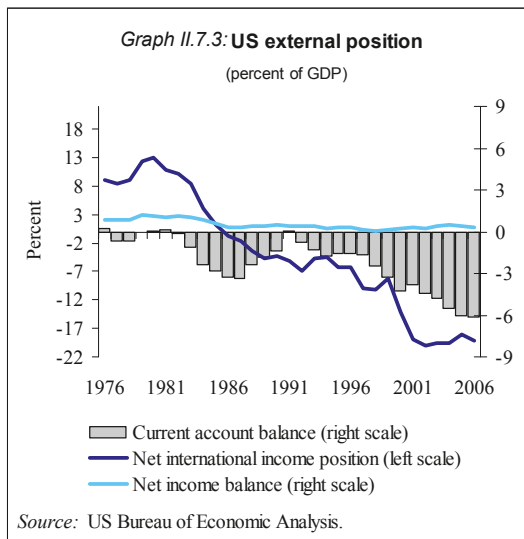
There are two main reasons why the returns within each asset class may be higher. First, there is the above-mentioned liquidity discount effect. Second, there are possible capital gains due to asset price and currency fluctuations. By being the provider of the global reserve currency, the issuing country is able to issue virtually all of its gross liabilities in its home currency. By so doing, it not only shifts the exchange rate risk, and accompanying hedging costs, to the rest of the world but, more importantly, it enjoys a capital gain when its currency depreciates, since its assets abroad are mostly denominated in foreign currency. The gains (or losses) on foreign-currency-denominated assets and liabilities due to their revaluation at current

exchange rates can be substantial. Data from the US Bureau of Economic Analysis show that, in the period 2002-2004, the depreciation of the dollar produced a net capital gain to US residents worth USD 920 billion, which offset more than half of the cumulative US current account deficit (USD 1622 billion) during the same period.⁽²¹⁶⁾

Gourinchas and Rey (2007) find strong evidence of excess returns on US gross foreign assets over gross foreign liabilities. Most of this exorbitant privilege comes from the return effect, while a non-negligible fraction of it comes from the structure of the US' external balance sheet (i.e. low-yielding assets dominate the liability side while foreign assets have a greater share of high-yield, riskier assets). The exorbitant privilege accruing to the US has been increasing since the collapse of the Bretton Woods system: the difference between the average return on US assets and US liabilities has increased from an about 26 basis points during the Bretton Woods period to about 3.3 percentage points since 1973. This partly reflects the fact that, as financial globalisation has intensified, US assets have gradually shifted from long-term bank loans into higher return and risky investments (notably FDI and equity).

An important implication of the exorbitant privilege is that the issuing country can accumulate large net foreign liabilities without incurring a corresponding shift in its net foreign income payments. This helps explain why the marked deterioration in the US net foreign liabilities during the period 1970-2004 has not been accompanied by a corresponding increase in net income payments (see Graph II.7.3).

⁽²¹⁶⁾ On this point, see also Clarida (2007).



7.3.3. Lower transaction costs for residents

Residents of a country issuing an international currency (exporters, importers, borrowers and lenders, tourists, etc.) benefit directly from it because they can conduct international transactions in their own currency. First, the need to incur expenses for currency conversion in international trade and financial transactions is reduced. In a seminal study, the European Commission estimated that the reduction in transaction costs in the foreign exchange market from a shift of about 10% of euro-area trade (including intra-euro-area trade) from the dollar to the euro could amount to about 0.05 percent of its GDP (European Commission 1990). The reduction in transaction costs reflects not only to the reduction in the number of currency conversions but also the fact that a vehicle currency is likely to develop a broader and more efficient foreign exchange markets, characterised by narrower bid-ask spreads.

Other microeconomic gains stem from the reduction in exchange-rate risk (and the related need for costly hedging) and from the fact that price comparisons for goods and commodities are more transparent for residents if they are denominated in their home currency.

7.3.4. A boost to domestic financial markets

An international currency is also likely to promote more business for the home-country's banks and other financial institutions. Being able

to operate in their own currency abroad or in international transactions gives those institutions a competitive advantage in terms of transaction costs and familiarity with the currency. Moreover, they can benefit from the economies of scale associated with the enlarged opportunities to work in their own currency. They can also benefit from their better access to the local money market and the lender of last resort of the area issuing the international currency.

An international currency can also help to develop more sophisticated and liquid financial markets domestically. Deep and efficient domestic financial markets are essential, as noted, for the emergence of the euro as an international currency. But the process works both ways: the internationalisation of the euro, by encouraging investment and borrowing in euros by foreigners and by creating economies of scale for local financial institutions, should promote the efficiency and depth of the euro area's financial markets.

In a world of financial globalisation, and with the relative importance of financial services in the euro-area economy increasing, the impetus from an international euro to domestic financial developments is likely to be particularly large. The share of financial and business services in euro-area GDP already now exceeds that of manufacturing and euro-area countries are among the largest world exporters and importers of financial services, with the share of financial services in total euro-area trade having been increasing since the early 1990s (European Commission 2005c). By supporting the competitiveness and development of the euro area's financial institutions and markets, a rising international use of the euro could help meet the competitiveness challenges of globalisation.

7.3.5. The costs

One possible disadvantage associated with having an international currency is that it may complicate the conduct of monetary policy in the issuing country. First, a greater use of the euro abroad may affect the information content of the monetary aggregates monitored by the ECB as part of its two-pillar monetary strategy (see Chapter I.5). In addition, the internationalisation

of the euro is expected to increase the substitutability of euro-denominated and dollar-denominated assets, facilitating shifts in international investment portfolios. Sudden and frequent portfolio shifts may increase the instability of money demand in the euro area. Such liquidity shocks could make it more difficult for the monetary authorities to maintain a steady course over time. They could also result in increased exchange rate instability (although there is little evidence of this; see Chapter I.2) and have some negative implications for financial stability as they increase the exposure of banks to sudden swings in liquidity conditions.

Aside from the issue of short-run money demand and exchange rate volatility, the international use of a currency, by raising the demand for the currency and capital inflows, could cause the currency to appreciate on a sustained basis, with negative effects on the country's external competitiveness and the current account. As discussed above, by facilitating the financing of the US current account and helping to create a gap between the total return on its foreign assets and liabilities, the international use of the dollar has indeed contributed to the deterioration of the US current account deficit. This can be seen as the flipside of the exorbitant privilege. As noted by e.g. Gourinchas and Rey (2007), this situation cannot be sustained indefinitely if it results in an explosive net foreign liability position.

It has also been argued that policymakers in the economy issuing an international currency, and in particular the monetary authorities, may come under increased pressure to rescue foreign financial institutions or to accommodate specific needs of other economies when conducting their policies. This possible cost may be particularly relevant when the international currency is used as legal tender by other countries (see, for example, IMF 1999, and Bogetić 2000). Other features of an international currency, notably the large volume and relevance for global stability of financial transactions conducted in that currency, may also subject the authorities of the issuing area to such pressure.

Finally, the transition to a new equilibrium with a more important global role of the euro may happen in a disorderly manner, with

diversification away from the dollar and towards the euro putting upward pressure on the euro's exchange rate. While a more gradual and orderly transition is also possible, the risk of a more erratic one should not be dismissed (Mundell 2000).

7.4. THE EURO AREA AND GLOBAL STABILITY

Since the mid-1980s, the world has seen a significant reduction in macroeconomic and financial volatility, often referred to as the Great Moderation (see Chapter I.3). EMU may have contributed to this process, both through the positive spillover effects of lower euro-area volatility on the rest of the world and through other mechanisms, i.e. by facilitating international risk sharing, although, with the euro still being a young currency, its long-run impact may not have fully materialised.

Prior to the launch of the euro predictions about the impact of the single currency on international stability proliferated. Several channels through which EMU could affect world stability had been identified (Döhring and Temprano-Arroyo 2008). Some implied stabilising effects; others entailed a potential increase in volatility, notably for exchange rates. Three channels were deemed relevant:

- *Stability spillovers.* The euro area's stability-oriented macroeconomic policy framework was expected to have indirect stabilising effects on the world economy given the sheer size of the euro area. In addition, the euro would offer an exchange rate anchor for countries with strong trade and monetary links with the EU and weak institutional frameworks. These effects were deemed particularly relevant for Central Eastern, and South-Eastern European countries, as well as for some African regions. Box II.7.12 illustrates this for the Western Balkans and the countries of the CFA zone.

Box II.7.2: Regional Stabilising Effects of EMU: the case of the Western Balkans and the CFA Zone

EMU is having direct stabilising effects on neighbouring regions and other regions with close economic and institutional ties with the EU. This happens through several channels but three have been highlighted by the literature: i) the adoption of the euro as exchange rate or monetary anchor; ii) the implicit guarantee that EU accession prospects or geographical and political proximity to the EU may confer to a country, which can reduce the likelihood of financial crises; and iii) the adoption of macroeconomic rules and frameworks inspired in the EMU model, which enhance domestic macroeconomic discipline. This box looks at two cases: the Western Balkans and the countries of the CFA zone.

In the aftermath of the crises of the 1990's, **the Western Balkans** were confronted with critical stabilisation challenges. In this context, the introduction of new monetary and exchange rate regimes based on the euro, which include Bosnia and Herzegovina's currency board arrangement and unilateral euroisation regimes by Montenegro and Kosovo (see Chapter I.9), helped curb previously rampant inflation to almost EU levels. The official anchoring to the euro and the rather widespread use of the euro by the private sector as financial currency and parallel cash (see Chapter I.9) contributed to the remonetisation of the economies, the recovery of domestic savings and deeper financial and trade integration with the EU. The overall result has been improved macroeconomic stability and fairly robust economic growth, despite the challenges inherent to the catching-up process (see Macovei *et al.* 2008)

The EU accession perspective has been another major driver of the stabilisation and catching-up process in the Western Balkans. Candidates need to fulfil the Copenhagen economic criteria for accession, which require the existence of a functioning market economy, capable of coping with competitive pressures within the EU. For that purpose, they are pursuing a wide-range of reforms to ensure macroeconomic stability, liberalise markets, restructure and privatise the state-owned industries and improve the business environment. The European Commission monitors the accession process, which represents an additional assurance for international capital markets of the soundness of public policies in the Western Balkan countries. A pre-accession fiscal surveillance procedure, inspired on that applicable to EU countries, is being conducted jointly by the Commission and the Western Balkan countries. It includes the adoption of the EU's fiscal accounting rules and the regular submission of medium-term fiscal programmes. This is complemented by the organisation of macroeconomic dialogues and, occasionally, the provision by the EU of macro-financial assistance. All this reinforces credibility and financial stability in the region.

The fixed peg of the **West and Central African CFA** franc to the euro (see Section I.9) has helped the region achieve higher macroeconomic stability than in most other regions of SSA. In particular, its inflation levels and variability have been lower than in most other SSA countries. The peg, in combination with the underlying monetary unions based on the CFA franc, provides a stable monetary institutional framework to participating countries, many of which suffer from weak governance. The guarantee of convertibility backed by the French Treasury facilitates external transactions and lends further credibility to the arrangement.

In the context of the CFA franc devaluation of 1994, CFA zone countries adopted regional macroeconomic surveillance procedures and targets inspired on those of the EU's Maastricht Treaty and the EU's Stability and Growth Pact. Main convergence criteria are a balanced budget (excluding grants), a debt-to-GDP ratio below 70%, an inflation rate below 3%, and the avoidance of budget arrears. The scheme also includes the adoption by the Council of Ministers of broad economic policy guidelines, the preparation of rolling multi-annual convergence programmes and a procedure to correct deviations from the scheme's macroeconomic targets. Although this framework has contributed to underline the need for fiscal prudence in the region, compliance with its criteria has been insufficient in several of the CFA countries. Contrary to developments in the EU, monetary integration has not been preceded by a substantial economic integration, implying that fiscal policies may need to play a more important role as adjustment mechanism in the face of asymmetric shocks (see Hallet 2008).

- There is also evidence that EU membership and the prospect of future euro-area membership reduced the risk of financial instability in countries that are experiencing large current account deficits and rapid credit growth as part of their catching-up process (Darvas and Szapáry 2008).

On the other hand, EMU could have destabilising effects to the extent that it increases the co-movement of economic and financial variables within the euro area and, therefore, their net impact on the rest of the world (see Chapter I.3 for evidence).

- *International risk sharing.* The euro could facilitate international risk diversification and consumption smoothing, which could make a positive contribution to global stability. The more integrated and broader financial markets that EMU would help to create, in combination with the internationalisation of the euro, would increase risk diversification opportunities both within the euro area and in the world as a whole.
- *Exchange rate volatility.* Finally, EMU was expected to affect exchange rate volatility. There were several predictions, with contradictory effects. Some argued that as the euro area would be a larger and more closed economy than its individual members, its policy makers would adopt a policy of "benign neglect" towards the exchange rate (Kenen 1995, Wyplosz 1997).⁽²¹⁷⁾ It was also noted that the emergence of the euro as an international currency would increase the substitutability of dollar and euro assets, increasing the potential for disruptive portfolio shifts and, therefore, exchange rate volatility. Other observers argued that with the removal of intra-area exchange rates EMU, intra-euro-area shocks would spill over

into the exchange rate of the euro against third currencies and to the interest rates of the euro area. The assumption was that there is a given amount of volatility in the system and that if this volatility was not absorbed by movements in intra-area exchange rates it would have to show up elsewhere. That view was challenged though by other observers, arguing that the regime change to EMU would affect the underlying amount of volatility, e.g., by reducing the likelihood of asymmetric shocks. Moreover, Flood and Rose (1995) showed that locking in exchange rates would not necessarily increase the volatility of other variables in the system. In addition, the regime change to EMU was expected to reduce the volatility of global exchange rates as the recurrent tensions within the EMS that used to spill over in the world monetary system would disappear (Mundell 2000).

The sections below examine the evidence on each of these three scores in the first ten years of EMU.

7.4.1. International stability spillovers

Since the turn of the century, global *financial markets* have been characterised by a period of benign, low-volatility financial conditions (Panetta *et al.* 2006; IMF 2007a). This decline in volatility is partly related to structural shifts such as financial innovation and integration.⁽²¹⁸⁾ It also reflects the reduction in inflation and interest rates and the implementation of prudent monetary policies in many countries, including through the adoption of stronger monetary policy frameworks. However, the recent financial turmoil has demonstrated that there was also some complacency built into expectations of permanently benign financing conditions.

⁽²¹⁷⁾ This view was underpinned by Hau (2002), who found that exchange rate volatility is negatively correlated with trade openness. However, it did not go unchallenged. For example, Masson and Turtelboom (1997) argued that insufficient knowledge about the properties of money demand and the behaviour of key indicators for the euro area would probably lead to ECB to rely significantly on the exchange rate as an indicator.

⁽²¹⁸⁾ The impact of financial integration on stability has been hotly debated in the literature. Recent work has focussed on the existence of threshold effects whereby more advanced economies benefit more from the stabilising effect of financial integration, whereas financial integration may be destabilising for less advanced economies. See Kose *et al.* (2003) and the overview in European Commission (2005c).

Table II.7.4:

Quarterly interest rate volatility (standard deviation)

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI	EL	UK	US	JP	CA	CH
3 month interbank rates																	
1990-98	0,5	0,3	0,7	0,8	1,9	1,1	0,5	0,4	0,4	0,8	1,2	5,1	0,6	0,4	0,4	0,9	0,5
1999-07						0,3						0,5	0,4	0,5	0,1	0,4	0,3
10 year government bond yield																	
1990-98	1,6	1,3	3,0	1,7	1,6	3,0	-	1,4	1,3	3,5	2,8	5,6	1,7	1,1	1,9	1,2	1,6
1999-07	0,7	0,6	0,7	0,7	0,7	0,7	-	0,7	0,7	0,7	0,7	1,0	0,4	0,7	0,3	0,6	0,7

Note that with the creation of a single euro area money market as of 1999, there is a single 3-month interbank rate in the euro area.

Source: European Commission (CA and CH: EcoWin).

Table II.7.4 shows that all G-7 countries except the US, as well as Switzerland, have experienced a decrease in short-term *interest-rate volatility* since 1999, and all have seen a decrease in the volatility of long-term interest rates. This phenomenon has been associated with the strong downward convergence of interest rate levels in the euro area discussed in Chapter I.7.

Gerlach and Hoffmann (2008) find an EMU-specific reduction of the volatility of both short-term and long-term interest rates. That is, the observed reduction in interest rate volatility in the euro area cannot be fully explained by the so-called 'Great Moderation' at the global level. It partly results from EMU. The reduction in interest rate volatility in euro-area countries was stronger in the run-up to EMU than after 1999, owing to pre-EMU convergence. The authors also identify a small spillover effect on other OECD economies from the reduction of short-term interest rate volatility within the euro area.

By contrast, there is no evidence of increased stability of *stock prices* in either the euro area or the G-7 since 1999. This is mostly due to the dotcom boom and bust. No EMU-related effect on stock market volatility can be identified, either within the euro area or in the rest of the world.

The "Great Moderation" of *business cycles and inflation* observed in the world economy since the mid-1980s has been amply documented (see Chapter I.3 and e.g., Stock and Watson 2005, Summers 2005 and IMF 2007a). The following observations can be made (see Table II.7.5):

- A strong decrease in the volatility of the *inflation* rate is visible both in the 1990s and after 1999 in both euro-area countries and the control group (other G-7 countries and Switzerland). This occurred in a period where all major economies experienced strong disinflation after the inflation-prone 1970s. Gerlach and Hoffmann (2008) find an EMU-specific effect in the reduction of inflation volatility among euro-area countries in the run-up to EMU, but not after 1999. They also find that this reduction in inflation volatility has spilled over to other OECD countries.
- From the period 1990-98 to 1999-07, the volatility of *GDP growth* decreased in the majority of G-7 economies, with the exception of Germany and Canada. It also decreased for the euro-area aggregate. Output volatility in the euro area and the US now looks quite similar. However, within the euro area, the picture is more mixed, with increases in output volatility after 1999 in

Table II.7.5:

Volatility of macroeconomic variables

	EA***	BE	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	UK	CH*	US	JP	CA*
Inflation (standard deviation of monthly annualised inflation rate)																		
1980-89	3,6	2,8	2,1	4,2	3,8	4,3	-	5,7	3,4	2,6	2,0	7,1	2,1	4,4	1,8	3,5	2,3	3,2
1990-98	1,4	0,9	1,2	5,6	1,7	0,9	0,9	1,6	1,0	0,8	1,1	3,9	1,8	2,6	2,1	1,1	1,2	1,7
1999-07	0,4	0,7	0,6	0,7	0,6	0,6	1,2	0,4	1,1	1,3	0,6	0,9	0,9	0,6	0,5	0,8	0,5	0,8
Real GDP (standard deviation of quarterly annualised growth rates in %)																		
1981-89	-	1,8	-	3,4	2,0	1,3	-	1,4	-	2,4	-	-	1,7	2,1	2,1	2,5	1,7	**
1990-98	1,3	1,9	1,3	2,7	2,2	1,4	-	1,4	-	1,2	1,3	-	4,2	1,8	1,8	1,5	2,4	2,2
1999-07	1,2	1,3	1,4	0,8	0,9	1,1	2,9	1,3	2,6	1,6	1,2	1,7	1,7	0,9	1,5	1,2	1,4	2,4
Real household consumption (standard deviation of quarterly annualised growth rates in %)																		
1981-89	-	1,4	-	2,6	1,4	-	1,7	-	2,3	0,4	-	1,7	2,6	1,3	1,7	1,3	**	
1990-98	1,1	1,2	1,2	-	2,2	1,4	-	2,0	-	1,6	1,8	-	3,6	1,8	1,0	1,4	2,0	2,0
1999-07	0,9	1,3	1,4	1,0	1,2	0,8	3,0	1,0	2,1	1,9	1,4	1,7	1,2	1,1	0,9	0,9	0,7	0,9

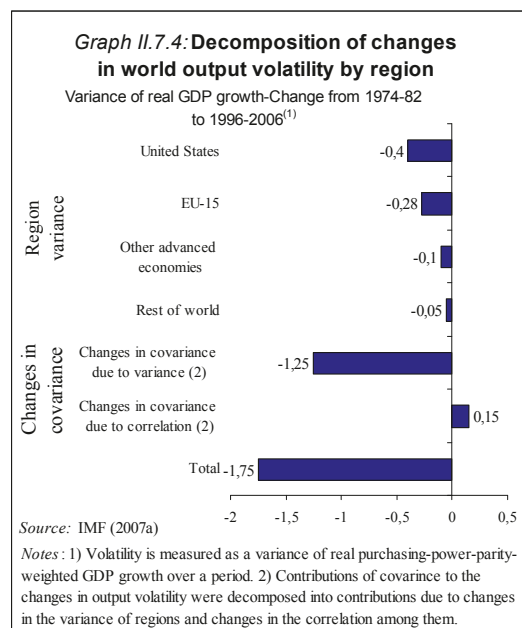
*** GDP aggregate covers 98% of the euro area; consumption aggregate covers 96% of the euro area.

Source: European Commission (except *EcoWin, ** IMF); own calculations

Austria, Belgium, France, and Portugal. Barrel *et al.* (2008) confirm that EMU has reduced output volatility in the euro area. Gerlach and Hoffmann (2008) also find a stabilising effect of EMU on the output volatility in the euro area, although this effect is weaker than the effect on inflation and interest rate volatility. They also find evidence that EMU has had stabilising spillovers effects on output volatility in the countries outside the euro area.

- As discussed in Chapter I.3, there is evidence that business cycles have become more synchronised within the euro area and that this may have to do in part with EMU ⁽²¹⁹⁾. Euro-area business cycles have also become more synchronised with those of other OECD countries, particularly with those of certain neighbouring countries such as the UK and Switzerland. IMF (2007a) argues that the increased cross-country correlation of output at the global level (to which euro-area countries have contributed) has played against the reduction in global output volatility observed since the mid-1980s (see Graph II.7.4).

smaller than the volatility of GDP in a majority of countries, indicating a certain degree of consumption smoothing. Moreover, in many euro-area countries, the volatility of consumption declined more markedly than that of GDP since the introduction of the euro.



7.4.2. The euro and international risk sharing

The degree of international risk diversification is generally found to be still quite limited (e.g. Kose *et al.* 2007; European Commission 2007c, for the euro area). However, some recent studies, including Artis and Hoffmann (2007) and Sorensen *et al.* (2007) find a statistically significant link between consumption smoothing and financial market integration and suggest that risk sharing has increased among OECD countries during the recent period of financial globalisation, reflecting a falling home asset bias.

The bottom panel of Table II.7.5 above indicates that the volatility of consumption growth decreased in most of the advanced countries after the introduction of the euro. It also shows that the volatility of consumption is now significantly

Gerlach and Hoffmann (2008) find that EMU has contributed considerably to increase international risk sharing by euro-area countries. By helping to deepen euro area financial markets, they argue, EMU has increased the resilience of euro-area consumption to variations in output (which have themselves declined, as discussed above).⁽²²⁰⁾ The authors find that euro-area countries share significantly more risk with each other than does the average non-euro-area country. Moreover, they also detect an important international dimension to the positive effect of EMU on risk sharing. In fact, they find that much of the increase in euro-area international risks sharing observed since 1999 has been vis-à-vis non-euro-area countries. Similarly, their study indicates that while there has been some decline since 1999 in the amount of risk non-euro countries share among themselves this has been more than

⁽²¹⁹⁾ As noted in Chapter I.3, part of the increase in business cycle synchronisation may also reflect EU-wide developments, notably the effect of the Single Market programme of trade and financial integration.

⁽²²⁰⁾ This interpretation is also supported by empirical results by Bekaert *et al.* (2006), which find that consumption volatility tends to decline more than output volatility in the wake of financial liberalisations.

compensated by the increase in risk sharing they conduct with euro-area countries. Therefore, risk sharing between euro-area and non-euro-area countries seems to account for most of the global increase in risk sharing observed since 1999.

As risk spreads across euro-area countries have been reduced, euro-area investors had an incentive to diversify their portfolio into assets outside the euro area. These effects could be reinforced by a rising international role of the euro, which, as noted, would reduce the cost of international financial transactions for euro-area residents and would further increase the liquidity of euro-area securities markets and, therefore, their appeal for foreign investors and borrowers.

The positive effect of EMU on international consumption smoothing is particularly relevant because of the direct connection between consumption and welfare. It should also help improve the functioning of EMU by smoothing the adjustment to internationally generated asymmetric shocks. The findings in this section suggest that financial integration in the euro area is reinforcing its resilience to asymmetric disturbances by facilitating not only intra-regional risk sharing but also risk-sharing with the rest of the world. A rising international role of the euro could push this process further.

7.4.3. The euro and exchange rate stability

The impact on the real economy of medium-term exchange rate fluctuations and short-term volatility differs.⁽²²¹⁾ Large fluctuations in exchange rates in a *medium-term time frame* lead to the reallocation of resources, in particular between the tradables and non-tradables sectors of the economy. Where this reallocation is not frictionless, it leads to adjustment costs and associated welfare losses.⁽²²²⁾ Also, exposure to medium-term exchange rate fluctuations is hard to manage for export and import businesses, as financial hedging instruments with long maturities are typically not easily available or quite expensive. *Short-term* exchange rate

volatility was long considered to have little or no impact on real variables, but more recent empirical work points to significant negative effects of exchange rate volatility on trade.⁽²²³⁾ This view has been corroborated by a recent strand of empirical research that finds that currency unions boost intra-regional trade.⁽²²⁴⁾ Exchange rate volatility also increases the risks involved in cross-border portfolio investment and thus contributes to perpetuate home bias⁽²²⁵⁾ and imperfect cross-border risk sharing.

As reported in Chapter I.2, the amplitude of *medium-term exchange rate fluctuations* (both in effective terms and on a bilateral basis) decreased from the 1980s to the 1990s for practically all key world currencies and, in effective terms, it continued to do so after 1999. The breadth of this reduction suggests that it is essentially a reflection of the global "Great Moderation". A specific euro effect cannot be identified.

However, the differentiated performance of bilateral exchange rates since 1999 calls for two qualifications. *First*, while the euro reduced medium-term exchange rate swings in the participating countries with weaker legacy currencies, the magnitude of medium-term fluctuations in the euro against the dollar and yen has been stronger than that of the legacy currencies taken together. This lends some support to the predictions of the "benign neglect" argument as put forward by Kenen (1995) and Wyplosz (1997). It also suggests that the exchange rate continues to play an important role as absorber of asymmetric economic

⁽²²³⁾ For an overview, see Baldwin *et al.* (2005).

⁽²²⁴⁾ The seminal paper by Rose (2000) found a very large currency-union effect on trade. It sparked a series of studies on the impact of EMU (e.g. Micco *et al.* 2003, Baldwin *et al.* 2005), which conclude that EMU has led to a significant increase in trade (though smaller than Rose's initial work suggested). See also Chapter I.2.

⁽²²⁵⁾ See Fidora *et al.* (2006). A striking example of the impact of exchange rate volatility on capital flows is the so-called carry trade (i.e. borrowing in a currency that has a low interest rate in order to invest in a currency that carries higher interest). The risk associated with carry trade depends on the level of exchange rate volatility, and there have been several episodes of sharp unwinding of carry trades in a context of increased exchange rate volatility (e.g. unwinding of yen carry trades in 1998 and 2007).

⁽²²¹⁾ For a more in-depth analysis of the impact of EMU on exchange rate variability, see Döehring and Temprano-Arroyo (2008).

⁽²²²⁾ See Williamson (1983), Obstfeld (1985), Dixit (1989).

developments between the euro area and the US/Japan. *Second*, EMU has been accompanied by a reduction in long-term fluctuations against the pound Sterling and the Swiss franc, as well as between these two currencies. This observation points towards a possible regional stabilisation effect of EMU on exchange rates. The relatively high and rapidly rising synchronisation of the business cycles of the UK and Switzerland with that of the euro area reported in Chapter I.3, and the also relatively high correlation of their interest rates with those of the euro (see Table II.7.6), seems consistent with this interpretation.

Table II.7.6:

Correlation of long-term interest rate with that of the euro area, 1999-2007

	US	JP	UK	CH
1999-2007	0,72	0,19	0,85	0,97

Source: European Commission.

Regarding the possible impact of EMU on *short-term exchange rate volatility*, Chapter I.2 showed that, despite a temporary surge in volatility in the first three years of EMU, the short-term (daily, quarterly) volatility of the euro during the EMU period has been on average significantly lower than that experienced by its predecessor currencies. This is true for the volatility of both bilateral and nominal effective exchange rates. To some extent this is mechanical, reflecting the abolition of exchange rates within the euro area. However, it also reflects a reduction of volatility against the dollar and other key third currencies. Contrary to what some had predicted, therefore, the elimination of intra-euro-area exchange rates has not led to increased volatility in the euro's exchange rate against third-country currencies.

7.5. CONCLUDING REMARKS

While size and other structural characteristics of the euro area suggest that the euro could challenge the dollar's international supremacy, incumbency advantages are likely to slow down, and could even arrest, the process of internationalisation of the euro. Whether and how quickly these inertial forces will be overcome will depend on:

- the euro-area's ability to develop more integrated, deeper and more efficient capital markets;
- the ultimate size of the euro area, and in particular on whether the United Kingdom will eventually join it (which could give a significant boost not only to the size but also to the liquidity and efficiency of the euro area's financial markets);
- the future relative evolution of the euro-area and US economies and, in particular, on the extent to which the US manages to bring its current account down to a more sustainable position;
- and the portfolio diversification policies of the central banks with large reserve holdings and of the key sovereign wealth funds, which in turn will be significantly affected by the relative soundness of macroeconomic policies in US and the euro area.

It is hard to predict what the steady-state international monetary system will look like and how long it will take to reach it. A protracted period of co-existence of the dollar and the euro with similar importance is entirely possible. What seems clear, however, is that over the medium term chances are that the euro will continue to strengthen its international status, especially in the regions neighbouring the euro area.

The internationalisation of the euro can bring a number of long-term benefits to the euro area. These include seigniorage revenues, the capacity to place securities among foreign investors at a liquidity discount and, ultimately, a stronger ability to finance current account deficits. An international euro can also promote more international business for the euro area's financial institutions and can contribute to the development of its financial markets. In a world of growing financial globalisation, these effects are likely to be amplified. Politically, the euro's international status can be seen as a sign of the success of Europe's integration process.

Non euro-area EU countries may also share part the benefits indirectly, given their close

economic and financial links with the euro area. For example, while London's financial centre does not benefit directly (and may be seen as losing competitive advantage) from the reduction in transaction costs and other advantages that the international use of the euro brings to euro area financial institutions, it may indirectly benefit from the euro's boost to the euro-area denominated financial markets given its current edge on dealing with some financial contracts in euros.

There are also potential costs and risks associated with having an international currency, including a more unpredictable money demand and higher exposure to sudden shifts in portfolio preferences due to the increased substitutability between euro assets and dollar assets. Although the costs and benefits cannot be estimated with precision, the evidence suggests that the benefits are likely to outweigh the costs. Over the long run, the euro area is therefore likely to benefit from the emerging international currency status of the euro.

EMU not only has contributed to the stabilisation of a number of financial and macroeconomic variables within the euro area but has also had volatility-reducing spillovers on the world economy. The stabilisation of euro-area interest rates and inflation contributed to greater stability of those variables in other OECD countries, even though this effect materialised already during the run-up to the single currency in the 1990s. Strong and sustained stabilisation spillovers from the euro area on the world economy have been identified in the area of international risk diversification and consumption smoothing. Meanwhile, although long-term swings in the bilateral exchange rates between the euro (or its main legacy currencies) and the dollar or the yen have been more marked under EMU, the effective exchange rates of all major currencies have become more stable under EMU. Moreover, short-term exchange rate volatility has generally declined under EMU. EMU is also having additional stabilisation effects on certain regions that are importing macroeconomic discipline by using the euro as nominal anchor or by adopting fiscal rules inspired by those of the EU.

The effects of EMU are thus not confined to the euro area. The creation of a new economic entity of a size only matched by the US, the emergence of the euro as a key international currency, and EMU's powerful stimulating effect on the integration and development of euro area's financial markets are likely to have far-reaching consequences for the world economy and the international monetary system as well. EMU and the international role of the euro are increasing the relevance its monetary policy decisions for economic agents and financial markets worldwide. Moreover, the euro area, with its stability-oriented macroeconomic policy framework, is having positive spillover effects on world stability, particularly in the euro area's neighbouring regions.

All this warrants an increased involvement of the euro area in global governance and policy coordination, both in the macroeconomic sphere and in the area of financial supervision and regulation. For this, it must be able to speak in a more assertive and coherent manner in the international fora. The possible options for achieving this are discussed in Part III of the Report.

8. EXPLOITING POLICY SYNERGIES AND THE BENEFITS FROM COORDINATION

8.1. INTRODUCTION

The euro area will be facing major challenges in the next ten years, including the aging of the population, climate change, supply constraints of primary resources and globalisation. The impact of these tendencies is already visible and tend to expose some of the remaining shortcomings in the functioning of EMU, notably the uneven pace of structural reform and the associated rigidities in product and labour markets, the absence of a unified framework for regulation and surveillance in financial markets, the risks to fiscal sustainability and the need to enhance the efficiency of public spending and its funding and the lack of a single voice in external representations and dialogues. The required broad orientations of policy action are clear. They should include the promotion of innovation and labour market participation, the removal or easing of market rigidities that slow down adjustment or make it excessively costly, the improvement of the quality and sustainability of public finances, a steady and smooth enlargement of the euro area and a better management of the euro-area's growing international role.

Designing an optimal mix of these policies is not always easy since there may be trade-offs or outright clashes -- for example with income distribution goals -- along with synergies. It is useful to examine these possible conflicts and synergies in some detail, which is the focus of this chapter. A main finding is that *prima facie* most of the policy orientations identified in the previous chapters should not be conflicting or are even mutually reinforcing:

- Policies aimed at raising potential growth in the face of ageing help to ensure that public finances evolve on a stable footing. Reforms aimed at improving flexibility in goods and factor markets and at reducing the costs of reallocating labour across economic activities and regions contribute to employment and productivity growth and also make euro-area economies more resilient to shocks. Improved supervision and regulation of

financial markets limit the risks of boom-bust dynamics, and contribute to macroeconomic stability.

- Distribution policies are often thought to conflict with the goal of boosting economic growth, but if such policies are carefully designed so as to minimise distortions and disincentives there is less likely to be such a conflict. Similarly, well designed policies aimed at reducing long-term unemployment reduce inequality at the bottom of the income scale. Policies targeted at improving the stock of human capital designed to enhance the skills of the least-skilled workers lift the economy's production potential while reducing income disparities. Incentive compatible distribution schemes ease the hardship resulting from globalisation or skill biased technical change, and foster efficiency and growth in the longer term. Financial market development and integration supports growth and reduces inequality in purchasing power by easing credit constraints imposed on low-income households.

Trade-offs and synergies exist not only across policy objectives but also, for any given objective, across countries participating in the euro area. This is the case whenever the effects of policies carried out in one country have significant implications for the rest of the area. The typical case is that of budgetary policy: the risk that countries neglect the impact of their deficits on area-wide interest rates justifies the presence of a rules-based framework for fiscal policy. To the extent that asymmetric shocks in one country produce effects on the rest of the area, the same case could be made for policies that improve adjustment capacity and economic resilience. While awareness of economic spillovers of budgetary policy has led to the development of an extensive coordination rules-based framework for fiscal policy, coordination in other areas, such as structural policies, financial market supervision and regulatory policies, has remained so far relatively loose. This raises issues concerning the governance of the euro area, which is discussed in detail in Part III of this Report.

8.2. POLICY SYNERGIES AND TRADE-OFFS

8.2.1. Growth and fiscal sustainability

In order to sustain a reasonable rate of potential growth, euro-area countries will need to offset the fall in labour inputs associated with ageing by higher labour participation rates and stronger productivity growth. In turn, sustainable public finances will require that fiscal positions are under control. These policy objectives are mutually reinforcing for a number of reasons:

- Higher labour participation rates raise the fraction of the population that contributes to financing social security, and thus contribute to fiscal sustainability.
- Faster productivity growth boosts real incomes and raises the resources needed to finance higher age-related expenditures.⁽²²⁶⁾
- Sound budgets avoid the risk of investment (and hence potential growth) being crowded out by rising long-term interest rates.

A possible trade-off between fiscal discipline and growth-friendly policies may exist to the extent that they entail short-run fiscal costs (Beetsma and Debrun 2003). Although the available empirical evidence suggests that the short-run budgetary cost of reforms is often small (Deroose and Turrini 2005; van den Noord and Cournede 2006), reforms that have not been carried out because they are too costly are per definition not included in these studies. The 2005 reform of the Stability and Growth Pact (see Chapter I.10) contains a clause to address this issue to some extent by granting countries some temporary leeway under certain conditions in the face of urgent and well-founded structural reform needs.

⁽²²⁶⁾In theory, increased growth potential could have a negative impact on public finances sustainability if higher potential output is systematically prompting proportionally higher government expenditure. However, an empirical test rejects this hypothesis for the EU countries (Arpaia and Turrini 2008).

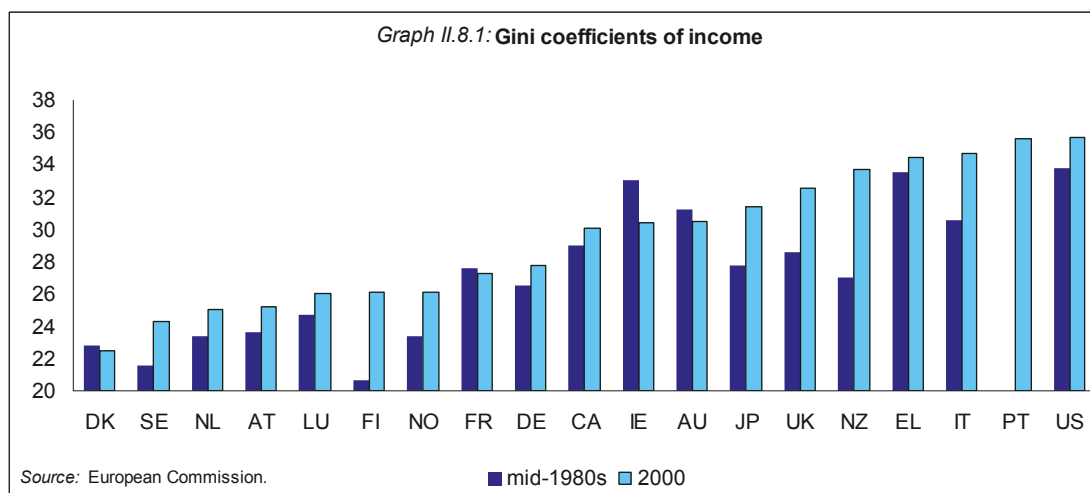
8.2.2. Growth and market flexibility

Synergies also appear to prevail over trade-offs with regard to growth policies and policies to enhance the adjustment capacity of the euro area. As stressed in Chapter II.4, efficient adjustment requires a reduction in wage and price stickiness along with greater labour mobility across industries and regions. Removing the remaining barriers for financial markets development and integration would further help adjustment by facilitating the reallocation of capital and risk sharing. These policies are also growth enhancing as they facilitate the optimal allocation of resources. Higher potential growth, in turn, eases adjustment. For example, disinflation to recover competitiveness, if needed, is less painful in a strong growth environment.

8.2.3. Growth and macroeconomic stability

The objective of raising growth is compatible also with a stable macroeconomic environment. A priori the link between growth and output volatility may not be clear-cut, but most empirical evidence point to a negative correlation between growth and volatility (Ramey and Ramey 1995, Martin and Rogers 1995, Kneller and Young 2001, Norrbin and Yigit 2005).⁽²²⁷⁾ Empirical support for the theoretically expected negative relationship between inflation volatility and growth is also widely supported (Judson and Orphanides 1999, Kahn and Senhadji 2000, Kneller and Young 2001). As well, improved supervision and regulation of financial markets hits two birds with one stone: it lowers the obstacles to financial integration and limits the risks of bubbles, and thus favours both growth and macroeconomic stability. In a similar vein, policies to enhance productivity growth will make it easier for the monetary authorities to deal with recurrent inflationary supply shocks. Finally, structural reform is conducive to a better monetary transmission and economic resilience

⁽²²⁷⁾Theories pointing to a possible positive relationship between volatility and growth are mostly based on the concept of "creative destruction" or variants thereof (see e.g. Aghion and Saint-Paul 1993, Saint-Paul 1997 and Caballero and Hammour 1994). Theories that point to the opposite relationship are based on the cost of uncertainty associated with volatility built into capital cost (see e.g. Martin and Rogers 2000).



to shocks, and thus will ease the short-run trade-off between inflation and output.

8.2.4. The links with income distribution

The progressive increase in income disparities in many advanced economies over the past two decades has led to widespread concern about income inequalities. Notably the English speaking countries and the Mediterranean countries in the euro area show wide income disparities, while income distributions have become more unequal in most countries since the 1980s (Graph II.8.1). This rise in income inequality – and the concomitant change in the distribution of wealth – is commonly attributed to the observed shift of labour demand from unskilled to skilled workers associated with globalisation and skill-biased technological progress (Checchi and Garcia-Peñalosa 2005). As discussed in Chapter II.2., such tendencies are likely to get stronger in the next ten years of EMU.

However, in view of the diversity of national experiences, both in terms of timing and magnitude of the changes in income distribution, domestic institutional factors must also play a role (Atkinson 2003, Harjes 2007). Labour market and welfare institutions have had a key role in transmitting trade and technology shocks to relative wages and unemployment rates (Gottschalk and Smeeding 1997, Atkinson 2000 and 2003). In countries where prices and wages are flexible (e.g. the US or the UK), the shift in demand for higher skills has been fully reflected

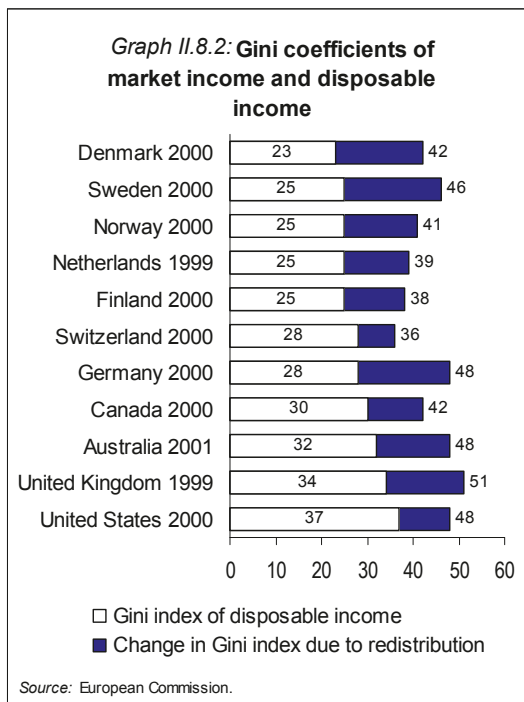
in growing wage differentials, whereas in other countries the rise in wage differential has been contained and the shift in demand translated into rising unemployment (e.g. most countries in continental Europe).⁽²²⁸⁾

Policies aimed at promoting growth, sustainability and adjustment could potentially further worsen outcomes in terms of income distribution:

- The distribution of disposable incomes is obviously affected by redistributive policies (see Graph II.8.2). But redistribution policies are costly, which suggests that policies to ensure fiscal sustainability would lead to rising inequality.
- Growth and adjustment friendly reforms in labour markets could also have an adverse impact on the income distribution. For example, a reduction in firing costs facilitates temporary lay-offs and leads to larger flows in and out of unemployment, which incurs costs for the affected workers. Additionally, there could be an increased risk of long-term unemployment for those displaced (mostly lower skilled) workers with low re-employability.

⁽²²⁸⁾ Labour institutions that give rise to wage compression may also have aggravated the shift in demand for skills by promoting the use of technologies that are complementary to unskilled labour (Acemoglu 2003).

- Increased adaptability of real wages to market conditions may widen the wage dispersion. Since empirical evidence confirms that institutions like minimum wages and unionisation tend to compress the wage scale, so their reversal would have the opposite effect (Checchi and Garcia-Peñalosa 2005, de Mooij and Tang 2006).



Some conditions may ease this trade-off or even lead to synergies between growth and adjustment friendly policies and the income distribution:

- A strong growth potential is a pre-requisite to underpin the comparatively generous social welfare systems present in most euro-area economies.
- Increased inequality associated with a number of labour market reforms will be mainly transitory if these reforms are incentive-compatible. Reducing the barriers to labour mobility would further contribute to lower temporary displacement costs.
- Some EU countries show both a stronger performance in terms of growth and employment and in terms of inequality and poverty, while other countries perform poorly on both scores (Sapir 2004). This suggests

there is room for improving economic performance without compromising income distribution by improving the efficiency of institutions, a conjecture which is supported by recent empirical evidence (Afonso *et al.* 2007).

- In several areas there are little inherent tradeoffs with income distribution to start with. Policies to increase skills help to contain the dispersion of income by curbing the wage differentials between skilled and unskilled labour.⁽²²⁹⁾ Product market reforms contribute to raise labour demand and thus tend to reduce income inequality. Policies aimed at reducing long-term unemployment reduce inequality as well. Measures aimed at reducing obstacles to financial market integration help to ease credit constraints facing low income earners (Levine 2005).

8.3. ISSUES OF POLICY COORDINATION

The view underlying the Maastricht Treaty was that – aside from centralised monetary policy – coordination in EMU should mainly stem from a rules-based framework to ensure fiscal stability in the euro-zone, limiting this way the room for policy actions entailing negative spillovers to the rest of the area (see Chapter I.10). Forms of coordination aimed at fostering "good" behaviour have nevertheless become part and parcel of the EU governance structure, notably with the growing role of the Lisbon agenda.

Currently, opinions on the need for policy coordination in EMU appear divided. Some policy-makers and observers contend that EMU needs stronger forms of policy coordination in view of its unique setting with sovereign states sharing monetary policy while keeping substantial control on most other policy domains (e.g. De Grauwe 2006). On the opposite extreme there are views that increased coordination is unnecessary, and could even be harmful, and that it would be sufficient for countries to keep their house in order" (Alesina *et al.* 2001, Issing 2002). Other observers are in favour of

⁽²²⁹⁾ See for empirical evidence Gottschalk and Smeeding (1997).

strengthening the coordination in selected areas (e.g. Sapir *et al.* 2003, Pisani-Ferry 2006). Yet others consider that there is no point in coordination if there is little common interest over and above the sum of the individual interests and commitment is difficult to enforce (e.g., Tabellini and Wyplosz 2006). The sections below examine these issues in some more depth.

8.3.1. The general case for policy coordination

In general terms, there is a rationale for economic policy coordination if the effects of policies in one country spill over to other countries. The following type of spillovers can be distinguished:

- *Economic spillovers.* Examples are non-market externalities (e.g. pollution) or pecuniary externalities (e.g., changes in the terms of trade). The presence of "club goods", i.e. goods produced in one country that benefit a group of countries in a non-excludable and non-rivaling fashion, can also give rise to economic spillovers. The presence of club goods calls for collective action (Olson 1965), otherwise countries would free ride.
- *Learning and peer pressure effects.* By exchanging regularly experiences and information, a group of countries may improve their policy making by learning from others' successes and failures. Countries may use peer pressure to weaken reform resistance at home.

Economic spillovers are stronger the more integrated product and factor markets are. Deeply integrated economic areas are also more likely to benefit from common positions in multilateral settings and share a larger amount of club goods. Even so, the costs associated with coordination are not negligible. Appropriate institutions need to be set up, relevant standards harmonised across countries, compromises to be made and leeway for policy discretion sacrificed. In addition, policy coordination could lengthen the recognition and decision lags of policy making. Moreover, the responsibilities in relation

to objectives may be diluted and the credibility of policy makers reduced (Rogoff 1985).

To some extent, coordination can be modulated to ease the trade-off between the benefits and the costs. A useful distinction is that between "hard" and "soft" coordination (e.g., Begg, Hodson and Maher 2003):

- *Hard coordination.* The most radical form of hard coordination is centralisation, with policies devolved to a supra-national agency (e.g. the common market, EU competition and trade policy, euro-area monetary policy). Other forms of hard coordination leave implementation in the hands of national authorities, but failure to comply with rules commitments leads to enforcement by a supra-national body. The corrective arm of the Stability and Growth Pact (see Chapter I.10) can be seen as a form of such coordination.
- *Soft coordination.* There are less binding forms of coordination, normally based on weak enforcement mechanisms, the setting of guidelines, codes of conduct, or simply the maintenance of regular dialogues among parties. The aim is to gain commitment among a group of countries in the pursuit of a common interest, for instance reaching a common position in a multilateral policy setting. Or it may be limited to an exchange of information and debate on national experiences and possible best practices in view of fostering good policies. The Lisbon Strategy is an example of such coordination.

If the benefits of coordination clearly exceed the costs due to sizable economic spillovers, 'harder' forms of coordination may be adopted, although political and institutional constraints may lead to substantial departures from this general principle.

8.3.2. Economic policy coordination in a monetary union

Economic policy spillovers in EMU differ from those arising under flexible exchange rate arrangements. Members of EMU share a large amount of club goods, including monetary stability, interest rates, the external exchange rate

and the current account position (Cohen and Wyplosz 1999, Jacquet and Pisani Ferry 2000, von Hagen and Mundschen 2001). As noted, the existence of club goods raises an issue of free-riding behaviour, which manifests itself in an incentive to ignore fiscal spillovers which are specific to monetary unions (see e.g. Beetsma 2001). In addition, the well functioning of a monetary union (a club good) in part depends on: (i) the efficiency of intra-area adjustment in the absence of an internal exchange rate mechanism, and (ii) the ability to reach common positions in global macro-financial policy making and pursue them effectively (von Hagen and Mundschen 2001).

Fiscal policy spillovers are of two types:

- *Long-term spillovers arising from higher deficit bias.* The debt issued by countries in a monetary union become close substitutes (Detken *et al.* 2005), so that lack of fiscal discipline in a given country would not translate into higher interest rate spreads, but rather into higher union-wide yields on government bonds (Faini 2004). Additionally, the loss of the nominal exchange rate implies also the loss of a relevant disciplining device for fiscal authorities. Finally, a real or perceived possibility of bail-out by the common monetary authority would further tend to increase the deficit bias. Hence, each member of a monetary union has a stronger tendency to run high deficits, resulting in higher interest rates and lower economic growth.
- *Short-term fiscal spillovers associated with fiscal shocks.* This type of spillovers is not unique to a monetary union per se (see Box II.8.1), but the disappearance of internal exchange rates and national monetary policies produces an incentive for more fiscal activism. This may give rise to an imbalanced fiscal/monetary policy mix (see Chapter I.5).⁽²³⁰⁾

⁽²³⁰⁾A quantitative assessment of fiscal spillovers in a monetary union based on DSGE simulations is found in European Commission (2006a). Evidence on spillovers based on structural VARs is provided in Bénassy-Quéré and Cimadomo (2006).

Structural policy spillovers are manifold. Financial markets regulation and supervision in each country has implications in terms of monetary policy transgression. Labour and product market regulation affect wage and price stickiness, which in turn affects the adjustment capacity of countries to asymmetric shocks. Tax reform packages may be aimed to relief the tradable sector. For example, a reduction in VAT, which taxes imports and exempts exports, coupled with a reduction in labour taxes, spill over into relative competitiveness positions. The same holds for wage moderation policies. Countries that are adjusting to a negative shock may be tempted to resort to "competitive devaluation" policies. However, this would have a negative impact on the trade balance of partner countries, which may be induced to respond in a similar fashion. Coordination in this area serves to contain such beggar-thy-neighbour behaviour.

Global financial issues matter for the well being of each member of the monetary union as well. Effective arrangements for global coordination are part of the club good provided by monetary union and its effectiveness entails spillovers to all Members. Prima facie, the increased leverage from monetary union creates incentives for co-operation in this field. On the other hand, the "benign neglect" hypothesis (see Chapter I.10) points in the other direction.

Overall, there are specific benefits from coordination in a monetary union, but there are also costs. This is notably the case for coordinating fiscal and monetary policies. The credibility of the commitment of monetary authorities to price stability derives from the strict independence of the monetary authority, which is a limitation for fiscal-monetary policy coordination (e.g. Alesina *et al.* 2001). In addition, the desirability of coordination among fiscal and monetary authorities in monetary unions is limited given that fiscal stabilisation policies face much longer decision and recognition lags than monetary policy. As well, a number of stylised conditions need to be fulfilled in order for fiscal-monetary policy

coordination to produce better outcomes.²³¹ The alternative chosen in EMU was to co-ordinate policies "ex ante", via a clear assignment of objectives and responsibilities among monetary and fiscal authorities and the sharing of common principles and guidelines for the conduct of fiscal policies enshrined in the Treaty and the SGP, within a regular dialogue on macroeconomic issues takes place within the Eurogroup and the Council.

The Treaty provisions are mainly aimed to redress fiscally-induced economic spillovers, and in particular the long-run fiscal spillovers associated with deficit bias in monetary unions. The corrective arm of the Stability and Growth Pact (see Chapter I.10) is the clearest example of this. Short-term spillovers associated fiscal stabilisation are mainly dealt with by Art. 99 of the Treaty, which states that "Member States shall regard their economic policies as a matter of common concern and shall co-ordinate them within the Council" and by the preventive arm of the Stability and Growth Pact. The Broad Economic Policy Guidelines and the use of Early Warning recommendations are instruments the Council can use to signal a fiscal stance deemed inconsistent with the general interest. Overall, the prevalence assigned in the existing EMU coordination framework to fiscal stability (as opposed to fiscal stabilisation policy) is consistent with the emerging consensus that fiscal authorities have only imperfect control on their fiscal impulse and may not always have the right incentives to gear fiscal policy in a stabilising fashion.

With regards to structural policies, the EMU set-up refrains from placing specific constraints on national policy-makers other than that they

should be conducted in accordance with "the principle of open market economy with free competition" and considered as matters of "common concern" to be coordinated "within in the Council" (Art. 99).⁽²³²⁾ The institutional arrangements for coordination of structural policies have considerably evolved, in particular with the re-launch of the Lisbon strategy. Even so, a smaller weight attached to coordination of structural reforms compared to the provisions on fiscal policy in the EMU set-up. This may reflect a smaller weight attached to spillovers from structural policies in EMU compared with those arising from deficits. There may also be an implicit belief in the 'there-is-no-alternative' (TINA) argument, i.e. an expectation that the incentives for euro-area countries to carry out reforms would have increased substantially as the competitiveness channel becomes key to ensure efficient adjustment and where the room for fiscal expansions is constrained. However, the evidence on TINA is scant, if not pointing in the opposite direction (see Chapter I.6).

The current se-up of economic coordination in EMU is not strongly equipped to ensure consistency among national policies with direct implications for competitiveness. In this respect, while in ERM exchange rate realignments were perceived as a common concern and were subject to commonly agreed principles, no similar framework is available in EMU to discuss internal devaluations and other policies with a direct bearing on competitiveness. One of the reasons for such an asymmetry may be the difficulty in setting boundaries to the policies, to be coordinated given that a potentially large set of policies affect the internal adjustment dynamics.

8.3.3. A forward-looking perspective

Ongoing developments in international trade and investment require the ability of euro-area countries to adjust to shifting comparative advantages and to improve their capacity to compete "at the frontier" of the technological ladder. The possible persistence of supply tensions in raw materials and energy markets

²³¹ For a theoretical appraisal of the case of fiscal coordination in a monetary union see, e.g., Dixit and Lambertini (2003), Bamboni *et al.* (2007) and Hughes-Hallett (2008) regarding fiscal-monetary coordination and Beetsma, Debrun and Klassen (2001), and Uhlig (2003) regarding fiscal-fiscal coordination. Results show that coordination is optimal only if all policy actors are involved and their objectives represent those of society. Once these assumptions are violated, whether or not coordination is advantageous depends upon a series of factors relating mostly to the specific form of interaction among policy authorities, the relative strength of trade and interest rate spillovers, and the type of shocks (symmetric vs. asymmetric).

⁽²³²⁾ Article 121 in the text of the Treaty of the European Union as amended by the Lisbon Treaty

may stiffen the trade-off between price and output stabilisation. The need to cope with falling potential growth and rising tensions in public finances with ageing raises makes a call on ensuring higher participation rates of the labour force and rising potential growth via policies that speed up the growth of total factor productivity. The enlargement of the euro area to new countries requires a sound surveillance framework and effective supervision of financial markets. The increased heterogeneity of the euro area also raises issues regarding the effective functioning of adjustment mechanisms within it. The rising international relevance of the euro and the euro area raises the responsibilities of the euro area in, and potential gains from global macro-financial policy coordination and surveillance.

It would appear that enhanced co-operation is needed to foster good practices in terms of structural policies, to ensure orderly financial market developments in a context where financial integration will further expand and where new countries will enter the euro zone, and to raise the ability of the euro area to speak with one voice in multilateral fora for macro-financial policies. There could also be tendencies that raise the costs of coordination, such as the increasing number of member countries and their diversity. It is also possible that soaring energy and other commodity prices exposes the European Central Bank to pressure to compromise the price stability goal, which has implications for the potential cost of fiscal-monetary policy coordination higher. Finally, the need for coordination may progressively diminish in some areas, such as in the area of euro-area enlargement once it is completed.

All considered there appears to be a strong rationale to step up coordination in the following areas:

- *The Single Market.* Overall, there is substantial consensus among policy makers and observers that the full completion of the Single Market is a necessary pre-requisite for the functioning of EMU (Sapir *et al.* 2004).
- *Reforms in product and labour markets.* Here too the benefits for the functioning of EMU

are large. Although the euro area already disposes of coordination instruments for structural policies, i.e., Lisbon, structural reforms are the key to bolster the competitiveness channel in EMU. As shown in Box II.8.1, spillovers would be reduced and it would also reduce the likelihood of symmetric shocks producing asymmetric effects (De Grauwe 2000, Ciccarelli and Rebucci 2002).

- *Financial regulation and supervision.* A consistent framework for financial regulation and supervision across EU countries is key to ensure an adequate response to the financial stability risks associated with increasingly developed and integrated markets. Moreover, cross-country asymmetries in financial market regulation and supervision have implications for monetary policy transmission.
- *Policies that impinge on competitiveness.* Competitiveness dynamics are not only the result of market forces. Tax and welfare policies shape relative costs and wage dynamics are determined in part by policy decisions -- government wages being a prominent example. Against this background, there is a common interest in improving available information and keeping a regular dialogue to foster information exchange on taxation and wage policies that have a direct bearing on competitiveness.
- *Fiscal stabilisation.* The costs associated with tight coordination of fiscal stabilisation policies should not be neglected. However, enhanced budgetary surveillance in EMU would help establishing a policy mix consistent with shared objectives. Moreover, a strengthened commitment of fiscal authorities in EMU would help to counter pressure from interest groups and curb the tendency for fiscal policy to be pro-cyclical in good times. The exchange of experiences and best practices of fiscal governance and the quality of public finances would contribute to improve the contribution of fiscal policy to growth and stabilisation.

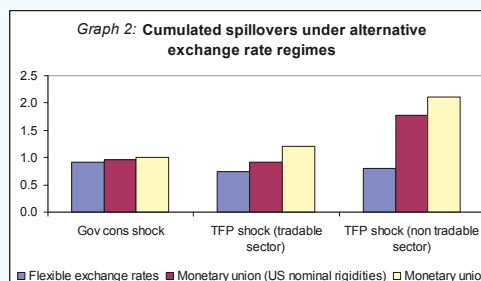
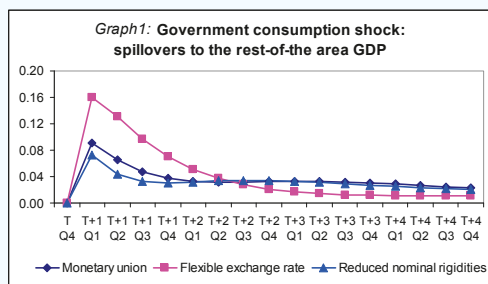
Box II.8.1: Spillovers in a monetary union with nominal rigidities

If the adjustment to asymmetric shocks spills over to other countries in EMU there may be a case for policy co-ordination. However, there are two issues to consider. The first issue is if the spillover to other countries is different in a monetary union compared with a benchmark case where monetary policies are independent and nominal exchange rates can adjust. The second issue is that reforms reducing the extent of nominal rigidities can impinge on the magnitude of intra-area spillovers. These issues are examined with the two-sector, two-country version of the QUEST III model (see European Commission 2006a, Langedijk and Roeger 2007).

Graph 1 below reports the impact on the GDP of the rest of the area arising from a government consumption shock in a big euro-area country (Germany) of 1 per cent of GDP in three cases: flexible exchange rates, the existing monetary union, and a theoretical benchmark in which, under a monetary union, nominal rigidities in wages and prices are set equal to those in the US for the whole euro area. A given shock in a given country belonging to a monetary union spills over to other union members via three main channels. First, direct demand effects having an impact on net exports. Second, there is an impact of relative prices on net exports. Third, changes in the common policy interest rate set by monetary authorities in response to the shock matter. Under flexible exchange rates the latter effect is not present, while the trade channel associated with changes in relative prices is stronger due to nominal exchange rate adjustment.

Under a flexible exchange rate regime the short-term spillovers are about twice as large as with the monetary union case. In the former case, policy interest rates in the country receiving the shock rise, leading to an appreciation of the exchange rate and therefore to an amplification of the spillover into the net exports of the rest of the area. However, the spillovers in the monetary union case are more persistent. Since adjustment to the shock is faster under nominal exchange rates, also the spillover effect vanishes more quickly. The same type of result extends to shocks of different types. As shown in Graph 2, the cumulated spillover effect (over ten years) would in general be higher in a monetary union than under flexible exchange rates. The fact that spillovers are more persistent in a monetary union tends to generate long-lasting fluctuations in other countries in the union in response to asymmetric shocks.

Model simulations also show that reforms leading to a generalised reduction in nominal rigidities in the euro area would reduce the size of spillovers under all types of asymmetric shocks considered in Graph 2. As illustrated in Chapter II.3, lower nominal rigidities imply a more efficient adjustment to shocks for the country being hit by the disturbance, since both the equilibrating competitiveness channel works more efficiently and there is less risk of a perverse behaviour of the real interest rate. The simulation results displayed here also show that a lower degree of nominal rigidities across the euro area tend to be associated with smaller spillovers from asymmetric shocks.



- *Global macro-financial governance.* Finally, potential benefits from improved coordination mechanism appear available in the field of global macro-financial governance. Strengthening the ability of the euro area to speak with a single voice in multilateral fora would raise its leverage.

8.4. CONCLUDING REMARKS

The main challenges ahead require policy responses to strengthen synergies rather than trade-offs. Policies aimed at raising potential growth would help ensure that public finances evolve on a stable footing. Reforms aimed at improving price signals in goods and factor markets and at reducing the costs of reallocating labour across economic activities and regions will at the same time contribute to employment and productivity growth and make euro-area economies more resilient to shocks. Improved supervision and regulation of financial markets limit the risks of boom-bust dynamics, thus contributing to macroeconomic stability in euro-area incumbents, as well as ease some of the trade-offs faced by the countries that still need to join the euro during their convergence path.

Although policies aimed at growth, sustainability and adjustment appears mutually consistent, tensions could arise between those policies and distribution and equity outcomes, especially as far as reforms in social security to ensure sustainability and labour markets are concerned. Although the trade-off between growth and distribution may be mostly temporary, resulting notably from the costs associated with labour relocation across sector and regions, rising inequality deserves a prompt and adequate policy response, including to ensure that rising inequality does not act as a deterrent for further progress along the reform agenda for growth, adjustment and sustainability. Enhancing the efficiency of welfare systems, notably via improved incentives, the effectiveness of public policies in the social field, and the prioritisation of welfare programmes -- in line with the flexicurity model -- would contribute to ease possible trade-offs.

Most of the challenges outlined above will need to find an answer in the policy agenda of the

Member States themselves. However, the mere fact that euro-area countries share a common currency implies benefits from co-ordinating efforts on these issues. A rationale for co-ordinating policies is offered first of all by the presence of economic spillovers. This is the case whenever the effects of policies carried out in one country have significant implications for the economic welfare of rest of the area. A further source of coordination benefits comes from learning spillovers, which improve the quality of policy making at national level. Cohesion policy is a good example and can significantly contribute to such process, not only because it directly targets structural reforms and convergence of EU regions but also because the way it is formulated and implemented fosters the coordination of EU-wide economic policies. The benefits of coordination need to be compared with its costs, mainly consisting of reduced room for tailoring policies to specific country needs, longer decision lags, and possible worsened incentives. While harder coordination may be justified in case of strong spillovers and low coordination costs, in other cases, softer forms of coordination may be warranted.

Overall, although in monetary unions there is both a larger set of policy areas where economic spillovers arise but possibly also additional coordination costs, it appears that there are some specific fields in which the current framework for policy coordination could be strengthened. First, ensuring a fully efficient working of the Single Market would be key for a smooth adjustment mechanism of the euro-area. Moreover, while awareness of economic spillovers in the realm of budgetary policy has led to the development of a coordination framework for fiscal policy based on ex-ante rules, coordination in other areas, notably structural policies, policies that directly affect competitiveness (notably wage-setting policies) and financial market supervision and regulatory policies, has remained so far relatively loose in spite of possibly relevant spillovers. In some of these areas stronger coordination between euro area members may be instrumental in attaining better outcomes at the EU level. Finally, there is also a strong rationale for EMU to define and pursue common positions in global fora.

Part III

Policies and governance of the euro area

SUMMARY OF MAIN FINDINGS

Rationales for joint action

EMU is a major economic success. It is arguably the most important global monetary reform since Bretton Woods. But while its objectives and achievements have been predominantly economic, it has never been solely about monetary reform or fiscal discipline, but also driven by a strong political rationale. From the outset EMU has been thought of as a milestone in the process of integration of EU. This role has become even stronger with the EU expansion since 2004. The newly acceded EU member countries have seen the catching-up of their economies to EU standards – a key objective of the EU's inclusive integration strategy – boosted by the prospect of euro-area accession. Such broader motivations for EMU are bound to become even more prevalent in the future. A well-functioning EMU will be in the interest of the whole EU, not only in economic terms but also in terms of furthering public support for EU integration. It will also have positive spin-offs for other policy areas where the EU wishes to exercise global leadership, e.g. sustainable development, development aid, trade policy, competition and human rights.

These political considerations reinforce the economic rationale for action to improve the functioning of EMU. In its first ten years EMU has largely achieved its key objective of fostering macroeconomic stability. However, the goal of macroeconomic policy discipline, and delivery on that goal – important as it may be – does not automatically lead to a more flexible, resilient and faster growing economy or a more effective interaction between an expanding EMU and other global economic players. This requires progress with structural reform and market integration, high-quality and sustainable public finances, a smooth completion of the convergence process of the newly acceded EU members and a strong presence of the euro area in the global policy arena.

Moreover, as shown in Part II of this report, Europe shares with most other developed economies a rapidly changing global landscape, ageing populations and rising concerns about energy and climate change. These global trends have major implications for the euro area over the next ten years. Importantly, the "typology" of

shocks hitting the economy is likely to change. The frequency and size of country-specific demand shocks (including policy-driven ones), which were a key concern prior to the abolition of internal exchange rates in 1999, have diminished. Meanwhile the relative incidence of common demand shocks (e.g. related to the emerging economies, the unwinding of global imbalances and global financial turbulence) and supply-side shocks (e.g. related to scarce energy and food, climate change and technology) is likely to increase.

Monetary policy will be able to deal with common demand shocks at the euro-area-wide level as this will go hand in hand with the goal of price stability in the medium run. However, supply shocks will primarily have to be met with market responses, assisted by automatic fiscal stabilisers if budgetary positions permit and if the mechanisms on which they rely are compatible with flexible markets. And where demand shocks produce asymmetric effects due to cross-country differences in economic structure and the associated exposure to external trade and finance, the same will apply. Improved market responses, supported by flexicurity-based social models, will thus pay a double dividend in the form of stronger growth and smoother intra-area adjustment.

Another important economic rationale for policy action in the euro area stems from the increasingly pervasive role of financial markets. Financial markets can help absorb asymmetric shocks by providing risk sharing opportunities over time and space. However, in the presence of widespread rigidities, they can also amplify the spillover effects of shocks among the participating countries – be they positive or negative. Spillover effects are the main motivation for coordination of economic policies in the euro area and the case for coordination is strengthened as financial markets become progressively more integrated.

An ambitious policy agenda

Against this backdrop, Part III of the report proposes a three-pronged agenda, comprising a domestic, an external and a governance leg. Concerning the **domestic policy agenda**, proposals are made to broaden and deepen the

macroeconomic surveillance of EMU and to foster structural policies in the pursuit of better functioning markets in an enlarging EMU. Concerning the **external policy agenda**, proposals are geared towards enhancing the euro area's role in global economic governance fora. Finally, proposals are made to strengthen the **governance** of the euro area in view of the heightened need for coordination.

A start has already been made in these three areas and hence an evolution, not a revolution, in orientations is needed. The assignment of policy responsibilities within the EMU framework appears to be appropriate and the proposed policy actions are fully in line with both the letter and the spirit of the Treaty, which attributes a prominent role to good economic governance. The policy proposals primarily address issues that are directly relevant for the functioning of EMU and the economies participating in it. However, since the economic ties between EU countries inside and outside EMU are tight and because the two jurisdictions will gradually converge over the next decade, the policy proposals are also relevant for the EU as a whole.

The domestic agenda: moving to more comprehensive economic surveillance

The aim is to make the surveillance framework in EMU work better within the possibilities offered by the Treaty. A key finding of this report is that even though a comprehensive framework for fiscal surveillance has been developed and agreed in EMU, countries may comply with the provisions of the SGP and still build up internal or external imbalances such as persistently higher or lower than area-average inflation and/or increasing current account imbalances. This calls for an integrated approach to macroeconomic surveillance, with the European Commission continuing to assume its role as guardian of the rules and commitments agreed by the participating countries. The approach would involve a deepening and a broadening of surveillance.

Surveillance should be **deepened** by strengthening its analytical foundations. This is particularly relevant for the SGP's preventive arm. It should be geared to guiding fiscal behaviour over the cycle and in particular in

good times, as a means to address any procyclical bias and to ensure that fiscal policy supports adjustment processes in EMU. A second reason for more in-depth economic surveillance stems from the shared concern that countries participating in the euro area should avoid overheating or inadequate developments in competitiveness, as this produces spillover effects within the area. Specifically, inflationary or deflationary pressures stemming from a lasting departure from output potential in a subset of countries would trigger a monetary policy reaction that would restore price stability in the euro area as a whole at the cost of enduring offsetting deviations from capacity in the rest of the area. Moreover, country-specific adjustment patterns need to remain consistent with a sound macroeconomic policy stance in the euro area as a whole, so as not to overstretch the capacity of monetary policy to maintain price stability or that of fiscal policy to ensure sustainable public budgets.

No major change in the existing policy framework in EMU is needed. It is well-suited to address the ongoing change in the typology of shocks, with monetary policy responding at the area-wide level and market responses, possibly assisted by fiscal stabilisation (be it automatic or discretionary), acting at the country level – the latter provided it does not work against the functioning of markets or conflict with the requirements of the SGP-friendly medium-term fiscal frameworks adopted at the national level can be supportive in this regard. Such frameworks should ideally encompass well-designed expenditure rules, which would allow the automatic fiscal stabilisers to operate within the limits of the SGP while attuning the composition of public expenditure to the structural and cyclical needs of the economy or other political desiderata.

Surveillance should also be **broadened** beyond a sole focus on fiscal issues. It should include an analysis of developments in the determinants of competitiveness and economic adjustment and the transmission of both monetary and fiscal policies. The objective would be to establish an early warning system to prevent the emergence of macroeconomic imbalances and competitiveness problems. This should help to reduce the likelihood of policy conflicts arising

from diverging macroeconomic developments or from national policies that do not take the euro-area dimension of national policies sufficiently into account. The ongoing financial market turmoil, by hampering the smooth flow of funds within the euro area and the EU, increases the risks for the financing of large current account deficits (European Commission 2008d). Although the need for reinforced surveillance applies to existing and future euro-area countries alike, there are macro-financial challenges that are more specific to countries that are lining up for accession to the euro area. These countries are experiencing large capital inflows in a context of high returns. Domestic credit is rapidly increasing (in most countries from a low base) in a low real interest rate environment (both globally and in terms of spreads), with buoyant income expectations and rapidly developing and integrating financial sectors leading to sizeable external imbalances. More emphasis on these macro-financial issues and more regular consultations (at both technical and political level) is therefore necessary to prevent such imbalances to threaten macroeconomic stability.

One opportunity to strengthen the foundations for surveillance of newly acceded EU countries outside the euro area is offered by the ERM II framework, which is both an element of the euro adoption criteria and an instrument to foster nominal convergence in its own right. As an increasing number of these countries are expected to join the mechanism over the coming years, ERM II should become the central platform for comprehensive surveillance, comprising both macro- and microeconomic issues, akin to that proposed for current EMU members. This would provide useful guidance to future euro-area members as they prepare for EMU accession.

The domestic agenda: fostering better functioning markets

As already noted, reforms to improve market functioning, while of interest to all EU countries, is of added significance for the euro area. Better functioning markets are needed in many countries participating in the euro area to boost growth, enhance their capacity to adjust to country-specific economic shocks and

compensate for the loss of the monetary policy instrument. Progress in enhancing competition and integration in product and services markets, including the market for financial services, adequate wage developments, flexibility and security on labour markets have all been recognised, in this and other reports, as particularly important for EMU to function effectively. In addition, social safety nets should be designed so as to leverage the impact of the automatic fiscal stabilisers and adjustment mechanisms which they give rise to, by stimulating workers to adjust to changing economic conditions rather than locking them into inactivity. It is worth noting that these policy measures are either the responsibility of the participating countries (e.g. labour market policies) or relate to policies in which the EU has an important role (e.g. integration of financial markets, network industries etc.). These policy actions already lie at the core of the Lisbon Strategy for Growth and Jobs which covers all EU countries, and thus the necessary coordination framework is already in place, even if there is scope to improve it further.

In spite of the particular value of structural reform to the euro area, however, experience has shown that joining the area has not been a sufficient motivation for participating countries to accelerate the pace of reforms. On the contrary, in some cases, it has led to a slower pace of reforms. The bottleneck has not been disagreement on the objectives and direction of such reforms, but rather major obstacles at the implementation stage. Therefore, it is necessary to consider what steps can be taken to strengthen the incentives for policy makers to implement structural reforms. Indeed, policy makers should look beyond the short-run cost of structural reform and consider the positive effects of structural reform on longer-term economic performance. This would imply the need to: (i) design a structural reform review mechanism to validate the expected effects of reforms on potential growth, prices, financial markets and public finances, building on the analytical work done in the context of the Lisbon Strategy for Growth and Jobs; (ii) use the outcomes of this review mechanism as a basis to co-ordinate structural reform so as to internalise the positive spillover effects of reforms via monetary policy or other channels; (iii) where appropriate, use the

existing provisions in the SGP to take into account, in the annual assessments of Stability and Convergence Programmes, the whole lifespan of reform packages involving a fiscal cost in the short run that is more than offset by fiscal gains at a later stage.

The euro-area economy already benefits from the positive effects of EU financial integration on growth and consumption smoothing effects. But, again, there are reasons why the countries participating in the euro area in particular would wish to accelerate the process of financial integration at the EU level. First, sharing a single currency allows these countries to deepen integration in certain financial markets – for example, money markets, bond markets and wholesale mortgage markets. Accordingly, the efficiency gains from financial integration may be greater within the euro area. Second, integrated financial markets promote a more uniform – and hence effective – transmission of the single monetary policy across the euro area. Third, the euro has emerged as a potential rival to the US dollar as a global currency. However, the potential of the euro in this respect is inevitably constrained by the fact that it remains a currency without the underpinning of a single financial market. In the absence of adequate financial instruments for portfolio investment, the euro area will never rival the US as a location for financial investment

Among the areas where the euro-area members can add impetus to the process of financial integration are the arrangements for market regulation and prudential supervision within the EU. The Lamfalussy framework has been the main vehicle for delivering a coherent and effective regulatory and supervisory framework for the EU. However, it is essential that this framework evolves rapidly so as to keep pace with progress in financial integration. To this end, the euro-area members can help to provide the necessary political commitment to deliver greater regulatory and supervisory convergence in the EU as a whole. Similarly, euro-area members can take a leading role in improving EU arrangements for managing and resolving possible cross-border financial crises, reflecting the importance of safeguarding stability in an integrated financial environment. Of more specific interest to the countries participating in

the euro area are measures to enhance the efficiency of euro-denominated government securities markets. While these markets are significantly integrated, their functioning could be improved, particularly from the supply side. The euro-area government securities market matches the US Treasuries market in terms of size, but is considerably less liquid due to fragmentation in issuance. After ten years, it now seems opportune to consider measures to ensure that the euro-area government securities market functions at full potential.

The external agenda: enhancing the euro area's global role

Given the sheer size of the euro-area economy – matched only by the US economy – and the emergence of the euro as a key international currency, the effects of the euro area's policy decisions and economic developments are felt worldwide – not least since global financial markets are acting as an ever-stronger international transmission channel. EMU, and its stability-oriented economic policy framework, has become a pole of stability for the world economy. At the same time, the growing international status of the euro exposes the euro area to disruptive portfolio shifts between key international currencies. The euro area must rise to these new responsibilities and challenges and play a more active and assertive role in international economic and financial affairs, both in multilateral fora and through its bilateral dialogues with strategic partners. It can only do so effectively if it is able to speak with a single voice, based on a single position. This would strengthen the area's international negotiating power and also reduce the costs of international coordination, both for the euro area and for its key partners. The EU's common external trade policy may provide a role model in this regard.

Speaking with a single voice based on a single position in international fora is an ambitious aim, but it is facilitated by the single monetary and exchange rate policies alongside the existence of coordination frameworks in other policy areas. However, the euro area's external representation remains fragmented and the coordination among euro-area countries in them insufficient. This causes the euro area to punch below its economic weight in the international fora, even if both the

EU and euro area are often seen by other countries as over-represented (in terms of both seats and voting power). The only feasible way for the euro area to align its effective influence with its economic weight is by consolidating its representation. Whilst increasing the euro area's effective voting power, it would also free up sorely needed space for emerging market countries to raise their participation in the international financial architecture. This could usefully be complemented by a selective reinforcement of bilateral macroeconomic dialogues with strategic partners and regions. Obviously these objectives cannot be achieved overnight, and an incremental strategy would seem to be the realistic way forward.

Promoting more effective governance

EMU's system of economic governance has proven fit for purpose overall. The current policy assignment to the institutions and instruments that govern the conduct of economic policy in EMU is sound and consistent with allowing the euro area to tackle the policy challenges highlighted above. Therefore, a radical overhaul is not warranted. Institutions and practices will nevertheless have to evolve with a view to enhancing effectiveness and legitimacy and meeting future challenges. The Treaty provides opportunities to further enhance the role of EMU's system of economic governance.

From the outset the ECOFIN Council has been the forum for economic policy decision making in the EU. In view of the growing overlap between the euro area and the EU, the ECOFIN Council should keep centre stage in EMU's system of economic governance. Its EU-wide coverage should be used to reinforce its capacity, where appropriate also in conjunction with other Council formations. It could also foster a more consistent approach within its own spheres of competence – i.e. macroeconomic policy, financial markets and taxation.

Since the advent of EMU the Eurogroup has been the key platform for policy coordination on issues which relate to the specific responsibilities of Finance Ministers with regard to the single currency. Its informal role has encouraged open and frank debate and over time it has gained visibility and relevance, particularly after it

appointed its first permanent President in January 2005. This has been instrumental in the development of a more coherent agenda and has facilitated dialogue with other institutions and relevant social partners. Given its informal character, the Eurogroup is well placed to continue to play an active role in positive policy coordination, and it would be natural to extend its role to coordinate structural reforms, complementing EU-wide coordination processes. By promoting a macroeconomic perspective to structural reform, the Eurogroup may help frame a balanced response to policy challenges that go beyond the remit of Finance Ministers, with the macroeconomic and fiscal dimensions of structural reforms internalised into its debates. The Eurogroup can thus provide new momentum to reform debates in the Member States as well as in the EU as a whole.

Building on the positive experience to date, further progress towards a more effective functioning of the Eurogroup would be possible and beneficial. However, this also requires that members of the Eurogroup share the responsibilities, goals and challenges stemming from managing a single currency. The participating countries need to show clearer political will and leadership to turn common understanding into concerted policy action, regarding both the internal and external agendas. On the domestic agenda, what is needed is shared ownership of EMU's macroeconomic stability framework so as to effectively shield the ECB from recurrent and misguided demands to compromise its mandate. Better shared responsibility is also necessary to strengthen the euro area's capacity to achieve common positions and thus enable the Eurogroup President to become a fully legitimate partner in the macroeconomic policy dialogue. This would naturally imply that the Eurogroup orientations as expressed by the President become a reference for the strengthened pursuit of the euro area's global agenda. The Eurogroup should also aim at facilitating a process of trust-building between current and future euro-area members. In the years to come the most pertinent challenge will be to ensure a smooth and successful euro-area enlargement, as the number of participating countries, as well as their heterogeneity will continue to increase. The system of governance must rise to this challenge.

1. INTRODUCTION

In its first ten years the policy agenda of EMU has pursued macroeconomic stability via the anchoring of inflation expectations and safeguarding fiscal discipline. This agenda has been supported by EU policies to promote structural reforms in product, labour and financial markets and address divergences in macroeconomic performance across countries. Although progress has been made on all these policy objectives, further progress is needed.

One important finding in Part I of this Report is that a call on macroeconomic policy discipline, and delivery on that goal, does not automatically entail progress with structural reform and market integration, nor does it ensure high quality and sustainable public finances in the longer run, or secure a smooth enlargement and a strong global presence of the euro area. Yet these are necessary conditions for robust growth, flexible adjustment to disturbances and the smooth operation of EMU at large, and should therefore figure more explicitly on its policy agenda. Moreover, as shown in Part II of this Report, a number of broad global trends are changing the nature of these policy objectives and conditions and further heighten the need for co-ordinated policy action at the euro-area level.

There are also strong political rationales for developing appropriate policy responses at the euro-area level to address the emerging challenges:

- From the outset EMU has been thought of as a milestone in the process of integration covering the whole EU. Euro-area enlargement obviously needs to be well managed, but this must be essentially regarded as a transitional issue. Although the transition to a broad membership of the euro area is a phased process, the presumption must be that over the medium term the euro area and the (current) EU will converge. Ultimately, euro-area membership is to extend to all EU countries, barring those with an opt-out should they decide to retain it.
- A well-functioning EMU will pay dividends for the functioning of the EU as a whole. Often the issue of divisiveness between the euro area and other EU Member States is

highlighted. However, from a longer-term perspective the focus on a well-functioning euro area is in the interest of all EU Member States. Reinforcing the governance of EMU would be to the advantage of current and future members of the euro area alike and ultimately for the EU as a whole.

- A well-functioning EMU will foster the EU's global leadership role. It is of crucial importance that EMU establishes a common position on global issues, both in the macroeconomic sphere and in the area of financial supervision and regulation. A proven ability to strengthen its external representation and assume its responsibilities in areas where it already is a global player will have positive spin-offs for other policy areas where the EU wishes to exert a global leadership role beyond purely economic matters, e.g. sustainable development, development aid, trade policy, competition and human rights.

Taking account of the common challenges facing the EU and the rationale for acting at the euro-area level, Part III of the Report proposes a three-pronged agenda:

- Concerning the **domestic policy agenda**, to broaden and deepen the macroeconomic surveillance of EMU and to foster national policies in the pursuit of better functioning markets in EMU (Chapter III.2);
- Concerning the **external policy agenda**, to enhance the euro area's role in global economic governance fora in the context of the rapidly changing global landscape (Chapter III.3);
- To make the **governance** of the euro area more effective (Chapter III.4).

A start has already been made in most areas and hence an evolution, not a revolution, in policy orientations is needed. The assignment of policy responsibility within the EMU framework appears to be adequate and the proposed policy actions are fully in line with both the letter and spirit of the Treaty with respect to economic governance.

2. DOMESTIC AGENDA

2.1. RATIONALES

The experience with the euro-area policy framework has varied across policy areas. Monetary policy has anchored price stability without unduly high interest rates and with long-run inflation expectations steady at close to the ECB's definition of price stability. Fiscal policies have supported macroeconomic stability in EMU. Progress in fiscal consolidation has been impressive over the last years, so that with a deficit of only 0.6% of GDP in 2007 – as compared to an average of 4% in both the 1980s and 1990s – the euro area has achieved one of the best results in decades. Fiscal consolidation, mainly based on public expenditure restraint, has supported macroeconomic stability and procyclicality of fiscal policies, while not fully eradicated, has diminished considerably since the launch of the euro. The abolition of national monetary policy and of the exchange rate instrument was hoped to accelerate growth-friendly structural reforms. But contrary to initial expectations, the pace of structural reforms has been slow and piecemeal. Despite the productivity-boosting impact of the single currency, potential growth has remained low. While employment has soared, productivity growth has slowed down, essentially due to insufficient innovation and human capital formation.

In the future, the global trends highlighted in Part II will make strong calls on macroeconomic management in the euro area. Globalisation, rising food and energy prices and rapidly ageing populations will pose challenges in terms of growth, macroeconomic stability, adjustment capacity, the sustainability of social security systems and the distribution of income and wealth. They will produce policy challenges that are particularly compelling for the euro area, considering its relatively low growth potential, its relatively weaker adjustment capacity, and its exposure to ageing shock.

In principle, the existing policy assignment in EMU is well-suited to address the ongoing change in the typology of shocks, with supply-side shocks (e.g. shocks related to energy, food, climate and technology) and common shocks

(e.g. global financial turbulence) taking precedence over the classical country-specific demand shocks (including policy-driven shocks). On the one hand, monetary policy should be able to deal with common demand shocks at the area wide level. However, to the extent these shocks have asymmetric effects – due to cross country differences in their economic structure and related exposure to external trade and finance – they, along with supply shocks, will have to be met primarily with market responses, assisted by automatic fiscal stabilisers to the extent budgetary positions permit this. Importantly, improved market responses supported by flexicurity-based social models will pay a dividend in the form of stronger growth, smoother intra-area adjustment, and better social outcomes.

While concerns over the disappointing growth performance and the persistent intra-area imbalances are widely shared, policy determination to resolve these issues has been lacking. To some extent, the changes introduced by EMU to the institutional environment may have contributed to this. Prior to EMU, competitiveness was perceived as a policy priority by policy makers and financial markets alike in view of the possibility of (potentially costly) nominal exchange rate realignments. Structural reforms were further motivated by the need to prepare the economy for EMU. Inside the euro area, in contrast, surveillance priorities shifted towards the sustainability of public finances as the cornerstone of a well-functioning monetary union. The attention paid to intra-area inflation differentials, real exchange rates and current accounts declined. Joining the common currency area seems to have weakened the incentives to undertake structural reforms because problems with intra-area competitiveness no longer led to pressure on exchange rates and risk premiums.

This chapter proposes that relevant policy actors, i.e. Commission, Council, Eurogroup, European Parliament, ECB and Member States, promote a domestic euro-area agenda which has three components:

- *Deepening fiscal policy co-ordination and surveillance.* Effective fiscal surveillance

should not stop when a country is not in excessive deficit. Fiscal policy coordination should guide national budgetary behaviour over the cycle in both good and bad times. Surveillance should be used to secure the sustainability of public finances for the benefit of future generations and be geared to moving public expenditure and taxation in a growth-friendly direction. Effective medium-term fiscal frameworks at national level would allow the automatic fiscal stabilisers to operate within the limits of the SGP while attuning the composition of public expenditure to the structural and cyclical needs of the economy.

- *Broadening macroeconomic surveillance in EMU beyond fiscal policy.* Even though a comprehensive framework has been developed and agreed in EMU for fiscal surveillance, countries may comply with the provisions of the SGP and still build up internal or external imbalances such as persistently higher inflation and/or increasing current account deficits. There is a clear need to extend surveillance to address macroeconomic divergences, in particular with the aim of assessing whether the observed divergences are benign – i.e. reflecting catching up or part of normal adjustment – or harmful – i.e. reflecting inefficient adjustment and, in this case helping the affected countries to devise effective responses before divergences become entrenched.
- *Better integrating structural reform needs in the overall policy co-ordination approach within EMU.* In the absence of nominal adjustment via internal exchange rates it is essential that other channels of shock absorption are enhanced. Therefore, stepping up reforms – of course welcome in the EU as a whole – is an absolute must for the euro area. In view of the importance of structural reform as a source of growth and flexible adjustment, the incentives for members to pursue it need to be strengthened. Three avenues should be pursued: a closer monitoring of the euro-area recommendations made within the Lisbon Strategy, enhancing the political incentives built into EMU's

coordination framework, and devising the right sequencing of reforms.

Countries wishing to join the euro area face similar growth and adjustment challenges, even if their timing and scale may be somewhat different. Embarking on these reforms prior to euro adoption is essential to ensure that they fully benefit from joining the euro.

The proposed policy actions as part of the domestic agenda of the euro area are essential pre-requisites for the successful completion of the external agenda. While a growing international role presents opportunities for the euro area, it also comes with challenges and responsibilities that can only be effectively addressed if progress is made with the domestic agenda.

2.2. DEEPENING BUDGETARY SURVEILLANCE

As shown in Chapters I.5 and II.5, the euro area's fiscal surveillance system has improved fiscal discipline, but not yet secured long-run sustainability. On a positive note, fiscal policy behaviour after the start of EMU compares favourably with the pre-EMU period seen in a somewhat longer perspective. Overall, the EMU fiscal framework has led to the achievement of the best budgetary positions since 1973. However, it has proven burdensome to coordinate Member States' efforts during such adjustment, in particular in the early years of EMU, and it is not clear whether all Member States to uphold the consolidation drive. As regards the cyclical properties of fiscal policy, two observations are notable. First, excessive deficits in some Member States can be traced back to fiscal profligacy in the cyclical upswing, which is not yet fully eradicated. Second, the SGP provisions still do not provide clear incentives for Member States to achieve prudent positions of close to balance or in surplus, which in turn entails the risk of fiscal tightness in a slowdown if Member States have not built up enough buffers in good times.

2.2.1. Strengthening the preventive arm of the Stability and Growth Pact

Deepening budgetary surveillance should therefore cover the continuously rigorous application of the corrective arm of the SGP and an improved preventive arm. Since the SGP was reformed in 2005, the implementation of the corrective arm – which fleshes out the Excessive Deficit Procedure (EDP) outlined in the Treaty and is vital to underpin the single currency – has clearly improved. Since the reform, the procedure has been successfully enforced in all cases where fiscal deficits have exceeded 3% of GDP, and the countries concerned have made genuine efforts to comply, thus reinforcing the rules-based fiscal framework in EMU. As a result, no euro area country featured a deficit in excess of the reference value in 2007.

Effective fiscal surveillance should not stop when a country is not in excessive deficit. Fiscal policy coordination should guide national budgetary behaviour over the cycle in both good and bad times. Surveillance in good times should serve to avoid overheating and prevent public finances from becoming unsustainable due to underlying budgetary deteriorations masked by overly benign growth projections, as was the case in the early 2000s. Surveillance in bad times should help countries that have fiscal leeway to use it wisely or countries facing fiscal constraints to stay on a sustainable consolidation course.

The preventive arm of the Pact focuses mainly on medium-term planning, peer support and pressure and exchanges of best practices. The enforcement mechanisms foreseen by the legal framework are also softer than foreseen by the corrective arm. Unlike the excessive deficit procedure of the corrective arm of the SGP, it does not foresee pre-defined and codified corrective actions, but it relies on the promotion and respect of common objectives and requirements in order to create room for cyclical smoothing while improving the long-term sustainability of public finances.

Within the legal framework of the revised SGP and the current Treaty provisions, three tools appear to be particularly promising to arrive at a stronger preventive arm. They concern, (i) the adoption of medium-term fiscal frameworks,

(ii) common rules of conduct for fiscal policy-making, and (iii) improving the diagnostic accuracy of indicators that capture cyclical positions. A fourth proposal relates to exploring the possibility of the SGP to improve incentives for structural reforms. It is discussed further below in this chapter.

2.2.2. Medium-term fiscal frameworks

Fiscal surveillance should be geared to guiding fiscal behaviour over the cycle and in particular in good times, as a means to address any pro-cyclical bias and to ensure that fiscal policy supports, rather than exacerbates, adjustment processes in EMU. In view of the pending challenge arising from ageing populations, it is clear that a major task still resides in making the preventive arm of the Pact as effective as possible. Surveillance should be used to secure the sustainability of public finances for the benefit of future generations.

The adoption of medium-term fiscal frameworks at national level could go a long way towards achieving stable and sustainable public finances. To be effective such frameworks should encompass well-designed expenditure rules, which would allow the automatic fiscal stabilisers to operate within the limits of the SGP while attuning the composition of public expenditure to the structural and cyclical needs of the economy.

An analysis of the track record of Member States in achieving the targets presented in their stability programmes shows that in two thirds of the cases the actual improvement falls short of plans. The gap between plans and outcomes typically increases in the outer years of the programme and the main reasons for missing the budgetary targets are to be found on the expenditure side. In the clear majority of cases (75%), government expenditure grew faster than planned. These results are a clear indication that current budgetary arrangements in the Member States lack key elements to successfully implement medium-term targets. One such element would be the consideration of budgetary developments over a multi-annual period through multi-annual budgetary frameworks, institutional devices allowing fiscal authorities to extend the horizon of fiscal policy making beyond the

annual budgetary calendar. Available evidence confirms that, controlling for other factors, reliance on developed medium-term budgetary framework can significantly contribute to limit the size of the discrepancy between plans and outcomes. (European Commission 2007h).

Surveillance should be geared also to moving public expenditure and taxation in a growth-friendly direction, by delivering better value for public money, with fewer distortions, a stronger focus on human capital and infrastructure and heightened incentives for job and business creation. Reforms of social expenditure programmes that aim to offer better income protection while strengthening work incentives (the so-called flexicurity) would also greatly help to enhance the sustainability and quality of public finances while ensuring that budgets have better macroeconomic stabilisation properties.

2.2.3. Set of common principles

The SGP has been criticised as being "long on rules and short on principles". The idea would be to establish a number of principles which guide fiscal policy-making in EMU so as to avoid an excessive activism which is particularly harmful in monetary union. Common rules of conduct for fiscal policy-making could help avoid free-rider behaviour, in particular to better address economic shocks with budgetary implications.

The reform of the SGP has gone some way towards meeting this criticism by articulating the sustainability rationale for a medium-term fiscal strategy going beyond the respect of the 3% of GDP Treaty threshold and by spelling out the broad principles of conduct of fiscal policy in relation to cyclical conditions.

A further development of the principles embodied in the Treaty and the SGP could be envisaged. This could take the form of a code of conduct for fiscal policy. Elements of this code of conduct could include:

- *the principle of and the rationale for more active response of fiscal policy in the event of supply shocks.* This is the case where the 'activist bias' strengthened by monetary union is liable to being most counterproductive. The potential for conflict with monetary policy

would be exacerbated in the case of expansionary reactions of fiscal policies to an adverse supply shock, since this would amount to seeking to stabilise output around the 'wrong' equilibrium level. Fiscal relaxation in the wake of an oil shock is an example;

- *rules of conduct for the management of shocks to public finances along their medium-term path.* They could cover, in particular, how budgetary policy is expected to react to 'tax windfalls' (positive or negative).⁽²³³⁾ Both the volatility of aggregate tax elasticities and the ratchet-up tendency of expenditure would suggest a principle of accommodation of tax windfalls coupled with adherence to nominal medium-term expenditure path. Besides being in line with standard income-smoothing prescriptions, this principle would also reflect ample evidence on the conditions for successful fiscal consolidations, which point to the key role of expenditure control;
- *the principle of and modalities for a common evaluation of the implications of national fiscal policies for the euro area as a whole.* Currently, stability programmes are examined on a purely country-by-country basis and with a strict focus on budgetary sustainability. Thus, they do not allow assessing the economic policy spillovers that EMU is supposed to intensify. Setting up a joint analysis of the implications of national fiscal plans for the euro area as a whole could lead to a systematic monitoring of the cross-border consequences of national fiscal policies. This could involve a check on the cross-country consistency of the macroeconomic scenarios, particularly concerning trade and competitiveness developments.⁽²³⁴⁾ The assessment of spill over would need to be based on macro-

⁽²³³⁾ In the past, revenue windfalls led to excessive activism on the side of fiscal policy makers and affected the stabilisation function of fiscal policy.

⁽²³⁴⁾ The programmes are expected to be based on common external assumptions provided by the Commission, e.g. on world trade, EU growth, oil prices. In practice this is not always the case and, more importantly, this leaves still ample room for inconsistencies in the projected developments in intra-euro trade and competitiveness.

econometric simulations of the impact of the fiscal policy changes foreseen by the programmes, for example against a no-policy-change baseline⁽²³⁵⁾ and other alternative adjustment scenarios.

- *an analytical framework for assessing the budgetary implications of the costs of structural reforms* that may justify deviations from the medium-term objective. This issue is further discussed below as a proposal to strengthen the incentives for structural reforms.
- *The definition of the scope and modalities for considering which and when measures other than of fiscal nature could be useful to avoid the emergence of significant macroeconomic imbalances or to correct them.* For example, the resolution of financial market imbalances or of deteriorating competitiveness may require policy measures directly targeted at the area involved, with only a limited role to play by fiscal policy. As discussed below as part of the broadening of surveillance, this would be particularly important for countries that, while formally respecting the Treaty criteria, are subject to macro-financial risks.

Objective: Further development of the Treaty and SGP's fiscal framework in the form of a set of common principles for fiscal behaviour.

2.2.4. Improving the diagnostic accuracy of cyclical budgetary indicators

Past experience indicates that pro-cyclical fiscal policy was to some extent due to measurement problems.⁽²³⁶⁾ This hampered progress towards sustainable fiscal positions in the following ways: via an erroneous assessment of cyclical conditions, a misinterpretation of revenue

windfalls, and underestimation of real expenditure developments. A better understanding of the short-term fluctuations is a pre-requisite for a more accurate assessment of the underlying budgetary position. Thus, a better assessment of cyclical conditions in real time and a better track of short-term changes in elasticities or windfall gains in government tax revenues and more stringent principles on the definition of macroeconomic assumptions could yield a marked improvement in the tool-kit of fiscal surveillance. Two concrete proposals for arriving at more cautious indicators, which would help avoid negative surprises in bad times, can be put forward:

- *The assessment of cyclical conditions in real time could be improved by coupling output gap estimates with complementary indicators.*⁽²³⁷⁾ The number of potential candidates is relatively large. In principle, all indicators that are expected to reflect or mimic cyclical developments can be of use, for instance the rate of inflation, changes in the rate of unemployment, interest rates, real exchange rates and/or the current account balance. The basic advantage would be that unlike real-time output gap estimates, which converge to the 'true' value only after a number of years, complementary real-time indicators are generally less prone to revisions. To the extent that these complementary indicators were correlated with the 'true' output gap measured ex post, they may improve upon the real-time assessment of the cycle.
- *A more accurate assessment of tax revenues for identifying revenue windfalls.* The commonly agreed method for the calculation of the cyclically-adjusted balances used in the EU fiscal surveillance framework assumes a constant relationship between tax revenues and economic activity.⁽²³⁸⁾ This approach

⁽²³⁵⁾ For example, the Commission forecasts provide a natural benchmark.

⁽²³⁶⁾ The weakness of forecasts in detecting turning points are widely acknowledged and evidence exists that Member States tend to base their budgets on too optimistic forecasts. For applications to the EU, see for example Melander *et al.* (2007) on the first and Jonung and Larch (2004) on the second point.

⁽²³⁷⁾ This would take also into account the provisions of the Code of conduct according to which "the identification of periods of economic 'good' times should be made after an overall economic assessment".

⁽²³⁸⁾ This method is motivated by the forward-looking nature of the budgetary surveillance exercise: The 'best' predictor for tax elasticities in future years is the average of the past.

can have unwelcome implications for fiscal policy analysis in the event of significant autonomous increases in tax revenues as they may be assessed to be structural and seduce fiscal policy makers into increasing expenditure or reducing the tax burden. From a conceptual point of view, there is a relatively good understanding of why the link between tax revenues and the aggregate level of economic activity is not stable over time. The main reasons for short-term variations in tax elasticities are either linked to the composition of GDP growth or swings in asset prices.⁽²³⁹⁾ For instance, consumption-driven growth tends to yield higher tax revenues than export-led growth. Asset price booms may boost tax revenues through wealth effects.

Objective: More systematic and accurate assessment of cyclical positions in real time; better assessment of cyclical variations in tax proceeds with a view to strengthening the preventive arm of the SGP.

2.3. BROADENING MACROECONOMIC SURVEILLANCE

While monetary policy will continue to secure price stability, and deeper budgetary surveillance will aim at improving sustainability and better quality of public finances, there is a clear need to extend surveillance to address macroeconomic divergences. Spillover effects arising from strong interdependence of countries – particularly those sharing a single currency – are one of the main grounds for macroeconomic coordination and surveillance, the case for which becomes stronger as economies become progressively more integrated. Therefore, there is a need to assess whether the observed divergences are benign – i.e. reflecting catching up or part of normal adjustment – or harmful – i.e. reflecting inefficient adjustment and, in this case help the affected countries to devise early responses before divergences become entrenched.

⁽²³⁹⁾See Girouard and Price (2004) and Morris and Schuknecht (2006), Deruennes and Larch (2007).

2.3.1. The EMU-specific dimension

Multilateral surveillance is applied to all EU Member States. In view of the common currency, and therewith the impossibility to correct even very large macroeconomic imbalances by means of monetary or exchange rate policy, effective economic surveillance has additional importance for euro-area Member States.

Although the abolition of internal bilateral exchange rate variation means that competitiveness problems are less pressing in the sense of requiring immediate policy action, they nevertheless weigh on economic performance. Chapter II.4 uncovered that market driven adjustment to these imbalances, which occurs mainly through the competitiveness channel, has taken place at a slow pace. Member States may engage in discretionary policy measures to unwind these imbalances or cushion their consequences. The possible unwinding of such imbalances could significantly impact on the fiscal position or on the overall economy of the country and hence become a concern for the euro area as a whole. In dependence on the policy actions taken to tackle imbalances, other Member States may see their competitiveness in the euro area eroded.

The motivation for a more in-depth surveillance stems from the shared concern that Member States avoid overheating or pronounced and long-lasting adjustment in competitiveness, as this produces spill-over effects via monetary policy. As price stability for the area as a whole is tantamount to maintaining its output close to potential, lasting departures from potential in a subset of countries would have to entail enduring capacity underutilisation in the rest of the area. Moreover, country-specific adjustment patterns need to remain consistent with a sound macroeconomic policy stance in the euro area as a whole, thereby not overstressing the capacity of monetary policy to maintain price stability and of fiscal policy to ensure sustainable public budgets.

A further challenge for macroeconomic surveillance in EMU stems from the role of financial markets in influencing the incentives for pursuing stability-oriented fiscal policy and

promoting structural reform. The benefits of financial integration in stimulating economic growth and facilitating the absorption of shocks within EMU are accompanied by specific downside risks. In particular, the combination of weaker financial-market discipline in the absence of exchange-rate risk and increased access to international capital through market integration provides greater scope for participating Member States to accumulate internal and external imbalances, which may prove unsustainable over time.

An additional relevant aspect is the envisaged increase in heterogeneity of economic structures within the euro area. While specialisation allows for further welfare gains through trade, the entry of small, heavily specialised economies may increase the exposure to sectoral shocks. Most new entrants in EMU will be catch-up countries of which a number is likely to feature large current account deficits, which further increases the importance of a continuous monitoring of developments in the determinants of competitiveness and economic adjustment and the transmission of both monetary and fiscal policies.

Due to sharing a single currency, all Member States are interested in avoiding that any partner suffers either from overheating or from pronounced and long-lasting adjustment in competitiveness. They also have a common concern that Member States do not address competitiveness problems by measures that involve "beggar-thy-neighbour" policies or a backlash against EU common policies, or open markets in general. EMU's legitimacy and acceptance of the limited set of policy tools at hand in monetary union could be undermined by a presently weak economic performance in individual Member States, in particular if policy makers are tempted to use EMU as scapegoat for home-made policy failures.

Objective: more rapid and systematic signalling of internal and external imbalances, along with fiscal imbalances, among countries participating in the euro area and candidates to euro area.

2.3.2. Building on the existing architecture

The key objective of the EU's macroeconomic coordination framework is to ensure that the economic policies carried out at the EU level and the national levels yield an overall coherent policy stance and whenever possible exploit synergies. For this reason, the Treaty stipulates that "Member States shall regard their economic policies as a matter of common concern" and "shall coordinate them within the Council" (Article 99). Economic policies are coordinated through two instruments mentioned in the Treaty. The first is the adoption of "broad guidelines of the economic policies and of the Community", which are now adopted within the set of Integrated Guidelines as cornerstones of the Strategy for Growth and Jobs. The second concerns the monitoring of economic developments in each Member State and the EU on the basis of reports by the European Commission. The former provides a framework for ex ante discussion of national policy measures from a euro-area perspective while the latter allows ex post assessment.

The broader surveillance could build on the existing architecture used for budgetary surveillance. Therein, macroeconomic coordination focuses on the stability and convergence programmes, which present the Member States' budgetary strategy, containing *inter alia* the country's medium-term budgetary objective, underlying economic assumptions and a description and evaluation of policy measures how the programme objective will be accomplished. The ECOFIN is assessing in progressively more depth economic and budgetary developments in all EU countries during the annual cycle through the evaluation of these programmes. In this context, the Eurogroup is assessing the Stability Programmes of the euro-area Member States, using its informal character to discuss more in-depth the programmes' content and their economic consequences, also focusing on possible macroeconomic imbalances. The conclusions of the Eurogroup discussions feed the formal consultation and surveillance process in the ECOFIN.

On the basis of Commission reports, the Eurogroup could exchange views on policy

guidelines relevant for the functioning of EMU and monitor Member States' compliance. As regards fiscal policy, this already exists in the framework of an annual mid-term budgetary review, which takes place in spring each year, ahead of national budgetary procedures. In this mid-term budgetary review, the Eurogroup assesses national budgetary developments and their implications for the euro area as a whole in a horizontal perspective. A similar mechanism also exists for structural policies. As part of the Integrated Guidelines, the Eurogroup has agreed on policy guidelines and recommendations that apply specifically to the euro-area Member States. The assessment of their implementation has become a relevant part of the policy co-ordination process around the Integrated Guidelines, involving a report by the Commission, informal discussions by the Eurogroup and formal adoption by ECOFIN.

As Member States will remain key players, mechanisms need to be developed so that they take better account of the area-wide nature of policy challenges, cross-border spill-over effects of policy responses and the benefits of common approaches. The objective is therefore to reinforce the tool of peer review to encourage Member States undertaking adequate measures to address competitiveness problems. Monitoring at the euro area level should increase the attention of Ministers of Finance to the relevance of the issues from a euro-area perspective. It may also prompt domestic discussions and foster timely and effective policy action at the Member State level.

Although no major overhaul in the existing policy procedures in EMU is needed, a number of procedural innovations may nevertheless contribute to improving the effectiveness of economic coordination. In terms of practical policy implications, the deepening of the economic surveillance framework would evolve in three stages:

- deepening the common understanding on key economic concepts and the role which policies play in this process;
- developing diagnostic tools and indicators that the effectively monitor and assess

relevant developments in time to support meaningful policy exchanges;

- devising policy guidelines;
- establishing a framework for monitoring policy measures including pre-exchange of information.

Over time, a sophisticated analytical framework has been developed along these lines for fiscal policy. A positive experience of the reformed SGP was that the existence of a code of conduct for budgetary policies has shown to have a significant impact on how policies are run.⁽²⁴⁰⁾ Learning from this experience, codes of conduct could be developed for other areas, building on the remit of Article 99 and eventually leading to further secondary legislation. Such codes of conduct are a common understanding of one issue and on the best ways to address it. They may include the definition of the issue, clarify procedures and provide political guidance on how to react.

Economic policy making in the euro area is still centred on the functioning of national economies. A better integration of EU processes with the national processes would be a useful move towards the governing a large and much more closed economy. Concerning the timing of budgetary processes, the idea of an EU semester followed by a national semester has been put forward. While the proposal was premature when first presented first in 2004, progress along these lines has been made since then with the discussions about the medium-term budgetary review. Similar planning processes could be envisaged for other areas, possibly building on the policy intentions announced in the Lisbon National Reform Programmes, and even more formally than for budgetary procedures in order to arrive at a better intertwining between national and EU policies.

While it is proposed to enhance surveillance-type co-ordination, this line could evolve into common understandings on appropriate policy responses to country-specific shocks (see the

⁽²⁴⁰⁾ This encompasses the reformed SGP in itself, and the more detailed Code of Conduct on its implementation.

proposal on the broad principles of the conduct of fiscal policies above). In the longer term, the involved policy makers would be expected to find agreement, for example in the form of a code of conduct, on the procedures for issuing recommendations to euro-area Members in this area and on expected actions by Member States in response to recommendations.

By focusing on broad economic developments and assessing economic challenges, an integrated coordination framework has the potential to identify suitable policy responses in a more forward-looking manner. In addition to guiding policy design at the national level, this system could help to develop strategies for promoting a consistent handling of key policy decisions over the next years at EU level. Thus, economic surveillance in the euro area may present the starting point for initiating policy discussions, for example first of informal character in the Eurogroup and later more formally in ECOFIN of issues that influence economic performance in monetary union, thereby contributing to improved policy planning in the EU.

2.3.3. Broadening the coverage of macroeconomic surveillance towards competitiveness and macro-financial risks

The broadening of surveillance aims at better integrating the surveillance of fiscal and other macro issues. Broadening the existing surveillance processes for the euro-area Member States aims at establishing an effective early-warning system of economic trends at the Member State level that may impinge on fiscal, financial and competitiveness developments. For fiscal and financial surveillance a comprehensive framework is already in place. While the importance of fiscal discipline for a sound macroeconomic policy mix was well justified in the early phase of EMU and will continue to play a key role, the emergence of persistent inflation rate differentials, differences in perceived real interest rates and widening current account imbalances (see Chapter I.4) suggest that further aspects of policy conduct require more attention in policy debates than devoted to in the last years.

In order to cater for aspects beyond the sustainability of public finances, it would be warranted to widen the focus of macroeconomic surveillance to internal and external imbalances at the Member State level. The intention would be to establish a regular monitoring of intra-area real exchange rate developments, their determinants and consequences, including factors that determine the speed of adjustment. Rather than focusing only on fiscal parameters, the broader framework could also encompass the analysis of developments in the determinants of competitiveness and economic adjustment, housing and the impact of the quicker reallocation of capital on the transmission of both monetary and fiscal policies as well as on financial stability.

The broadening of the subject of surveillance to competitiveness developments aims at partially restoring the prominence played by this issue in policy discussions prior to the introduction of EMU. It is not that a surveillance of competitiveness developments and other aspects of macroeconomic stability has been absent since the launch of EMU. On the basis of reports by the Commission, discussions on exchange rates, inflation, competitiveness, growth differences and current account developments have been recurrent in the Eurogroup. While these debates benefited from the informal character of the Eurogroup, their main consequence was limited to the creation of awareness and consensus on key challenges. They hardly entered into the formulation of policy guidelines. Compared to fiscal surveillance, little follow up was given to these issues when economic policy guidelines were discussed, i.e. when economic surveillance assumed a more formal legal nature. The actual outcome in terms of persistent inflation differentials and wide current account imbalances in some Member States suggest that surveillance at the EU level has not translated into determined policy action at national level.

There are advantages if the surveillance of competitiveness and budgetary developments is somehow linked. The reason is that it is typically very difficult to clearly distinguish whether competitiveness problems arise from structural shortcomings or reflect the cyclical situation of the economy. Fiscal tightening can be used to slow down a real appreciation caused by

inflationary pressure, thereby reducing also the external imbalance. However, if overheating comes from external demand, rather than internal demand, fiscal stabilisation may not be required. In the case of protracted adjustment dynamics, there can be effects on budget balances which could go beyond normal cyclical conditions, thus requiring a greater discretionary fiscal effort either to stick to the medium-term objective or to reach it. Discretionary fiscal tightening coupled with the working of automatic stabilisers may therefore be required especially in cases of an economic boom originating from low real interest rates. But in many situations, also other policies play an important role in handling stabilisation. These may be credit and wage policies to contain excess demand or prudential policies to limit the risk of financial sector imbalances building up. To the extent that structural shortcomings lay behind the stabilisation challenge, for example by feeding a real exchange rate appreciation via either a persistent inflation differential or low productivity growth, the instruments should address undue developments at the sectoral or microeconomic level.

A broader coverage in macroeconomic surveillance would encompass the financial sector also. Monitoring developments and trends in the financial sector, e.g. growth in bank credit, the evolution in asset prices, can provide important information on the possible build-up of macroeconomic imbalances and/or incipient threats to financial stability. Accordingly, the rationale for an early warning system equally applies to the financial-sector aspects of the economy.

Objective: consensus on an operational approach to surveillance of competitiveness and financial sector trends, with a view to define guidelines and ensure their monitoring.

The prospect of enlargement of the euro area will also make an increasing call on broad surveillance of candidate euro area countries. Those among them that have entered the ERM2 framework should become subject to more intensive surveillance. The unwinding of global current account imbalances and concerns over

housing and mortgage markets have reiterated the importance of monitoring macro-financial stability risk. In particular the Central and Eastern European Member States have experienced large capital inflows in an environment of high returns. Domestic credit has been rapidly increasing (from a low base) in an environment of low interest rates (both globally and in terms of spreads), buoyant income expectations and rapidly developing and integrating financial sectors. The corollary of these trends has been the build-up of sizeable external imbalances as well as, in some cases, overheating pressure leading to high inflation. These developments raise issues of both vulnerability and adjustment. Directing resources to their most effective use (through well-functioning labour and product markets and a supportive business environment) and gearing macroeconomic policy (notably fiscal) at containing demand pressures is key in this context.

These elements are in principle reflected in the context of National Reform Programmes and Convergence Programmes, which have tended to put more emphasis on the broader policy setting in recent years.⁽²⁴¹⁾ Looking ahead, it might be worth discussing whether the existing procedures provide a sufficient base to address the macro financial challenges facing these Member States (or other Member States, potentially also in the euro area). While the introduction of new procedures should be approached with caution, strengthening this dimension in existing procedures and foreseeing more regular consultations among Member States on macro financial issues and challenges (at both technical and political level) may be warranted.

⁽²⁴¹⁾ As from their EU accession, the newly acceded Member States have been fully participating in the policy coordination and surveillance mechanisms under the Treaty. This concerns notably economic policy coordination under Article 99 (including related to the Lisbon strategy) and fiscal surveillance under Article 104 and the SGP (with the exception of the sanctions mechanism). They are adopting Convergence Programmes and National Reform Programmes, which help to galvanise political commitments to sound fiscal policies and structural reforms. They are also fully involved in the consultation mechanisms on financial stability and supervisory matters (Financial Services Committee, Financial Stability Table etc.).

Objective: better address macro-financial challenges of EMU candidate member states through more comprehensive surveillance and regular consultations.

A specific situation arises with respect to the Exchange Rate Mechanism II (ERM II). ERM II reduces monetary autonomy, and hence requires closer coordination and surveillance of the economies involved. The reinforced coordination process would therefore be particularly useful for Member States in the convergence process. Stronger surveillance would contribute to the continued smooth functioning of the ERM II mechanism itself and, more broadly, help prepare the ground for successful further euro area enlargement. The aim of such enhanced monitoring and dialogue would not be to add new formal procedures, or to detract from existing instruments of surveillance and policy co-ordination. Rather, it should bring together various policy strands that are dealt with elsewhere (including fiscal, structural and prudential elements) with a view to ensuring that the overall thrust of members' economic policies supports the smooth functioning of ERM II.

In terms of governance, this enhanced approach should involve a reinforced link between ERM II-related commitments and Convergence Programmes (as has been started with the 2007 vintage of Programmes) as well as a regular dialogue among ERM II members at technical level (based on input by the Commission). Adding a political dimension to the process might also be considered (e.g. by expanding Eurogroup meetings to ministers from ERM II participants on certain occasions). Strengthening the policy co-ordination dimension of ERM II would be very beneficial to facilitate a process of trust-building between current and future euro-area members. Given that new entries into the mechanism might be expected in the coming years as countries move closer to euro adoption, this issue would become relevant for an even larger number of "pre-in" Member States.

2.3.4. Developing an analytical framework for the monitoring of competitiveness developments

Expanding macroeconomic surveillance towards competitiveness necessitates a number of further decisions to be made. In the short to medium term, it will be necessary to develop a common analytical framework and reaching agreement among all relevant actors on adequate economic policy guidelines, relevant statistical data for monitoring actual developments and benchmarks for assessing these, the scope of possible policy actions and policy instruments to strengthen competitiveness and, therewith associated, adjustment capacity in euro-area Member States. Coming to such a consensus requires preparation and in-depth discussions. For example, the creation of timely and accurate statistics is an enduring task. Sometimes, available indicators are difficult to interpret, theoretical concepts demand for clarification and the impact of policies is uncertain.

The broadening of economic surveillance towards external balances requires a consensus on suitable definitions and adequate indicators. This is not easy in the case of competitiveness developments because divergence is not always bad and the distinction between warranted and unwarranted diverging competitiveness positions necessitates a sound understanding of the factors at work. This Report and earlier work by the Commission on adjustment dynamics in the euro area (European Commission 2006b) has intended to raise awareness, thereby preparing the ground for developing a common concern for competitiveness developments among euro-area Member States.

The complexity involved in the interpretation of competitiveness documented in the Annex to this Chapter implies that judgements cannot be easily derived from comparing the development of statistical indicators to well-defined benchmarks. For example, differences in the evolution of prices in the tradable and in the non-tradable sector suggest caution when interpreting the evolution of broadly-based real effective exchange rate measures. Moreover, a careful analysis needs to distinguish between competitiveness developments reflecting a temporary response to an asymmetric shock and

those reflecting a permanent change in trends. These observations point in the direction of referring to a battery of indicators to cover the most important dimensions of competitiveness, including the following factors.

- *Real exchange rate indicators.* Changes in competitiveness in the short run are usually associated with changes in real effective exchange rates. A number of real exchange rate indicators exist or can be constructed in dependence of the following factors: (i) sectoral structures (notably price developments in tradables versus non-tradables); (ii) market destination (e.g., domestic market vs. export markets); (iii) cost structure (e.g. GDP deflators vs. unit labour costs); (iv) competitor group (e.g., intra-area vs. extra-area). While the different real effective exchange rate indicators often point in the same direction, they may yield different signals and this difference is often difficult to interpret. Therefore, it will be useful to complement price-based information by quantity-based information such as export performance, market shares by destination, product, sector, etc.
- *Labour cost indicators.* Differences in unit labour costs developments are a crucial determinant of real effective exchange rates. They can be further decomposed into productivity growth and labour costs. While productivity growth is largely endogenous to macroeconomic developments and indirectly influenced by microeconomic policies over the medium to long term, labour cost developments are potentially subject to policy influences. In most euro-area countries, there is a limited role of governments in influencing the outcome of wage bargaining processes. Public wage agreements, minimum wages, labour taxation, moral suasion and, in countries where they exist, tripartite agreements are possible channels through which governments can have an impact (see Chapter II.4). Moreover, information sharing on actual or perspective wage developments would help preventing that wage policies taking place in Member States are mutually inconsistent from the viewpoint of adjustment objectives.
- *Financial market indicators.* On the one hand, prospering economies tend to attract capital inflows and accumulate foreign debt. The resulting upward pressure on real exchange rates does not necessarily indicate deteriorating competitiveness, but belongs to the normal functioning of economic adjustment processes. On the other hand, financial imbalances often shadow macroeconomic imbalances, especially when associated with credit and house price booms. The experiences of overheating in the past suggest that credit growth and house price developments may have a crucial role in generating boom-bust cycles. Countries adopting the euro over the next years may face a similar positive interest rate shock than some of the founding members. For them, the risk of overheating is a real one. A better understanding of asset market developments will therefore increase in importance in the future.
- *Establishment of benchmarks.* For all the issues listed above, a methodology would need to be set up that includes agreement on relevant indicators to measure actual developments and benchmarks. The choice of benchmarks will require substantial analytical input at technical level. For example, there is no natural equilibrium for exchange rates. However, despite well-known caveats, equilibrium competitiveness analysis may help to assess the role of developments in relative prices in absorbing cyclical divergences versus that of re-equilibrating external imbalances. There will therefore be a need to devote technical work to developing this tool. A second point relates to the fact that standard models to assess equilibrium exchange rates are not fully equipped to deal with the particular situation of the new entrants, which are catch-up countries, featuring large current account deficits (Isard 2007). Finally, there is a need to establish

models that help assess developments in house prices and credit booms.

- *Policies that affect competitiveness positions.* Competitiveness dynamics is not only the outcome of market forces, but depends to a relevant extent on policy decisions. In addition to the common interest to improve available information on intra-area relative price developments, it would therefore be useful to foster information exchange on policies that have a direct bearing on competitiveness.

The central role of economic structures and structural policies for ensuring competitiveness implies that macroeconomic surveillance needs to be accompanied by more effective microeconomic governance. Below, this chapter sets out proposals on how the incentives for structural reforms, most of which will have to be carried out at the national level, can be improved. A better articulation of structural reforms in the macroeconomic surveillance framework would contribute to signalling their added value, which may foster their acceptance in national policy circles.

Within the large set of potentially important structural policies that impact on intra-area competitiveness, taxation has a special role. This is so because consumption tax rates may have a direct impact on relative prices and income taxes on labour costs. Corporate tax rates may take effect on multinational enterprises' location decision. The overall complexity of taxation systems may be a cause of the current rigidity of euro-area economies. Therefore taxation may impact on other countries' competitiveness position for which in the euro area adjustment through nominal exchange rates is no longer possible. Policy coordination with a view to the forthcoming review of VAT rates⁽²⁴²⁾, of the possible shift from direct to indirect taxation or taking account of the needed progress as regards corporate taxation will be important given that changes in these areas will have a direct bearing on intra-area competitiveness positions and therefore are of elevated importance in monetary

union. Equally important for competitiveness are public service tariffs, administrated prices, industry-specific taxes or regulation, which can affect inflation and the speed of the adjustment of the economy.

Given the importance of such areas, but the relative greater competence at the level of Member States than of the euro area or the EU, enhanced policy coordination would rely mainly on Member States' willingness to provide early information on policy intentions and the possible design of policy measures. Member States could benefit from such information exchange in several respects. First, experiences from other Member States that face similar challenges may help design policy measures in an effective way. Second, the efficiency of measures might be improved when Member States, facing similar challenges, act jointly. Third, early information reduces the risk of pursuing policies that improve competitiveness in the initiating Member State, but would erode the competitiveness position of the euro area as a whole, if all Member States would implement this kind of policies.

Objective: develop diagnostic tools and indicators to effectively monitor and assess relevant developments to support policy exchanges; establish a framework for monitoring policy measures *ex ante*.

2.4. INTEGRATING STRUCTURAL REFORMS IN EMU COORDINATION FRAMEWORK

The weight of the growth and adjustment challenge in the euro area contrasts with the absence of strong forms of policy co-ordination in the area of structural reforms. On the one hand, the current prevalence of soft forms of policy co-ordination is basically consistent with past minor cross-country externalities between policy actions in the area of structural reforms. On the other hand, the euro and the emergence of a euro area economy have transformed such externalities and hence the way in which economic policies must be run also in the area of structural reforms. Due to the fixed exchange rates and the higher degree of economic integration, the benefits from reforms are higher in EMU, but the costs of non-reforms also.

⁽²⁴²⁾The minimum VAT rate as well as a number of derogations will end in 2010.

In various places in this Report, it is argued that joining the euro area has not motivated Member States to accelerate the pace of structural reforms. Despite wide agreement on the need for reforms, deeds proceeded slower and less ambitious than desired in euro-area Member States. The consensus accomplished among Member States, Commission and Council on the Lisbon agenda for growth and jobs suggests that the bottleneck has not been disagreement on the objectives and direction of such reforms. By contrast, the re-launch of the Lisbon Strategy in 2005 has increased the ownership of Member States. Since then, Member States have issued National Reform Programmes, outlining their reform strategy and setting reform priorities. Moreover, the adoption of euro-area policy recommendations by the European Council reflects that policy-makers agree on the substance of the specific reform needs for countries in EMU. However, there appear to be major obstacles at the implementation stage. Therefore, it is necessary to consider what steps can be taken to reverse this situation. In particular it is necessary to improve the incentives mechanisms for policy-makers to implement structural reforms. It is also necessary to examine the scope to usefully develop a euro-area dimension and the extent to which the unique characteristics and enhanced role of the Eurogroup can be best used.

2.4.1. Benefits from structural reform in EMU

The task of improving microeconomic conditions is not only a challenge for euro-area Member States, but for countries outside the euro area and the EU alike. While renewed structural reform impetus, building on the Lisbon Strategy for Growth and Jobs, is welcome for all EU Member States, it is of additional significance for euro-area countries for the following reasons.

First, many euro-area countries tend to be significantly exposed to respond to the emerging global challenges. They are endowed with a limited supply of natural resources and the substantial changes in relative prices caused by climate change and tension on natural resource markets are likely to present a stiffer challenge to policy makers in EMU to support economic growth while adhering to the commitment to price stability. Moreover, many of them face

rapidly ageing populations as the post war baby-boom generation retires as of 2010, which will limit labour supply and potential growth. The emerging upward pressure on age-related expenditures is confronted with an already high public indebtedness, which puts pressure on public finance position. Moreover, adjustment to the diffusion of technical progress has been slow in some euro-area Member States, due to growth unfriendly structural policy stances in the past and evidenced by subdued rates of potential GDP growth.

In face of these challenges, the absence of the monetary policy tool and internal nominal intra-area exchange rates, a larger share of adjustment in euro-area countries needs to take place via markets. More flexible relative wages and prices would be supportive to this. However, this report found that nominal rigidities in the euro area have inhibited wage and price adjustment and thereby have reinforced potentially destabilising real interest changes.⁽²⁴³⁾ Slow responses of production factors to changing economic conditions, the so-called real rigidities, have reinforced these nominal rigidities, leading to a sluggish working of the competitiveness channel. The consequence has been a less than optimal resilience to both adverse global shocks and country-specific disturbances.

Finally, the costs of non-reforms are higher in the euro area than in the EU. An important reason is that financial integration, while enhancing the economic performance of the euro area as a whole, tends to deepen structural divergences between the Member States if reforms proceed at different speeds. The consequence could be that rigid economic structures reduce the attractiveness for international capital. The absence of reforms then means that capital will be diverted to less productive activities, for example housing, or to other countries. By contrast, on a positive note, any reform-initiating country gains more from enhanced competitiveness and the attraction of capital in an integrated single currency area than outside. The competitiveness gains will be larger because intra-area exchange rates are fixed, implying that variations in the nominal exchange

⁽²⁴³⁾ See Chapter II.4.

rate cannot offset the gains in competitiveness relative to other euro-area countries. At the same time, capital inflows may be higher in response to reforms, because they are no longer hindered by home bias, the current account constraint or exchange rate risk.

Addressing price stickiness, especially in services, wage inertia, segmented financial retail markets and costs of adjusting production factors have been identified as being particularly relevant for the well-functioning of EMU. Therefore, progress with competition in service markets, financial market integration, adequate wage developments, flexibility and security on labour markets have all been recognised, in this and other reports, as particularly important for euro-area Member States. The adoption of euro-area policy recommendations by the European Council that cover exactly these areas reflects that policy-makers agree on the substance of reform needs in EMU.

Such policy measures, essential for euro area Member States to facilitate smooth adjustment to changing economic conditions, are also those that enhance their growth potential.

The structural policies that determine the potential growth rate of the economy to a large extent overlap with those that improve its adjustment capacity. Reforms that are conducive to adjustment are usually supportive to higher potential growth and vice versa.⁽²⁴⁴⁾ Though there is no need for a separate reform agenda in the euro area within the Lisbon Agenda for Growth and Jobs, both the low rate of potential growth and the higher need to strengthen adjustment capacity in monetary union imply that more efforts and a larger set of policy priorities are needed. The adoption of euro-area recommendations by the Council reflects the agreement of policymakers on the substance of reform needs in EMU. It also demonstrates that the specific euro-area dimension of reforms can

be pursued within the existing co-ordination framework for structural reforms set by the Lisbon agenda. Hence, there is no need to develop extra procedures for the euro area. Against this background, the next section highlights the main areas of reform where the euro area could focus its action.

2.4.2. Structural reform priorities of particular relevance for euro-area Member States

Better functioning labour markets

In view of rapidly ageing population and still high rates of unemployment in some euro-area countries, further labour market reforms that contribute to enhancing labour utilisation are important. Numerous reforms to raise labour utilisation have been undertaken in the past and have paid off. This is evidenced by an impressive structural improvement in the euro area's labour market related to the reforms enacted in the past five to ten years. The structural nature of the improvement is reflected in the introduction of more flexible working arrangements; the reduction of disincentives to work which were previously embedded in tax and benefit systems; a stronger reliance on preventative, and targeted, active labour market policies; the reduction – although moderate – of the tax burden on labour, especially for the low-skilled; and more generally, sustained and widespread wage moderation in many of the euro area's Member States. Progress, however, has been uneven across these policy areas and across countries and thus they should remain at the centre of labour market reform strategies in the decade to come.

Of particular relevance for euro-area Member States are in addition reforms that reduce adjustment costs on labour markets, thereby offsetting the lack of intra-area exchange rate movements. Wage developments are crucial for this, not only because labour costs are a key determinant of inflation in the euro area. Rigid wages interact with price stickiness and affect the ECB's room for manoeuvre for interest rate cuts in a cyclical slowdown. Higher wage flexibility and margins for wage differentiation across industries, occupations and regions and investment in human capital would be

⁽²⁴⁴⁾ Higher growth facilitates adjustment and via the reallocation effect, more efficient adjustment stimulates economic growth. Slow adjustment means that production factors maintain in less efficient uses, that costs of factor reallocation are high and that relative factor prices and purchasing prices send distorted signals, which inhibits economic growth.

instrumental in boosting competitiveness and allowing the smoother reallocation of resources in the event of shocks. The estimates in Chapter II.4 suggest that reforms to employment protection, minimum wages, wage bargaining institutions and unemployment benefit systems may have a considerable impact on the working of the competitiveness channel, which is crucial for adjusting to intra-area differences in a monetary union.

With a view to the higher need for labour market flexibility, euro-area Member States would be expected to significantly benefit from the "flexicurity principles". These combine the policy goal of improving flexibility with that of ensuring income security and have become a promising venue for designing policy strategies. They basically ask Member States to develop an integrated policy approach encompassing contractual arrangements such as employment protection legislation, lifelong learning strategies, active labour market policies and efficient social security systems.⁽²⁴⁵⁾ This intends to reconcile the demand of protection of workers against unemployment and income risks with the need of modern firms to respond quickly to and anticipate swings in consumers' preferences and the challenges created by technological progress and globalisation.⁽²⁴⁶⁾ Flexicurity may help to develop comprehensive rather than partial approaches to reforms of the welfare state. By defining different combinations of flexibility and security, flexicurity principles allows a better comparison and evaluation of the national reform strategies and of the overall coherence between reforms of the social protection systems and of employment policies. Reforms of social expenditure programmes and active labour market policies should aim to offer better income protection while strengthening incentives to work. The design of the tax-benefit system has proven an essential role in providing incentives to participate in the labour market and

facilitate the reallocation of labour resources in the event of shocks. Bolder efforts in these directions would enhance the quality of public finances, ensure that budgets have better macroeconomic stabilisation properties, and increase the needed adjustment capacity of euro-area countries.

Working-time organisation and labour mobility are complementary policy areas of special relevance for adjustment in the euro area. Flexible forms of work organisation can have a profound impact on firms' adjustment capacity. One example would that they allow adjustment in hours worked rather than in persons employed. Firms' internal flexibility can also be conducive to organisational change, which has been identified as a crucial determinant of reaping the benefits from technical change. Moreover, there is a common interest in the euro area to improve regional and occupational mobility, which are crucial factors in the adjustment to local or sectoral shocks.⁽²⁴⁷⁾ The effect of little job mobility is evident in striking differences in rates of unemployment across occupations and regions.

Cross-country mobility of euro-area domestic residents has been low and in view of language barriers and differences in traditions, institutional changes at the EU level such as recognition of professional qualifications, European Qualifications framework, portability of supplementary pensions are not likely to improve international labour mobility dramatically.

Unwarranted obstacles to mobility are linked to the design of labour market institutions and housing markets and a number of policies may impact on occupational and regional mismatch, including more efficient public employment services, training and active labour market policies, more flexible wages and increased wage differentiation.

The most mobile part of the population consists of migrants. The removal of transitional restrictions for workers from new Member States should be rapidly done for countries which are already part of the euro area. Recent initiatives at

⁽²⁴⁵⁾ See European Commission (2006g).

⁽²⁴⁶⁾ Flexibility is not only for employers as well as security is not only in the interest of workers. Workers' demand of flexibility responds to the need for better organisation of the working and private life. Similarly, firms have an incentive to invest in firm-specific skills if they can rely on relationships that allow their investments to be profitable.

⁽²⁴⁷⁾ See Janiak and Wasimers (2008).

the EU level, for example covering the conditions of entry of highly qualified workers and their mobility in the EU, aim at developing a common policy on external migration and may therefore contribute to higher labour mobility in the euro area.

Objective: within a flexicurity approach, foster intra-area adjustment via reforms of tax and benefit systems to facilitate the smooth reallocation of labour resources in the event of shocks. Rapidly remove transitional restrictions on mobility for countries already in the euro area.

Removal of remaining barriers to product market integration

A number of further items have been recognised as specifically important for growth and adjustment in the euro area. Labour and product market regulations are potentially costly in terms of sustaining high unemployment, limiting the role of competitive forces and having adverse effects on productivity and income. Innovation and technology diffusion are an important element of the link between competition and productivity. The Single Market Programme and the preparation for the introduction of the euro led to an increased openness of economies, which has raised the competitive pressure. However, price stickiness, low productivity growth in services and high costs of adjusting factors have inhibited efficient adaptation to changed economic circumstances and the diffusion of technical progress. These factors have also held back the adaptation of technical progress in the euro area. The simulations presented in Box I.4.1 suggest that price rigidity has an important effect on the impact of a productivity shock on GDP, arguing that sticky price responses leads to delayed employment reaction and therewith to a shortfall in demand over the transition period. According to the estimates in Chapter II.4, product market regulation has a significant bearing on the speed with which competitiveness adjust to cyclical forces. Weak productivity performance and price stickiness seems to be concentrated in product market segments that are less exposed to international competition, and likewise more

distant from EU economic integration. Retail trade, financial intermediation and insurance have been identified as crucial sectors. Moreover, regulation in professional services is heterogeneous. All this affects productivity growth across countries in the euro area and feed inflation persistence.

In EMU the flow of factors between the tradable sector, i.e. manufacturing, and the non-tradable sector, i.e. many services, is a crucial parameter for an efficient economic response to changes in competitiveness. Entry conditions and competition in services are important policy triggers in this respect. National regulation and obstacles for cross-border activity in services have been highlighted as potentially important impediments to accomplish low barriers to entry in services and therewith better functioning product markets. The implementation of the Directive on Services is therefore an important step towards a simpler, more transparent and modern regulatory framework. Through the impact of scale economies and higher competition, price stickiness is expected to decline and more efficiency to increase on euro-area services markets. Member States are obliged to transpose the Service Directive by 2009. More speedily, complete and consistent implementation of its provisions might have more added value for economic performance in the euro area. Euro-area countries should therefore be more proactive in implementing the Services Directive.

Whereas labour market measures are predominantly a national responsibility, the EU can play a leading role in policy actions to enhance labour productivity. In particular, the Single Market Programme, competition policy and market opening to previously sheltered sectors such as networks and services are policy directions, featuring prominently on the Lisbon agenda that have a positive impact on both productivity growth and adjustment capacity in EMU. Despite the potential of the single market to deliver higher benefits for the euro-area Member States, some of them have been laggards in the past in the implementation of single market legislation. In particular large euro-area countries seem to face strong national oppositions when it comes to policy measures

that aim at market opening or further economic integration.

Last year's Single Market Review established principles which should guide the future development of product market integration. As part of the Single Market Review, the Commission has proposed to adopt a common methodology to monitor the functioning of key product markets for the euro area. This market-monitoring tool aims at identifying the markets that are the most important for growth and adjustment in the euro area and which present signs of market malfunctioning in a first stage. In a second step, the origins of the identified market malfunctioning and government failures will be investigated and possible policy instruments to be used to remove them identified. Within this context, the euro-area Member States can serve as a pioneering group of countries that would be the first to implement this evidence-based methodology. This would be all the more important given that the euro-area members are the most integrated EU members and as a result have the highest potential for cross border spill-over. As a result, it is important that they have a shared assessment of existing economic problems and that they come to a common understanding of what reform efforts are required to remedy these problems.

Objective: euro area countries to forcefully implement the Services Directive to boost market flexibility and curtail inflation persistence. Implementation of the policy initiatives proposed in the Single Market Review. Market monitoring system to target markets' malfunctioning.

Fostering financial integration

Efficient financial markets have an important role in enhancing economic growth potential and facilitating adjustment to shocks. The interests of the euro area and the EU in promoting financial integration generally coincide. But the potential benefits are even greater for euro-area members, because their markets are denominated in the same currency, which provides the opportunity for deeper integration and can facilitate risk sharing and economic adjustment. In addition, the euro-area Member States have a specific

interest in financial integration from a stability point of view, insofar as the Eurosystem plays a role in safeguarding financial stability within the euro area as a whole and shares responsibilities in this respect with relevant national authorities.

Over and above their economic importance, elaborated in Chapter I.7, well functioning financial markets are conducive to reforms in other areas. By allowing economic agents to bridge short-term income losses and smooth consumption over time, they bring forward the long-term gains of reforms. This may strengthen the constituencies in favour of reforms and hence lower their political costs. The empirical results in Chapter II.4 suggest that this mechanism may indeed be at work since economic reforms are associated with lower political costs in countries with well-developed financial markets, leading to the conclusion that a strong focus on financial integration in the optimal sequencing of reforms may be warranted.

Euro-area Member States enjoy particular economic benefits from financial integration insofar as a single-currency environment presents opportunities for deeper levels of integration in specific markets. For example, euro-area Member States share a very homogenous government securities market, where instruments are close portfolio substitutes and yields are highly convergent. Such possibilities for deeper financial integration can be exploited to amplify the growth dividend for euro-area Member States, to underpin the euro as a global currency, to deliver a more efficient transmission of monetary policy and to facilitate the management of asymmetric shocks via enhanced opportunities risk sharing. For all of these reasons, sustained progress in financial-market integration is of even greater importance for the euro area than for the EU as a whole and participating Member States should take the lead in promoting the wider process of EU financial integration. Despite the progress achieved in financial integration, a number of markets can be identified in which integration needs to be improved accelerated for reasons specific to the functioning of the euro area. In particular, liquidity in the euro-denominated corporate and government securities markets needs to be

enhanced by improvements on the supply side⁽²⁴⁸⁾, while the integration of mortgage markets and other retail markets needs to progress more rapidly so as to improve the transmission of euro-area monetary policy and deliver the benefits of integration more directly to citizens.

Objective: Promote financial integration, particularly in those markets of specific benefit to the euro area, such as the government securities market, mortgage markets and other retail markets.

Another aspect of financial integration where further progress is required relates to the EU regulatory and supervisory framework. A substantial degree of regulatory and supervisory convergence has been achieved via the implementation of the FSAP and the operation of the Lamfalussy committees, but the compliance costs due to inconsistent application of EU legislation and insufficient harmonisation of supervisory practices limits the efficiency gains from financial integration. Given the specific importance of financial integration to the euro

area, participating Member States should take the lead in developing a more convergent EU regulatory and supervisory framework.

Objective: Euro area to take the lead in developing a fully convergent and consistent EU supervisory framework.

Financial integration should not come at the expense of financial stability. The integration of financial markets must be accompanied by improved cross-border arrangements for prudential supervision, crisis management and crisis resolution. In contrast to the accelerating trend in cross-border financial activity in the EU and the euro area, financial-stability arrangements have been relatively static and remain predominantly national-based. The result is inefficiency in the framework for supervision and financial-crisis management, implying the potential for an inadequate response to contagion risks within an integrated financial system. It is essential, therefore, that financial-stability arrangements in the EU keep pace with the changing financial environment and euro-area Member States can again play a leading role in establishing such arrangements.

Objective: Euro area Member States to take the lead in creating EU financial-stability arrangements that keep pace with progress in the integration of EU financial markets and the emergence of pan-EU institutions.

⁽²⁴⁸⁾For example, Chapter I.7 demonstrated that upon close inspection, the euro-area government bond market could be more efficiently integrated. Already in 2000, a group of financial sector experts examined possible approaches to enhance liquidity in the euro-denominated government bond market. At that time, it was considered too soon after the launch of the euro to follow up on this work. However, after nearly ten years of EMU, it now seems opportune to reconsider these and other possible avenues. The original proposals were (1) co-ordination on technical aspects of debt issuance such as the issuance of government bonds with identical coupon and maturity dates, using a common issuance calendar, primary dealership system and a real-time clearing and settlement system. (2) The creation of a joint debt instrument that would be underpinned by guarantees of a "several nature", which would mean that each participant guarantees only its own debt. This could enhance market liquidity, as instruments issued under common title would need to have identical characteristics, e.g. coupons, maturity and rating, without being in conflict with the non-bail out clause, as each tranche remains a distinguishable legal object. (3) The creation of a single euro area debt instrument backed by joint guarantees. This would be a single debt instrument, where each participant would guarantee the totality of the obligations of the joint instrument, thereby making it an indivisible legal object, which could be in conflict with the no-bail clause of the Treaty. (4) Borrowing could be delegated to a EU institution, which borrows for on-lending to Member States.

2.4.3. Strengthening incentives for reform

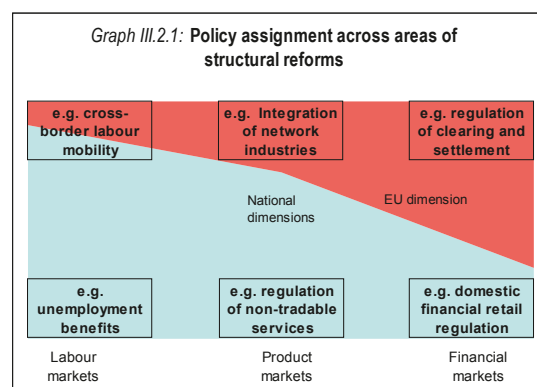
As shown above, the directions of market reforms are familiar to policy makers and their principles have been agreed at EU level through the Lisbon strategy. Although there is no strong case for the euro area pursuing a separate structural reform agenda to that that pursued at EU level, they have an interest in taking the lead in the pursuit of reform in view of their greater reform needs and benefits. While structural reform pays off for all EU Member States, the euro area would benefit from assuming leadership in this regard.

The benefits from a better coordination of structural reforms in the euro area may accrue through different channels.

- *Reforms have economic spillover* to other countries, which may be stronger in monetary union. Such spillover take place through trade flows, terms of trade, FDI, knowledge. Direct cross-border spill over from structural reforms are generally considered to be small. Economic studies tend to find that the main benefits accrue in the country that implements them. However, the simulations in Chapter II.8 show that spillover from, for example, reforms that lead to favourable TFP shocks are considerably higher in a monetary union than in a flexible exchange rate regime. Thus, the initiating country benefits less. The simulations also show that in a monetary union the benefits accruing from reforms for the initiating country are even lower the more rigid its economy.
- *Vertical complementarities between policies make reforms more powerful* when they are pursued in tandem rather than individually. Relevant may also be knock-on effect, i.e. that reform in one area creates momentum for reform elsewhere. There is some empirical evidence that "reform in one policy area sometimes raises the likelihood of subsequent reform in other" (Høj *et al.* 2006). Complementarities between reforms pursued at EU and national level, especially to ensure the smooth functioning of the single market, are a special case.
- *Mutual learning and promotion of best practices are important means to help overcome reform resistance that resides in the uncertainty* attached to the impact of reforms. Particularly when the effects of reforms are hard to grasp for the public, information about the short and long term benefits to be expected from the reform, as well as about the costs of maintaining the status quo is crucial to create the necessary support. Learning from experiences in other countries, and cross-country comparisons expand the information set and facilitate the framing of domestic debates.

- *Peer pressure can help overcome domestic reform resistance* (political economy spillover). International exchange may help improve the credibility of reform strategies through two main channels. First, information about reforms about the effects of reforms is may be perceived as biased, that is suspected to be created in order to influence a predetermined outcome. The origin of information from abroad or its provision through supranational organisations may lessen this bias. Second, case studies on reform events suggest that acknowledging or exploiting external constraints may speed up the revelation of the involved actors' true preferences and therefore act as an efficient way to build commitment to pursue reforms.

The benefits from co-ordinating structural reforms seem to be constrained by the fact that the policy areas in question are either the responsibility of the Member States (e.g. social and labour market institutions) or relate to policies in which the EU has an important role (e.g. financial market integration, network industries etc.). The mix of Member States' and EU's activity differs considerably across market segments, with only little competences at EU level for labour market regulation and much wider scope for financial market integration (see Graph III.2.1).



Differences in responsibilities across market segments and policy areas of course impact on how coordination of structural reforms can take place. On issues where Member States are in the lead, the strengthening of domestic reform promoters' positions will be important. Here it appears that national reform discussions have been dominated by national costs and benefits,

without due consideration given to their euro-area dimension. The dominance of national concerns in structural reform debates means that both reform needs and gains are underweighted. Therefore, rather than focusing on the functioning of national economies alone, policy makers would be well advised to take the euro-area dimension into account when designing structural policies. Highlighting euro-area spillover would bring out the true gains of reforms and may lead to a better informed public debate about national reforms. By contrast, in areas, where action at EU level can be envisaged, support from euro-area Member States, especially in areas that are important for the functioning of EMU, would help accelerate processes and come to more ambitious integration measures. Highlighting the euro-area dimension beyond macroeconomic policies in wider debates would raise the awareness of structural reform needs and contribute to overcome reform resistance. Here, the euro area could act as vanguard of reforms.

Objective: In the event of new national policy measures, achieve a common understanding on their spillover effects on other Members States, on the euro area as a whole and on the single monetary policy and exchange rate.

Improving the role of the Eurogroup in monitoring structural reforms

The Eurogroup is the suitable policy actor for representing the importance of the euro-area dimension of reforms, which have to be carried out at either the national or the EU-level. The main task of the Eurogroup is currently the surveillance of public finances and macroeconomic developments. Over the last years, the Eurogroup has increasingly discussed microeconomic issues, becoming involved in the formulation of Integrated Guidelines, the assessment of progress with the implementation of economic reforms and debated numerous microeconomic topics relevant for a better functioning of EMU. A further development of such dialogue should be envisaged along three dimensions:

- The backbone for the coordination of structural reforms is provided by the recommendations to the euro area as a whole together with the country-specific recommendations made within the Integrated Guidelines of the Lisbon Strategy. The monitoring of the implementation of reforms in reply to the recommendations is done by the Commission and the Council. While the informal discussions in the Eurogroup already play an important role in the preparation of Council debates, a closer monitoring of reforms in the Eurogroup could be organised.
- For reform measures under national responsibility, the Eurogroup could exchange information about reform needs and benefits in a cross-country perspective. By fostering evidence on successful reforms and costs of non-reforms and channelling into the national debates, the Eurogroup would give credibility to domestic reform promoters. Exchange of information on both the optimal sequencing and communication of reforms may help national policy makers to engineer policy strategies more efficiently.
- For Community policies, the Eurogroup could act as a frontrunner, encouraging euro-area Members to be at the fore of debate in both the design and implementation phase. Given its informal character, which encourages open and frank debates, the Eurogroup is well placed to prepare the more committing debates in the ECOFIN and complement other EU-wide coordination processes.

A stronger voice of the Eurogroup in the discussions on the Lisbon Growth and Jobs agenda would have the additional advantage that the macroeconomic and fiscal dimensions of structural reforms can be better internalised into the reform debates. By promoting a macroeconomic perspective, the Eurogroup may help frame a balanced response to policy challenges that are outside the remit of Finance Ministers. The visibility of benefits and costs for the economy as a whole would be strengthened relative to partial interests.

For the Eurogroup to become a vocal supporter of reforms at national and EU level, it will be important that its discussions on structural reforms become more focused with a particular stress on spillovers. The objective of these discussions would be to arrive at common understandings. A more effective monitoring of the implementation of reforms in response to euro-area recommendation would have the character of a common will. An even stronger signal would result from euro-area Ministers' commitment to concrete measures aiming at removing nominal wage and price rigidities. As stressed before, pressing towards a brisk implementation of the Service Directive in the euro-area Member States would be a suitable starting point for common action by the Eurogroup.

The impact of the Eurogroup will also depend on whether its statements are backed up by sound evidence. The move towards stronger evidence-based policies would imply the need to design a structural reform review mechanism to validate the expected effects of reforms on potential growth, prices and public finances. This could build on the analytical work done in the context of the Lisbon Strategy for Growth and Jobs. The outcomes of this review mechanism could serve as a basis to co-ordinate structural reform in an effort to internalise the positive spill-over effects of structural reform.

Objective: Expand the remit of the Eurogroup as an active and vocal supporter of structural reforms.

Exploiting the interdependencies between the fiscal policy framework and structural reforms

EMU has not only raised the need for structural reforms. For some reforms its stability-oriented macroeconomic policy framework also provides some leeway for either obtaining higher benefits from them or reducing their costs. This applies first of all to policy measures that have a favourable impact on price trends and to those that, though fiscally costly in the short run, entail large fiscal gains at later stages.

In the past, a number of structural policies had a significant impact on inflation. The most prominent example is the deregulation of the telecommunication sector, which went along with strongly declining prices in this sector. More indirect has been the impact of various measures that targeted an increase of labour supply, for example of women, and hence contributed to moderate wage developments. In a forward-looking perspective, imperfectly competitive and integrated service markets in the euro area are an important pending issue, since they are the consequence of sticky prices for services. Another significant issue concerns the flexibility on labour markets. Progress in this area would ultimately also improve the response of nominal wages to cyclical slowdowns.

Structural reforms in these areas would contribute to lower inflation, allowing the ECB to run a less restrictive monetary policy stance than otherwise. Since the ECB targets inflation in the euro area, reforms in large Member States or co-ordinated reforms among many Member States have a larger impact on actual inflation and would therefore more likely be awarded with lower interest rates. However, also small Member States would benefit from reforms that reduce inflation. While lower inflation in a small country will have only little impact on euro-area inflation, it will translate into competitiveness gains and possibly help attract inward capital flows for the initiating country. The fixed intra-area exchange rates prevent that upward pressure on the small country's exchange rate offsets the gains in competitiveness.

The nexus between structural reform and public finances has been explicitly addressed by the revised SGP. There are now specific provisions that allow for the possibility to consider structural reforms when assessing a budgetary deficit, provided the reform strengthens the sustainability of public finances in the longer run. These provisions have been handled in a cautious way. The current operationalisation in the SGP effectively caters only for pension reforms that involve the creation of a funded second-pillar pension scheme coupled with a corresponding reduction of the contributions to

the pay-as-you-go first pillar under the corrective arm of the SGP. ⁽²⁴⁹⁾

By contrast, the framework for the cost-benefit analysis of other structural reforms foreseen by the SGP in the preventive arm has remained underdeveloped. The reform of the Pact does not exclude that indirect budgetary costs and benefits of reforms could be taken into account, provided that the overall effect of any broad package of measures could be shown to be beneficial to long-term sustainability.

While a strictly conditional and formalised approach to decisions on the required budgetary adjustment seems then justified by concerns with moral hazard, the question emerges of building a robust analytical framework for assessing individual reforms. This venue would imply the need to:

- (1) spell out an interpretation of the Stability and Growth Pact that would allow 'reform packages', where additional room for fiscal manoeuvre would be justified to support structural reform that raise potential growth and thereby enhance sustainability; and
- (2) design a structural reform review mechanism, which would allow to validate the expected effects of reforms on public budgets and potential growth, building on the analytical work done in the context of the Lisbon Strategy for Growth and Jobs. Here, it would, for instance, be necessary to agree on a workable definition of relevant budgetary costs of reforms and how they were estimated in order to prevent abuse. ⁽²⁵⁰⁾

Clearly, setting up the review mechanism under step 2 could proceed only if political conclusions

had been reached under step 1, which would allow countries to benefit from it under the Stability and Growth Pact. Step II would need to include a specification of the information requirements to be satisfied to qualify for waivers, in terms of identification and costing of structural reform measures and estimation of the expected economic and budgetary effects.

Whereas the focus in the Lisbon agenda is on the design and effectiveness of reform strategies, i.e. the identification of policy priorities and effective means to address structural shortcomings, the SGP's review mechanism would be limited to evaluating the economic and budgetary consequences of selective individual reform measures. The aim of that mechanism was to allow Member States to include the net effects on the fiscal sustainability of the 'validated' reforms in the assessment of excessive deficit procedure, and to mention them in the Council Opinion. This is for example already applied for pension reforms. Thus, while Member States are not required to quantify expected budgetary consequences of their reform programmes in the Lisbon co-ordination framework, while some voluntarily do so, they would have an incentive to present detailed estimates for specific reform measures for the debate of their budgetary position in the fiscal surveillance framework. The analytical framework being developed for the monitoring of the Lisbon agenda could be used for this purpose.

A way forward in this respect could involve the setting-up of a specific peer-review mechanism of the type already foreseen for the validation of projections of age-related expenditure in connection with the adoption of major pension reforms. A review of national best practices could provide a useful starting point for defining quality requirements on the models and tools used to reckon the budgetary and economic consequences of reforms, benchmarks stating when reform measures are considered sufficiently significant and further aspects of importance including the quantification of no-policy-change scenarios (the cost of no reform). Here, it would be important to ensure consistency between any refinements in the SGP framework and the evolution of the information

⁽²⁴⁹⁾ Systemic pension reforms are treated as 'other relevant factors' in the corrective arm, with consideration given to the net costs of the reform regressively for the initial five years after a Member State has introduced the reform. The SGP provisions imply that when considering whether a budget deficit higher than 3% of GDP is excessive, the net cost of pension reforms should be considered only if the deficit is close to the reference value.

⁽²⁵⁰⁾ The division line between direct budgetary costs, costs to compensate the losers from reforms or costs to secure the support of the electorate may not be straightforward.

requirements in the context of the Lisbon strategy. ⁽²⁵¹⁾

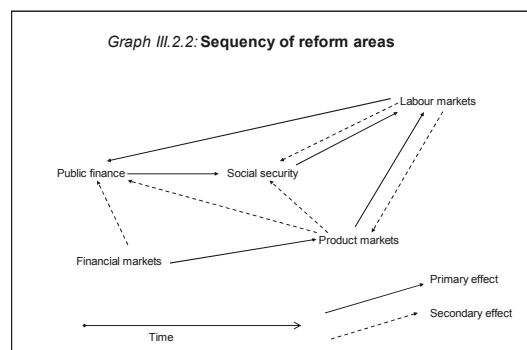
Objective: spell out the provisions in the Stability and Growth Pact on the room for fiscal manoeuvre in case of reform packages that entail transitory fiscal costs but generate higher potential growth. Set up a peer review mechanism to underpin the application of the SGP flexibility clause.

Devising the right sequencing of reforms

There is some empirical evidence that reform in one policy area creates momentum for reform progress elsewhere. When studying progress with reforms in OECD countries, for example, Høj *et al.* (2006) noted that "reform in one policy area sometimes raises the likelihood of subsequent reform in other". While the empirical literature on the sequencing of reforms has remained so far rather general, a number of guidelines can be derived. For example, labour market reforms may be more acceptable if a strong social safety net is available, so that losers from reforms do not face the threat of poverty. Obviously, an efficient social security system benefits from sound public finances, allowing transitory increases in spending to be alimented. At the same time, labour market reforms, when they raise labour utilisation, may be capable of reducing demand for social security and improving public revenues, therewith contributing to financial sustainability of public budgets and social systems.

Arguments on the optimal sequencing of product and labour market reforms run both ways. On the one hand, product market reforms lower prices and increase real wages, which may increase support for labour market reforms. Deregulation in product market reduces rents in the goods markets, which may facilitate moderate wage setting in the labour market simply because there are smaller rents to distribute among wage and capital earners. On the other hand, if product

market reforms increase competition, job turnover may also increase, which raises wage-earners income insecurity and might thus be detrimental to their support for labour market reforms. ⁽²⁵²⁾



Early financial market reforms may pay off because efficient financial markets may facilitate reforms in other areas through various channels (Buti *et al.* 2008). First, efficient financial markets mean fewer credit-constrained agents which are then able to smooth consumption intertemporally when faced with temporary income shortfalls due to reforms elsewhere. Second, if product market reforms ease market-entry or facilitate firm growth, agents' access to finance is a crucial precondition of their chance to use this occasion. Third, efficient financial markets may attract capital from abroad; an effect that may be greater if product and labour markets are liberalised. While the direct benefits of product and labour market reforms sometimes materialise only in the medium-term, when agents involved have adjusted behaviour, the rewards in terms of capital inflows may be rather instantaneous, as financial actors tend to act in anticipation of better future growth prospects.

Inspired by the experience in transition countries, the packaging of reforms and the speed with which reform packages are enacted has received some attention. Packaging promises to reduce the influence of special interest groups because aggregate benefits that accrue to all affected increase relative to costs for each interest group. Moreover, opponents to reforms need to form coalitions beyond their genuine area of interest.

⁽²⁵¹⁾ Currently, some Member States voluntarily indicate the budgetary consequences of several policy measures when they report about their progress with structural reforms.

⁽²⁵²⁾ See, for example, Blanchard and Giavazzi (2001).

The drawback of packaging is that it may overburden capacity to deal with the package in authorities. There is the risk that activity in many dimension leads to badly designed individual proposals, which fall short of expectations or give rise to political opposition.

Concern the choice between a shock and a gradual approach, the literature argued that adjustment costs, credibility and feasibility are main determinants. Adjustment costs are likely to be high if markets are rigid, capital and labour specific (i.e. cannot be easily transferred to other sectors) and entrepreneurs are inflexible. In these cases, a shock approach is more likely to lead to higher unemployment and output losses. Credibility is an important determinant of adjustment costs because agents will align their behaviour to the new conditions quicker if the announced policies are credible. Feasibility is strongly determined by the political system. Strong governments may more easily press ahead with unpopular reforms, but may face problems when a lack of public support threatens the sustainability of the reform process.

Objective: As to the sequencing of reforms, particular emphasise should be placed on improving the functioning of financial markets which help 'bring forward' the benefits of other reforms and hence strengthen the political incentives in implementing them.

APPENDIX 1

Monitoring intra-area competitiveness

The monitoring and assessment of developments in competitiveness at the level of Member States is a complicated task. This annex reconsiders the concept of competitiveness, looks at key indicators and possible benchmarks for competitiveness surveillance.

A large amount of work has been done on international competitiveness of countries, but there is no clear consensus on how to define and how to measure it. On the one hand, criticising thoughts on how to use industrial policy in favour of the home economy, Krugman (1994) once called competitiveness a "dangerous obsession". On the other hand, reports on competitiveness such as those by the World Economic Forum and the IMD (Lausanne) attract a lot of attention and some countries have established competitiveness councils. The variety of views reflects the diversity of definitions of competitiveness and approaches to its measurement.

Without encompassing all activity in this field, four aspects of competitiveness appear to be of great importance. The characteristics of a country as a location of investment (e.g. FDI) can be summarised in its "ability to attract". This concept has a long-term orientation and can therefore not contribute markedly to the discussion of short- to medium-term adjustment dynamics in response to shocks. A country's record in terms of responding to structural changes and economic shocks contains information about its "ability to adjust". In that regard the amount of unutilised resources is sometimes interpreted as an indicator of a countries' ability to adjust. Technological advances and improvements in companies' productivity can be the source of increases of real incomes relative to other countries and thus determine the "ability to earn". In the short- and medium-term the macroeconomic performance of a country is closely related to its achievements in international trade, i.e. its "ability to sell". It is this ability that has been identified as a crucial element of the functioning of the competitiveness channel of intra-euro-area adjustment. The position of a country's producers on international markets depends on their price and cost competitiveness, but also on their non-price competitiveness. There are several overlaps between the above-mentioned abilities and

policy instruments that affect one of the abilities are usually also relevant for the others. The complexity of the concept of competitiveness is also reflected in the variety of measurement approaches.

A widely used type of indicators is real effective exchange rates that aggregate bilateral real exchange rates. As regards the euro-area economies, when calculating such indicators the main choices relate to the weights and the domestic price or cost measures. There is broad consensus that the weights should reflect a country's trade composition. Since the trade composition might change over time using moving weights appear to be advantageous compared to the use of a base year, but this comes at the cost that movement in trade shares and relative costs are not fully separable. Trade weights can be derived from export, import of trade volume data. In order to take into account competition in which two countries may be engaged in a third country ("third market effect") often double export weights have been used.

The choice of the domestic price or cost measures is crucial for the results. In the euro area there is evidence that developments in broad measures of the real exchange rate (such as those based on unit labour costs or GDP deflators) can be persistently different from developments in more narrow measures (such as those based on export prices). There is also some evidence that broad measures are better suited to analyse developments in the trade balance and the current account while real rates based on export prices are more correlated with measures of export performance. This hints on differences between relative prices in tradables and non-tradables. A decomposition of the real exchange rate into both components confirms that changes in the relative price of non-tradables (in terms of tradables) have made a significant contribution to change in intra-area competitive positions as measured by broad indicators since the launch of the euro. There are also some indications that this contribution has increased in recent years. Cross-country differences in the development of the relative prices of non-tradables reflect substantial heterogeneity in productivity differentials between the tradable and non-tradable sectors but also important differences in

pricing behaviours (margins) between the two sectors.

An assessment of the competitiveness position of a country requires a benchmark that allows answering the question as to whether an adjustment of price-cost competitiveness is needed. Such a benchmark informs about equilibrium competitiveness, which a country may overshoot (or undershoot) during the adjustment period after a country-specific shock has hit the economy. In principle the method should allow to distinguish whether the observed competitiveness development reflects a temporary response to an asymmetric shock or a permanent change in its trend. This feature is closely related to the time horizon of the measure of equilibrium competitiveness. The size and the duration of the deviation from equilibrium, i.e. the "mis-alignment", depend on a number of factors that slow changes in competitiveness, e.g. insufficient wage and price flexibility that delay the response of costs and prices to country-specific cyclical patterns. Misalignments increase the change in output that is needed to restore competitiveness. The identification of such deviations could constitute the background for policy actions that aim at enhancing the efficiency of adjustment.

The starting point for equilibrium analysis is the theory of purchasing power parity (PPP) that states in its absolute (relative) version that (changes of) price levels in two countries (expressed in the same currency) should be equal. Very strong assumption, e.g. on weights of goods, have to be met to arrive at PPP. Moreover, the results of empirical analysis suggest not relying on PPP as fluctuations and trend patterns cannot be accounted for by factors that are compatible with PPP (e.g. transaction costs).

A popular approach to the measurement of equilibrium competitiveness, and thus misalignment, are equilibrium real exchange rates (for an overview, Driver and Westaway 2004). With the nominal exchange rate irrevocably fixed, equilibrium real exchange rates turn down to equilibrium cost or price ratios. Deviations from equilibrium (misalignment) play a key role in economic debate as a cause of competitiveness changes,

overheating (overcooling), sectoral misallocation (between tradables and non-tradables) and global imbalances. Despite the importance of equilibrium exchange rates there is no clear view on the method of how to derive estimates.

One of the best-known equilibrium real exchange rates is the Fundamental Real Equilibrium Exchange Rate (FEER). It is the rate that is consistent with internal balance in a given number of countries at the same time, i.e. output is at potential and inflation is stable, and external balance, i.e. the current account balance is at a sustainable level. Its calculation requires an empirical model incorporating the macroeconomic variables are affected by the real exchange rate. An important difference from the PPP is that the ERER will change over time as determinants of internal and external equilibrium change. Should for instance productivity growth in the tradable sector exceed that in the non-tradable sector (Balassa-Samuelson case) the equilibrium rate would depreciate. For the estimation of FEERs the external balance has to be defined. The definition of the current account comprises international trade and returns on net foreign assets. While for the former it can be assumed to depend on domestic and foreign output, the latter depends on the net foreign asset position. What is missing in the FEER approach is information about the nature of the adjustment process, i.e. it can be labelled as a comparative static approach. The advantages this implies for the estimation are partially offset by missing analysis of dynamics, the missing response of real exchange rate to the level of output, and the basically recursive structure in that the current account determines the capital account without any feedback from the latter to the former. One also has to keep in mind the need to specify a current-account model, to estimate potential output and to define a sustainable level of the current account.

The Behavioural Equilibrium Exchange Rate (BEER) is the rate that arises when the effects of macroeconomic variables are at their equilibrium levels or paths. Thereby the concept takes into account the possibility that variables may generate long swings and trend movements in the real rate. The concept modifies the FEER by extending the actual to medium-term equilibrium values of fundamental determinants. Under the

BEER the equilibrium rate is assumed to be determined by the long-run economic fundamentals. In the literature the terms of trade, the relative price of non-tradables to tradables and net foreign assets are seen as such long-run determinants (e.g. Clark and MacDonald 1998). For estimating the BEER the long-run relationship between the prevailing exchange rate and the short- and long-run economic fundamentals needs to be taken into account. In a second step the coefficient estimates of each fundamental variable is used to compute the BEER. This approach therefore involves short-run (cyclical) factors that may affect the medium- to long-run development of the ERER whereas FEER only incorporates exchange rate changes driven by changes in internal and/or external equilibrium (Clark and MacDonald 2000).

The BEER has been criticised for not capturing the convergence process from actual value in the short run to the equilibrium rate (MacDonald 2000). The NATURAL Real EXchange rate (NATREX) approach tries to overcome this shortcoming. The NATREX is the rate that would prevail if speculative and cyclical factors could be removed while unemployment is at its natural rate. Both FEER and BEER are consistent with the economy operating at full capacity and sustainable current account balance. The principal difference between the FEER and the NATREX is that the former assigns a normative value while the latter is only a positive concept. The main difference between the BEER and the NATREX is that the latter takes as its point of departure a specific theoretical dynamic stock-flow model to derive a reduced form where the equilibrium rate depends on relative thrift and relative factor productivity differences.

Changes in competitiveness in the short run are usually associated with changes in real effective exchange rates. But the results obtained by looking at effective exchange rates depend strongly on the indicator under consideration, most namely on the selected deflator (e.g. tradable vs. non-tradable goods). Therefore assessing competitiveness just on the basis of a real effective exchange rate is fraught with difficulties. Such indicators also fail to capture changes in the equilibrium over the medium to long term. This is a feature where approaches to the derivation of benchmarks, most notably equilibrium exchange rates, have the merits of quantifying misalignments. As there is no consensus about the most appropriate method, however, only a broadly-based analysis appears suitable for tackling the large amount of uncertainty surrounding estimated equilibrium exchange rates. All such analysis has to be conducted with a great amount of caution as methods cannot be assumed to produce robust results (Bayoumi et al. 1994, ECB 2002). One has to be aware of the fact that there is neither a single indicator nor a single methods method that produces best results at all junctions.

3. ENHANCING THE GLOBAL ROLE OF THE EURO AREA

3.1. INTRODUCTION

The euro has become the second most important international currency and, although incumbency advantages will continue to favour the dollar for some time, the euro is likely to further increase its international weight. This brings new opportunities but also new risks for the euro area. Moreover, EMU has created one of the largest integrated economic and financial areas in the world. In combination with the rising international status of the euro, this is making economic developments and policies in the euro increasingly relevant for the world economy. Globalisation, particularly in the financial field, is magnifying the implications of these changes.

All this entails new global policy challenges and responsibilities for the euro area. The euro area should recognise these increasing global responsibilities and the costs of uncoordinated external policies. It cannot longer afford to adopt a policy of benign neglect in international macroeconomic and financial affairs. Its interests and global relevance must be appropriately acknowledged, managed and represented internationally. However, to date the external representation of the euro area in the multilateral economic and financial fora has remained fragmented and, despite some progress, the co-ordination of euro-area countries in them is still in its infancy. To be able to speak with a more coherent voice in global fora, the euro area needs to consolidate its external representation.

This chapter elaborates on the new global challenges and responsibilities of the euro area. It then presents the main arguments for consolidating European representation in multilateral institutions, noting that the time is ripe for launching this process of consolidation. Finally, it discusses the need to reinforce its bilateral macroeconomic dialogues with strategic countries and regions as a useful complement to a more pro-active and cohesive participation in multilateral fora.

3.2. NEW GLOBAL CHALLENGES AND RESPONSIBILITIES

3.2.1. Managing the international role of the euro

As discussed in Part II, the internationalisation of the euro brings a number of benefits to the euro area. These benefits, which are likely to increase over time, range from seigniorage revenues and a capacity to place securities among foreign investors at lower interest rates to certain competitive advantages for euro-area exporters and financial institutions. However, there are also potential costs and risks associated with having an international currency, including a more unpredictable money demand and a higher exposure of the euro area's economy and its financial system to abrupt shifts in portfolio preferences due to the increased substitutability between euro assets and dollar assets. Moreover, the transition from the current situation to a new steady state characterised by a wider international role of the euro may not be smooth, complicating for some time the conduct of monetary and exchange rate policies in the euro area. Nonetheless, over the longer term, the advantages of having an international currency are likely to outweigh the costs.

The euro area is de facto today contributing to a market-driven internationalisation of the euro by implementing prudent macroeconomic policies under a strong stability-oriented policy framework, pursuing an agenda of structural reforms, promoting the integration and development of its financial markets, and maintaining sound prudential regulations and a liberal capital account regime.

However, the new policy challenges and responsibilities in the international arena, notably those related to the greater potential for financial upheaval due to sudden changes in market expectations, call for a clear role of the euro area in global economic governance institutions.

The euro's global stature also requires developing the resilience of the euro area's financial system to sudden and large-scale portfolio shifts, both through carefully designed prudential regulations (focusing on the exposure of financial

institutions to exchange rate, interest rates and other market risks) and through a strengthening of financial supervision, liquidity provision and crisis management functions of the Eurosystem. This further underlines the importance of implementing the measures, discussed in Part II, aimed at improving regulatory and supervisory convergence across euro-area countries and reinforcing the arrangements for managing and resolving cross-border financial crises.

3.2.2. EMU as a pole of global stability

EMU's global implications go beyond those directly associated with the euro's rising international use. As illustrated in Part II, by promoting macroeconomic and financial stability inside the euro area, EMU is having positive spillover effects on global stability, as well as more direct stabilisation effects on its neighbourhood. EMU is contributing to global stability, for example, through the firm anchoring of inflation expectations and through the reduction of interest rate and exchange rate volatility, particularly in the European continent. Also, by fostering more integrated and broader financial markets at home, it is facilitating international risk sharing and consumption smoothing. And in the current context of large global current account imbalances, the euro area's relatively balanced external position has helped to reduce the risk of a disorderly correction of such imbalances. It could therefore be argued that the euro is *de facto* acting as a "global public good".

More generally, the relevance of developments in the euro area for the rest of the world economy is increasing. By contributing to increase the co-movement of business cycles within the euro area, EMU is amplifying the impact of euro-area cyclical developments on the rest of the world. In the financial area, by opening new opportunities for the integration and development of euro area financial markets, EMU is providing a platform for a bigger role of European financial institutions in the global financial market place.

This increasing significance of euro-area economic developments and policy decisions for the rest of world is underpinned by the large size of the euro area. Part II showed that, in terms of GDP, trade flows and financial size, the euro

area is a global economic power on par with the United States. Moreover, as stressed by Sapir (2007), its presence in the world economy manifests itself not only through trade, capital or migratory flows but also through the EU's intense regulatory activity.

The important and growing global relevance of the euro area, including its positive contribution as a pole of stability, provides another strong argument for the involvement of the euro area in global surveillance and policy coordination. It provides a rationale for the euro area to show leadership and convey in a more assertive way its views on the key issues discussed in international surveillance and development fora (e.g., on global stability, sustainable development, the fight against poverty, or financial transparency and supervision), as well as its preference for multilaterally agreed solutions.

3.2.3. Globalisation

The globalisation trends discussed in Part II, and in particular financial globalisation, further strengthen the case for a more active participation of the euro area in global surveillance and development fora.

Rising financial globalisation increases both the potential benefits and the risks stemming from the internationalisation of the euro. According to Lane and Milesi-Ferreti (2006), the ratio of industrialised countries' foreign assets and liabilities to GDP has tripled since 1990. By boosting cross-border holdings of financial assets, financial globalisation can increase the benefits the issuer of an international currency obtains from being able to place securities at among foreigners at a liquidity discount. Also, financial globalisation is contributing to intensify the trend seen in the euro area (as well as in other maturing economies) towards an increasing share of financial services in GDP and exports. This will tend to multiply the competitive advantage the euro area's financial institutions reap from being able to operate internationally in their home currency.

At the same time, however, financial globalisation amplifies the potential costs related to the euro's international dimension. Specifically, it increases the potential magnitude

of disruptive portfolio shifts between key international currencies and, therefore, the difficulties this implies for the conduct of the euro area's monetary policy. More powerful portfolio shifts and stronger and more complex inter-linkages between domestic and foreign financial institutions (as revealed by the recent US subprime crisis) could also increase the vulnerability of the euro area's financial system to shifts in investor preferences and global financial turmoil.

But other aspects of globalisation, including rising international trade integration and migration, also underline the need for a deeper involvement of the euro area in global policy making. The euro-area economy is not only significantly more open than that of the US or Japan, as measured by the share of total extra euro-area exports and imports over GDP, but has also been opening up faster in recent times.⁽²⁵³⁾ This makes the euro-area economy relatively more sensitive to global economic developments and also tends to increase the influence of euro-area developments and policy decisions abroad.

Moreover, globalisation and the emergence of new global players is affecting in a more structural way the way the euro area economy works. In particular, it is affecting the international division of labour, financial volatility, inflation, the labour market, income distribution, and the sustainability of current account imbalances. It also affects the way the euro area's adjustment process operates by altering both the typology of shocks and the adjustment mechanisms (including the effectiveness and appropriate conduct of monetary and fiscal policies).

3.3. WHY CONSOLIDATE EXTERNAL REPRESENTATION?

The previous section has argued that EMU and globalisation trends argue strongly in favour of a deeper involvement of the euro area in global

economic governance. This should be done, as noted, at both multilateral and bilateral level. This section focuses on the multilateral channel and argues that, if the euro area is to speak with a more coherent and influential voice in multilateral fora, the first-best option is to fully consolidate its representation in them.

The existence of a single monetary and exchange rate policy in the euro area and of coordination frameworks in other policy areas (notably for fiscal and structural policies) makes it natural and efficient for the euro area to speak with a single voice in international macroeconomic surveillance fora such as the IMF and the G-7. The participation of euro-area institutions in the multilateral consultations on global imbalances organised by the IMF in 2006-2007 provided a good illustration of this. The creation of an increasingly integrated financial system within the euro area and the Community's regulatory responsibilities in the financial area, for their part, argue strongly for a coordinated representation of the euro area in the international fora dealing with financial regulatory and surveillance issues (e.g., the Financial Stability Forum or the Basle Committee).

A consolidated representation of the euro area in international fora can strengthen the euro area's negotiating power and can increase its gains from international policy coordination. It can also reduce the transaction costs associated with international coordination and increase the interest of other key partners to coordinate with the euro area. The EU's common external trade policy demonstrates the advantages in terms of bargaining power and influence of speaking with a single voice.

The benefits the euro area can reap from coordinating positions in global economic governance fora are likely to be much greater than the sum of the individual benefits each of its Member States can obtain through an uncoordinated approach.

The world economy at large can also gain from a unified external representation of euro area countries. In fact, many of Europe's partners increasingly regard the euro area/EU as a single

⁽²⁵³⁾Between 1997-2000 and 2001-06, the euro area's openness ratio rose from an average of 33% of GDP to an average of 37.5% of GDP, which compares with an increase from 24% to 25% for the US and from 21% to 25% for Japan. See Di Mauro and Anderton (2007).

entity and find it more efficient to deal with it through a single interlocutor.

As emphasized by several observers⁽²⁵⁴⁾, the current fragmentation of the euro area's external representation causes the euro area to punch below its global economic weight in multilateral fora. This explains, for example, why, despite the large aggregate voting share and large number of chairs EU countries have at the IMF, the EU is seen as less influential in it than the US, which has however a quota about half the EU's aggregate quota. At the same time, however, there is a growing perception among other countries that Europe is over-represented, in terms of both seats and aggregate voting power. In this context, the only feasible way for the euro area to increase its influence in global fora, is by consolidating its representation and speaking with a single voice.

Finally, and as noted in Part II, long-term trends in the world economy, and in particular the rise of emerging market economies, will tend to reduce the weight and influence of the euro area in international financial institutions and fora, providing an additional case for the amalgamation of euro-area representation in them as a way of maintaining influence. These trends will also provide an opportunity for doing so, since they will produce a more general case for an overhaul of the international financial architecture.

In fact, the move towards a more consolidated external representation of the euro area should facilitate the reform of the international architecture by freeing space for emerging and developing countries. And as the balance of economic power continues to shift towards emerging markets, the pressure on Europe to consolidate its representation in international financial institutions so as to facilitate the reform of their governance structure is likely to intensify.

The existence of a single monetary and exchange rate policy in the euro area provides a particularly strong rationale for the full

⁽²⁵⁴⁾See, for example, Bini-Smaghi (2004 and 2006b) and Sapir (2007).

consolidation of euro-area representation at the IMF through the adoption of a "single chair". In the case of the G-7/G-8 and G-20, the replacement of the currently fragmented and incomplete representation of individual euro area countries by a consolidated representation would also be conducive to a reform of their structure that increases the role of key emerging market economies.

Objective: in the longer term: i) create a single euro-area chair at the IMF; and ii) support the consolidation of euro area/EU representation in the 'G-groups', which would facilitate entry of some key emerging market economies.

Although the first best option would be to fully consolidate the representation of euro-area countries in the IMF and the G groups, there seems to be at present insufficient support among euro-area countries for such an ambitious step.

Given this political constraint, *an incremental strategy* could be considered, focusing in the short term on improving the infrastructure for European coordination and decision-making so as to facilitate the development of common positions. In particular, the scope and effectiveness of coordination in the Bretton Woods institutions could be increased. This strategy would also involve an increased participation of common institutions in the multilateral fora, consistent with the measures endorsed by the ECOFIN Council in October 2006.⁽²⁵⁵⁾ Finally, the participation of the euro area as a single entity in ad hoc global consultations such as the IMF-led multilateral consultation mechanism has proved useful and should be continued in the future.

⁽²⁵⁵⁾These measures, discussed in more detail in van den Noord *et al.* (2008), include a more proactive approach of the euro-area Presidency in the G-8 and the G-20, a strengthening of EU coordination at the IMF and the World Bank and the full participation of the Commission in the G-7 in all agenda items within its competences, in the G-20 and in the FSF as an observer.

Objective: in the short-term, strengthen the infrastructure for the coordination of euro area positions in international fora and implement other measures endorsed by the ECOFIN Council in October 2006.

The euro area should now set in motion a process that will, over time, provide a more rational representation in those fora. The euro area has too much to gain from consolidation. And, in the rapidly evolving world economy and international monetary and financial system, inaction in this domain is likely to prove costly.

3.4. STRENGTHENING BILATERAL DIALOGUES WITH STRATEGIC PARTNERS

Another important channel that should be strengthened to allow the euro area to appropriately convey its views on international economic and financial issues is the high-level bilateral macroeconomic dialogues that it conducts with key economic partners.

These dialogues provide a useful complement to the discussions conducted in the multilateral fora. They improve the mutual understanding of economic developments and policies and facilitate the resolution of contentious issues and the exchange of experiences. They can also help the EU/euro area agree on common lines with its key partners on prominent policy issues discussed in the multilateral fora, and can partly compensate for the at times limited progress made at the multilateral level. For example, during 2006-07, the euro area usefully complemented its participation in the IMF-led multilateral consultations on global imbalances with bilateral dialogues on the matter held with some of the multilateral consultation partners. These bilateral talks on global imbalances were fully consistent with, and provided additional support to, the agreed multilateral strategy.

From a global surveillance point of view, the reinforcement of bilateral dialogues should focus on a limited number of strategic partners that account for a large share of the world economy and are important players in multilateral fora and on a few key regions. These partners should also include some major emerging countries such as

Brazil, China, India and South Africa, in addition to the more traditional partners such as Japan, Russia and the United States.

Like the multilateral fora, some of these dialogues should increasingly be used to convey a unified euro-area voice on issues of global relevance. The high level troika format (President of the EuroGroup, President of the ECB and Commissioner for Economic and Monetary Affairs), used in the dialogue with China recently, could be extended in specific cases to other major strategic partners. These high level dialogues could be used in a selective manner to conduct a sort of "euro diplomacy", just as there is a "dollar diplomacy", through which Europe could convey an increasingly integrated and coherent foreign economic policy.

Objective: Boost the global role of the euro area via macroeconomic dialogues with key strategic partners and key regions.

3.5. CONCLUDING REMARKS

In sum, EMU, the emergence of the euro as an international currency and globalisation bring new opportunities but also new global challenges and responsibilities for the euro area. EMU is having positive implications for world stability, with particularly strong spillovers on neighbouring regions. As the issuer of the world's second international currency and as one of the largest economic entities in the world, the euro area cannot longer afford to take a back seat in international surveillance and policy making.

The euro area must rise up to these new challenges and to its global and regional responsibilities by playing a more assertive role and speaking with a single voice in international economic and financial affairs. This can allow Europe to maximise the benefits and minimise the costs of the new global environment. Just like the bundling of its forces on trade matters has helped Europe play a role commensurate with its commercial weight on the world level, Europe should seek to capitalise on the success of the euro to increase its leverage on international economic and financial matters.

However, and despite significant progress since 1999, the euro area's existing representation in multilateral fora remains fragmented and its infrastructure for coordinating and streamlining policy positions is still insufficiently developed. This prevents the euro area from playing an international role proportionate to its economic and financial weight and consistent with its new global responsibilities.

At the same time, the emergence of new key players in the world economy has increased the need to reform the governance of the international financial architecture and the pressure on the euro area to consolidate its representation in those institutions. Both things could go hand in hand. European consolidation could help multilateral institutions enhance the voice of emerging and developing countries, thus contributing to restore their legitimacy and relevance. At the same time, consolidation would allow the euro area to gain influence in these institutions by being able to speak with a single voice.

In this context, the medium term unequivocally point towards a full consolidation of euro-area representation in some key fora, notably the IMF and the G groups, as the first-best option. However, for this consolidation to be effective, the euro area/EU must improve its decision-making mechanism in the area of international economic and financial matters. This is essential to facilitate the convergence of views that can allow Europe to speak with a single voice.

An incremental strategy focusing on further strengthening the infrastructure for European coordination, increasing the participation of common institutions and a partial amalgamation of euro-area representation in certain fora should be considered. This incremental strategy would help euro-area countries further develop the practice of adopting common approaches to global issues, preparing the ground for more ambitious steps further down the road. During this transition period, ad hoc mechanisms allowing the euro area to speak with a unified voice, such as the multilateral consultations led by the IMF, should be designed.

In addition, the euro area, and where appropriate the EU, should continue to develop its bilateral macroeconomic dialogues with major partners. And it should use these dialogues strategically to reach agreements and build alliances on key international issues. These dialogues provide another useful channel through which an increasingly cohesive Europe can convey a common voice to the world.

4. MORE EFFECTIVE GOVERNANCE

4.1. INTRODUCTION

EMU's system of economic governance – which refers to the institutions and instruments that govern the conduct of economic policy in the euro area – remains fundamentally fit for purpose. Over the last ten years, it has encouraged euro-area members to coordinate their economic policies with a view to meeting the shared policy challenges. Above all, it has helped to promote a common understanding among euro-area policy makers of the importance of sound public finances and adaptable product, labour and capital markets for the smooth functioning of EMU. Progress in strengthening the euro area's voice on the world stage has been limited so far, but first steps have been taken that should allow to improve coordination of Member States' positions and the projection of a common voice over time.

In view of these and other achievements, a radical reform of EMU's system of economic governance would appear to be unwarranted at this juncture. Nevertheless, steps could be taken to enhance existing institutions and instruments. In the first place, attempts to coordinate economic policies under EMU have suffered on occasion from an implementation deficit due to the reluctance of some Member States to translate this common understanding of policy challenges into concerted policy measures. The legitimacy of EMU's economic leg may also need to be enhanced further as the euro-area dimension assumes a more prominent role in debates over public finances and the regulation of product, labour and capital markets.

The broader structural changes in the world economy enhance the need for Europe to strengthen the operation of existing institutions and instruments. The euro area and the world economies have moved (and continue changing) very fast and economic governance needs to follow this rapid change. Incapacity to move rapidly risks weakening the legitimacy of EMU and the EU in broad terms. The euro area is substantially more integrated than ten years ago when EMU started and especially than twenty years ago when EMU was designed. Globalisation is a reality and interactions with

the rest of the world are more complex and involve many more non-European partners than in the past. Moreover, the ongoing integration of the world economy and the enhanced competition and international labour division that it implies, puts a premium on the euro area and its Member States being able to adapt smoothly to these changes. On an international level, they also enhance the need for the euro area to bundle its forces with a view to preserving and possibly enhancing its influence and to fully assume the responsibilities that come with the growing role of the euro in the world financial system.

The dimension of the euro-area economy and the number of countries now involved are now so large that the relevance and particularity of the euro area have taken centre stage. The euro and the emergence and development of a 'euro-area economy' have transformed the way policy making must be run. The system of economic governance must now therefore properly address this euro-area dimension and adapt to the transformations of the euro-area economy. This requires some adjustments because the current system⁽²⁵⁶⁾ might still be excessively centred on the functioning of national economies. A transition in the policy-making from a system based on a collection of small open economies with strong focus on containing nominal exchange rate developments (before EMU) or on avoiding gross budgetary errors (in the early EMU) towards governing a large and much more heterogeneous euro-area economy may be necessary. Bearing all this in mind, the next sections have a two-fold aim: looking at EMU's system of governance and its effectiveness and analysing where room exists for enhancing economic governance.

This chapter is therefore structured as follows. After this brief introduction, section two reviews the room for improving the effectiveness of the economic coordination within the EU notably as concerns the role of ECOFIN and the Eurogroup. This second section assesses the evolving role of the ECOFIN and the Eurogroup and considers several steps for enhancing their role in the

⁽²⁵⁶⁾A detailed description of how the current governance is structured and works is provided in the first part of this report (Part I, Chapter 9).

economic governance of the euro area. Section three analyses avenues to improve coordination and dialogue in order to achieve better governance and greater legitimacy. Finally, the last section focuses on the future of the system of economic governance, reviewing two major changes that will shape governance in years to come: euro-area enlargement and the potential adoption of the Lisbon Treaty.

4.2. IMPROVING ECONOMIC GOVERNANCE IN EMU

The euro-area economy is changing fast and so should its system of economic governance. The recent integration of three new members into the euro area lays the foundation for further enlargement, with membership of the euro area expanding towards all EU Member States. This will mean that the euro area will make up an ever larger part of the EU and consequently membership of the Eurogroup will tend to converge to that of the ECOFIN Council. Hence, the ECOFIN Council is and will continue to be at the heart of EMU's system of economic governance.

The Eurogroup complements ECOFIN's work regarding issues of particular interest for the euro area. It was originally intended as a temporary arrangement that would cease to exist once all ECOFIN Ministers represented countries that had adopted the single currency. Nonetheless, with several Member States outside the euro area, the Eurogroup is also expected to play an important role in next decade. In any case, the tenth anniversary of EMU may be a good moment to reassess the relationship between the ECOFIN Council and the Eurogroup.

As the euro area expands, the range of issues that are of particular relevance for Eurogroup finance ministers as opposed to the ECOFIN at large will tend to become narrower. Against this background, it will be increasingly important for the two bodies to cooperate closely together while building on their respective strengths. On the one hand, the ECOFIN Council, being the only one invested with formal legislative authority for economic and financial matters, will see its capacity enhanced to take the requisite decisions to improve the functioning of

EMU through the amendments brought by the Lisbon Treaty to the Maastricht economic framework. The structure set by the Maastricht Treaty remains, however, fundamentally intact. On the other hand, the Eurogroup will be endowed through the Lisbon Treaty with a permanent 2½ years presidency, whilst the ECOFIN Council will continue with a six-monthly rotating presidency. This places the Eurogroup in a better position to consider longer-term and fundamental issues affecting the functioning of EMU and its external representation. Furthermore, without the pressure of formal decision making, the Eurogroup provides greater opportunity for informal exchanges of views at early stages of discussions.

Building on each grouping's relative advantages needs to be accompanied by effective cooperation between the ECOFIN Council and the Eurogroup. Cooperation between both is necessary to strengthen governance in the euro area in future years. On a practical level, the effectiveness of this cooperation could probably be improved by a better and possibly longer-term planning of their activities. Further avenues to improve the effectiveness of each of these bodies are discussed in the subsections below, which analyse the role of both the ECOFIN Council and the Eurogroup separately.

4.2.1. The role of the ECOFIN Council

The ECOFIN Council is the natural body for decision-making at the EU level as concerns economic policies, because it ensures coordination between Finance Ministers. They are key actors in the euro area's system of governance because they are most directly involved in the functioning of EMU, and they have direct competence in areas that are more relevant for the functioning of EMU such as budgetary policy, financial markets or taxation.

At EU level key policy decisions are taken by the ECOFIN and, for a smaller set of issues, in the Eurogroup. Therefore, ECOFIN needs to continue playing a central role in raising economic growth, securing sustainable public finances, and contributing to an adequate role for the European economy on the world stage. Its EU-wide coverage should be used to reinforce its

capacity to coordinate policies at the EU level. ECOFIN is the forum for several key forms of economic governance in the EU, such as the Lisbon agenda or the SGP and it is in charge of implementing Article 99 of the Treaty. The ECOFIN Council has effectively taken up these responsibilities.

Nonetheless, ECOFIN's role has evolved in recent years because of three main reasons: (1) the increased focus on implementing EMU's economic-policy framework, (2) the development of the Eurogroup, and (3) EU enlargement, which may have reduced the scope for real interactive debate among Ministers.

Although, ECOFIN has worked well, to meet these challenges there may still be scope for further improvement. In particular, it could make an effort to foster a more consistent approach across its own competences, i.e. macroeconomic policy, financial markets and taxation.

Moreover, ECOFIN should continue to improve two main avenues to enhance its working methods. First, improve its agenda setting and second, ensure an appropriate organisation of discussions. In relation to the former, several elements can contribute to improve ECOFIN's agenda setting. Firstly, ECOFIN's agenda should be more "outcome driven". This means, inter alia, that there should be a greater emphasis on taking concrete decisions in discussions between Ministers. Secondly, ECOFIN could have a more coherent and effective communication strategy towards the public. Thirdly, on top of regular decision making responsibilities, there should be a greater focus on strategic discussions on political challenges.

Regarding the better organisation of discussions, there are two aspects that can ensure a successful outcome. First, very focused short introductory oral presentations within ECOFIN focusing of key issues for discussion could centre the debates appropriately. This should always be facilitated by, inter alia, circulating written statements in advance. Second, the number of items on the agenda should be as reduced as possible to ensure decisions on key issues are considered sufficiently.

Objective: Foster a more consistent approach to ECOFIN's own competences via a better agenda setting and more effective organisation of discussions.

4.2.2. The role of the Eurogroup

The work of ECOFIN is complemented by the Eurogroup, which is also a key body in the present EMU's system of economic governance. Over the last decade, the Eurogroup's responsibilities for the economic governance of EMU have grown considerably. Whereas informal meetings of euro-area Finance Ministers initially took place in the hours before the ECOFIN Council, they now take up much of the previous day. This change reflects the growing political importance of the Eurogroup but also the increased number of items on its agenda, with the economic situation and euro-area members' responsibilities under the Stability and Growth Pact and Lisbon Strategy being among the topics that are regularly discussed within the Eurogroup.

The Eurogroup should continue to be nurtured in a double perspective:

- *In the short-term*, (i.e. as long as there is a significant difference with respect to the EU) it is the forum which has the 'competence' to look at questions related to the specific responsibilities Ministers share with regard to the single currency. This is stated in the new Protocol included the Lisbon Treaty.
- *In the medium-term*, with progressive overlap with the ECOFIN, ways have to be found to preserve room for substantive discussions in a restricted and informal setting. This will ensure that enough time can be devoted for an appropriate discussion and brainstorming of issues relevant to the euro area.

The Eurogroup has become more visible as an institution over the last decade, particularly since it appointed its first permanent President in January 2005. The permanent presidency has enhanced the organisation and consistency of Eurogroup meetings. The Eurogroup President now plays a key role in the economic governance

of EMU, communicating the views of euro-area Finance Ministers to the media and participating in international fora such as the G7 Finance Ministers Meetings. The participation of the Eurogroup President in these meetings is just one element behind the growing need for the euro area to speak with a single voice on economic, monetary and financial matters on the international stage. The visibility of the Eurogroup has also been increased through its growing use of public statements reflecting euro-area Finance Ministers positions on international economic issues and domestic policy challenges.

Objective: strengthen the functioning of the Eurogroup in order to decisively look at questions related to the specific issues of the euro area. In the longer term, as ECOFIN and Eurogroup increasingly overlap, Eurogroup remains in place as informal forum for open and frank debates.

The Eurogroup's most important achievement over the last decade has been to foster a common understanding among Finance Ministers of the principal policy challenges facing the euro area. In the budgetary sphere, for example, there is now a broad consensus among Eurogroup members about the importance of avoiding pro-cyclical fiscal policies during good economic times. To this end, in the context of the annual Mid Year Review of Budgetary Policies, the Eurogroup adopted a set of orientations in April 2007 calling on euro-area members to reach their medium-term budgetary objectives by 2010 at the latest.

Furthermore, over the last number of years the Eurogroup has been charged with growing responsibility for the economic governance of the euro area, particularly since the appointment of its permanent President in January 2005. This development has its advantages, as demonstrated by the Eurogroup's proactive role in brokering a deal on revising the Stability and Growth Pact in March 2005. On a less positive note, the Eurogroup has enjoyed less success in turning this common understanding among euro-area Finance Ministers into concerted policy action. In the budgetary domain, commitments to consolidate budgetary positions during the good

times have not always been reflected in budgetary decisions. Likewise, the consensus that exists among euro-area Finance Ministers on the importance of adaptable product, labour and capital markets for the smooth functioning of EMU has failed to redress the slow pace of structural reform in some Member States that has been highlighted in this review. This is regrettable given the particular importance of adaptable markets to facilitate adjustment of euro-area economies in the context of a common monetary policy. The effective functioning of the Eurogroup depends to a great extent on a broadly shared understanding of the implications of EMU for national policies amongst all stakeholders. In particular, common understandings amongst finance ministers only may not always be enough to trigger changes in policies outside their immediate sphere of competence.

While the Eurogroup has improved its functioning over the last decade through learning by doing, it has not yet emerged as a body that actively guides and takes real leadership on matters that, although not always unique to the euro area, are of particular importance for euro-area members. Especially, it has failed to add decisive impetus amongst euro-area members to undertake structural reforms that would improve growth performance and adjustment capacity. Also, on the external side the euro area has not yet fully taken up the role on the world stage that its economic weight and the rising international role of the euro would suggest.

Substantive coordination among euro-area participants can play an active and useful role in the preparation of structural reforms, which could appropriately complement the Lisbon processes. The Eurogroup allows open and frank debates to take place on reform needs and obstacles, on appropriate policies and their likely impact. Agreement on the need for reform between euro-area Ministers of Finance could therefore provide extra momentum in support of structural reform efforts. The macroeconomic and fiscal dimensions of structural reforms might then be better internalised into reform strategies. By promoting a coherent macroeconomic and structural reform perspective, the Eurogroup would help frame an integrated response to policy challenges that necessarily encompass

issues beyond the direct purview of Member States.

The Eurogroup's emerging decision-making role also raises questions about whether it gives due regard to the principles of legitimacy, accountability, transparency and openness when making decisions that can affect the course of national economic policies. The lack of transparency of the Eurogroup stems from its very nature as an informal body, but it has been highlighted as a main aspect to be improved. The legitimacy of the Eurogroup will be enhanced by its integration into the EU's legal architecture (see section 4.4.2).

Ensuring a better follow-up to Eurogroup meetings is particularly important to strengthen the effectiveness of the Eurogroup. To this end, Eurogroup members may wish to make more frequent use of terms of reference following discussions of key policy challenges for the euro area. This document would summarise Ministers' understanding of particular issues and the implications for economic policy. If further discussions of these issues were held at subsequent Eurogroup meetings, the terms of reference could serve as a point of departure. Further use of this measure would have the advantage of promoting continuity and consistency in Eurogroup discussions and ensuring consistent communication. In the recent past, they have already been used in connection with ministers' discussions on policy reactions to oil price increases and on exchange-rate matters, but there is a clear need to extend the spectrum of issues covered by such terms of references.

A much better and genuine understanding among Eurogroup ministers of the effects of national policies for the euro area as a whole and vice versa of the requirements that EMU puts on national policies would be key for improving the efficiency and impact of the Eurogroup and therewith its possibility to emerge as a real guiding force for the development and functioning of EMU. To some extent this may be a technical issue that could potentially be addressed by improving the way Eurogroup meetings are prepared so as to improve the level of information and discussions. However, the failure to rise to this challenge reflects also a lack of political will and fundamental differences in

approaches to policy making among different countries and their ministers. Apart from continued efforts to create, broaden and deepen common understandings, there is no obvious way to address the latter issue.

As argued previously in this report (Chapter III.3), the growing international role of the euro in the global economy will also require the Eurogroup to become more effective in managing the external dimension of EMU. The first step is to work for greater coordination and dialogue within the Eurogroup and between institutions in order to better form common positions on external issues, but this would only be useful if accompanied by pressure on Member States to move forward on this issue.

Objective: enhance the role of the Eurogroup and its President as the key interlocutor vis-à-vis other institutions in the euro area.

A key challenge faced by the Eurogroup in years to come is the enlargement of the euro area. The Eurogroup is the key platform through which the new Member States will participate in euro-area economic policy-making. Euro-area enlargement will affect the operating environment for the Eurogroup in a number of ways, not all of them pointing in the same direction. On the one hand, the Eurogroup will cater for an increasing share of total Member States, i.e. the weight of the euro-area dimension for overall EU economic policy governance will be strengthened. On the other hand, an increasing number of participants (with potentially rather diverse interests and challenges) may make the decision-making process in the Eurogroup more complicated, and may broaden the scope of relevant issues for discussion (e.g. an increased macrofinancial and structural dimension).

The accession of Cyprus, Greece, Malta and Slovenia to the euro area in its first decade has already widened the circle of euro-area Finance Ministers, raising questions over the future functioning of the Eurogroup. The most important of these is whether the informal approach to economic governance can endure as more and more Finance Ministers join the table.

This will greatly affect the efficiency of the future Eurogroup that could be expected to eventually include most EU Member States. At a practical level, the wider the circle of euro-area Finance Ministers becomes, the more difficult it will be to hold full discussions that take account of the preferences of all participants.

The Eurogroup must therefore rise to the challenge of euro-area enlargement. Euro-area Finance Ministers have a responsibility to work closely with prospective euro-area members to build trust and to provide encouragement to implement the necessary policies and reforms on the road to the euro. To this end, the Eurogroup may wish to invite the Finance Ministers of ERM II countries to participate in meetings from time to time.

4.3. STRONGER COORDINATION AND DIALOGUE FOR BETTER GOVERNANCE AND GREATER LEGITIMACY

Effective functioning of economic governance in EMU in years to come is obviously not restricted to dynamic ECOFIN Council and Eurogroup and a successful enlargement of the euro area. It also requires coordination between major institutions and actors involved in economic policy: the European Commission, the European Parliament, the Eurogroup, the ECB, the Council, national parliaments and national governments.

A fruitful exchange and dialogue should reach the national parliaments of euro area and EU members. Involving national parliaments in the Stability and Growth Pact and the Lisbon Strategy can be understood as an attempt to foster a home-grown debate on the importance of fiscal discipline and well-functioning product, labour and capital markets under EMU.

The European Council's 2005 invitation to national parliaments to become more closely involved in Lisbon reforms and in fiscal surveillance did not trigger a spontaneous increase in parliaments' interest in economic governance. In the budgetary sphere, only half of euro-area members involve National Parliaments in substantive discussions of Stability Programme Updates (European Commission 2007i). In the case of the Lisbon Strategy, even

less euro-area members involved their National Parliaments in substantive discussions of the National Reform Programmes for Growth and Jobs (Pisani-Ferry and Sapir 2006).

It seems clear that a greater involvement of national parliaments in debates over the Stability and Growth Pact and the Lisbon Strategy would help boost the legitimacy of EMU's system of economic governance. How this can be achieved is, first and foremost, a matter for the individual Member States to decide upon as the degree of parliamentary involvement in national economic policy making varies from one country to another. Without prejudice to this, the European institutions could do more to increase public awareness of EMU's system of economic governance and Member States' responsibilities under the Stability and Growth Pact and the Lisbon Strategy.

Objective: greater involvement of national parliaments in debates over the Stability and Growth Pact and Lisbon Strategy to boost the legitimacy of EMU's governance.

Stronger coordination also requires sufficient dialogue between institutions. Enhancing this dialogue would involve more regular meetings on issues linked to EMU's economic dimension between major institutions. First, a fluid dialogue needs to take place between finance ministers and the ECB. The Eurogroup's efforts to build a common understanding between euro-area fiscal and monetary authorities have also fallen short of expectations. The regular exchange of views between euro-area Finance Ministers and the ECB, though useful, has been unable to prevent euro-area politicians from engaging in periodic, public criticisms of ECB monetary policy. Moreover, the position of finance ministers in this debate has been quite diverse. If finance ministers fail to shape common views, a fluid dialogue and an optimal understanding between monetary and fiscal authorities seems hard to achieve. This dialogue would not imply any limit to the ECB's independence and would indeed contribute to strengthen it.

Objective: pursuing common positions among Ministers as the condition to improve the dialogue with the ECB. This dialogue would strengthen the ECB's independence and improve the understanding of monetary and fiscal authorities.

A wider inter-institutional dialogue may be also beneficial. In its resolution on the European Commission's Annual Report on the Euro Area, the European Parliament called for a joint dialogue between the Eurogroup, the Commission and the Parliament, similar to the Monetary Dialogue that exists between Parliament and the ECB, to take place at least annually. To facilitate this dialogue, the European Parliament held a joint debate on the Commission's 2007 Annual Statement on the Euro Area and the European Central Bank 2006 Annual Report on 11 July 2007. Enhancing this dialogue, by meeting more regularly and promoting a more extensive discussion of the shared policy challenges could help to enhance the legitimacy of EMU's economic leg without limiting in any way the prerogatives of the ECB.

The existing Monetary Dialogue, set up by the Treaty, is a good example as it has helped to enhance the legitimacy of EMU's monetary dimension in several important respects. Firstly, it has enhanced transparency and openness by giving the ECB President an additional opportunity to present his views on the economic situation and the policy challenges facing the euro area. Secondly, it has enhanced democratic accountability by giving Members of the European Parliament an opportunity to push for changes in the monetary governance of the euro area, without curtailing the ECB's prerogatives.

Finally, the macroeconomic dialogue could also provide closer coordination of economic actors. It seems necessary to increase ownership of national stakeholders by stimulating a debate in the context of the Macroeconomic Dialogue (MED) on specific issues which are both high on a national agenda and carry a wider importance via eventual spill-over effects with stronger involvement/participation of national representatives. Particular economic issues specific for individual countries could perhaps be

discussed in "specialised MED meetings" at technical level. These specialised meetings would need to ensure a close link to the regular MED meetings needs in order to fully exploit the benefits of this framework.

Objective: fostering communication and inter-institutional dialogue and dialogues with a wider set of stakeholders to improve coordination and economic governance in the euro area.

4.4. CHANGES IN THE FUTURE SYSTEM OF ECONOMIC GOVERNANCE IN THE EURO AREA

The future enlarged euro area will experience several major changes that will affect the way economic governance needs to be conducted. In the next decade there will two major changes that will shape the way the system of economic governance in the euro area works. These changes are, first, the progressive enlargement of the euro area, and second, the potential adoption of a new Treaty. This last section indicates therefore the consequences of the euro-area expansion for the system of economic governance and where further possibilities may be provided by the possible entry in force of the new Treaty.

4.4.1. Towards a successful enlargement of the euro area

Following the enlargements of the EU in 2004 and 2007, the euro area is set to enlarge as well and it is reasonable to expect that over the coming ten years, all the new Member States will have joined as well. This ongoing euro-area enlargement process implies potential changes in the ramifications for the management of monetary union. While euro-area enlargement is a sequenced process, and it will take a number of years until all of the new Member States adopt the single currency, it is worth taking a forward-looking view, so as to ensure that the euro area is well prepared to face potential medium-term challenges for governance.

The process of euro-area enlargement is governed by a clear rules-based framework set out in the Treaty. Member States have to demonstrate their readiness to participate in the euro area through the achievement of a 'high degree of sustainable convergence'; which is assessed by reference to a set of criteria. The Treaty framework blends technical and political dimensions, with entry decisions are being taken at the political level, based on a Commission proposal, which in turn is based on technical reports by the Commission and ECB. This set-up aims to ensure both sound economic grounding and political legitimacy and accountability.

The framework for euro-area enlargement reflects the recognition that membership in the single currency area is a crucial step for an economy, affecting not only itself but also its partners. The exchange rate is irrevocably fixed, and the array of available economic policy instruments is fundamentally changed. In particular, the country will be subject to area-wide monetary policy, implying that domestic adjustment will hinge on effective fiscal and structural policies. Against this background, the set of entry criteria aim to give an indication of a country's ability to contribute to macroeconomic stability in the euro area once it has given up its own monetary and exchange rate policy. While the criteria are clearly defined in quantitative terms, thus providing transparent benchmarks and ensuring equal treatment (as any country that fulfils the criteria has the right to join the euro area), the assessment is not, and should not be, purely mechanistic. Crucially, the Treaty calls for convergence to be sustainable. This is to ensure that fulfilment of the criteria reflects underlying fundamentals and is not only due to one-off factors.

Looking ahead, the institutional framework for euro-area enlargement has been fully retained by the Lisbon Treaty, testifying to the value attached by Member States to continuity and predictability on this important governance issue, and indicating that the underlying rationale of the

assessment framework remains as valid today as it did in the run-up to the 3rd stage of EMU ⁽²⁵⁷⁾.

Four years after the 2004 enlargement round, three of the new Member States have already joined the euro area, and another one (Slovakia) is expected to do so in January 2009, underscoring that euro-area enlargement is an open process. While their starting positions may in some respects have been more favourable than for other converging non-participating member states, all of them had to undertake significant policy adjustments to meet the entry conditions (Slovenia in terms of its inflation dynamics and exchange rate regime, Cyprus and Malta in terms of sustained fiscal consolidation). Euro adoption strategies served as policy anchors, but reforms were clearly in countries' own longer-term interest.

Furthermore, the euro-area dimension within these procedures will have to take account of increasing diversity among members. This may increase diagnostic complexity, but it will add value by broadening the exchange of analysis and best practices throughout the enlarged single currency area. That diversity will nonetheless diminish over time as economic integration strengthens further and real convergence progresses (Begg 2008).

4.4.2. From Maastricht to Lisbon

Under the Maastricht Treaty, economic governance delivers an adequate economic policy package. As the Treaty clearly states, a closer coordination of economic policies (Article 99) that maintains price stability (Article 105), avoids excessive deficits (Article 104), and promotes a labour market that is responsive to economic change (Article 125) is essential to promote a higher standard of living and quality of life among Member States (Article 2).

⁽²⁵⁷⁾ The only material change concerns procedure, giving euro-area members a stronger voice in assessing countries' readiness for euro adoption (based on the initial Commission proposal, euro-area members adopt a proposal to the Council in full composition). This is an element of the broader objective to strengthen the role of the euro area as a policy actor, rather than a substantive change of the framework

All the improvements proposed in this part are based on the current Treaty, as it already gives enough leeway for better governance and more effective coordination. Therefore, the Lisbon Treaty, which is still in the process of ratification, is not a pre-condition for improvements in economic governance of the euro area to take place. However, this new Treaty opens further possibilities and contains several elements that contribute to define better the functions of some bodies involved in economic policy and improve their effectiveness and legitimacy, carving out a stronger role for the euro area as an economic policy actor. Consequently, it will also set the framework for all policy proposals in this report, which is in line with both the letter and spirit of the new Lisbon Treaty, which provides more possibilities to achieve effective euro-area economic governance. The new Treaty would increase the possibilities for more effective economic governance with some changes for all major institutions.

As for the European Commission, its right of initiative will be strengthened in relation to the Excessive Deficit Procedure. Henceforth, Council decisions on the existence of an excessive deficit will be taken on the basis of a Commission proposal rather than a recommendation, as is currently the case. The Commission's surveillance role will also be strengthened by opening the possibility for the Commission to address a warning to a Member State whose policies are deemed to be inconsistent with the broad economic policy guidelines or risk jeopardising the proper functioning of economic and monetary union. Thus far, only the Council had the possibility to address such signals to the Member States in the form of a recommendation.

As regards the EMU chapter, the Lisbon Treaty would, overall, not affect the European Parliament's powers very much. Nonetheless, it is relevant to note that with the Lisbon Treaty the old cooperation procedure has disappeared, and it has, depending on the subject, been replaced by the more forceful co-decision procedure or the weaker consultation procedure. Finally, the Lisbon Treaty also contains changes affecting the Council and the Eurogroup. The Council's capacity to act will be strengthened in several

respects. *First*, Member States that are the subject of a potential legal decision are excluded from the vote thereby avoiding putting them in a position of both party and judge.

Second, possibilities for strengthening euro-area governance have been enhanced in three ways:

- Provisions specific to euro-area Member States have been introduced (Chapter 4, Articles 114-115a), allowing them notably to take further steps in regard of strengthening the coordination and surveillance of budgetary discipline and of setting out economic policy guidelines. Regarding EMU's external dimension, the novelty is the explicit reference to the Council being enabled to take the appropriate measures to ensure *unified* representation within the international financial institutions and conferences.
- Voting in the ECOFIN Council has been restricted to ministers representing euro-area countries in a number of cases
- Finally, the Eurogroup would be given formal recognition through a new Protocol attached to the Lisbon Treaty. This Protocol recognises the need to develop ever-closer coordination of economic policies within the euro area and the need for enhanced dialogue between euro-area Member States. To this end, the protocol gives formal recognition to the Eurogroup and its President, who henceforth will be elected for a term of two and half years. Ministers are to elect a president for a 2½ year period, which would slightly extend the "de facto" 2 year fixed Presidency introduced in 2005.

The euro area will thus be able to avail itself of two conceptually distinct policy-making vehicles, both with specific comparative advantages: the Eurogroup as an informal deliberative entity and the ECOFIN Council with voting restricted to euro-area ministers as a formal decision-making body. The ongoing euro-area enlargement process underscores that this is a timely strengthening of the institutional setting for decision-making and governance in the euro area.

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2008 — xiv, 328 pp. — 21 x 29.7 cm

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