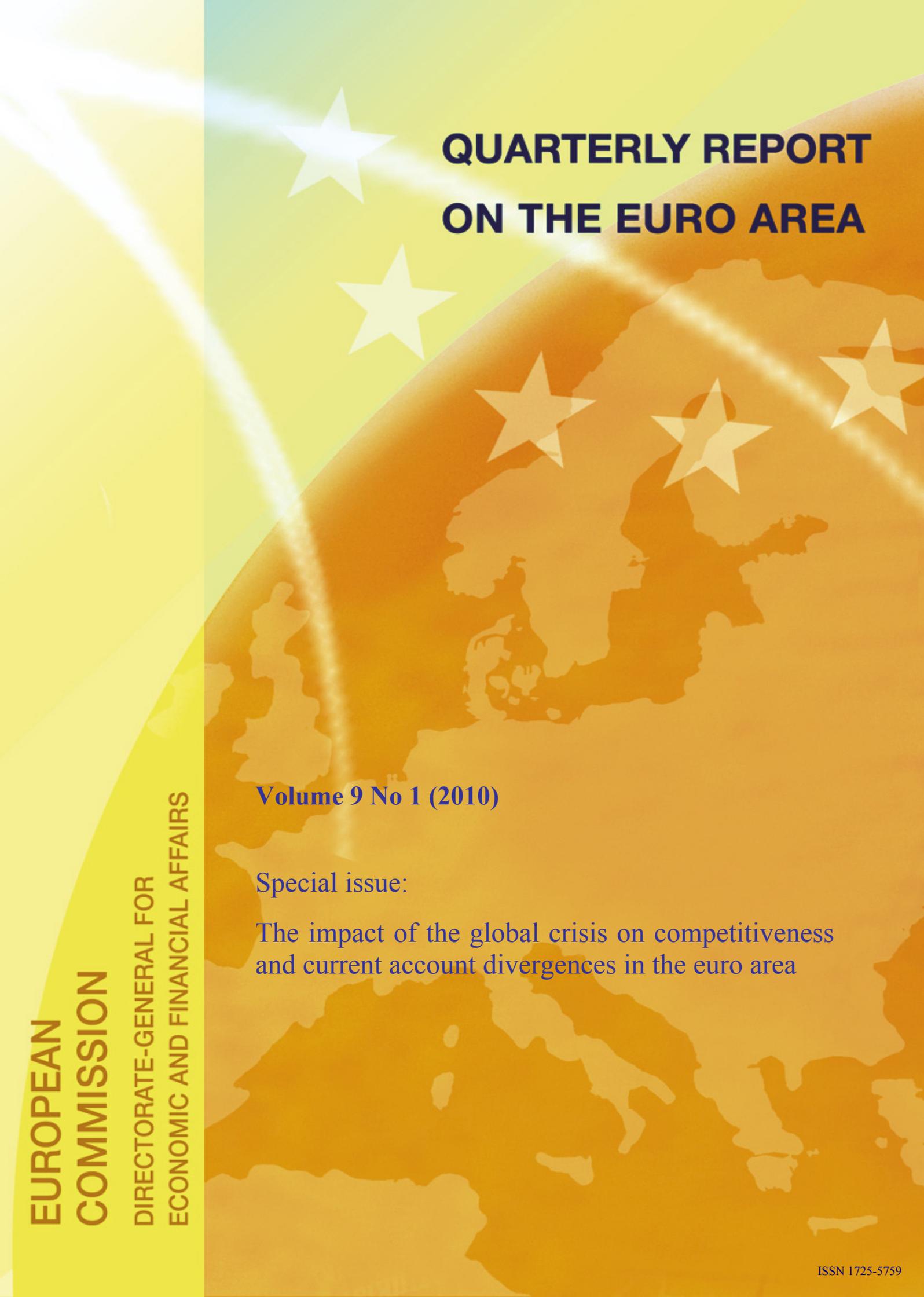


**EUROPEAN
COMMISSION**

**DIRECTORATE-GENERAL FOR
ECONOMIC AND FINANCIAL AFFAIRS**

The background features a stylized map of Europe in shades of orange and yellow. Overlaid on the map are several white stars of varying sizes, arranged in a semi-circular pattern that mimics the flag of the European Union. The overall color palette is warm, with a gradient from light yellow at the top to a darker orange at the bottom.

QUARTERLY REPORT ON THE EURO AREA

Volume 9 No 1 (2010)

Special issue:

The impact of the global crisis on competitiveness
and current account divergences in the euro area

Special issue:
**The impact of the global crisis on competitiveness and
current account divergences in the euro area**

Contents

Editorial	5
I. Competitiveness and current account divergences in the euro area	7
II. Underlying domestic macroeconomic imbalances fuelled current account deficits	11
III. Anatomy of current account surpluses in the euro area	17
IV. Differences in Member States' export performance	23
V. The importance of valuation effects for external asset positions in the euro area	29
VI. Conclusions	37
Recent DG ECFIN publications	39
 Boxes	
IV.1. Export demand equations for euro-area countries	26
V.1. Valuation effects on the net foreign asset positions	33
VI.1. Conclusions of the Eurogroup - Surveillance of intra-euro-area competitiveness and macroeconomic imbalances	38

EDITORIAL

The global economy is slowly emerging from the great recession. This crisis has affected all economies around the world. In the euro area GDP contracted by 4% in 2009, unemployment surged, and public debt rose to unprecedented levels.

While the euro-area economy is recovering, it is still facing significant headwinds. According to our interim forecast of February, the projected growth rate for 2010 remains unchanged at 0.7% in the euro area, compared to our autumn forecast. The global recovery in the second part of 2009 and in particular the upswing in Asia should help euro-area growth in 2010. Financial markets recovered in 2009, but considerable uncertainties remain. The weak labour market outlook dampens demand, and many of the growth sources being of temporary nature, the robustness of the EU recovery is yet to be tested.

Risks to the euro-area recovery also relate to the pent-up correction of intra-euro-area imbalances. The build-up of external imbalances has been associated with a significant increase in household and corporate indebtedness in some Member States. The deterioration of balance sheets in the course of the crisis is weighing on consumption and investment. Experience tells us that such adjustments can be relatively long-lasting.

As we discuss in depth in the Section I of this report, the current economic crisis has not fundamentally altered our assessment of the significant imbalances remaining in the euro area. Up to now, the crisis has led to a narrowing of current account differences within the euro area but only modest correction of past competitiveness divergences between Member States. Moreover, although part of the observed narrowing of current account divergences is structural but part of it is also cyclical and divergence could widen again.

As a result, significant adjustment needs continue to exist in some Member States and the scope for structural reforms has increased. In fact, the crisis has cruelly exposed underlying structural issues which ultimately need to be tackled irrespective of prevailing cyclical conditions.

Parts of the observed divergence of current accounts and competitiveness are a source of

potential concern to the extent that they reflect underlying macroeconomic imbalances, which increased the vulnerability of Member States to the shocks of the crisis. These domestic economic imbalances include, depending on the Member State, high (public and private) debt, but also structural weaknesses and housing bubbles. The correction of many of these imbalances is only beginning and will have to be pursued urgently. Action is particularly needed in Member States showing large public debt, persistently large current account deficits and/or competitiveness losses. In these countries significant gains in competitiveness are needed not only to restore the external balance but also to restore the balance of the labour market. In the absence of significant price adjustments, there is a risk that unemployment could rise further or become entrenched as the export sector is unable to compensate for lower domestic demand.

Greece is in a league of its own here, combining large and persistent fiscal imbalances and protracted losses of competitiveness. Its current account deficit has swollen to above 10 per cent of GDP and its net external indebtedness is around 90 per cent of GDP. At the same time, fiscal deficits have exceeded the 3% limit set by the Stability and Growth Pact in every year but one since the introduction of the euro, and also public debt at 110% of GDP is very far above the 60% limit. Clearly, significant policy action is needed. Greece's measures announced on 3 March were welcomed by finance ministers meeting in the Eurogroup and Ecofin Council earlier in the month. They should be conducive to increasing fiscal consolidation while at the same time contributing to the necessary competitiveness adjustment. The statement of euro area Heads of State and Government on 25 March should pave the way for lower tensions in the financial markets.

In some surplus countries, the report identifies persistent weakness in domestic demand – with corporate saving and investment decisions playing a central role – as a source of concern for the euro area as whole as well as the well-being of surplus countries themselves. We do not argue that surplus countries are too competitive. On the contrary, Member States should strive to be as competitive as possible in an increasingly competitive global economy. For growth to be balanced, however, export

successes should translate into stronger domestic demand, thus boosting imports, too. The structural weaknesses of domestic demand need to be identified and tackled.

Concerning fiscal policy, all Member States are faced with the challenge to return their public finances to a sustainable path. But we are applying a differentiated approach across euro-area countries in which major current account surplus countries are still providing a significant fiscal impulse in 2010 while major deficit countries have started with sizeable fiscal consolidations already.

The report also discusses differences in Member States' export performance. The analysis reveals that foreign demand has been the main driver of euro-area countries' exports since 1999, but price competitiveness has been the key factor explaining differences in export performance across Member States. Furthermore, non-price factors have also played a role and were especially important during the current crisis.

Significant and persistent current account imbalances lead to a build-up of large external asset and liability positions. The report provides an analysis of the impact of changes in the valuation of assets and liabilities on the net foreign asset positions of euro-area Member States. In current account deficit countries, persistent negative valuation effects have compounded the deterioration of net foreign asset positions coming from the current account deficits. In contrast, valuation effects have played a minor role in current account surplus countries except during the crisis when surplus countries have made significant losses on their external assets. Lastly, the analysis finds that Member States with large gross external asset positions can be subject to very large swings in their net asset position due to their larger exposure to shocks.

The crisis has shown that the economic governance of the euro area needs further substantial improvement. First, we need to make sure that all Member States abide by the rules of the Stability and Growth Pact. This also means that we have to be able to rely on the quality of the statistical data provided. Putting fiscal policy

on a sustainable path is of utmost importance for the functioning of EMU and it is also in the interest of each individual Member State.

Drawing lessons from the crisis, we need to broaden the focus of our surveillance beyond fiscal policy to include relevant developments of macroeconomic imbalances. Problems with the functioning of labour markets, product and service markets and the financial sector are behind large parts of the current account divergence, and our surveillance needs to take them into account. Measures targeted at boosting labour productivity and potential growth, improving resource allocation by the financial sector and ensuring sustainable public finances would be beneficial in all Member States as they would help to correct imbalances and to underpin the recovery. To prevent the emergence of imbalances in the future, we will have to look also into the role of credit cycles and financial sector imbalances in particular.

At DG ECFIN, we have addressed divergences in the euro area for some time, including in our 2006 Economic Review and our 2008 report on EMU@10. On 15 March, the Eurogroup endorsed our review of 'surveillance of intra-euro-area competitiveness and imbalances' and agreed to horizontal Terms of Reference reflecting the commitment of Member States to tackle these imbalances. Heads of State and Government of the euro area committed in their statement of 25 March to promote a strong coordination of economic policies in Europe. The Commission will make proposals to build a more effective framework for enhanced surveillance in the euro area.

The crisis has put a heavy burden on all our economies. At the same time, the crisis has increased awareness that a decisive response is needed to ensure proper functioning of the euro area. If we seize this opportunity, we can bring our project of EU integration a significant step forward.

MARCO BUTI

DIRECTOR-GENERAL

I. Competitiveness and current account divergences in the euro area

After a decade of steady divergence of external positions and competitiveness within the euro area, the global financial crisis has triggered a partial reduction of Member States' current account deficits and surpluses. Member States which entered the recession with large current account deficits have experienced a combination of a sharper drop in private-sector demand and a less dramatic fall in exports than the rest of the euro area. These forces have tended to curb their current-account deficits, an effect which has been amplified by changes in the composition of domestic demand with, in particular, a substitution of imports with domestic products. Conversely, Member States which entered the recession with large current account surpluses have experienced more resilient private-sector demand and a bigger exposure to the slump in world trade due to their export specialisation and greater trade openness. The resulting current-account rebalancing has, however, not been accompanied by a significant rebalancing of competitiveness. As such, the recent rebalancing is likely to prove, at least in part, temporary.

The surveillance of competitiveness and current account imbalances in euro-area Member States has become an important part of the European Commission's macroeconomic surveillance. A special issue of the Quarterly Report on the Euro Area published in March 2009 provided an in-depth analysis of divergences in competitiveness and external positions in the euro area since the launch of the single currency. ⁽¹⁾ Since then, the global economic and financial crisis has had a profound and lasting impact on Member States' economies, including their external sectors. The present report updates last year's work by looking further into the impact of the crisis on intra-euro-area divergences.

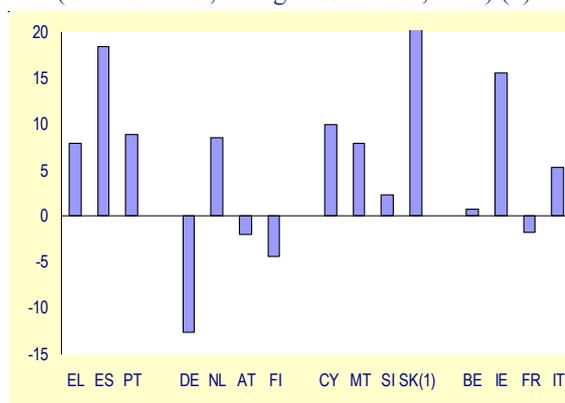
The pre-crisis decade saw a steady divergence in competitiveness within the euro area ...

In the decade preceding the global economic crisis, the euro area experienced significant and persistent divergence in its Member States' competitiveness as measured by real effective exchange rates (REERs). Some Member States saw significant falls in their REER (DE, FI), while others registered sharp rises (EL, ES, IE, IT, NL, PT) (Graph I.1). ⁽²⁾

Most of the countries that introduced the euro in the last couple of years (CY, MT but especially SK) also experienced periods of sustained appreciation, but most of it preceded euro

adoption and was consistent with underlying fundamentals. The broad pattern of divergence is visible irrespective of the price deflator used (i.e. GDP deflator, unit labour costs or export prices) or the reference group (i.e. intra-euro area or total REER).

Graph I.1: Intra-area real effective exchange rate developments, euro-area countries (GDP deflator, change 1998-2007, in %) ⁽¹⁾



⁽¹⁾ SK is off-scale; actual value is 52.5 %. BE also includes LU.
Source: Commission services.

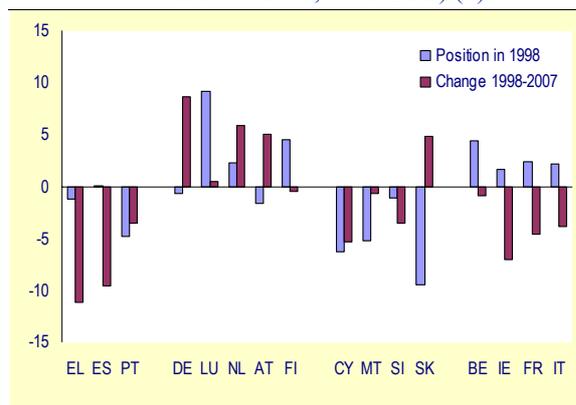
... together with a continuous divergence in current accounts

Since the introduction of the euro, Member State differences in current account positions have increased rapidly, reaching an all-time high in 2007 (Graph I.2). Some Member States entered the euro area with sizeable surpluses or deficits (e.g. BE, FI, PT and the countries that joined the euro recently), but much of the divergence in current account positions has taken place under the euro. To a large extent, the divergence trend can be traced back to developments in the balance of goods and services, which is usually the largest component of the current account.

⁽¹⁾ European Commission (2009), Quarterly Report on the Euro Area, 'Competitiveness developments within the euro area', Vol. 8 No 1.

⁽²⁾ To facilitate reading, most charts in this section show countries grouped according to the following categories: (i) large current account deficit countries (based on 2008 data), (ii) current account surplus countries (based on 2008 data), (iii) Member States that joined the euro recently, and (iv) remaining countries.

Graph I.2: **Current account positions, euro-area countries** (level in 1998 and changes between 1998-2007, % of GDP) (1)



(1) Net lending (+) or net borrowing (-), total economy; for LU balance on current transactions.

Source: Commission services.

A large part of the cross-country divergence of current accounts since the launch of the euro has been determined by considerable and persistent differences in the strength of domestic demand across Member States.⁽³⁾ Stronger relative demand pressures in a given Member State tend to fuel import demand and depress the current account. Differences in export performance – and therefore price competitiveness – have also contributed to the divergence of current accounts but, in most Member States, this has been of secondary importance compared with domestic demand factors.

Member States which have accumulated large current account deficits in pre-crisis years also saw a sharp deterioration of their external liabilities, with net foreign asset (NFA) positions reaching between 80% and 100% of GDP in 2008 depending on the countries considered. As discussed in section V of this report, the deterioration in NFAs has been amplified by persistent valuation effects.⁽⁴⁾

The crisis has led to modest price adjustment...

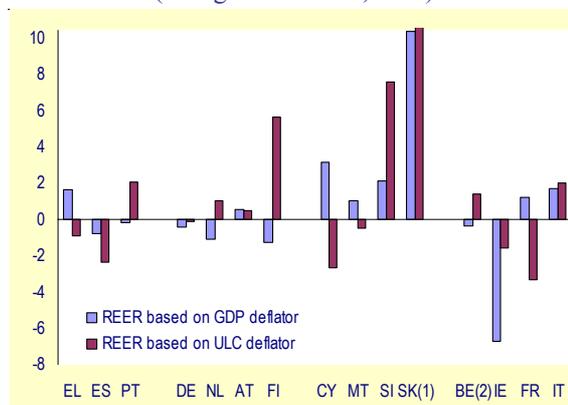
Since the outbreak of the financial crisis in 2008 there has been little evidence of intra-euro-area convergence in price competitiveness. The intra-euro-area REER based on GDP deflators does not show a clear pattern across Member States in 2008 and 2009 (Graph I.3). Most of the Member States registered very small changes in this

⁽³⁾ For a detailed discussion, see European Commission (2009), *ibid.*

⁽⁴⁾ See section V, ‘External valuation effects in the euro area’ in this issue.

measure of competitiveness, usually not exceeding 2% over the last two years, except for Ireland, which stands out with a depreciation of around 7%.⁽⁵⁾

Graph I.3: **Intra-area real effective exchange rate, euro-area countries** (change 2007-2009, in %)



(1) SK is off-scale; actual value is 14.3 % for ULC deflator.
 (2) BE also includes Luxembourg.

Source: Commission services.

In contrast, there have been modest signs of convergence in cost competitiveness. Since the beginning of the crisis, unit labour cost (ULC) growth has accelerated significantly in most Member States but more so in large surplus countries, most of which also enjoy a strong competitiveness position. ULCs have decelerated sharply or even fallen in Spain and Ireland. This differentiated behaviour of ULCs has entailed a moderate rebalancing of the REER based on ULCs. Nevertheless, except for Ireland, which is experiencing outright cuts in pay, the rebalancing has been mainly due to cyclical developments in labour productivity. Changes in productivity are likely to be mostly temporary, reflecting the cyclical impact of the crisis, including exceptional labour hoarding in several surplus countries and a deep fall in activity of the low-productivity construction sector in Spain and, to a lesser degree, Ireland.

... but significant current-account adjustment

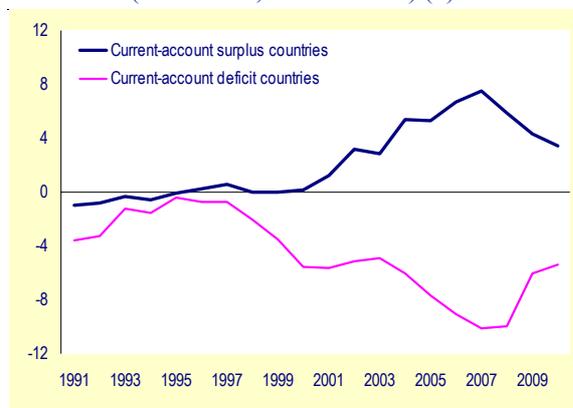
At the same time, however, the crisis has led to an abrupt reversal of the previous divergence trend in current accounts. The reversal can be traced back to both surplus and deficit countries (Graph I.4). Most countries with large current account surpluses (DE, NL, AT and FI) have seen

⁽⁵⁾ Slovakia recorded an appreciation of almost 17% during 2007-09 but much of this was due to nominal appreciation preceding euro adoption.

I. Competitiveness and current account divergences in the euro area

significant falls in their external balances with only Luxembourg's position remaining broadly unchanged. Countries with sizeable deficits have typically experienced reductions in their deficit positions (except PT).⁽⁶⁾ Large improvements have also been registered in the deficits of some of the recent members of the euro area (SI, SK and MT). Finally, developments in the remaining countries (BE, IE, FR, IT) have been heterogeneous, with Belgium reporting a large drop in its current account surplus and Ireland a significant improvement. The position of France and Italy remained broadly unchanged.

Graph I.4: **Current account positions, euro-area surplus and deficit countries (1991-2010, in % of GDP) (1)**



(1) Surplus countries include DE, LU, NL, AT, FI. Deficit countries include IE, EL, ES, CY, PT. Data for 2010 are based on the Commission's autumn forecast.

Source: Commission services.

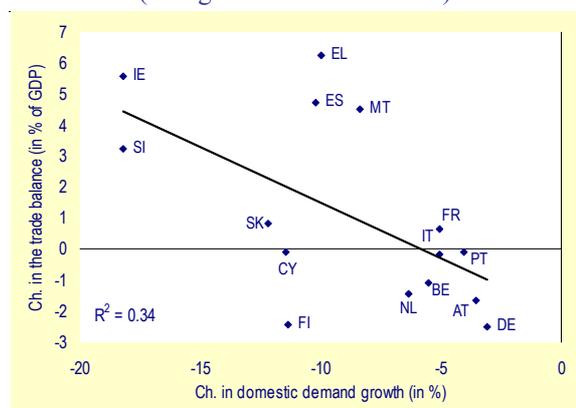
Recent changes in current accounts reflect mostly domestic demand factors but also different exposures to the trade slump

There is a relatively close cross-country correlation between changes in the trade balance and changes in domestic demand between 2007 and 2009 (Graph I.5). Member States which have seen an improvement in the trade balance since the beginning of the crisis have also experienced a stronger contraction of domestic demand than the rest of the euro area, and vice versa.

A key source of country differences in domestic demand in the past two years has been the private sector response to the crisis. Member States with large current account deficits have experienced a sharp rise in saving and a sharp cut in investment

by their private sector, which has been offset to various degrees depending on the country considered by rising government deficits. The change in private sector behaviour has been less pronounced in Portugal and Greece than in Spain. Only Ireland and Slovenia show similar private sector weakness. In contrast, in countries with large current account surpluses, changes in private-sector savings and investment have been far more limited. In those countries, drops in current account surpluses have been mostly driven by increasing public deficits.

Graph I.5: **Changes in domestic demand and in the trade balance, euro-area countries (change between 2007-2009)**



Source: Commission services.

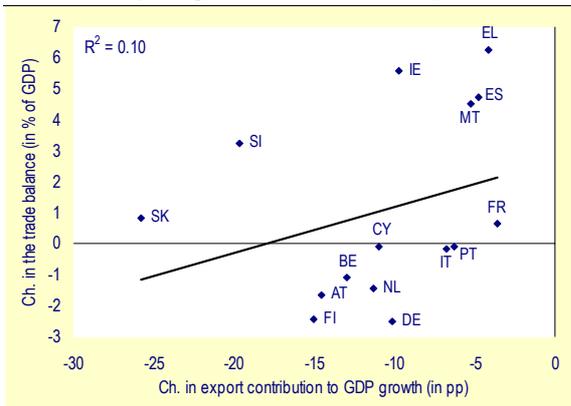
To a lesser degree, recent changes in the trade balance also reflect differences in exposure to the slump in world trade.

Graph I.6 shows that changes in the trade balances are positively correlated with the contribution of exports to growth during the crisis. This suggests that, to some extent, Member States which have experienced a stronger fall in exports have also seen a bigger drop in their current account positions. However, the correlation coefficient is much lower than in the case of domestic demand, indicating that country differences in exposure to the slump in world trade have played a less important role than country differences in domestic demand.

The change in the contribution of exports to growth can be interpreted as a measure of the size of the trade shock experienced during the crisis. A lower contribution indicates lower exposure to the slump in world trade. Countries with lower exposure have tended to register more positive developments in the trade balance.

⁽⁶⁾ Data shown in this report is based on ECFIN's AMECO database (storage of early March). More recent data suggest that the current account deficit in Greece may have improved only marginally during the crisis.

Graph I.6: **Changes in exports and in the trade balance, euro-area countries (change between 2007-2009)**



Source: Commission services.

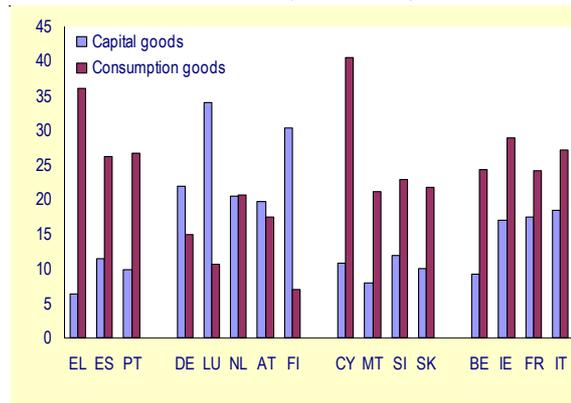
Differences in trade exposure can be partly explained by differences in trade openness. In addition, the crisis has exposed the importance of non-price factors. In particular, the composition of the export basket has been an important determinant of exposure to world trade turbulence during the crisis.⁽⁷⁾ The crisis has hit trade flows much more severely for some products than others. Trade in services (except for transport) has in general fared better than trade in goods. Among goods, investment goods have seen much steeper drops. In contrast, trade in traditional ‘non-cyclical’ sectors such as food and beverages or pharmaceuticals has been more resilient. Surplus countries in the euro area show high relative specialisation in capital goods (Graph I.7) and have faced sharper contractions in exports during the recession. All the other Member States tend to be more specialised in the production of consumption goods, which mitigated the impact of the trade slump on exports.

Overall, the drivers of the differentiated export developments in the euro-area Member States during the crisis have been to a large extent cyclical and may well turn around with the recovery.

Differences in the impact of the recession on trade can also be found on the import side. Some countries (notably EL, ES, CY, SI but also FI) have experienced an exceptionally strong drop in

imports, reflecting changes in the composition of domestic demand. These countries have seen substitution of local demand away from imports towards domestic products, reflecting a shift away from imported luxury goods but also a collapse in demand for (mostly imported) investment equipment. The substitution effect is driven by the crisis and is likely to be largely temporary.

Graph I.7: **Share of capital and consumption goods in total exports of goods, euro-area countries (in %, 2007)**



Source: Commission services.

Summing up, the convergence in current account positions observed in the euro area in the past two years can be explained by differences in the reaction of Member States’ domestic demand to the crisis as well as differences in trade exposure.

Most Member States which entered the recession with large current account deficits have experienced a combination of a sharper drop in private sector domestic demand and lower exposure to the slump in world trade than in the rest of the euro area. To various degrees, this has allowed improvements in the trade balance via both the import channel – i.e. a drop in domestic demand reduces imports, thereby lifting the trade balance – and the exports channel. Conversely, Member States which entered the recession with large current account surpluses have experienced more resilient private-sector demand and bigger exposure to the slump in world trade. In these countries, the two channels have played in reverse, acting as powerful dampening forces on the surpluses.

⁽⁷⁾ See also section IV, ‘Differences in Member States’ export performance’.

II. Underlying domestic macroeconomic imbalances fuelled current account deficits

Macroeconomic imbalances, including housing and credit bubbles, contributed to significant current account deficits in the years preceding the crisis. The crisis has corrected a number of these imbalances, including a progressive cooling-off of housing markets. At the same time, significant imbalances remain and there is a need for further adjustment involving a rebalancing of relative prices and demand across Member States. However, the crisis might render the adjustment more challenging because the combination of low inflation and nominal rigidities as well as lower growth potential can make necessary wage adjustments more difficult. Balance sheet adjustment and impaired financial intermediation may further hamper the necessary adjustment processes. At the same time, recent developments have sharpened awareness of the underlying problems as well as of the necessary steps to address them.

Current accounts and competitiveness diverged significantly in the decade preceding the financial crisis with, in particular, some Member States accumulating large current account deficits. This section briefly recaps the domestic macroeconomic imbalances that have been the counterpart to these deficits and discusses the impact of the crisis on the imbalances in detail. It then studies how the crisis has affected the adjustment capacity of deficit countries. The next section will turn to the issue of persistent current account surpluses in some Member States.

The divergence in current accounts can be related to a range of domestic imbalances

Divergence in competitiveness and current account positions is not necessarily bad in a monetary union. Distinguishing between ‘harmful’ competitiveness developments – which require some form of policy intervention – and ‘benign’ ones – where adjustment can be left to market forces – is key for economic policy.

As discussed more extensively in last year’s special issue of the Quarterly Report on the Euro Area on competitiveness divergences, economic theory suggests that the distinction largely depends on the extent to which changes in external performance are driven by market dysfunction or policy mistakes.⁽⁸⁾ Last year’s analysis showed that the divergence trend in competitiveness and current accounts within the euro area up to the beginning of the crisis can only partly be attributed to benign factors such as Balassa-Samuelson effects, price convergence or deeper financial integration. Divergence was also

associated with a range of domestic macroeconomic imbalances in some Member States. Labour markets did not always respond appropriately to country-specific shocks. In those catching-up Member States which accumulated large current account deficits and external debt, capital inflows were not channelled to the most productive uses and were associated with disappointingly weak productivity performance. In some Member States running current account deficits, the inflow of foreign capital facilitated the rise in household and/or corporate debt, fuelling excessive credit dynamics and contributing to the emergence of housing bubbles. Furthermore, these capital inflows were not associated with sufficient fiscal restraint. Finally, weak domestic demand in some surplus countries contributed to the divergence in current accounts (this is analyzed in depth in section III).

Progressive cooling-off of housing markets is helping to reduce current account imbalances

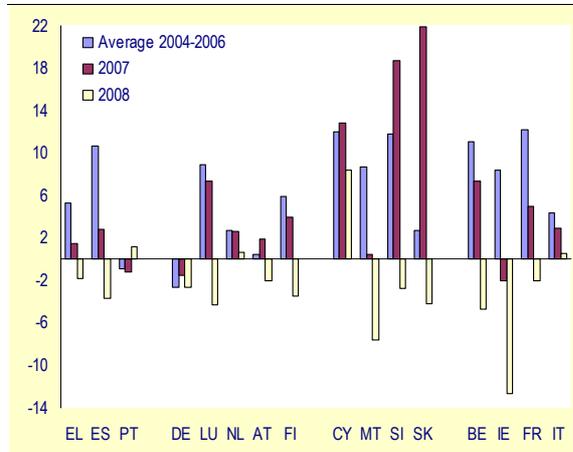
Housing markets have played a pivotal role in the divergence of external positions across euro-area Member States over the past decade. They have amplified the effects on domestic demand of Member State differences in real interest rates and in the speed of financial deepening. In some Member States, the rapid expansion of the construction sector has also contributed to diverting resources away from the export sector. These trends were all the more worrying since house price developments were in some cases clearly unsustainable.

The ongoing cooling-off of housing markets is affecting all euro-area Member States except Germany and Portugal, where house prices remained fairly flat or negative in the years preceding the crisis (Graph II.1). It tends, however, to be more marked in countries with

⁽⁸⁾ Earlier discussions of the topic include European Commission (2006), ‘The EU Economy 2006 Review’ and European Commission (2008), ‘EMU@10: successes and challenges after 10 years of Economic and Monetary Union’

competitiveness problems and where house price booms had been greatest before the onset of the crisis (BE, EL, ES, IE, FR, MT, SI).

Graph II.1: Real house prices, euro-area countries (annual growth in %) (1)



(1) House prices deflated by the HICP.
Source: ECB, Commission services.

In most euro area countries that underwent or still undergo a catching-up process, as well as France although to a lesser degree, the crisis has entailed a dramatic downshift in construction activity relative to pre-crisis trends. In contrast, the downshift has been more muted in current account surplus countries, with the exception of Finland.

Overall, the reduction of housing imbalances is helping to reduce external imbalances within the euro area. At this juncture, it remains difficult to say, however, to what extent the reduction is durable or will be reversed with the recovery.

Households and corporations have embarked on a balance sheet adjustment process

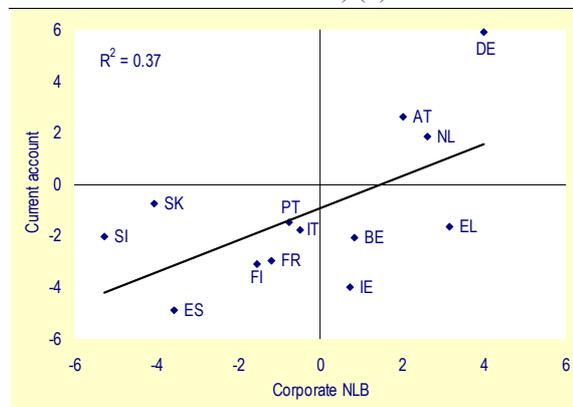
Following the shock of the financial crisis, households have embarked on significant balance sheet adjustment in current account deficit countries (ES and IE and to a lesser degree PT and SK). It is translating into a large increase in households’ net lending/borrowing (NLB),⁽⁹⁾ reducing current account deficits.⁽¹⁰⁾ The extent to which the ongoing adjustment is durable or just a temporary by-product of the crisis is difficult to assess. The crisis has probably led to a lasting change in risk attitudes, particularly in the

⁽⁹⁾ NLB is the difference between saving and investment of the institutional sector considered. NLB is positive (resp. negative) when the sector lends to (resp. borrows from) the rest of the economy.
⁽¹⁰⁾ No data available for CY, LU and MT.

banking sector, suggesting that at least part of the adjustment will persist. In contrast, the increase in NLB has generally remained limited in Member States that do not feature high current account deficits or other competitiveness problems (with the exception of FI).

Corporate NLB has been a central determinant of changes in current accounts in euro-area Member States since the launch of the euro.⁽¹¹⁾ Excluding new euro-area Member States, about two thirds of the changes in current account levels between the early phase of EMU and the more recent period can be ascribed to corporate NLB (Graph II.2).

Graph II.2: Changes in corporate NLB and in the current account, euro-area countries (average 2004-08 vs average 1999-03, in % of GDP) (1)



(1) Corporate NLB data are not available for CY, MT, and LU. Data for IE cover 2004-08 relative to 2002-03.
Source: Commission services.

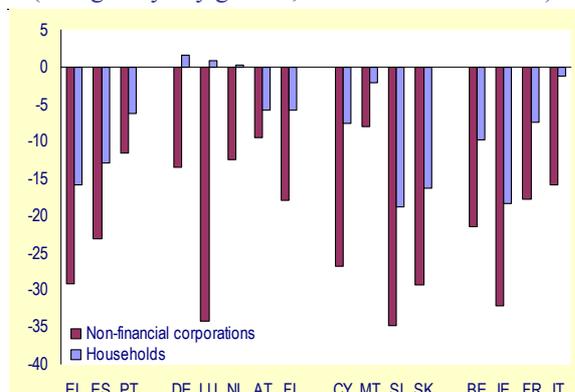
To a lesser degree than in the household sector, the crisis has been associated with some early signs of balance sheet adjustment in the corporate sector. While in a world of perfect capital markets, adjustment to debt overshooting and excessive leverage can be obtained by the issuance of new equity, in reality the issuance of new equity is often constrained by many factors such as fixed costs of equity issuance, temporarily high risk aversion, the cost of external funding, or issues related to corporate control. These capital market imperfections force corporations to rely, at least partly, on internal funding to adjust their balance sheet structure. To achieve this, corporations simultaneously cut investment and raise corporate savings. Since the onset of the crisis, such concurrent movements in investment and savings have been registered essentially in

⁽¹¹⁾ For a further discussion see section III, ‘Anatomy of current account surpluses in the euro area’ in this issue.

II. Underlying domestic macroeconomic imbalances fuelled current account deficits

Spain and Greece and, to a lesser degree, in France. In other Member States, investment has generally dropped due to various cyclical factors but savings have also decreased due to deteriorating profitability.

Graph II.3: **Credit growth, euro-area countries**
(change in y-o-y growth, Jan. 2008 to Jan. 2010)



Source: ECB, Commission services.

In line with balance sheet data, growth in credit to households and corporations has fallen dramatically in recent months in most Member States with large current account deficits (Graph II.3). In some of the countries where deficits are not large but export performance was weak prior to the crisis (mostly BE and IE) as well as some of the new euro-area Member States (CY, SI and SK), credit growth also fell dramatically. In contrast, the deceleration in credit growth has been less strong in Member States with current account surpluses (except LU).

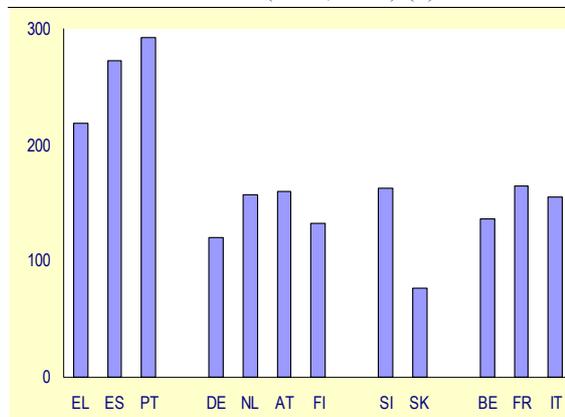
Further balance sheet adjustment might be necessary in a range of Member States

Further balance sheet adjustment appears likely in some Member States, particularly in the corporate sector. Adjustments to asset price falls, high leverage and lower growth prospects can trigger protracted phases of balance sheet adjustment characterised by substantial reductions in the net borrowing of the corporate sector. The crisis has triggered sharp falls in asset prices which have led to a strong increase in leverage ratios across euro-area Member States. In addition, the crisis is also projected to impact euro-area potential growth negatively.⁽¹²⁾ This would raise the debt burden relative to expected earnings and would force companies to reduce debt further. Due to these

⁽¹²⁾ European Commission (2009), Impact of the current economic and financial crisis on potential output, Occasional Paper 49.

factors combined with more cautious risk attitudes by lenders and borrowers, the financial turmoil is likely to be followed by a drawn-out period of corporate balance sheet repair in the euro area.

Graph II.4: **Corporate leverage, euro-area countries** (2008, in %) (1)



(1) Ratio of debt to value added in the non-financial corporate sector. Debt is the sum of securities other than shares and loans. Data for IT are for 2007.

Source: Commission services.

Balance sheet correction needs appear particularly large in Member States with large external deficits. Leverage is indeed high in their corporate sector (Graph II.4). Potential growth is likely to decelerate more strongly than in the rest of the euro area as balance sheet adjustment depresses investment. Moreover, pressures on profitability in the years preceding the crisis were already higher, as national accounts data suggest. Some of these factors are also at play in other countries and could entail some balance sheet adjustments to respond to past pressures on profits (CY, IT) or a sharp slowdown in growth prospects (IE and most new Member States).

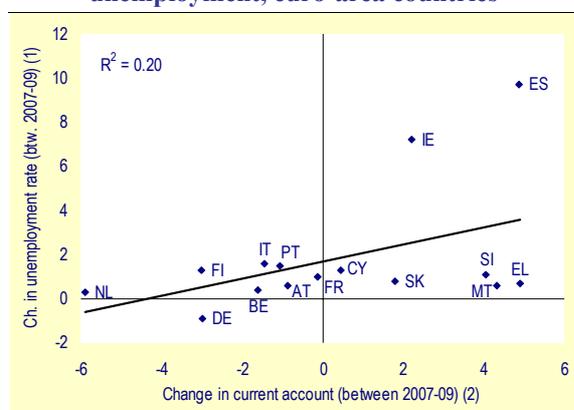
Some imbalances have improved but others remain and new ones have emerged

Some of the countries with external imbalances or competitiveness problems have registered a cooling-off of the housing market and early signs of improvements in private-sector balance sheets. These improvements in underlying domestic imbalances have, however, been associated with large rises in unemployment. This is particularly the case in Spain and Ireland (Graph II.5).

Part of the rise in slack in labour markets is cyclical and will be absorbed when the economy picks up. However, part of it risks becoming of a more structural nature. The crisis has triggered a process of structural downsizing in some sectors,

notably construction (EL, ES and IE). The required reallocation of the labour force from the non-tradable sector to expanding sectors (mostly the export sector) will take time – involving workers’ retraining but also new capital investment – and therefore risks being associated with a lasting rise in unemployment. This adjustment process will also have to go hand-in-hand with substantial changes in relative prices, including the internal exchange rate. So far, however, the data show little evidence of substantial price adjustments, highlighting the need for more consistent wage policies in order to avert further increases in unemployment.

Graph II.5: **Changes in current account and unemployment, euro-area countries**



(1) In percentage points of labour force. (2) Change in net lending (+) or net borrowing (-), total economy (in percentage points of GDP); balance of current transactions for LU.

Source: Commission services.

More generally, it is of crucial importance to take the appropriate policy choices. Policies that boost productivity and skills reduce the need for nominal wage adjustment. Similarly, enhanced workers' retraining would facilitate the necessary labour reallocation.

The crisis has not reduced the need for adjustment

The global economic crisis has triggered a convergence in current accounts which has both temporary and structural features. The convergence is in part due to a sharp drop in private sector demand in some large current account deficit countries which is driven by a balance sheet adjustment process. Part of this effect is likely to persist over the coming years. However, the convergence is also explained by the differentiated impact of the crisis on Member States’ exports and imports (see previous section).

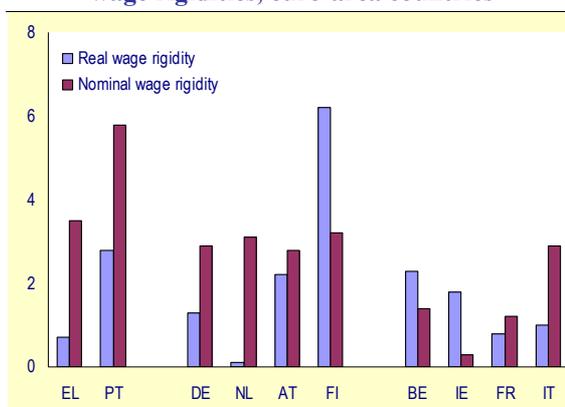
This effect is likely to be essentially temporary and reversed with the recovery.

Except for Ireland, convergence in current accounts has so far been associated with only modest changes in relative prices. This means that the need for substantial competitiveness improvements in countries with high external deficits highlighted in last year’s issue of the Quarterly Report on the Euro Area largely remains.

Most euro-area Member States have low competitiveness adjustment capacity ...

The correction of competitiveness and external imbalances requires significant changes in relative prices and a reallocation of demand and supply between the non-tradable sector and the export sector. The euro-area economy is characterised by a significant labour and product market rigidity which, in the absence of additional reform effort, would lengthen the period of adjustment and make them more costly in terms of unemployment.

Graph II.6: **Micro evidence on nominal and real wage rigidities, euro-area countries**



Source: Dickens et al. (2007), ‘How wages change: micro evidence from the International Wage Flexibility Project’, Journal of Economic Perspectives, No 21(2), pp. 195-214.

This is particularly true for most Member States, which need to recoup the large losses in price competitiveness incurred during much of the decade. Product and labour market rigidities tend to be high as micro-evidence from firm-level data shows (see Graph II.6). Other evidence presented by the ECB also points to significant real rigidities in concerned Member States. ⁽¹³⁾

⁽¹³⁾ See for instance ECB (2009), ‘New survey evidence on wage setting in Europe’, ECB Monthly Bulletin, February 2009.

II. Underlying domestic macroeconomic imbalances fuelled current account deficits

... and the crisis will render the necessary competitiveness rebalancing more challenging

Unless structural reform policies are stepped up, in most countries with large price competitiveness problems, the global economic and financial crisis risks hampering the adjustment capacity further.

First, in the period of very low inflation brought by the crisis, nominal rigidities are more likely to hamper downward adjustments in relative wages and prices. But the recent experience in Ireland and Greece shows that determined policy action in terms of public wages facilitates overall competitiveness adjustment.

Second, unless appropriate policies are put in place, the crisis risks weighing significantly on medium-term prospects for potential output growth. Possible losses in growth potential are generally projected to be stronger in Member States with large competitiveness problems. In these countries, wage bargaining systems face the double challenge of having to adjust to past losses in competitiveness as well as to weaker productivity growth. Clearly, policies to boost potential growth would be highly beneficial.

Third, pre-crisis balance-sheet stress has been severely compounded by the crisis-induced drop in asset prices and changes to risk attitudes. The

ongoing phase of balance sheet correction is likely to persist for some time. Member States which face considerable adjustment needs in terms of both price competitiveness and corporate balance sheets will have to strike a delicate balance between raising corporate cash flow to fix balance sheets and lowering prices to restore competitiveness. In other words, corporate balance sheet correction may slow the speed of the adjustment process by reducing firms' capacity to pass through lower wage costs into output prices.

Finally, the crisis has negatively affected financial intermediation, thereby hampering the necessary reallocation of capital and, consequently, labour across sectors. Financial sector repair therefore remains a key policy priority.

While the adjustment has been made more difficult by the crisis, determined, comprehensive and effective policy action can still facilitate the necessary rebalancing. As the case of Ireland demonstrates, fast and effective policy intervention is possible and can lead to substantial gains in competitiveness. Moreover, large adjustment needs in some Member States could act as a catalyst for structural reforms which would both facilitate adjustment and enhance long-run growth prospects.

III. Anatomy of current account surpluses in the euro area

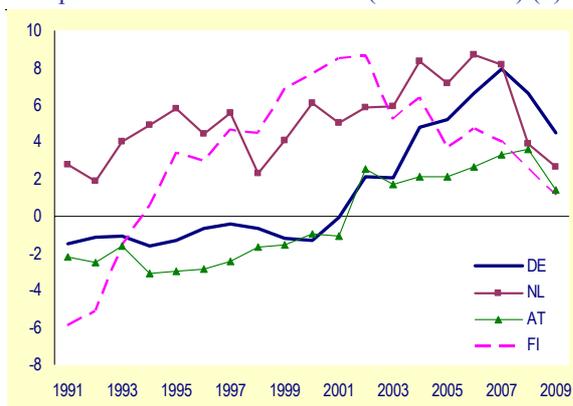
This section analyses developments of current accounts in four surplus euro-area Member States: Germany, the Netherlands, Austria and Finland. A significant and lasting upward shift in the current account occurred in all these countries but Finland in the early 2000s. This shift was associated with persistent weakening of domestic demand with increased net lending of the corporate sector playing a key role. Moreover, in Germany, the household sector increased its net lending by reducing investment and increasing gross savings. As an additional factor, over 2004-07, the surplus countries' strong export performance allowed them to take advantage of the boom in world trade. This provided room for fiscal consolidation and raised domestic savings and current account surpluses further. During the crisis, surpluses contracted substantially on the back of significant fiscal expansions and comparatively resilient private-sector demand. However, looking forward, signs of structural strengthening of private-sector demand remain elusive.

Policy action appears particularly pressing in Member States that have accumulated large current account deficits and experienced significant competitiveness losses. However, there is also a need to better understand the main drivers of large surpluses in some Member States. This section analyses the anatomy of current account surpluses in four major surplus countries of the euro area.

Current account surpluses increased substantially in the early years of the euro

Germany, the Netherlands, Austria and Finland have been running substantial current account surpluses (Graph III.1). Both, Germany and Austria had a slightly negative current account from 1991 up to 2002, when the external balance moved forcefully into surplus. The surplus increased particularly strongly in Germany, where it reached a peak of almost 8% of GDP in 2007.

Graph III.1: Current account (in % of GDP) (1)



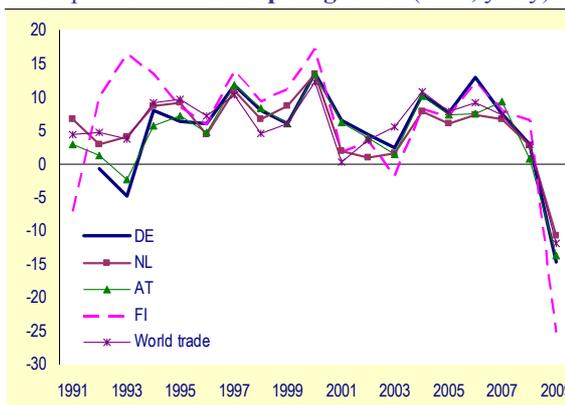
(1) Net lending of the total economy.

Source: Commission services.

The Netherlands has traditionally run a current account surplus which increased substantially after the introduction of the euro. In contrast, during the 1990s, Finland's current account

moved quickly from a deficit to a substantial surplus of above 8% of GDP in 2001, but has been falling since then. Luxembourg has also been running a significant current account surplus but is not considered in the following due to the particular nature of its external position. ⁽¹⁴⁾

Graph III.2: Real export growth (in %, y-o-y)



Source: IMF World Economic Outlook, Commission services.

Developments in external competitiveness have been only partly in line with trends in the current account. For Germany and Austria, sizeable reductions in unit labour costs relative to trading partners were recorded during the period 1998-2009, in line with rising current accounts surpluses. However, the reductions were much more significant relative to euro-area trade partners than relative to a larger group of partners. In Finland, a deterioration in competitiveness in the early 2000s was followed by a shrinking of the

⁽¹⁴⁾ Luxembourg's balance on goods and services is huge compared to GDP (31.7%) reflecting among other things exports of financial services. At the same time, the net primary income balance received from the rest of the world is strongly negative (-20.6%).

current account.⁽¹⁵⁾ In contrast, in the Netherlands, substantial losses of competitiveness went hand-in-hand with rising current account surpluses.

The global trade cycle is a major driver of exports

Exports of the four current account surplus countries considered are strongly driven by the global trade cycle. The correlation between real export growth and real world trade growth was above 0.85 in all four countries during 1992-2009. Graph III.2 shows that the export growth of the four countries correlates very strongly. This correlation reflects the global trade cycle.

Over the past decade, export growth in all four countries, and in particular Germany, has significantly outpaced that of the euro area. However, such buoyant export growth performance cannot explain the surge in current account surpluses per se. In principle, higher exports tend to generate higher income and thereby higher imports, potentially leaving the current account unaffected. For instance, some large current account deficit countries have experienced an acceleration in export growth under the euro similar to that of surplus countries without observing a significant improvement of the current account (EL). Ultimately, the current account depends on domestic saving and investment balances. Export growth can only affect it to the extent that it affects saving and investment behaviours.

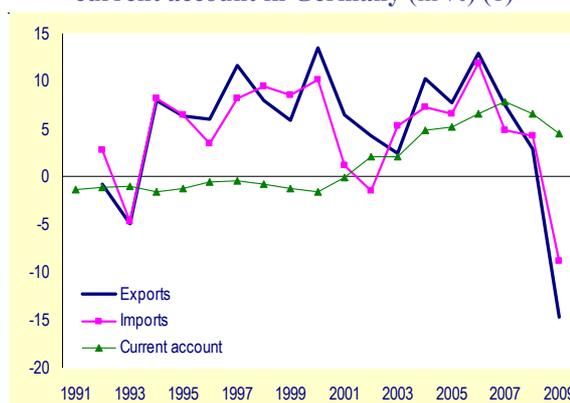
Import growth fell significantly behind export growth on the back of weak domestic demand

In the early 2000s, import growth fell significantly behind export growth in Germany (Graph III.3), Austria and the Netherlands. Accordingly, the current account surplus shifted significantly upward in the three countries. In Finland, export growth lagged behind import growth in the early to mid-2000s.

Weakness in domestic demand has been the central driver of the downshift in imports and increasing current account surpluses. This can be assessed on the basis of a simple demand-side growth accounting exercise. As results documented in Table III.1 show, the contribution

of domestic demand to growth during 1999-2007 was weak in Germany and Austria but also in the Netherlands. In the eight years prior to EMU, domestic demand was the central component of growth in all the countries. Domestic demand growth then fell much more strongly than GDP growth compared to the period 1991-1999. In contrast, in Finland, the domestic demand contribution was much more important for growth. The contribution of net exports to growth was important in Austria and the Netherlands and, in particular, in Germany during 1999-2007. Accordingly, imports were weaker than exports leading to a widening current account. In particular during the first four years of EMU, domestic demand was especially weak and consistent with that, import growth fell significantly short of export growth as documented above.

Graph III.3: Export and import growth and the current account in Germany (in %) (1)



(1) Real export and import growth and net lending of the total economy.

Source: Commission services.

Table III.1: Demand-side growth accounting

	Real GDP growth	Domestic demand contribution	Export contribution	Net export contribution
1999	1.7	1.8	1.5	-0.1
DE 2007	1.5	0.4	3.0	1.1
2009	-1.9	0.0	-2.8	-1.8
1999	3.5	3.4	5.0	0.1
NL 2007	2.3	1.6	3.9	0.7
2009	-1.3	-0.5	-3.1	-0.7
1999	2.5	2.1	2.3	0.5
AT 2007	2.4	1.4	3.8	0.9
2009	-0.8	0.1	-3.8	-1.0
1999	3.0	1.9	3.5	1.6
FI 2007	3.7	3.1	3.0	0.5
2009	-2.8	-1.9	-4.5	-1.0

(1) 1999 refers to the period 1991-99, 2007 refers to 1999-2007 and 2009 refers to 2008-09.

Source: Commission services.

⁽¹⁵⁾ At least based on unit labour cost data. Measures of the real exchange rate based on other deflators show more benign developments in competitiveness.

Demand has been comparatively resilient during the crisis

The forces that were at play in surplus countries during the early years of the euro have, to some extent, reverted in the global economic crisis. The surplus countries have been deeply affected by the world trade slump. In all four Member States, net exports provided a negative contribution to GDP growth over the period 2008-09 and the negative export shock is anticipated to be particularly large in Austria, Finland and the Netherlands. In contrast, domestic demand has remained relatively resilient, at least in Germany and Austria.

Persistent rises in corporate net lending are a central driver of the rise in current account surpluses in the early 2000s ...

A breakdown of saving/investment decisions by the household, corporate and government sector sheds further light on the determinants of the significant current account surpluses. Table III.2 documents the changes in the net lending/borrowing (NLB) of the institutional sectors from the second half of the 1990s to the period 2003-07.⁽¹⁶⁾ The largest part of the increase in the current account in Germany, the Netherlands and Austria can be traced back to the corporate sector. The household sector has also been contributing substantially to the increase in the current account in Germany and to some extent also in Austria. In this medium-term picture, the government contributed modestly to an increase of the surplus except for Finland, where reduced net lending by the private sector was partially compensated by increased lending of the government.

Table III.2: Net lending across sectors (in % of GDP) (1)

	DE	NL	AT	FI
Total economy	6.3	3.1	4.5	-0.6
Non-financial corporations	2.3	4.1	2.7	-0.8
Financial corporations	0.8	0.5	-0.1	-1.2
Households	2.6	-2.5	0.8	-2.1
Government	0.6	1.0	1.1	3.5

(1) Net lending of the institutional sectors. Changes of average 2003-07 relative to average 1995-2000.

Source: Commission services.

In Germany, Finland and in particular the Netherlands, the non-financial corporate sector is a very significant net lender to the economy. In Germany, Austria and the Netherlands, net lending increased significantly around the turn of the century and in the early 2000s. The shift appears to be structural as the corporate sector in these economies continues to provide net finance to the economy except for Austria, where corporate net lending has moved back to slightly negative territory.

... pointing to balance-sheet adjustment

Around the turn of the century, the corporate sector increased gross savings and reduced investment in Germany, the Netherlands and Austria. Such a strategy leads to an improvement in the net financial assets of the sector; it can thus be called a balance-sheet adjustment process. The persistency of the balance-sheet adjustment as indicated by increased net lending suggests that corporations in Germany and the Netherlands appear to have suffered from a significant deterioration of their balance sheets in the early 2000s.

To achieve the balance-sheet adjustment, NLB can be directly increased by cutting investment. But the greatest lever to increase savings in the corporate sector is via moderate wage compensation.

The development of wage compensation can be assessed by studying the wage share. As in other parts of the global economy, the share of wages in GDP has been falling significantly in the euro area as a whole. However, the fall has been significantly more marked in Germany and Austria than in the euro area as a whole. Although in the Netherlands, the wage share has been falling at the rate of the euro area, it has still been falling more significantly than in the current account deficit countries. Only in Finland, has the wage share been falling less than in the euro area. Wage share developments are broadly in line with disposable income developments which, in turn, have led to weak consumption and domestic demand thereby resulting into current account surpluses.⁽¹⁷⁾

⁽¹⁶⁾ NLB is the difference between saving and investment of the institutional sector considered. NLB is positive (resp. negative) when the sector lends to (resp. borrows from) the rest of the economy.

⁽¹⁷⁾ See for example Eppendorfer and Stierle (2008), German consumption: is there hope for a revival, ECFIN country focus, 5(6).

Households' net savings also played a role

On top of weak disposable income developments weighing on consumption, the household sector has significantly increased its NLB in Germany. ⁽¹⁸⁾ This means that more of its income has been saved and less has been consumed and invested. As in the corporate sector, the increase was sharpest in the years right after the turn of the century. Also in Austria, an increase in households' NLB can be observed, even though at a significantly smaller rate. With gross savings rates rising at a similar rate in Austria and Germany, the weakness in German household investment led to the stronger increase in German net lending. In contrast, in the Netherlands and Finland, the household sector has reduced its NLB, also reflecting falling gross savings rates.

The empirical evidence indicates that corporate as well as household decisions explain much of the strong increase in current account surpluses. The desired level of net savings seems to have shifted in the early 2000s and a rather protracted process of balance-sheet adjustment started at that time. This led to weak domestic demand and an increase in the current account surplus.

Fiscal consolidation is the counterpart to the further rise in current accounts during 2004-07

Governments reacted to the balance-sheet adjustment process in the early 2000s, which involved a significant reduction of private sector demand, by expanding fiscal deficits. This dampened the initial impact of the increased net lending in the private sector on demand and the current account.

When global trade boomed during 2004-07, Germany, the Netherlands and Austria were able to benefit strongly from world demand and significantly expanded their exports. The current account surplus continued to increase in that period. In terms of saving/investment balances, this trade-driven current account cycle finds its counterpart in the net lending of the government. In fact, fiscal consolidation was important for the dynamics of the 2004-07 period.

In this period, the current account surplus increased while private sector net lending stayed

fairly constant and fiscal deficits decreased substantially. ⁽¹⁹⁾

Is the reduction in current account surpluses permanent?

During the crisis, domestic demand remained relatively resilient in surplus countries due to significant fiscal expansion and comparatively stable private sector net lending. As a result, imports have been falling much less than exports and current account surpluses have contracted. This constituted a sizeable positive growth contribution to the rest of the world. At this juncture, it is difficult however to discern any substantial structural strengthening of private-sector demand. The changes in risk attitudes and in bank lending triggered by the crisis could prolong the period of corporate balance sheet correction which has contributed to the accumulation of surpluses in some of them in the pre-crisis years.

Clearly, more research is needed to confirm this diagnosis and uncover the causes of structural weakness in domestic demand in surplus countries. This concerns in particular the determinants of the significant shift in NLB in the corporate as well as the household sector in the early 2000s and the factors rendering the shift rather persistent, particularly in Germany. The impact of the bursting of the dot-com bubble on balance sheets could be a useful research avenue in that respect. Furthermore, the impact of tax reforms on corporate net lending decisions should be assessed. Finally, a better understanding of the impact of the comparatively underdeveloped services sector on the current account of surplus countries is needed.

Overall, current account surplus countries in the euro area should revisit the factors underlying the structural weakness in private sector demand. Removing structural obstacles to growth in domestic demand would be beneficial for the surplus countries themselves. First, increased consumption is typically associated with an increase in welfare. Second, stepped-up investment is conducive to increasing the long-term growth potential.

⁽¹⁸⁾ Huefner and Koske (2010) analyse the increase in the gross savings rate in Germany and find that it can be partly attributed to wealth effects ('Explaining household saving rates in G7 countries: implications for Germany', OECD Working Paper No. 754).

⁽¹⁹⁾ The increasing fiscal consolidation can be linked to the world trade boom as rising exports meant higher sales and greater corporate profitability, leading to buoyant (corporate) tax revenues.

III. Anatomy of current account surpluses in the euro area

In addition, a structural strengthening of domestic demand in surplus countries would also be beneficial to the current account deficit countries. Via the trade channel, increased demand in surplus countries could help reducing current account deficits. Quantitatively, however, this

channel is relatively weak and deficit countries cannot rely exclusively on stepped-up demand in surplus countries to reduce their imbalances. But greater demand in surplus countries would ease the adjustment burden.

IV. Differences in Member States' export performance

Since the introduction of the euro, euro-area Member States have recorded diverging developments in their export sectors. Although foreign demand has been the main driver of euro-area countries' exports since 1999, the differences in export performance across Member States have been caused mainly by divergent developments in price competitiveness. The important role of prices for export differences can be explained both by large country differences in the responsiveness of exports to price changes and by differences in price developments across countries. Furthermore, the different reactions of Member States' exports to changes in price competitiveness indicate that non-price factors also play a role in external trade. This was especially visible during the recent crisis, when the product structure of exports stood behind very different export developments across Member States.

Euro-area countries' exports and their determinants – pre-crisis trends

The divergent developments in Member States' external sectors, discussed in this report, can be also be observed in different export dynamics recorded since the introduction of the euro. The source of these differences varied between the pre-crisis times (1999-2008) and the recent period of heavy turbulence in world trade (2009) ⁽²⁰⁾. The differences in these two periods also show the importance of various factors that influence trade flows. During the first ten years of the euro area, average annual growth of real exports in Luxembourg, Ireland, Germany and Finland exceeded 7%. Export developments in Slovakia and Slovenia were even more impressive, but their performance reflects in part an ongoing trade integration process. In contrast, average export growth in Italy and Malta was just above 2% and in France and Belgium between 3 and 4% (see Table IV.1).

Differences in the strength of country-specific foreign demand are a potential explanatory factor behind the differences in export developments. Member States whose exports are directed to fast growing markets will, ceteris paribus, experience faster export growth. Table IV.1 shows the average annual growth rates of foreign import demand addressed to individual Member States. During 1999-2008, when world trade was growing by 6.6% annually, the export markets of Finland and Greece expanded by almost 8% annually, the highest growth rate among the euro-area countries. At the other end of the spectrum, Ireland's export markets grew by only 5.6% ⁽²¹⁾.

Also Spain, Luxembourg, the Netherlands, Belgium and Portugal faced comparatively sluggish external demand, with average annual growth of around 6%. These differences in foreign demand reflect differences in the geographical orientation of exports.

Table IV.1: Export, foreign demand, market shares and competitiveness, euro-area Member States (annual average change in %, 1999-2008)

	Exports (1)	Foreign demand (2)	Market shares (3)	REER (4)
BE	4.2	6.2	-1.8	1.0
DE	7.3	7.0	0.3	-0.9
IE	7.4	5.6	1.7	0.2
EL	5.9	7.7	-1.7	1.3
ES	4.5	6.0	-1.3	1.4
FR	3.5	6.5	-3.0	-0.5
IT	2.2	7.2	-4.7	1.9
CY	3.7	6.9	-3.0	1.0
LU	7.8	6.0	1.8	-
MT	2.4	6.4	-3.8	2.5
NL	5.6	6.2	-0.5	0.6
AT	6.4	7.1	-0.5	0.1
PT	4.0	6.2	-2.1	0.7
SI	8.3	7.3	0.8	0.0
SK	10.4	7.5	2.6	4.0
FI	7.2	8.0	-0.8	-1.6

(1) Real exports of goods and services; (2) export-weighted foreign imports of goods and services, 60 main euro-area trading partners; (3) performance of exports over foreign demand; (4) based on export price deflator.

Source: Commission services.

As export growth depends on the dynamics of the underlying external demand, a useful metric to compare countries' export performance is market share developments (see Table IV.1). Between 1999 and 2008 most of the euro-area countries lost market shares. This process is common to advanced economies and is related to the rapid integration of many emerging markets into the world economy and hence the division of the

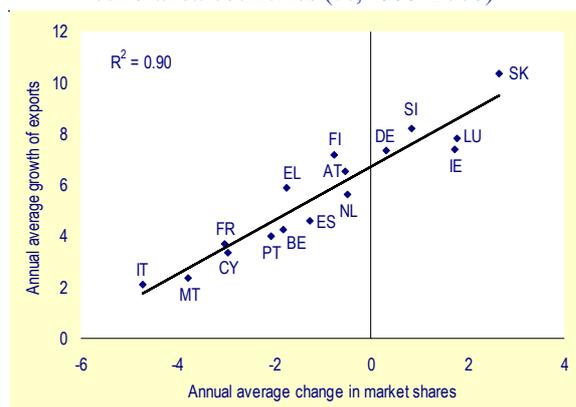
⁽²⁰⁾ As this section discusses trade issues, we take as demarcation the large turbulences in world trade started at the end of 2008 and for the sake of simplicity take only 2009 as a crisis year.

⁽²¹⁾ Export markets are defined here in geographical terms, disregarding the sectoral composition of exports. If a country specialises in fast-growing sectors such as pharmaceuticals or

ICT, as Ireland has done, this will underestimate the true growth of foreign demand for a country's products.

world export market among an ever larger number of global competitors. Among euro-area countries, the positive effect of trade integration was particularly visible in the catching-up economies of Slovakia and Slovenia, whose market shares grew over time. Large differences in export performance persisted across the euro area even when disregarding the special cases of Slovakia and Slovenia. Italy was losing on average almost 5% of its market shares every year and Malta almost 4%. At the same time, Ireland and Luxembourg increased their market shares by almost 2% on average between 1999 and 2008, while Germany recorded smaller but still positive changes. Graph IV.1 shows that there is a very strong correlation between export growth and market share growth during 1999-2008. This means that a large part of the differences in export growth in the euro area was related to gains or losses in export market shares.

Graph IV.1: Market shares and export growth, euro-area countries (% , 1999-2008)



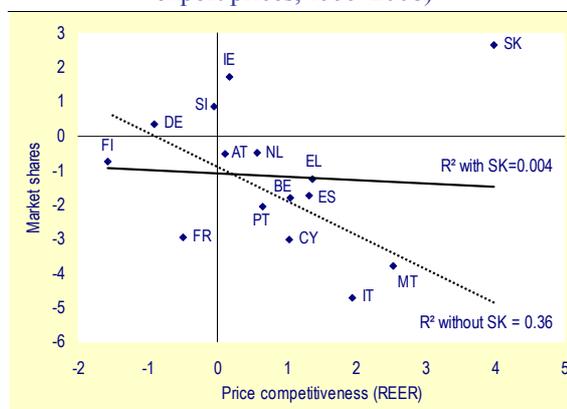
Source: Commission services.

Column four in Table IV.1 documents the large differences in the developments of price competitiveness among euro-area Member States (measured as the real effective exchange rate based on export price deflator), which is the primary factor influencing export market shares. During 1999-2008, Slovakia recorded the highest real exchange rate (REER) appreciation, which however stems from the nominal appreciation of the currency⁽²²⁾. Apart from Slovakia, Malta and Italy experienced the largest losses of price competitiveness among euro-area countries. On the other hand, in Finland, Germany and France the price competitiveness of exports improved as the REER fell on average.

⁽²²⁾ Slovakia introduced the euro on 1 January 2009.

Graph IV.2 shows the cross-country correlation between changes in price competitiveness and export market shares changes during 1999-2008. Although the low R² seems to indicate no correlation, it is in fact due to Slovakia, which is a clear outlier in the sample. After removing Slovakia from the sample, the correlation increases to 36%, and the relationship is clearly negative, in line with expectation. Nevertheless, more than 60% of cross-country differences in market share changes still cannot be explained by changes in REER.

Graph IV.2: Price competitiveness and market shares, euro-area countries (average annual % change, REER based on export prices, 1999-2008)



Source: Commission services.

Non-price competitiveness factors are another source influencing market share developments. They encompass features such as product differentiation, technological content, or product quality. Graph IV.2 also shows that non-price competitiveness can play both a negative and a positive role for export developments. The outstanding example is Slovakia, which in spite of over 2% annual appreciation of the REER, increased its market shares by almost 4% per year, pointing to strong gains in non-price competitiveness. Ireland and Slovenia also recorded some gains in non-price competitiveness, although much smaller compared to Slovakia. France and Italy are examples of negative influence of non-price factors on export market shares. In France, which is the most striking example in spite of REER developments comparable to those in Germany, market shares were falling on average by 3% annually, in contrast with some small gains in Germany.

Measuring export performance: export demand equations

Traditional export equations are a useful tool to quantify the respective roles of income and prices for export developments. These equations explain export developments by changes in (i) foreign demand and (ii) price competitiveness. The estimation method is based on the presumption that a long-term equilibrium relationship between exports, prices and foreign demand exists and that in the short term exports fluctuate around that equilibrium. Box IV.1 contains more information on the methodology and estimation results.

The results of the estimates show that traditional determinants of exports go some way towards explaining the export performance of the euro-area members, but their explanatory power differs across countries. The most visible line of demarcation is country size. Traditional factors seem to have reasonably good explanatory power in larger Member States, yet less so in smaller ones. The usually less diversified product structure of exports in smaller economies could be one reason for that. Due to the existence of scale economies, large countries are better positioned to produce and export a larger number of product varieties than small countries. ⁽²³⁾

Turning to those countries where a long-term equilibrium relationship has been detected statistically (France, Germany, Italy, Spain and Austria), the estimation results show that most of them exhibit the same responsiveness of exports to changes in foreign demand. Specifically, a 1% increase in foreign demand translates into roughly a 1% increase in exports in the long term. A positive exception in this regard is Spain, whose exports react by more than one-to-one to the increase in foreign demand. Coupled with a steady increase in foreign demand, this result implies increasing market shares in goods and services. Growing market shares for Spanish exports can be related to the steady opening-up of the Spanish economy and its growing size, observed during most of the sample period. The strong export performance should not, however, be a source of complacency. The rapid integration process will not continue indefinitely. As the process of integration runs its course, further gains in export shares will diminish. On the opposite side, France's exports have been lagging

far behind the growth of its destination markets, pointing to major structural weaknesses in France's export sector.

The estimates show that Member States' exports react very differently to changes in price competitiveness. On the one hand, Germany's and Austria's exports exhibit comparatively small price elasticity, meaning that in the long run price factors are comparatively less important for the competitiveness of German and Austrian exporters. On the other hand, Italy's exports are very sensitive to the price charged by its exporters and cost-based factors are especially relevant for Italy's competitiveness. The size of the differences in price elasticities is remarkable: a 1% deterioration in price competitiveness would reduce Italy's exports in the long term by more than twice as much as Germany's.

Table IV.2: Contribution of trade determinants to export growth, euro-area Member States (1999-2008, average annual growth in percentage points) (1)

	Total export growth	REER	Foreign demand	Unexplained
DE	7.3	0.5	6.4	0.4
ES	4.5	-1.9	7.4	-0.9
FR	3.5	0.8	5.3	-2.6
IT	2.2	-4.6	6.7	0.2
AT	6.4	-0.3	6.7	-0.1

(1) The contribution of a variable takes into account lagged effects of this variable.

Source: Commission services.

The equations can also be used to assess the contributions of various determinants to export growth during 1999-2008 (see Table IV.2). The simulations show that foreign demand was the main driver of exports but price competitiveness was key for explaining differences in export performance across euro-area countries. The comparison between Germany and Italy is informative of the role played by price competitiveness. If Italy's real exchange rates had evolved in a similar way to Germany's since the beginning of 1999, Italy's export growth would have almost matched that of Germany's, while in reality it was less than one third its size.

The analysis presented in the previous section shows that changes in foreign demand and prices explain only part of the cross-country variance in export growth and it is necessary to look for other factors. Residuals estimated from export equations can be associated with the influence of these other factors, which are not explicitly taken

⁽²³⁾ See for instance Krugman, P. (1988), 'Differences in income elasticities and trends in real exchange rates', NBER Working Paper No 2761.

Box IV.1: Export demand equations for euro-area countries

Single-equation error-correction models of export demand were estimated with cointegrating vectors obtained using the Johansen (1991 and 1995) maximum likelihood method. The equations have the following form:

$$\Delta x_t = \eta + \sum_{i=1}^4 \delta_i \Delta x_{t-i} + \sum_{i=1}^4 \phi_i \Delta fdem_{t-i} + \sum_{i=1}^4 \varphi_i \Delta reer_{t-i} + \alpha ECM_{t-1} + \varepsilon_t$$

where:

$$ECM_t = x_t - \gamma_1 fdem_t - \gamma_2 reer_t - \gamma_0$$

is the error correction term containing the long-term equilibrium; x is real exports of goods and services; $fdem$ is the country-specific foreign demand calculated as export-weighted foreign real imports of goods and services for 60 main trading partners of the euro area; $reer$ is the real effective exchange rate deflated with export prices; α is the adjustment coefficient indicating the speed of correction of the disequilibrium. All variables are in logs. Using the general-to-specific approach the initial number of lags (4) was reduced to a more parsimonious form.

The main results of the estimation are presented in the table below.

Determinants of real exports in euro-area countries — estimation results (1)				
	Long-run elasticities		Adjustment coefficient	R ²
	Foreign demand	REER		
Austria	1.03	-0.82	-0.15	0.57
Germany	1.03	-0.73	-0.26	0.70
Spain	1.36	-1.31	-0.12	0.41
France	0.86	-1.18	-0.31	0.38
Italy	1.08	-1.72	-0.20	0.48

(1) Sample is 1980Q1-2008Q3 except France: 1980Q1-2000Q1. All coefficients are significant at 5%.
Source: Commission services.

The table reports results obtained for countries for which meaningful long-term cointegration vectors were found. Apart from the countries listed in the table, Portugal, Greece, Belgium, the Netherlands and Finland were tested for cointegration relationship. Ireland, Cyprus, Luxembourg, Malta, Slovenia and Slovakia were omitted because the data series were too short. REER measures other than export-price based measures were checked but did not produce plausible results. France also exhibits a lack of cointegrating relationship when the entire sample period is considered. Cointegration exists for shorter sub-samples, up to around the year 2000, but breaks down thereafter.

The estimates show that real exchange rates and foreign demand explain to a large extent changes in exports over time. The estimated cointegrating vectors have signs in line with economic theory. Real exports are related positively to external demand and negatively to an appreciation of the real effective exchange rate. The explanatory variables account for around a half of the quarterly variation in real exports. It should be borne in mind that quarterly exports are very volatile and contain a lot of noise. Therefore the size of the coefficient of determination over this relatively long sample indicates a reasonably good fit. The long-term demand elasticities for most of the countries are close to unity, indicating constant export market shares in the long run. In fact, the hypothesis of unity elasticity was rejected only for Spain and France. Price elasticities exhibit large variation among countries, which indicates different weights of price factors for exports across Member States. It should also be borne in mind that the absolute value of the elasticity is rather sensitive to the price indicator used.

The size of the adjustment coefficient shows the speed at which exports return to their equilibrium value and hence how important the equilibrium is for determining the short-term behaviour of exports. In the estimates presented here, the size of the adjustment coefficient varies from 0.12 for Spain to 0.31 for France, which implies that half of the disequilibrium is corrected in 1.5 years in Spain and in only half a year in France.

into account in the equations. The results presented in Table IV.2 show that residuals have played some role in driving exports since 1999, and a rather significant one in the case of France. This large negative contribution of residuals in

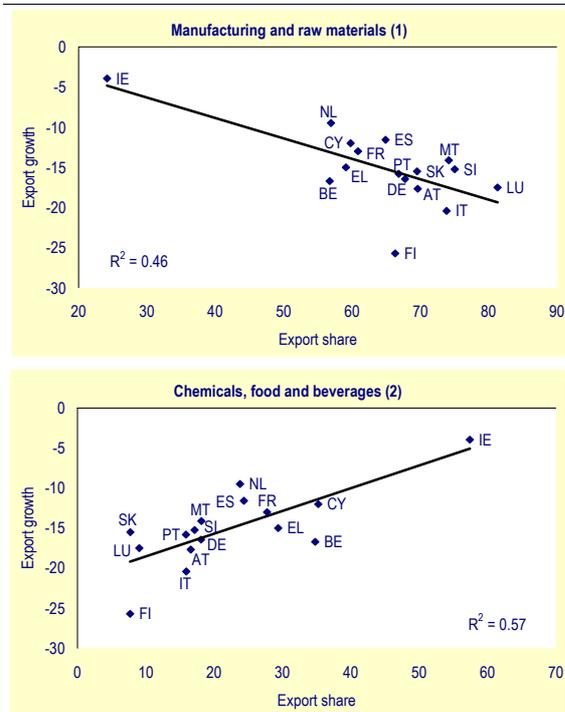
France can be associated with the negative non-price factors identified during 1999-2008 (see Graph IV.2). Negative residuals also played a non-negligible role in Spain during this period. At the same time, Germany's relatively large and

positive residuals can reflect the existence of some positive non-price factors.

Export developments in the euro area during the recent slump in world trade

At the end of 2008 and the first half of 2009 world trade fell at a speed not experienced since the Great Depression. Euro-area exports have been severely affected by the fall in trade activity. In the trough of 2009Q2, euro-area (intra- and extra-area) real exports of goods and services dropped by 17% (year on year). Although exports started to recover slowly from 2009Q3, they contracted by more than 13% over the whole of 2009.

Graph IV.3: Euro-area Member States: the impact of export structure on export growth (correlation between the share of various export sectors and the growth of total exports of goods, in %, 2009)



(1) Share of manufacturing less chemicals and raw materials (SITC 2, 3, 4, 6, 7, 8) in total exports of goods based on trade statistics. Growth rate of goods exports in 2009 based on National Accounts. After removing IE from the sample R² = 15%. (2) Share of chemicals (SITC 5) and food and beverages (SITC sectors 0 and 1) in total exports of goods based on trade statistics. Growth rate of goods exports in 2009 based on National Accounts. After removing IE from the sample R² = 32%.

Source: Commission services.

Export developments during the slump in world trade in 2009 illustrate the influence of structural factors on export developments. There were very large differences in export developments among euro-area Member States during this period. Exports from Finland fell by almost 25% in 2009,

from Italy by close to 20% and from Germany by more than 14%. At the same time Ireland's exports slid by just 3%. The country differences in foreign demand and price competitiveness were too small to explain export reactions across Member States. To illustrate this point, Table IV.3 reports contributions of various factors to export growth in 2009 for selected countries. Although the drops in foreign demand were in most cases the main driving force behind exports, the size of residuals increased significantly compared to the period 1999-2008 (Table IV.2).

Table IV.3: Contribution of trade determinants to export growth, euro-area Member States (2009, growth in percentage points) (1)

	Total export growth	REER	Foreign demand	Unexplained
DE	-14.2	0.7	-11.0	-3.9
ES	-11.5	-1.2	-1.3	-9.0
FR	-11.2	0.3	-10.0	-1.6
IT	-19.0	-4.4	-7.9	-6.7
AT	-12.3	-0.7	-7.5	-4.1

(1) The contribution of a variable takes into account lagged effects of this variable.

Source: Commission services.

As indicated already in Section I., the product structure of exports appears crucial to understand export developments in 2009. During the turbulence in world trade, large differences in trade developments across sectors were recorded. First, trade in services proved much more resilient than trade in goods although transport services suffered large falls due to the slowdown in world trade itself. Second, also among individual goods sectors, differences were large. Exports of food and beverages proved relatively resilient, while exports of raw materials and manufacturing collapsed. Among manufacturing sectors, transport equipment was most severely affected, while chemicals proved rather resilient, which was entirely due to pharmaceutical goods. These sectoral differences can be explained by the nature of the crisis and the fact that worldwide financing problems have led to a slump in spending on capital goods and consumer durables. As the export structure differs considerably among euro-area Member States, different developments in individual sectors translated into divergent export performance.

In conclusion, the analysis confirms that over the medium- to long-term horizon traditional factors, i.e. prices and demand, tend to determine trade flows. In the short term, however, and especially in times of turbulence in world trade, the importance of other factors can increase substantially.

V. The importance of valuation effects for external asset positions in the euro area

Financial globalisation has led to a sharp increase in gross cross-border holdings of foreign assets and liabilities. As asset and liability prices fluctuate, the value of the net foreign asset (NFA) position changes. Such valuation effects can play an important role as they affect the level of the trade balance needed to keep the NFA position stable. Since the launch of the euro, the external assets and liabilities positions of some euro-area Member States have been subject to significant valuation effects. These valuation effects are mostly related to fluctuations in equity prices but also, in some cases, to changes in the prices of other securities. Depending on the countries considered they have been of a cyclical or a more structural nature. Three groups of countries can be distinguished: (i) since the launch of the euro, current-account deficit countries have seen persistent negative valuation effects, which have compounded the deterioration of their NFA; (ii) in contrast, valuation effects have only had a modest impact on NFA positions in current-account surplus countries, except during the present crisis; (iii) Member States with large gross asset positions can be subject to very large swings in their NFA due to valuation effects.

As the divergence in current accounts observed in the euro area in recent years has been remarkable in terms of persistence, it is important to see whether the impact on net foreign asset (NFA) positions of the observed movements in current accounts has also been amplified by valuation effects. Therefore, this section analyses the role played by valuation effects on the NFA positions of euro-area Member States. Valuations effects on external assets and liabilities are defined as the capital gains/losses on the net external liabilities that are due to fluctuations in asset prices and exchange rates. Valuation effects can play a stabilising role on the NFA position when they offset the underlying movements in the current account, but also an amplifying role when they move in the same direction as the current account.

As discussed in detail in the section, there are several reasons for paying due attention to valuation effects within the euro area when analysing intra-euro-area adjustment mechanisms.

First, valuation effects have contributed to a persistent deterioration of the NFA position in Member States with large current account deficits, amplifying the effects of accumulated deficits during 1995-2007. These valuation effects, which have been particularly persistent, can mainly be traced back to fluctuations in equity prices.

Second, some euro-area Member States that are acting as financial intermediation centres and/or serve as an investment base for multinational companies (e.g. BE, IE) have accumulated large gross positions which may lead to large swings in NFA positions at times of crisis.

Third, in the surplus countries, the crisis has entailed negative valuation effects which have

weighed NFA positions. These effects can in part be related to adjustments in the pricing of risk on securities (e.g. losses due to the sub-prime crisis).

Some stylised facts on valuation effects in the euro area

Capital gains/losses can offset the current account balance, breaking the positive relation between the change in the net foreign asset position and the current account (see Box V.1 for some explanation on the accounting of valuation effects). The existence of large accumulated gross asset positions in some Member States paves the way for potentially very big valuation effects in case of large asset price fluctuations as in the current financial crisis. Table V.1 shows the gross asset positions of the euro-area Member States in

Table V.1: Assets and liabilities with the rest of the world, euro-area countries
(as % of GDP, 2008)

Country	Balance	Assets	Liabilities
BE	52.1	476.0	423.9
DE	18.2	193.1	174.9
IE	-58.5	1335.7	1394.2
EL	-88.0	88.8	176.7
ES	-79.3	126.8	206.0
FR	-6.8	250.0	256.8
IT	-9.9	115.1	125.0
NL	42.8	722.1	679.3
AT	-8.9	276.1	285.0
PT	-99.6	173.9	273.5
SI	-33.0	95.0	128.0
SK	-43.2	53.9	97.1
FI	-4.9	224.7	229.6

Source: Commission services.

2008, which were particularly large in Belgium, Ireland and the Netherlands.

Table V.2 illustrates the importance of valuation effects for euro-area Member States. For example, in 2008, in Ireland, due to the sizeable gross asset positions, the negative valuation component was five times bigger than the current account deficit, amplifying the negative change in the NFA by as much (Table V.2).

Table V.2: Changes in the net foreign assets positions and valuation effects, euro-area countries (2008, as % of GDP)

Country	Change in NFA	Current account (1)	Valuation effects
BE	21.1	-0.2	21.4
DE	1.9	6.6	-6.2
IE	-38.1	-5.1	-29.3
EL	6.7	-12.4	22.9
ES	-4.3	-9.1	4.8
FR	-18.2	-3.3	-14.1
IT	-7.7	-3.1	-4.6
NL	0.5	3.9	-3.1
AT	1.7	3.6	-1.2
PT	-7.5	-10.3	3.1
SI	-12.8	-6.0	-5.2
SK	-6.3	-5.8	-0.4
FI	23.7	2.5	23.8

(1) Current account positions are measured by net lending (+) or net borrowing (-) with the rest of the world. This includes the capital account balances.

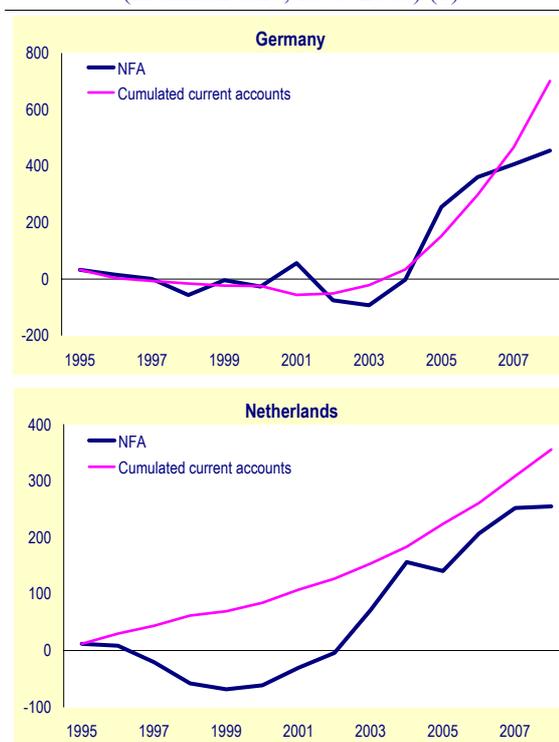
Source: Commission services.

Developments over time in valuation effects are not directly observable in balance of payment statistics but can be estimated by comparing NFA and cumulated current accounts. An approximate measure of the cumulated value of valuation effects over a period of time from T0 to T can be obtained by taking the difference between the NFA and a naïve estimate of the NFA based on BoP/National Accounts data. This naïve estimate of NFA is obtained by adding the successive current accounts from year T0 to the initial NFA position in year T0.

The comparison of naïve estimates of the NFA positions and actual NFA data over the period running from 1995 to 2008 suggests that valuation effects have had three types of effects on net external positions depending on the Member States considered: i) a moderate negative impact in some surplus countries (in particular, DE, NL) (Graph V.1); ii) a persistent deterioration of the

NFA position in some deficit countries (EL, ES, and PT) (Graph V.2); and, iii) 'scissors effects' ⁽²⁴⁾ in some euro-area Member States which have large gross asset positions (e.g. BE, IE) (Graph V.3).

Graph V.1: Net foreign asset (NFA) position and cumulated current accounts (in billion euro, 1995-2008) (1)



(1) The difference between the NFA line and the cumulated current accounts line gives the cumulated valuation effect at each point in time.

Source: Commission services.

In the large euro-area surplus countries (DE, NL), valuation effects remained moderate and did not play an important role up to the financial crisis. However, from 2007 onwards, negative valuation effects have been important and have contributed to dampening significantly the effect of the current account surplus on the NFA position.

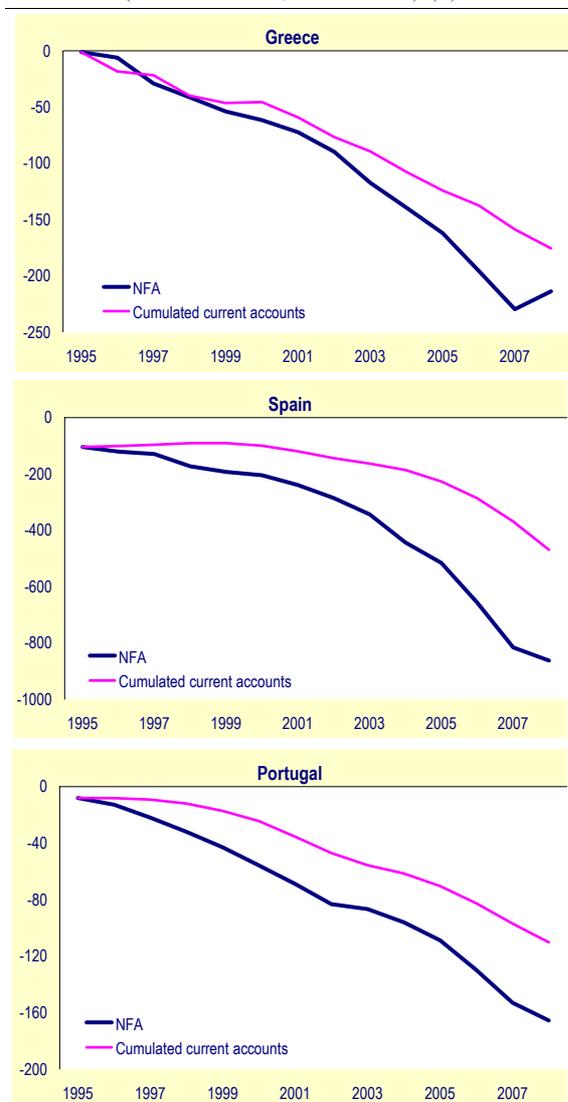
More importantly, for Member States with large current-account deficits (EL, ES, PT), the negative valuation effects seem to have been persistent, amplifying the movements in the current account and the deterioration of the net external asset position over the period 1995-2007 (Graph V.2). Since the crisis, these negative valuation effects have been subject to some

⁽²⁴⁾ The "scissors effect" reflects the situation when the net foreign asset position rapidly goes from positive to negative or the other way round.

V. The importance of valuation effects for external asset positions in the euro area

correction in Greece and, to a much lesser degree, in Spain.

Graph V.2: Net foreign asset (NFA) position and cumulated current accounts (in billion euro, 1995-2008) (1)



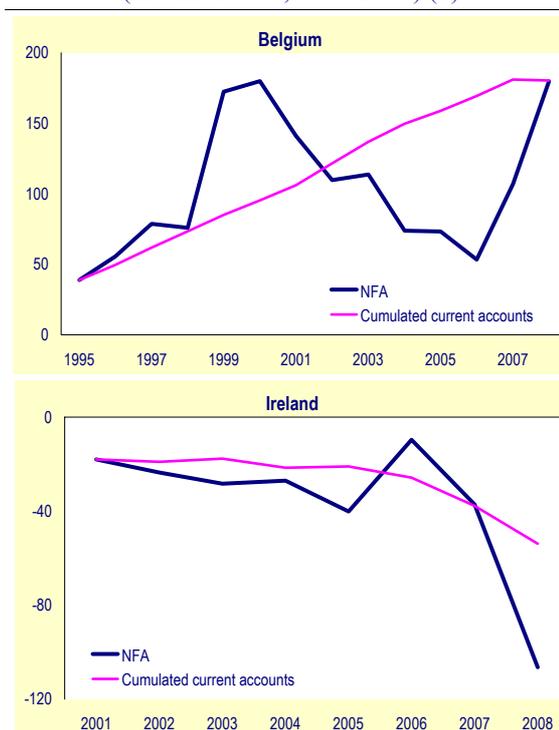
(1) The difference between the NFA line and the cumulated current accounts gives the cumulated valuation effect at each point in time.

Source: Commission services.

Last but not least, some of the euro-area Member States are acting as financial intermediation centres and/or serve as an investment base for multinational companies (e.g. BE, IE). In these countries, an initial FDI investment allows multinational companies to take on significant corporate debt with reduced transaction costs, leading to large gross foreign asset and liability positions. These countries have registered large swings in their NFA positions over the last decade. These large gross asset positions render them highly sensitive to asset price fluctuations.

In addition, their role as financial centres or investment base for multinationals probably implies a higher exposure to exchange rate fluctuations than in other Member States. This exposure to fluctuations in asset prices and exchange rates has been quite visible during the crisis, leading to very sharp valuation effects in 2007 and 2008. While in Belgium, the valuation effects have been reversed, in Ireland, a significant deterioration took place during the current downturn (see Graph V.3).

Graph V.3: Net foreign asset (NFA) position and cumulated current accounts (in billion euro, 1995-2008) (1)



(1) The difference between the NFA line and the cumulated current accounts line gives the cumulated valuation effect at each point in time. Data for Ireland (2001-2008).

Source: Commission services.

Valuation effects differ across asset categories

In the euro area, valuation effects can be explained mostly by fluctuations in asset prices and by the structure of external assets and liabilities. As cross-border asset holdings in the euro area are mostly denominated in euros,⁽²⁵⁾ valuation effects due to currency movements tend to be small.

⁽²⁵⁾ Lane, Philip R. and Jay C. Shambaugh, "Financial Exchange Rates and International Currency Exposures" American Economic Review (forthcoming).

Table V.3: The structure of net foreign asset position in the euro area (as % of GDP, 2007)

Country	Net				Gross Liabilities			
	Currency and deposits (f2)	Loans (f4)	Shares and other equity (f5)	Securities other than shares (f3)	Currency and deposits (f2)	Loans (f4)	Shares and other equity (f5)	Securities other than shares (f3)
BE	-47.3	49.0	-27.2	39.8	195.6	41.7	187.5	65.0
DE	6.5	10.4	17.0	-17.0	46.7	21.9	41.2	65.3
IE	-138.1	192.8	-212.6	171.3	251.4	171.8	514.3	324.4
EL	-18.6	-8.0	-29.7	-43.2	51.3	12.7	42.7	77.2
ES	-14.2	-15.7	-7.3	-41.1	42.3	29.5	56.4	78.2
FR	-27.1	5.5	22.4	11.2	87.9	22.4	79.7	78.6
IT	-2.9	1.4	27.3	-30.8	22.2	20.7	20.4	62.1
NL	-12.9	76.5	47.2	-67.2	119.8	133.2	256.2	196.5
AT	-5.3	20.5	0.4	-29.5	65.4	26.0	88.0	107.7
PT	-33.8	-18.6	-29.3	-12.1	89.7	35.7	74.5	70.7
SI	-1.1	-37.7	-3.2	18.5	28.3	49.2	23.3	9.4
SK	-2.7	1.8	-32.8	2.3	11.3	10.7	41.7	5.7
FI	4.6	0.9	-30.6	-4.7	24.9	21.5	114.5	74.6

Source: Commission services.

In general, valuation effects over the last decade have been mostly due to investment in the asset category *Shares and other equity* (f5) in most euro-area Member States.⁽²⁶⁾ Valuation effects due to investment in the asset category *Securities other than shares* (f3) are generally modest compared with those related to *Shares and other equity* (f5) despite the importance of this category in the NFA positions of most euro-area Member States (see Table V.3). Over the period 1995-2007, the cumulated value of the valuation effects for this asset category was close to zero for most euro-area Member States, except Portugal.

Valuation effects due to investment in the asset categories *Currency and deposits* (f2) and *Loans* (f4) are mostly caused by currency movements, some deposits and loans being denominated in other currencies than the euro. As these assets are not marked to market, they are subject to only limited price effects. The cumulated valuation effects over the period 1995-2008 for these asset categories were generally limited for most euro-area Member States. The largest fluctuations in the valuation effects on these asset categories can be seen in Belgium, Ireland and the Netherlands and, to some extent, in Portugal and Greece,

indicating that these countries are more exposed to exchange rate movements.

Relative equity prices and the size of net positions played an important role in the pre-crisis period...

Valuation effects can be explained either by a relative asset prices effect or by a net asset position effect. In the case of the *Shares and other equity* (f5) category, for instance, the relative price effect will entail a negative valuation effect if domestic equity prices increase faster than equity prices in the rest of the world. In contrast, the net asset position effect will depend on the size and the sign of the net balance and on fluctuations in global equity prices rather than relative equity prices.

In the case of a global increase in equity prices, a country with a negative net position in equity (i.e. where foreign equity assets held by residents are lower than domestic equity assets held by foreigners) will see a negative valuation effect. The larger the size of the net position or of the increase in equity prices, the more negative the valuation effect will be.

Since the launch of the euro, some of the economies in the euro area have benefited from faster rises in equity prices than the euro-area average due to better medium-term growth prospects. This has typically been the case of catching-up economies such as Spain and Greece, although not of Portugal (see Graph V.4). In Spain and Greece, the negative valuation effects

⁽²⁶⁾ In National Accounts, financial assets and liabilities are structured in seven categories: *Monetary gold and special drawing rights (SDRs)* (f1), *Currency and deposits* (f2), *Securities other than shares* (f3), *Loans* (f4), *Shares and other equity* (f5), *Insurance technical reserves* (f6), *Other accounts receivable/payable* (f7). Among these categories, *Currency and deposits* (f2), *Securities other than shares* (f3), *Loans* (f4) and *Shares and other equity* (f5) have the most important weight in total financial assets.

Box V.1: Valuation effects on the net foreign asset positions

Financial globalisation has led to a sharp increase in the gross cross-border holdings of foreign assets and liabilities. Such large gross positions can drive a wedge between the current account and changes in NFA, as asset and currency prices fluctuate. The simplified equation below illustrates the relation between the change in NFA and the current account. ⁽¹⁾

$$\text{Change in NFA (change in stocks)} = \text{Current account (flows)} + \text{Valuation effects}$$

Valuation effects can play an important role for the sustainability of the net foreign asset position as the size of the trade surplus that a debtor country has to run to service its net external liabilities will depend not only on its growth rate but also on the net returns it has to pay on these liabilities. In other words, the size of trade balance needed to stabilise the NFA depends on the net investment income balance and on the size of valuation effects (i.e. the capital gains/losses due to fluctuations in asset prices and exchange rate). The recent empirical literature points out the importance of valuation effects in the process of international adjustment. The simplified equation below illustrates the relation between the current account, the trade balance and the investment income balance. ⁽²⁾

$$\text{Current account} = \text{Trade balance (broad definition)} + \text{Net investment income}$$

- ⁽¹⁾ The exact identity is given by: Change in NFA = Current account + Valuation effects + Capital account transfers + Errors and omissions in the balance of payments data. The capital account transfers and the errors and omissions are generally a small component being considered as a residual. For simplicity, they are omitted from the above equation.
- ⁽²⁾ The exact identity is given by: Current account = Trade balance + Current transfers + International labour income balance + Net investment income. For illustration purposes, the broad definition of trade balance is given by the sum of the trade balance, the current transfers and the international labour income.

References:

Caballero, R., E. Farhi and P-O. Gourinchas (2008), 'An equilibrium model of global imbalances and low interest rates', *American Economic Review*, 98:1, 358-393;
 Lane, P. R., and G. M. Milesi-Ferretti (2004), 'Financial globalization and exchange rates', IMF Working Paper 05/3;
 Lane, P. R., and G. M. Milesi-Ferretti (2006), 'Europe and global imbalance', IMF Working Paper, Nov 9-10.
 Gourinchas, P.-O. and H. Rey (2007), 'International financial adjustment', *Journal of Political Economy*, vol. 115, No. 41;
 Obstfeld, M. (2004), 'External adjustment', *Review of World Economics* 140(4): 541-68.

registered during the decade up to the financial crisis can be mostly attributed to this relative equity price effect. In contrast, the net-position effect on *Shares and other equity* (f5) has played an important role in Portugal. It has only played a small role in Spain and Greece.

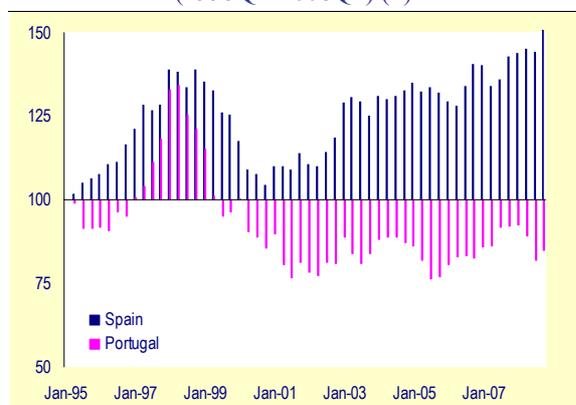
...but also during the crisis.

Developments in asset prices are determined by both the medium-term growth trend but also by the cyclical position of the economy. When the valuation effects on NFA are determined by cyclical factors, periods of positive capital gains are followed by periods of negative capital gains, the cumulated value of valuation effects being close to zero in the medium-term. In contrast, when structural factors are at play valuation effects are more persistent.

There seems to be a significant degree of heterogeneity in the euro area concerning the impact of the crisis on valuation effects. These effects have for instance been substantial in Belgium, Ireland and Greece, but very modest in Portugal and the Netherlands (see Table V.4).

In Greece and, to a much lesser degree in Spain, valuation effects have played a stabilizing role, helping to relax the external constraint. Given negative net positions, the global fall in equity prices has translated into positive valuation effects

Graph V.4: Equity prices in real terms relative to the euro area, Spain and Portugal (1995Q1-2008Q4) (1)



(1) Ratio of the price indices 1995Q1=100.

Source: Commission services.

which should, however, be reverted once the global economy and global equity prices recover. In addition, relative price effects have also played a role in these countries, as domestic equity prices have dropped more than global equity prices. This has translated into positive valuation effects in the *Shares and other equity* (f5) category. These relative price effects could be the first signs of a more structural/permanent effect related to a longer period of underperformance of equity prices due to a lasting phase of competitiveness adjustment in Greece and Spain.

Table V.4: Valuation effects in selected euro area Member States, in 2008 (as % of GDP) (1)

Country	Val. effects	Val. effects	Val. effects
	NFA	(f3)	(f5)
	Col (1)	Col (2)	Col (3)
BE	21.4	3.2	19.4
DE	-6.2	-5.1	-1.7
IE	-29.3	-21.7	5.7
EL	22.9	-0.1	22.9
ES	4.8	-0.7	4.5
NL	-3.1	-6.3	5.3
PT	3.1	-3.7	7.5

(1) (f3) Securities other than shares; (f5) Shares and other equity.

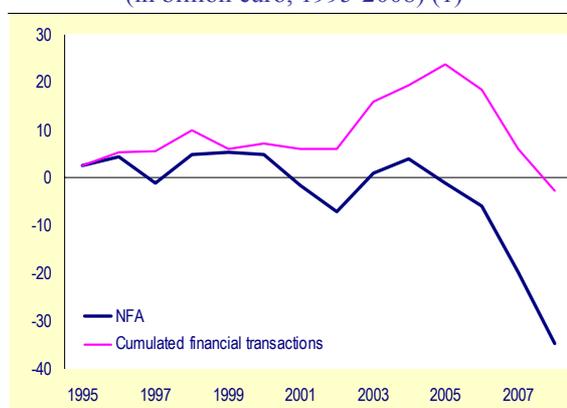
Source: Commission services.

In general, valuations effects in the asset category *Securities other than shares* (f3) are small and show little correlation with the cycle. Occasionally, however, valuation effects in this category can be sizeable and of a structural nature. For example, in Portugal, the negative valuation effects over the period 1995-2008 are mostly due to *Securities other than shares* (f3) and have shown no sign of reversal in the crisis (Graph V.5). Furthermore, in the current times of re-pricing of risk, relative price effects for this asset category seem to have played an important role in some surplus countries. In 2008, Germany and the Netherlands experienced negative valuation effects that were caused mostly by relative price effects in the category *Securities other than shares* (f3) (see Table I.1.4). These negative valuation effects, which are probably related to changes in risk premiums on bonds and sub-prime losses, are likely to be permanent in nature.

The net-position effect has played an important role in the current downturn in some of the euro-area Member States that are acting as financial intermediation centres and/or serve as an investment base for multinational companies. For example, in Ireland, the valuation effects have aggravated the negative NFA position due to the loss in value on the asset category *Securities other*

than shares (f3) that dominated the net value gain on the asset category *Shares and other equity* (f5) (Table V.4). In the face of the adverse global shock on securities prices, the negative effect coming from the large size of the positive net position has been significant enough to dominate any other possible effect coming from relative securities prices. By contrast, Belgium has registered a reversal of the valuation effects due to the net gain on the equity position. This improvement can be traced back to both a relative equity prices effect and a net-position effect. Valuation effects on *Securities other than shares* (f3) have been negligible in Belgium, with no valuation losses on this asset category.

Graph V.5: Valuation effects in "Securities other than shares" (f3), Portugal (in billion euro, 1995-2008) (1)



(1) The difference between the NFA line and the cumulated financial transactions line gives the cumulated valuation effect at each point in time.

Source: Commission services.

The role of valuation effects for the intra-euro area adjustment

The analysis provided in this section suggests a couple of lessons regarding the possible interactions between valuation effects on net external positions and developments in economic activity in euro-area Member States with, in particular, striking differences between surplus and deficit countries.

Catching-up economies tend to accumulate current-account deficits to finance large investment needs or to consume part of the anticipated future income gains. To the extent that income convergence processes are characterised by faster equity price gains in the catching-up country than in the rest of the world, the deterioration in net external assets due to current-account deficits will be compounded by negative valuation effects. This has two major

V. The importance of valuation effects for external asset positions in the euro area

consequences. First, negative valuation effects accelerate the deterioration of the country's balance sheets and raise its exposure to financial shocks. Second, the negative valuation effects indicate that part of the country's gains in equity wealth accrue to external investors. Given that the order of magnitudes involved can be significant, ⁽²⁷⁾ such transfers of wealth can weigh substantially on domestic demand via traditional wealth effects. Hence, valuation effects probably contributed to dampening growth in demand (relative to a situation where foreign holdings of domestic equity would have been nil) in catching-up countries in the euro area in pre-crisis years. Their role in the coming years will depend on developments in relative equity prices.

If catching-up economies such as Greece and Spain enter protracted periods of sub-par growth and weak gains in equity prices, the same factors will play in reverse and valuation effects will contribute to supporting domestic demand (again relative to a situation where foreign holdings of domestic equity would have been nil).

Overall, there is some indication that, in the case of catching-up economies, valuation effects can

have a destabilising role for net external positions but a stabilising role on domestic demand.

The situation is quite different in the case of surplus countries where valuation effects have generally remained small in pre-crisis years. Since the onset of the crisis, however, these countries have experienced significant negative valuation effects which are probably, at least partly, explained by investment in sub-primes markets. Assuming that current-account surpluses reflect private agents' desire to accumulate external assets, negative valuation effects, such as those observed during the crisis, will prolong the accumulation period and entail additional current-account surpluses. The recent experience of the euro area thus shows that large current-account surpluses require an efficient financial sector capable of channelling large capital outflows into foreign assets with strong returns.

Finally, in countries characterised by large gross asset or liability positions, valuation effects can lead to very sharp swings in net foreign asset positions. Beyond associated wealth effects, these swings raise the risk of sharp deteriorations in balance sheets in some sectors of the economy.

⁽²⁷⁾ In Spain, for instance, negative valuation effects on equities represent more than 30% of GDP in cumulative terms in the decade preceding the crisis.

VI. Conclusions

After a decade of increasing divergence, the global economic crisis has triggered a partial rebalancing of current accounts. The rebalancing is partly structural but also partly temporary and could be partially reversed with the recovery. It has been associated with some improvements in underlying domestic imbalances, particularly in terms of balance sheets in the private sector of current account deficit countries and some house price corrections. However, some new imbalances have emerged in the form of surging unemployment that call for determined policy action that facilitates labour reallocation and boosts labour productivity. Structural weaknesses in private sector demand in surplus countries also appear to largely persist. Furthermore, except for Ireland, convergence in current accounts has so far been associated with only moderate rebalancing of relative prices.

Overall, while the crisis has reduced some underlying imbalances, the need for substantial adjustment remains. It should involve a rebalancing of relative prices and demand across Member States.

Competitiveness divergences and underlying imbalances are a matter of common concern for euro-area Member States and warrant appropriate and timely policy measures. Determined action would reduce the social costs of unwinding euro-area imbalances. It would also facilitate the smooth functioning of EMU. A coordinated approach will contribute to attaining this objective.

Coordination will clearly be beneficial in achieving the objective of a smooth adjustment because of substantial trade and financial linkages. A common approach to addressing imbalances would reduce the adjustment difficulties of each individual country compared to a situation, where countries would act in an uncoordinated way. Moreover, a coordinated approach would be associated with fewer,

potentially distorting side effects on comparatively balanced economies in the euro area.

The policy response should be comprehensive, tailored to the specific needs of each Member State and cover measures in a range of areas: budgetary and wage policies, labour markets, product and service markets and the financial sector.

Action is required in all euro-area Member States. In the horizontal terms of reference adopted on March 15, the Eurogroup explicitly acknowledged the need for action in both current account deficit and surplus countries (see Box VI.1). As the terms of reference line out, the nature, importance and urgency of the policy challenges differ significantly depending on the countries considered.

Given vulnerabilities and the magnitude of the adjustment required, the need for policy action is particularly pressing in Member States which have accumulated large current account deficits and large competitiveness losses. These countries need to undertake the necessary relative wage and price adjustments and facilitate the reallocation of resources from the non-tradable to the export sector. In countries with fiscal imbalances, this adjustment should go hand-in-hand with sizeable fiscal consolidation.

Action is also needed in Member States that have accumulated large current account surpluses. In these countries, policies should aim to identify and implement structural reforms that help in strengthening domestic demand.

The crisis has underscored the need for reforms and co-ordination across Member States. A coordinated and ambitious policy response would ease the necessary adjustment processes but would also boost the euro-area's long-term growth prospects.

Box VI.1: Conclusions of the Eurogroup - Surveillance of intra-euro-area competitiveness and macroeconomic imbalances

On 15 March, the Eurogroup Ministers discussed the issue of divergences in competitiveness and macroeconomic imbalances within the euro area. A consensus emerged both on the analysis of the situation and on necessary policy responses by all Member States.

All euro-area Member States are facing important policy challenges to address the economic, budgetary and financial implications of the crisis and to pave the way for sustainable growth. This requires policy action geared at mitigating the impact of the crisis on potential output and employment, boosting productivity growth and ensuring sustainable public finances. An additional challenge arises from the existence of large competitiveness and current-account differences among euro-area countries. A smooth adjustment is important for the recovery and, more generally, for the smooth functioning of EMU.

Competitiveness divergences and current-account imbalances increased steadily in pre-crisis years and have in most cases largely persisted throughout the crisis. They have been underpinned by the build-up of a range of domestic economic imbalances in some Member States, including inter alia high (public and private) debt, structural weaknesses and housing bubbles in some current-account deficit countries, as well as persistent weakness in domestic demand in some surplus countries.

Competitiveness divergences and underlying imbalances are a matter of common importance for euro area Member States and warrant appropriate and timely policy measures. Determined action would reduce the social costs of unwinding euro area imbalances as well as the risks related to a market-driven correction. It would also facilitate the smooth functioning of EMU. A coordinated approach will contribute to attaining this objective.

The policy response should be comprehensive, tailored to the specific needs of each Member State and cover measures in four key areas: budgetary and wage policies, labour markets, product and service markets and the financial sector. Measures targeted at boosting labour productivity and potential growth, improving resource allocation by the financial sector and ensuring sustainable public finances would be beneficial in all Member States as they would help to correct imbalances and to underpin the recovery.

Action is required in all euro-area Member States, but the nature, importance and urgency of the policy challenges differ significantly depending on the countries considered. Given vulnerabilities and the magnitude of the adjustment required, the need for policy action is particularly pressing in Member States showing persistently large current-account deficits and large competitiveness losses.

These countries need to undertake the necessary relative wage and price adjustments and facilitate the reallocation of resources from the non-tradable to the export sector. In countries with fiscal imbalances, this adjustment should go hand in hand with sizeable fiscal consolidation. Countries where weaknesses in the fiscal framework contributed to fuelling external imbalances in the past should take steps to control primary expenditure and increase the effectiveness and efficiency of public finances. But action is also needed in Member States that have accumulated large current-account surpluses. In these countries, policies should aim to identify and implement structural reforms that help in strengthening domestic demand. Finally, in Member States that suffer from structural weaknesses in their export performance without incurring large current account deficits, there is a need to improve both price and non-price competitiveness.

Ministers commit:

- to address the issue of competitiveness divergences and macroeconomic imbalances swiftly and effectively;
- to put in place an ambitious and comprehensive policy response covering appropriate measures in four broad areas: budgetary and wage policies, labour markets, goods and services markets and the financial sector;
- to make sure that the agreed policy response is coordinated in the euro area, designed to address the specific vulnerabilities and needs of each country and facilitates the smooth functioning of EMU; and
- to review progress made on a regular basis.

<http://www.consilium.europa.eu/uedocs/NewsWord/en/ecofin/113375.doc>

Recent DG ECFIN publications

1. Policy documents

EUROPEAN ECONOMY. 9. November 2009.

Sustainability Report 2009

http://ec.europa.eu/economy_finance/publications/publication_summary16273_en.htm

EUROPEAN ECONOMY. 10. November 2009.

European Economic Forecast - autumn 2009

http://ec.europa.eu/economy_finance/publications/publication_summary16053_en.htm

EUROPEAN ECONOMY. 11. November 2009.

Product Market Review 2009

http://ec.europa.eu/economy_finance/publications/publication_summary16501_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. 57. November 2009.

Progress towards meeting the economic criteria for accession: the assessments of the 2009 Progress Reports

http://ec.europa.eu/economy_finance/publications/publication_summary16140_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. 58. February 2010.

Cross-country study: Economic policy challenges in the Baltics

http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/op58_en.htm

2. Analytical documents

EUROPEAN ECONOMY. ECONOMIC PAPERS. 392. December 2009.

Francesca D'Auria, Andrea Pagano, Marco Ratto, Janos Varga (European Commission)

A comparison of structural reform scenarios across the EU member states - Simulation-based analysis using the QUEST model with endogenous growth

http://ec.europa.eu/economy_finance/publications/publication_summary16459_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 393. December 2009.

Uwe Böwer and Alessandro Turrini (European Commission)

EU accession: A road to fast-track convergence?

http://ec.europa.eu/economy_finance/publications/publication_summary16468_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 394. December 2009.

CASE - Centre for Social and Economic Research

Quality of Public Finances in Support of Growth in the Mediterranean Partner Countries of the EU

http://ec.europa.eu/economy_finance/publications/publication_summary16474_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 395. December 2009.

Lars Jonung (European Commission) and Eoin Drea (Tom Philips and Associates Dublin)

The euro: It can't happen, It's a bad idea, It won't last. US economists on the EMU, 1989-2002

http://ec.europa.eu/economy_finance/publications/publication_summary16343_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 396. December 2009.

Matthias Hartmann and Helmut Herwartz (Christian-Albrechts-University Kiel)

Did the introduction of the euro impact on inflation uncertainty? An empirical assessment

http://ec.europa.eu/economy_finance/publications/publication_summary16491_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 397. January 2010.
Marco Ratto, Werner Roeger and Jan in 't Veld (European Commission)
Using a DSGE model to look at the recent Boom-Bust Cycle in the US
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp397_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 398. January 2010.
Julia Lendvai and Werner Roeger (European Commission)
External Deficits in the Baltics 1995 to 2007: Catching Up or Imbalances
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp398_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 399. January 2010.
Werner Roeger, Janos Varga and Jan in 't Veld (European Commission)
How to close the productivity gap between the US and Europe: A quantitative assessment using a semi-endogenous growth mode
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp399_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 400. February 2010.
Kamil Dybczak and Bartosz Przywara (European Commission)
The role of technology in health care expenditure in the EU
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp400_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 401. February 2010.
Joan Canton, Ariane Labat and Anton Roodhooijzen (European Commission)
An indicator-based assessment framework to identify country-specific challenges towards greener growth
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp401_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 402. February 2010.
U. Michael Bergman (University of Copenhagen) and Lars Jonung (European Commission)
Business Cycle Synchronization in Europe: Evidence from the Scandinavian Currency Union
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp402_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 403. February 2010.
René Belderbos, Leo Sleuwaegen and Reinhilde Veugelers (Vlerick Leuven Gent Management School)
Market Integration and Technological Leadership in Europe
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp403_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 404. February 2010.
Salvador Barrios (European Commission) and Pietro Rizza (Bank of Italy)
Unexpected changes in tax revenues and the stabilisation function of fiscal policy. Evidence for the European Union, 1999-2008
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp404_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 405. March 2010.
Alfonso Arpaia and Nicola Curci (European Commission)
EU labour market behaviour during the Great Recession
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp405_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. 406. March 2010.
Mark Hayden, Žiga Žarnić (European Commission) and Paul J.J. Veenendaal (CPB Netherlands)
Options for International Financing of Climate Change Mitigation in Developing Countries
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/ecp406_en.htm

3. Regular publications

Business and Consumer Surveys (harmonised surveys for different sectors of the economies in the European Union (EU) and the applicant countries)

http://ec.europa.eu/economy_finance/db_indicators/surveys/index_en.htm

Business Climate Indicator for the euro area (monthly indicator designed to deliver a clear and early assessment of the cyclical situation)

http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/2010/bci_2010_02_en.pdf

Key indicators for the euro area (presents the most relevant economic statistics concerning the euro area)

http://ec.europa.eu/economy_finance/db_indicators/key_indicators/documents/key_indicators_en.pdf

Monthly and quarterly notes on the euro-denominated bond markets (looks at the volumes of debt issued, the maturity structures, and the conditions in the market)

http://ec.europa.eu/economy_finance/publications/bond_market/index_en.htm

Price and Cost Competitiveness

http://ec.europa.eu/economy_finance/db_indicators/competitiveness/index_en.htm

Contributors to this issue are:

Competitiveness and current account divergences in the euro area	<i>E. Ruscher, G. Wolff, M. Żogala</i>
Underlying domestic macroeconomic imbalances fuelled current account deficits	<i>E. Ruscher, G. Wolff, M. Żogala</i>
Anatomy of current account surpluses in the euro area	<i>G. Wolff</i>
Differences in Member States' export performance	<i>M. Żogala</i>
The importance of valuation effects for external asset positions in the euro area	<i>N. Balta</i>
Data assistance	<i>G.M. Isbasoiu</i>
Overall co-ordination and editing	<i>R. Felke and E. Ruscher</i>

Comments on the report would be gratefully received and should be sent to the Editor-in-Chief:

Servaas Deroose
Director – Macroeconomy of the euro area and the EU / Deputy Director General (acting)
Economic and Financial Affairs Directorate-General
European Commission
BU1 0/209

B-1049 Brussels

or by e-mail to servaas.deroose@ec.europa.eu, eric.ruscher@ec.europa.eu, reinhard.felke@ec.europa.eu