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Foreword

I am pleased to introduce the third issue of Eurostat's publication *European economic statistics*.

The aim of this publication is to bring together statistical information from different areas in order to provide an overall picture of the structure and development of the European economy as well as information on important methodological developments and projects.

The recent financial and economic crisis has underlined the importance of relevant, timely and comparable statistics. This is the core of Eurostat's mission and I am proud to emphasise that the European Statistical System (ESS) already provides a large number of such data. However, the crisis has induced a substantial reform of EU economic governance and surveillance procedures, and this editorial contains a preliminary review of potential implications of recent initiatives in the area of statistics.

As in the previous editions, a significant part of the publication is devoted to presenting and analysing recent statistics on the European economy. They cover the full range of Eurostat's economic indicators, including statistics relating to national accounts, government finances, balance of payments, prices, monetary and financial accounts, foreign trade and the labour market. This is particularly interesting this year, as the impact of the financial and economic crisis becomes visible in the evolution of annual indicators, which are the main basis for this publication, but infra-annual indicators have also been used to illustrate interesting aspects in some cases.

The methodological section provides information on a range of new developments in relation to European economic statistics. The first article provides some background on the Principal Global Indicators website, a G20-initiative to which Eurostat is contributing. The second article deals with the sector decomposition of euro area nominal growth, which provides insights to recent events.

Moreover, another thematic article deals with the Statistical Data and Metadata eXchange (SDMX) initiative, which is not only a protocol for data exchange but a means to support improved business processes in statistical organisations, enabling data and metadata to be transmitted, disseminated and shared in the most efficient way. The final article deals with the role of data analysis in official statistics and how this process can be enhanced with specific techniques.

I hope that this publication will be a useful tool to provide the generalist user with insights on the European economy and new developments in the area of European economic statistics and I would like to thank members of the Eurostat editorial board and all contributors for their valuable input.

Walter Radermacher
Director-General, Eurostat

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EDITORIAL

Roberto Barcellan and Christine Gerstberger, Eurostat, National Accounts — Production

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Editor: Christine Gerstberger

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Editorial

Europe 2020 and enhanced EU macroeconomic, budgetary and structural surveillance: What are the implications for statistics?

By Roberto Barcellan and Christine Gerstberger — Eurostat, National Accounts — Production ([1])

1.1. Introduction: the crisis heritage

The recent financial and economic crisis has shown that the instruments for the coordination of the economic policy in the EU have not been fully used and gaps in the current system of governance still exist.

Against this background, Olli Rehn, the European Commissioner for Economic and Monetary Affairs, stressed: 'The need for greater coherence, greater coordination and foresight in the preparation of national budgets and national reform plans to ensure Europe's financial stability and achieve better growth while creating employment, in line with the objectives of the strategy set out in Europe 2020. We need more EU coordination, but also a more rigorous implementation of the rules we have adopted, with dissuasive sanctions to prevent slippage and regain confidence.'

With its communications on 'Europe 2020 — A strategy for smart, sustainable and inclusive growth' and on 'Enhancing economic policy coordination for stability, growth and jobs — Tools for stronger EU economic governance' ([2]), the European Commission has opened the 'post crisis' season for official statistics that will lead the development of statistics in the coming years.

Indeed, both initiatives — Europe 2020 and the macroeconomic, budgetary and structural surveillance — address the consequences of the financial, economic, social and public finance crisis not only from a political point of view. They require, at the same time, a strong statistical input to provide the necessary information to establish, assess and monitor European economic and monetary policies in the coming years.

Whilst the perception in analysing the main lines set out by the two communications clearly points to an emphasised role of statistics, the concrete references to them and their exact role have still to be detailed in the coming months.

Accordingly, this article provides a broad overview on recent initiatives and outlines some potential implications regarding the further development of European economic statistics.

1.2. Status of recent initiatives to improve EU governance and surveillance

1.2.1. Europe 2020 — Headline targets and flagship initiatives

On 3 March 2010, the European Commission launched the Europe 2020 strategy to follow up the 2000 Lisbon strategy. Formally adopted by the European Council on 17 June 2010, its declared objective is to overcome the crisis and prepare the EU economy for the next decade.

'Smart, sustainable and inclusive growth' is the motto of Europe 2020.

According to the European Commission, the European Union needs a strategy to emerge stronger from the crisis and turn the EU into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion.

Europe 2020 establishes three mutually reinforcing priorities:

— **smart growth:** developing an economy based on knowledge and innovation;

— **sustainable growth:** promoting a more resource-efficient, greener and more competitive economy;

— **inclusive growth:** fostering a high-employment economy delivering social and territorial cohesion.

These priorities are linked to concrete targets at European level (see Box 1.1) and national level.

([1]) We are grateful to Ales Capek (Head of Unit, Eurostat, Key Indicators for European Policies) and John Verrinder (Head of Unit, Eurostat, Statistics for Excessive Deficit Procedure II) for their contributions to this article.

([2]) See COM(2010) 2020 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF) and COM(2010) 367/2 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0367:FIN:EN:PDF).

BOX 1.1: EUROPE 2020 EU HEADLINE TARGETS

The EU needs to define where it wants to be by 2020. To this end, the Commission proposes the following EU headline targets:

— 75 % of the population aged 20–64 should be employed.

— 3 % of the EU's GDP should be invested in R & D.

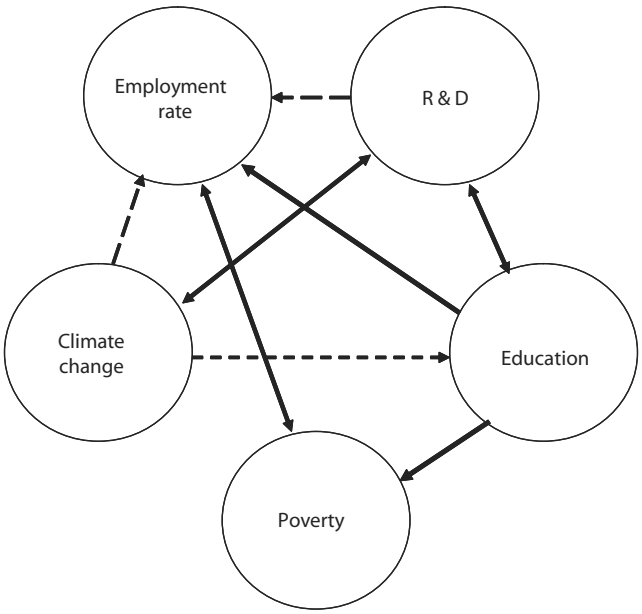
— The '20/20/20' climate/energy targets should be met (including an increase to 30 % of emissions reduction if the conditions are right).

— The share of early school-leavers should be under 10 % and at least 40 % of the younger generation should have a tertiary degree.

— 20 million less people should be at risk of poverty.

These targets are critical to the overall success of the initiative (see Figure 1.1). To ensure that each Member State tailors the Europe 2020 strategy to its particular situation, the Commission proposes that EU goals are translated into national targets and trajectories.

Figure 1.1: Europe 2020 — Headline targets — Synergies/interlinkages



The targets are representative of the three priorities of smart, sustainable and inclusive growth but they are not exhaustive: a wide range of actions at national, EU and international levels will be necessary to underpin them. The Commission is putting forward seven flagship initiatives to catalyse progress under each priority theme (see Box 2.2).

1.2.2. EU macroeconomic, budgetary and structural surveillance

Meanwhile, initiatives for enhanced EU macroeconomic, budgetary and structural surveillance have also gained momentum.

On 29 September 2010, the European Commission adopted a legislative package containing the most comprehensive reinforcement of economic governance in the EU and the euro area since the launch of economic and monetary union. These proposals are the concrete translation of the re-

BOX 1.2: EUROPE 2020 FLAGSHIP INITIATIVES

— '**Innovation Union**' to improve framework conditions and access to finance for research and innovation so as to ensure that innovative ideas can be turned into products and services that create growth and jobs.

— '**Youth on the move**' to enhance the performance of education systems and to facilitate the entry of young people to the labour market.

— '**A digital agenda for Europe**' to speed up the roll-out of high-speed Internet and reap the benefits of a digital single market for households and firms.

— '**Resource efficient Europe**' to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency.

— '**An industrial policy for the globalisation era**' to improve the business environment, notably for SMEs, and to support the development of a strong and sustainable industrial base able to compete globally.

— '**An agenda for new skills and jobs**' to modernise labour markets and empower people by developing their skills throughout the life cycle with a view to increase labour participation and better match labour supply and demand, including through labour mobility.

— '**European platform against poverty**' to ensure social and territorial cohesion such that the benefits of growth and jobs are widely shared and people experiencing poverty and social exclusion are enabled to live in dignity and take an active part in society.

cent Commission communications on economic governance, dated 12 May and 30 June, into legislative proposals ([3]).

The cornerstone of a set of tools to strengthen the economic governance of the EU and the euro area is the implementation of enhanced surveillance of fiscal policies, macroeconomic policies and structural reforms.

Enhanced surveillance will be based on a 'European semester' and comes with an array of sanctions to prevent or correct imbalances that could jeopardise the financial stability of the EU and the euro area. The Stability and Growth Pact will be reinforced with particular attention given to the evolution of debt as well as public deficits.

The proposals of this 'toolkit' are based on three main blocks of reform. Firstly, they call for a synchronisation of the European Union surveillance with the national budget procedures in a single framework, the 'European semester.'

Member States must submit their stability and convergence programmes and their national reform programmes simultaneously. This will facilitate a better integrated and more effective *ex ante* policy coordination at the European level. In the second part of the year, this review should guide the drafting of domestic budgets for the following year.

The Stability and Growth Pact should be reinforced both on the preventive and corrective arms. The Commission proposes to require a faster pace of progress towards budgetary balance for countries with high level of debt or pronounced risks in terms of debt developments. The debt criteria should be applied effectively through a clear and simple numerical benchmark for defining a satisfactory pace of debt reduction.

Secondly, beyond budgetary surveillance, the Commission proposes to address the macroeconomic imbalances among Member States which weaken the cohesion of the EU and in particular the euro area. Early detection through a scoreboard of indicators together with a more constraining European framework would spur the correction of divergences.

Thirdly, the EU-wide surveillance of structural reforms in Member States should ensure that sufficient progress is made in line with the overall goals of the Europe 2020 strategy for a more sustainable and more environmentally friendly growth that is based on knowledge and creates jobs, as adopted at the European Council in June 2010.

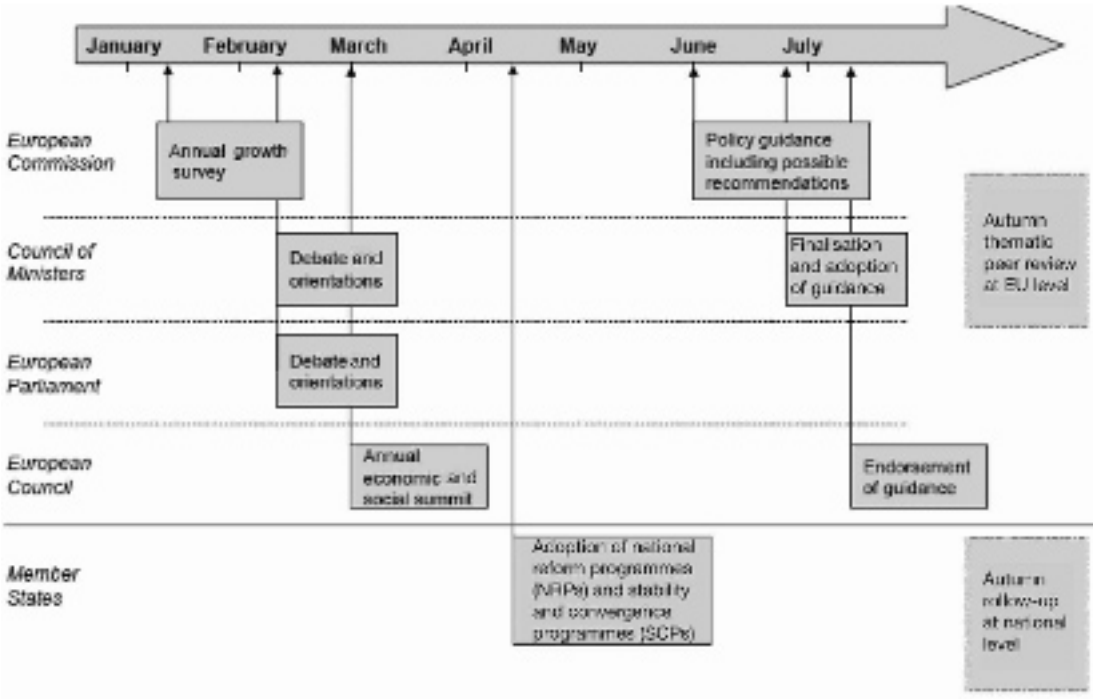
([3]) See: IP/10/561; IP/10/859 and IP/10/1199 as well as related documents on the website: http://ec.europa.eu/economy_finance/articles/eu_economic_situation/2010-09-eu_economic_governance_proposals_en.htm

On 7 September 2010, the European Council endorsed changes to the manner in which the EU's Stability and Growth Pact is implemented in order to allow a 'European semester' to be introduced, as from 2011, as part of a reform of EU provisions on the coordination of the Member States' economic policies ([4]).

The so-called European semester is one of the first initiatives to emerge from a task force on economic governance set up at the request of the European Council in March and chaired by the President of the European Council, Herman Van Rompuy. The aim is to boost coordination of the Member States' economic policies on the basis of expected results.

The new six-month cycle will start each year in January when the Commission will present an annual growth report. It will continue in March when, on the basis of a report from the Commission, the European Council will identify the main economic challenges and give strategic advice on policies. Taking this advice into account, during April the Member States will review their medium-term budgetary strategies and at the same time draw up national reform programmes setting out the action they will undertake in areas such as employment and social inclusion. In June and July, the European Council and the Council will provide policy advice before the Member States finalise their budgets for the following year (see Figure 1.2).

Figure 1.2: European semester of policy coordination



Source: http://ec.europa.eu/economy_finance/articles/euro/documents/com_367_european_semester_en.pdf

1.2.3. Europe 2020 — Integrated country surveillance

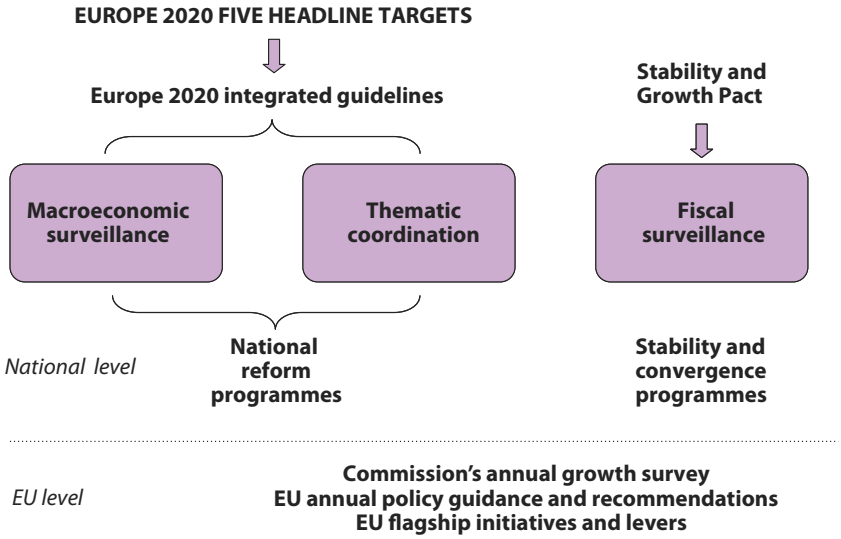
Accordingly, Europe 2020 will rely on two pillars: the thematic approach outlined above, combining priorities and headline targets; and country reporting, helping Member States to develop their strategies to return to sustainable growth and public finances (see Figure 1.3).

Integrated guidelines will be adopted at EU level to cover the scope of EU priorities and targets. Country-specific recommendations will be addressed to Member States.

National targets should be ambitious but realistic, correspond to EU targets, reflect different starting positions and national circumstances and be coherent among them. National targets will be discussed bilaterally between Member States and the Commission.

([4]) See http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/116295.pdf

Figure 1.3: Europe 2020 — Integrated country surveillance



1.3. Implications for European economic statistics

The successful achievement of the Europe 2020 targets and the implementation of the enhanced surveillance rely on the availability of timely, reliable and comparable statistics. What are the potential implications of these enhanced goals, processes and procedures on European economic statistics?

On the one hand, it is too early to be specific, as discussions on the concrete set of indicators that should be in the integrated surveillance process are still ongoing, but a main focus will certainly be on achieving further improvements of existing official statistics and their production processes.

1.3.1. Europe 2020 — Building on the Lisbon strategy's structural indicators

The predecessor of the Europe 2020 initiative, the Lisbon strategy, was already supported by a number of structural indicators (the so-called 'structural indicators').

These indicators were instruments for the objective assessment of progress made towards the Lisbon objectives, and supported the key messages of the annual progress report. The majority of indicators stemmed from the European statistical system (ESS) but there were also indicators that came from sources outside the ESS.

These indicators covered the six domains: 'general economic background', 'innovation and research', 'economic reform', 'employment', 'social cohesion' and the 'environment' as well as a short list of 14 indicators which are available on Eurostat's website (see Table 1.1) ([5]).

Table 1.1: Short list of structural indicators

General economic background
GDP per capita in PPS
Labour productivity per person employed
Innovation and research
Youth education attainment level by gender
Gross domestic expenditure on R & D (GERD)
Economic reform
Comparative price levels
Business investment
Employment
Employment rate by gender
Employment rate of older workers by gender
Social cohesion
At-risk-of-poverty rate after social transfers by gender
Long-term unemployment rate by gender
Dispersion of regional employment rates by gender
Environment
Greenhouse gas emissions, Kyoto base year
Energy intensity of the economy
Volume of freight transport relative to GDP

([5]) See http://epp.eurostat.ec.europa.eu/portal/page/portal/structural_indicators/indicators

The new Europe 2020 indicators follow a slightly different logic. The set of headline target indicators comprises eight main indicators for monitoring the five headline targets of the strategy. These indicators are compiled for the EU as a whole and also for the individual Member States. The progress made towards the objectives of the strategy will then be measured using these indicators and the headline targets defined both for the EU and the Member States. This set should be complemented by additional indicators to measure developments relating to the flagship initiatives and to provide more detail on the achievements towards the objectives of the strategy.

1.3.2. Enhancements for fiscal surveillance

Similarly, fiscal surveillance in the EU is already supported by well established datasets and procedures ([6]).

The Maastricht Treaty, which foresaw the creation of the euro, organised the way multilateral fiscal surveillance is conducted within the European Union. It obliges Member States to comply with budgetary discipline by respecting two criteria: a deficit to GDP ratio and a debt to GDP ratio not exceeding reference values of 3 % and 60 % (or sufficiently diminishing and approaching the reference value at a satisfactory pace) respectively, as defined in the 'Protocol on the excessive deficit procedure' (EDP) annexed to the Treaty.

The EDP sets out schedules and deadlines for the Council, following reports from and on the basis of opinions by the Commission and the Economic and Financial Committee, to reach a decision that an excessive deficit exists in a Member State.

These reference values are based on government finance statistics (GFS) which show the economic activities of government, including: government revenue, expenditure and deficit as well as its transactions in assets, liabilities and other economic flows.

Council Regulation (EC) No 479/2009 requires that Member States report EDP-related data to Eurostat twice per year — at end-March and end-September in harmonised tables (see Box 3).

During the recent financial crisis, Eurostat provided guidance on the statistical recording of public interventions to support financial institutions and financial markets during the financial crisis. It has also collected and published data on government interventions for the years 2007 and 2009.

BOX 1.3: EDP NOTIFICATION TABLES

EDP notification tables are designed specifically to provide a consistent framework, with a link to national budgetary aggregates and between the deficit and changes in the debt. They should be fully consistent with GFS data and have the following format:

Table 1 provides a summary view showing the net lending/net borrowing for general government and subsectors, the general government debt by instrument, interest payable by general government (reported both with and without interest payments on swaps and forward rate agreements (FRAs), gross fixed capital formation of general government and the GDP of the reference year.

Tables 2 (2A, 2B, 2C and 2D) provide the link between the so-called working balances (i.e., the public deficit as reported nationally to parliament) and the net lending/net borrowing in ESA 1995 for each subsector.

Tables 3 (3A, 3B, 3C, 3D, 3E) make the link between the net lending/net borrowing (ESA deficit) and the change in debt.

Table 4 shows supplementary information: the stock in trade credit payable by government; the amount outstanding in the government debt from the financing of public undertakings; the extent and the reasons in case of substantial differences between the face value and the present value of government debt; and the gross national income (GNI).

([6]) http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/excessive_deficit

Following identified difficulties with Greek data, Eurostat's powers to verify statistical data used for the excessive deficit procedure were strengthened by the granting of enhanced verification powers ([7]).

These recent developments will contribute to further improve the quality of public finance statistics as the basis for fiscal surveillance.

1.3.3. Work on a surveillance scoreboard

On 29 September 2010, the Commission put forward a legislative package of reforms to strengthen existing tools and extend them for coordinating economic and fiscal policy in the EU which will now be examined by the Council, the European Parliament and the Economic and Social Committee.

Four proposals deal with fiscal issues, including a wide-ranging reform of the Stability and Growth Pact (SGP), while two new regulations aims at detecting and addressing effectively emerging macroeconomic imbalances within the EU and the euro area.

The foreseen mechanism strives to provide the framework for identifying and addressing macroeconomic imbalances, including deteriorating competitiveness trends ([8]).

Surveillance would start with an alert mechanism that aims at identifying Member States with potentially problematic levels of macroeconomic imbalances.

The alert mechanism would consist of a scoreboard complemented by expert analysis. The scoreboard would be composed of a set of indicators in order to identify timely imbalances emerging in different parts of the European and national economies.

The set of indicators should be sufficiently large to cover any possible case of major imbalance and making sure that it is sufficiently sensitive to detect imbalances early on.

— Possible indicators would most likely include both external (e.g. current accounts) and internal ones (e.g. private and public sector debt).

— The composition of the scoreboard may evolve over time due to changing threats to macroeconomic stability or advances in data availability.

— Alert thresholds would be defined and announced for each indicator. The thresholds should be seen as indicative values which would guide the assessment but should not be interpreted in a mechanical way. They should be complemented by economic judgment and country-specific expertise.

These specifications suggest that the enhanced economic governance and surveillance process in the EU will largely rely on official statistics that are already produced within the ESS, with probable requests to improve specific areas.

Within the ESS, Eurostat will play a key role to contribute to the development and production of concrete indicators. Building on positive experience with the establishment of EU/EMU short-term indicators (principal European economic indicators), a dedicated group has been set up in the ESS to analyse the implications of indicators and raise the awareness of policymakers and Member States of the statistical implications. This should ensure an appropriate response of the ESS to any additional statistical requirements and contribute to enhancing the EU economic governance and surveillance process.

([7]) See: Council Regulation (EU) No 679/2010 of 26 July 2010 amending Regulation (EC) No 479/2009 as regards the quality of statistical data in the context of the excessive deficit procedure.

([8]) See: MEMO/10/454 of 29 September 2010: Economic governance package (2): Preventing and correcting macroeconomic imbalance (http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/10/454&format=HTML&aged=0&language=EN).

2 Statistical analysis

2.1. Overview of statistical analysis

The following chapters provide statistical analysis based on major EU economic indicators. Data for EU candidate countries, members of the European Free Trade Association (EFTA), and other major economies are also presented where available.

Analysis is generally based on annual data available in May 2010. A selection of tables with important indicators can be found in the statistical annex to this publication. Further information and the latest statistics are on Eurostat's website. Unless otherwise stated, EU and EA refer to aggregate data for the current 27 Member States of the European Union (EU-27) and the 16 members of the euro area (EA–16).

Although some aspects of the economy (e.g. agriculture or business statistics) are not covered in detail, it is important to emphasise that the analysis is based on a coherent set of data which have many links with one other (commonly through the national accounts system). Together, these statistics give an overview of the main characteristics and trends affecting European economies at the aggregate EU, euro area or Member State level.

High frequency indicators from the areas traditionally covered in this publication are in general also part of Eurostat's 'Principal European economic indicators' (PEEIs), which will be used in the second part of this overview to provide a snapshot of the economic situation in May 2010 and to highlight typical inter-linkages between different indicators.

The next section summarises key findings from the detailed analysis.

2.1.1. Summary of key findings

As in previous editions of this publication, analysis was mainly based on a review of annual data which are typically used to analyse economic trends and structures over a medium-term perspective of several years. While changes from one year to the next are usually gradual, the latest data have to be interpreted in the light of the recent financial and economic crisis, which had a significant impact on many areas. Infra-annual data have also been used in some cases to illustrate interesting developments.

A main general finding of the detailed analysis is indeed that a reversal of previous trends can often be noted for 2008 and 2009 data, confirming the major impact that the recent financial and economic crisis had on a wide range of economic indicators.

National accounts

— For instance, following annual growth of about 2 % to 3 % between 2002 and 2007, gross domestic product (GDP) in the EU and the euro area contracted by 4.1 % and 4.2 % respectively in 2009, and all EU countries except Poland suffered significant contractions in economic growth.

— As a result, average growth of GDP over the past seven years declined to 1.2 % for the EU and 1.0 % for the euro area, but some catching-up by the relatively poorer Member States has taken place.

— The main effects of the recent crisis were a decline in manufacturing output, investments and profits, while government services, private consumption and 'compensation of employees' (i.e. pay) remained relatively resilient.

— Annual sector accounts are useful for analysing the economic behaviour of each sector in the economy, mainly non-financial corporations, financial corporations, general government and households — as well as transactions with the 'rest of the world'.

— Data for 2008 show that the household saving rate was higher in the euro area (14.1 %) than in the EU (11.0 %) and that the household investment rate (mainly in dwellings) was 10.5 % and 9.7 % respectively.

— The business investment rate was broadly the same in the EU (23.2 %) and in the euro area (23.1 %), but the profit share of non-financial corporations was 0.8 percentage points (pp) higher in the euro area (39.0 %) than in the EU (38.2 %).

— National accounts also provide information at regional level. Member States calculate a number of key variables, in particular at the NUTS 2 regional level, which subdivides the EU into 271 regional units.

— Divergences between GDP per inhabitant among the EU regions are still very high, but have been narrowing over recent years.

Public finance

— Governments play a key role in economics, providing public services and redistributing income. Total general government expenditure stood at 50.7 % of GDP in both the EU and the euro area (EA–16) in 2009.

— Public finances were significantly affected by the recent crisis. The ratio of total government expenditure to GDP increased sharply between 2007 and 2009. A large proportion of government expenditure (42.8 % of the EU total in 2009) went on redistributing income in the form of social transfers in cash or in kind.

— Total general government revenue in the EU amounted to 44.0 % of GDP in 2009, nearly 1 pp less than in 2008. EU governments collect most of their revenue in the form of taxes (57.6 %), and a further 32.3 % as social contributions.

— In 2009 the government deficit increased sharply in both the euro area and in the EU as a whole and went above the 3 % criterion. Government debt increased to 73.6 % GDP in the EU and 78.7 % of GDP in the euro area.

Inflation, interest rates and exchange rates

— The impact of the economic and financial crisis was also very marked in inflation and interest rate data.

— The annual average inflation rate in the euro area fell to a low of 0.3 % in 2009, after several years of relative stability at around 2.2 % and substantial increases in 2008 (EU trends followed a broadly similar pattern).

— Long-term interest rates in the euro area, as measured by the Maastricht criterion, averaged 4.3 % in 2008 and 3.8 % in 2009, featuring several swings in monthly data.

— Euro area money market rates, measured by the three-month Euribor, fell from an average of 4.6 % in 2008 to 1.2 % in 2009, with again much variance in monthly data.

— Following a general upward trend between 2002 and 2008, the value of the euro against other major currencies fell significantly between end-November 2009 and end-May 2010.

External dimension of the economy

— The global nature of the recent economic and financial crisis was underlined by major effects on external transactions.

— The sum of EU-27 imports and exports to countries outside the EU fell by a fifth between 2008 and 2009. Imports fell by more than exports, leading to a reduction in the overall trade deficit of over EUR 150 billion, almost 60 %.

— The EU-27's exports of goods to the United States fell by more than the overall average, but the US remained by far the most important destination. Exports to Russia fell by over one third, relegating Russia to fourth place behind Switzerland and China.

— China remained the largest source of EU-27 imports in 2009. Imports of energy products and raw materials both fell by over one third, accounting together for more than half the overall fall in EU-27 imports.

— While all Member States recorded falls in both exports and imports in 2009, they were particularly marked in Greece, Lithuania, Bulgaria, Romania and Finland, all of whom saw falls of over 30 % in total trade.

— International trade in services of the EU with the rest of the world was more resilient to the global crisis than trade in goods — in 2009 exports to non-EU countries fell by 9.2 % and imports by 6.3 %.

— The EU as a whole remains the world's largest exporter and importer of services, with a share of roughly 25 %. The USA continues to be the EU's biggest partner in international trade in services (25 % of exports, 31 % of imports). Of the EU Member States, the United Kingdom is the largest exporter of services outside the EU (22 % of total EU exports) and Germany the biggest importer (19 %).

— The EU current account deficit decreased to EUR 127.5 billion in 2009, roughly the same level as 2007, mainly due to the drop in the deficit in trade in goods. In 2009, Switzerland replaced the USA as the EU's main debtor, and China remained its main creditor.

— After the 2007 peak of EUR 531 billion, the annual flows of outward foreign direct investment (FDI) of the EU decreased to EUR 263 billion in 2009, a drop of more than 50 %. At the same time, incoming FDI was down by 46 %. FDI stocks of the EU continued to grow in 2008, and the EU remained a net investor vis-à-vis the rest of the world.

— Most of the foreign affiliates of EU resident enterprises are based in other EU countries (59 %). Their most important area of activity

outside the EU is the United States. Most foreign affiliates outside the EU are active in the services sector.

Labour market

— The crisis hit employment very hard in 2009: all Member States but one had negative employment growth, and the EU-27 average decreased by 1.8 %. The previous year, 2008, was on average a transition year after the expansive earlier period.

— The employment rate in the EU-27 decreased from 65.9 % in 2008 to 64.6 % in 2009, returning it to the level of 2.8 years before.

— In general, employment declined most in construction and manufacturing. As these industries typically employ men, it was they who lost more jobs than women. Young adults were hit harder than prime-aged workers or older workers.

— Also linked to the crisis, working time decreased by 2.8 % in the EU-27, after sustained increases in the period 2004–2008. Full-time workers had to adjust their working time more than part-time workers, especially among self-employed persons.

— In 2009 there were 21.4 million unemployed persons in the EU-27, 4.7 million more than in 2008. The surge in unemployment was due both to people losing their jobs and to economically inactive persons starting to seek work.

— Unemployment was up most in Spain (+ 1.6 million persons), the United Kingdom (+ 0.6 million) and France (+ 0.5 million). Unemployment rates also reached record figures, with men being more affected than women.

— Over the next quarters, long-term unemployment is likely increase substantially due to the scarcity of new jobs available. Indeed, long-term unemployment will probably be the most enduring consequence of the economic crisis for the labour market.

2.1.2. Economic overview based on PEEIs

While the analysis presented in this publication generally focuses on annual data, this section uses a selection of monthly and quarterly statistics from different areas of European economic statistics to review the current economic situation and illustrate typical interlinkages between these indicators.

Eurostat's Principal European Economic Indicators (PEEIs) were selected and developed to facilitate analysis of the economic situation in the euro area, the EU and its Member States. These indicators have been regularly monitored and improved in terms of coverage and timeliness over recent years. An initial list of 19 principal indicators selected in 2002 has since been expanded to 22 in 2008 (see Table 2.1.1)

Most recent figures can be found either in the overview PEEI section on Eurostat's website or in the database, where a more comprehensive collection of European and national short-term indicators is presented in the section 'general and regional statistics'. PEEI indicators are generally also part of larger sets of indicators from specific statistical domains.

The selection of PEEI and some complementary indicators on the EU and the euro area presented on the following pages set out the main trends in relation to the recent financial and economic crisis up to 2010Q1.

For instance, Figures A, B and C show that economic growth in the EU and the euro area was relatively robust until 2008Q1, when the worsening financial crisis resulted in a sharp contraction of GDP (with a peak decline in quarter-on-quarter GDP of 2.5 % in 2009Q1). A main factor for this was a sharp fall in investments, while household expenditure declined too, albeit quite moderately. However, quarter-on-quarter GDP growth returned close to zero as early as 2009Q2 and has remained positive since then.

Figure D suggests that economic sentiment is generally a good predictor of economic growth, as it started to deteriorate in June 2007, which corresponds to the beginnings of the subprime crisis in the US housing market. A negative peak in March 2009 was followed by a recovery in economic sentiment that has remained intact since then. On the other hand, employment and unemployment (see Figures E and F) are typically lagging indicators, as change in economic activity usually takes some time to affect labour markets. Indeed, quarter-on-quarter employment growth turned negative only in 2008Q3 and has stayed negative since then, while unemployment rates have been increasing from April 2008 on.

Monthly production figures are also very useful. Figure G shows that a steady decline in construction activity started as early as the beginning of 2007 and that the downward trend continues. Industrial production (see Figure H) started to fall sharply

only in May 2008, but bottomed out one year later, and has been recovering since then, broadly in line with industry orders (see Figure I).

The final set of Figures J, K and L shows that annual inflation in the EU and the euro area fell from over 4 % in July 2008 to around 0 % within a year, before resuming an upward trend. The ECB lowered its marginal lending rate from 5.25 % in September 2008 to 1.75 % in May 2009 and has kept it stable since then. While the USD/EUR exchange rate broadly followed the pattern of the economic downturn and recovery, its most recent decline has been linked to investors' concerns about Greek government debt.

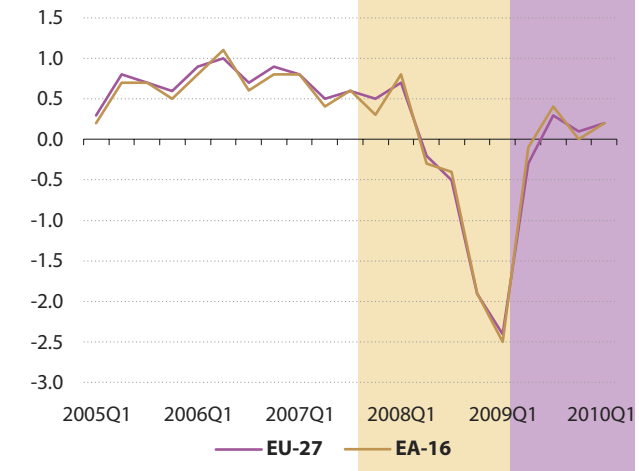
Table 2.1.1: Overview on the availability of principal European economic indicators

Principal European Economic Indicators	Current release of European aggregates	Legal date of transmission from MS to Eurostat	Target date of transmission (2008 revised targets)
Set 1: Consumer price indicators			
1.1. Harmonised consumer price index: MUICP flash estimate	0	–	0
1.2. Harmonised consumer price index: actual indices	14–16	30	15
Set 2: Quarterly national accounts			
2.1. Quarterly national accounts: first GDP (flash) estimate	42 (*)	70	45
2.2. Quarterly national accounts: GDP release with more breakdowns	65	70	60
2.3. Quarterly national accounts: household and company accounts	120	90	90
2.4. Quarterly national accounts: government finance statistics	96	90	90
Set 3: Business indicators			
3.1 Industrial production index	42	40 large MS	40
3.2 Industrial output price index for domestic markets	34 (**)	35 large MS	
3.3 Industrial new orders index	55 (***)	50 large MS	50 (40)
3.4 Industrial import price index	na	45	45
3.5 Production in construction	49	45 large MS	45
3.6 Turnover index for retail trade and repair	35 (**)	30	30
3.7 Turnover index for other services	61	60	60
Set 4: Labour market indicators			
4.1 Unemployment rate (monthly)	30	–	30
4.2 Job vacancy rate (quarterly)	76	70 for all MS	70 for all MS
4.3 Employment (quarterly)	75	70	45
4.4 Labour cost index (quarterly)	76	70	70
Set 5: External trade indicators			
5.1 External trade balance: intra- and extra-MU; intra- and extra-EU	47	40	46
Set 6: Housing indicators			
6.1 Residential property price index	na	–	90
6.2 House sales	na	–	90
6.3 Building permits	106		

(*) 2.1 First GDP estimates: common release date at *t* + 45 days.
(**) Longer delay due to 1st May 2010 weekend.
(***) Longer delay due to the Whit Monday (24 May) weekend.
na = not available.

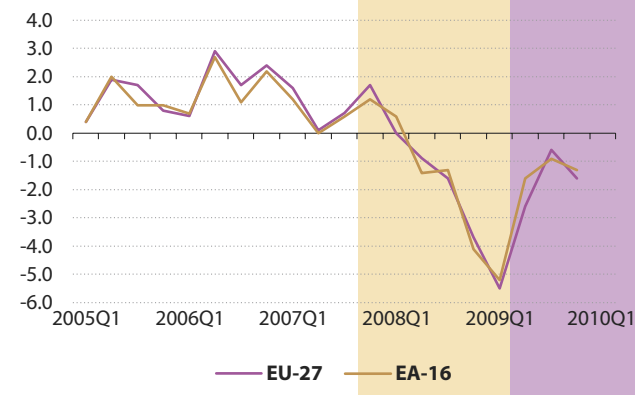
OVERVIEW ON THE ECONOMIC SITUATION (1)

A: Gross domestic product
(quarterly, volume changes q/q - 1 in %, sa)



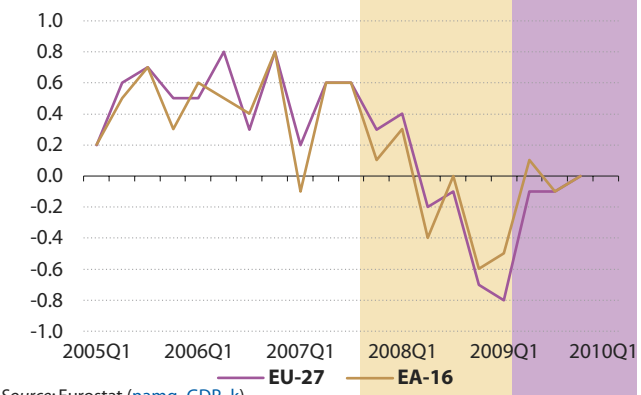
Source: Eurostat (namq_GDP_k)

B: Gross fixed capital formation
(quarterly, volume changes q/q - 1 in %, sa)



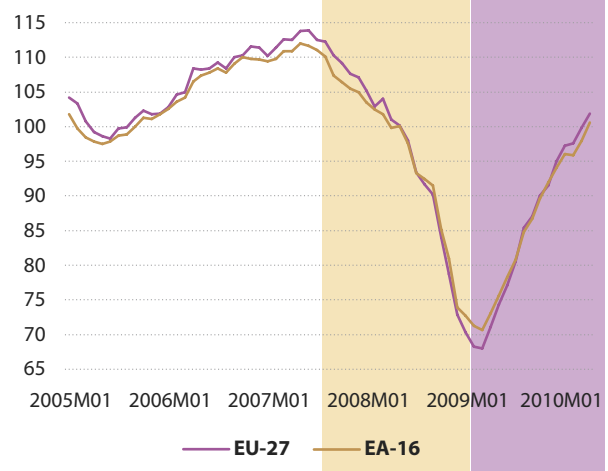
Source: Eurostat (namq_GDP_k)

C: Household consumption expenditure
(quarterly, volume changes q/q - 1 in %, sa)



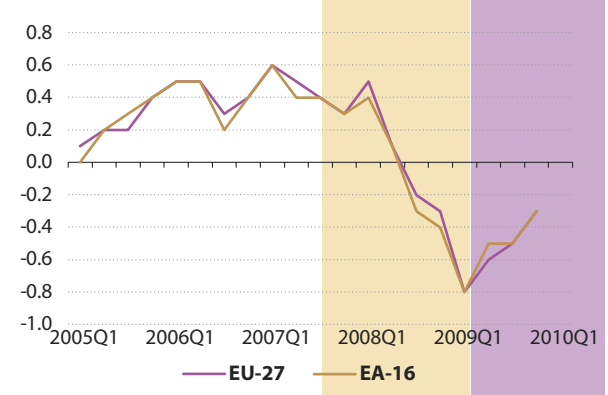
Source: Eurostat (namq_GDP_k)
sa: seasonally adjusted data.

D: Economic sentiment indicator
(monthly, 2005 = 100)



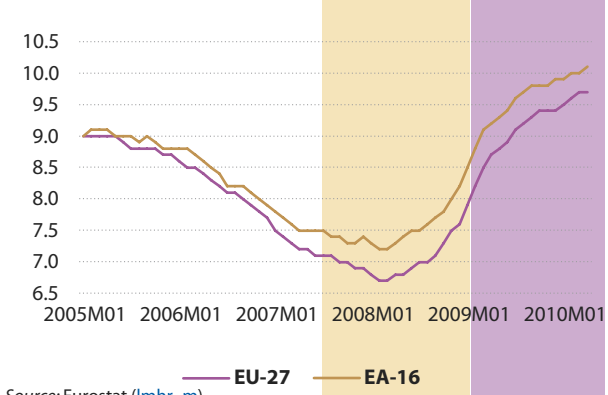
Source: Eurostat (bsci_m)

E: Employment
(quarterly, volume changes q/q - 1 in %, sa)



Source: Eurostat (namq_aux_pem)

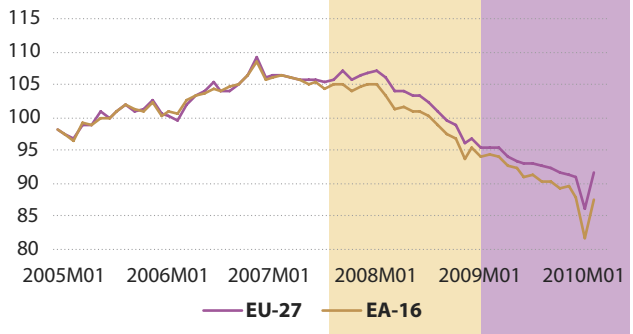
F: Harmonised unemployment rate in %
(monthly, sa)



Source: Eurostat (lmhr_m)

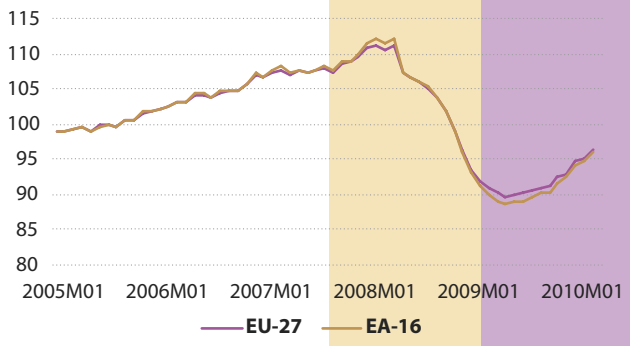
OVERVIEW ON THE ECONOMIC SITUATION (2)

G: Construction production index
(monthly 2005 = 100 sa)



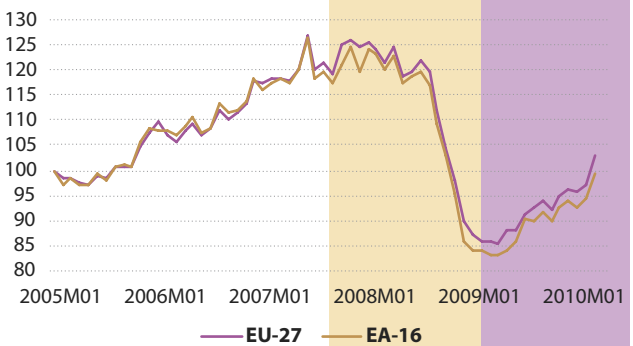
Source: Eurostat (sts_copr_m)

H: Industrial production index
(monthly, 2005=100, sa)



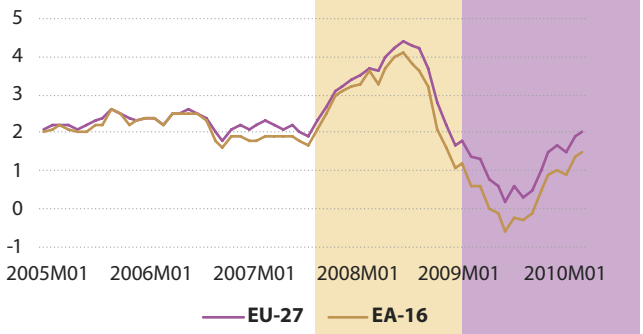
Source: Eurostat (sts_inpr_m)

I: New orders – manufacturing
(monthly, 2005 = 100, sa)



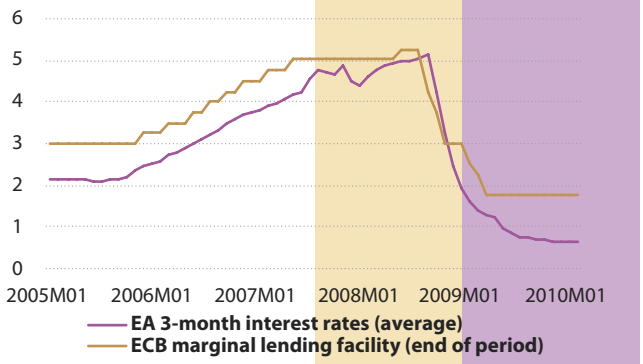
Source: Eurostat (isno_m)
sa: seasonally adjusted data.

J: Harmonised Index of Consumer Prices (HICP)
(monthly growth rate t/t - 12 in %)



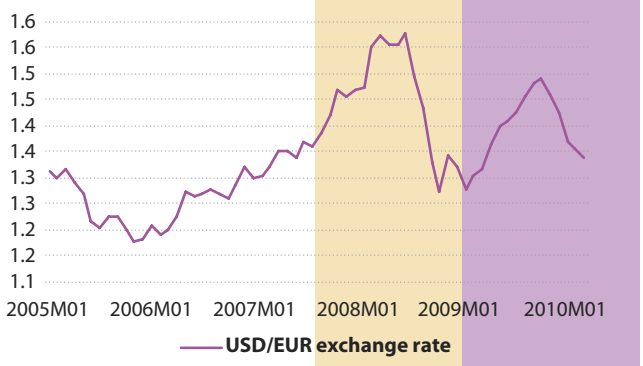
Source: Eurostat (cphi_m)

K: Euro area interest rates
(in %)



Source: Eurostat (mfir_m)

L: USD/EUR exchange rate
(monthly)



Source: Eurostat (mfrt_m)

2.2. National accounts

2.2.1. Introduction

This section covers a set of indicators from non-financial national accounts, which are a powerful tool for studying many aspects of the economy. Indeed, many well-known economic indicators are derived from this system of accounts and balance sheets — it provides a consistent framework for describing economic transactions within a region, a country, or a group of countries.

To ensure data are comparable across countries, EU Member States agreed on the use of common concepts, definitions, classifications and accounting rules, specified by the European System of National and Regional Accounts (ESA 95). This framework has legal status in the EU ([9]), but is currently under revision to bring it in line with the 2008 System of National Accounts (SNA), the worldwide guidelines in this area.

More specifically, the ESA consists of two main sets of tables. The input–output framework focuses on the production and use of goods and services in an economy. The sector accounts meanwhile record economic activities in a systematic manner, distinguishing players from institutional sectors such as households, financial and non-financial corporations and government. On this basis, national accounts offer systematic, detailed and comparable statistics that are used widely for economic analysis and for formulating and monitoring European policies.

The remainder of this section focuses on analysing main national accounts aggregates, sector and regional accounts. Key findings can be summarised as follows.

Gross domestic product (GDP) in current prices gives an indication of the size of the economy. It is worth noting that only five Member States account for about three quarters of the EU economy. Cross-country comparisons of income levels typically use GDP per capita expressed in purchasing power standards (PPS).

In the recent financial and economic crisis, all EU countries except Poland suffered significant contractions in economic growth. As a result, average growth of GDP since 2002 declined to 1.2 % for the EU and 1.0 % for the euro area, and average annual growth per capita was only 0.7 % and 0.4 % as the population increased by 0.4 % and 0.6 % respectively. A further breakdown shows that in the EU nearly 75 % of GDP growth and 85 % of GDP per capita growth stemmed from higher labour productivity, while the rest came from increases in employment rates.

The ensuing breakdown of GDP growth by its main aggregates confirms that more than 70 % of EU total value added originates from service industries; GDP is spent mainly on private consumption; half of EU investments relate to construction assets, and compensation of employees accounts for about 50 % of GDP in the EU. The main effects of the recent crisis were a decline in manufacturing output, investments and profits, while government services, private consumption and compensation of employees remained relatively strong.

The next step is to analyse specific sectors of the economy. This shows that around one tenth of households' disposable income is saved and brings out significant variations in household debt (in some countries the household debt-to-income ratio is below 50 %, compared with above 200 % in others); the share of non-financial corporations' business profit is slightly below 40 %.

National accounts also provide information at regional level. Member States calculate a number of key variables, in particular at the NUTS 2 regional level, which subdivides the EU into 271 regional units. The divergences between GDP per inhabitant among the EU's regions are still very high, but have been narrowing over recent years; at Member State level, however, this applies only to the EU–15 countries, while regional discrepancies in the new Member States are still widening.

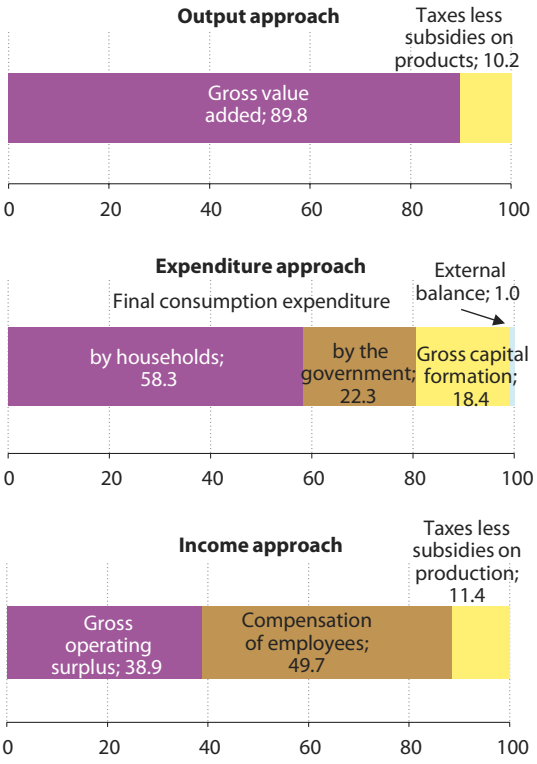
The remainder of this section presents details of the main findings.

([9]) See Council Regulation (EC) No 2223/96 and ESA 95 transmission programme (Regulation (EC) No 1392/2007).

2.2.2. Main national accounts aggregates

A core selection of national accounts data focuses on developments at the aggregate level of the total economy. For instance, GDP is a central measure of the economic performance of a country (or region). It can be calculated using three approaches: the output approach, which sums the gross value added of various industries, plus taxes and minus subsidies on products; the expenditure approach, which sums the final use of goods and services (final consumption and gross capital formation), plus exports and minus imports of goods and services (external balance); and the income approach, which sums compensation of employees, net taxes on production and imports, gross operating surplus and mixed income.

Figure 2.2.1 presents the respective size of these aggregates for the EU (in % of total EU-27 GDP).



Source: Eurostat (nama_gdp_c)

While data from the production and expenditure side are recorded at current and constant prices, i.e. adjusted for price changes via price indices, this is not the case for income aggregates, which are presented only at current prices. Eurostat's database offers multiple download options, e.g. expressing data in euro, national currencies, purchasing power standards (PPS), or diverse ratios and growth rates.

The following analysis of main EU national accounts aggregates takes different perspectives, looking, for example, at overall structures and trends at the EU or euro area aggregate level over time or at variations across Member States. The remainder of this section reviews selected aspects in turn. Starting with an analysis of Member States' contribution to EU GDP and a comparison of GDP per capita levels, it presents different breakdowns of economic growth before focusing specifically on the structure of, and changes in, main output, expenditure and income aggregates.

Contributions to EU GDP

EU statistics are the result of aggregating data from 27 Member States, which are fairly heterogeneous in terms of size, income levels, economic structure and economic performance.

Table 2.2.1 provides an overview of the relative size of the 27 economies and other economies between 2002 and 2009, based on GDP measured at current prices and exchange rates. Member States are sorted in descending order according to their share of EU GDP in 2009 and classified into three groups. A first group of five large Member States accounted for nearly three quarters of EU GDP in 2009 (71.7 %). A second group of 12 medium-sized Member States accumulated about one quarter (25.3 %) of EU GDP. Lastly, a group of 10 small Member States represented just 2.9 % of the EU economy.

Accordingly, it often happens that trends at the EU level mainly reflect developments in the large Member States, even if their respective share of EU GDP has decreased steadily, with Member States which joined the EU after 2004 benefiting from economic growth above the EU average. However, this process stalled in 2009 as Germany, France and Italy expanded their relative share of EU GDP. The United Kingdom's share dropped over the last two years. This reflects not only changes in Member States' respective growth in the wake of the financial and economic crisis but also exchange rate movements, as the currencies of many EU Member States lost ground against the euro between 2007 and 2009. The reverse was true of the currencies of the United States and Japan, contributing to their relative expansion in size in relation to EU GDP.

Table 2.2.1: Comparison of countries' economic size in relation to the EU-27

Classification	Country	Share in EU–27 GDP							
		2002	2003	2004	2005	2006	2007	2008	2009
Large Member States (more than 5 %)	Germany (DE)	21.6	21.4	20.8	20.3	19.9	19.6	20.0	20.4
	France (FR)	15.6	15.8	15.7	15.6	15.5	15.3	15.6	16.2
	United Kingdom (UK)	17.2	16.3	16.7	16.6	16.6	16.5	14.5	13.3
	Italy (IT)	13.0	13.2	13.1	12.9	12.7	12.5	12.5	12.9
	Spain (ES)	7.3	7.7	7.9	8.2	8.4	8.5	8.7	8.9
	Subtotal	74.7	74.4	74.2	73.6	73.1	72.4	71.3	71.7
Medium-sized Member States (between 1 % and 5 %)	Netherlands (NL)	4.7	4.7	4.6	4.6	4.6	4.6	4.8	4.8
	Poland (PL)	2.1	1.9	1.9	2.2	2.3	2.5	2.9	2.6
	Belgium (BE)	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.9
	Sweden (SE)	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.5
	Austria (AT)	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3
	Greece (EL)	1.6	1.7	1.8	1.8	1.8	1.8	1.9	2.0
	Denmark (DK)	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9
	Finland (FI)	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4
	Ireland (IE)	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.4
	Portugal (PT)	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.4
	Czech Republic (CZ)	0.8	0.8	0.8	0.9	1.0	1.0	1.2	1.2
	Romania (RO)	0.5	0.5	0.6	0.7	0.8	1.0	1.1	1.0
	Subtotal	23.3	23.4	23.4	23.9	24.2	24.6	25.9	25.4
Small Member States (less than 1 %)	Hungary (HU)	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
	Slovakia (SK)	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5
	Slovenia (SI)	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Luxembourg (LU)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Bulgaria (BG)	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
	Lithuania (LT)	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
	Latvia (LV)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
	Cyprus (CY)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Estonia (EE)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Malta (MT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subtotal	2.1	2.2	2.3	2.3	2.4	2.5	2.8	2.7
EFTA countries	Iceland (IS)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Liechtenstein (LI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:
	Norway (NO)	2.1	2.0	2.0	2.2	2.3	2.3	2.5	2.3
	Switzerland (CH)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Candidate countries	Croatia (HR)	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
	Former Yugoslav Republic of Macedonia (MK) (*)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
	Turkey (TR)	2.4	2.7	3.0	3.5	3.6	3.8	4.0	3.7
Main trading partners	Japan (JP)	41.9	37.0	34.9	33.1	29.7	25.9	26.5	30.8
	United States (US)	113.2	97.4	89.9	91.8	91.3	83.1	78.5	86.6

(*) Former Yugoslav Republic of Macedonia: provisional code which does not prejudge in any way the definitive nomenclature for this country, which will be agreed following the conclusion of negotiations currently taking place on this subject at the United Nations.
: = not available.
Source: Eurostat (nama_gdp_c)

Comparison of GDP levels

The influence of exchange rate effects and differing population sizes on the comparability of nominal GDP levels across countries over time underlines the importance of GDP per capita expressed in purchasing power standards (PPS) for comparing relative income levels.

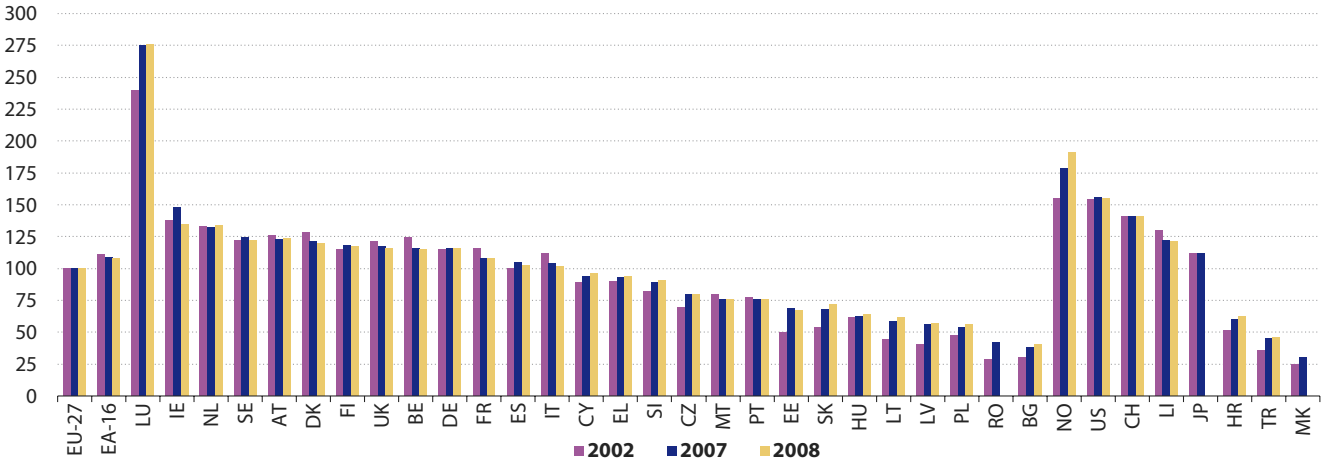
This indicator is the result of combining four elements. First, GDP is measured at current prices and exchange rates. Second, to facilitate GDP per capita comparisons, levels are divided by population. Third, GDP per capita in euro is converted into an artificial currency using purchasing power parity (PPP) exchange rates. This is because the same amount of euro can buy a different amount of goods and services in different countries due to differences in price levels, especially for non-tradable items such as haircuts, health and education. Finally the amounts expressed in PPP are scaled to euro, so that the aggregate for the EU as a whole is the same whether expressed in euro or PPS.

Figure 2.2.2 shows the results of these calculations to obtain purchasing power adjusted GDP figures per inhabitant, indexed to EU-27 = 100, for 2002, 2007 and 2008. Based on the latest figures, only three countries — Luxembourg, Ireland and the Netherlands — had an index of 25 % or more above the EU average, while eight countries — Estonia, Slovakia, Hungary, Lithuania, Latvia, Poland, Romania and Bulgaria — were more than 25 % below the EU average. Interestingly, this classification of countries is still the same as in 2002.

PPS figures are used to compare income levels across countries in a specific year, but changes in this indicator have to be interpreted with caution, as many factors (such as exchange rate movements, domestic prices and population changes) affect the way they change over time Nonetheless, comparing the relative positions of countries between 2002 and 2008 provides some interesting insights. All 14 countries with income levels below the EU average — i.e. Member States that joined the EU after 2004 together with Portugal and Greece — improved their relative position. This shows that a convergence process is in operation within the EU, as GDP per capita in countries that were relatively poorer grew faster than in the relatively richer countries.

Moreover, though GDP in PPS is a standard measure for comparing income levels across countries, it is important to keep in mind that it is based on the concept of domestic production and as such does not account for net primary income transfers with the rest of the world. These can be important for countries like Luxembourg, where a significant part of the wages and salaries paid in relation to domestic production go to cross-border commuters, or Ireland, where profits made by foreign multinational companies are included in GDP but are partly repatriated via dividend payments. In these cases gross national income (GNI), which adjusts for these income flows, would offer a better comparison of income levels (see also Box 2.2.1).

Figure 2.2.2: GDP per capita in purchasing power standards (PPS), EU-27 = 100



Source: Eurostat (nama_gdp_c)

BOX 2.2.1: GDP SHORTCOMINGS FOR MEASURING INCOME LEVELS

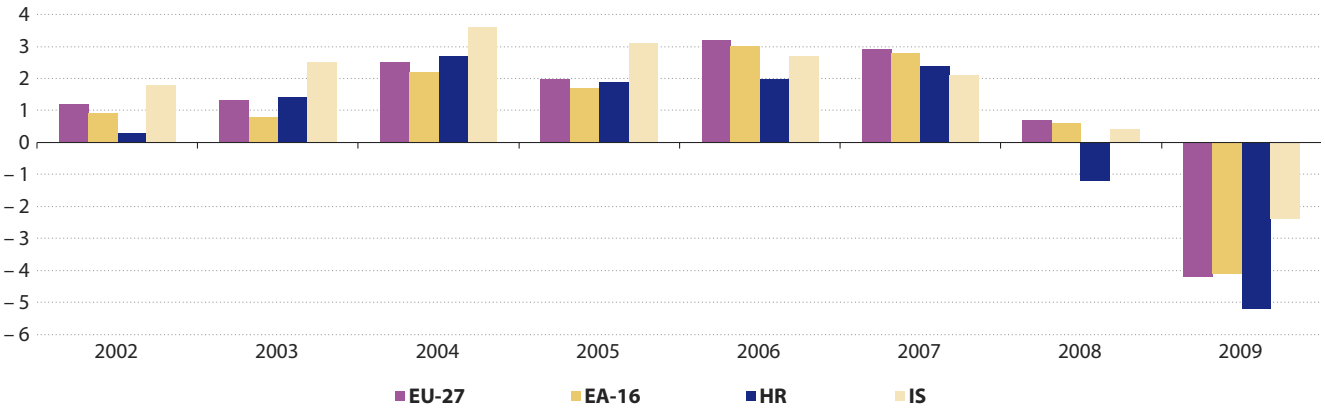
GDP is the standard measure for international comparisons of income levels. There are many reasons for that. It is very timely, closely harmonised across countries and widely known by users. Nonetheless, in certain cases it may give a misleading picture of relative income levels, and other alternative indicators in the framework of national accounts may be preferable, e.g. gross national income (GNI), which is the measure used to calculate a major part of the contribution of EU Member States to the EU budget. The difference between GDP and GNI is mainly net primary incomes with the rest of the world (GNI = GDP + net primary incomes with the rest of the world). Primary incomes comprise compensation of employees and property income. In most EU countries the balance is relatively small, and so GDP is very similar to GNI. Indeed, for the EU as a whole, GDP and GNI are almost the same. Nonetheless there are two countries, Luxembourg and Ireland, for which the difference is significant. In the case of Luxembourg the difference is partly due to the large daily influx of commuter workers coming from France, Belgium and Germany. What they produce is taken into account in Luxembourg's GDP, but the salaries are not included in its GNI. In Ireland's case, the difference is due to the major presence of foreign multinational corporations. Their profits are included in Ireland's GDP, but the dividends repatriated by the multinationals are not included in GNI.

Recent GDP growth

So far our analysis has been based on figures in current prices or in PPS, but in order to analyse the behaviour of economies over time the indicator most used to gauge a country's real economic growth is the change in GDP in volume terms, i.e. adjusted for increases in nominal GDP that stem from price effects, using chain-linked volume time series (see Box 2.2.2).

Figure 2.2.3 shows annual GDP volume growth for the EU, the euro area, the USA and Japan between 2002 and 2009. Following a period of relatively strong growth between 2002 and 2007, the world's worst financial and economic crisis since the 1930s let to a sharp worsening of the global economic situation. Following a slowdown in 2008, EU and euro area GDP contracted by 4.1 % and 4.2 % in 2009. This was more than in the United States (– 2.4 %), but less than for Japan (– 5.2 %).

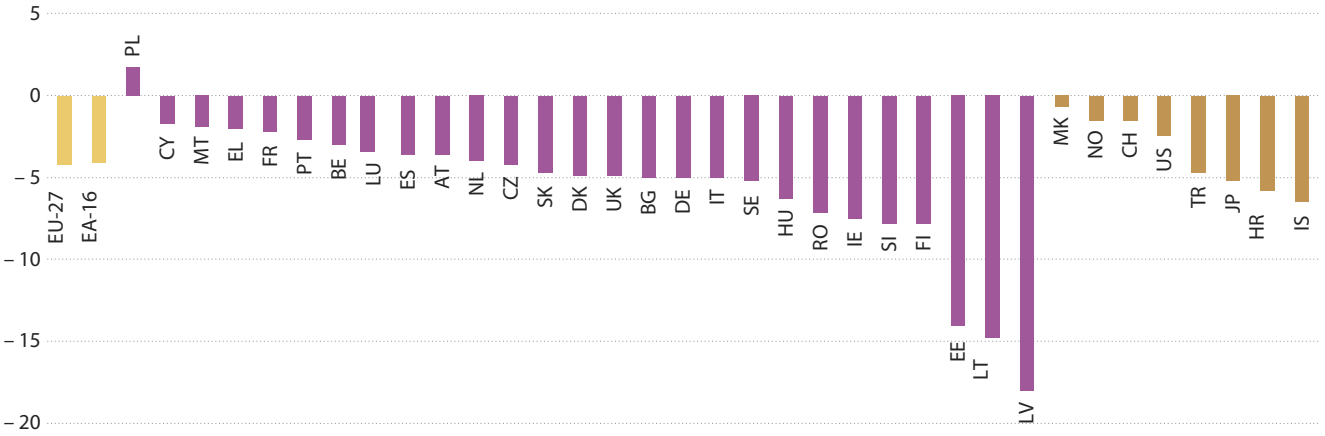
Figure 2.2.3: GDP volume growth between 2002 and 2009, change on previous period (%)



Source: Eurostat (nama_gdp_k)

Figure 2.2.4 underlines the massive impact on countries' GDP. Only Poland's economy continued to grow slightly in 2009, while other Member States' GDP mostly experienced a contraction of between 2 % and 5 %. Hungary, Romania, Ireland, Sweden and Finland were more severely affected (– 6 % to – 8 %), and Estonia, Lithuania and Latvia suffered most (– 14 % to – 18 %). Of non-member countries, Iceland was worst affected (– 6.5 %). Overall, the financial and economic crisis thus constitutes a severe setback to the catching-up process under way in many EU Member States over recent years.

Figure 2.2.4: GDP volume growth in 2009, change on previous period (%)



Source: Eurostat (nama_gdp_k)

BOX 2.2.2: Calculating AGGREGATES AND CONTRIBUTIONS TO GDP GROWTH

Volume measures have traditionally been expressed in constant prices of a base year (commonly moved ahead every five years). With a view to producing more accurate measures of volume growth, the price base is now updated every year, giving data in the previous year's prices, which — together with data expressed at current prices — make it possible to calculate volume growth rates. Multiplying successive growth rates, starting from a reference year level, provides a chain-linked volume time series.

Chain-linked volume of year ***t*** = Chain-linked volume of year ***t*** – 1 × (Previous year prices of year ***t***/Current prices of year ***t*** – 1)

A fundamental feature of chain-linking is the loss of additivity for all years except the reference year and the year directly following. Consequently, it is not simply a matter of adding up chain-linked data to obtain aggregates, such as the GDP growth of the Baltic countries or the growth rate of industry plus construction, as was done with constant prices. Custom aggregations should be obtained by summing up the components of the desired aggregate at the previous year's prices and current prices and subsequently chain-linking the series. Not all Member States provide data at the previous year's prices, but these can easily be reconstructed from the available data at current prices and chain-linked volume series by using the following reformulation of the above equation:

Previous year prices of year ***t*** = Chain-linked volume of year ***t*** × (Current prices of year ***t*** – 1/Chain-linked volume of year ***t*** – 1)

The lack of additivity also prevents direct use of chain-linked data to calculate the contributions to GDP growth of individual variables, such as gross fixed capital formation (GFCF). To do so, it would be necessary to combine data at previous year's prices and current prices. For example, to calculate the contribution of GFCF to GDP growth the following expression should be used:

(GFCF at previous year's prices for year ***t*** – GFCF at current prices for year ***t*** – 1)/GDP at current prices for year ***t*** – 1

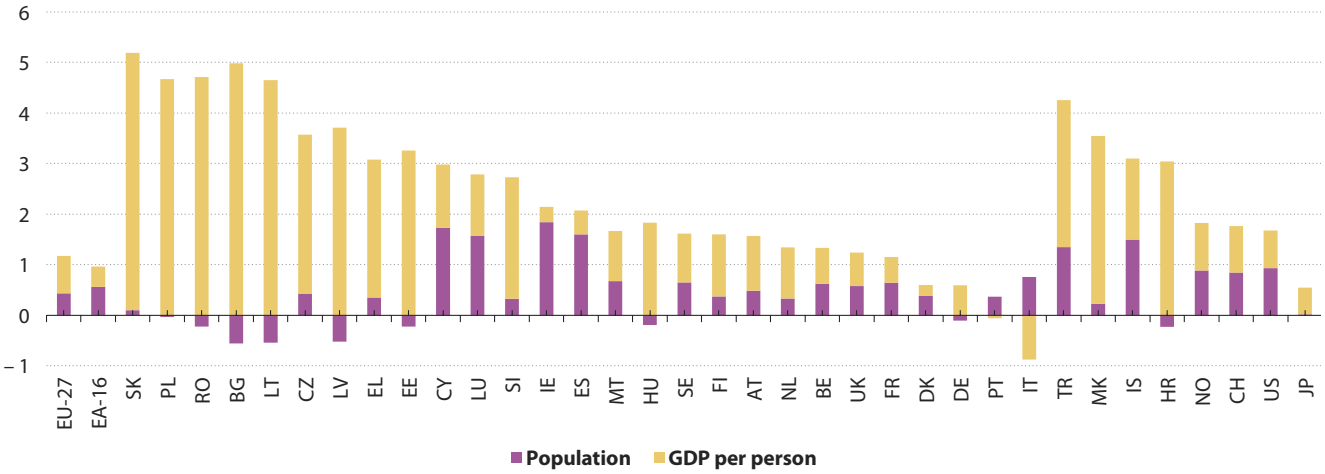
Breaking down medium-term growth

All this notwithstanding, the EU's most recent Member States have still grown significantly over the past seven years. In Figure 2.2.5, all EU countries have been sorted according to their average annual growth rate between 2002 and 2009, but this order is not entirely mirrored by respective average per capita figures, as average population changes also play some role. For the EU and the euro area, the average growth rate was 1.2 % and 1.0 %, but the average annual growth per capita was only 0.7 % and 0.4 % as the population increased by 0.4 % and 0.6 % respectively.

Indeed, while GDP volume change gives a rough indication of short-term change in living standards, changes in population should be taken into consideration over longer periods. As the population decreased in many of the EU's most recent Member States, GDP per capita growth often outstripped GDP volume growth in these countries. On the other hand, most of the older Member States are at the lower end of the ranking. For other countries represented, GDP volume growth mostly exceeded GDP per capita growth due to growing populations.

In fact, comparing EU and US figures gives a good example of the shortcomings of focusing solely on the GDP volume growth rate. While the EU experienced lower average GDP growth rate than the USA (1.2 % versus 1.7 %), average increases in GDP per capita were similar (0.7 % for both) as the population in the USS grew more than in the EU (0.9 % versus 0.4 %).

Figure 2.2.5: Average annual growth of volume GDP for the period 2002–09



Source: Eurostat (nama_gdp_c and nama_aux_pem)

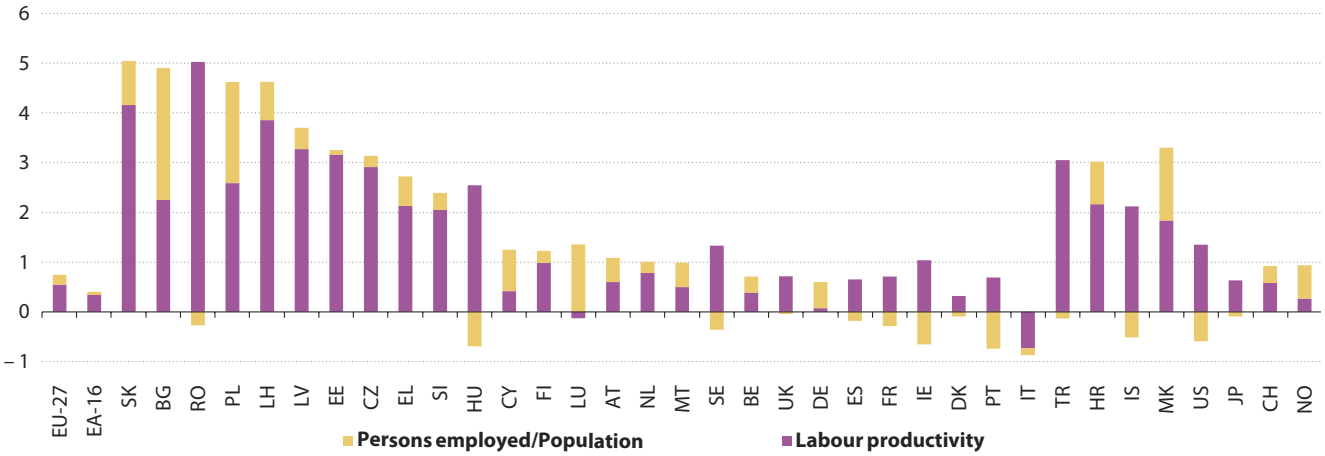
It is important to understand the sources of economic growth in terms of labour productivity gains. Figure 2.2.6 splits the average changes in GDP per capita between 2002 and 2009 into changes in labour input and labour productivity respectively. Labour input is measured as the number of persons employed and labour productivity as GDP per person employed. GDP in volume per person is broken down into its components according to the following equation:

$$\frac{GDP}{population} = \frac{GDP}{employment} \times \frac{employment}{population} \rightarrow$$

This breakdown shows that nearly 75 % of EU and 85 % of euro area growth stemmed from higher labour productivity, while the rest came from slight increases in the employment rate. Productivity gains were also the main source of GDP per capita growth for most central and east European Member States as well as the EU candidate countries, but Italy recorded a significant decline.

Increases in the employment rate still supported growth in a majority of countries, but several countries within and outside the EU experienced significant declines in their employment ratio. This contrasts with the situation in the previous year and can be attributed to the financial and economic crisis, which resulted in a sharp decline in the employment ratio in many countries.

Figure 2.2.6: Contributions of labour productivity and input to average GDP per capita growth



Source: Eurostat (nama_gdp_c, nama_aux_lp and nama_aux_pem)

The production side

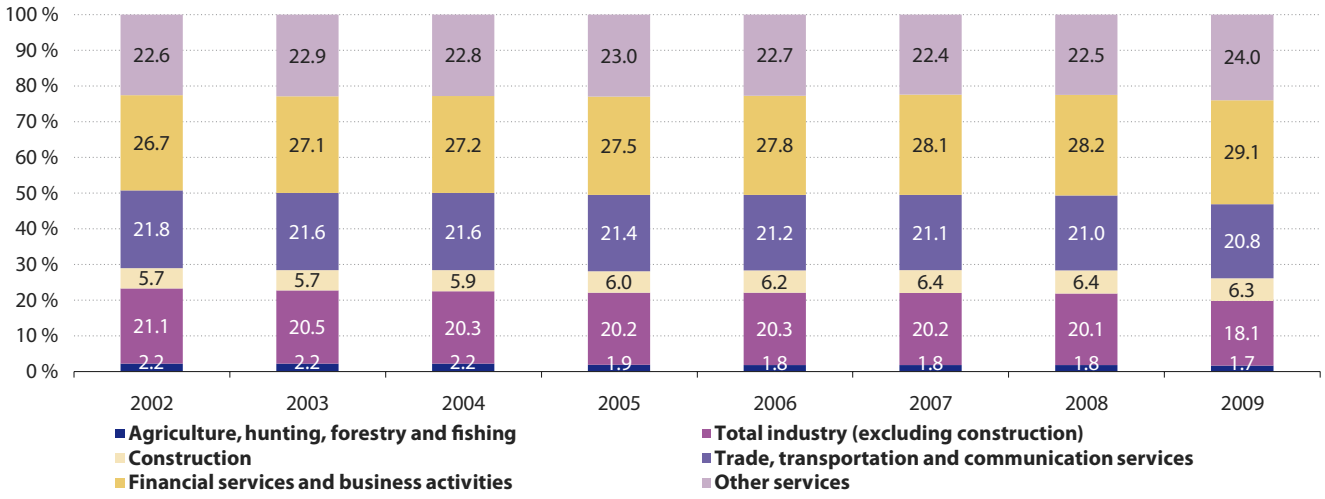
Following analysis of the overall GDP aggregate in the previous sections, the remainder of this investigation looks at specific GDP components. Starting from the production side, a first step is to analyse **gross value added** (GVA) by industries. This is the difference between output and intermediate consumption, the value of goods and services consumed or used as inputs in the production process, which accounts for around 50 % of the total production of goods and services in the EU and is valued at purchasers' prices. In order to obtain GDP at market prices from GVA, which is valued at basic prices, it is necessary to add taxes less subsidies on products. These amount to about 11 % of EU GDP and are available for the total economy, but not by industry, so it is not possible to calculate the GDP of specific industries. This is why GVA, and not GDP, is used to analyse the importance of different industries.

Figure 2.2.7 presents breakdowns of GVA by six industries, but more detailed breakdowns exist.

While the overall structure of the EU GVA was fairly stable over earlier years, some effects of the economic and financial crisis can be seen in the decline in GVA generated by total industry, which is dominated by **manufacturing**, and an expansion of **other services**, which includes public administration and defence, education and health. Interestingly, the share of **financial services and business activities** continued to expand, and the share of **trade, transport and communication services** and **construction** fell only slightly. Together, the three service industries clearly dominate EU GVA with an overall share of 74 % in 2009, while the share of **agriculture, hunting, forestry and fishing** remained on a steady downward trend.

The impact of the crisis becomes clearer when we look at changes in GVA in volume terms. These are presented in Table 2.2.2 and confirm a strong contraction of manufacturing (– 15 %), but also substantial declines in GVA from construction, trade and financial services activities, while only public services expanded.

Figure 2.2.7: EU gross value added by industry, % of total, 2002–09



Source: Eurostat (nama_nace06_c)

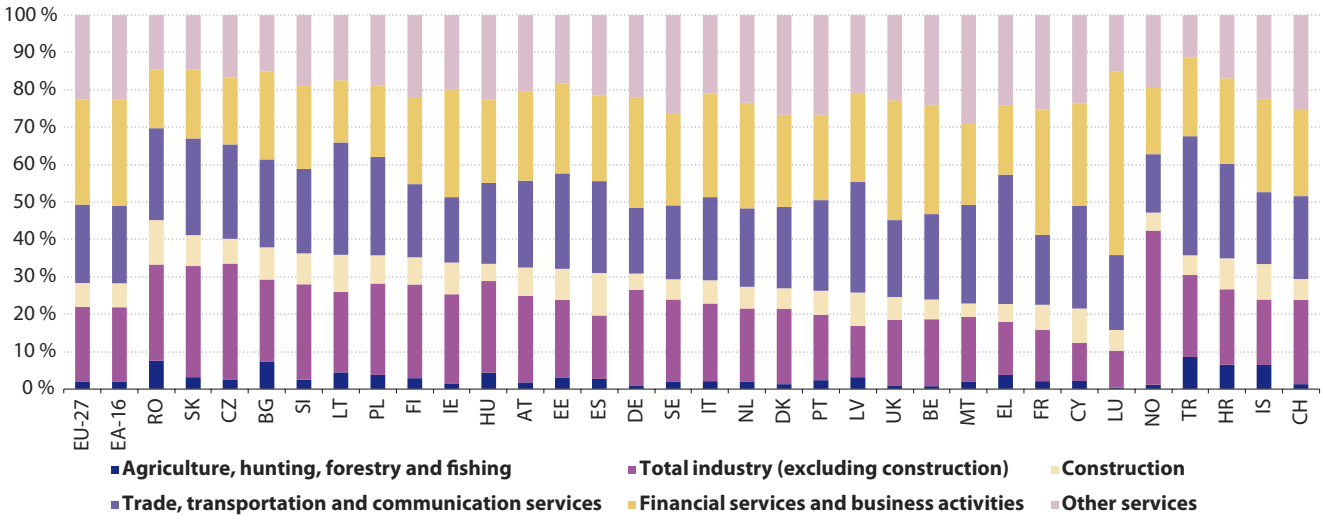
Table 2.2.2: EU-27 GVA by industry, volume changes over the previous period (%)

	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture, hunting, forestry and fishing	0.2	– 4.5	11.1	– 4.9	–0.1	– 2.0	3.2	– 0.1
Total industry (excluding construction)	– 0.1	0.5	3.1	1.2	3.5	2.4	– 0.7	– 12.4
of which: Manufacturing	– 0.6	0.6	2.9	1.8	4.5	3.0	– 0.8	– 15.2
Construction	0.1	0.9	1.9	1.9	3.1	3.0	– 0.1	– 6.3
Trade, transportation and communication services	1.8	1.6	3.2	2.3	3.2	3.6	0.8	– 4.7
Financial services and business activities	1.7	2.2	2.3	3.3	4.6	4.6	1.8	– 2.2
Other services	1.9	1.3	1.3	1.3	1.3	1.7	1.5	1.1
Total	1.3	1.3	2.6	2.0	3.2	3.1	0.9	– 4.3

Source: Eurostat (nama_nace06_k)

Finally, Figure 2.2.8 shows on the basis of 2008 figures that different industries' shares of GVA vary significantly across countries. EU Member States are sorted by their GVA from agriculture, industry and construction activities. These industries account for 45 % in Romania, but less than 16 % in Luxembourg, which has, on the other hand, by far the largest share of GVA from financial services and business activities, with nearly 50 %. The share of Industrial GVA was highest in the Czech Republic and Slovakia (around 30 %), while Romania, Lithuania and Ireland had high construction activities (10–12 %), and Romania and Bulgaria had large agricultural GVA (over 7 %). Greece, Lithuania and Latvia had the largest share of trade, transport and communication services (30–35 %); Denmark, Portugal and the Netherlands have the largest share of 'other services' (about 27 %), i.e. largely public services. Outside the EU, Norway stood out by having the largest share in industrial GVA (over 40 %).

Figure 2.2.8 Country-to-country comparison of value added by industry, % of total, 2008



Source: Eurostat (nama_nace06_c)

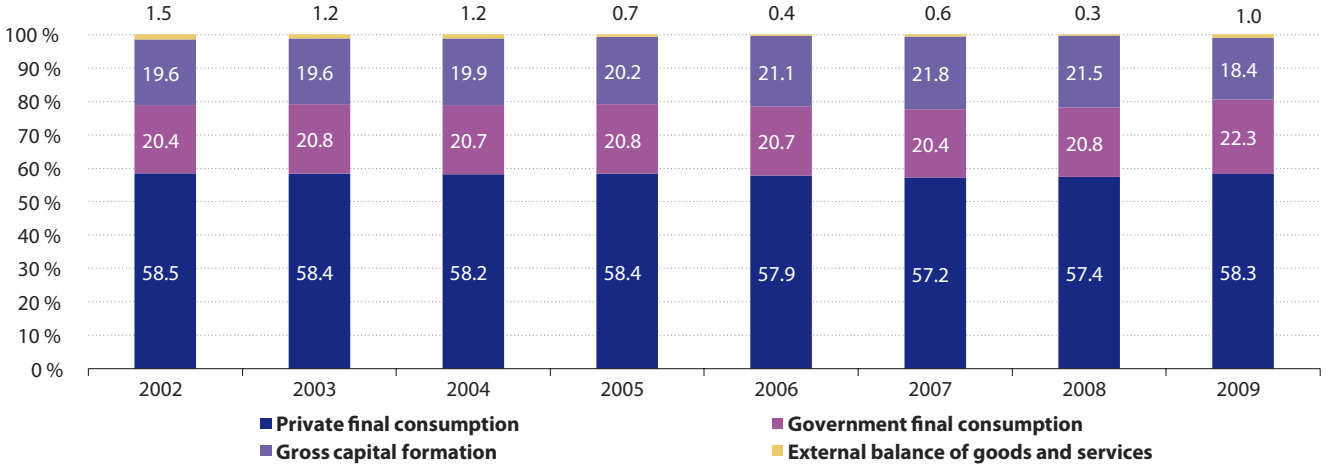
The expenditure side

This section focuses on the main expenditure components of GDP. **Private final consumption** includes expenditure by households and by non-profit institutions serving households (NPISH). **Government final consumption** comprises the value of goods and services produced by general government itself, other than own-account capital formation and sales, and purchases by general government of goods and services that are supplied to households. However, country-to-country comparisons should be interpreted with caution as such things as the provision of education or health services by the public sector varies across countries. Gross capital formation consists of gross fixed capital formation, which measures resident producers' acquisitions, less disposals, of fixed assets plus certain additions to the value of non-produced assets, and changes in inventories, which records the value of entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories. Finally, the external balance represents the difference between exports and imports of goods and services.

Figure 2.2.9 shows the respective weights of each expenditure component in EU GDP for 2002–2009. Private final consumption was by far the most important component with nearly 60 % of GDP, while government final consumption and gross capital formation each represented around 20 % of GDP. Some effects of the financial and economic crisis can be seen in the decreasing share of investment and the increasing share of government final consumption over the past two years.

However, the impact of the crisis becomes more visible when we look at year-on-year changes in the respective volume figures that are presented in Table 2.2.3. These show not only that gross fixed capital formation declined by 16.5 % over 2009, but also a more than 12 % contraction of imports and exports, which underlines the global nature of the economic crisis.

Figure 2.2.9: Main EU expenditure components, % of GDP, 2002–09



Source: Eurostat (nama_gdp_c)

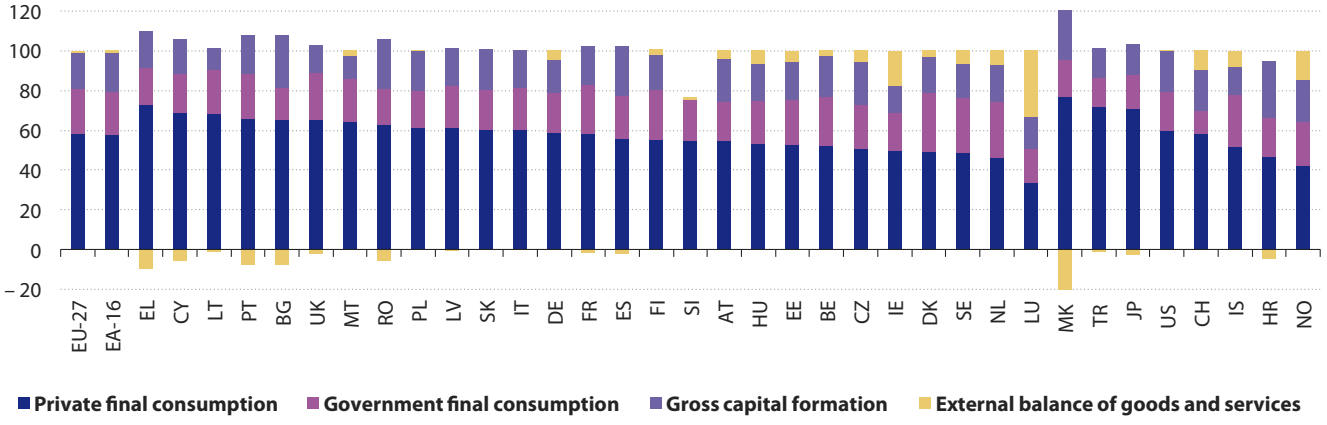
Table 2.2.3: EU-27 main expenditure components, volume changes over the previous period (%)

	2002	2003	2004	2005	2006	2007	2008	2009
Private final consumption	1.7	1.7	2.2	2.1	2.2	2.0	0.8	– 1.7
Government final consumption	2.6	2.1	1.7	1.7	2.0	1.9	2.3	2.1
Gross capital formation	– 2.2	2.0	4.2	2.5	6.8	6.2	– 1.0	– 16.5
Exports of goods and services	2.1	1.7	7.6	5.9	9.3	5.5	1.5	– 12.4
Imports of goods and services	1.5	3.3	7.6	6.3	9.2	5.5	1.4	– 12.1
Gross domestic product at market prices	1.2	1.3	2.5	2.0	3.2	2.9	0.7	– 4.2

Source: Eurostat (nama_gdp_k)

Figure 2.2.10 shows sizeable differences in the weight of expenditure components for individual countries in 2009 and some inverse relations between final private and government consumption. For instance, Denmark, Sweden and the Netherlands had the highest shares of government final consumption (close to 30 %), but relatively low private consumption, while Greece, Cyprus and Latvia had the highest shares of private final consumption (around 70 %), but relatively low government final consumption shares. Gross capital formation was highest in Bulgaria, Spain and Slovenia (around 25 %). Greece, Bulgaria, Portugal, Cyprus and Poland had significant deficits in their external balance of goods and services in relation to GDP, while Luxembourg and Ireland had the highest positive balance, which is however again explained in part by their specific particularities in terms of large cross-border income, goods and services flows.

Figure 2.2.10: Main expenditure components by country, % of GDP, 2009



Source: Eurostat (nama_gdp_c)

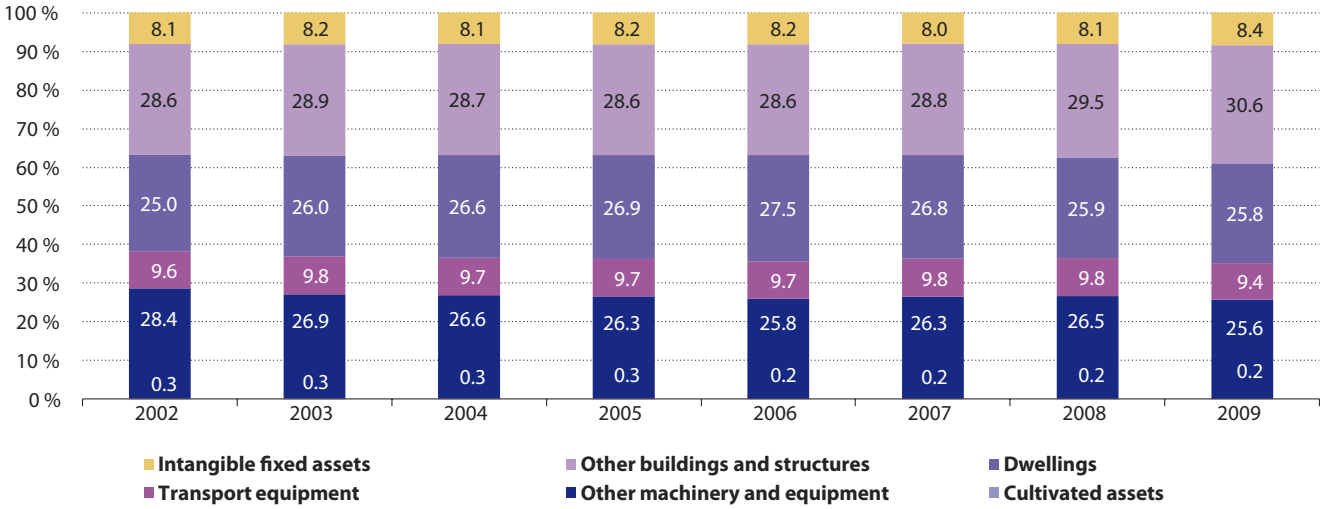
Focus on gross fixed capital formation

As other sections deal in more detail with certain expenditure components (Section 2.3 for government final consumption Section 2.4 for private final consumption and Section 2.5 for exports and imports of goods and services), this section contains more detail on the composition of, and trend in, gross fixed capital formation.

Figure 2.2.11 shows the breakdown by fixed asset type for the EU between 2002 and 2009, a period which was dominated by investments in buildings and structures, dwellings and machinery. While a gradual shift from machinery to construction investment occurred between 2002 and 2007, investment in both dwellings and machinery seems to have fallen somewhat with the recent financial and economic crisis.

Again, the impact of the crisis can be brought out better by analysing year-on-year changes in main expenditure components in volume terms. Data presented in Table 2.2.4 show that investment in dwellings started to decline in 2008, but that investments in machinery and transport equipment contracted even more sharply over 2009.

Figure 2.2.11: Breakdown of EU gross fixed capital formation by six asset types, 2002–09 (%)



Source: Eurostat (nama_pi6_c)

Table 2.2.4: EU-27 gross fixed capital formation, volume changes over the previous period (%)

CPA	2002	2003	2004	2005	2006	2007	2008	2009
Cultivated assets	– 1.3	– 2.8	13.1	– 20.8	34.8	11.1	– 7.3	– 3.6
Other machinery and equipment	– 3.0	– 1.0	4.9	4.9	7.0	10.3	1.7	– 17.6
Transport equipment	0.4	3.3	3.8	4.4	7.6	7.8	– 1.4	– 18.4
Dwellings	0.3	2.7	3.3	3.5	6.3	2.2	– 4.9	– 10.8
Other buildings and structures	0.3	1.6	0.9	1.7	4.1	5.1	1.0	– 6.1
Intangible fixed assets	1.8	1.7	2.9	4.5	7.1	4.8	1.6	– 6.3
Total	– 0.6	1.3	3.1	3.5	6.1	5.9	– 0.6	– 11.6

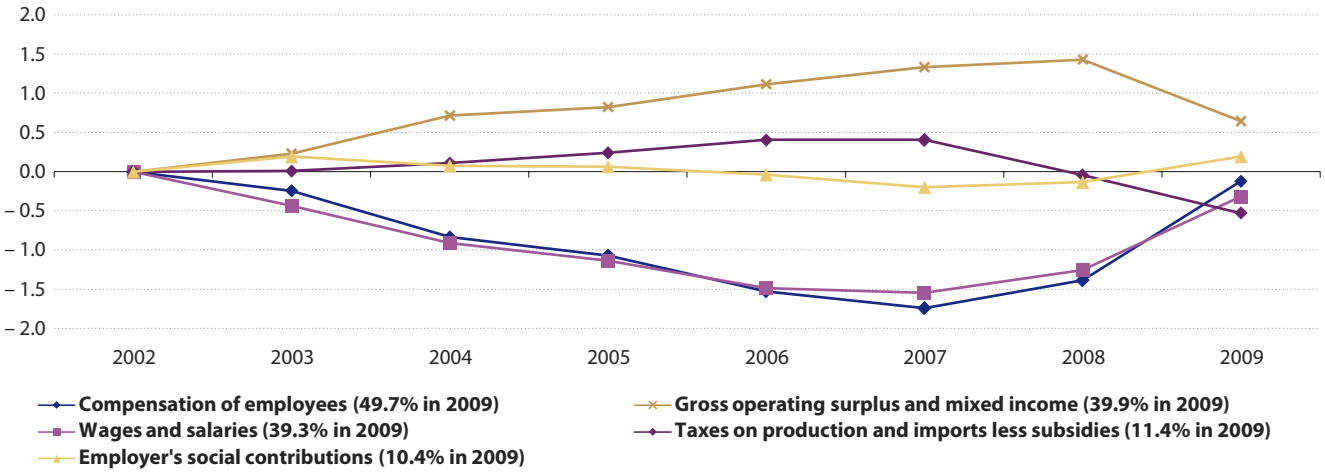
Source: Eurostat (nama_pi6_k)

The income side

The final section focuses on how GDP is distributed among the various players in the production process. The first major component is compensation of employees, i.e. the total remuneration, in cash or in kind, payable by an employer to an employee. It can be broken down into wages and salaries and employers' social contributions. The other large component is 'profits', i.e. gross operating surplus and mixed income, which is defined as the surplus (or deficit) on production activities before account has been taken of any interest, rents or charges paid or received for the use of assets; plus the remuneration for the work carried out by the owner (or by members of his/her family) of an unincorporated enterprise. Finally, there are taxes on production and imports less subsidies, which consist of compulsory (in the case of taxes) unrequited payments to or from general government or institutions of the EU in relation to the production or import of goods and services, the employment of labour and the ownership or use of land, buildings or other assets used in production.

Figure 2.2.12 presents changes in the respective shares of the various components between 2002 and 2009. They demonstrate a reversal of the previous downward trend in the share of GDP distributed as compensation of employees, which was driven by a decline in wages and salaries. As not only the share of gross operating surplus and mixed income but also the share of taxes less subsidies on production and imports declined significantly in 2009 in response to the financial and economic crisis, the share of compensation of employees and its components, i.e. wages and salaries and employers' social contributions, regained some ground and returned to close to their shares in 2002. This is consistent with the fact that private final consumption declined only moderately in response to the crisis (see previous Table 2.2.3), as private final consumption is driven mainly by the change in household disposable income, of which wages and salaries are the most important component.

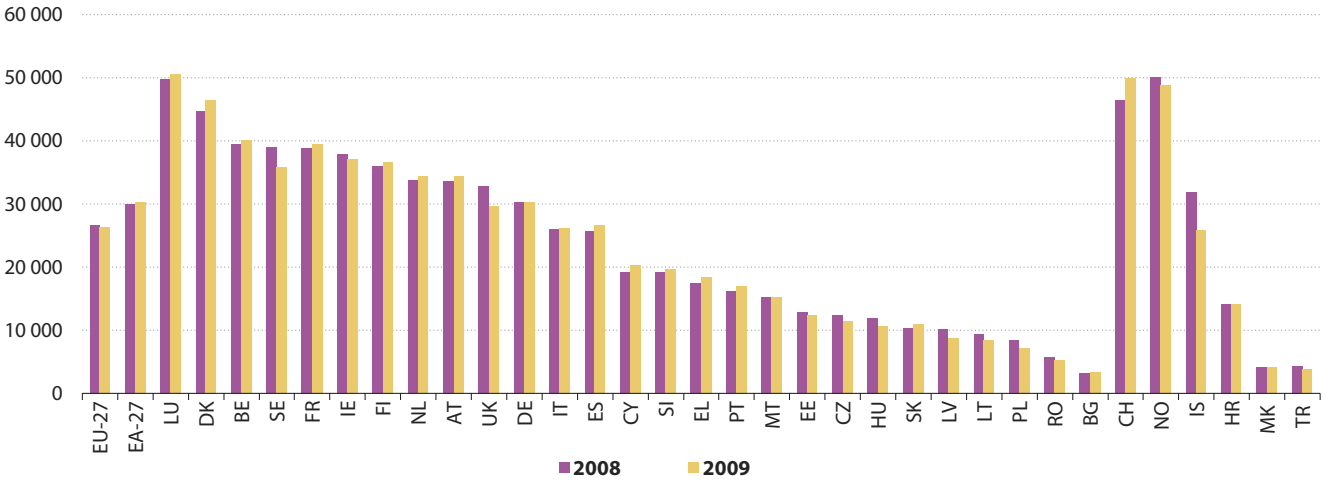
Figure 2.2.12 Changes in the share of EU income components in GDP between 2002 and 2009 (%)



Source: Eurostat (nama_gdp_c)

Another interesting indicator is average compensation per employee, which is obtained by dividing compensation of employees by the number of employees. Figure 2.2.13 confirms that the average was broadly stable in 2008 and 2009. It also underlines that country-to-country differences are still huge: average compensation per employee in 2009 was EUR 26 400 in the EU and EUR 30 400 in the euro area. It was highest in Luxembourg (above EUR 50 000) and lowest in Bulgaria (below EUR 3 500).

Figure 2.2.13: Average compensation per employee, 2008 and 2009 (EUR)



Source: Eurostat (nama_nace06_c and nama_nace06_e)

2.2.3. Sector accounts

For more than 10 years, the Member States' annual sector accounts have been collected using the common methodology described in the European System of Accounts 1995 (ESA 95) ([10]).

Since 2006, the non-financial annual sector accounts of the euro area and of the EU have been published by Eurostat, together with the sector accounts of most Member States. Since June 2007, quarterly series have also been released for the euro area, and the European Union followed this up with the publication of a national breakdown in October 2009 ([11]).

A synthesis of the methods used to compile European sector accounts on the basis of Member States' data is provided in *European Economic Statistics — 2008 edition* (Chapter 3.2), European Communities, 2008.

Annual sector accounts represent a wealth of information that make it possible to analyse the economic behaviour of each sector in the economy — mainly non-financial corporations, financial corporations, general government and households. Transactions of the economy as a whole vis-à-vis non-member countries are recorded in the accounts of the 'rest of the world'.

The behaviour of households and non-financial corporations is particularly relevant for economic analysis. Households are generally the main source of national saving, which finances investment in the national economy or abroad.

Non-financial corporations are the main driver of investment in productive assets, which to some extent determines long-term growth. Considered together, household saving and business investment generally explain the main developments in an economy's lending capacity or borrowing needs.

Sector accounts also give valuable information about how value added is shared among stakeholders. One possible indicator serving this purpose is the profit share, defined as the portion of value added that remunerates capital. Profit share is the complement to wages costs that remunerate labour, plus net taxes on production that (partially) finances government services.

The following subsection comments on the saving rate and investment rate of households, while the last subsection focuses on the investment rate and profit share of non-financial corporations.

For each of the above indicators, disparities across countries are analysed for the reference year 2008, i.e. the year when the economic turmoil started. Movements between 2000 and 2008 are also commented on for each ratio.

Households

The households sector covers individuals or groups of individuals acting as consumers and entrepreneurs — provided, in the latter case, that their activities as market producers are not carried out by separate entities. This sector has been merged with the small sector of non-profit institutions serving households (associations, charities, etc.).

Household saving rate

In national accounts terms, the gross household saving rate is defined as gross saving divided by gross disposable income, the latter having been adjusted for any net increase/decrease in the equity of households in pension fund reserves.

The household saving rate is in gross terms, which means before deducting the normal wear and tear of fixed assets, mainly dwellings in this case. The graph sets out in descending order the saving rates of households as measured in 2008 for all Member States for which data were available, plus Norway, Switzerland, the euro area (EA–16) and the EU-27.

As Figure 2.2.14 shows, the household saving rate in 2008 was more than 3 percentage points (pp) higher in the euro area (14.1 %) than in the EU (11.0 %). This gap is mainly explained by the low saving rates of Denmark (5.5 %) and the UK (1.7 %).

In the euro area, saving rates were generally high and homogeneous. Only Greece had a low rate, whereas the three largest economies in the euro area (Germany, Italy and France) rank in the top positions.

Member States that are not part of the euro area, the Baltic countries in particular, had the lowest household saving rates (3.0 % for Estonia, 0.8 % for Latvia, and – 1.3 % for Lithuania). A negative saving rate means that the household sector as a whole has to borrow to finance part of its current expenditure.

([10]) For more details, see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1996R2223:20030807:EN:PDF

([11]) All these data are available, together with methodological information in English, French and German, on the following website: http://ec.europa.eu/eurostat/sectoraccounts

As indicated in Table 2.2.5, over the period 2000–08, the saving rate of the EU decreased (– 0.4 pp), whereas it increased in the euro area (+ 0.6 pp). A significant increase was observed only for Sweden (+ 6.7 pp).

By contrast, notable decreases were recorded in particular for the 'new' Member States such as Lithuania (– 7.8 pp), Hungary (– 5.8 pp), Poland (– 5.9 pp) and Slovakia (– 4.4 pp). In these countries, households increased their final consumption faster than their disposable income was growing.

Among the 'old' Member States, only Greece (– 4.6 pp) and Portugal (– 3.8 pp) show such strong decreases in their household saving rates.

Figure 2.2.14: (Gross) household saving rates (2008 data if available)

Source: Eurostat (tsdec240)

Table 2.2.5: Changes in gross household saving rates between 2000 and 2008 (pp)

EU–27	EA–16	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
– 0.4	0.6	0.0	:	1.7	1.2	2.1	– 1.1	:	– 4.6	1.8	0.2	0.9	:	– 1.5	– 7.8

LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	CH (*)
:	– 5.8	:	1.0	2.8	– 5.9	– 3.8	:	2.5	– 4.4	– 0.7	6.7	– 2.9	– 0.3	0.9

(*) change calculated from 2000 to 2007;

Source: Eurostat (tsdec240)

Household investment rate

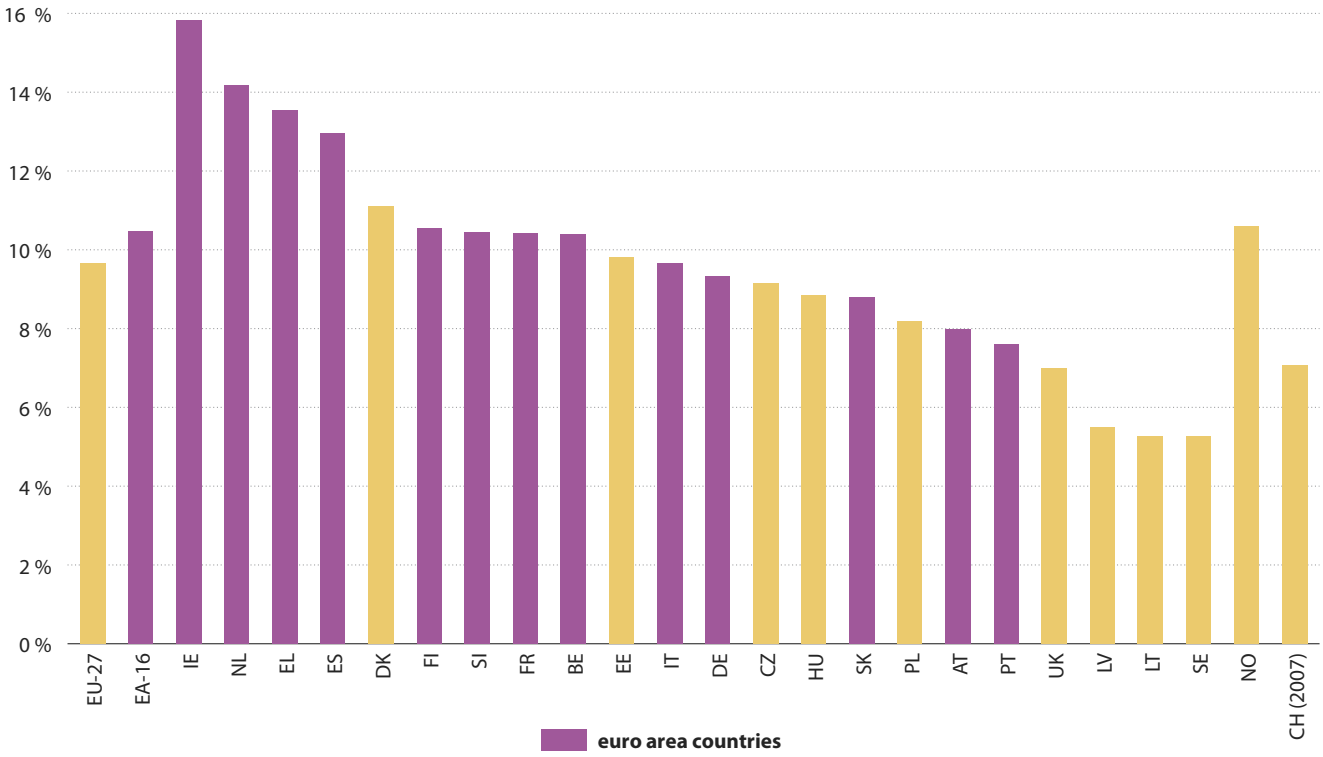
The household investment rate is defined as gross investment (gross fixed capital formation; mainly dwellings) divided by gross disposable income. The residual part is mainly made up of investment in equipment and machinery by self-employed workers and non-profit institutions. Consumer durables (which include private cars) are not considered part of households' investment. In 2008, the household investment rate (see Figure 2.2.15) was 0.8 pp higher in the euro area (10.5 %) than in the EU (9.7 %). The top four positions were taken by euro area members — Ireland (15.8 %), Netherlands (14.2 %), Greece (13.5 %) and Spain (12.9 %) — and the four lowest positions by non-euro area countries — Sweden (5.3 %), Lithuania (5.3 %), Latvia (5.5 %) and the UK (7.0 %). It was the UK, together with Poland (8.2 %), which did most to keep the EU saving rate low compared with the euro area.

Among the non-euro area members of the EU, only the investment rates of Denmark (11.1 %) and Estonia (9.7 %) exceeded the EU average.

Over the period 2000–08 (see Table 2.2.6), higher increases were measured in the EU (+ 0.6 pp)

than in the euro area (+ 0.2 pp). Estonia and Latvia had the highest increases (+ 4.3 and + 3.5 pp respectively) within the EU. They were followed by the two euro area members Spain (+ 2.0 pp) and Netherlands (+ 1.9 pp). None of the EU Member States showed a significant decrease during this period. The largest fall was measured in Portugal (– 3.1 pp).

Figure 2.2.15: (Gross) household investment rates (2008 data if available)



Source: Eurostat (tec00098)

Table 2.2.6: Changes in gross household investment rates between 2000 and 2008 (pp)

EU–27	EA–16	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
0.6	0.2	1.2	:	0.2	0.2	– 1.5	4.3	:	– 1.0	2.0	1.8	0.6	:	3.5	0.0

LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	CH (*)
:	0.4	:	1.9	– 0.6	1.6	– 3.1	:	1.2	– 1.6	0.2	1.8	1.2	1.7	– 0.3

(*) change calculated from 2000 to 2007

Source: Eurostat (tec00098)

Household debt-to-income ratio

The household debt-to-income ratio is defined as the ratio of households' debt arising from loans, recorded at the end of a calendar year, to the gross disposable income earned by households in the course of that year ([12]). It thereby constitutes a measure of the indebtedness of households, expressed in proportion to their capacities to repay their debt. This information on the financial condition of the household sector has gained importance in the wake of the financial turmoil of 2008/09.

The debt-to-income ratio is calculated on the basis of the gross debt — that is, without taking account of any assets held by households. Gross disposable income does not take into account depreciation on household assets, such as dwellings. However, it does include changes in the equity of households in their pension fund reserves,

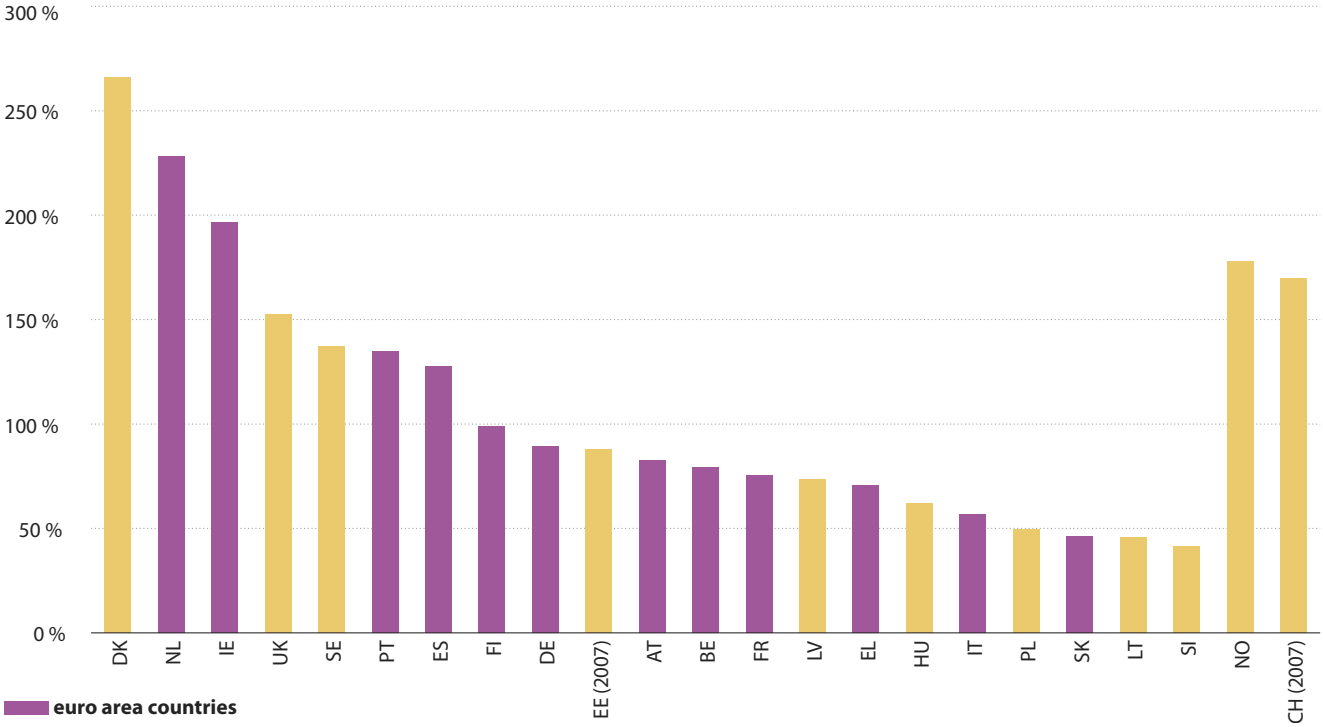
([12]) Loans constitute financial assets and liabilities created when creditors lend funds to debtors, either directly or through brokers, which are evidenced by non-negotiable instruments or not evidenced by documents. Debt on loans refers to the amounts of principal that the debtors are contractually obliged to repay the creditors, even in cases where the loan was traded at a discount or premium. It does not include short-term credits to households resulting, for instance, from invoices of goods already delivered or from factoring, which make up a small proportion of overall household liabilities.

calculated as the difference between their contributions and benefits to/from these pension funds.

In 2008, the household debt-to-income ratio differed remarkably across countries (see Figure 2.2.16). While it was below 50 % in Slovenia, Lithuania, Slovakia and Poland, it was close to 200 % in Ireland, 227.9 % in the Netherlands and even 265.7 % in Denmark. This means that in the former four countries less than half the annual disposable income of households would have been required to repay their debt, whereas in the Netherlands and Denmark the household income of two entire years would not have been sufficient. A comparatively high debt-to-income ratio can be found in west European countries not belonging to the euro area. By contrast, in central and eastern Europe the debt-to-income ratio is relatively low, with none of these countries having household debt greater than 90 % of their annual disposable income.

Turning to developments over time, Table 2.2.7 shows the changes in household debt-to-income ratio since 2000. Overall, the figures indicate divergence. In most of the countries with a relatively large debt-to-income ratio in 2008, the indicator increased at a higher rate after 2000 than in the other countries. An exception to this general rule is Switzerland, where the debt-to-income ratio was already comparatively high in 2000 and increased only by 13.8 pp up to 2007. More modest increases were generally recorded in the euro area compared with other EU Member States, with the exception of the Netherlands, Spain and Greece. Among non-euro area countries, Estonia, Latvia, Norway, Hungary and the UK saw their household debt-to-income ratios increase by more than 50 pp over the period. Finally, Germany is the only country in the table in which the household debt-to-income ratio decreased between 2000 and 2008.

Figure 2.2.16: Household debt-to-income ratio (2008 data if available)



Source: Eurostat (tec00104)

Table 2.2.7: Changes in the household debt-to-income ratio from 2000 to 2008 (pp)

EU–27	EA–16	BE	BG	CZ	DK	DE	EE (*)	IE	EL	ES	FR	IT	CY	LV	LT
:	:	17.1	:	:	81.7	– 15.5	72.6	:	53.6	59.0	20.0	24.6	:	65.2	43.4

LU	HU	MT	NL	AT	PL	PT	RO	SI (**)	SK	FI	SE	UK	NO	CH (*)
:	52.4	:	76.1	8.5	39.6	47.7	:	18.1	36.9	37.9	42.5	52.2	59.2	13.8

(*) change calculated from 2000 to 2007;
(**) change calculated from 2001 to 2008

Source: Eurostat (tec00104)

Non-financial corporations

The non-financial corporations sector covers enterprises whose principal activity is the production of goods and non-financial services to be sold on the market. It includes incorporated enterprises, but also unincorporated enterprises as long as they keep a complete set of accounts and exhibit economic and financial behaviour that differs from that of their owners. Small businesses such as self-entrepreneurs are recorded under the households sector.

Business investment rate

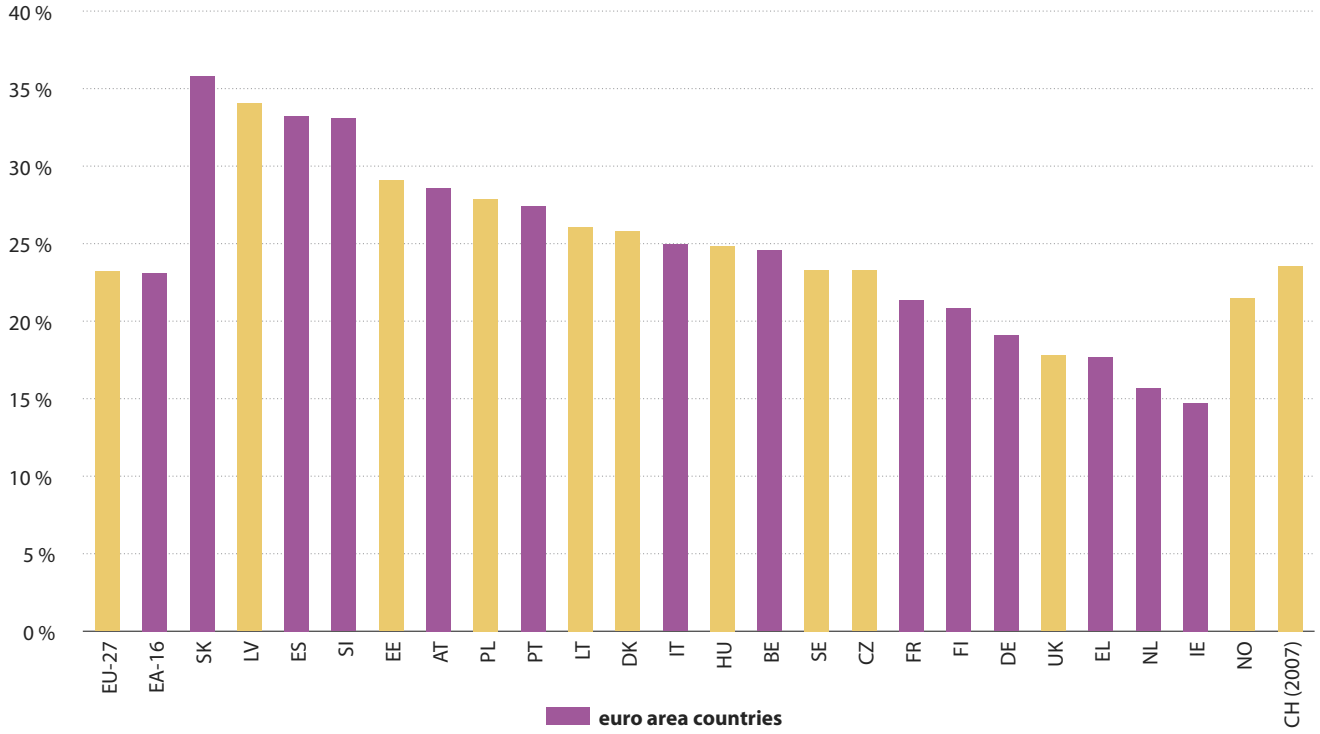
The investment rate can be used as an indicator for analysing the propensity of this sector to invest (in buildings, machinery, etc.) and thus to contribute to the long-term growth of the economy. It is defined as gross investment (fixed capital formation) divided by gross value added. By gross, we mean that the amount of fixed assets used up during the year as a result of normal wear and tear is not deducted.

In Figure 2.2.17, the investment rate of non-financial corporations is shown for all available Member States, Norway and Switzerland, and for the EA–16 and EU–27 as a whole.

The business investment rate was broadly the same in the EU (23.2 %) and in the euro area (23.1 %). Among the non-euro area countries, the Member States that joined the EU in 2004 generally had high investment rates. In particular, this was the case for the Baltic States (Latvia 34.0 %, Estonia 29.1 % and Lithuania 26.1 %), but also for Poland (27.9 %) and Hungary (24.8 %).

In the EA–16, Slovakia (35.8 %), Spain (33.2 %) and Slovenia (33.1 %) topped the table. The three lowest positions of the whole EU went to Ireland (14.7 %), Netherlands (15.6 %) and Greece (17.6 %).

Figure 2.2.17: (Gross) investment rate of non-financial corporations (2008 data if available)



Source: Eurostat (tec00099)

Table 2.2.8: Changes in business investment rates between 2000 and 2008 (pp)

EU–27	EA–16	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
0.1	0.0	1.5	:	– 10.0	0.2	– 2.0	– 2.4	:	– 2.4	2.8	1.6	1.1	:	– 1.9	1.8

LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	CH (*)
:	– 6.6	:	– 2.6	– 2.9	– 10.3	– 5.6	:	1.4	3.6	1.0	0.2	– 0.7	3.6	0.0

(*) change calculated from 2000 to 2007

Source: Eurostat (tec00099)

Turning to the dynamics of investment rates from 2000 to 2008, as outlined in Table 2.2.8, we see that only a slight increase was recorded in the EU (0.1 pp), while the euro area level remained unchanged. At country level, the fall observed for the Czech Republic was – 10 pp, and the downturn was even more marked in Poland (– 10.3 pp). Sizeable decreases were also measured in Hungary (– 6.6 pp) and Portugal (– 5.6 pp). In general, there were no conspicuous increases in investment rates. Slovakia (3.6 %) and Spain (2.8 %) had the highest increases in the EU. The increase in Norway (3.6 %) was the same as in Slovakia.

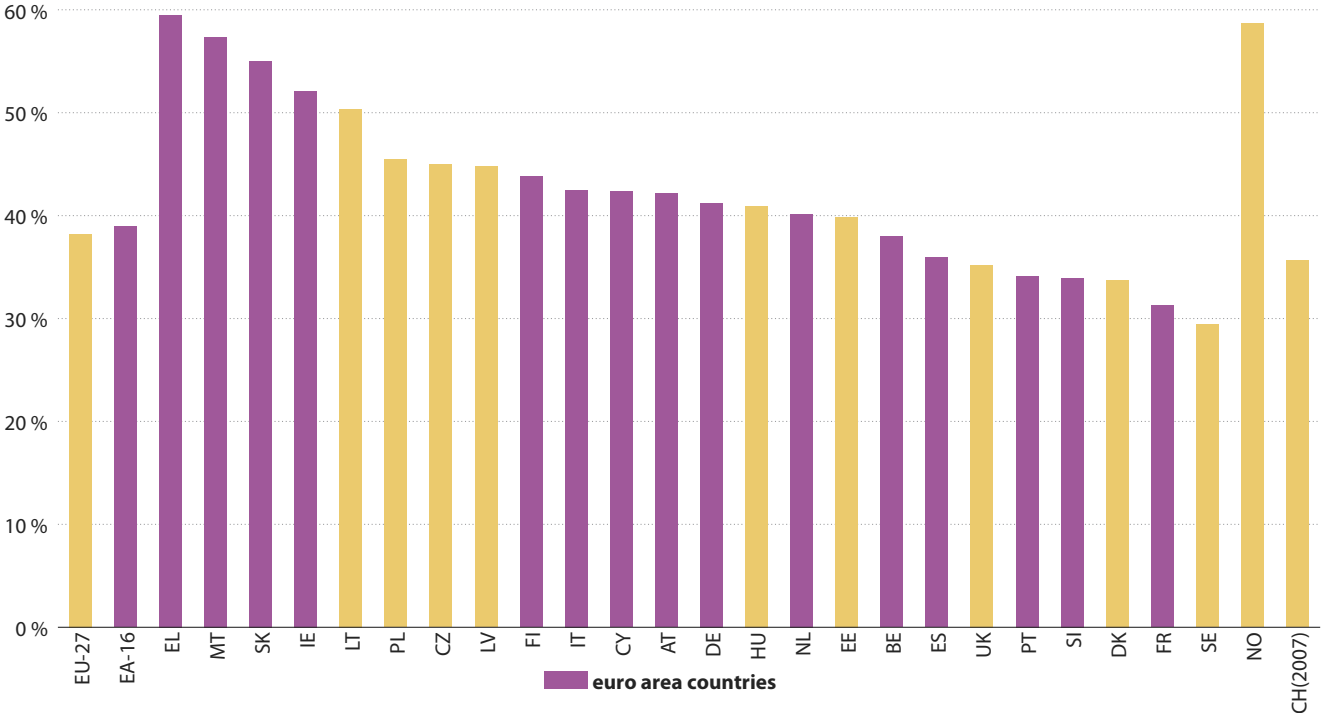
Business profit share

Another important variable derived from the sector accounts is the profit share of non-financial corporations, measured as their gross operating surplus divided by gross value added. This indicator measures the portion of value added that remunerates the capital. When related to investment rates, it helps us to understand whether firms' investment behaviour is linked to their current/past profit shares.

As Figure 2.2.18 shows, the profit share of non-financial corporations was 0.8 pp higher in the euro area (39.0 %) than in the EU (38.2 %). Low rates were observed for Sweden (29.4 %), France (31.3 %) and Denmark (33.7 %). At the other extreme, the highest profit shares were measured in Greece (59.5 %), Norway (58.7 %), Malta (57.3 %) and Slovakia (55.0 %).

Profit shares increased by 1.3 pp in the EU and 1.2 pp in the euro area between 2000 and 2008 (see Table 2.2.9). A large increase was recorded in Poland (+ 8.7 pp), followed by Slovakia and Malta (both at + 6.4 pp) and Germany (+ 5.0 pp). Sizeable decreases were observed in Cyprus (– 9.6 pp) and Denmark (– 7.1 pp), followed by Latvia and Estonia (– 5.0 and – 4.9 pp respectively).

Figure 2.2.18: (Gross) profit shares of non-financial corporations (2008 data if available)



Source: Eurostat (tec00100)

Table 2.2.9: Changes in the profit share of non-financial corporations between 2000 and 2008 (pp)

EU–27	EA–16	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
1.3	1.2	3.1	:	– 2.7	– 7.1	5.0	– 4.9	:	3.6	0.2	0.1	– 4.4	– 9.6	– 5.0	– 1.1

LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	CH (*)
:	2.3	6.4	1.1	2.5	8.7	– 2.6	:	5.1	6.4	– 1.9	– 0.9	1.5	3.5	1.6

(*) change calculated from 2000 to 2007

Source: Eurostat (tec00100)

2.2.4. Regional GDP

Map 2.2.1 shows the regional distribution of GDP per inhabitant for 2007 (as a percentage of the EU average of 24 900 expressed in PPS) for the EU-27, Croatia, the former Yugoslav Republic of Macedonia and Turkey.

The most prosperous regions are in southern Germany, the south of the UK, northern Italy, Belgium, Luxembourg, the Netherlands, Austria, Ireland and Scandinavia. The capital regions of Madrid, Paris, Prague and Bratislava also fall into this category. Most of the economically weaker regions are on the southern, south-western and in particular in the eastern periphery of the EU, as well as in Croatia, the former Yugoslav Republic of Macedonia and Turkey.

The values for the EU-27 range from 26 % of the EU average (6 400 PPS per inhabitant) in Severozapaden (Bulgaria) to 334 % (83 200 PPS) in Inner London. The difference between the two ends of the range is therefore 13.1 to 1. Luxembourg at 275 % (68 500 PPS) and Brussels at 221 % (55 000 PPS) follow in second and third places; Hamburg at 192 % (47 800 PPS) and Prague (Czech Republic) at 172 % (42 800 PPS) take fourth and fifth places.

Prague (Czech Republic), the region with the highest GDP per inhabitant in the new Member States, is already up to fourth place with 172 % of the EU average, and Bratislavský kraj (Slovakia) with 160 % (39 900 PPS) has reached 12th place out of the 271 NUTS 2 regions of the EU-27. However, these two regions are exceptions in the new Member States, as the next nearest lag far behind: Zahodna Slovenija (Slovenia) at 107 % (26 600 PPS) in 94th place, Közép-Magyarország (Hungary) at 103 % (25 600 PPS) in 111th place, and Cyprus at 94 % (23 300 PPS) in 146th place. With the exception of four other regions (Bucuresti-Ilfov in Romania, Mazowieckie in Poland, Malta and Stredny Cechy in the Czech Republic), all the remaining regions of the new Member States have a GDP per inhabitant of less than 75 % of the EU-27 average. The same applies to Croatia, the former Yugoslav Republic of Macedonia and Turkey.

If the 271 regions of the EU are divided into classes according to their GDP (in PPS) per inhabitant, we see that in 2007, GDP per inhabitant in 67 regions was less than 75 % of the EU average. These 67 regions account for 24.4 % of the population, almost three quarters of which are in the new Member States, and just over one quarter in EU–15 countries. As much as 9.9 % of the population live in the 28 regions whose per inhabitant GDP is less than 50 % of the EU average; with the exception of the French Overseas Department of Guyane all of these regions are in the new Member States.

At the top of the scale, 41 regions have a GDP per inhabitant of more than 125 % of the EU average. 20.6 % of the population live in these regions. 55 % of the population, i.e. a significant majority, live in regions with a GDP per inhabitant between 75 % and 125 % of the EU average.

A comparison of the ranges between 2000 and 2007 shows that the gap between the most and the least prosperous of the 271 EU regions is continuing to narrow. While the difference was 17.7 to 1 in 2000, it had fallen to 13.1 to 1 by 2007.

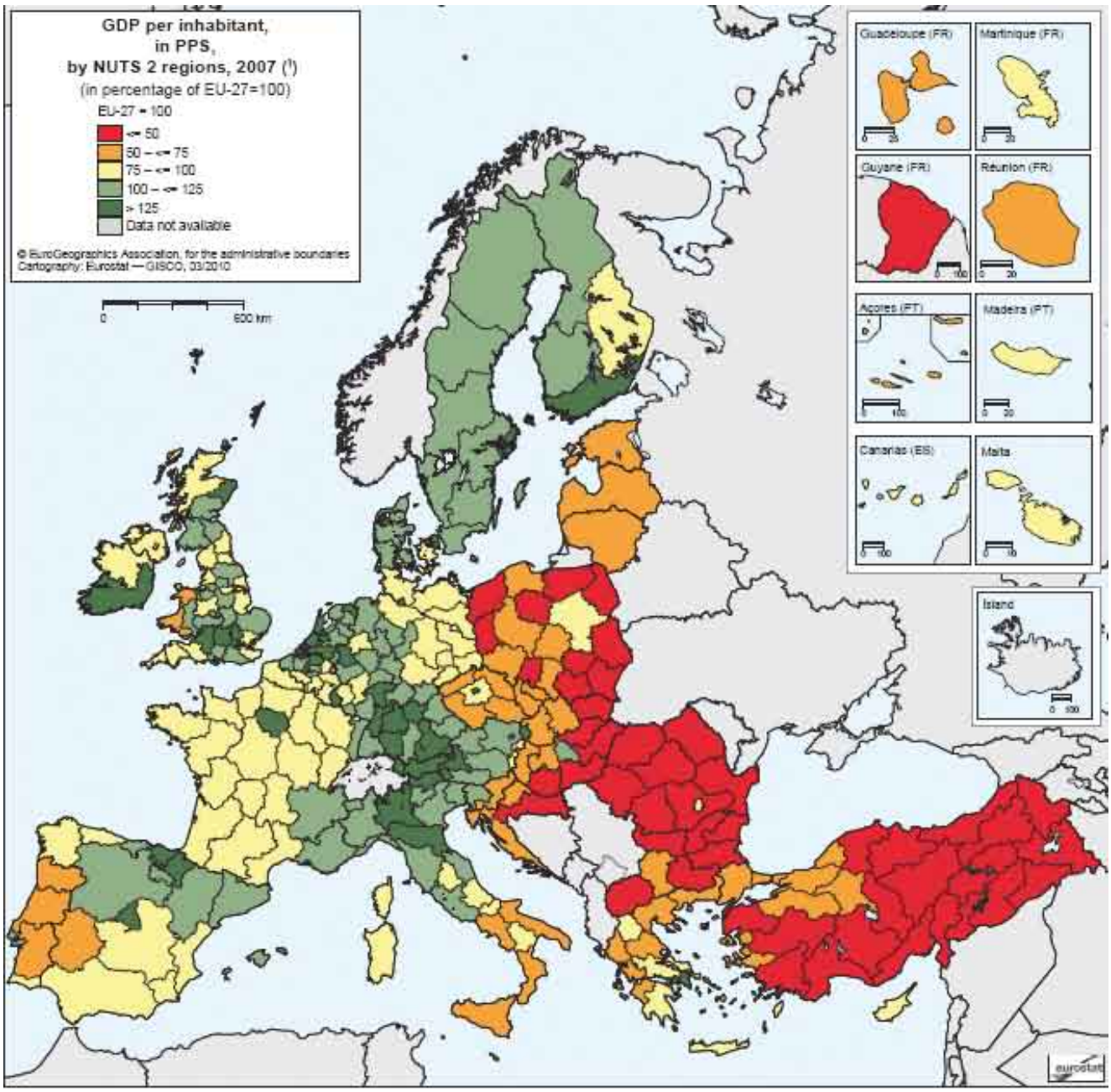
There are also substantial regional differences within countries themselves. In 2007, the highest per inhabitant GDP was more than twice the lowest in 14 of the 23 countries with more than one NUTS 2 region. This group includes seven of the nine new Member States as well as Croatia and Turkey, but only seven of the 14 EU–15 Member States.

The largest regional differences are in Turkey and the United Kingdom, where there is a factor of 4.9 and 4.6 respectively between the two extremes, and in Slovakia, where the factor is 3.5. The lowest values can be found in Slovenia and Sweden with 1.5, and in the Netherlands (1.6). Moderate regional disparities (i.e. factors of less than 2) are found only in the EU–15 Member States and in Slovenia.

In all the new Member States, in Croatia and in a number of the EU–15 Member States, a substantial share of economic activity is concentrated in the capital regions. As a result, in 18 of the 23 countries included here in which there is more than one NUTS 2 region, the capital regions are also the regions with the highest GDP per inhabitant. For example, Map 2.2.1 clearly shows the prominent position of the regions of Brussels, Sofia, Prague, Athens, Madrid, Paris, Lisbon, Budapest, Bratislava, London, Warsaw and Bucharest.

A comparison of the ranges between 2000 and 2007, however, shows that developments in the EU–15 were significantly different to those in the new Member States. Whilst the ranges between the regional extremes in the new Member States tended to increase, they decreased in half of the EU–15 countries.

Map 2.2.1: GDP per inhabitant, in PPS, by NUTS 2 regions, 2007 (as percentage of EU-27 = 100)



(1) Turkey, 2006

2.3. Public finances

2.3.1. Introduction

Governments play a key role in economies by providing public services and redistributing income. The way in which they finance their activities (taxation or borrowing) and the scale, pattern and purpose of their expenditure has a major impact on other economic players. In the European Union there is particular interest in government fiscal policy, due in part to the excessive deficit procedure and the debate on the sustainability and quality of public finances. These aspects are monitored under the Stability and Growth Pact and other initiatives.

This section analyses the finances of EU governments over recent years. The data concern the general government sector, as defined in the European System of Accounts (see Box 2.3.1 for further details).

BOX 2.3.1: DEFINITION OF THE GENERAL GOVERNMENT SECTOR

In the European System of Accounts (ESA 95, paragraph 2.68) the 'general government' sector is defined as containing 'all institutional units which are other non-market producers whose output is intended for individual and collective consumption, and mainly financed by compulsory payments made by units belonging to other sectors, and/or all institutional units principally engaged in the redistribution of national income and wealth'.

The main functions of general government units are therefore:

— to organise or redirect flows of money, goods and services or other assets among corporations, among households or between corporations and households for the purpose of social justice, increased efficiency or other aims legitimated by the citizens (redistribution of national income and wealth), e.g. corporate income tax paid by companies used for financing unemployment benefits, or social contributions of employees used to fund pension systems;

— to produce goods and services to satisfy households' needs (e.g. state healthcare) or to meet needs of the whole community (e.g. defence, public order and safety).

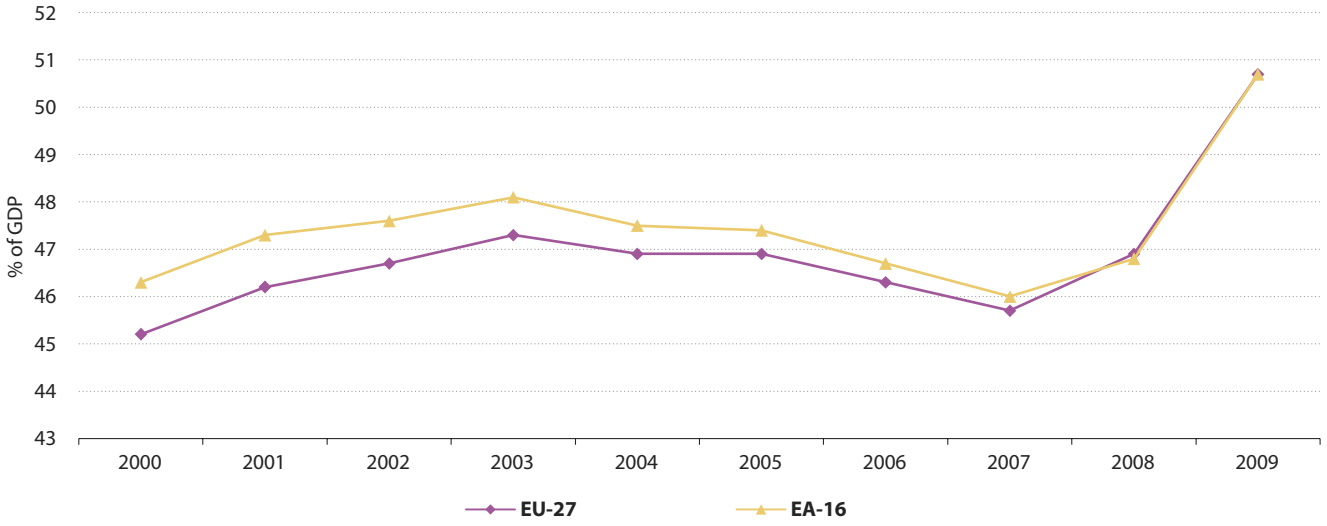
By convention, the general government sector includes all public corporations that are not able to cover at least 50 % of their costs by sales and are therefore considered non-market producers.

2.3.2. Government expenditure

General trends and structure

Total general government expenditure (for a formal definition see Box 2.3.2) stood at 50.7 % of GDP both in the EU and in the euro area (EA–16) in 2009 (see Figure 2.3.1). Over the period 2000 to 2009, the ratio of total government expenditure to GDP grew in the EU, reaching a peak in 2003, and fell back slowly up to 2007 (with a stable period between 2004 and 2005). From 2007 onwards, the ratio increased again sharply, first by around 1 percentage point (pp) between 2007 and 2008, then by nearly 4 pp between 2008 and 2009 (see Figure 2.3.1). In the euro area, the ratio followed approximately the same trend. However, while over the period 2000–07 the ratio for the EA–16 remained above the EU ratio, from 2008 onwards both ratios have converged to roughly the same value.

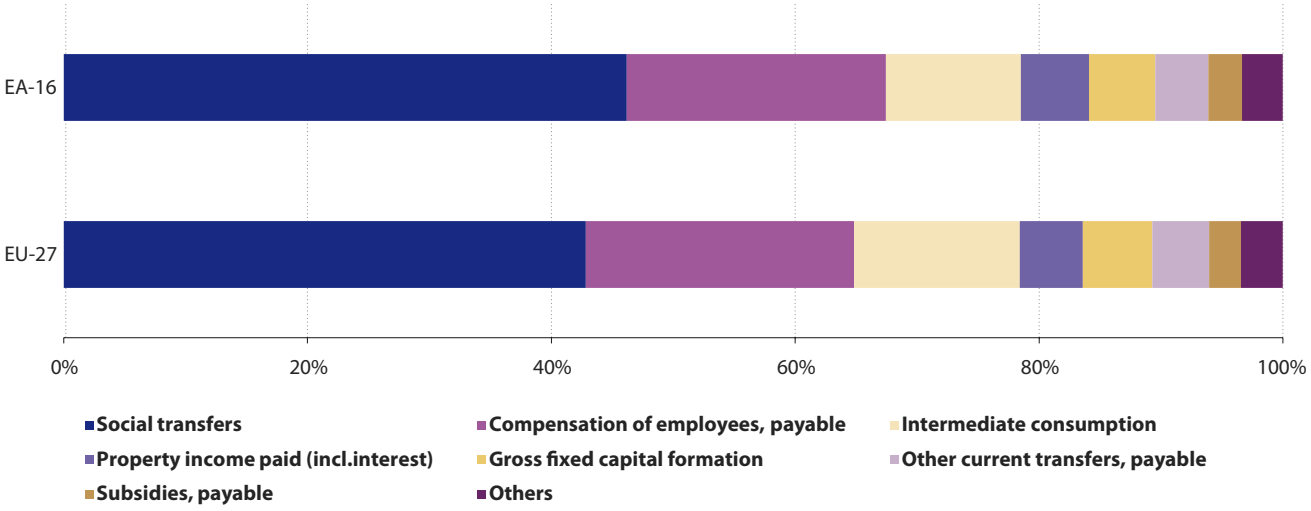
Figure 2.3.1: Total general government expenditure over the period 2000–09



Source: Eurostat (gov_a_main)

Large proportions of government expenditure (42.8 % of the EU total in 2009) went on redistributing income in the form of social transfers in cash or in kind (see Figure 2.3.2); 22.0 % was spent on compensation of employees and 13.6 % on intermediate consumption. Interest on borrowing and rent paid by government accounted for 5.2 % of the total, while public investment spending (acquisitions less disposals of fixed assets gross of consumption of fixed capital) took another 5.7 %. The remainder was for other current transfers (4.7 %), subsidies (2.6 %) and other components such as capital transfers and taxes paid (3.4 %). In the euro area the share of social transfers in total government expenditure was 3.4 pp larger than in the EU, and the share of intermediate consumption was 2.5 pp smaller.

Figure 2.3.2: Composition of total government expenditure in 2009



Source: Eurostat (gov_a_main)

BOX 2.3.2: GOVERNMENT REVENUE AND EXPENDITURE

To ensure consistency between national accounts (production, generation, distribution, redistribution and use of income, accumulation and financing) and the government budget perspective (government spending and revenue), two additional concepts are defined in ESA 95 with reference to national accounts categories:

Government revenue as the sum of:	**Government expenditure** as the sum of:
— sales consisting of market output, output for own final use and payments for other non-market output — taxes on production and imports, receivable — other subsidies on production, receivable — property income, receivable — current taxes on income, wealth, etc., receivable — social contributions, receivable — other current transfers, receivable — capital transfers, receivable	— intermediate consumption — gross capital formation — compensation of employees, payable — other taxes on production, payable — subsidies payable — property income paid (including interest) — current taxes on income, wealth, etc., payable — social benefits other than social transfers in kind, payable — social transfers in kind related to expenditure on products supplied to households via market producers — other current transfers payable, — adjustment for the change in net equity of households in pension funds reserves — capital transfers payable — acquisitions less disposals of non-financial non-produced assets (public investment spending)

By convention, internal transactions inside the general government sector, i.e. between different subsectors or between different general government units belonging to the same subsector, related to property income, other current transfers and capital transfers, are excluded from government revenue and expenditure.

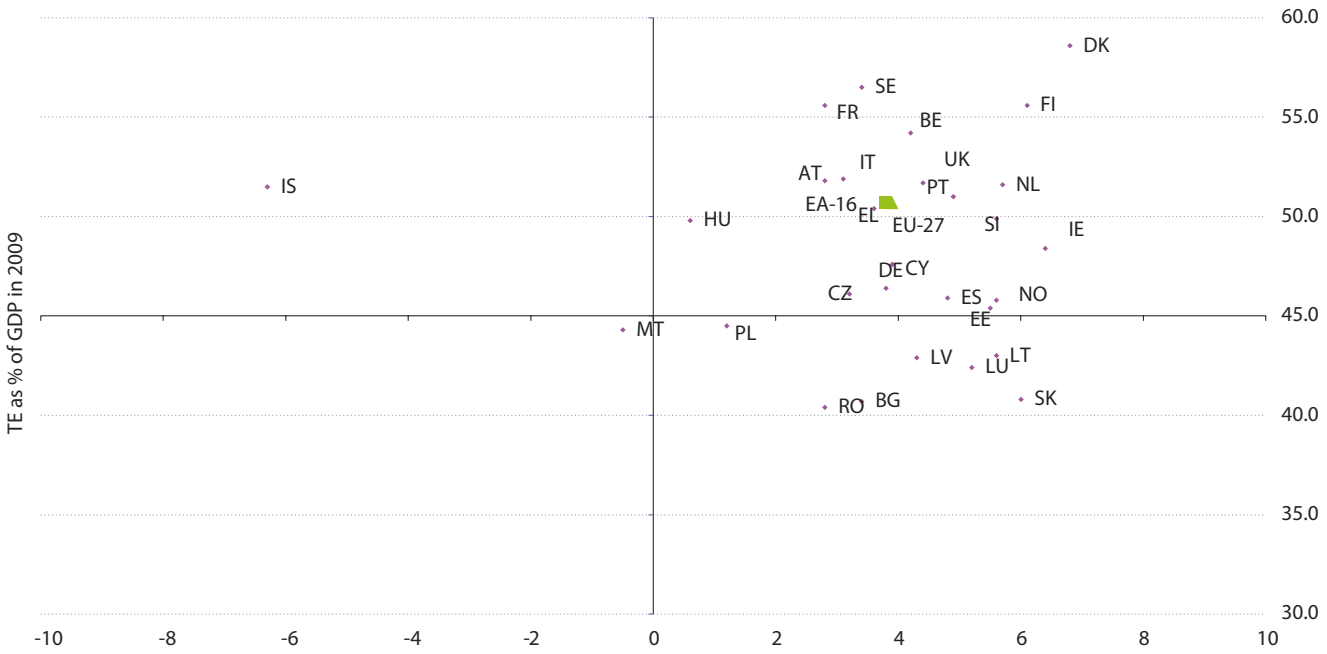
Country-by-country comparisons

Figure 2.3.3 presents Member States' total government expenditure as a percentage of GDP, as recorded in 2009, and its change in pp of GDP compared with 2008.

Ten Member States recorded total general government expenditure above the EU-27 average in 2009, as a share of GDP. The highest level, 58.7 % of GDP, was recorded in Denmark, followed by Finland (56.1 %), Sweden (55.8 %) and France (55.6 %). By contrast, the lowest ratio of general government expenditure to GDP in 2009 was recorded in Romania, followed by Bulgaria and Slovakia — all three with general government expenditure standing at just over 40 % of GDP in 2009.

Compared with 2008, all Member States but one (Malta) increased their level of government expenditure. Increases of over 6 pp of GDP were recorded in Denmark (6.9 pp), Finland (6.6 pp), Ireland (6.4 pp), and Slovakia (6.0 pp). The Netherlands, Slovenia, Lithuania, Estonia and Luxembourg increased their government expenditure to GDP ratio by more than 5 pp. The median change among the 27 EU Member States was 3.8 pp. This marked increase in government expenditure was undoubtedly linked to the economic and financial context. Most of the Member States have increased their expenditure to stabilise the financial system and support the economy. In Malta the level of government expenditure fell slightly, by 0.5 pp of GDP. This was due to expenditure remaining stable while GDP increased slightly.

Figure 2.3.3: Government expenditure as a percentage of GDP in 2009 and its change between 2008 and 2009 in pp of GDP



Source: Eurostat (gov_a_main)

Of the EFTA countries, 2009 total government expenditure data were available only for Iceland and Norway. Total government expenditure in Norway increased significantly in 2009 (from 40.2 % to 45.8 % of GDP). Since 2003, government expenditure's share of GDP in Norway had fallen by 8.0 pp. The increase in 2009 brings government expenditure back to around the same level as in 2004. In Iceland, government expenditure decreased sharply from 57.8 % in 2008 to 51.5 % of GDP in 2009 ([13]). In Switzerland, government expenditure accounted for 32.2 % of GDP in 2007 (the latest year for which figures are available).

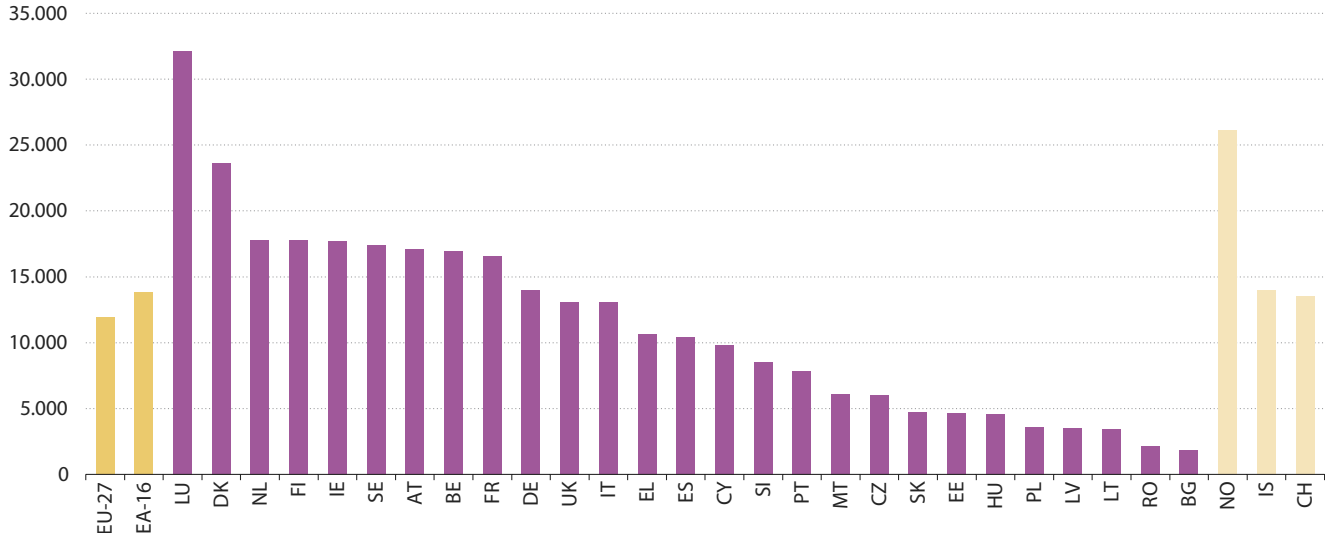
Government expenditure per inhabitant averaged around EUR 11 960 in the EU in 2009 (see Figure 2.3.4). Substantial disparities are observed among Member States. In Luxembourg in 2009, the government spent EUR 32 149 per inhabitant ([14]), the highest figure in the EU, whereas Bulgaria spent only EUR 1 823. Government spending per inhabitant was below EUR 10 000 in all the Member States that have joined the EU since 1 May 2004 (the central and east European countries, Malta and Cyprus) as well as in Portugal. In 2009, the four most populous Member States (Germany, France, Italy and the United Kingdom) spent between EUR 13 089 per inhabitant in Italy and EUR 16 570 per inhabitant in France.

Looking at EFTA countries, Norway and Iceland recorded government expenditure of some EUR 26 170 and EUR 14 020 per inhabitant respectively in 2009. Switzerland also recorded values above the EU average in the latest year for which data were available (2007).

([13]) This was partly due to the inclusion of the central government's assumption of debt of EUR 1.3 billion in 2008.

([14]) This figure for Luxembourg (and also the equivalent figure for revenue below) is inflated because a significant proportion of the Luxembourg labour force is non-resident.

Figure 2.3.4: Government expenditure in euro per inhabitant in 2009



Source: Eurostat (gov_a_main)

An analysis of total expenditure in individual Member States in 2009 (see Figure 2.3.5) gives rise to the following observations ([15]).

— Belgium, the Czech Republic, Germany, France, Luxembourg, the Netherlands, Austria, Portugal and Slovakia spent more than the EU average of 42.8 % of their total government expenditure on redistributive transactions (social transfers in cash or in kind), with Germany recording the highest percentage at 56 %. Cyprus and Latvia were well below the EU average, with around 30 %. However, for Latvia, the share of expenditure on redistributive transactions has increased noticeably, from 22.3 % in 2008 to above 30 % in 2009.

— Of the EU Member States, Cyprus, Denmark and Malta spent the largest share of total government expenditure on compensation of employees (33.6 %, 33.0 % and 32.8 % respectively). By contrast, in the Czech Republic, Germany, Luxembourg, the Netherlands, Austria and Slovakia, the share was below 20 %.

— Intermediate consumption (purchases of non-capital goods and services) was a relatively small item of government spending in Belgium, Germany, France, Luxembourg, Austria and Portugal, with a share of total expenditure below 10 %, whereas in Finland and Sweden it was nearing 20 % (19.9 % for Finland and 18.6 % for Sweden).

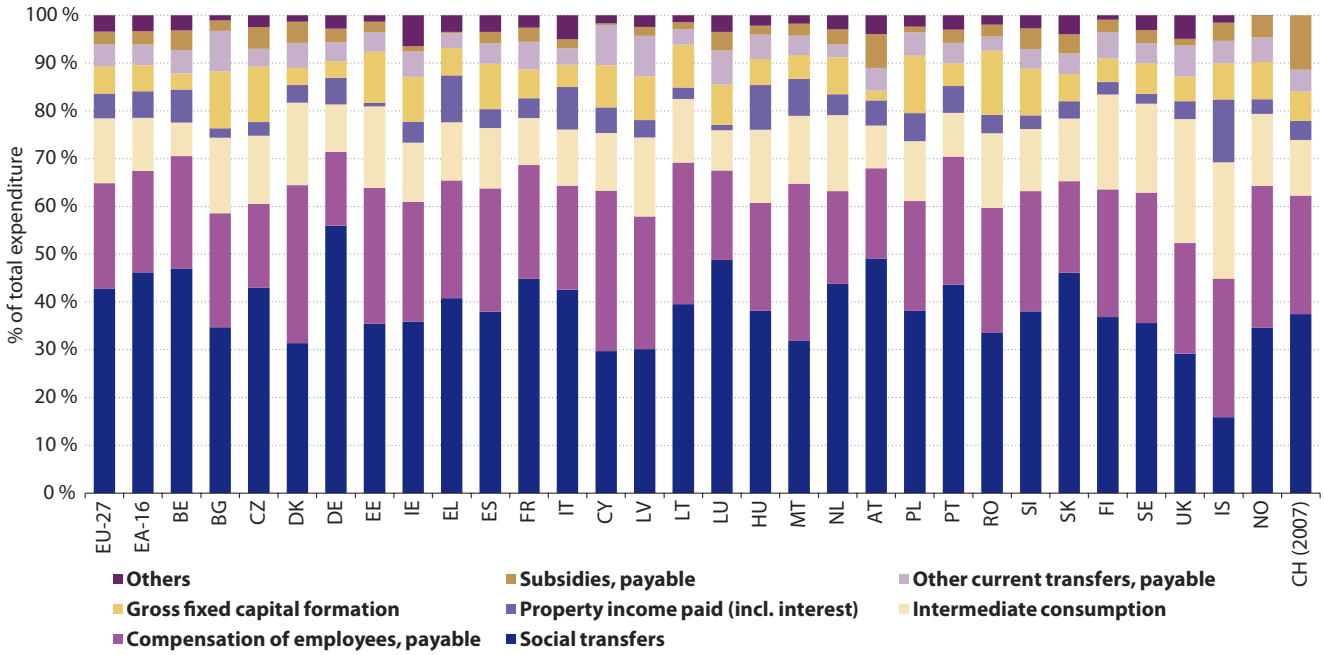
— Interest payments (making up most of the component 'property income, paid, including interest') had a relatively large share of total government expenditure in countries with a high level of government debt, such as Greece (9.9 %), Hungary (9.3 %), and Italy (8.9 %), and a very low share in Member States with a low level of government debt, in particular Estonia (0.7 %), Luxembourg (1.2 %) and Bulgaria (2.0 %).

([15]) The United Kingdom and Greece are excluded from the analysis of shares of social transfers and intermediate consumption in total government expenditure. For these countries, social transfers are underestimated and intermediate consumption overestimated due to the statistical treatment of social transfers in kind related to expenditure on products supplied to households via market producers.

— The share of government spending on investment was generally greater in Member States that have joined the EU since 1 May 2004. Indeed, for Romania, Poland, Bulgaria, the Czech Republic and Estonia, more than 10 % of total expenditure was allocated to investments. Cyprus, Latvia and Lithuania invested around 9 % of GDP. Hungary, Malta and Slovakia spent around 5 % of total expenditure for investment. Of the other Member States, Belgium, Denmark, Germany and Austria spent least proportionally on investments, while Ireland, Spain, Luxembourg and Netherlands spent most.

— Compared with other Member States, other current transfers weighed relatively more heavily in Cyprus and Latvia, and subsidies weighed more in Austria.

Figure 2.3.5: Main components of government expenditure in 2009



Source: Eurostat (gov_a_main)

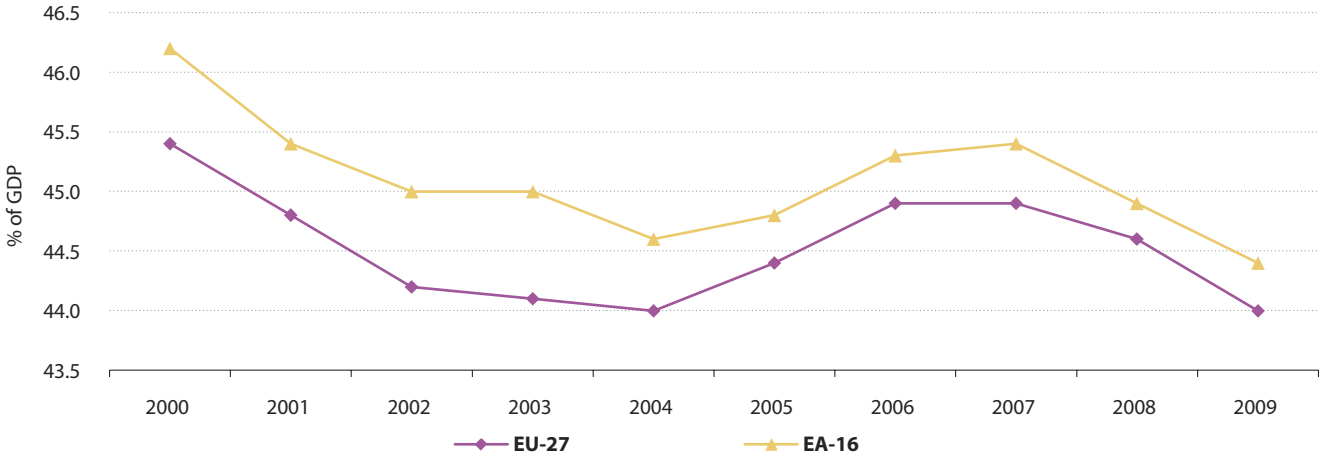
In Norway, the share of social transfers in total government expenditure in 2009 was 34.6 %, while compensation of employees accounted for 29.7 % and intermediate consumption for 15.1 %, followed by investment (7.8 %), other current transfers (5.2 %), subsidies (4.6 %) and property income paid (including interest) (3.1 %). In Iceland, compensation of employees and intermediate consumption were the predominant types of government expenditure in 2009 (29.0 % and 24.3 % of the total respectively). Social transfers made up just 15.9 % of total government expenditure, by far the lowest figure among the countries for which data are available. In Switzerland (2007 data) the level of social transfers was slightly higher than in Norway (36.2 %).

2.3.3. Government revenue

General trends and structure

Total general government revenue (for a formal definition see Box 2.3.2) in the EU amounted to 44.0 % of GDP in 2009. In comparison with 2007, this corresponds to a reduction of nearly 1 pp. Over the period 2000–09, the ratio of total general government revenue to GDP decreased from 45.4 % in 2000 to a low of 44 % in 2004. It subsequently increased by just less than 1 pp of GDP and reached a peak in 2006 (44.9 %). The ratio remained stable in 2007 and fell back, with the 2009 level the same as 2004. The same trend is observed for total general government revenue in the euro area. However, the ratio of total general government revenue to GDP remained slightly higher in euro area countries than for the EU as a whole. This difference diminished after 2004 (see Figure 2.3.6).

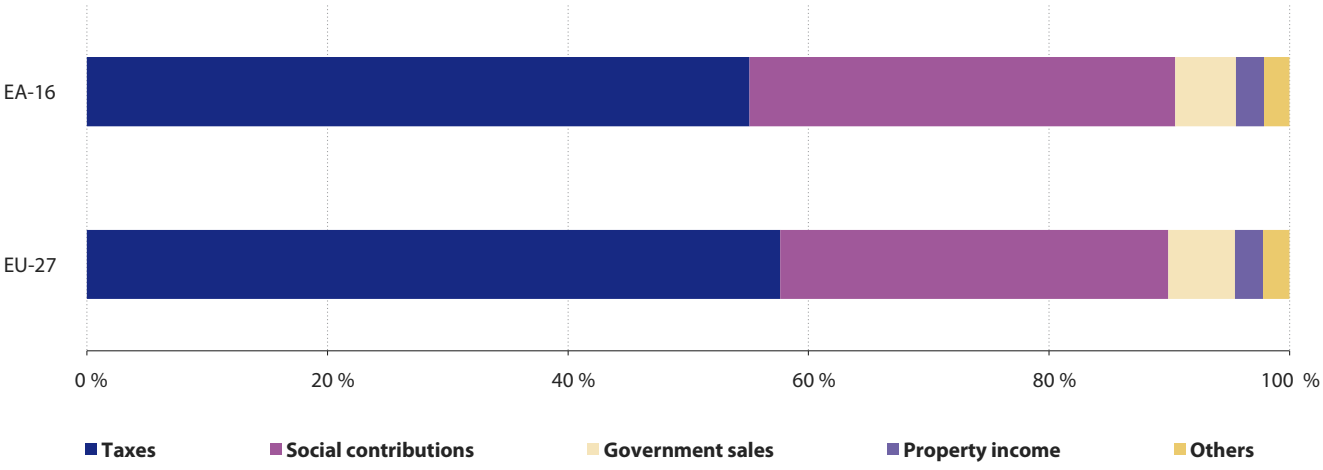
Figure 2.3.6: Total general government revenue over the period 2000–09



Source: Eurostat (gov_a_main)

EU governments collect most of their revenue in the form of taxes (57.6 %) and a further 32.3 % as social contributions. Taxes on production and imports accounted for some 29 %, and taxes on income and wealth, etc. yield, on average, 27.7 % of total government revenue. Taxes on capital make up less than 1 % of total government revenue in the EU. The share of revenue from sales of products and services by government is around 5.5 %, whereas 2.3 % of revenue comes from rents and interest received (property income) and another 2.1 % from current and capital transfers (see Figure 2.3.7).

Figure 2.3.7: Composition of total revenue in 2009



Source: Eurostat (gov_a_main)

Country-by-country comparison

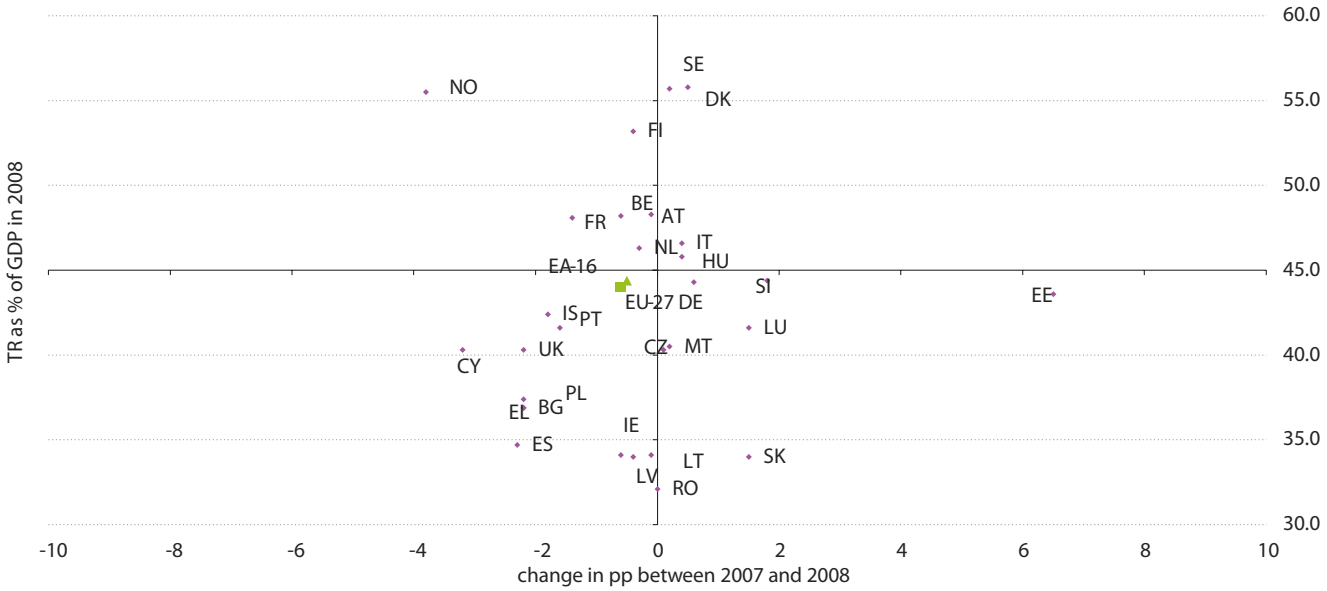
Figure 2.3.8 presents Member States' total government revenue as a percentage of GDP, as recorded in 2009, and its change in pp of GDP compared with 2008.

Eleven Member States recorded total general government revenue above the EU-27 average in 2009, as a GDP ratio. The highest level, 55.8 % of GDP, was recorded in Denmark, closely followed by Sweden (55.7 %). At the other end of the scale, Ireland, Spain, Latvia, Lithuania, Romania and Slovakia recorded a general government revenue to GDP ratio of less than 35 %.

Compared with 2008, the ratio decreased in a majority (15) of the Member States. The largest decrease was recorded in Cyprus (– 3.2 pp), followed by Spain, Bulgaria, Greece and Poland. For Romania the ratio remained stable. 11 Member States saw an increase in their revenue ratio between 2008 and 2009. The most substantial increase was recorded by Estonia (+ 6.5 %), but was mainly due to a drop in GDP. Slovenia, Slovakia and Luxembourg also experienced growth of more than 1 pp.

In Iceland, total government revenue amounted to 42.4 % of GDP in 2009, a drop of 1.8 pp compared with 2008, whereas in Switzerland in 2007 (the latest year for which figures are available) total government revenue accounted for 33.9 % of GDP. In both 2008 and in 2009 Norway recorded a higher ratio of government revenue than any EU Member State, at 59.3 % and 55.5 % of GDP respectively.

Figure 2.3.8: Total government revenue as a percentage of GDP in 2009 and its change since 2008 in pp of GDP

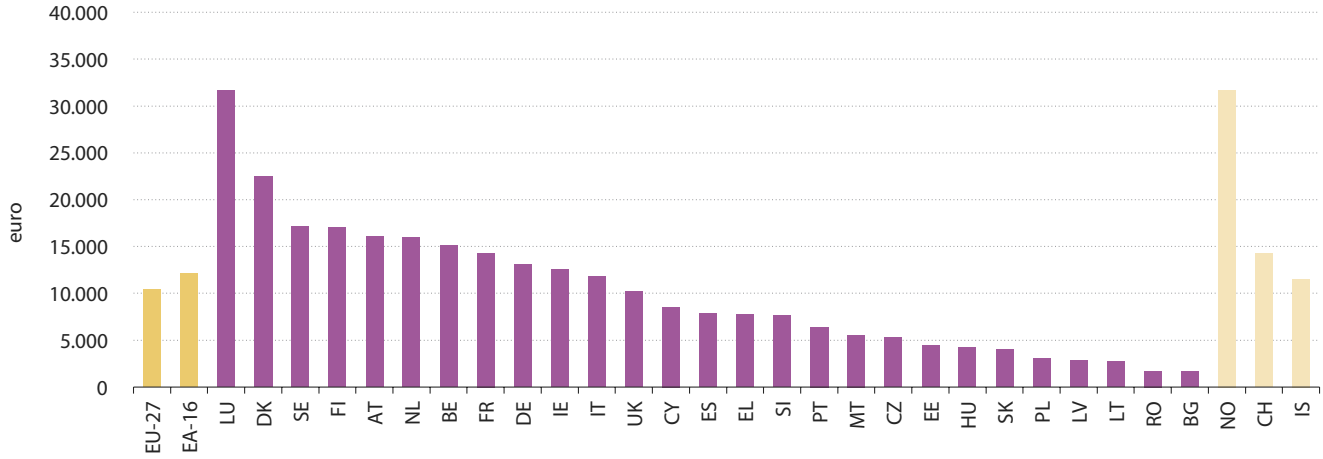


Source: Eurostat (gov_a_main)

Looking at the relationship between the value of total revenue and the country's total population (see Figure 2.3.9), using total government revenue in euro per inhabitant as an indicator, it is clear that all the Member States that joined the EU since 1 May 2004 collect less revenue per inhabitant than the EU average (just under EUR 10 400). The United Kingdom, Spain, Greece and Portugal are also below the EU average. By contrast, Luxembourg government revenue per inhabitant was above EUR 30 000 in 2009, while Denmark's figure was above EUR 20 000.

In Norway, government revenue was EUR 31 693 per inhabitant, more than three times the EU average, whereas in Iceland it was EUR 11 539 in 2009 and in Switzerland EUR 14 224 in 2007.

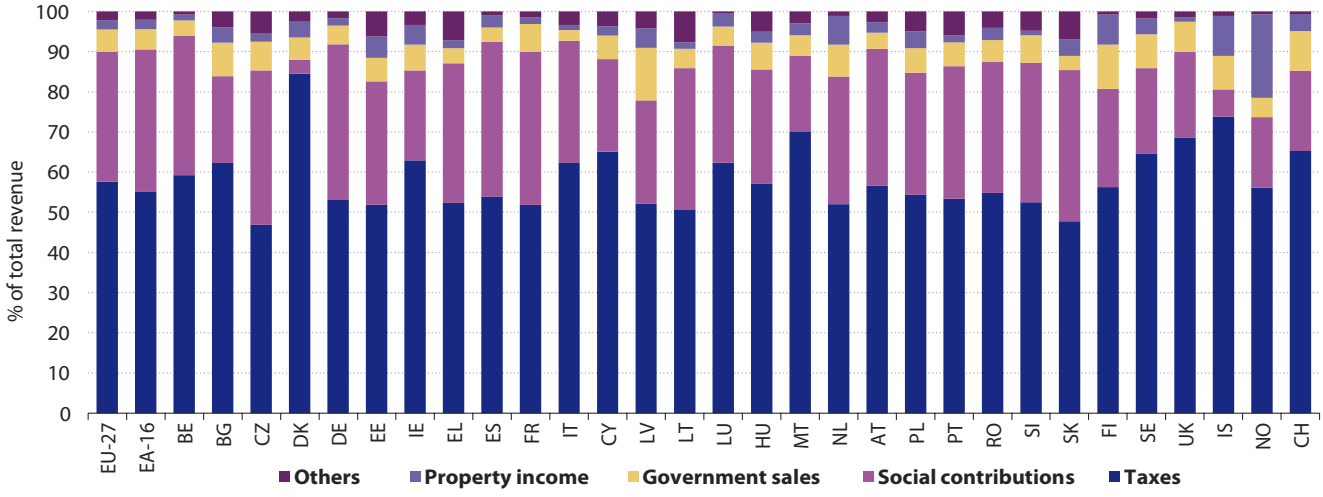
Figure 2.3.9: Government revenue per inhabitant in 2009



Source: Eurostat (gov_a_main)

As mentioned above, nearly 90 % of EU government revenue is collected in the form of taxes and social contributions. Bulgaria, Estonia, Latvia, the Netherlands, Poland and Finland were the only countries where the combined share of other types of revenue was equal to or exceeded 15 % of the total in 2009. In Latvia and Finland, government sales exceeded 10 % of total revenue. Bulgaria and Netherlands also recorded a high share of government sales (around 8 %). Property income was also relatively important in the Netherlands and Finland (7.0 % and 7.4 % respectively), compared with an EU average of 2.3 %.

Figure 2.3.10: Main components of government revenue in 2009



Source: Eurostat (gov_a_main)

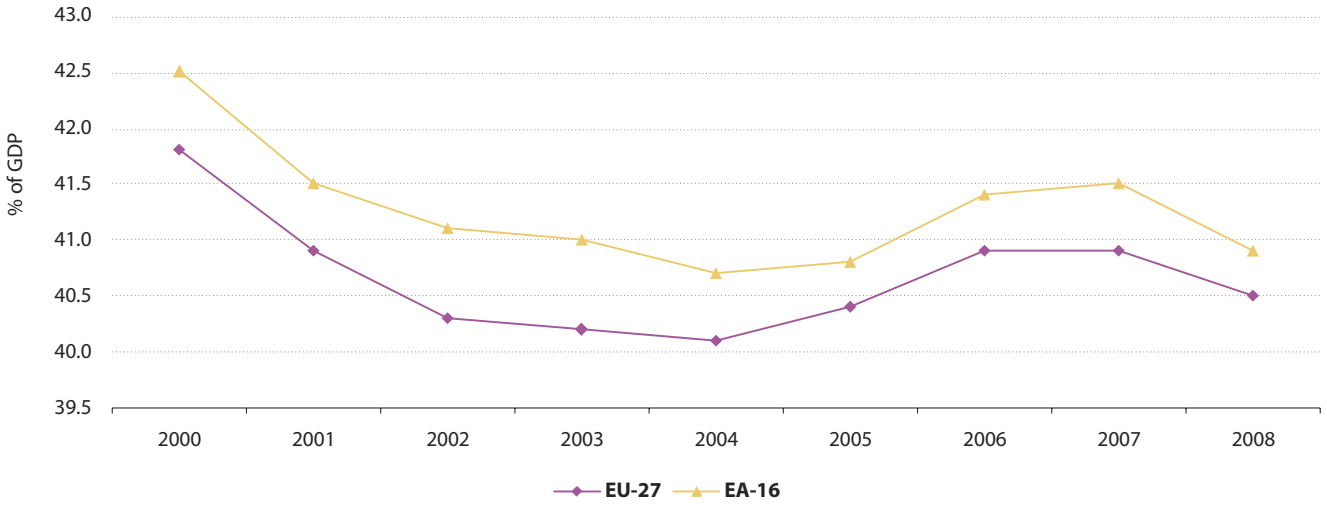
In Norway, most government revenue also comes from taxes and social contributions (73.7 %). However, what distinguishes this country from EU Member States is that 20.8 % of government revenue is collected in the form of property income (interest and rent received), largely relating to its 'Government Pension Fund — Global' (oil fund). Iceland relies to a large extent on taxes (representing 73.8 % in 2009), whereas it collects relatively little in the way of social contributions (6.7 %). The only EU Member State collecting a higher share of government revenue via taxes is Denmark: around 84.5 % — partly due to its social insurance system. In Switzerland, more than 85 % of EU government revenue is collected in the form of taxes and social contributions. Government sales accounted for 9.8 %.

2.3.4. Taxes and social contributions ([16])

General trends and structure of taxation in the EU and in the euro area in 2008

General government ([17]) total tax revenue in the EU–27 in 2008 amounted to 40.5 % of GDP, 0.4 pp down on 2007. This fall in the tax-revenue-to-GDP ratio in 2008 followed an increase of 0.8 pp between 2004 and 2007 (the 2004 level being the lowest value recorded over the period 2000–08; see Figure 2.3.11). Euro area tax revenue followed a roughly similar pattern, at a slightly higher level. However, the decline in the tax-revenue-to-GDP ratio in 2008 was more marked in the euro area (EA–16), where the ratio fell from 41.5 % in 2007 to 40.9 % in 2008.

Figure 2.3.11: Total tax revenue over the period 2000–08



Source: Eurostat (gov_a_tax_ag)

Looking at a more detailed breakdown of tax revenue, social contributions show up as the most significant source of tax revenue in the EU, with a share of 33.9 %, followed by taxes on income (30.3 %), VAT and other taxes on products and production (17 % and 16 % respectively). In the euro area the share of social contributions is 3.5 pp higher (see Figure 2.3.12).

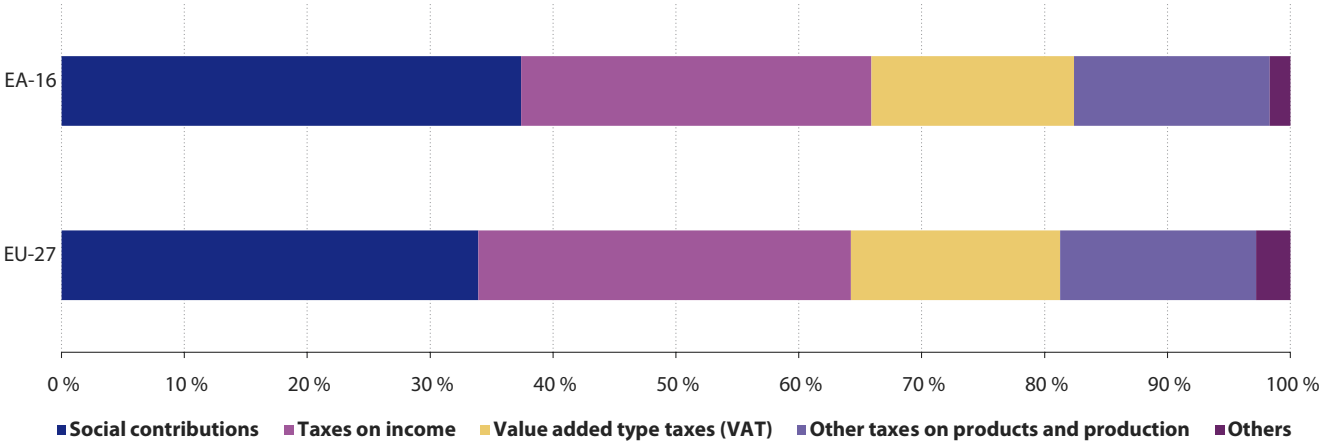
Changes in the main tax revenue components in the EU over the period 2000–08 are presented in Figure 2.3.13. Between 2000 and 2003 taxes on income fell by 1.3 GDP pp in the EU-27, then rose from 2005 to 2007 and fell again in 2008 to a level of 12.3 % of GDP. VAT revenue in the EU-27 remained stable over the period 2001–04 after the 0.2 GDP pp drop between 2000 and 2001, increasing from 2005 on by 0.1 GDP pp annually until 2007, but with a final fall to 6.9 % of GDP pp in 2008. Other taxes on products and production first moved in the same direction as VAT by increasing, gaining 0.1 pp of GDP between 2005 and 2006 before starting to decrease in the last two years by 0.4 pp of GDP compared with 2006, finishing up at 6.4 % of GDP in 2008.

([16]) For the sake of consistency and a more detailed breakdown, the data analysed in this section are taken from ESA 95, Table 9, transmitted by Member States to Eurostat at the end of September 2009. Consequently, they are available only up to 2008 and are not updated to take account of the latest revisions to the main government aggregates used as a basis for the analysis in the other sections of this chapter.

([17]) For the purpose of this section 'general government' includes taxes collected on behalf of the EU institutions. It therefore covers all tax revenue collected at EU level.

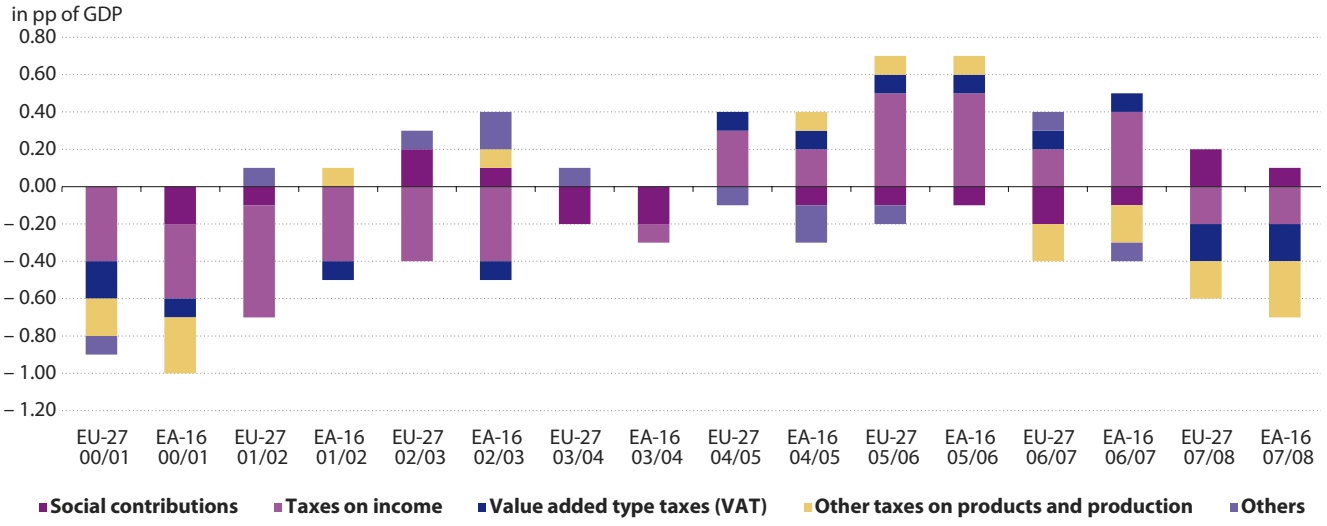
Considering their significant share in total tax revenue, social contributions appear to be a relatively stable component, with annual changes of around 0.2 GDP pp and showing a downward trend since 2003, although moving back up to 12.3 % of GDP in the latest year. The residual component 'others' in the EU-27 recorded changes of no more than approximately 0.1 GDP pp over the period 2000–08, with a ratio of 1.1 % of GDP in 2008. The component 'others' includes 'taxes on income, wealth, etc.', except for taxes on income in addition to capital taxes — all reduced by amounts of taxes and social contributions assessed but unlikely to be collected, where applicable.

Figure 2.3.12: Main components of tax revenue in 2008



Source: Eurostat (gov_a_tax_ag)

Figure 2.3.13: Changes in main ESA 95 tax revenue categories over the period 2000–08



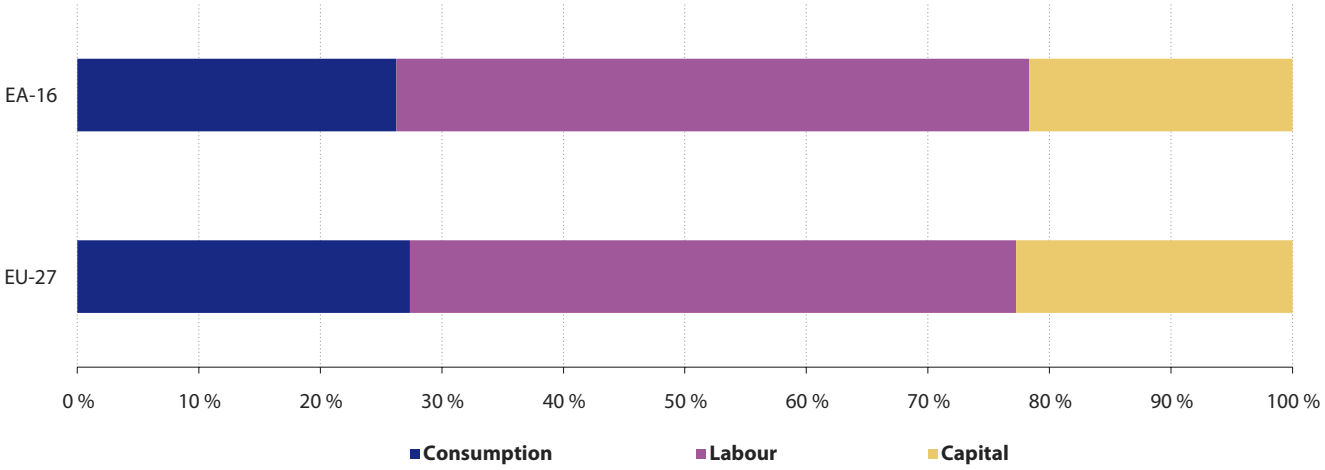
Source: Eurostat (gov_a_tax_ag)

Figure 2.3.14 shows that the economic function that brings in most tax revenue in the EU-27 is labour, at 50 %. Taxes on consumption account for 27.4 % of total taxation, whereas taxes on capital make up the remainder (22.8 %) ([18]). However, in the euro area, taxation on labour is 2.2 pp higher than in the EU and taxation on consumption and capital slightly lower (both by 1.1 pp).

Looking at changes in taxation by specific economic functions (labour, consumption and capital) in the EU presented in Figure 2.3.15, we can see that taxes on labour decreased by 1 pp of GDP between 2000 and 2007 due to a fall in social contributions and personal income tax, and then increased to 19.7 % of GDP in 2008.

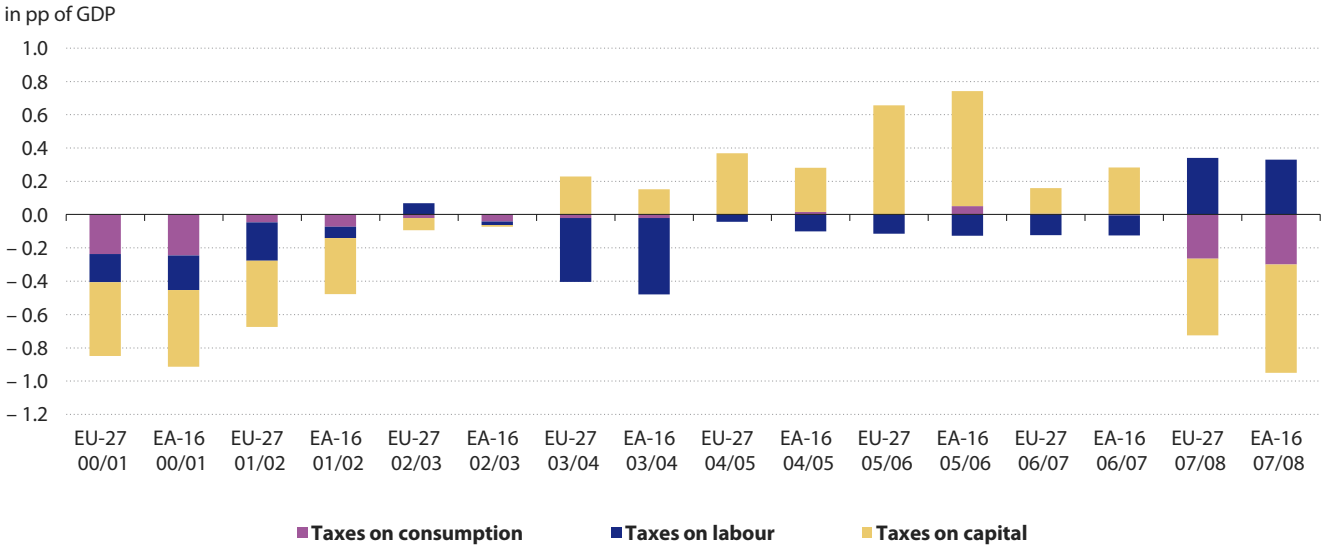
Taxes on capital fell from 8.9 % of GDP in 2000 to 8.0 % of GDP in 2003 and then increased by 1.4 pp of GDP over the period 2003–07, reaching a peak of 9.4 % of GDP in 2007. There was then a sharp decrease of 0.5 pp in 2008. Taxes on consumption remained stable over the whole period 2002–07, at 11.1 % of GDP, before declining markedly, by 0.3 pp of GDP, in the latest year.

Figure 2.3.14: Composition of the tax burden by economic functions in 2008



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

Figure 2.3.15: Taxation by economic functions over the period 2000–08



Source: Eurostat calculations on the basis of Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

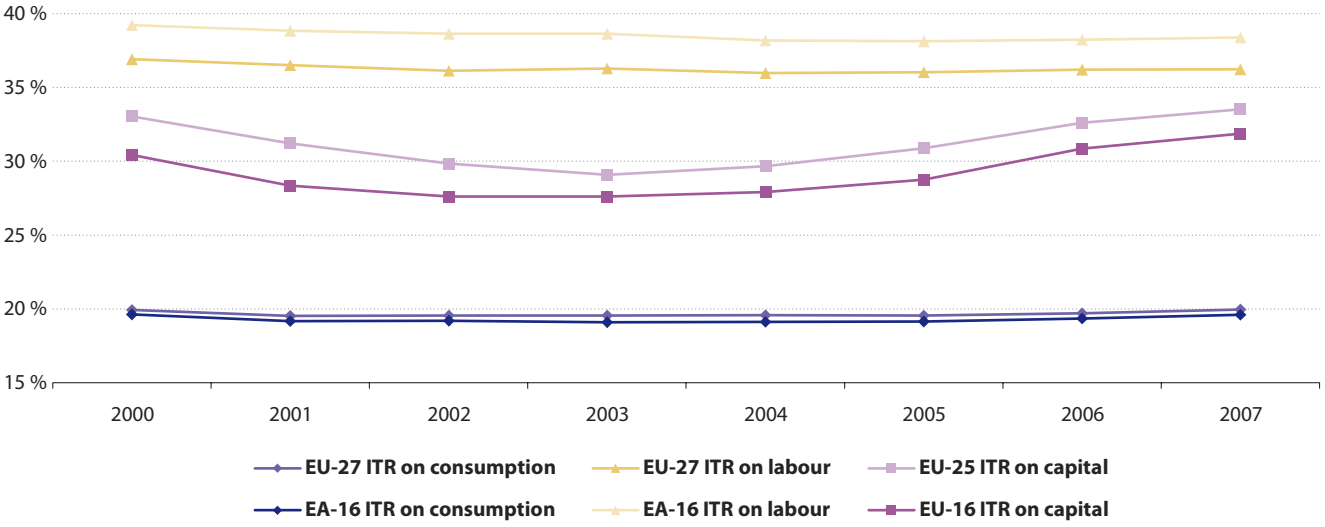
([18]) Due to a lack of attribution of category D995 (capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected), total calculated taxation may exceed 100 %.

The implicit tax rates (ITR) in Figure 2.3.16 show the relationship between taxes on specific economic functions and the size of their potential tax bases. In 2008, taxes on labour accounted for 36.5 % of the labour tax base (compensation of employees as well as payroll taxes and taxes on the wage bill) in the EU-27 and had, after a decrease (by 0.9 pp) between 2000 and 2005 and an increase between 2005 and 2008, returned to the same level as in 2001. Consumption taxes in the EU-27 represent roughly one fifth of final consumption expenditure of resident households.

Over the years 2000–03 the EU implicit tax rate on capital decreased by almost 3 pp, before showing a significant increase of almost 5 pp in 2007 and a renewed decrease by 1.3 pp to 32.2 % in 2008.

It is also interesting to examine the relationship between the ITRs on capital and consumption. Although capital raises less tax revenue than consumption as a percentage of GDP, when the value of the potential tax bases is taken into account taxation of capital is more than 10 pp higher than taxation of consumption.

Figure 2.3.16: Implicit tax rates over the period 2000–08



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

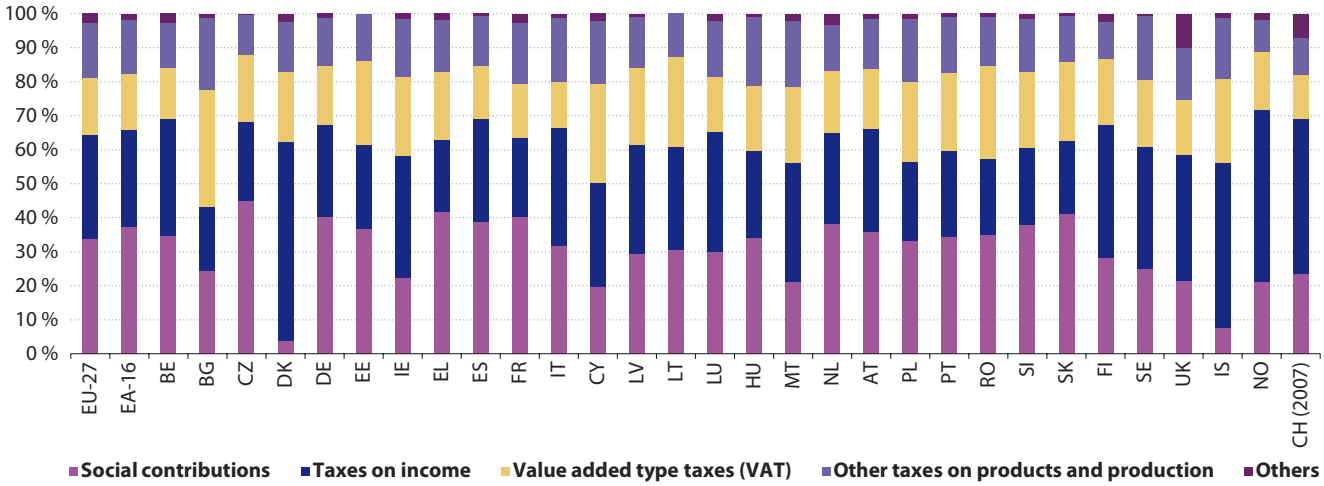
Country-by-country comparison

The share of social contributions (see Figure 2.3.17) is above the EU weighted average (33.9 % of total tax revenue) in 14 Member States, with more than 40 % in the Czech Republic (which, at 44.9 %, has the highest share in the EU), Germany, Greece, France and Slovakia. In Denmark, which finances its social benefits mainly from taxes on income, social contributions make up just less than 4 % of the total. The second lowest share of social contributions, at just over 20 %, was recorded by Cyprus. Malta and the United Kingdom have shares equal to or below 22 %, as does Norway. For Iceland the share of social contributions was below 8 % of total tax revenue.

Taxes on income are the biggest source of tax revenue in Denmark, with over 58 % of the total in 2008. It is followed by Finland, the United Kingdom, Sweden and Ireland, where the respective share was close to or more than 36 %, and then by Luxembourg, Malta, Italy and Belgium (34 % or more). In Greece and Bulgaria this type of tax was relatively less important, generating less than 21 % of total tax revenue in 2008. Among EFTA countries, Norway and Iceland relied mostly on taxes on income for generating its tax revenue (over 45 % of total revenue) in 2008, as did Switzerland in 2007.

Value added tax was very important in the structure of taxation in Bulgaria (34.5 % of the total in 2008). In Cyprus, Romania and Lithuania its share was above 26 %, whereas Italy, Belgium and Spain raised no more than 15.5 % of their tax revenue from VAT.

Figure 2.3.17: Main types of taxes in 2008



Source: Eurostat (gov_a_tax_ag)

Looking at the components making up 'other taxes on products and production', a relatively high level of taxes and duties on imports excluding VAT was reported by Luxembourg and Estonia (over 3 % of GDP). Domestic excise, consumption and sales taxes, stamp taxes and taxes on capital and financial transactions generate revenue equivalent to 5 % of GDP or more in Bulgaria, Denmark, Hungary and Malta. France, Italy, Austria and Sweden also have relatively high revenue (above 3 % of GDP) from taxation of land and buildings used for production (especially France), of total wage bills and payroll taxes (especially Sweden and Austria) and from other taxes paid by enterprises as a result of engaging in production, where the taxes are independent of the quantity or value of goods and services produced or sold.

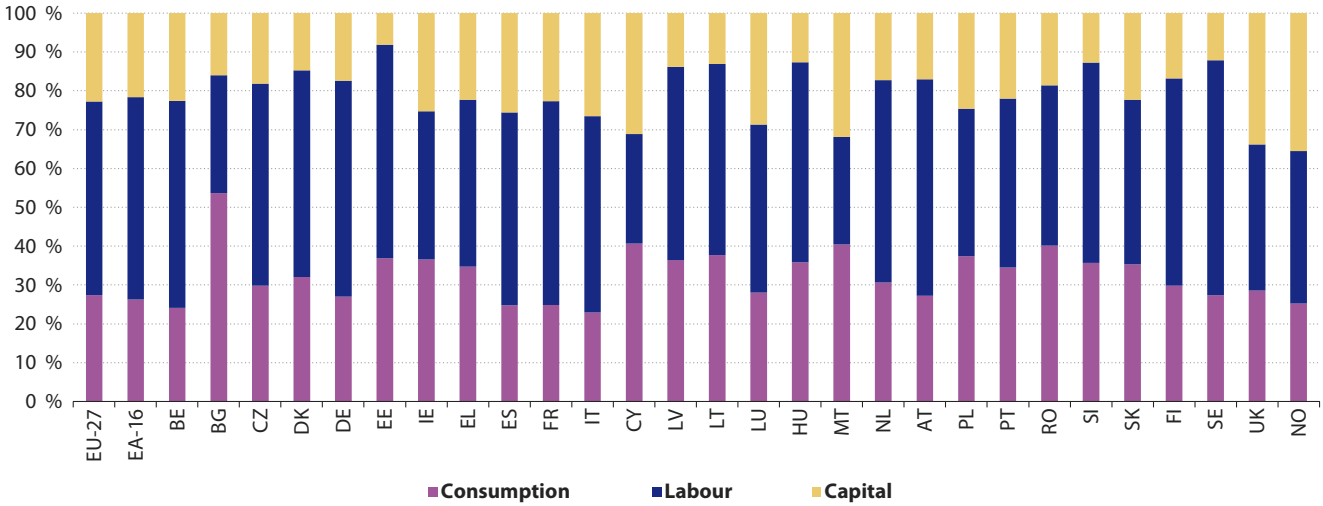
The United Kingdom collected revenue equivalent to 2.4 % of GDP from other current taxes, whereas in all other Member States this type of tax generated no more than 1 % of GDP in 2008. In the United Kingdom, most of these current taxes, equivalent to 1.8 % of GDP, were raised from current taxes on capital (e.g. property taxes on buildings periodically paid by individuals) that do not exist in the tax systems of Estonia, Ireland, Malta and Bulgaria (in 2008), whereas 0.6 % of GDP came from payments by households for licences granted automatically on payment.

Inheritance taxes and gift taxes levied at irregular and infrequent intervals are considered as capital taxes that should be distinguished as a category of current taxes levied directly on the value of assets owned or net worth ('wealth taxes') ([19]). Belgium, Bulgaria and the United Kingdom were the only countries where the value of capital tax revenue in 2008 was equal to or above 0.5 % of GDP (the United Kingdom scoring the highest share: 1.5 % of GDP). Estonia is the only Member State that does not collect this type of tax revenue at all.

Consumption is the economic function on which most tax revenue is levied in Bulgaria (over 50 %) and in Cyprus and Malta (over 40 %), whereas in all the other Member States labour is the most common basis for taxation (see Figure 2.3.18). In Ireland, Poland and Romania the difference between the shares of these two functions did not exceed 2 pp in 2008. In general, taxation on capital generates the least revenues in all countries; only in Spain, Italy, Luxembourg, the United Kingdom and Norway did taxation on capital raise more tax revenue than taxation of consumption in 2008.

([19]) Capital taxes' should not be confused with 'taxes on capital'. Please see Box 2.3.3 for details.

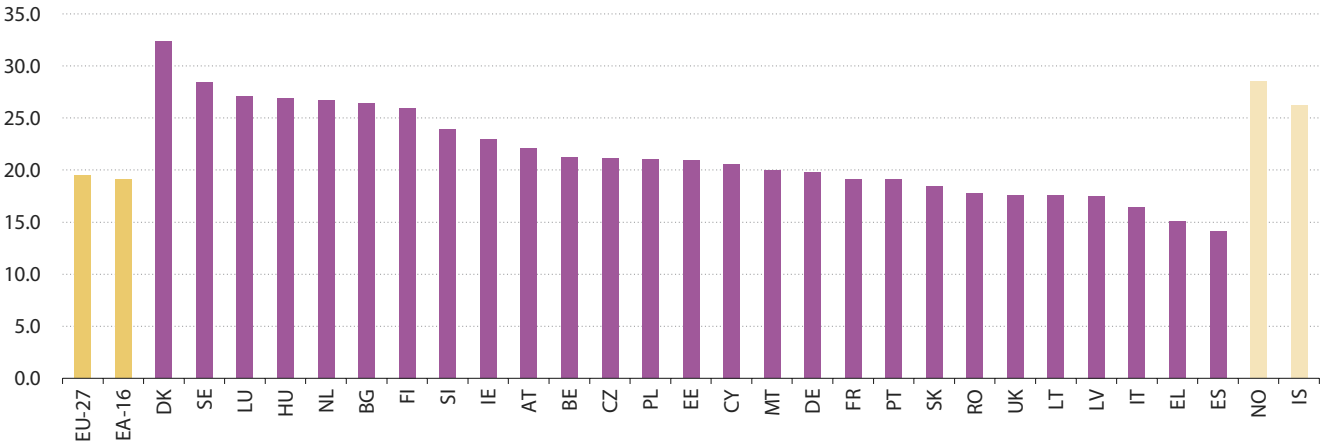
Figure 2.3.18: Taxes by economic functions in 2008



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

Figures 2.3.19 to 2.3.21 show the implicit tax rates on consumption, labour and capital (where available) for individual EU Member States. The Member State that raises the most taxes on domestic final consumption of its households is Denmark (32.4 % in 2008), whereas the ratios in Spain and Greece are less than half of this (14.1 % and 15.1 % respectively).

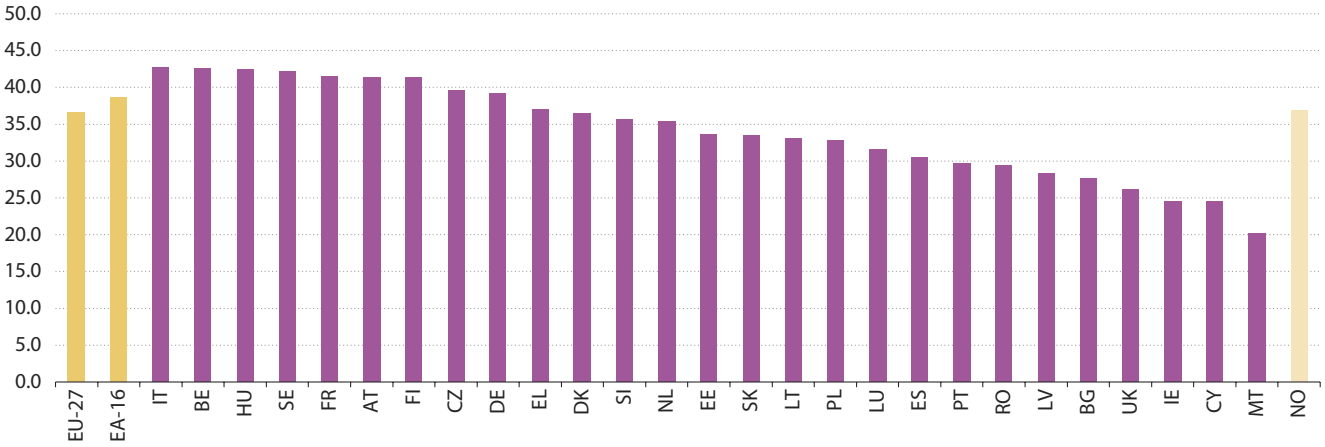
Figure 2.3.19: Implicit tax rate on consumption in 2008 (%)



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

Taxes on labour in relation to compensation of employees are highest in Italy and Belgium (almost 43 %), with the lowest implicit tax rates on labour recorded in Malta (20.2 %), Cyprus, Ireland and the United Kingdom (close to or just above 26 %).

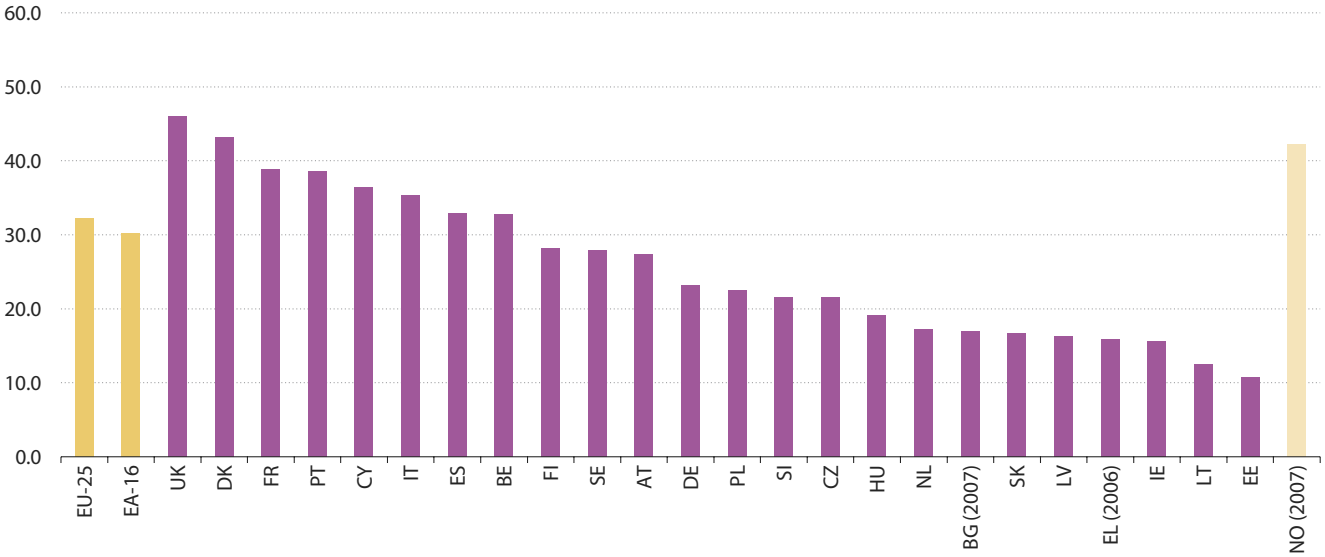
Figure 2.3.20: Implicit tax rate on labour in 2008 (%)



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition

Amongst the Member States for which data on ITR on capital are available, the highest levels were recorded in the United Kingdom (almost 46 %), Denmark, France and Portugal (over 38 %), whereas in Estonia and Lithuania the level was only a third of this.

Figure 2.3.21: Implicit tax rate on capital in 2008 (%)



Source: Taxation trends in the European Union — Data for the EU Member States, Iceland and Norway — 2010 edition.

BOX 2.3.3: TAXATION

Total tax revenue is an aggregate comprising:

— **taxes on production and imports**, such as value added tax, import duties, excise duties and consumption taxes, stamp taxes, payroll taxes, taxes on pollution and others,

— **current taxes on income, wealth, etc.** such as corporate and personal income taxes, taxes on holding gains, payments by households for licences to own or use a car, hunt or fish, current taxes on capital that are paid periodically, and others,

— **capital taxes**, such as inheritance taxes, death duties and taxes on gifts and capital levies that are occasional or exceptional,

— **actual social contributions** paid on a compulsory or voluntary basis by employers or employees or the self- or non-employed to insure against social risks (sickness, invalidity, disability, old age, survivors, family, maternity, etc.),

— **implicit social contributions** payable under unfunded social insurance schemes (in which employers pay social benefits to their employees, ex-employees or their dependants out of their own resources without creating a special reserve for the purpose),

reduced by the amount of **taxes and social contributions assessed as unlikely to be collected**, where applicable.

The ESA 95 category 'taxes on production and imports' is also known under the economic term '**indirect taxes**', whereas 'taxes on income, wealth, etc.' and 'capital taxes' are defined as '**direct taxes**'.

An alternative classification of taxes may be made according to their economic function. Since this split does not correspond fully to the ESA 95 breakdown of taxes, it is undertaken specifically for each Member State in the annual exercise by the European Commission (Taxation and Customs Union DG) and Member States cooperating in the Working Group on Structures of Taxation. The results are published in the report ***Taxation trends in the European Union — Data for the EU Member States and Norway***, which is the source of the data presented and the methodological information below.

The breakdown of taxes by economic functions is as follows:

— **taxes on consumption** — i.e. levied on transactions between final consumers and producers and on the final consumption goods, such as VAT, taxes and duties on imports excluding VAT, stamp taxes, taxes on financial and capital transactions, taxes on international transactions, on pollution, under-compensation of VAT, poll and expenditure taxes and payments by households for licences;

— **taxes on labour —** on employed labour, i.e. taxes directly linked to wages and mostly withheld at source, paid by employees and employers, including compulsory social contributions, and on non-employed labour income, i.e. all taxes and compulsory social contributions raised on transfer income of non-employed persons, where these could be identified (e.g. unemployment and healthcare benefits);

— **taxes on capital —** defined as taxes on capital and business income that economic agents earn or receive from domestic resources or from abroad (e.g. corporate income tax, tax on income, social contributions of self-employed and taxes on holding gains) and taxes on capital stock that include wealth taxes (paid periodically on the ownership and use of land or buildings by owners and current taxes on net wealth and on other assets, such as jewellery and other external signs of wealth), capital taxes, real estate tax, taxes on use of fixed assets, professional and business licences and some taxes on products.

Implicit tax rates are special tax indicators defined separately for each economic function, measuring the actual or effective tax burden levied on different types of economic income or activities that could potentially be taxed. They are computed as the ratio of total tax revenue of the specific economic category (consumption, labour or capital) to a proxy of the potential tax base defined using the production and income national accounts.

Definition of the implicit tax rate on:

— **consumption** — all taxes on consumption divided by final consumption expenditure of households on the economic territory concerned;

— **labour** — direct taxes, indirect taxes and compulsory actual social contributions paid by employees and employers on labour employed, divided by compensation of employees, increased by wage bill and payroll taxes;

— **capital** — ratio between revenue from all taxes on capital and all (in principle) potentially taxable capital and business income in the economy, such as net operating surplus of corporations and non-profit institutions, imputed rents of private households, net mixed income by self-employed, net interest, rents and dividends and insurance property income.

2.3.5. Government deficit and debt

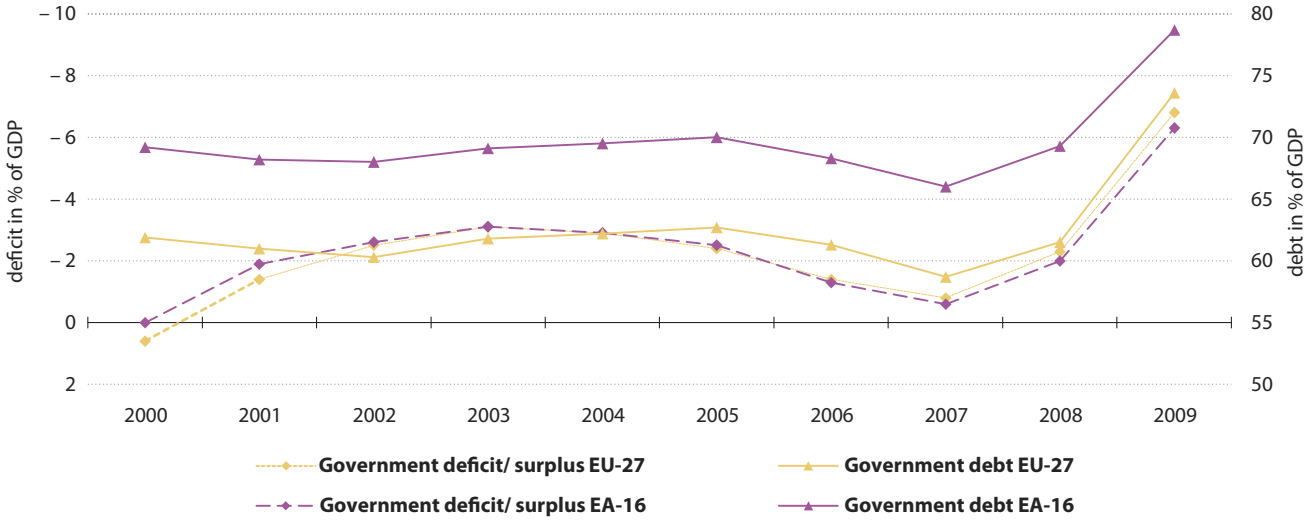
After analysing the financial position of governments in the European Union and in the euro area (see Figure 2.3.22) over the last decade, we can draw the following conclusions.

— The government balance (the difference between total government expenditure and revenue) in the EU and in the euro area was in deficit over almost the entire period. Between 2000 and 2003 the government balance shifted from a slight surplus in the EU–27 of 0.6 % and zero in the euro area (16 countries) in 2000 to above the Maastricht reference value of 3 % of GDP. The EU-27 deficit then decreased by around 2.3 pp of GDP up to 2007 before increasing again but staying below the 3 % criterion in 2008. In 2009 the deficit increased sharply in both the euro area and in the European Union as a whole to above the 3 % criterion. The EU-27 deficit increased by 4.5 pp to 6.8 % GDP. In the euro area the government deficit to GDP ratio increased from 2.0 % to 6.3 % GDP.

— Government debt showed a downward trend between 2005 and 2007, falling below the Maastricht reference value of 60 % of GDP in the EU-27 in 2007 (58.7 %). This was followed by a sharp increase between 2007 and 2008 to 61.5 % of GDP. In 2009 government debt increased even more in the European Union as a whole, reaching 73.6 % GDP, well above the 60 % criterion.

— In the euro area, government debt followed the same trend as in the EU-27 countries, but debt stood at a higher level and above the Maastricht reference value of 60 % throughout the review period. In 2009 it increased to 78.7 % of GDP.

Figure 2.3.22: EU-27 and EA–16 public balance (scale inverted) and debt over the period 2000–09



Source: Eurostat (gov_dd_edpt1)

Compared with the situation in 2008, the government's budgetary position as a percentage of GDP worsened in all but two Member States. In 2009 Estonia and Malta recorded a smaller budget deficit than in 2008.

In 2009, the deficit ratios were above the target reference value of 3 % of GDP in 22 Member States, up from 11 Member States in 2008. In 2009, the largest government deficits as a percentage of GDP were recorded by Ireland (– 14.3 %), Greece (– 13.6 %), the United Kingdom (– 11.5 %), Spain (– 11.2 %), Portugal (– 9.4 %), Latvia (– 9.0 %), Lithuania (– 8.9 %) and Romania (– 8.3 %).

BOX 2.3.4: THE EXCESSIVE DEFICIT PROCEDURE (EDP)

The fiscal framework of the European economic and monetary union (the Protocol on the Excessive Deficit Procedure annexed to the Maastricht Treaty) requires sound public finances, based on the following criteria:

— negative public balance (deficit) not exceeding 3 % of GDP,

— public debt not exceeding 60 % of GDP.

For the sake of comparability between Member States, these criteria are measured by reference to (though not fully identical to) two economic categories from the national accounts framework:

— net lending(+)/net borrowing (–) of general government, and

— liabilities of general government.

Under the EDP, all Member States are requested to report their data to Eurostat before 1 April and 1 October each year. Following an assessment, and within three weeks of these deadlines, Eurostat is obliged to publish the government deficit and debt data.

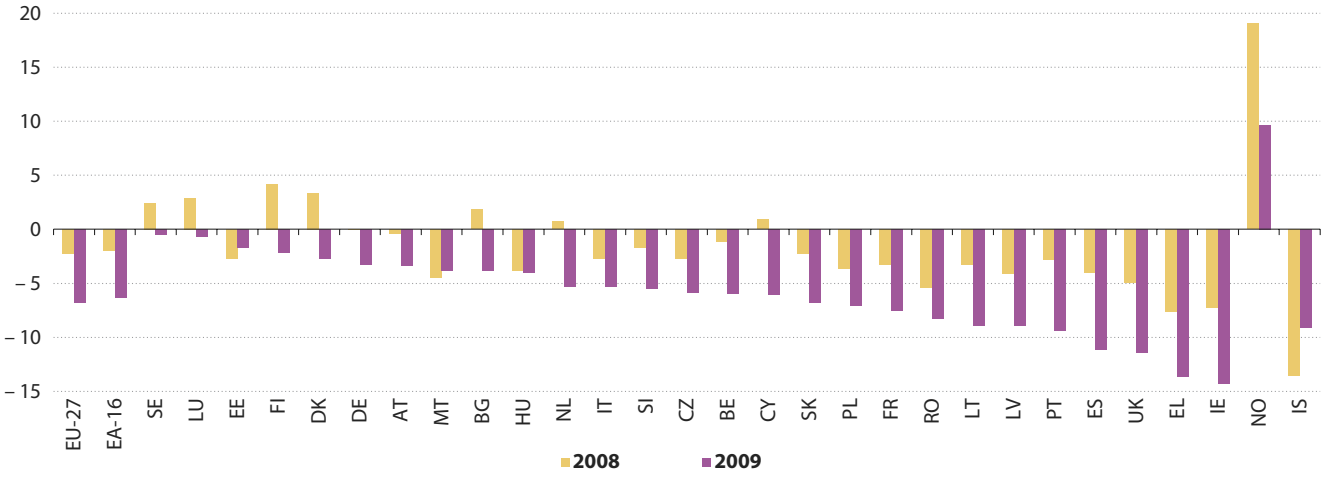
The relevant definitions are set out below:

National accounts (ESA 95)	**Excessive deficit procedure (EDP)**
Net lending (+)/ net borrowing (–)	**Government surplus/ deficit (net lending/ borrowing under EDP)**
= net acquisition of financial assets less net incurrence of liabilities or = gross saving (defined as gross disposable income less final consumption expenditure) corrected by net capital transfers and gross acquisitions less disposals of non-financial assets, or = total revenue less total expenditure	= net lending (+)/net borrowing (–) of general government (as defined in ESA 95), plus net streams of interest payments resulting from swaps arrangements and forward rate agreements
Liabilities	**Government consolidated gross debt ('Maastricht debt')**
Six categories of liabilities: — currency and deposits, — securities other than shares, — loans, — shares and other equity, — insurance technical reserves, — other accounts, payable.	Sum of government liabilities as defined in ESA 95 in: — currency and deposits, — securities other than shares, excluding financial derivatives, and — loans outstanding at the end of the year, measured at **nominal** value and consolidated.

All eight Member States with a surplus in 2008 turned into deficit in 2009. Five of them recorded deficits below the reference value: Sweden (– 0.5 %), Luxembourg (– 0.7 %), Estonia (– 1.7 %), Finland (– 2.2 %), Denmark (– 2.7 %). The deficits of the remaining three Member States exceeded the 3 % threshold: Germany (– 3.3 %), the Netherlands (– 5.3 %) and Cyprus (– 6.1 %).

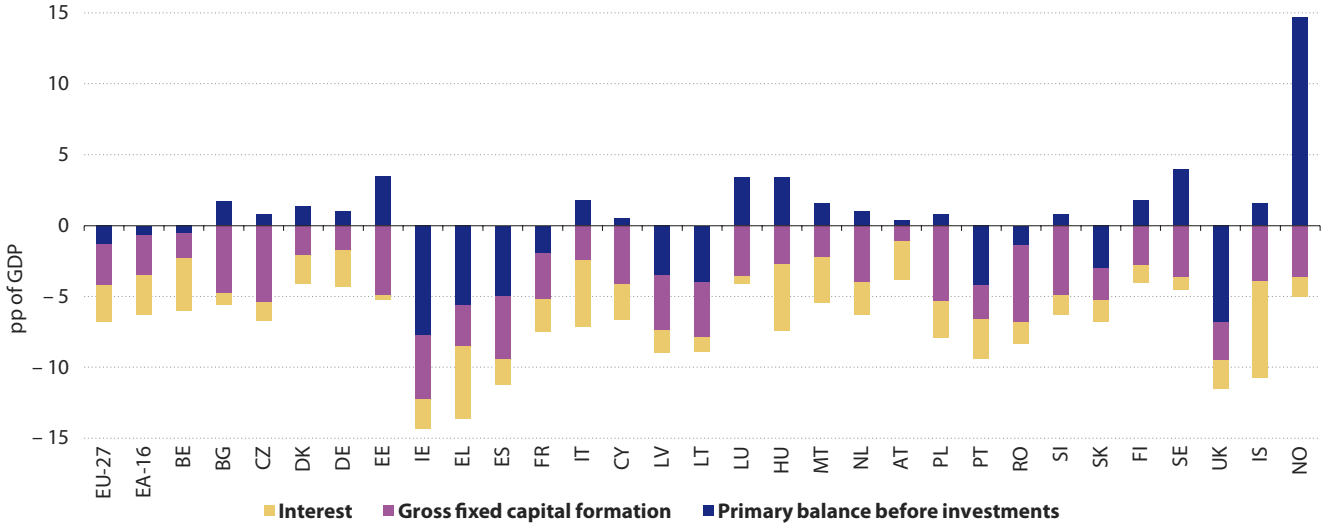
In Norway, the government surplus stood at 9.7 % of GDP in 2009, whereas Iceland recorded a deficit of 9.1 %.

Figure 2.3.23: Government surplus (+)/deficit (–) in EU Member States in 2008 and 2009 (% of GDP)



Source: Eurostat (gov_dd_edpt1)

Figure 2.3.24: Primary balance before investments, gross fixed capital formation (GFCF) and interest paid in EU Member States in 2009 as a percentage of GDP



Source: Eurostat (gov_dd_edpt1)

The latest (2009) results can be broken down into three elements (see Figure 2.3.24):

— primary government deficit/surplus before gross fixed capital formation (investments),

— gross fixed capital formation (GFCF),

— interest payable.

In 2008 only Ireland and the United Kingdom were unable to cover all their government expenditure except interest on public debt and gross fixed capital formation (public investment) from their revenue. In 2009, though, that was the case for nine more Member States: Belgium, Greece, Spain, France, Latvia, Lithuania, Portugal, Romania and Slovakia. The rest of the Member States saw a worsening of their primary balance before interest on public debt and public investment as a percentage of GDP, resulting in a negative average for the European Union (– 1.3 %) and for the euro area (– 0.7 %).

In order to assess the long-term sustainability of public finances, it is essential to measure the financial commitments countries will have to face in the future. Whilst this is largely determined by expected future cash flows, the starting point for governments is their accumulated commitments from the past, measured conventionally as gross general government consolidated debt ('Maastricht debt').

In 2009, 12 Member States had government debt ratios higher than 60 % of GDP (see Figure 2.3.25): Italy (115.8 %), Greece (115.1 %), Belgium (96.7 %), Hungary (78.3 %), France (77.6 %), Portugal (76.8 %), Germany (73.2 %), Malta (69.1 %), the United Kingdom (68.1 %), Austria (66.5 %), Ireland (64.0 %) and the Netherlands (60.9 %).

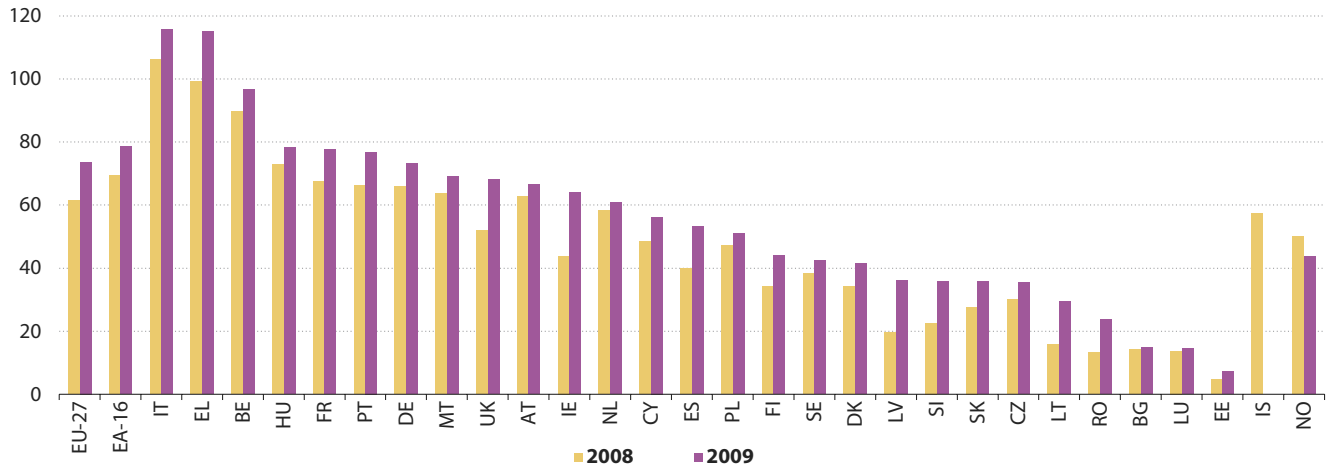
At the end of 2009, the lowest ratios of government debt to GDP were in Estonia (7.2 %), Luxembourg (14.5 %), Bulgaria (14.8 %), Romania (23.7 %) and Lithuania (29.3 %).

All 27 Member States increased their debt to GDP ratios between 2008 and 2009. The biggest increases (above 13 pp of GDP) were in Ireland (20.1), Latvia (16.6), the United Kingdom (16.1), Greece (15.9), Lithuania (13.7) and Spain (13.6).

Fifteen Member States reported a debt ratio below 60 % of GDP in 2009, against 18 in 2008.

In Norway, government debt at the end of 2009 stood at 44 % of GDP, slightly down on 2008, when it stood at 50 %.

Figure 2.3.25: Public debt at the end of 2008 and 2009 (% of GDP)



Source: Eurostat (gov_dd_edpt1)

While the government deficit/surplus normally explains most of the change in government debt, there are other contributing factors. The difference between the change in government debt and the government deficit/surplus for a given period is called the 'stock-flow adjustment'. This is made up of 15 different elements incorporating three main groups: 'net acquisition of financial assets', including financial transactions which do not contribute to the deficit but only to the change in debt, 'net incurrence of liabilities in financial derivatives and other liabilities', which are the liabilities excluded from the Maastricht debt, and a third group relating to effects of face valuation, appreciation/depreciation of foreign currency debt, other changes in volume (such as reclassification of units outside or inside government, etc.) and statistical discrepancies, reflecting differences arising from the diversity of data sources ([20]).

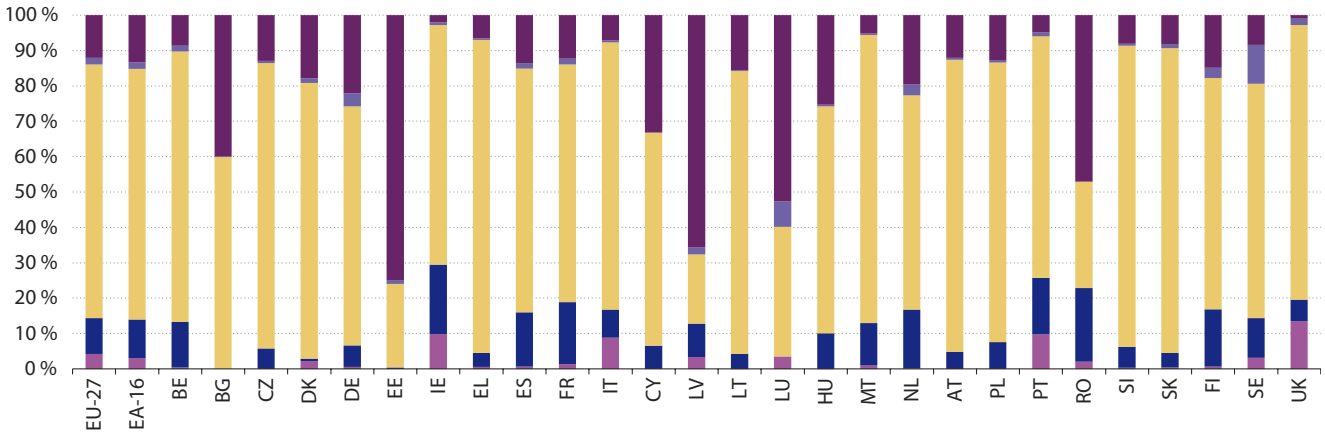
([20]) Eurostat publishes a twice-yearly note on the stock-flow adjustment in government accounts as part of the latest reporting of data in the framework of the excessive deficit procedure.

Most EU Member State governments finance their activities through the issue of securities other than shares (government bonds, treasury bills, etc.) rather than through direct loans (see Figure 2.3.26). In 2009, securities other than shares made up almost 82 % of EU and euro area government debt, whereas loans accounted for just below 14 %. In addition, governments tend to rely on long-term (maturity over one year) rather than on short-term financing.

At the end of 2009 only Bulgaria and Luxembourg had no short-term securities other than shares. Member States that rely more on loans than debt securities are Estonia (76 % of total government consolidated gross debt), Latvia (67.7 %) and Luxembourg (59.8 %). In Bulgaria, Germany, Cyprus, Hungary and Romania, the share of loans in government debt is also relatively high (over 25 %).

The share of currency and deposits in government debt in the EU went down slightly to 4.2 %, and in the euro area too became smaller (3.1 %). However, in some EU Member States the share of this item is just below 10 %: in Ireland and Portugal it accounted for 9.8 % of total government debt in 2009, while in the United Kingdom it reached 9.7 %.

Figure 2.3.26: Composition of government consolidated gross debt at the end of 2009



(*) Securities other than shares exclude financial derivatives.

Source: Eurostat (gov_dd_edpt1)

2.4. Inflation, interest rates and exchange rates

2.4.1. Introduction

The harmonised indices of consumer prices (HICPs) provide the best way of comparing consumer price inflation between countries in the EU and the euro area, and of assessing price convergence and stability in the context of monetary policy analysis. The annual average inflation rate for the euro area in the period 2002–07 was relatively stable at around 2.2 %; in 2008 it rose to its highest level ever at 3.3 %, whereas in 2009 the smallest ever annual average inflation rate was recorded: 0.3 %. In the EU as a whole, the annual average inflation rate in 2009 stood at 1.0 %, its lowest level since the start of the HICP series in 1997.

Long-term interest rates are a convergence criterion for participating in the third stage of European economic and monetary union. Following the market turmoil that began in summer 2007 and central banks' moves to safeguard liquidity, the Maastricht criterion interest rates in the euro area decreased from 4.60 % in July 2007 to 4.08 % in March 2008. Later they increased within three months to 4.79 % in June 2008 before falling again to 3.74 % in December 2008. The rates remained below 4 % in the following months except in June 2009 (4.11 %), reaching 3.69 % in April 2010.

Money market rates, also known as interbank rates, are interest rates used by banks for operations among themselves. In general they decreased between 2000 and 2004. Later, in the euro area, the three-month Euribor increased steadily and in December 2007 reached 4.85 %. In 2008 it first fell, to 4.36 % in February, before increasing to 5.11 % by October 2008, the highest figure since the creation of this benchmark in 1999. In the months that followed, central banks all over the world took measures to minimise the effect of the 'credit crunch'. As a result Euribor decreased each month. By February 2009 Euribor was below 2 %, i.e. again the lowest figure since the creation of this benchmark. In the ensuing months it decreased further each month to 0.64 % in April 2010.

The introduction of the euro eliminated exchange rates between an increasing number of EU Member States. In contrast to the moderate fluctuations between the majority of European currencies, the value of the euro increased against the currencies of important trading partners between 2002 and 2008: the Japanese yen (29.1 %) and the US dollar (50.5 %). However, between end-November 2009 and end-May 2010 the value of the euro decreased by 18.1 % against the US dollar and the Chinese currency renminbi-yuan, and by 13.5 % against the Russian rouble.

2.4.2. Trends in consumer price inflation

Consumer price indices (CPIs) measure the changes over time in the prices of consumer goods and services acquired, used or paid for by households. CPIs have a variety of potential uses, for example in indexing commercial contracts, wages, social protection benefits or financial instruments and as inputs into various types of economic analysis.

The harmonised indices of consumer prices (HICPs) are a set of EU consumer price indices calculated according to a harmonised approach and a single set of definitions (see Box 2.4.1).

BOX 2.4.1: OFFICIAL MEASURES OF INFLATION

EU inflation is measured by the EICP (European Index of Consumer Prices), which is the official EU aggregate. The EU had 15 Member States until April 2004, 25 Member States from May 2004 until December 2006, and 27 Member States from January 2007.

Euro area inflation is measured by the MUICP (Monetary Union Index of Consumer Prices), which is the official euro area aggregate. The euro area initially included Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece was included from January 2001, Slovenia from January 2007, Cyprus and Malta from January 2008 and Slovakia from January 2009.

The USA and Japan use national consumer price indices which follow a slightly different methodology.

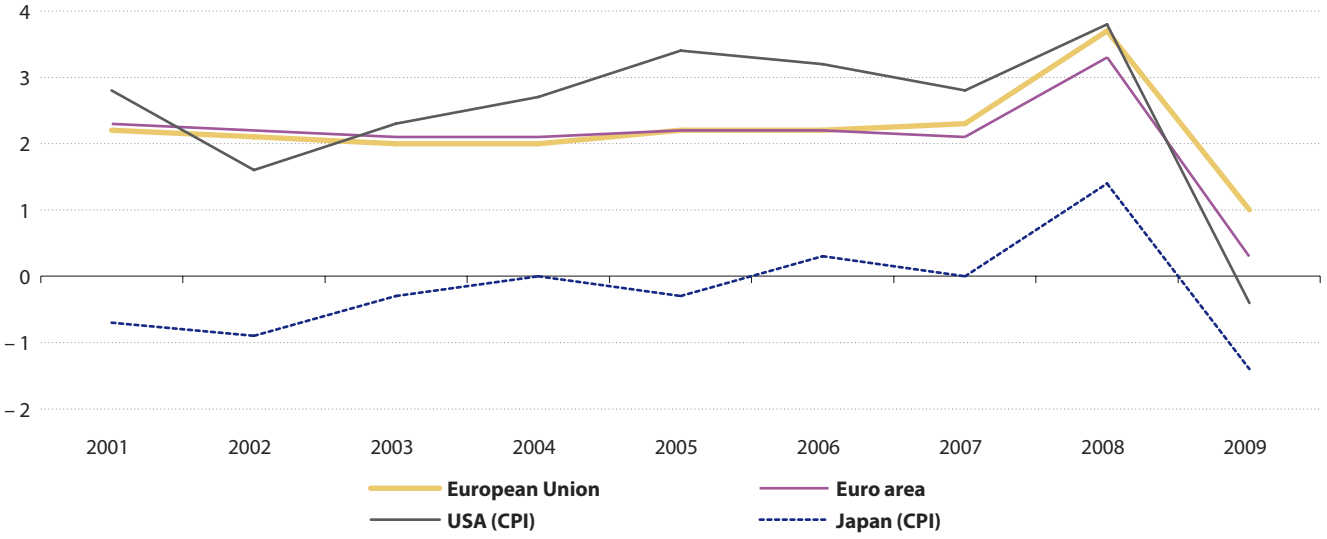
HICPs were set up to provide a measure of consumer price inflation in the EU and the euro area, and for country-to-country comparisons. They play an important role in assessing price convergence and stability for monetary policy.

The primary objective of the European Central Bank (ECB) is to maintain price stability in the euro area. In the pursuit of price stability, the ECB aims at maintaining euro area year-on-year inflation rates below, but close to, 2 %.

Inflation in the euro area

In 2009, the smallest ever annual average inflation rate was recorded for the euro area: 0.3 %. This followed a substantial increase in the inflation rate in 2008 and several years of relative stability at around 2.2 % (see Figure 2.4.1). The rapid slowing down of inflation in 2009 was due mainly to the sharp falls in energy and food prices between summer 2008 and summer 2009. Looking at the monthly figures for energy, the annual inflation rate recorded negative values from December 2008 until November 2009 and bottomed out in July 2009 at – 14.4 %. In the third quarter of 2009 a progressive rise in energy prices was measured, climbing to 9.1 % in April 2010.

Figure 2.4.1: Annual average inflation rates (%)

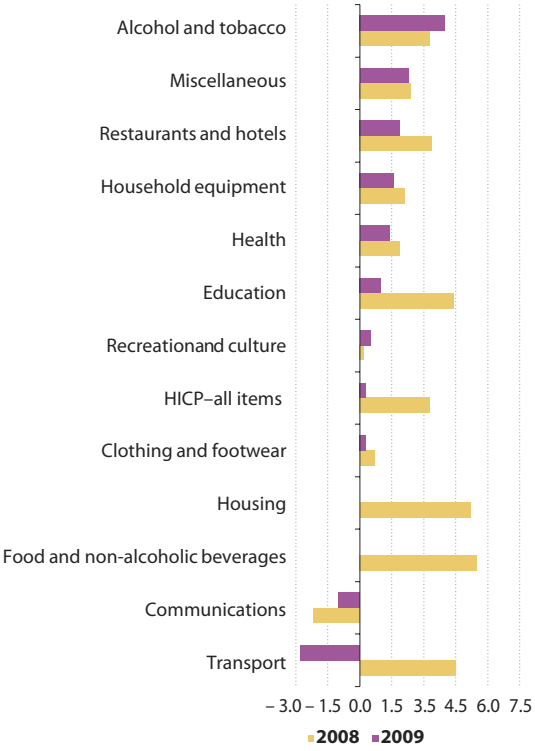


Source: Eurostat (tsieb060)

Looking at Figure 2.4.2, consumer prices for transport in particular recorded extraordinarily low inflation rates in 2009, with an annual average of – 2.8 %. This was significantly below the price increases recorded for transport since 2002, when annual average inflation reached 1.7 %. Transport price falls in 2009 might be explained by the sharp drop in prices of fuels and lubricants. Towards the end of 2008, price inflation for transport turned negative and stood at – 20.7 % in July 2009. In December 2009 the situation changed as the annual inflation rates started going up again and reached 20.2 % in March 2010.

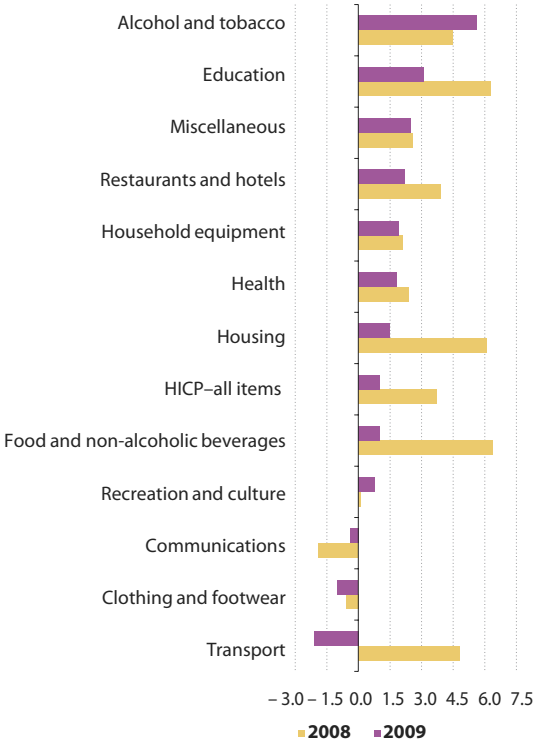
In 2009, the three main headings with the largest weights in household final monetary consumption expenditure for the euro area showed annual average rates below the overall inflation rate of 0.3 %. These were **transport** (– 2.8 %), **food and non-alcoholic beverages** (0.0 %) and **housing** (0.0 %). Other components with downward impacts on inflation were **communications** (– 1.0 %) and **clothing and footwear** (0.3 %). Upward impacts on overall inflation in the euro area came mainly from **alcohol and tobacco** (4.0 %), **miscellaneous goods and services** (2.3 %) and **restaurants and hotels** (1.9 %).

Figure 2.4.2: Euro area — HICP main headings, annual average inflation rates (%)



Source: Eurostat (prc_hicp_aind)

Figure 2.4.3: EU — HICP main headings, annual average inflation rates (%)



Source: Eurostat (prc_hicp_aind)

Inflation in the EU and EEA Member States

In the EU as a whole, annual average inflation in 2009 stood at 1.0 %. It had been below euro area inflation until 2004, while the EU had 15 Member States. Then in 2005 and 2006 both country groups showed the same annual average inflation rates and in 2007 and 2008 EU inflation went above that of the euro area (see Figure 2.4.1). The more detailed monthly data show that summer 2006 was the turning point, when EU inflation actually went above that of the euro area.

In 2009, the highest annual average inflation rates were recorded for Romania (5.6 %), Lithuania (4.2 %) and Hungary and Poland (4.0 % each) (see Figure 2.4.5). The main components with high rates in 2009 in the European Union were **alcohol and tobacco** (5.6 %), **education** (3.1 %), and **miscellaneous goods and services** (2.5 %); those with the lowest rates were **transport** (– 2.1 %), **clothing and footwear** (– 1.0 %), and **communications** (– 0.4 %).

The six highest annual average inflation rates for 2009 among the 27 EU Member States were for countries that had joined the EU in 2004 or 2007. Iceland, a Member State of the European Economic Area (EEA), had by far the highest inflation rate, 16.3 %, which was mainly due to its falling currency. Within the EU, the lowest rates were recorded for Ireland (– 1.7 %), Portugal (– 0.9 %) and Spain (– 0.2 %).

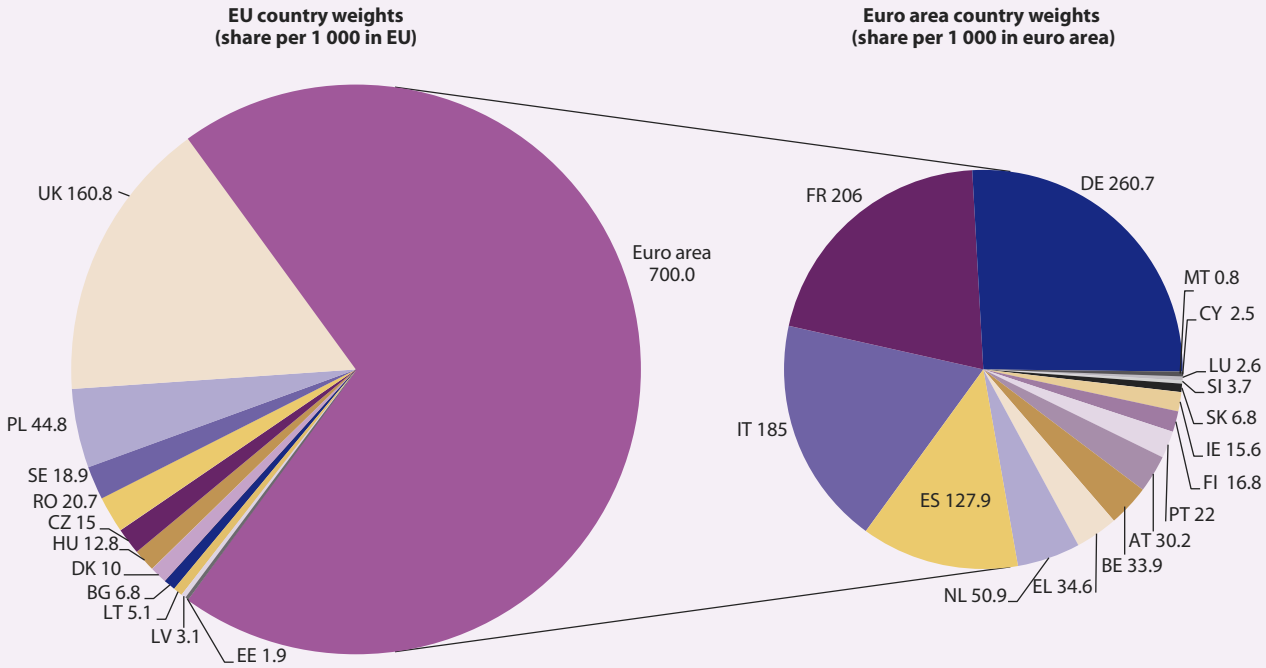
BOX 2.4.2: COMPOSITION OF COUNTRY AGGREGATES

The weight of each country reflects its share in the EU or euro area total measured by household final monetary consumption expenditure (HFMCE). The country weights used in 2009 are based on data for 2007 updated to December 2008 prices. For the countries outside the euro area the weighting information denominated in national currencies are converted into purchasing power standards. For a new country entering into the euro area, weights in national currency are converted into euro using the irrevocably locked exchange rates.

The HICPs are compiled as a weighted average of the countries belonging to the EU or euro area. The indices are computed as annual chain indices allowing country weights to change each year; consequently, new Member States can be added to country aggregates. For the EU enlargement in May 2004, chain-linking was also done in May to maintain the correct country coverage for both the EU and EEA aggregates.

In the EU and EEA HICP aggregates, the euro area is treated as a single entity.

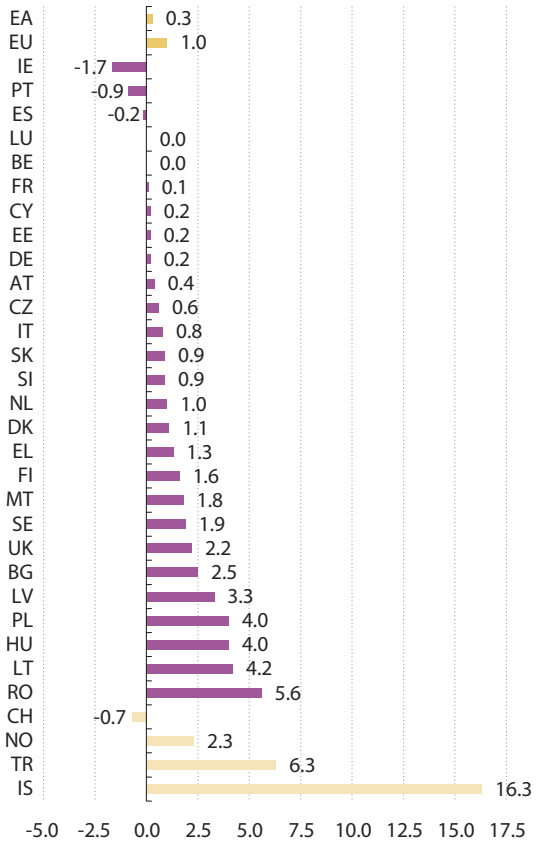
Figure 2.4.4: EU and euro area — country weights, 2009



Source: Eurostat (prc_hicp_cow)

When comparing annual average inflation rates for all EEA member countries for 2008 and 2009 (see Figure 2.4.5), there was only one country — Iceland — where the rate went up, from 12.8 % in 2008 to 16.3 % in 2009. For all the other EEA countries, annual average rates decreased between 2008 and 2009. The biggest decreases in the EU were recorded in Latvia (from 15.3 % in 2008 to 3.3 % in 2009), Estonia (from 10.6 % in 2008 to 0.2 % in 2009) and Bulgaria (from 12 % in 2008 to 2.5 % in 2009).

Figure 2.4.5: Annual average inflation rates by country, 2009 (%)



Source: Eurostat (prc_hicp_aind)

Permanent versus transitory price changes

There are many prices that have a substantial effect on the overall index, but which are liable to rise or fall sharply in a short time. Experts are always trying to construct inflation measures which are independent of these effects (e.g. short-term changes in energy prices, fresh fruit and vegetables) but which reflect that part of inflation caused by monetary effects or permanent price changes.

Special aggregates enable the factors responsible for certain inflation rate behaviour patterns to be detected.

To help the European Central Bank make its medium-term decisions, Eurostat releases a series of special aggregates, including:

— HICP all items excluding energy;

— HICP all items excluding energy, food, alcohol and tobacco;

— HICP all items excluding energy and unprocessed food;

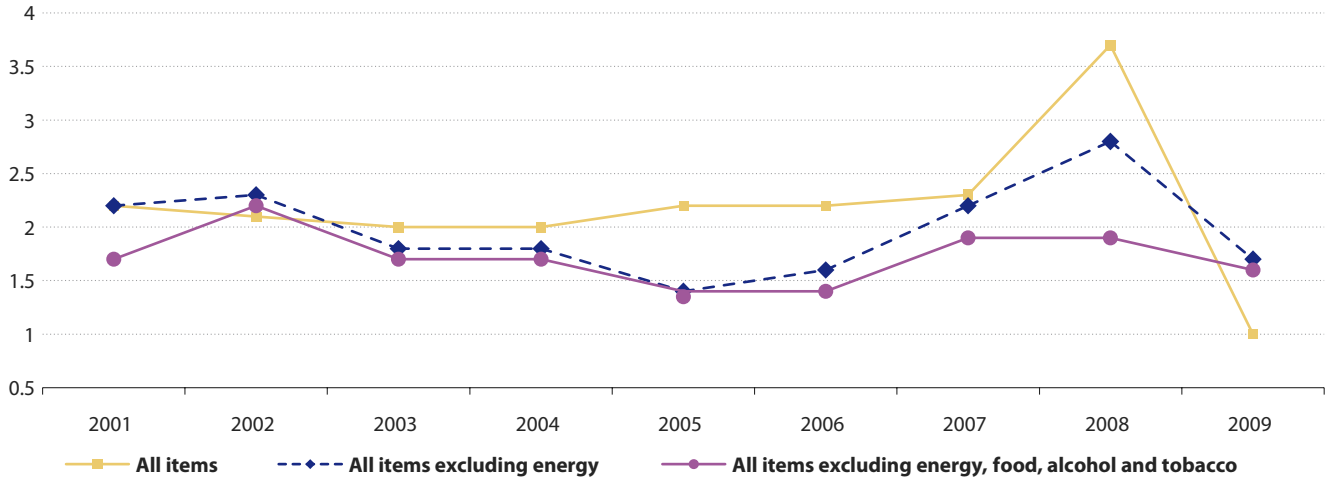
— HICP all items excluding energy and seasonal food;

— HICP all items excluding tobacco;

— Energy;

— Food, alcohol and tobacco.

Figure 2.4.6: EU HICP all items and special aggregates, annual average inflation rates (%)



Source: Eurostat (prc_hicp_aind)

When price changes are measured excluding energy or food, or alcohol and tobacco, or both, inflation rates can show trends which differ from overall inflation. In 2005, when the overall inflation rate was going up, they were actually falling when measured excluding energy and the food, alcohol and tobacco group (see Figure 2.4.6). This is because price changes in these groups had significant upward impacts on overall inflation. In 2009, inflation excluding energy, food, alcohol and tobacco was 1.6 % and was down slightly compared with the previous year, when it measured 1.9 %. However, the headline HICP inflation rate decreased sharply from 3.7 % in 2008 to 1.0 % in 2009. This was caused by the substantial downward impact of 0.7 % of energy on the all-items rate. Food also showed a small downward impact of 0.1 % on the headline rate.

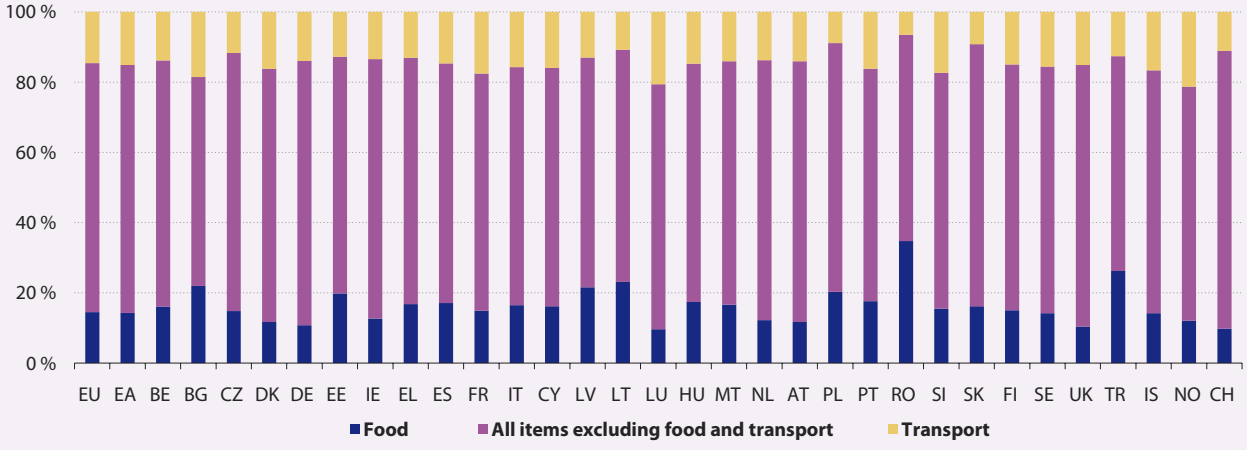
BOX 2.4.3: HOUSEHOLD CONSUMPTION PATTERNS

The consumption patterns of households determine the relative importance (weight) of household monetary expenditure that is attached to each of the categories of goods and services covered by the HICP. The impact on the all-items index of any price change is proportional to the size of the corresponding weight. There is no uniform basket applying to all Member States. The structure of the weights may vary considerably, both between the HICPs for individual Member States and between the HICP for an individual Member State and the average weighting structure for the EU or the euro area. HICP item weights are updated each year.

In 2009, the three categories food, transport and housing, each accounting for around 15 % of consumer expenditure, had the largest weights in both country groups: the EU and the euro area. A weight of around 10 % is attached to recreation and culture, though it is a little more important for the whole EU than for the euro area. The weights for restaurants and hotels are just below 10 %.

Within the national HICPs the weight for food varies between 11 % and 12 % (Luxembourg, the United Kingdom and Germany) and 37 % (Romania). The share of transport ranges from 7–9 % (Romania, Poland and Slovakia) to 18–21 % (Luxembourg, Bulgaria and France). Consumption expenditure on recreation and culture varies, ranging from 5–6 % (Romania, Greece, Bulgaria and Portugal) to 15 % (the United Kingdom). The weight for housing ranges from 9 % (Cyprus, Slovenia, Malta and Greece) to 22–24 % (Slovakia and Germany). In the housing category, it should be noted that HICPs reflect only monetary expenditure; unlike national accounts or household budget surveys, they do not cover services provided by owner-occupied dwellings. This means that countries in which a larger proportion of the population lives in rented dwellings tend to have a larger weight for housing than countries in which more households live in their own dwellings.

Figure 2.4.7: Consumption patterns, 2009 (%)



Source: Eurostat (prc_hicp_inw)

2.4.3. Trends in interest rates

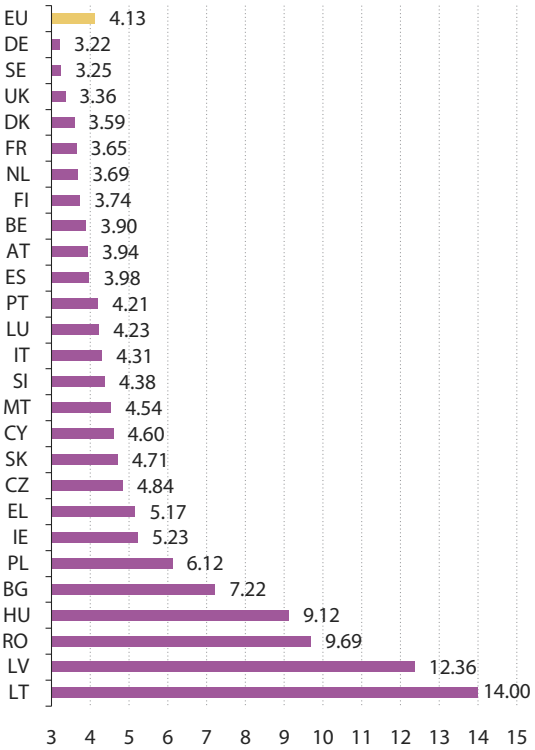
Long-term interest rates

Long-term interest rates are one of the convergence criteria indicators for European economic and monetary union (under Article 121 of the Treaty establishing the European Community). Article 4 of the Protocol on the Convergence Criteria annexed to the Treaty states that a Member State has to have an average nominal long-term interest rate that does not exceed by more than 2 pp that of, at most, the three best performing Member States in terms of price stability. The interest rate levels are measured using long-term government bonds or comparable securities, taking into account differences in national definitions. This means in practice that, for each country, data have to be collected on long-term (close to 10-year maturity) central government bonds (or a basket of several of these bonds) which are liquid on the secondary market (the interest rates for Cyprus are based on primary market rates). For all countries except Luxembourg the same principles have been used for calculating long-term interest rates. Estonia does not have any long-term government debt.

Long-term interest rates in the EU still vary between countries. Figure 2.4.8 shows that the gap between EU Member States' rates once again widened significantly in 2009. The lowest rates were recorded for Germany (3.22 %), Sweden (3.25 %) and the United Kingdom (3.36 %), while the highest rates were found in Lithuania (14.00 %), Latvia (12.36 %) and Romania (9.69 %). In the euro area the highest rates were recorded for Ireland (5.23 %) and Greece (5.17 %).

Annex Table 4-33 shows changes in long-term interest rates for EU Member States, EU aggregates, the euro area and for some OECD countries. In 2000 and 2001, long-term interest rates were higher than in subsequent years. The lowest rate in 2001 was recorded for Germany (4.80 %). EU and US 10-year government bond yields both stood at 5 %. The highest value was recorded for Poland in 2001 (10.68 %). Between 2000 and 2005, long-term interest rates decreased significantly in the euro area, by 202 basis points, to 3.42 %. The lowest rate in 2005 was recorded for Ireland (3.33 %), the highest in Hungary (6.60 %). In 2006 and 2007 higher long-term interest rates were reported by most of the Member States providing data, with the exception of Cyprus, Malta, the UK and Hungary. Following the market turmoil that began in summer 2007 and central banks' moves to safeguard liquidity, the Maastricht criterion interest rates in the euro area decreased from 4.60 % in July 2007 to 4.08 % in March 2008. Within three months they were up to 4.79 %, in June 2008, before falling again, reaching 3.74 % in December 2008. The rates remained below 4 % in the following months except for June 2009 (4.11 %), reaching 3.69 % in April 2010.

Figure 2.4.8: Maastricht criterion, annual average rates, 2009 (%)

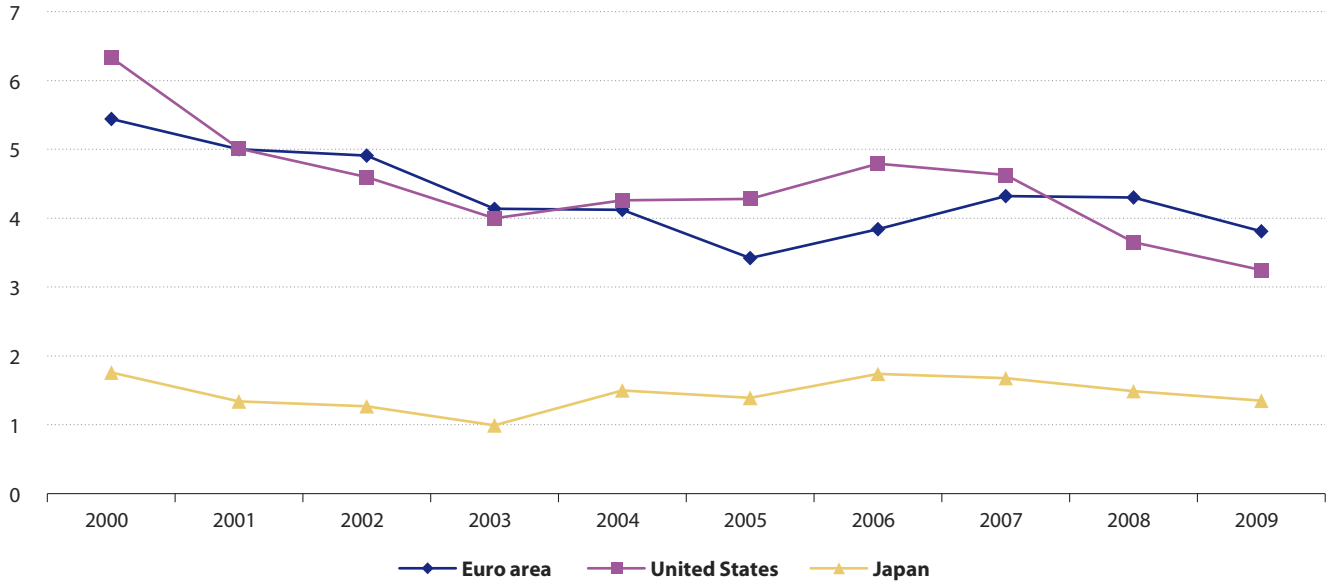


Source: Eurostat (tec00036 and tec00097)

Among euro area members, the spread between the lowest and the highest interest rate widened significantly from early 2008. In April 2008 the rate for Germany stood at 4.04 % and for Greece at 4.54 %. In April 2010 the rates stood at 3.06 % for Germany and 7.83 % for Greece.

In 2009 annual average long-term government bond yields stood at 3.81 % in the euro area, 3.25 % in the USA and 1.35 % in Japan. After December 2008 the rates fluctuated only slightly in Japan within the range 1.25 % to 1.47 %, reaching 1.36 % in April 2010. In the USA the rates increased from 2.42 % in December 2008 — the lowest figure recorded for more than a decade — to 3.82 % in April 2010 (see Figure 2.4.9).

Figure 2.4.9: Long-term interest rates, annual averages (%)



Source: Eurostat (tec00036)

Short-term rates

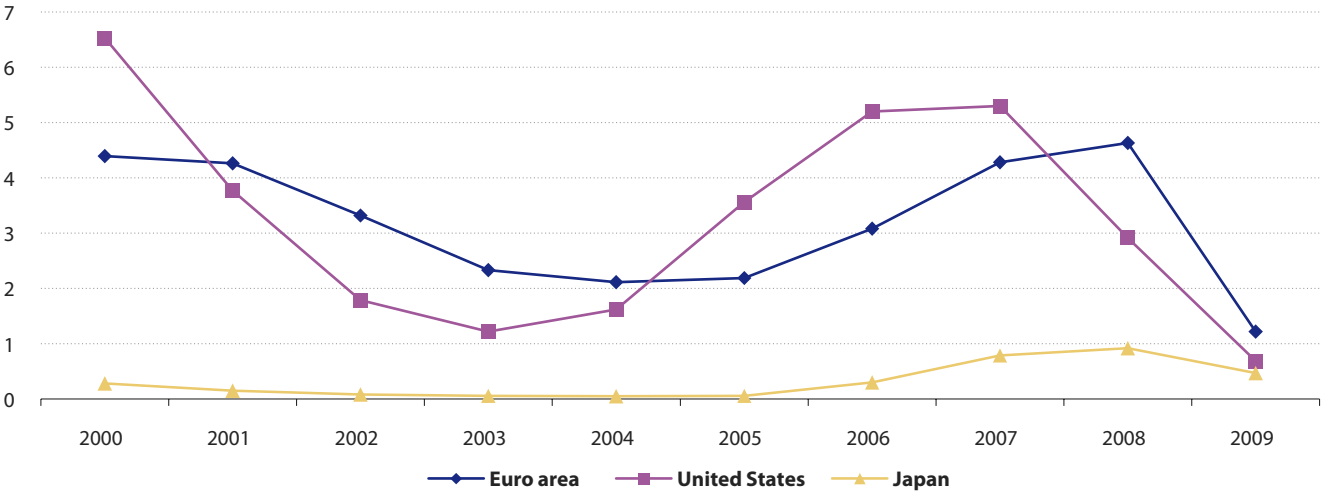
Money market rates, also known as inter-bank rates, are interest rates used by banks for operations among themselves. In the money market, banks are able to trade their surpluses and deficits.

Annex Table 4-34 shows the change in three-month money market interest rates in the euro area (Euribor) and in other Member States that had not adopted the euro before 2007. For the period 2000 to 2009, to provide a global picture, data are given for the US and Japan.

In general the rates decreased between 2000 and 2004. In the euro area the three-month Euribor fell by 228 basis points to 2.11 % in 2004 and remained below 2.20 % until September 2005. Later this important benchmark for short-term interest rates rose steadily and in December 2007 stood at 4.85 %. In 2008, Euribor fell to 4.36 % in February 2008 before rising again to 5.11 % by October 2008, the highest figure since the creation of this benchmark in 1999. In the months that followed, central banks all over the world took measures to minimise the effect of the 'credit crunch'. As a result Euribor decreased each month. Within just four months of February 2009 Euribor was below 2 %, i.e. the lowest figure since the creation of this benchmark. In the ensuing months Euribor decreased further each month to 0.64 % in April 2010.

The lowest annual rates in 2009 were noted in Sweden (0.92 %) and in the United Kingdom (1.21 %), the highest in Latvia (13.09 %) and in Romania (11.34 %).

Figure 2.4.10: Three-month money market rates, annual averages (%)



Source: Eurostat (tec00034)

In 2009, the three-month Euribor averaged 1.22 %. The short-term rate in the United States was 0.69 % and in Japan a mere 0.47 %. The increase in three-month money market rates between 2005 and October 2008 was a global phenomenon, not limited to the euro area. It was felt in most of the Member States outside the euro area and in Japan.

However, in the United States three-month money market rates followed a slightly different pattern to the euro area. Only in March 2004 was the lowest rate recorded for both (euro area 2.03 %, USA 1.11 %). After that, US money market interest rates increased continuously — exceeding the euro area level in November 2004 — to 5.50 % in July 2006. In that time the three-month Euribor rose only to 3.10 %. However, the gap of 240 basis points closed in subsequent months. Since January 2008, US short-term interest rates have been lower than in the euro area. The rates decreased sharply between December 2007 (4.98 %) and May 2008 (2.69 %). In the following months they rose again until October 2008 (4.06 %). Thereafter, triggered by the financial turmoil in October 2008, central banks took coordinated action to lower interest rates by providing liquidity at favourable conditions. As a result, three-month money market rates fell worldwide. They stood at 0.25 % in the USA in February 2010.

Worldwide, Japanese interest rates have always been the lowest. Japanese three-month interest rates remained below 0.1 % until March 2006. Since then they have increased significantly. However, with the exception of October 2008 (1.04 %) three-month interest rates have always been below 1 %. From October 2008 they fell steadily, reaching 0.24 % in April 2010. Among European countries the lowest level was recorded in April 2010 in Sweden with 0.52 % and the United Kingdom (0.66 %). In the euro area the three-month Euribor was 0.64 %; in the USA three-month interest rates stood at 0.31 %.

In April 2010 the highest three-month interest rates were observed in Hungary (6.14 %) and Romania (4.99 %).

2.4.4. Euro exchange rate developments

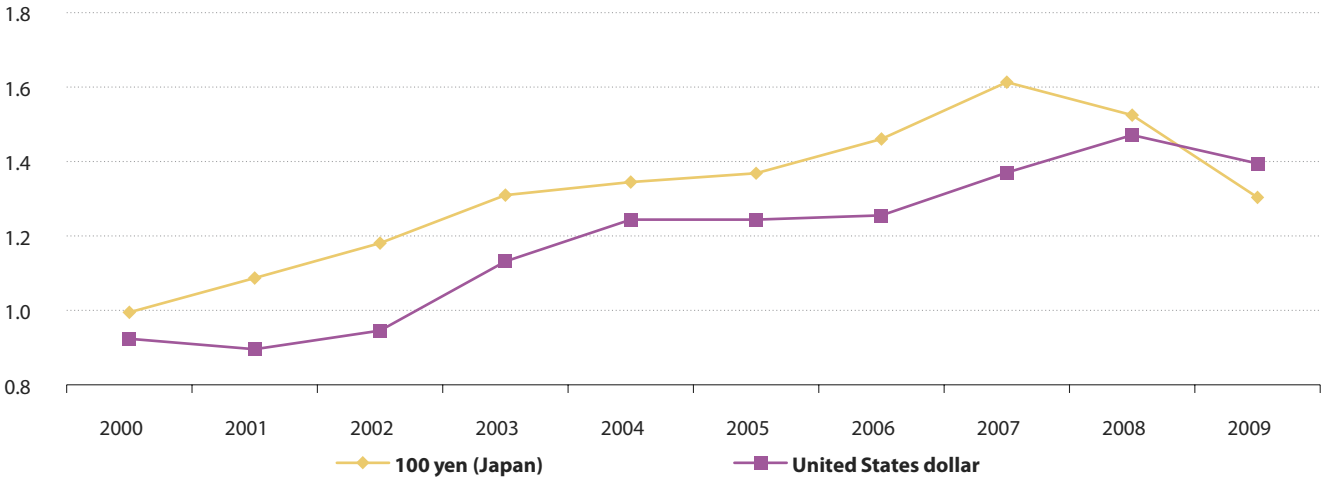
Exchange rate developments in the EU became less important in the decade ending in 2008 as the introduction of the euro eliminated exchange rates between an increasing number of Member States. At the outset, in 1999, the euro area covered 11 Member States (BE, DE, IE, ES, FR, IT, LU, NL, AT, PT, FI). Later others joined: Greece (2001), Slovenia (2007), Cyprus and Malta (2008) and Slovakia (2009). Some other European currencies have remained stable against the euro in recent years, especially the Danish krone, the Estonian kroon, the Latvian lats, the Lithuanian litas and the Bulgarian lev.

A small number of currencies appreciated against the euro during the period 2004–07, measured by the annual average exchange rates in 2007 as against 2004 (see Annex Table 4-35). The most significant gains were for the Romanian leu (+ 17.7 %) and the Polish zloty (+ 16.4 %).

However, after the financial turmoil in October 2008 the euro appreciated by the end of February compared with September 2008 against the Polish zloty by 37.7 %, against the Hungarian forint by 23.9 %, and against the Romanian leu by 18.3 %. Between then and April 2010 these currencies appreciated again. The euro depreciated against the Polish zloty by 16.7 %, against the Hungarian forint by 11.2 % and the Romanian leu by 4.0 %.

In contrast to the moderate fluctuations between the majority of European currencies, the value of the euro increased against the following currencies of important trading partners between 2002 and 2008: the Japanese yen (+ 29.1 %) and the US dollar (+ 50.5 %). Since early 2008 the value of the US dollar has fluctuated widely. Reaching USD 1.5812 per euro by end-March 2008, its value increased to USD 1.2644 by end-February 2009. Following a recovery by end-November 2009 (1.5023) the euro depreciated by 18.1 % within six months to 1.2307 by end May 2010. In parallel the value of the euro fell by 18.8 % against the Canadian dollar, by 13.5 % against the Russian rouble and by 18.1 % against the Chinese currency renminbi-yuan.

Figure 2.4.11 Euro exchange rates, annual average rates (%)



Source: Eurostat (tec00033)

2.5. External dimension of the economy

2.5.1. Introduction

The EU has a common trade policy (known as the common commercial policy). In other words, on trade issues, including issues related to the World Trade Organisation (WTO), the EU acts as a single entity. In these cases, the European Commission negotiates trade agreements and represents Europe's interests on behalf of the Union's 27 Member States. The Treaty on European Union (TEU) establishes the overall aims and objectives of EU trade policy: Article 3 sets out the general aims, including a highly competitive social market economy, aimed at full employment and social progress. Article 206 of the Treaty on the Functioning of the Union (TFU) explains how the common commercial policy must operate in principle: 'to contribute, in the common interest, to the harmonious development of world trade, the progressive abolition of restrictions on international trade and on foreign direct investment, and the lowering of customs and other barriers'. Article 207 TFU sets out the scope, instruments and decision-making procedures. Article 218 TFU establishes the current interinstitutional procedure for the conclusion of international agreements, principally by the Council.

The EU's external trade policy helps to make Europe competitive in foreign markets. Being an open economy, the EU's aim is to secure improved market access for its industries, services and investments, and to enforce the rules of free and fair trade. A coordinated foreign trade policy takes on even greater importance in an era of globalisation, when economies and borders are opening up, leading to an increase in trade and capital movements, and the spread of information, knowledge and technology, and involving a process of deregulation. The economic impacts of globalisation on the EU are obviously felt through trade in goods and services, financial flows ranging from foreign direct investment to more short-term forms, such as portfolio investment, as well as the movement of persons linked to cross-border economic activity, ranging from workers' remittances to the provision of services.

Globalisation acquires a higher profile when it is measured by actual trade flows. Within the EU, there are two main sources of statistics on international trade. One is international trade in goods statistics (ITGS), providing information on trade in merchandise goods, collected on the basis of customs and VAT declarations. ITGS provides highly detailed information on the value and volumes (quantity) of international trade in goods as regards the type of commodity. The second main source is balance-of-payments statistics (BoP), registering all the transactions of an economy with the rest of the world. The purpose of this chapter is to give an overview of the EU's trade in merchandise goods (within the ITGS framework), and its trade in services, current account, and foreign direct investments (within the BoP framework).

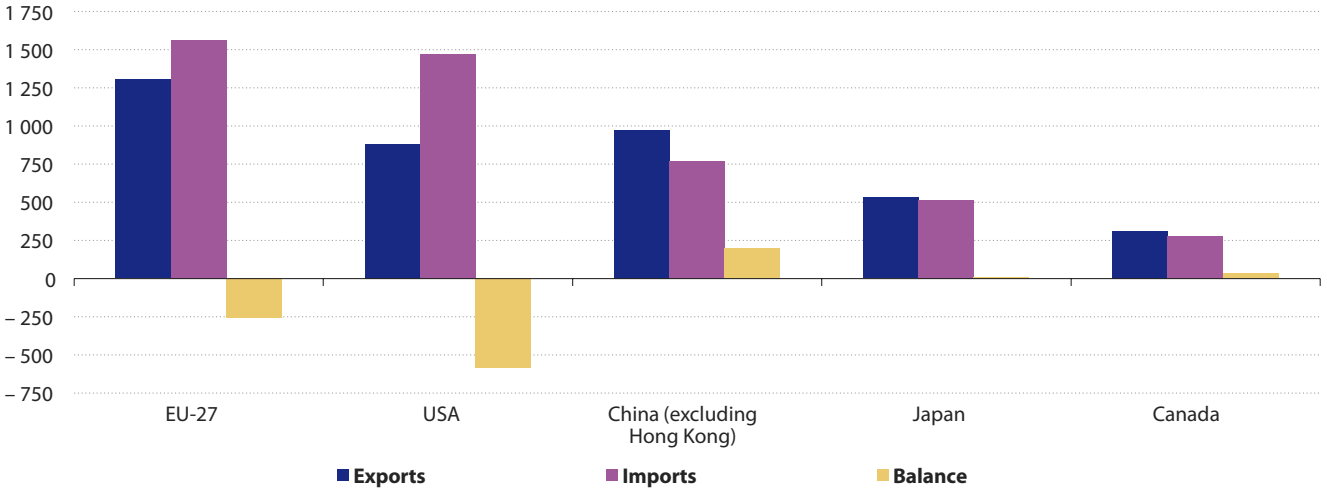
The global financial crisis which started in 2008 had a huge impact on the international exchange of goods and services and on the intensity of global financial flows and business activity. These effects are clearly evident in the data presented in this chapter. The upward trend of the EU trade in goods and services and investments ceased in 2008. However, since the crisis was a global economic shock, the EU preserved its leading role in the world's economy.

2.5.2. Trade in goods

The European Union was the major international player in world trade throughout 2008, the most recent year for which comparable data for other major economies are available. The sum of exports and imports reached EUR 2 871.5 billion, with imports making up 55 %. The resulting trade deficit was EUR 258.5 billion. The second largest world player was the United States, with total trade of EUR 2 355.7 billion. However, the trade deficit of the United States was substantially higher, at EUR 588.1 billion, as a result of the bigger share of imports (62 % of total trade).

China followed, with total trade of EUR 1 740.7 billion and a trade surplus of EUR 202.0 billion. Japan and Canada showed smaller trade surpluses of EUR 12.8 billion and EUR 32.1 billion respectively (see Figure 2.5.1).

Figure 2.5.1: Main world traders: exports, imports and balance, 2008 (billion EUR)



Source: Eurostat (tet00018)

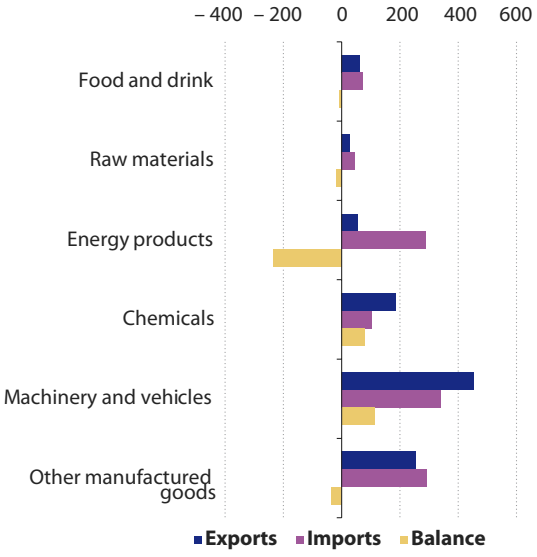
The steady increase in EU-27 imports and exports between 2003 and 2008 was sharply reversed in 2009, as the EU–27's total trade fell by EUR 577.4 billion to EUR 2 294.1 billion. Exports fell by 16 % to EUR 1 094.4 billion, while imports fell much more sharply, by 23 % to EUR 1 199.7 billion. These changes resulted in a large fall in the EU-27 trade deficit to EUR 105.3 billion, less than half that recorded in 2008 and the lowest since 2004.

The marked decrease in EU-27 imports and exports gathered momentum during the second half of 2008. Seasonally adjusted exports peaked at EUR 114.5 billion in April 2008 and fell by 24 % to EUR 86.9 billion in January 2009. The fall in imports started three months later, in July 2008, and they reached their lowest value in May 2009, having fallen 32 %, from EUR 140.5 billion to EUR 96.0 billion. After those low points both imports and exports followed a slow upward trend.

The overall fall of EUR 212.1 billion in exports was overwhelmingly due to declines in the two largest product groups, machinery and vehicles, and other manufactured goods, which fell by EUR 114.7 billion and EUR 60.9 billion respectively. By contrast, exports of the next largest product group, chemicals, fell by only EUR 12.2 billion (see Figure 2.5.2).

Germany recorded the largest fall in extra-EU-27 exports of machinery and vehicles, by almost EUR 40 billion, over a fifth of the 2008 figure. The fall was particularly marked in exports of cars, which decreased between 2008 and 2009 by EUR 10.3 billion, almost half the total EU-27 fall in car exports. France and Italy also recorded big falls — over EUR 10 billion — in exports of machinery and vehicles. Germany and Italy also experienced the sharpest falls in exports of other manufactured goods, with reductions of over EUR 10 billion each. However, the UK's decrease in this product group of EUR 8.6 billion was much larger in percentage terms, representing as it did a fall of over a quarter between 2008 and 2009.

Figure 2.5.2: EU-27 exports, imports and balance, by SITC-1 product group, 2009 (billion EUR)



Source: Eurostat (tet00061)

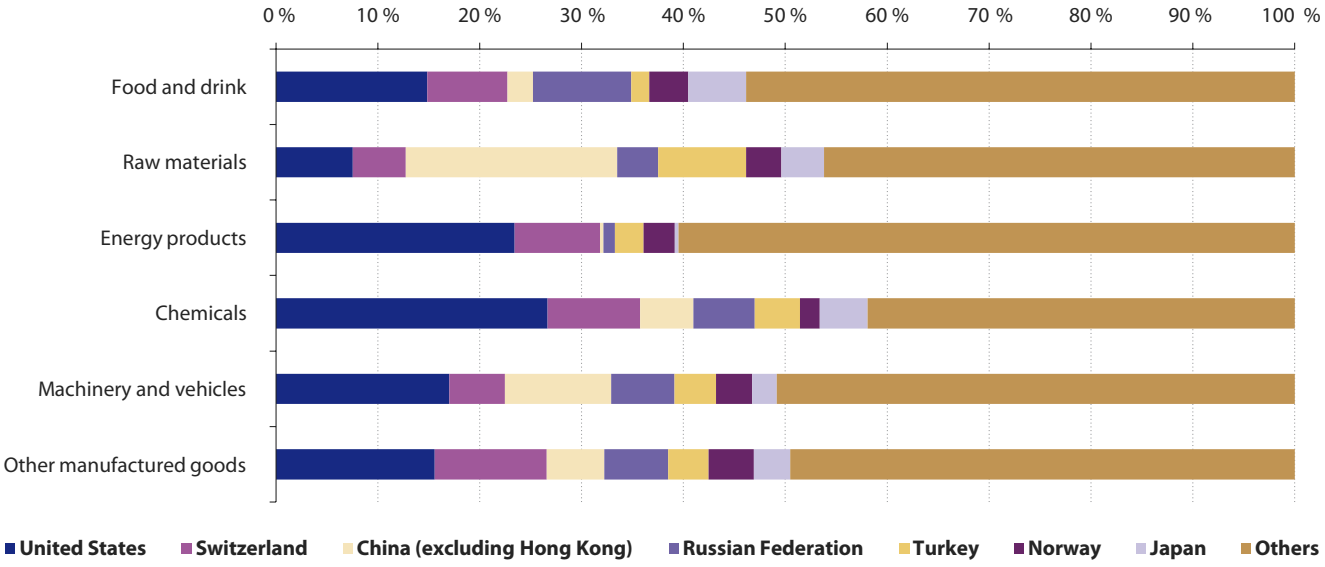
Germany also recorded the largest absolute fall in imports of machinery and transport goods, over EUR 17 billion, though this equalled the EU-27 average of – 20 %. In contrast, Bulgaria, Estonia, Finland and Lithuania saw imports of this product group fall by over 40 % between 2008 and 2009.

Of the main product groups, raw materials experienced the largest fall in imports in relative terms. Around one fifth of this was caused by imports of iron ore and concentrates declining by half from 2008 to 2009. Imports of energy products fell by EUR 166.2 billion, over one third, with 22 of the Member States recording falls of 30 % or more. Energy products accounted for around 45 % of the overall fall in EU-27 imports, with absolute falls of just over EUR 24 billion for both Germany and Italy.

The United States remained by far the largest destination for goods from the EU–27, despite an 18 % fall in exports. However, Russia, which had been the second largest destination for EU-27 exports in 2008, dropped to fourth place, behind Switzerland and China, as a result of EU-27 exports to Russia falling by 37 % in 2009 after rising more than fourfold between 2000 and 2008.

The United States was the major destination for almost all the product groups exported by the EU–27 in 2009 (see Figure 2.5.3). The only exception was in exports of raw materials, of which over one fifth went to China. However, by far the largest product group exported to China in terms of value was machinery and transport equipment, which accounted for over half of the EU–27's total exports to China.

Figure 2.5.3: Extra-EU-27 exports by SITC group, share by main partners, 2009

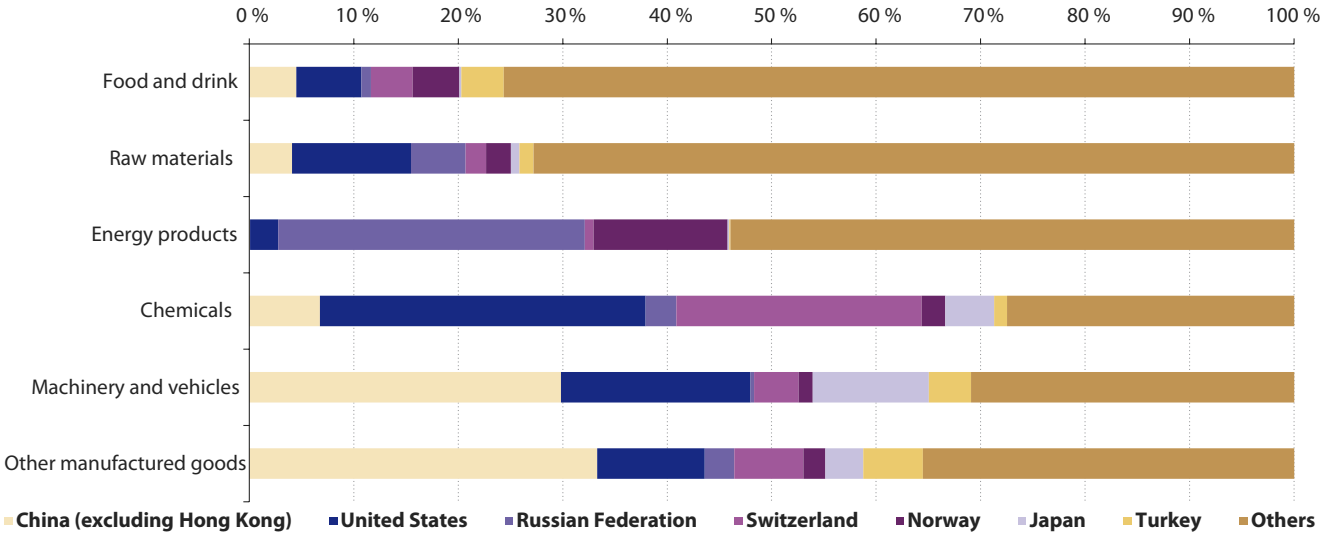


Source: Eurostat (DS_018995)

Imports from China, by far the largest source, fell by EUR 33.2 billion, while those from the United States and Russia, the second and third largest sources, fell by EUR 26.8 billion and EUR 62.5 billion respectively. This fall in imports from Russia was the greatest seen in imports from any major trading partner, in both absolute and percentage terms — a decrease of over a third.

The United States was the major source of the EU–27's imports for three product groups — chemicals, raw materials and food and drink — which together represent about one fifth of total imports (see Figure 2.5.4). EU-27 imports of chemicals came chiefly from the United States (EUR 32.7 billion) and Switzerland (EUR 24.6 billion), while energy imports came mainly from Russia (EUR 85.2 billion) and Norway (EUR 37.3 billion). China was the main source for EU-27 imports of machinery and vehicles (EUR 102.0 billion) and other manufactured goods (EUR 97.4 billion), the two largest groups representing more than half of total imports.

Figure 2.5.4: Extra-EU-27 imports by SITC group, share by main partners, 2009



Source: Eurostat (DS_018995)

BOX 2.5.1: TRADE IN GOODS — INTRA-EU ASYMMETRIES

As data for all 27 Member States are produced according to a harmonised methodology, in theory the intra-EU balance should be zero. However, bilateral comparisons have revealed persistent discrepancies in the Member States' mutual intra-EU trade, called asymmetries. For example, this means that, for a given period and a specific product X, volumes dispatched from France to Austria are not the same as volumes arriving in Austria from France. The main reasons are:

— the system of thresholds — this makes it possible to exempt some 80 % of operators from statistical formalities; for a given transaction therefore, a company might be required to provide statistical information in one Member State, whereas its supplier or customer in another Member State is exempted;

— late or non-response by certain companies;

— statistical confidentiality — different national practices for the application of confidentiality;

— misapplication of the rules and deadlines;

— valuation of transactions — the use of different methods for calculating the statistical value of dispatches (fob value) and arrivals (cif value);

— triangular trade — in the intra-EU context triangular trade is where a company in Member State A sells goods to a company in Member State B, which in turn sells them to a company in Member State C, although the goods are 'physically' forwarded only once — from A to C. In cases such as this, intra-Community trade statistics should record a dispatch from A bound for C, and an arrival in C of goods from A. There is, however, a considerable risk that A or C will regard Member State B as its trading partner.

At total level, the value of dispatches has been consistently higher than that of arrivals. Eurostat uses dispatches as the more reliable measure of total intra-EU trade as, at aggregated levels, total dispatches achieves better coverage than total arrivals.

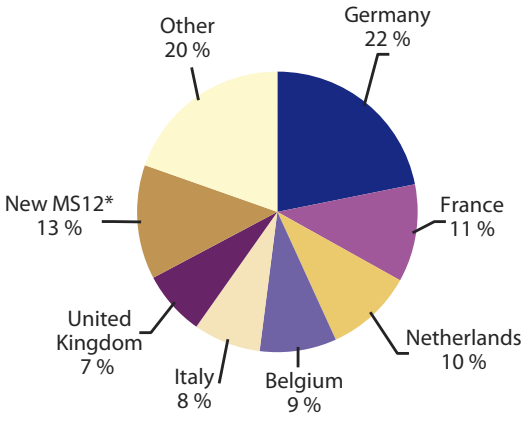
All EU-27 Member States recorded falls in both exports and imports in 2009. The six countries recording the largest falls in exports, — Lithuania, Finland, Bulgaria, Romania, Poland and Slovenia — all had Russia as one of their top three trading partners. The picture for imports was similar, with the exception of Greece, which recorded the biggest fall of 44 %, mainly from Russia (EUR – 3.5 billion).

Four Member States — Belgium, France, Ireland and the United Kingdom — reported the USA as their main trading partner for both trade flows in 2009; this pattern was most marked for Ireland, where nearly half of both imports and exports were traded with the United States. These four Member States recorded lower than average falls in their total trade, reflecting the fact that overall EU-27 trade with the United States fell on average by less than with other countries.

Close to two thirds of the EU's total trade was carried out within the Union in 2009. The weight of intra-EU trade (dispatches plus arrivals) measured as a percentage of the individual Member States' total trade ranged between 81 % in the Czech Republic and 54 % in the United Kingdom. Intra-EU trade (measured by dispatches) decreased in 2009 more markedly than extra-EU exports (– 19 % against – 16 %).

The new Member States (with the sole exception of Cyprus) showed a bigger reduction in their intra-EU trade than the overall EU average. The biggest falls (considering both arrivals and dispatches) were registered by Latvia and Lithuania, down by just over 30 %. Intra-EU dispatches are shown broken down by SITC-1 product group (see Figure 2.5.6). As for extra-EU exports, energy products and raw materials were the groups showing the largest fall in 2009 (– 36 % and – 27 % respectively).

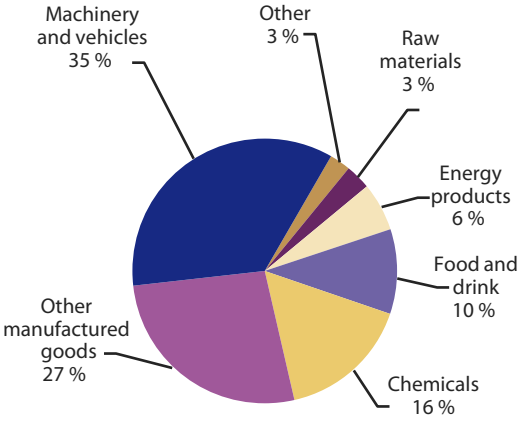
Figure 2.5.5: Intra-EU-27 trade (arrivals and dispatches), share by main declaring Member State, 2009



(*) 'New MS12' = Member States that joined the EU in the 2004 and 2007 enlargements

Source: Eurostat (tet00039)

Figure 2.5.6: Intra-EU-27 dispatches, share by SITC-1 product group, 2009



Source: Eurostat (ext_lt_intratrd)

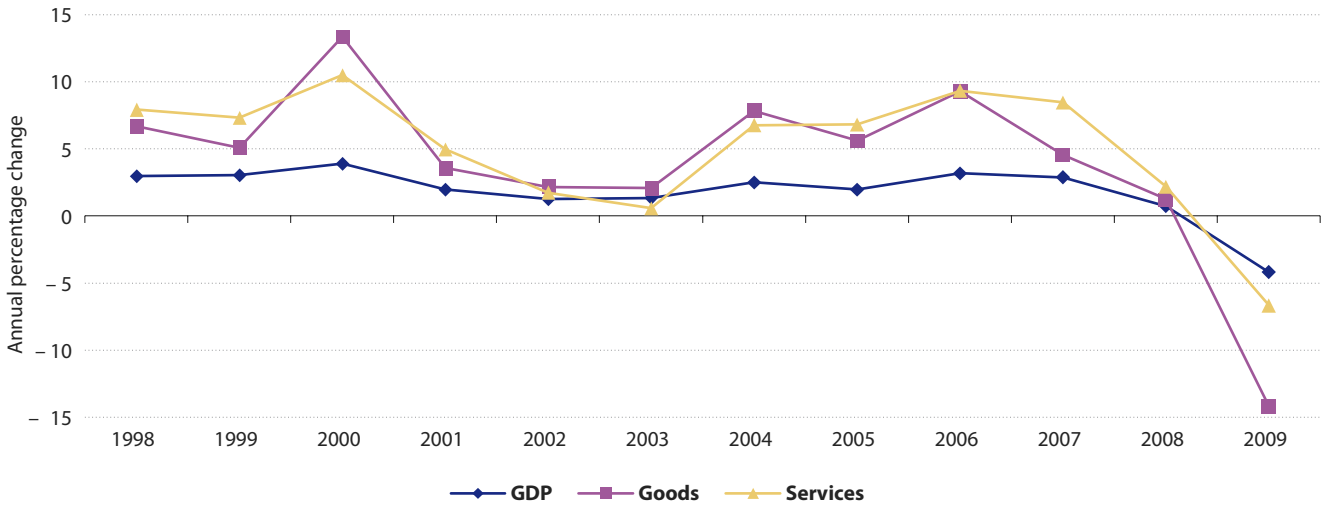
2.5.3. Trade in services

Whereas Section 2.5.2 described trade in merchandise goods (covered by international trade in goods statistics) this section will concentrate on trade in services. These statistics are compiled under the balance of payments banner.

Services play a major role in all modern economies. An efficient services sector is crucial to trade and economic growth and to vibrant and resilient economies. Trade in services also plays an important role in creating wealth and jobs throughout the world, and is a catalyst for development. Services are the backbone of economies and trade around the world and provide vital support to the economy and industry as a whole, for example through finance, logistics and communications. Increased availability and trade services boost economic growth by improving the performance of other industries, since services provide key intermediate inputs, especially in an increasingly interlinked globalised world.

Since the 1990s, the global exports of goods and services of EU countries have grown in a broadly similar pattern, with both sectors growing by about 4 % and 5 % respectively per year on average (see Figure 2.5.7). Consequently, services maintained their roughly 22 % share of overall international trade during this period. In 2009 — as Figure 2.5.7 shows — the EU countries experienced a significant decline in both total exports of goods (– 14.2 %, down from + 1.3 % in 2008) and total exports of services (– 6.7 %, compared with + 2.2 % in 2008).

Figure 2.5.7: EU GDP and total exports of goods and services of EU Member States, annual variation (%) (1)



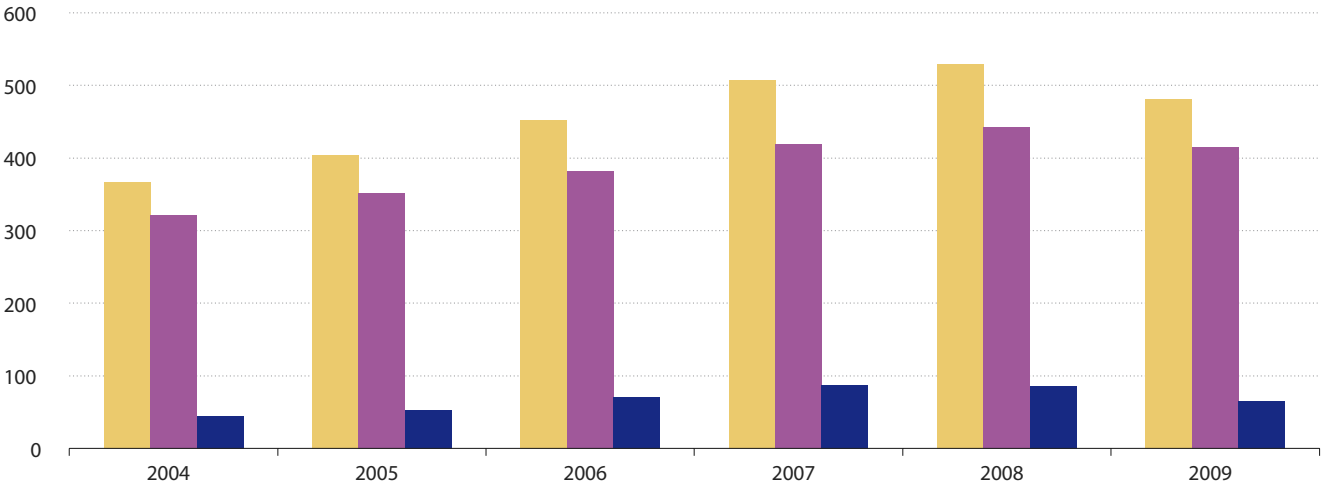
(1) At 2000 prices and exchange rates

Source: Eurostat (nama_exi_k)

In 2009 the EU's trade in services with the rest of the world was marked by falls of 9.2 % in exports (credits) and 6.3 % in imports (debits) over 2008 in value terms (see Figure 2.5.8). The balance surplus was down to EUR 65.3 billion in 2009, compared with EUR 86.2 billion in 2008. Still, the EU, viewed as a single economic entity, remains the world's largest exporter and importer of services, with a share of roughly 25 %.

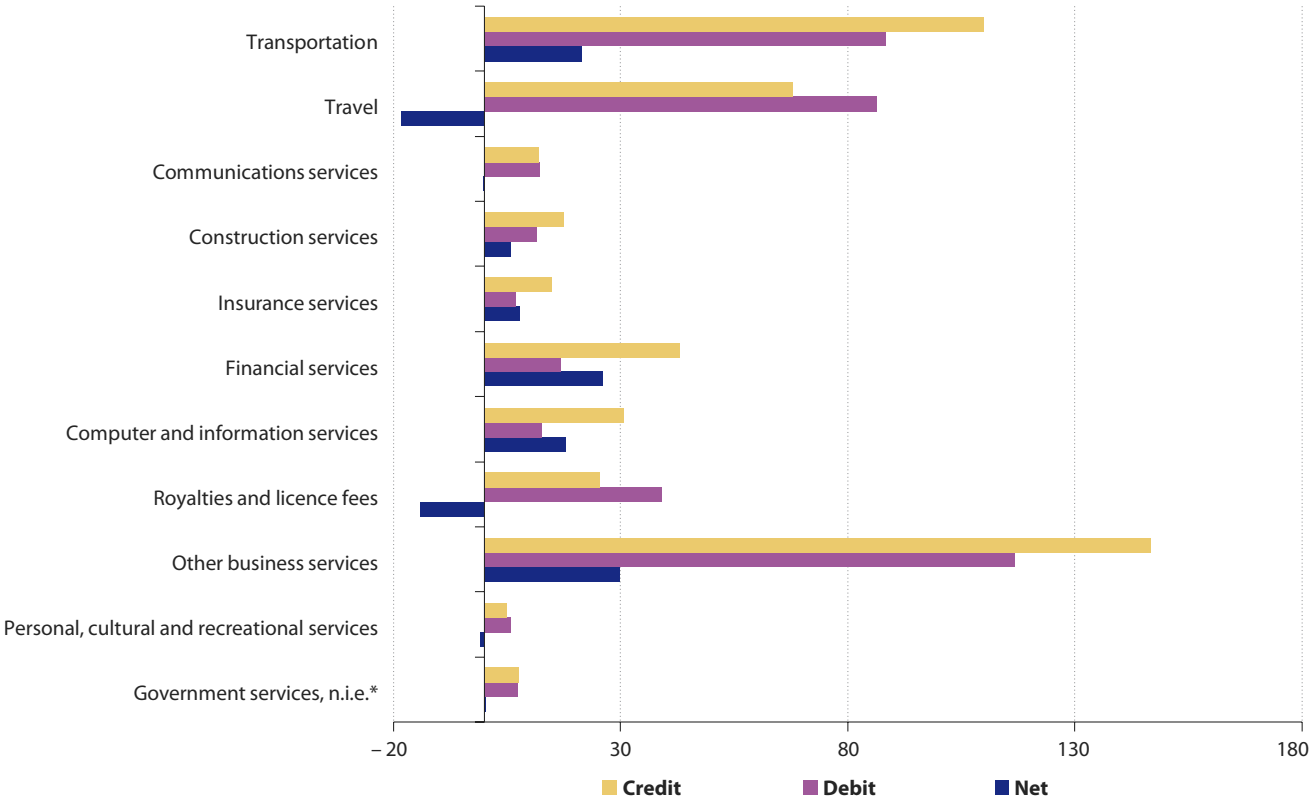
Figure 2.5.9 shows that transportation, travel and other business services (which cover merchanting and other trade-related services, operational leasing services and miscellaneous business, professional and technical services) made up 67 % of total EU exports and 70 % of total EU imports. The surplus in 2009 fell mainly because of the deteriorating balance in transportation, construction services, financial services and other business services, which could not be offset by slightly improved balances in travel, insurance services and computer and information services.

Figure 2.5.8: EU trade in services with the rest of the world — credit, debit and net (billion EUR)



Source: Eurostat (bop_q_eu)

Figure 2.5.9: Sector breakdown of EU international trade in services with the rest of the world in 2009 (billion EUR)



**Government services, n.i.e.* is a residual item covering government service transactions (including those of international organisations) not contained in previous classifications.*

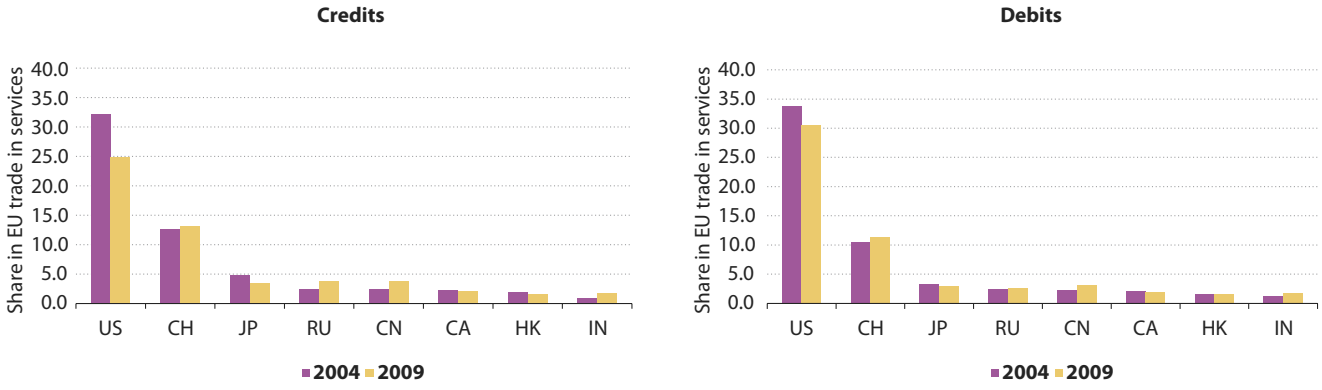
Source: Eurostat (bop_q_eu)

Analysis of the breakdown by partner and of the underlying trend in EU transactions with the rest of the world (extra-EU transactions) shows that the USA continued to be the EU's biggest trading partner (Figure 2.5.10). Preliminary results show that in 2009, 24.8 % of total exports from the EU went to the USA and 30.6 % of total imports came from the USA. However, since 2008 exports to and imports from the USA have both decreased, as has been the case with most other partners too. After several years of significant positive balances of the EU's trade in services with the USA (approximately EUR 9 billion in 2006 and 2007 and EUR 2.2 billion in 2008), a considerable deficit of EUR 7.6

billion was recorded in 2009. Exports to Russia, China, Brazil and India have more than doubled since 2004 (from EUR 9.2 billion to EUR 18.5 billion, from EUR 9.1 billion to EUR 18.2 billion, from EUR 3.7 billion to EUR 8.8 billion and from EUR 3.8 billion to EUR 8.8 billion respectively). Exports to India have increased more since 2004 than imports from India; consequently the EU trade balance with India moved from a EUR 0.3 billion deficit in 2004 to a EUR 1.3 billion surplus in 2009. Countries that increased their share of EU trade in services, albeit starting from a relatively low level, were China (3.8 % and 3.2 % of total EU exports and imports respectively in 2009, compared with 1.8 % and 1.8 % in 2004), and Russia (3.8 % and 2.6 % of total EU exports and imports respectively in 2009, compared with 1.8 % and 1.9 % in 2004).

The EU had considerable surpluses with most of its trading partners; the largest deficits were recorded with Morocco, Thailand, Croatia, Egypt and Turkey, mainly due to deficits recorded under the 'travel' category.

Figure 2.5.10: Extra-EU trade in services, share by main partner (%)

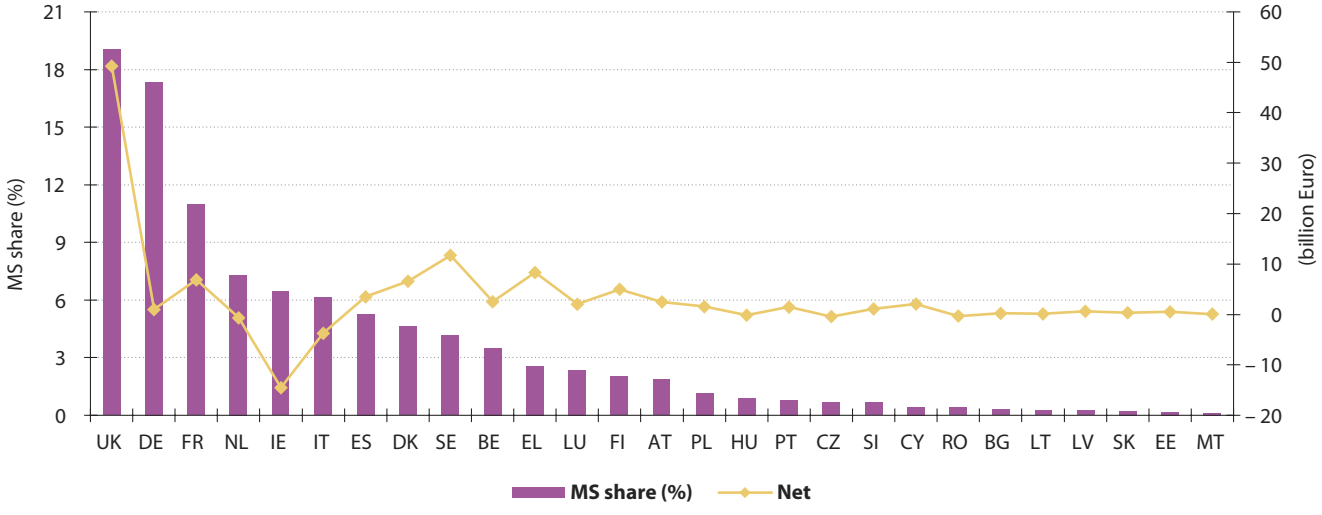


Source: Eurostat (bop_q_eu)

The United Kingdom continued to be the EU's largest exporter of services in 2008 (see Figure 2.5.11). Almost one quarter of all EU exports to the rest of the world came from the UK, followed by Germany and France. Germany was the biggest importer, accounting for 19 % of total EU imports, followed by the UK and France. The United Kingdom also recorded the largest surplus in 2008 (EUR 49.2 billion), followed by Sweden (EUR 11.7 billion) and Greece (EUR 8.3 billion). The highest deficit in 2008 was recorded by Ireland (EUR – 14.5 billion), followed by Italy (EUR – 3.7 billion).

Interestingly, about 58 % of EU trade in services in 2009 took place between EU Member States (intra-EU transactions). This share has remained more or less stable over the past decade.

Figure 2.5.11: Member States' 2008 share of total extra-EU ITS transactions (%), net (billion EUR)



Source: Eurostat (bop_its_det)

2.5.4. Current account

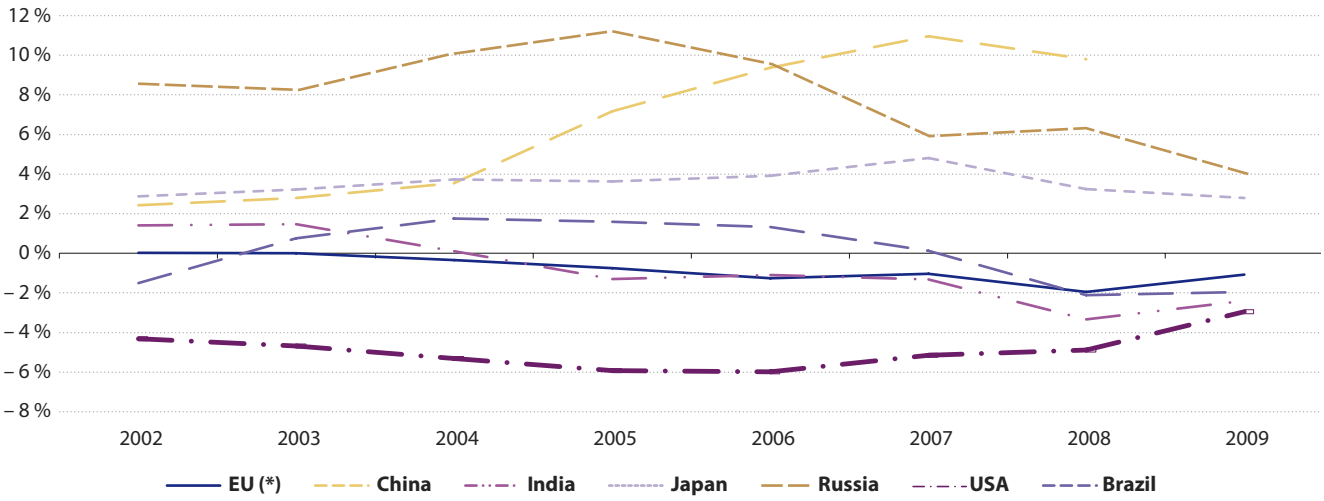
The current account measures the economic position in the world of a country or economic union such as the EU, covering all transactions (other than financial items) between resident and non-resident entities. Besides international trade in goods and services, it also includes income and current transfers. Economies with a current account surplus are net creditors, while those running a deficit are net debtors to the global economy. Any deficit is financed by the various items of the financial and capital accounts. Capital account covers all transactions that involve the receipt or payment of capital transfers linked to the acquisition or disposal of fixed assets or the acquisition or disposal of non-produced, non-financial assets. The financial account records transactions that involve financial assets and liabilities and is subdivided into direct investment, portfolio, other investments, financial derivatives and reserve assets.

The external position of the EU can be weighed against that of other major world economies by comparing the current account balance measured as a share of GDP. As shown in Figure 2.5.12, the current account of the EU has been close to balance over recent years, with a small deficit starting from 2004, which peaked in 2008 and then fell substantially in 2009.

China is the world's biggest creditor, with a current account surplus driven by exports of manufactured goods, which rose from over 2 % in 2002 to 11 % in 2007 and fell back only slightly in 2008. A similar trend was recorded in the current account surplus of Japan, which increased until 2007 and then fell back, reaching in 2009 roughly the same level as in 2002. The current account surplus of Russia reflected fluctuating prices of raw materials and energy products, which are its main exported goods; and after peaking in 2005, the balance fell steadily.

On the other side the USA remains by far the world's biggest debtor. Its current account deficit reached its highest level in 2006 and has since decreased, with its value in 2009 only half the value in 2006. The Brazilian current account moved from deficit in 2002 to surplus; it decreased after peaking in 2004, turning finally into a small deficit in 2008 and 2009 Similarly India moved from a small surplus up to 2004 to a deficit which peaked in 2008.

Figure 2.5.12: Current account balance as share of GDP (%)



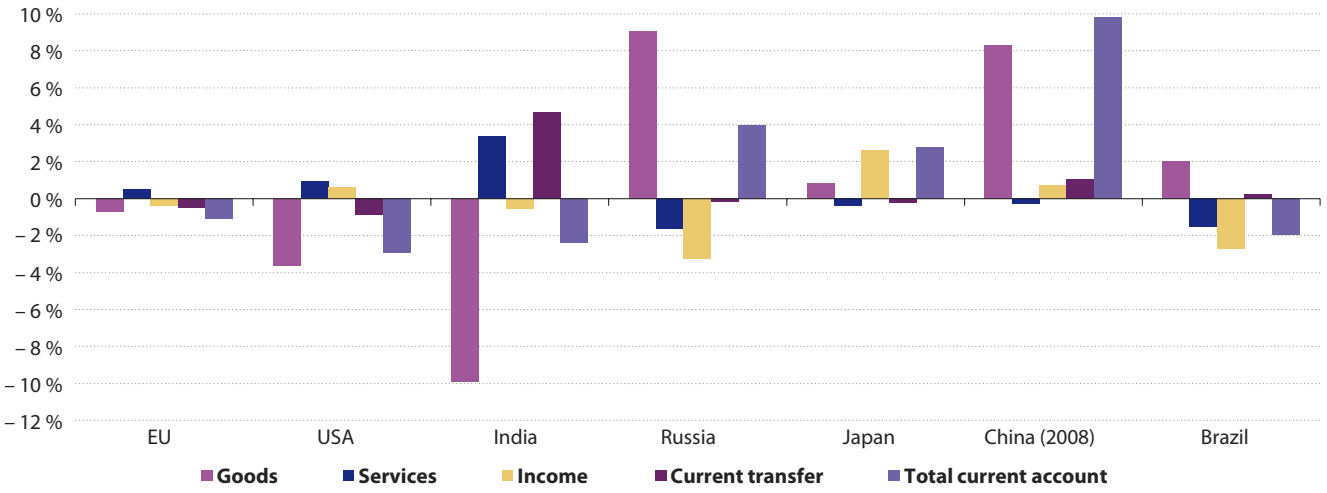
(*) 2002–03: EU-25; 2004–09: EU-27.

Sources: Eurostat, Bureau of Economic Analysis, Ministry of Finance of Japan, Central Bank of the Russian Federation, Banco Central do Brasil, Reserve Bank of India, National Bureau of Statistics of China

A more detailed picture of the strength of an economy compared with the rest of the world can be provided by the contribution of the various components to the current account balance: international trade in goods, trade in services, income and current transfers. Figure 2.5.13 presents this analysis for 2009. In the EU, the contributions of all components were fairly balanced, with deficits between 0.4 % and 0.7 % of GDP for income, current transfers and trade in goods account, which were partly offset by a surplus of 0.6 % of GDP for trade in services.

For the world's other major economies the overall current account balance is often determined mostly by a single component. In the USA, the deficit was caused by an imbalance in trade in goods, which was only partly offset by surpluses in trade in services and income. For China and Russia substantial current account surpluses were driven by trade in goods. In the case of China this surplus was reinforced by positive balances in income and current transfers, while in Russia it was reduced because of deficits in all other components. For Japan, the surplus on income was the main factor for an overall positive balance of current account, while a small surplus in trade in goods was almost offset by deficits in trade in services and current transfers. India ran a huge deficit in trade in goods which was, however, partly offset by surpluses in trade in services and currents transfers. On the other hand, in Brazil the surplus in trade in goods was not sufficient to balance the deficits in trade in services and income.

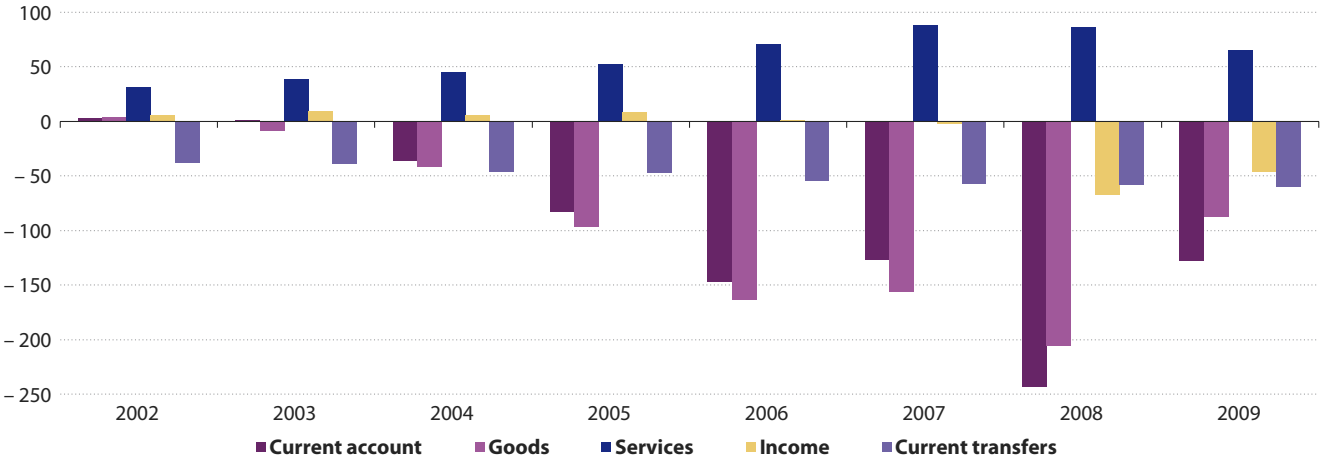
Figure 2.5.13: Current account by component as share of GDP, 2009 (%)



Sources: Eurostat (teibp050), Bureau of Economic Analysis, Ministry of Finance of Japan, the Central Bank of the Russian Federation, Banco Central do Brasil, Reserve Bank of India, National Bureau of Statistics of China

As described in Figure 2.5.14, the EU current account balance recorded small surpluses in 2002 and 2003, but then moved to deficit, which widened to EUR 243.3 billion (1.9 % of GDP) in 2008. In 2009 the current account deficit moved back to EUR 127.5 billion, which was roughly the level recorded in 2007. Trade in goods has been the main factor behind this deficit, and the overall current account imbalances mostly reflect fluctuations in this account. The trade deficit reached its maximum in 2008 (EUR 205 billion or 1.6 % of GDP) and then in 2009 dropped to EUR 87 billion (0.7 % of GDP). The income account had been close to balance until 2007 but then recorded a deficit of EUR 66.9 billion (0.5 % of GDP) in 2008 and EUR 45.8 billion (0.4 % of GDP) in 2009. These deficits were caused by negative balances in portfolio investment income and other investment income, while the EU still had surpluses in direct investment income. The surplus in trade in services increased steadily up to 2007; it remained stable in 2008 at EUR 86.2 billion (0.7 % of GDP) and fell slightly in 2009 to EUR 65.3 billion (0.6 % of GDP). The current transfers balance has been relatively stable since 2002, and in 2009 the deficit was EUR 59.9 billion (0.5 % of GDP).

Figure 2.5.14: EU (*) current account by component (billion EUR)

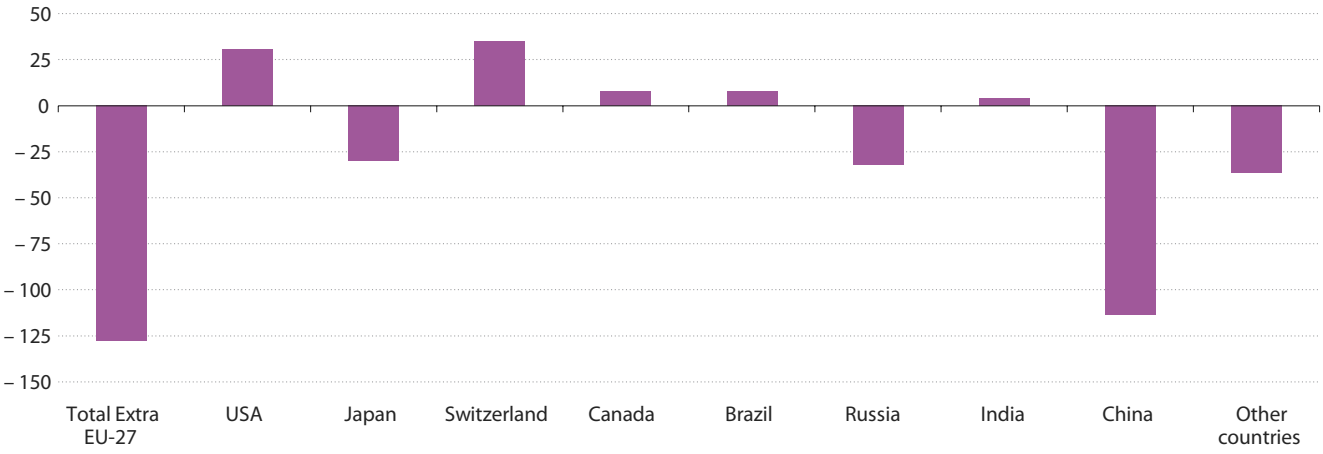


(*) 2002–03: EU-25; 2004–09: EU-27

Source: Eurostat (bop_q_eu)

Figure 2.5.15 presents the geographical breakdown of the EU current account in 2009. Switzerland replaced the USA as the EU's main debtor. This was caused by a fall in the surplus in trade in goods and a reversal of the surplus to a deficit in trade in services with the USA, while with Switzerland the EU still had surpluses for all basic components of the current account, the highest being in trade in services. The EU also had current account surpluses with Brazil, Canada and India. The main factors for this development were creditor positions in income account with Brazil and Canada, and in goods account with India. These were, however, more than counterbalanced by the debtor positions with some other economic partners. The deficit with China, caused by a huge imbalance in trade in goods, was slightly lower than in 2008, but — due to a drop in the overall current account deficit — its share increased from 58 % to 89 %. Russia and Japan remained the other major creditor countries of the EU, although both the deficits fell against 2008. The main factors for these imbalances were the deficits in trade in goods (Russia), and in goods and income accounts (Japan). With other economic partners the EU had surpluses in trade in goods and services in 2009, but they were more than offset by deficits in income and current transfers.

Figure 2.5.15: EU current account balance with other main economies, 2009 (EUR billion)



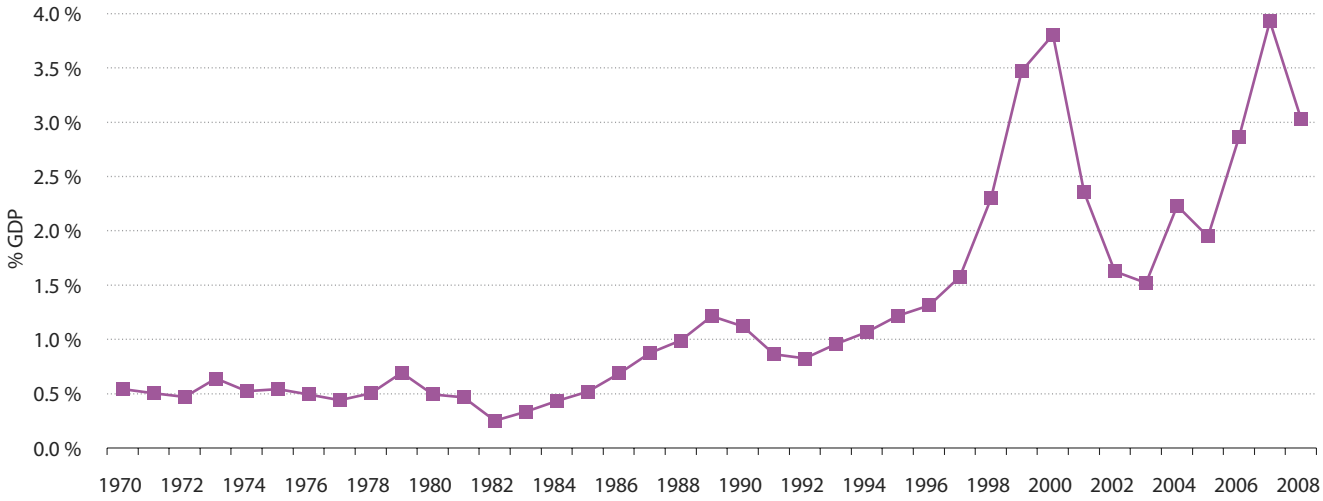
Source: Eurostat (bop_q_eu)

2.5.5. Foreign direct investment

Foreign direct investment (FDI) plays an important role in economic globalisation. For the investing company, it means access to new markets and marketing channels, possibly cheaper production facilities, access to new technology, products, skills and financing. For the host country of a company receiving the investment, it can become a source of new technologies, capital, products and management skills, which can lead to higher competition and give impetus to economic development. FDI complements and reinforces the expansion of trade flows and is seen as an important cornerstone of economic globalisation.

FDI flows are normally more volatile than GDP. This is especially true at global level. The ratio world FDI flows/global GDP (both in current US dollars), as shown in Figure 2.5.16, demonstrates the increasing importance of FDI for the economy over the past decade, reaching two peaks during this period: 3.8 % in 2000, and 3.9 % in 2007. In the meantime the share of global FDI in GDP declined by a dramatic 61 % from 2000 to 2003 and then recovered in the following four years to reach its highest ever level of USD 2 146 billion in 2007. Since 2008 FDI has faced the challenges of the global economic crisis: global foreign investment has slowed over the past 1–2 years more than GDP, falling slightly to a ratio of 3 % in 2008. The preliminary data for the EU give an indication that this negative development in global FDI activity continued in 2009.

Figure 2.5.16: World FDI flows as a % of world GDP, 1970–2008

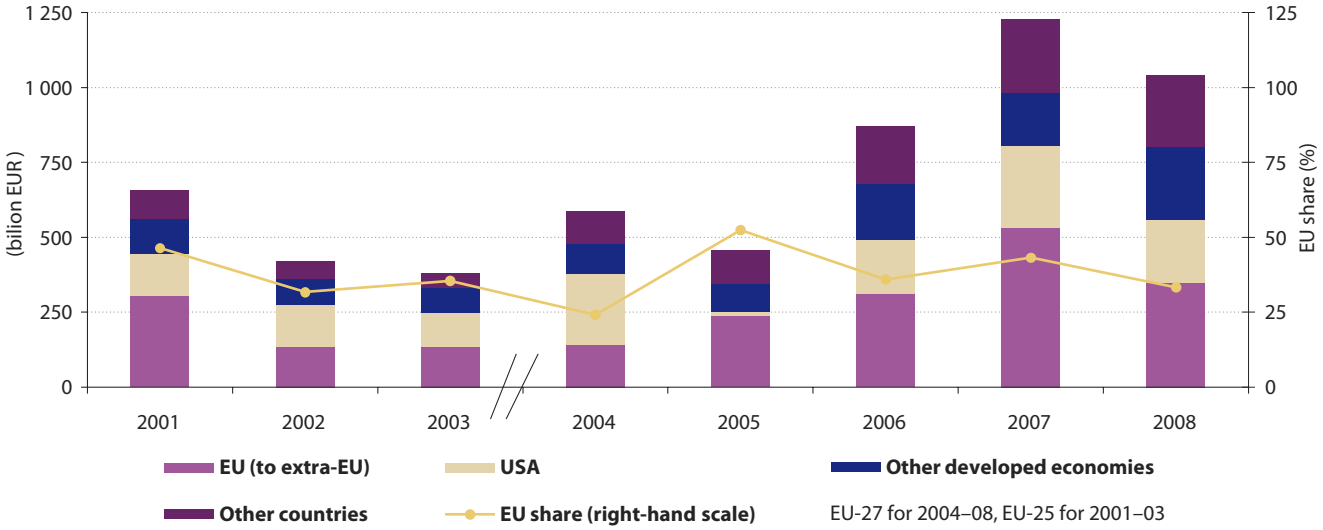


Source: Unctad

Figure 2.5.17 shows that the overall trend of world FDI flows has been driven by the developed economies, with the European Union playing a leading role. Except for 2002 and 2004, when it was surpassed by the United States, the EU has been the main contributor to global outward direct investment flows over the last eight years. Its share of global FDI outflows reached a peak of more than 50 % in 2005, and the highest absolute value of outward direct investments of EU residents was recorded in 2007 (EUR 531 billion). As a result of the economic and financial crisis outward FDI flows of the EU dropped by 34 % in 2008 compared with the 2007 peak, while global flows fell by 13 %.

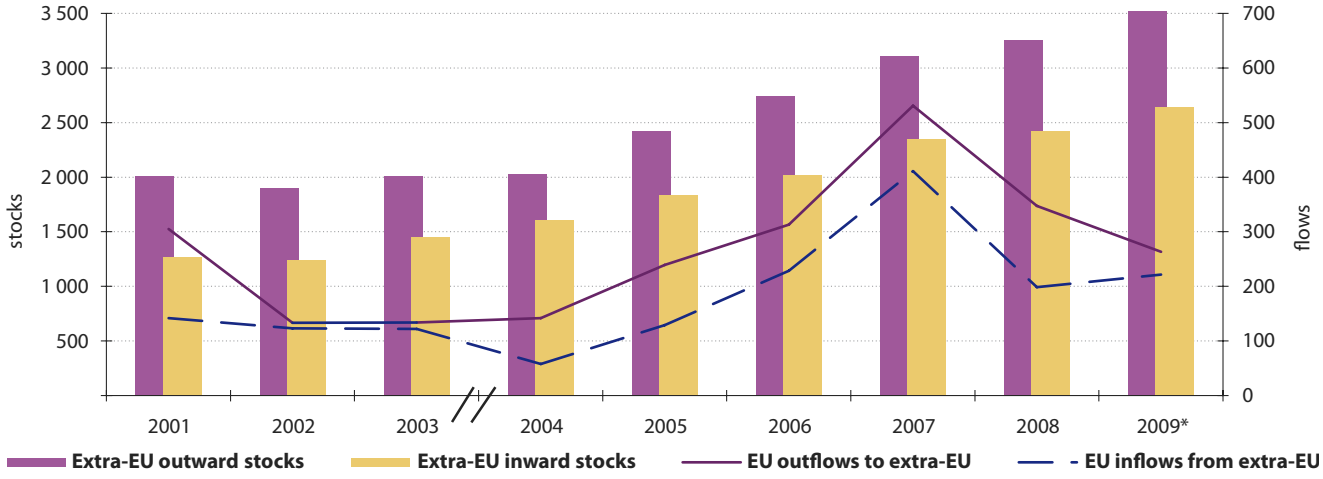
The decline in EU FDI flows to non-EU partners that started in 2008 continued in 2009, resulting in a 24 % annual decrease to EUR 263 billion. On the other side of the coin, incoming FDI flows from the rest of the world registered a slight recovery of 12 % to EUR 222 billion, thus cutting the gap between outward and inward FDI flows to its lowest value since 2003 (see Figure 2.5.18). In 2009, Luxembourg was the main player among the EU Member States both in outward (EUR 136 billion) and inward (EUR 120 billion) flows, most of these being handled by special purpose entities (a particular class of enterprises created mainly for tax purposes, often empty shells or holding companies). France was the second largest EU investor and recipient with EUR 118 billion and EUR 44 billion respectively, but like almost all other Member States it registered a significant decline in FDI activities compared with 2008.

Figure 2.5.17: World FDI flows by origin, 2001–08 (billion EUR)



Source: Eurostat (bop_fdi_flows), Unctad

Figure 2.5.18: EU FDI flows and stocks 2001–09 (billion EUR) (*)



(*) The FDI flow figures for 2009 are based on preliminary data from the Member States; FDI stock data for 2009 are estimated by Eurostat.

Source: Eurostat (bop_fdi_main, bop_fdi_pos)

At the end of 2008, EU FDI stocks in non-EU countries amounted to EUR 3 253 billion, a mere 4.7 % up on 2007, and the lowest annual growth rate since 2005. The total inward positions also increased only slightly to EUR 2 421 billion in 2008, but the EU still remained a net investor in terms of FDI stocks vis-à-vis the rest of the world.

The activity structure has been relatively similar for inward and outward stocks, with services (mainly financial intermediation) being the most attractive economic sector for FDI, accounting for almost half of total EU stocks (for more details on the sector breakdown of EU FDI stocks see Statistical Annex, Table 1.48).

Figure 2.5.19: EU-27 FDI outward stocks by main destination (end-2008)

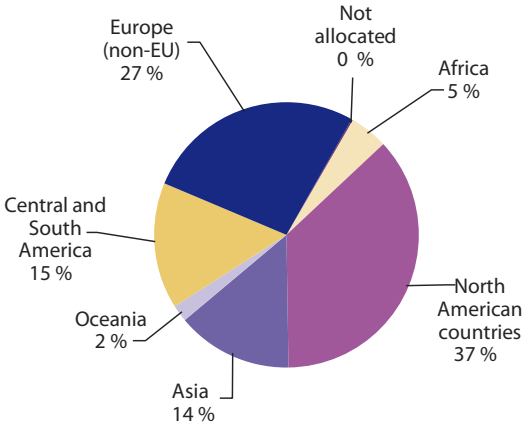
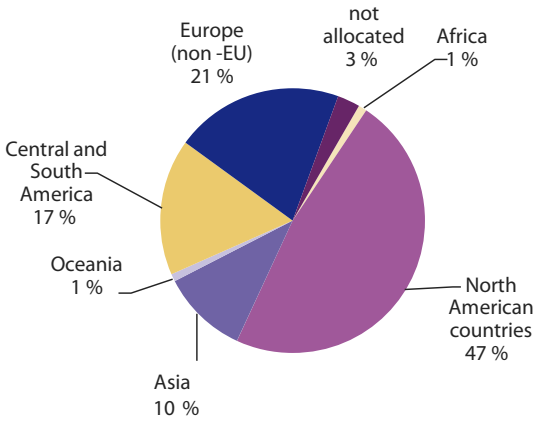


Figure 2.5.20: EU-27 FDI inward stocks by extra-EU main investor (end-2008)



Source: Eurostat (bop_fdi_pos)

As Figure 2.5.19 shows, at the end of 2008 North America was still the main destination of EU FDI stocks, worth EUR 1 198 billion, keeping its share in total extra-EU stocks steady (37 %) compared with the previous year. The lion's share of EU investment in this region was hosted by the United States (EUR 1 058 billion), where the United Kingdom continued to be the main investor among the EU Member States, holding EUR 252 billion.

By the end of 2008, the European countries not belonging to the EU together attracted EUR 875 billion of EU FDI, an annual increase of 8 %. The main destination of these investments was Switzerland with EUR 454 billion, followed by Russia with EUR 92 billion. The Netherlands and France remained the most important EU investors in Switzerland, each holding around EUR 40 billion at end-2008, while Germany had FDI stocks of EUR 20 billion in Russia — the biggest figure among the EU Member States.

The combined share of South and Central America slightly decreased compared with previous years to 15 % at the end of 2008, due mainly to the decline of EUR 25 billion (5 %) since end-2007.

EU stocks in Asia rose by 12 % in 2008 and amounted to EUR 462 billion at the end of the year. The main destination of EU investments in this region was still China (including Hong Kong), with EUR 136 billion (4 % of total EU FDI stocks abroad), followed by Singapore (EUR 81 billion), which overtook Japan (EUR 76 billion) in 2008. Of the EU Member States, the United Kingdom was the main player in Asia, holding EUR 86 billion, targeting mainly China (including Hong Kong) and Singapore, while France was the largest EU investor in Japan (EUR 15 billion).

At the end of 2008, the EU held FDI stocks in Africa worth EUR 153 billion, similar to the previous years. The Republic of South Africa remained the main destination with EUR 46 billion. North African countries accounted for approximately one third (EUR 47 billion) of total EU stocks in Africa.

Oceania kept its share at around 2 % of total extra-EU FDI stocks, although this region registered a decrease of EUR 8 billion (11 %) in EU stocks from the previous year, mainly due to the significant decline in the level of EU investment in Australia.

The geographical structure of inward FDI stocks in the EU has been stable for the past few years. At the end of 2008 (Figure 2.5.20), it was dominated by North America (EUR 1 151 billion). The United States' stocks have remained almost unchanged since the previous year at EUR 1 046 billion, representing more than 90 % of EU stocks originating from that region. The main target country was the United Kingdom (EUR 200 billion).

Europe (non-EU) was still the second largest holder of FDI stocks in the EU, with EUR 498 billion, with the biggest amount originating from Switzerland (EUR 306 billion), 17 % of it placed in Germany and 16 % in France. Sweden was the main EU host country of FDI stocks of Norway (EUR 12 billion), while Germany was the main EU destination of Russian FDI stocks (EUR 4 billion).

The share of EU FDI inward stocks from South and Central America increased substantially to 17 % in 2008 (14 % in 2004), the main investors being Brazil (EUR 42 billion) and Mexico (EUR 11 billion).

Asia held FDI stocks of EUR 255 billion in the EU at the end of 2008, up 11 % since the previous year. Almost half of this originated from Japan (EUR 117 billion), with the United Kingdom as the main EU destination (EUR 30 billion).

The shares of Africa and Oceania in EU inward stocks remained quite low, at around 1 % each.

2.5.6. Outward foreign affiliates statistics (FATS)

The European Union is one of the world's biggest investors, and foreign affiliates of European companies play a very important role in the global economy. Outward foreign affiliates statistics (FATS), which can be defined as describing the activity of foreign affiliates abroad controlled by the compiling economy, are therefore increasingly relevant in formulating European economic policies, as they provide information on the role that European capital groups play in the world's economy. They are also becoming one of the instruments for analysing economic globalisation processes.

Outward FATS is a relatively new statistical domain in the EU. The first reference year where Member States had a legal obligation to provide data on the number of enterprises (affiliates), their turnover and employment was 2007. All earlier data were provided on a voluntary basis, and the country coverage was highly incomplete. At present 23 Member States report FATS and the full coverage is expected in 2011 for the reference year 2009. Only then it will be possible to analyse EU aggregated data.

In 2007, out of 23 Member States with available data ([21]), Germany had the biggest share in terms of the number of enterprises, persons employed and turnover of foreign affiliates outside the EU, followed by France, the Netherlands and Italy.

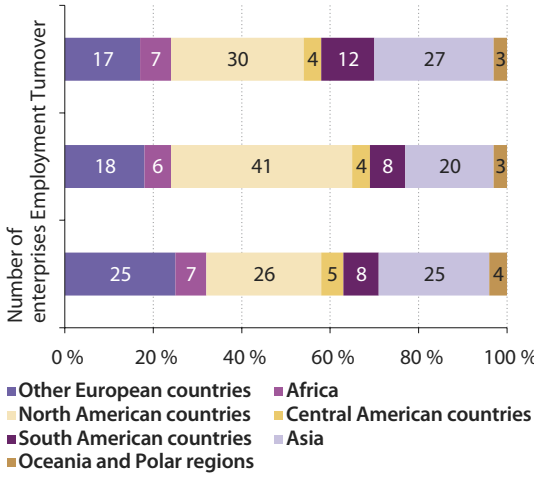
In general, EU foreign affiliates are more active inside than outside the EU. For the reference year 2007, 59 % of foreign affiliates of EU-based parent companies were resident in the EU too (ranging from 20 % for Slovenia to 81 % for the Czech Republic and 82 % for Estonia). In terms of employment the share of these intra-EU foreign affiliates was 53 % (from 12 % for Cyprus to 75 % for Ireland and 76 % for the Czech Republic) and for turnover, intra-EU affiliates accounted for 57 % of total foreign affiliates' turnover (25 % for Slovenia to 93 % for the Czech Republic, followed by 86 % for Ireland and 85 % for Slovakia). For most of the Member States with any data, foreign affiliates were more active inside the EU than outside for all three FATS variables. Exceptions were Slovenia, where the total number, turnover and employment of affiliates outside the EU were higher than those based in the other EU countries (80 %, 75 % and 86 % respectively). This phenomenon was true to a lesser extent also for Cyprus (employment and turnover), Hungary (employment), Portugal (employment) and Sweden (turnover).

Most foreign affiliates operate in general in the neighbouring countries of parent companies (France and the Netherlands for Belgium, Slovakia for the Czech Republic, the United Kingdom for Ireland, Lithuania and Estonia for Latvia, Romania and Slovakia for Hungary, Germany for Austria, Spain for Portugal or Sweden for Finland). Only for German foreign affiliates is the biggest country of destination for all three variables the United States. The USA is also the biggest destination in terms of both number of enterprises and employment for Sweden. Moreover, Croatia is an important host country for affiliates of parent companies based in Slovenia and Hungary, and Serbia for enterprises from Bulgaria and Slovenia.

The highest level of activity of European affiliates outside the European Union is registered in North America, with 26 % in terms of number of enterprises, 30 % of employment and 41 % of turnover, with the United States representing 93 % of the total turnover in North America (see Figure 2.5.21).

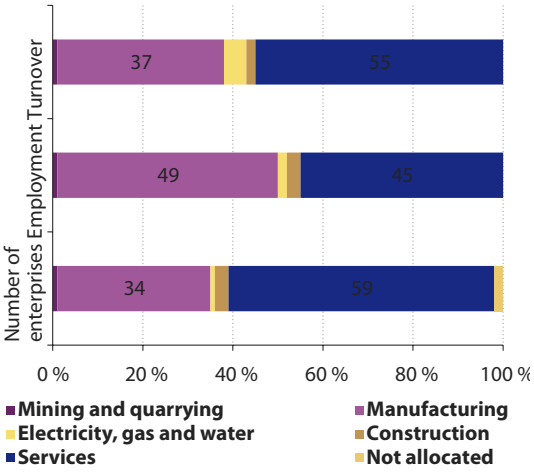
([21]) Spain, France, Luxembourg and the United Kingdom have complete derogations for 2007 and 2008 data and Poland for 2007 data.

Figure 2.5.21: Number of enterprises, number of persons employed and turnover (*)



(*) In foreign affiliates located outside the EU in 2007 for 23 reporting EU Member States.

Figure 2.5.22: Foreign affiliates inside and outside the EU by economic sector for 23 reporting EU Member States (2007)



Source: Eurostat (bop_fats_out_ent, bop_fats_out_e, bop_fats_out_t)

In terms of types of activities, **services** is the sector where most of the EU foreign affiliates are active and create the biggest turnover, with 59 % of the total number of enterprises and 55 % of total turnover, followed by **manufacturing**, which represents 34 % in terms of firms and 37 % in terms of turnover (see Figure 2.5.22). For the number of persons employed, the highest share was recorded in **manufacturing** with 49 %, compared with 45 % in **services**. This is due to employment levels in manufacturing in affiliates controlled from Bulgaria, the Czech Republic, Germany, Ireland, Slovakia, Finland and Sweden, while for the other countries employment in services was larger.

For most countries **trade and repairs** has the greatest share in total services for the three characteristics — with some exceptions. **Real estate and business activities** is the largest services sector for affiliates of parent companies based in Belgium and Cyprus (in terms of number of affiliates and persons employed) and for Sweden (employment), while **financial intermediation** is the most important sector in terms of number of enterprises for Ireland, for number of persons employed for Greece, Hungary, Austria and Portugal, and for turnover for Cyprus and Portugal.

The impact of foreign affiliates on employment differs considerably from country to country, being substantial in some countries and almost negligible in others. Among the EU countries providing FATS data, German affiliates are by far the biggest employer abroad, representing 60 % of total employment of EU affiliates abroad. But compared with total domestic employment, Sweden and Cyprus have the highest ratio with the total number of persons employed in foreign affiliates around 25 % of total employment in these countries. By contrast, this ratio is very small (less than 1 %) for such countries as Latvia, Slovakia, the Czech Republic and Bulgaria ([22]).

([22]) For Bulgaria only data on extra-EU affiliates could be taken into account in this analysis.

2.6. Labour market

2.6.1. Introduction

In 2009 the economic crisis hit the labour markets full-on. The 2008 (annual) data commented on in the previous edition of this publication were already showing signs of deterioration, but not in every country, and the (still positive) first half of 2008 partly neutralised — in the annual averages — the worrying developments during the second half of 2008. Instead, in 2009 all EU-27 Member States were affected, some dramatically so. At the time of writing, the labour market indicators give no sign of recovery yet, though the pace of decline has moderated.

The crisis hit Member States with varying timing and intensity, but with a broadly common pattern: unemployment increasing (in some countries surging), employment plunging (generally by less than the unemployment increase), employed people working fewer hours and/or increasing part-time work. More men than women are losing their jobs, and young people are particularly badly affected.

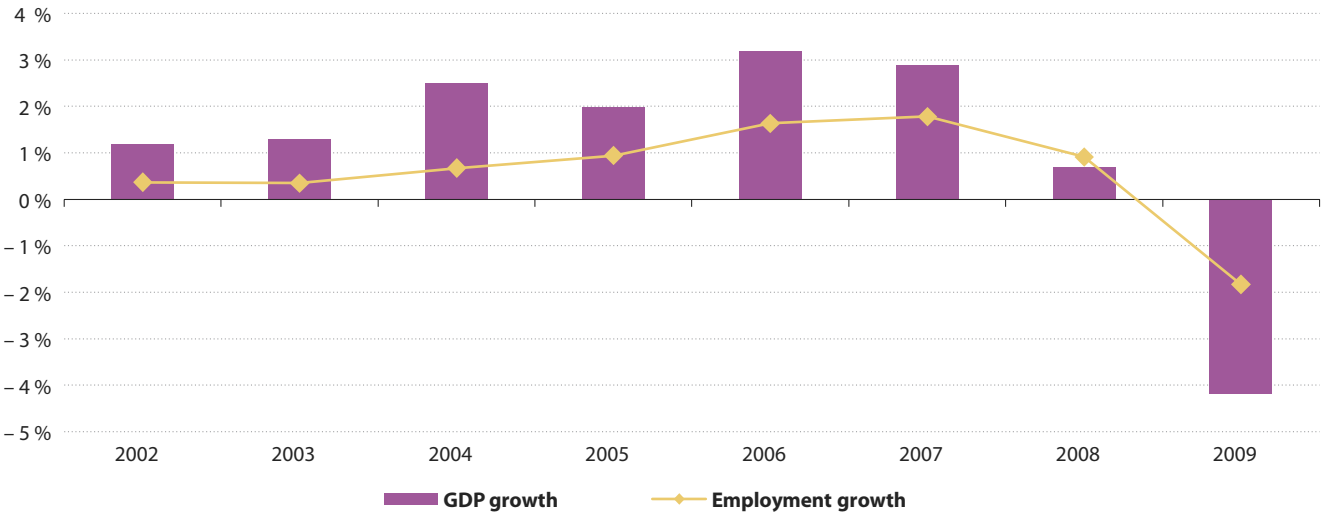
While the employment plunge and unemployment surge are the most visible consequences of the crisis, there is another development unfolding: long-term unemployment will probably increase substantially over the next quarters. Indeed, long-term unemployment seems set to be the most enduring legacy of the economic crisis in the labour market.

2.6.2. Employment growth and employment rates

Figure 2.6.1 shows changes in annual GDP and employment in recent years for the EU–27. The year 2007 marked the end of the previous expansion period, both in terms of GDP and employment, while 2008 was the deceleration year and 2009 the year of contraction. The GDP slowdown in 2008 led to slower employment growth too. Exceptionally, in 2008 employment grew more than the GDP, due to employment inertia against production hits. This resilience also points to the success of governments and social partners' measures to keep people in work, in many cases by working fewer hours or for lower pay or being laid off.

Figure 2.6.1 shows that 2008 was a transition year. Employment still grew by 0.9 % in the EU-27 and by 0.7 % in the EA–16 ([23]). In 2009, though, both GDP and employment growth turned negative; employment decreased by 1.8 % in the EU-27 and by 1.9 % in the EA–16.

Figure 2.6.1: EU-27 employment and GDP growth, 2002–09 (%)



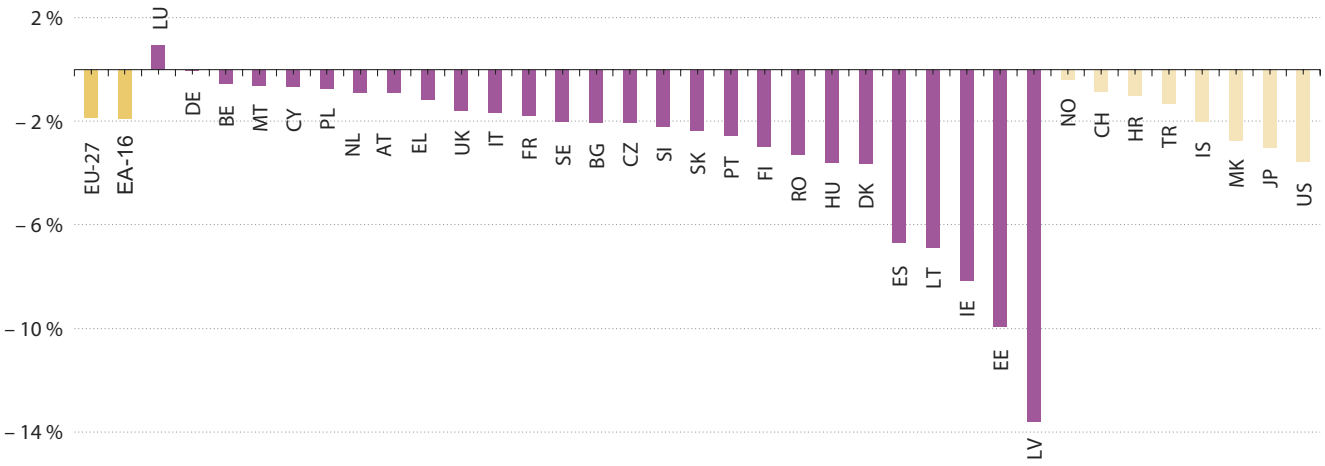
Source: national accounts (nama_gdp_k and nama_aux_pem)

([23]) Unless otherwise stated, employment in this chapter is measured as the number of persons employed or (the equivalent number of) jobholders. Employment can also be measured in jobs or in full-time equivalents. One jobholder could work in two or more jobs. Full-time and part-time jobs can be transformed into full-time equivalents. Hence these units are different yardsticks for measuring employment.

In 2009 all Member States had negative employment growth (see Figure 2.6.2), with the sole exception of Luxembourg (+ 0.9 %). All candidate countries and EFTA countries also had negative employment growth. Most affected in terms of employment growth were Latvia (– 13.6 %), Estonia (– 9.9 %), Ireland (– 8.2 %), Lithuania (– 6.9 %) and Spain (– 6.7 %).

On average, 222.2 million men and women were in work in the EU-27 in 2009. This represented a net decrease ([24]) of 4.1 million over the previous year, when employment peaked in the EU. In the EA–16 the decrease was 2.8 million persons since 2008, making a total of 145 million persons in 2009.

Figure 2.6.2: Employment growth, 2009 (%)



Source: national accounts (nama_aux_pem)

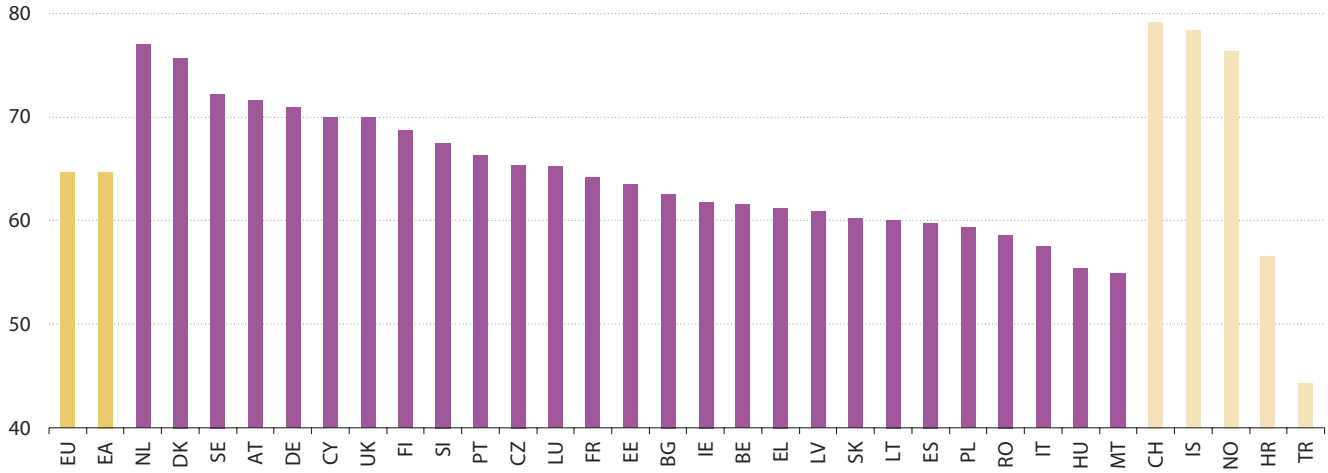
Obviously, the absolute number of employed persons decreased most in the big Member States, especially in Spain (– 1.4 million), followed by the United Kingdom (– 0.5 million), France (– 0.5 million) and Italy (– 0.4 million). Among the big Member States, only Germany and Poland were spared. Romania and Turkey saw the number of employed persons decrease by 0.3 million each.

Employment decreased not only in absolute number of persons but also in proportion to the population of working age, i.e. the employment rates (see Figure 2.6.3). The employment rates neutralise the effect of population changes over time (e.g. due to migration) and make it easier to compare countries of differing sizes.

The EU-27 employment rate for persons aged 15–64 as measured by the European Union labour force survey (EU LFS) fell in 2009 to 64.6 %, down from 65.9 % in 2008. This is a decrease of 1.3 percentage points (pp), making it the first time the EU-27 employment rate has fallen since Eurostat started estimating this indicator for the EU-27.

([24]) Net decrease' means the number of persons who entered employment minus the persons who left employment.

Figure 2.6.3: Employment rates by Member State, 2009 (%)



Source: EU LFS (lfsi_emp_a)

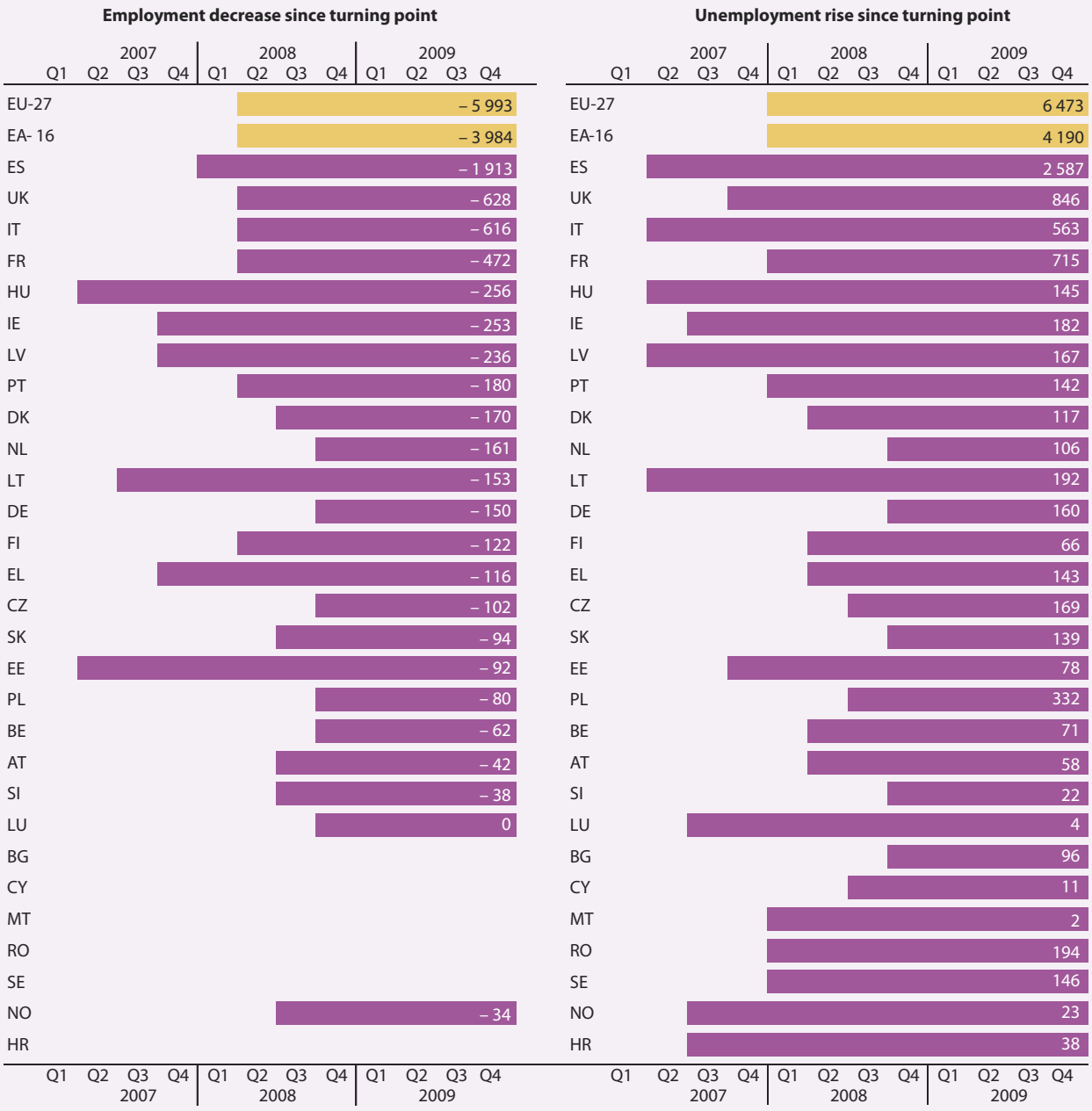
The Member States reporting the biggest declines in the employment rate in 2009 were Latvia (– 7.7 pp, down to 60.9 % in 2009), Estonia (– 6.3 pp, down to 63.5 %), Ireland (– 5.8 pp, down to 61.8 %), Spain (– 4.5 pp, down to 59.8 %) and Lithuania (– 4.2 pp, down to 60.1 %). Iceland reported a 5.3 pp fall, to 78.3 % in 2009. Employment rates grew in only two Member States: Luxembourg + 1.8 pp (up to 65.2 % in 2009) and Poland + 0.1 pp (59.3 % in 2009).

Annual EU-27 figures conceal highly varying performances within the year and between countries. Box 2.6.1 provides some insight on timing and intensity of the crisis, based on quarterly data.

BOX 2.6.1: THE TIMING AND DEPTH OF THE CRISIS IN THE EUROPEAN LABOUR MARKETS

The economic crisis affected each EU Member State's labour market with different timing and intensity. Annual and EU averages risk giving an excessively simple picture by ironing out the differences. The two charts below show the country situations based on quarterly data for employment on the left and unemployment on the right.

The chart on the next page shows when the crisis hit employment (***source:*** national accounts), i.e. the national turning point based on seasonally adjusted data. The bars extend throughout 2009Q4 as the labour markets have not yet recovered. Employment peaked and started its downturn as early as 2007Q2 in some countries (EE and HU) and as late as 2008Q4 in others (DE, NL, CZ, PL and BE). This means that the onset of the employment crisis in Europe spreads over 1½ years, a fairly long period. The turning point for the EU average was 2008Q2. The figures inside the bars report the change of employment levels since the national turning point up to 2009Q4 (thousands of persons). Spain is worst affected, with almost 2 million employed persons less. Hungary, Ireland and the Baltic countries have been heavily affected relative to their size. National accounts seasonally adjusted employment data are not available for some countries.



Source: National accounts, seasonally adjusted data
No seasonally adjusted data available for BG, CY, MT, RO, SE nor HR
Table: namq_aux_pem

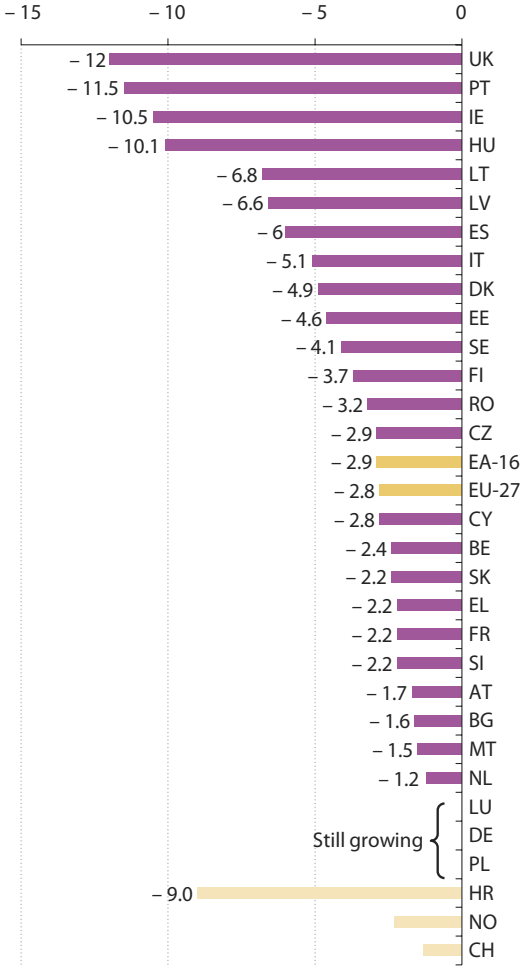
Source: EU LFS, seasonally adjusted data
Table: une_nb_q

The chart on the right shows unemployment (***source:*** EU LFS). The timing of the downturn is generally not the same as for employment. In most countries unemployment started to rise earlier, generally one quarter earlier (e.g. EU average), although it was as much as five quarters earlier in LU and three in ES. Unemployment changes had highly varying sustained intensity: it surged in ES whereas it increased mildly in LU. Unemployment was hit later than employment in EL, SK and SI.

In most countries, the rise in unemployment is higher than the fall in employment (the EU average shows it too). This is because many economically inactive persons start to seek work and become available on the labour market if the family income is at risk. Hence not all persons joining the ranks of the unemployed are previously employed persons who have recently lost their jobs. The figures for employment and unemployment changes in the two charts above must be treated with caution as they do not correspond to the same time period and are based on different sources. The publication ***European economic statistics — 2008edition***, Box 2.6.2 on page 115 explains these data sources in more detail.

A new insight on the magnitude of the crisis is delivered by the 'S-time distance method'. It works as follows. The negative employment developments in 2008 and 2009 made the employment rates revert to the levels of several years ago. How far back is quantified by the S-time distance. Each country regresses a different number of years, as shown in Figure 2.6.4.

Figure 2.6.4: Effect of the crisis on employment rates, number of years reversion



Source: EU LFS (derived from lfsi_emp_a)

According to this measure, the EU country most affected is the United Kingdom, which fell back to the employment rates of 12 years ago. The UK is followed by Portugal, Ireland and Hungary, each reverting to the situation more than 10 years back. Next comes a group with Lithuania, Latvia and Spain, going back some 6–7 years. Those countries had different circumstances. The UK, Ireland, Lithuania, Latvia and Spain all had strong employment creation over the last decade (some of them linked to migration) and are now quickly undoing the progress made. Portugal and Hungary had limited employment growth in recent years, hence any crisis hit puts them back many years. The less affected countries are Luxembourg, Germany and Poland, which are still growing in terms of employment rates. The average EU-27 step back is 2.8 years, slightly less than the 2.9 years for the EA–16.

This S-time distance measure has some interesting properties: it takes account of each country's past and it is neutral to country size. S-time distance reported here is based on employment rates. Results based on employment levels rank countries similarly (albeit not identically), except for countries with strong migration flows like Poland, Romania, the UK and Spain, or very small countries.

A look at EU-27 employment growth by industry in 2009 shows shrinking employment in all activities except public administration and other services (NACE Rev. 1.1 L–P), which grew by + 1.2 %. The biggest decreases were in construction (NACE F), down by 6.4 %, and manufacturing (NACE C–E), down by 5.0 %. Financial services (NACE J–K) and trade (NACE G–I) decreased by 1.9 %. Agriculture (NACE A–B) decreased less than in previous years, i.e. by 1.4 %. Figure 2.6.5 compares the growth patterns in 2009 with those for the averaged period 2002–07 (2008 is excluded from this comparison as being a transition year).

In spite of the important changes in 2009, EU employment distribution by activity does not deviate dramatically from previous years. In 2009, 70.3 % of persons employed in the EU-27 worked in service activities (+ 3.4 pp since 2002), 16.9 % in manufacturing other than construction (– 2.4 pp since 2002), 7.2 % in construction (+ 0.3 pp) and the remaining 5.7 % in agriculture, forestry and fisheries (– 1.3 pp). In the EA–16, the share of services in 2009 was 72.7 % (+ 3.4 pp since 2002), 16.4 % in manufacturing other than construction (– 2.4 pp since 2002), 7.1 % in construction (– 0.3 pp) and 3.8 % in agriculture (– 0.7 pp).

Figure 2.6.5: Employment growth by activity, EU-27, 2002–09 (%)

Source: Eurostat (nama_nace06_e)

These European averages conceal significant diversity among Member States, resulting from differences in economic structure. Table 2.6.1 shows the Member States reporting the highest and lowest share of employment in each main activity group. It is interesting to note that the Member State with the highest employment share in construction in 2009 is Luxembourg, a country hardly affected by the crisis. In previous years Ireland had the highest share in this activity.

Table 2.6.1: Employment by industry and Member State, share of total employment, 2009

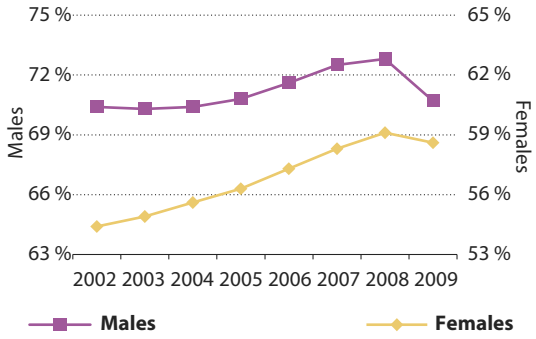
NACE	EU27 average	Lowest	Highest
Agriculture, hunting, forestry and fishing	5.70%	Luxembourg (1.5%)	Romania (29.8%)
Total industry (excluding construction)	16.90%	Cyprus (10.2%)	Czech Rep (29.3%)
Construction	7.20%	Germany (5.5%)	Luxembourg (10.9%)
Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods; hotels and restaurants; transport, storage and communication	25.50%	Romania (19.4%)	Cyprus (34.3%)
Financial intermediation; real estate, renting and business activities	15.20%	Romania (4.2%)	Luxembourg (28.7%)
Public administration and defence, compulsory social security; education; health and social work; other community, social and personal service activities; private households with employed persons	29.70%	Romania (15.9%)	Sweden (39.0%)
Total	100%		

NB: CZ, PL and RO data are for 2008.

Source: Eurostat (nama_nace06_e)

The crisis hit men harder than women (in terms of job losses). Male employment rates went down significantly more than those of females in 2009 (see Figure 2.6.6). The EU-27 female employment rate decreased to 58.6 %, which is 0.5 pp less than in the previous year. The male rate fell to 70.7 %, down 2.1 pp. These gender-related developments clearly mirror the job cuts by economic activity, as men tend to work in areas that have been harder hit by the crisis, like construction and manufacturing, whereas proportionally more women work in public administration, health and education services, in which employment actually grew in the EU-27 during 2009.

Figure 2.6.6: EU-27 employment rates by gender, 2002–09 (%)



Source: EU LFS (lfsi_emp_a)

Although circumstantial, recent developments are shaping the participation of women in employment: before the crisis they were finding more jobs, now they are weathering the crisis better. This is helping to close the employment rate gender gap, i.e. the distance between the two lines in Figure 2.6.6: the EU-27 gap closed from 13.7 pp in 2008 to 12.1 pp in 2009. Given the relation between the (sectors hit by the) crisis and employment by gender, it is hardly surprising that the Member States where the employment rate gender gap narrowed most in 2009 were among those worst affected by the crisis: Latvia (– 6.6 pp from 2008 to 2009, down to an employment rate gap of only 0.1 pp in 2009), Estonia (– 6.2 pp down to a gap of 1.1 pp), Ireland (– 5.8 pp down to a gap of 8.9 pp), Spain (– 4.8 pp down to a gap of 13.8 pp). The Member State with the narrowest employment gender gap in 2009 is Latvia (0.1 pp), followed by Estonia (1.1 pp) and Finland (1.6 pp). The gap is biggest in Malta (33.8 pp), Greece (24.6 pp) and Italy (22.2 pp).

Older workers (aged 55–64) were affected no worse by the crisis than younger workers. In fact, the opposite was true: in many Member States employment rates of people aged 55–64 rose in 2009, most markedly in Luxembourg (+ 4.1 pp up to 38.2 %), Slovenia (+ 2.8 pp up to 35.6 %), Germany (+ 2.4 pp up to 56.2 %) and the Netherlands (+ 2.1 pp up to 55.1 %). The EU-27 average also increased by 0.4 pp, going up to 46.0 %. Even in countries where the 55–64 employment rates decreased, the impact was less dramatic than for other workers, e.g. Latvia (– 6.2 pp compared with – 7.7 pp for the 15–64 age group) or Ireland (– 2.7 pp compared with – 5.8 pp for people aged 15–64).

Instead, young workers were clearly more affected than others. Indeed, employment rates of people aged 15–24 fell in every Member State except Luxembourg, where it rose by 2.9 pp to reach 26.7 % in 2009. The EU-27 average decreased by 2.4 pp, going down to 35.2 %. Youth employment rates decreased most in Ireland (– 10.5 pp down to 35.4 %), Latvia (– 9.5 pp down to 27.7 %) and Spain (– 8.0 pp down to 28.0 %). They fell least in Romania (– 0.3 pp to 24.5 %), Poland (– 0.5 pp to 26.8 %) and Greece (– 0.6 pp to 22.9 %).

2.6.3. Professional status and main job features ([25])

Most workers in Europe are employees rather than self-employed: at least 75 % of non-agricultural jobholders in all Member States in 2009 were employees ([26]). The share of employees in the EU-27 was 87.7 % and 87.0 % in the EA–16. These shares are extremely stable over time because the number of employees dwarfs the number of self-employed persons and, given the respective weights in total employment, dramatically different growth rates for the self-employed would be needed to have a significant impact on the shares.

([25]) All the information in this section refers only to main jobs, unless otherwise stated. This is because the LFS does not gather information on certain of the variables analysed here for secondary jobs. If secondary jobs are left out of consideration, the number of persons employed (i.e. jobholders) and jobs is the same. The wording of this section is focused on the jobholders, but occasionally for the sake of simplicity and clarity it will refer to jobs.

([26]) The shares in this paragraph exclude agriculture to eliminate the possible spurious effect of people not in real farming jobs but spending a few hours raising agricultural products purely for own-consumption. Most of them are women. Statistics record them as self-employed (or unpaid family workers) in agriculture, but this kind of labour clearly has a different economic significance from other self-employment in manufacturing and services.

Excluding employment in agriculture, employees and self-employed jobholders had similar (negative) growth in 2009: – 1.8 % and – 2.0 % in the EU-27, respectively. The corresponding growth in the EA–16 was also – 1.8 % and – 2.0 %. There is no significant evidence that the crisis has hit employees harder than self-employed people (or vice versa), in terms of the number of people losing their jobs.

Table 2.6.2: Part-time (PT) employment in 2009 and change in part-time employment before and after the crisis (Member States ranked by 2009 part-time growth) (*)

	Part-time in 2009 (% employees)	Part-time growth 2009 (pp)	Average PT growth 2002–07
EU–27	18.8	0.6	0.3
EA–16	20.0	0.5	0.6
EE	10.5	3.3	0.0
IE	21.2	2.6	0.1
LV	8.9	2.6	– 0.7
SI	10.6	1.6	0.5
LT	8.3	1.6	– 0.2
DK	26.0	1.4	0.7
AT	24.6	1.3	0.7
NL	48.3	1.0	0.8
HU	5.6	1.0	0.1
SK	3.6	0.9	0.1
UK	26.1	0.8	0.0
ES	12.8	0.8	0.6
BE	23.4	0.8	0.6
FI	14.0	0.7	0.3
CY	8.4	0.6	– 0.2
CZ	5.5	0.6	0.0
FR	17.3	0.4	0.2
EL	6.0	0.4	0.3
SE	27.0	0.4	0.7
DE	26.1	0.2	1.0
LU	18.2	0.2	1.2
IT	14.3	0.0	0.9
BG	2.3	0.0	– 0.3
RO	9.8	– 0.1	– 1.2
PL	8.4	– 0.1	– 0.2
MT	11.3	– 0.2	0.6
PT	11.6	– 0.3	0.2
IS	23.6	3.1	– 0.1
TR	11.3	2.0	0.8
NO	28.6	0.4	0.4
CH	34.6	0.3	0.3
HR	9.0	0.2	0.1

(*) Averages 2002–07 based on available data.

No data for IE (2005–07), IS (2002–03), TR (2002–06), HR (2002).

Source: EU LFS (lfsi_emp_a)

Most employment consists of full-time jobs, even though the share of part-time jobs has shown a tendency to increase. Back in 2002, 16.2 % of workers in the EU-27 classified their main job as part-time; in 2008 this rose to 18.2 %. The onset of the crisis accelerated this trend, as part-time employment allows employers to adjust to reduced labour demand while keeping jobholders on the payroll. In 2009, 18.8 % of employees in the EU-27 worked part-time (see Table 2.6.2). This is a 0.6 pp increase since 2008, as compared with an average 0.3 pp year-on-year increase during the pre-crisis period 2002–07 (2008 is excluded from this comparison as being a transition year).

There were significant pattern changes before and after the crisis (i.e. comparing averaged 2002–07 v 2009). A sharp increase in part-time work is noticeable in Estonia, Ireland, Latvia and Slovenia. Other countries maintained or reduced the growth of their share of part-time employment from previous years, like Belgium, Sweden and Germany (they all entered the crisis with part-time levels already well above the EU average). This may indicate that most countries are weathering the crisis by transforming full-time jobs into part-time jobs (meaning that the share of part-time work is increasing), whereas in a few other countries part-time workers are being dismissed proportionally more than full-timers (and hence the share decreases).

An additional piece of information is how part-time employment adjusted differently for men and women jobholders (see Table 2.6.3). In certain countries the crisis led to a steep increase in part-time male jobholders, for instance in Ireland, Lithuania, the Netherlands ([27]), Slovakia and Spain. Those countries have all low levels of part-time work, except the Netherlands, where it is mostly spread among women rather than men. In other countries, part-time work rose mostly among women (e.g. Hungary, United Kingdom, Cyprus and Turkey).

([27]) In the Dutch LFS, anyone working less than 35 weekly hours is coded automatically as a part-time worker. The figures shown here could thus partially be related to a reduction in the weekly hours worked rather than a change in full-time work status.

Table 2.6.3: Increase in part-time work by gender (pp), selected countries

	2009			Average 2002-07		
	Total	Females	Males	Total	Females	Males
IE	2.6	1.4	2.7	0.1	0.3	– 0.2
LT	1.6	0.9	2.1	– 0.2	– 0.1	– 0.3
NL	1.0	0.5	1.0	0.8	0.6	0.6
SK	0.9	0.5	1.3	0.1	0.2	0.0
ES	0.8	0.3	0.7	0.6	0.9	0.2
HU	1.0	1.3	0.6	0.1	0.1	0.1
UK	0.8	0.7	0.5	0.0	– 0.3	0.3
CY	0.6	1.1	0.4	– 0.2	– 0.4	0.0
TR	2.0	3.5	1.2	0.8	1.8	0.4

(*) Averages 2002-07 based on available data. No data for IE (2005–07), TR (2002–06)

Source: EU LFS (lfsi_emp_a)

An important factor in part-time work is whether or not it is voluntary. The involuntary part-time estimates for 2009 not being available yet at the time of writing, it is not possible to assess the full effect of the crisis ([28]). However, available data for 2008 indicate a change of trend: after several years of generalised reduction of involuntary part-time, the trend ends in 2007 and in 2008, with the crisis already affecting several countries, it turns upwards. Most affected are Slovakia (in 2007, 13.4 % of part-time workers aspired to a full-time job in 2007 compared with 23.0 % in 2008, i.e. a 9.6 pp increase) and Latvia (24.4 % in 2007 to 31.4 % in 2008, a 7.0 pp increase).

Table 2.6.4 presents the Member States with the highest increases in involuntary part-time in 2008 alongside the change in 2007. The EU-27 average reached 25.4 % of involuntary part-time in 2008, up from 24.7 % in 2007.

Table 2.6.4: Increase in involuntary part-time (PT) in 2007 and 2008 (pp), selected countries

	Increase involuntary PT in 2008 (pp)	Increase involuntary PT in 2007 (pp)
SK	9.6	– 3.5
LV	7.0	– 14.5
LU	4.2	– 4.5
ES	2.9	– 0.7
FI	2.3	– 5.1
IT	2.0	1.6
PT	1.9	4.0
FR	1.6	– 0.3
SI	1.0	– 0.3

Source: EU LFS (lfsa_eppgai)

Employment with a contract of limited duration (fixed-term employment) increased steadily in the years before the crisis, but the trend was broken in 2008 and continued downward in 2009. The EU-27 share was 13.5 % of employees in 2009, down from 14.0 % in 2008 and 14.5 % in 2007 and thus reverting to the level in 2004. The 2009 decrease was sharper in the EA–16, as fixed-term employees accounted for 15.2 % of total employees, down from 16.2 % in 2008.

Member States have very mixed trends, the EU averages being dominated by what is happening in Spain. Sixteen Member States saw a reduction in fixed-term employment, mostly in Spain, where fixed-term employment fell by 3.9 pp to 25.4 %. Other important decreases took place in Slovenia (– 1.0 pp down to 16.4 %), Sweden (– 0.8 pp down to 15.3 %), Portugal (– 0.8 pp down to 22.0 %) and Italy (– 0.8 pp down to 12.5 %). On the other hand, fixed-term employment increased in 11 Member States, most of all in Luxembourg (+ 1.0 pp to 7.2 %) and Latvia (+ 1.0 pp to 4.1 %). These developments hint at different ways of adjusting to the crisis: in some countries temporary contracts are terminated or not renewed, and hence their share decreases; in others temporary contracts increase as they replace permanent contracts. The relevance of fixed-term employment as a statistical indicator depends greatly on the particularities of national labour market legislation.

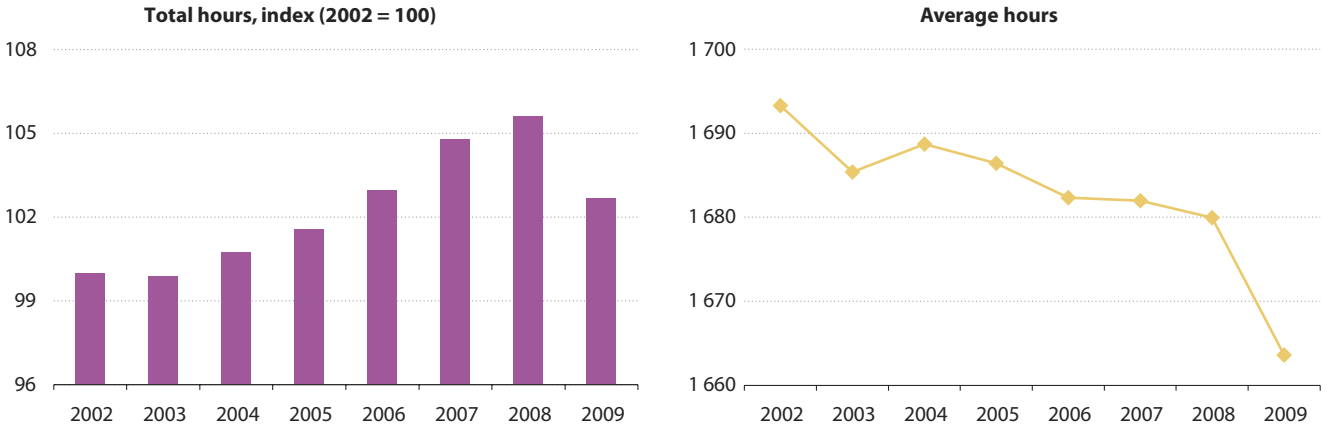
2.6.4. Working time

In terms analysing the crisis, the changes in working time in 2009 complement the picture given by part-time work.

The annual hours actually worked in the EU-27 decreased in 2009 by 2.8 %, after sustained increases in the period 2004–08. This downward trend reflects the adjustment of labour demand as output declines. In 2009 there was also a reduction in working time when measured as average hours worked per person employed: on average 1 664 hours were worked throughout 2009 in the EU-27, as compared with 1 680 in 2008 and 1 682 in 2007. The downward trend observed in recent years has therefore been maintained and has even accelerated (see Figure 2.6.7). These are national accounts estimates.

([28]) Data for 2009 are not available yet. 'Reasons for working part-time' is an annual variable, which is released later than the quarterly variables. The 2009 EU LFS data in this publication are actually averages of 2009Q1 to 2009Q4.

Figure 2.6.7: Total and average annual hours worked, EU-27, 2002–09



Source: Eurostat (nama_nace06_e)

Average hours worked per person is a more significant measure when we look at full-time/part-time status. Full-time workers had to adjust their working time more than part-time workers, especially among the self-employed. The EU LFS provides estimates of **weekly** hours worked. According to this source, EU-27 full-time workers actually worked 40.6 weekly hours in 2009, down from 41.0 hours in 2008 ([29]). The decrease is steeper among full-time self-employed persons (down to 46.2 from 46.7 in 2008) than among full-time employees (down to 39.5 hours from 39.8 in the previous year). There is also a decrease, albeit smaller, among part-time workers, from 20.0 weekly hours in 2008 to 19.9 hours in 2009. Part-time employees worked 20.0 hours in 2009, down from 20.1 in 2008, whereas part-time self-employed persons worked slightly more, up from 19.5 hours in 2008 to 19.6 hours in 2009. While these differences may look small, they matter when accumulated for all the weeks in the year and for all the persons employed. All those estimates are actual hours worked in the main job.

2.6.5. Unemployment rates and active population

Indicators of unemployment are showing the effects of the crisis even more clearly than indicators of employment. The unemployment turning point occurred before the employment one (see Box 2.6.1), more time has elapsed and the accumulated increase in the number of people unemployed is bigger than the decline in employment. In addition, many economically inactive persons join the ranks of the unemployed when they start to seek a job and become available to work.

In terms of number, in 2009, there were on average 21.4 million unemployed persons aged 15–74 in the EU-27. This is 4.7 million more than in 2008, the biggest increase on record for the EU-27. In the EA–16 there were 14.9 million unemployed, 3.0 million more than in the previous year. The increase was highest in Spain (+ 1.6 million), the United Kingdom (+ 0.6 million) and France (+ 0.5 million). In Turkey, unemployment increased by 0.8 million persons. Unemployment increased least (in absolute terms), albeit only by a few thousand persons, in Luxembourg, Malta and Cyprus. At the time of writing, unemployment is still growing throughout Europe; the most recent quarterly estimates are higher than the annual averages listed above.

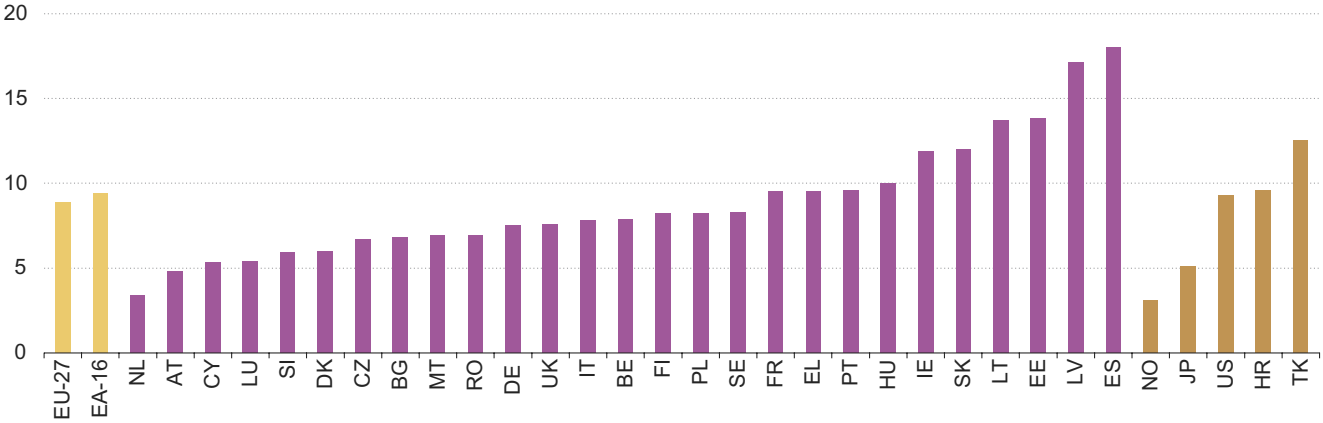
Unemployment rates, i.e. unemployed persons divided by the labour force aged 15–74, are reaching record figures in many countries (see Figure 2.6.8). Unemployment increased in every Member State, most dramatically in Latvia (+ 9.6 pp), Estonia (+ 8.3 pp), Lithuania (+ 7.9 pp), Spain (+ 6.7 pp) and Ireland (+ 5.6 pp). The unemployment rate rose least in Germany (+ 0.2 pp), Luxembourg (+ 0.5 pp), the Netherlands (+ 0.6 pp) and Belgium (+ 0.9 pp). The 2009 unemployment rates resulting from those changes are highest in Spain (18.0 %) and Latvia (17.1 %); they are lowest in the Netherlands (3.4 %) and Austria (4.8 %). The average EU-27 unemployment rate went up to 8.9 % in 2009 from 7.0 % in 2008 and 7.1 % in 2007. These are 2009 annual averages.

([29]) These weekly averages are computed only with people who worked during the reference week, i.e. they do not count people on holiday or leave. By contrast, national accounts annual hours worked estimates take account of all the employed population, even when on holiday. It follows that simply transforming the weekly (LFS) estimates into annual hours worked will not match the estimates of national accounts.

In 2009 unemployment grew faster among men than among women throughout Europe, in line with the gender differences for employment mentioned above. On average, in the EU-27 the male unemployment rate rose by 2.4 pp and the female rate by 1.3 pp; and in the EA–16 by 2.3 pp and 1.3 pp respectively. In Latvia the male unemployment rate rose by 12.3 pp and the female rate by 7.0 pp; and in Estonia by 11.1 pp and 5.3 pp respectively.

Unemployment grew significantly among young persons. The EU-27 unemployment rate for people aged 15–24 surged to 19.8 % in 2009, up from 15.5 % in 2008. This is a steep increase of 4.3 pp. For reference, the EU-27 unemployment rate of the (complementary) age group 25–74 increased by 1.7 pp, i.e. less than half. The indicator gives an alarming picture in Latvia (+ 20.5 pp, up to 33.6 % in 2009), Lithuania (+ 15.8 pp, to 29.2 %), Estonia (+ 15.5 pp, to 27.5 %), Spain (+ 13.2 pp to 37.8 %) and Ireland (+ 11.5 pp, to 24.2 %). These unemployment rates may, however, overstate how negative the situation is (see Box 2.6.2 for alternative measures).

Figure 2.6.8: Unemployment rates, 2009 (%)



Source: EU LFS (une_rt_a)

BOX 2.6.2: GAUGING THE EXTENT OF YOUTH UNEMPLOYMENT

While young people are undoubtedly badly affected by job losses from the crisis, different indicators give different pictures of how negative the situation is. The standard unemployment measure is the unemployment rate. As mentioned in the text, the EU-27 unemployment rate of people aged 15–24 surged to 19.8 % in 2009, an increase of 4.3 pp from the previous year. In the complementary age group 25–74 it increased by 1.7 pp.

The unemployment rates are however less well suited to the 15–24 age group than to other age groups or the overall working population. Note that the unemployment rates only take count of the population in the labour market. As many young people are still in education and have not yet joined the labour market, the unemployment rates do not take into account (in the denominator) a big share of the 15–24-year-olds. This means the indicator is less comprehensive and potentially less representative of the whole youth population. Moreover, unemployment rates could become too volatile and overstate the magnitude of any changes.

One way of addressing this issue is to use the unemployment ratio, which divides the number of unemployed persons by the total population in the same age group. Accordingly, the EU-27 unemployment ratio 15–24 moved from 6.9 % in 2008 to 8.7 % in 2009, a 1.8 pp increase (for comparison, the unemployment ratio 25–74 increased by 1.1 pp in the same period). Where growth in the unemployment rate 15–24 was more than double that for 25–74 (4.3 pp v 1.7 pp), the unemployment ratio increased by **only** 60 % more (1.8 pp v 1.1 pp). People in the 15–24 age group therefore look less disadvantaged with the unemployment ratio. However, the unemployment ratio is not a perfect indicator either, since it risks understating the scale of the problem: roughly speaking, if unemployment ratios say that **not too many young people** became unemployed it is also partly because a majority of them are still in education.

Finally, there is the possibility of doing a headcount of unemployed persons by age. In the EU-27, out of the 4.7 million additional unemployed in 2009 since 2008 (mentioned at the start of Section 2.6.5), 1.0 million are people aged 15–24, and the remaining 3.7 million are aged 25–74. This represents a 22 % share of newly unemployed persons, which is quite a lot. To put it in perspective, for instance, the share of **employed** persons 15–24 in the total 15–74 in 2008 was 10.2 %. If all employed persons in 2008 had had the same chance of losing their jobs irrespective of age, occupation or activity, we could expect the share of newly unemployed persons aged 15–24 to be around 10 % too (for the sake of simplicity, changes of inflows from inactivity during 2008–09 are ignored). The fact that 22 % is more than double 10.2 % shows clearly that proportionally more young employed people lost their jobs than the average. Having said that, after those changes, the share of employed persons aged 15–24 decreased only from 10.2 % of total employment for those aged 15–74 in 2008 to 9.6 % in 2009; so the blow to youth employment in 2008–09 was contained — and not just because few young people were employed in the first place.

Special comment should be reserved for long-term unemployment, i.e. those persons who have been unemployed for more than 12 months. Long-term unemployment is an indicator that takes time to absorb a hit. The 2009 statistics already show a growing trend of long-term unemployment, albeit not on a massive scale: 2009 long-term unemployment in the EU–27 was 3.0 %, up from 2.6 % in 2008 and reverting to the 3.0 % recorded in 2007.

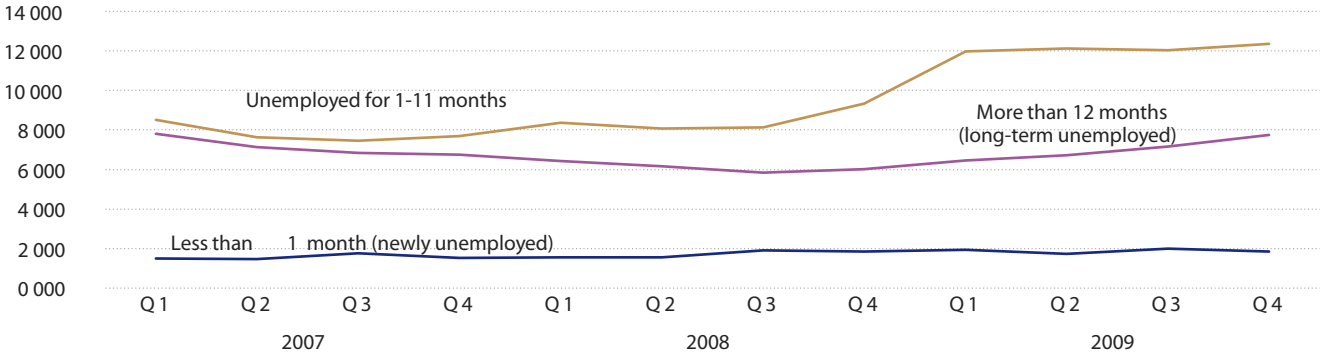
Figure 2.6.9 shows the increase in the EU-27 number of long-term unemployed persons (middle line in the figure). A change of trend is noticeable since 2008Q3, coinciding with the crisis hitting EU-27 unemployment. However, the levels in 2009Q4 are **only** back to the levels of 2007Q1. The trend in persons unemployed for less than 12 months (top line in Figure 2.6.9) indicates that the worst is yet to come. The chart shows that the downward trend of this line, i.e. unemployed for 1 to 11 months, breaks around 2007Q2, coinciding with a first wave of Member States being hit by the crisis (ES, UK, IT, HU, IE, LV and LT, see turning point for unemployment in Box 2.6.1). The trend then turns upwards and surges until 2008Q4, as gradually all the other Member States are sucked into growing unemployment and become part of the graph. By 2009Q1, all the Member States have joined, and the number of persons unemployed for 1–11 months stabilises. As time passes, in the ensuing months this 'wave' of persons will become long-term unemployed, unless they find a job or give up seeking employment or become unavailable for work.

This picture is complemented by the line at the bottom of Figure 2.6.9, which reports the persons unemployed for less than one month. It represents the inflow of newly unemployed persons. This inflow is very stable. A change can be seen in 2008Q3 from approximately 1.5 million new persons every quarter before the onset of the crisis to some 2.0 million persons since.

Note that the three lines in Figure 2.6.9 are interrelated but they do not depict the same group of people at the same time: people in the bottom line in a given quarter (persons unemployed for less than one month) will move to the top line next quarter (unemployed for 1 to 11 months) and then to the middle line four quarters later (unemployed for more than 12 months) unless they find a job in the meantime or give up searching.

As the bottom line in Figure 2.6.9 shows, the inflow of newly unemployed has remained fairly constant since 2008Q3. So the increase in the number of unemployed and long-term unemployed is due rather to the lack of new jobs: the crisis left behind enterprises with no job vacancies for the time being; unemployed persons compete for scarce job opportunities and job seeking takes longer and longer.

Figure 2.6.9: Unemployed persons by unemployment duration, EU-27, 2007–09



Source: EU LFS (lfsq_ugad)

In the future, this accumulation of long-term unemployed persons may be the most enduring consequence of the economic crisis in the labour market. In the next quarters the surge will reach the long-term and very-long-term unemployed. In the context of increasing competition for the available jobs, those who are less well prepared might well get trapped in long-term unemployment (people above middle age, persons with lower educational attainment, migrants, etc.).

3

Methodology

3.1. Principal Global Indicators — a G-20 initiative

By Roberto Barcellan, Eurostat, National Accounts — Production

3.1.1. The financial crisis and information gaps ([30])

The integration of economies and markets, as evidenced by the financial crisis spreading worldwide, highlights the critical importance of relevant statistics that are timely and internally consistent as well as comparable across countries: The international community has made a great deal of progress in recent years in developing a methodologically consistent economic and financial statistics system covering traditional datasets, and in developing and implementing data transparency initiatives. Within macroeconomic (e.g. real sector, external sector, monetary and financial, and government finance) statistics, the System of National Accounts (SNA) is the central organising framework. For macro-prudential statistics, an analogous framework is not yet in place, but there is ongoing progress in developing a consensus among data users on key concepts and indicators, including in relation to the SNA.

While the financial crisis was not the result of a lack of proper economic and financial statistics, it exposed a significant lack of information as well as data gaps on key financial sector vulnerabilities relevant for financial stability analysis. Some of these gaps affected the dynamics of the crisis, as markets and policymakers were caught unprepared by events in areas poorly covered by existing information sources, such as those arising from exposures taken through complex instruments and off-balance sheet entities, and from the cross-border linkages of financial institutions. Broadly, there is a need to address information gaps in three main areas that are interrelated.

The build-up of risk in the financial sector: The crisis demonstrated both the difficulty of capturing, and the importance of, sound indicators of the degree and location of leverage or excessive risk-taking within the system, particularly as regards unregulated or lightly regulated institutions and instruments (the 'shadow banking system') but also liquidity, credit and tail risks within the regulated sector. Related is the issue of a better understanding of where risks actually lie across institutions and markets given the growth of risk transfer instruments. Improved data are needed to construct many of these indicators and to make sure they are sufficiently timely and consistent. Information on 'soft signals', such as on lending standards, was also lacking in some instances. In addition to the need to improve the compilation and dissemination of aggregate statistics or averages, the crisis has demonstrated that attention has to be paid to ranges and distributions within the aggregates.

Cross-border financial linkages: There are important international financial network connections that have developed and are not captured by available information. For instance, the continued rapid growth of large financial institutions with a global reach has increased the importance of cross-border network links in national financial stability analysis, but information on these networks is lacking. Related is a lack of information on 'crowded trades' whereby large financial institutions — banks and non-banks — invested in the same asset class and/or funded themselves in markets where the supply of funding was subject to common directional risks.

Vulnerability of domestic economies to shocks: Data availability to monitor the behaviour and exposures of economic agents within the domestic economy needs strengthening. Such data are relevant to ascertaining (1) the vulnerabilities embedded in the balance sheet positions of financial institutions, governments, non-financial corporates, and the households sectors; (2) conditions in markets to which several of these sectors are exposed, such as the real estate markets; and (3) the financial and real sector linkages within an economy.

Indeed, the crisis also exposed fundamental weaknesses in the ability to integrate financial sector linkages into the macroeconomic models that have guided policymaking for decades. High-quality analysis is needed to understand financial crises. Indeed, the crisis has reaffirmed an old lesson — good data and good analyses are the lifeblood of effective surveillance and policy responses both at national and international

([30]) This section presents extracts from *The financial crisis and information gaps — Report to the G-20 Financial Ministers and Central Bank Governors*, October 2009.

levels. Further work on enhancing data for financial stability will contribute to developing a more robust macro-prudential policy and conceptual framework.

Moreover, the crisis has demonstrated a need to improve the communication of official statistics and advance the interaction among the academic, policy and statistical communities. The need for timely data compilations and releases is another important lesson of the crisis with some data that could have been useful in monitoring events during the crisis having only been available with a lengthy time lag. Examples include data on cross-border banking exposures and balance-sheet disclosures by large financial institutions.

Further, for efforts to improve data coverage and address gaps to be effective and efficient, the work needs to be coordinated and existing resources leveraged to the maximum extent possible. This requires action and cooperation from individual institutions, supervisors, industry groups, central banks, statistical agencies, and international institutions. Existing reporting frameworks should be used where possible. The legal framework for data collection might need to be strengthened in some countries. Also, there is a need to continue to use relevant data available in the private sector.

There are potential resource implications arising from the work programme, and it is recognised that addressing data gaps might be costly. However, data gaps are an inevitable consequence of the ongoing development of markets and institutions. These gaps are highlighted, and significant costs incurred, when a lack of timely, accurate information hinders the ability of policymakers and market participants to develop effective policy responses.'

3.1.2. The G-20 action plan: 20 recommendations

In April 2009, starting from the perceived statistical consequences of the crisis, the Group of Twenty (G-20) Finance Ministers and Central Bank Governors, and in particular its subgroup on 'Reinforcing International Cooperation and Promoting Integrity in Financial Markets', asked the IMF and the Financial Stability Forum (FSF), the predecessor of the Financial Stability Board, 'to explore gaps and provide appropriate proposals for strengthening data collection'.

According to this mandate, the IMF and the FSB called on international statistical institutions to identify the real or potential information gaps highlighted by the crisis and to address them in a systematic way.

'Experience demonstrates that closing information gaps typically involves a multi-year programme, combined with a strong institutional framework to take the programme forward, and sustained policy support.'

Under the coordination of the IMF and in strict cooperation with the FSB, the international organisations members of the Inter Agency Group on Economic and Financial Statistics — Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, the International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN), and the World Bank (WB) — analysed the G-20 information gaps and proposed concrete action to address them.

This resulted in detailed action plans related to the 20 recommendations made by the G-20 Finance Ministers and Central Bank Governors (see Table 3.1.1); they are currently being implemented (see Table 3.1.2).

Table 3.1.1: 20 recommendations of the G-20 Finance Ministers and Central Bank Governors

Recommendation	
R1	**Monitoring and Reporting** Staffs of FSB and the IMF report back to G20 Finance Ministers and Central Bank Governors by June 2010 on progress, with a concrete plan of action, including a timetable, to address each of the outstanding recommendations. Thereafter, staffs of FSB and IMF to provide updates on progress once a year. Financial stability experts, statisticians, and supervisors should work together to ensure that the program is successfully implemented.
Monitoring Risk in the Financial Sector	
R2	**Financial Soundness Indicators** The IMF to work on increasing the number of countries disseminating Financial Soundness Indicators (FSIs), including expanding country coverage to encompass all G-20 members, and on other improvements to the FSI website, including preferably quarterly reporting. FSI list to be reviewed.
R3	**Tail Risk in the Financial System and Variations in Distributions of, and Concentrations in, Activity** In consultation with national authorities, and drawing on the *Financial Soundness Indicators Compilation Guide*, the IMF to investigate, develop, and encourage implementation of standard measures that can provide information on tail risks, concentrations, variations in distributions, and the volatility of indicators over time.
R4	**Aggregate leverage and maturity mismatches** Further investigation of the measures of system-wide macroprudential risk to be undertaken by the international community. As a first step, the BIS and the IMF should complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, drawing on inputs from the Committee on the Global Financial System (CGFS) and the Basel Committee on Banking Supervision (BCBS).
R5	**Credit Default Swaps** The CGFS and the BIS to undertake further work in close cooperation with central banks and regulators on the coverage of statistics on the credit default swap markets for the purpose of improving understanding of risk transfers within this market.
R6	**Structured Products** Securities market regulators working through IOSCO to further investigate the disclosure requirements for complex structured products, including public disclosure requirements for financial reporting purposes, and make recommendations for additional improvements if necessary, taking account of work by supervisors and other relevant bodies.
R7	**Securities Data** Central banks and, where relevant, statistical offices, particularly those of the G-20 economies, to participate in the BIS data collection on securities and contribute to the further development of the BIS-ECB-IMF *Handbook on Securities Statistics (Handbook)*. The Working Group on Securities Databases to develop and implement a communications strategy for the *Handbook*.

International Network Connections	
R8	**Global Network Connections** The FSB to investigate the possibility of improved collection and sharing of information on linkages between individual financial institutions, including through supervisory college arrangements and the information exchange being considered for crisis management planning. This work must take due account of the important confidentiality and legal issues that are raised, and existing information sharing arrangements among supervisors.
R9	**Systematically Important Global Financial Institutions** The FSB, in close consultation with the IMF, to convene relevant central banks, national supervisors, and other international financial institutions, to develop by end 2010 a common draft template for systemically important global financial institutions for the purpose of better understanding the exposures of these institutions to different financial sectors and national markets. This work should be undertaken in concert with related work on the systemic importance of financial institutions. Widespread consultation would be needed, and due account taken of confidentiality rules, before any reporting framework can be implemented.
R10	**Portfolio Investment Survey – International Banking Statistics** All G-20 economies are encouraged to participate in the IMF's Coordinated Portfolio Investment Survey (CPIS) and in the BIS's International Banking Statistics (IBS). The IMF and the BIS are encouraged to continue their work to improve the coverage of significant financial centers in the CPIS and IBS, respectively.
R11	**Non-bank Financial Institutions – Funding patterns in the International Financial System** The BIS and the CGFS to consider, amongst other improvements, the separate identification of nonbank financial institutions in the consolidated banking data, as well as information required to track funding patterns in the international financial system. The IMF, in consultation with the IMF's Committee on Balance of Payments Statistics, to strive to enhance the frequency and timeliness of the CPIS data, and consider other possible enhancements, such as the institutional sector of the foreign debtor.
R12	**International investment Position** The IMF to continue to work with countries to increase the number of International Investment Position (IIP) reporting countries, as well as the quarterly reporting of IIP data. The *Balance of Payments and International Investment Position Manual*, sixth edition (*BPM6*) enhancements to the IIP should be adopted by G-20 economies as soon as feasible.
R13	**Cross-border Exposures** The Interagency Group on Economic and Financial Statistics (IAG) to investigate the issue of monitoring and measuring cross-border, including foreign exchange derivative, exposures of non-financial, and financial, corporations with the intention of promoting reporting guidance and the dissemination of data.
R14	**International Exposures of Large Non-bank Institutions** The IAG, consulting with the FSB, to revisit the recommendation of the G-22 to examine the feasibility of developing a standardized template covering the international exposures of large nonbank financial institutions, drawing on the experience with the BIS's IBS data, other existing and prospective data sources, and consulting with relevant stakeholders.

Sectoral and Other Financial and Economic Datasets	
R15	**Sector Accounts** The IAG, which includes all agencies represented in the Inter-Secretariat Working Group on National Accounts, to develop a strategy to promote the compilation and dissemination of the balance sheet approach (BSA), flow of funds, and sectoral data more generally, starting with the G-20 economies. Data on nonbank financial institutions should be a particular priority. The experience of the ECB and Eurostat within Europe and the OECD should be drawn upon. In the medium term, including more sectoral balance sheet data in the data categories of the Special Data Dissemination Standard could be considered.
R16	**Distributional Information** As the recommended improvements to data sources and categories are implemented, statistical experts to seek to compile distributional information (such as ranges and quartile information) alongside aggregate figures, wherever this is relevant. The IAG is encouraged to promote production and dissemination of these data in a frequent and timely manner. The OECD is encouraged to continue in its efforts to link national accounts data with distributional information.
R17	**Government Finance Statistics** The IMF to promote timely and cross-country standardized and comparable government finance data based on the accepted international standard, the *Government Finance Statistics Manual 2001*.
R18	**Public Sector Debt** The World Bank, in coordination with the IMF, and consulting with the Inter-Agency Task Force on Finance Statistics, to launch the public sector debt database in 2010.
R19	**Real Estate Prices** The Inter-Secretariat Working Group on Price Statistics to complete the planned handbook on real estate price indices. The BIS and member central banks to investigate dissemination on the BIS website of publicly available data on real estate prices. The IAG to consider including real estate prices (residential and commercial) in the Principal Global Indicators (PGI) website.
Communication of Official Statistics	
R 20	**Principal Global Indicators** The G-20 economies to support enhancement of the Principal Global Indicators website, and close the gaps in the availability of their national data. The IAG should consider making longer runs of historical data available

3.1.3. Structures put in place to implement the 20 recommendations

The list of recommendations represents a challenging programme to implement. Those recommendations that strengthen existing initiatives can continue to move forward, albeit with a new sense of urgency, but for new initiatives, a sense of relative priority is needed.

The institutional structures through which the programme can be guided and carried out have been recently established, not least to help meet the needs of coordination, leverage resources, and minimise costs. Some of the key structures are listed below.

— The Financial Stability Board and the International Monetary Fund, charged with working together to produce the reports to the G-20 Ministers of Finance and Central Bank Governors.

— The Interagency Group on Economic and Financial Statistics (IAG) was established at end-2008 to coordinate work on the improvement of economic and financial statistics (methodologies and data collection) among international agencies. Members of the IAG are the Bank for International Settlements (BIS), the European Central Bank (ECB), Eurostat, the IMF (chair), the OECD, the UN, and the World Bank.

— In June 2009, the FSB established the Standing Committee on Assessment of Vulnerabilities, to assess and monitor vulnerabilities in the global financial system, and the Standing Committee for Supervisory and Regulatory Cooperation to address coordination issues that arise among supervisors and regulators.

— The IMF, in cooperation with the FSB, in January 2009, established a Roundtable Forum for enhancing collaboration on financial stability analysis (Roundtable Forum).

— A number of other long-standing institutional arrangements can also be used to run the work programme, such as, but not limited to, the IMF Committee on Balance of Payments Statistics (Bopcom), the Committee on the Global Financial System (CGFS), the Inter-Secretariat Working Group on National Accounts (ISWGNA), the Inter-Agency Task Force on Finance Statistics (TFFS), and the Working Group on Securities Databases (WGSD).

These institutional structures should be utilised to ensure that national agencies involved in collecting and using data play their part in implementing the key recommendations set out above.

3.1.4. The role of official statistics and official statisticians

One of the key elements in implementing the G-20 recommendations, and a fundamental factor for the quality of the Principal Global Indicators (see next section), is the commitment of national statistical authorities to the G-20 recommendation targets. To achieve them, the strategy followed by the international organisations has been to build upon existing initiatives and data collection systems and to urge progress in the less advanced and quite new areas. Best practices have been derived from successful projects over recent years, and emphasis has been put on achieving appropriate coverage of the relevant statistics and international harmonisation.

The awareness of the national statistical authorities has been raised through direct contacts between the international organisations in charge of the different thematic areas and their correspondents in the G-20 countries, and with a dedicated senior officials' conference (Basel, April 2010). These initiatives aimed to ensure that the action plans and timetables were informed by a broad range of expertise.

Attention has also been devoted to coordinating the G-20 initiatives with other action undertaken by the members of the IAG, in particular with the three seminars (Ottawa 2009 ([31]), Scheveningen 2009 ([32]) and the forthcoming Moscow 2010) on the effects of the financial and economic crisis on rapid estimates and business cycle indicators.

([31]) International Seminar on Timeliness, Methodology and Comparability of Rapid Estimates of Economic Trends, 27–29 May 2009, Ottawa, Canada.

([32]) International Seminar on Early Warning and Business Cycle Indicators, 16–18 December 2009, Scheveningen, the Netherlands.

Table 3.1.2: Overview of the 20 recommendations and their advancement status

	Conceptual/statistical framework needs development		Conceptual/statistical frameworks exist and ongoing collection needs enhancement	
	Recommendation	Responsibility	Recommendation	Responsibility
Build-up of risk in the financial sector	R3 (Tail risk in the financial system and variations in distributions of, and concentrations in, activity)	IMF	R2 (Financial Soundness Indicators (FSIs))	IMF
	R4 (Aggregate leverage and maturity mismatches)	BIS and IMF	R5 (Credit default swaps)	CGFS and BIS
	R6 (Structured products)	IOSCO	R7 (Securities data)	BIS, ECB and IMF
Cross-border financial linkages	R8 and R9 (Global network connections and systemically important global financial institutions)	FSB and IMF	R10 and R11 (International banking statistics (IBS) and the coordinated portfolio investment survey (CPIS))	BIS, CGFS and IMF
	R13 and R14 (Financial and non-financial corporations cross-border exposures)	IAG consulting with FSB	R12 (International investment position (IIP))	IMF
Vulnerability of domestic economies to shocks	R16 (Distributional information)	OECD and Eurostat, in cooperation with the ECB	R15 (Sectoral accounts)	IAG led by IMF
			R17 (Government finance statistics)	IMF
			R18 (Public sector debt)	World Bank IATFFS
			R19 (Real estate prices)	ISWGPS BIS, IAG
Improving communication of official statistics			R20 (Principal Global Indicators)	IAG

3.1.5 Principal Global Indicators website

The crisis highlighted the fact that though most of the statistical indicators needed to assess the developing economic and financial situation were being produced regularly by countries, more needs to be done to ensure the accessibility and comparability of countries' figures in an international context.

Starting from these considerations, G-20 recommendation No 20 aims to enhance the communication of official statistics. The Inter-Agency Group on Economic and Financial Statistics (IAG) thereupon set up a website with data for the Group of 20 (G-20) countries, to facilitate the monitoring of economic and financial developments for these systemically important economies: the Principal Global Indicators website ([33]).

The site is hosted by the IMF, and is a joint undertaking of the IAG: Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, the International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN), and the World Bank (WB).

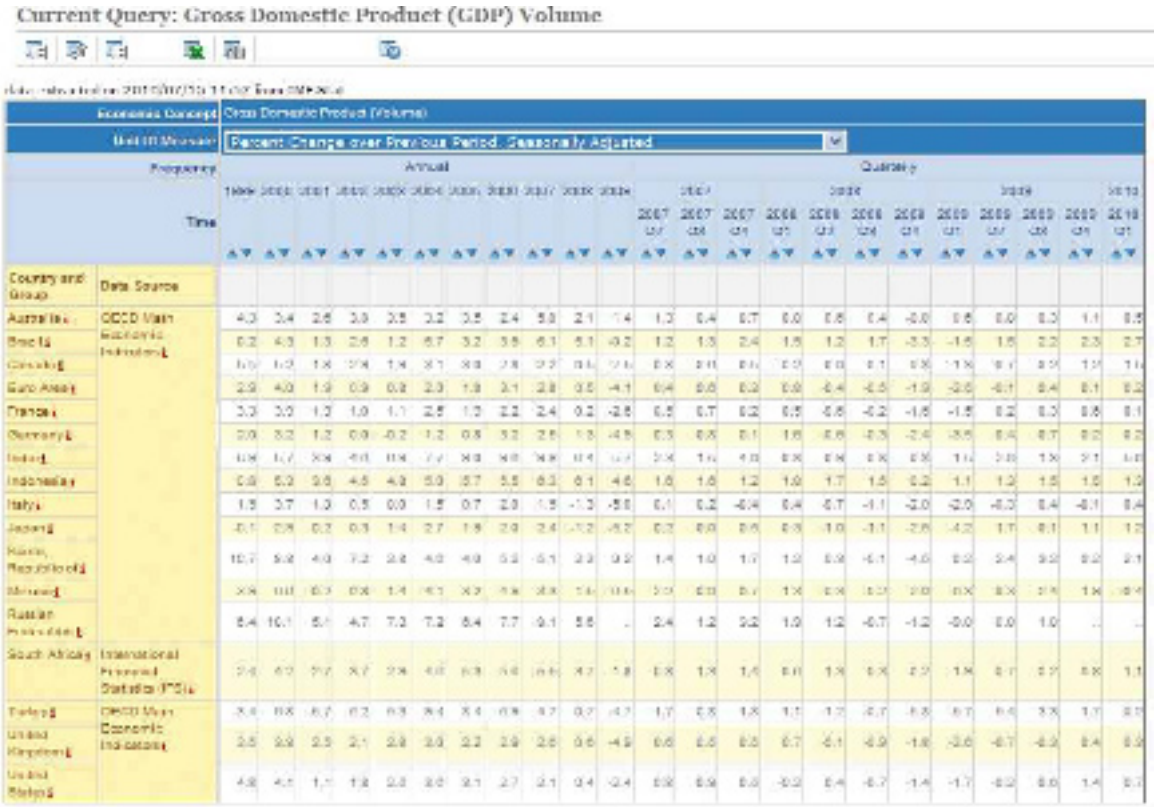
It sets out data on macroeconomic and financial indicators according to a double perspective:

— cross-countries concepts: to allow country-to-country comparison on key macroeconomic and financial indicators (for an example, see Figure 3.1.1);

— country concepts: a detailed collection of indicators for a specific country.

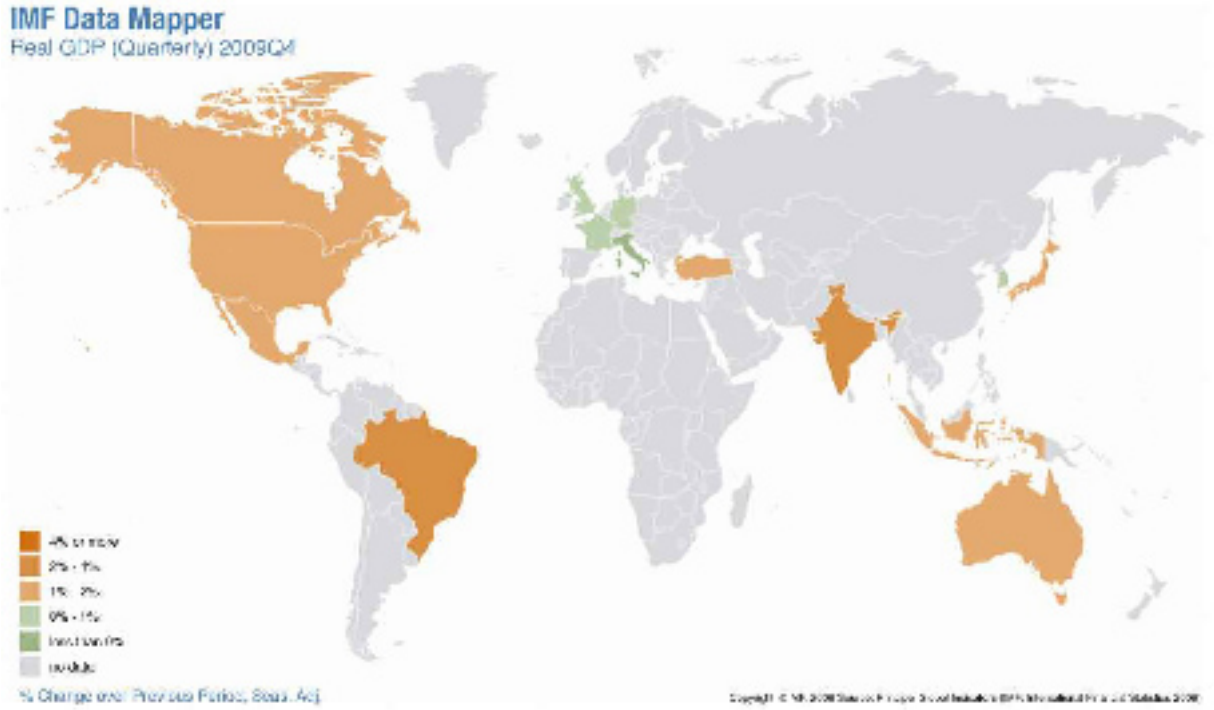
([33]) See: http://www.principalglobalindicators.org/default.aspx

Figure 3.1.1: Cross-countries view — GDP growth



The website also offers several ways and means of exploring and exporting data, through graphs, maps, dynamic animations, etc. (see, for example, Figure 3.1.2).

Figure 3.1.2: Map viewer: Real GDP growth — quarterly — 2009Q4



The website was designed and organised according to the relevance of information on the indicators: a first level of key indicators offers a cross-countries overview of the major developments in the G20 economies; a second level of indicators provides more detailed cross-countries information; the third level offers an in-depth overview from a country perspective, including more detailed statistical information by country.

The website is fed by the IAG members, which collect the information under their own responsibility and regularly update the indicators. The site therefore benefits from the experience and know-how accumulated by international organisations in disseminating statistical information (for example, the PGI website took its lead from the Principal European Economic Indicators initiative of the European Statistical System ([34]) and relies on the international statistical collection systems (the collection by Eurostat of data for European countries, the SDDS (Special Data Dissemination Standard) and GFS (Government Finance Statistics) collections of the IMF, the OECD main indicators, the BIS statistical databases, etc.).

In the coming months, the PGI website will continue to be improved by increasing the coverage of indicators and by enhancing the uploading procedures in the framework of SDMX (Statistical Data and Metadata Exchange) developments (for further information on this topic see Chapter 3.3 of this publication).

BOX 3.1.1: THE GROUP OF 20 (G-20)

Origins: The Group of 20 (G-20) was first established in the wake of the Asian financial crisis of the late 1990s as a meeting of finance ministers and central bank governors. Its goals were to bring stability to financial markets and to promote economic cooperation. Membership consists of advanced and emerging economies from all regions of the globe.

With the onset of the global financial crisis in 2008, the G-20 was seen as the most effective forum to lead global efforts to stem the crisis and mitigate its effects. G-20 leaders gathered on three occasions to stabilise the financial system, coordinate national economic policies to steer the world towards recovery and ensure that the international financial institutions were provided with the right underpinning and adequate resources.

Leaders' summits: The first meeting of G-20 leaders took place in **Washington DC**, on 14 and 15 November 2008. The Summit on Financial Markets and the World Economy produced an action plan that outlined measures to stabilise the global economy and prevent future crises. G-20 leaders underscored the critical importance of rejecting protectionism and introduced coordinated stimulus packages. Taken together, these actions constituted the largest fiscal and monetary stimulus and the most comprehensive support programme for the financial sector in modern times.

Leaders met a second time in **London** on 1 and 2 April 2009. At the London summit, leaders continued the work that had begun in Washington and announced a historic pledge to restore credit, growth and jobs in the world economy.

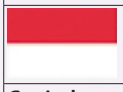
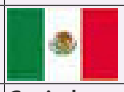
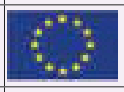
Following up on the measures taken in London, G-20 leaders met for a third time in **Pittsburgh** on 24 and 25 September 2009. The Pittsburgh summit established the G-20 as the premier forum for international economic cooperation, giving the group a mandate to continue beyond the current economic crisis. Leaders deepened their cooperation by agreeing to increase the voice of emerging economies in the international financial institutions, while establishing principles for responsible economic activity in the framework for strong, sustainable, and balanced growth.

The **Toronto** summit, on 26 and 27 June 2010, building on the achievements of its members in addressing the global economic crisis, resulted in agreement on the next steps G-20 countries should take to ensure a full return to growth with quality jobs, to reform and strengthen financial systems, and to create strong, sustainable and balanced global growth.

([34]) See: http://epp.eurostat.ec.europa.eu/portal/page/portal/euroindicators/peeis.

Leaders have agreed to meet again in Korea in November 2010. The Korean summit will provide opportunities for the G-20 to follow through on its commitments from previous summits and take action to build a future of sustainable and balanced economic growth.

G-20 COUNTRIES — KEY FIGURES:

	**Argentina**		**Australia**		**Brazil**		**Canada**
Capital	Buenos Aires	**Capital**	Canberra	**Capital**	Brasília	**Capital**	Ottawa
Population	40.3	**Population**	21.3	**Population**	193.7	**Population**	33.6
Total area	2 766 880 km²	**Total area**	7 713 000 km²	**Total area**	8 511 965 km²	**Total area**	9 984 670 km²
GDP	303 031 / +0.9 %	**GDP**	1 127 354 / +1.8 %	**GDP**	1 805 915 / – 0.2 %	**GDP**	1 459 679 / – 2.5 %
	**China**		**France**		**Germany**		**India**
Capital	Beijing	**Capital**	Paris	**Capital**	Berlin	**Capital**	New Delhi
Population	1 345.8	**Population**	62.3	**Population**	82.2	**Population**	1 198.0
Total area	9 600 000 km²	**Total area**	547 030 km²	**Total area**	357 021 km²	**Total area**	3 287 263 km²
GDP	4 911 294 / +9.0 % (*)	**GDP**	2 747 335 / – 2.6 %	**GDP**	3 466 868 / – 4.9 %	**GDP**	1 334 871 / +5.7 %
	**Indonesia**		**Italy**		**Japan**		**Mexico**
Capital	Jakarta	**Capital**	Rome	**Capital**	Tokyo	**Capital**	Mexico
Population	230	**Population**	59.9	**Population**	127.2	**Population**	109.6
Total area	1 900 000 km²	**Total area**	301 230 km²	**Total area**	377 887 km²	**Total area**	1 972 550 km²
GDP	597 175 / +4.6 %	**GDP**	2 190 003 / – 5.0 %	**GDP**	5 151 193 / – 5.2 %	**GDP**	905 373 / – 6.5 %
	**Republic of Korea**		**Russia**		**Saudi Arabia**		**South Africa**
Capital	Seoul	**Capital**	Moscow	**Capital**	Riyadh	**Capital**	Pretoria
Population	48.3	**Population**	140.9	**Population**	25.7	**Population**	50.1
Total area	99 434 km²	**Total area**	17 075 200 km²	**Total area**	1 960 582 km²	**Total area**	1 221 038 km²
GDP	912 889 / +0.2 %	**GDP**	1 302 653 / +5.6 % (*)	**GDP**	369 173 / +0.2 %	**GDP**	326 245 / – 1.8 %
	**Turkey**		**United Kingdom**		**United States**		**European Union**
Capital	Ankara	**Capital**	London	**Capital**	Washington	**Capital**	–
Population	74.8	**Population**	61.6	**Population**	314.7	**Population**	499.7
Total area	780 580 km²	**Total area**	244 820 km²	**Total area**	9 826 675 km²	**Total area**	3 287 263 km²
GDP	639 864 / – 4.7 %	**GDP**	2 260 567 / – 4.9 %	**GDP**	14 256 300 / – 2.4 %	**GDP**	17 001 590 / – 4.2 %

Legend: Data for 2009 except for * = 2008

Population in millions of inhabitants

GDP in millions of USD (current exchange rate) /annual growth rate for 2009

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3.2. Sector breakdown of euro area nominal growth

By Denis Leythienne, Eurostat, Government and sector accounts; financial indicators ([35])

3.2.1. Introduction

Since June 2007, the quarterly non-financial sector accounts of the euro area and of the European Union have been compiled by Eurostat, in cooperation with the European Central Bank, and released within four months of each quarter. These data are available, together with methodological information, in English, French and German, at: http://epp.eurostat.ec.europa.eu/portal/page/portal/sector_accounts/introduction/.

The behaviour of households and non-financial corporations is particularly relevant for economic analysis. Households are generally the main source of national saving, which itself finances investment in the national economy or abroad. Non-financial corporations are the main driver of investment in productive assets, which to some extent determines long-term growth. It follows that household saving and business investment can together explain, with the deficit/surplus of government, the main developments in the lending capacity or borrowing needs of an economy. As from April 2010, Eurostat publishes two quarterly sector accounts press releases, one analysing developments in the households sector and the other devoted to non-financial corporations.

Beyond the analysis of these two important sectors, quarterly sector accounts can also provide a useful insight into the economy as a whole. Indeed, although these data are not available in real terms, they provide a full sector breakdown of main aggregates at current prices, including gross domestic product (GDP), as explained in the next part.

3.2.2. Sector breakdown of nominal growth

National accounts have three different ways of measuring GDP, using the production, expenditure or income approach.

Under the production approach, GDP is seen from the supply side as the sum of the value added generated by all institutional sectors, namely: non-financial corporations; financial corporations; government and households/non-profit institutions serving households.

As all the production of a given economy has an economic use or destination, GDP may also be measured as the sum of all categories of expenditure: consumption, investment, changes in inventories and (net) exports. Once broken down by sector, this translates into the following equation:

(I) GDP = Household final consumption
+ Household investment
+ Government final consumption
+ Government investment
+ Business investment
+ Business changes in inventories
+ Net exports
+ Others

In the above equation, household investment mainly consists of dwellings, whereas business investment is made up of machinery, equipment and buildings. Both are recorded 'gross', that is, without depreciation.

Business changes in inventories record changes in the value of stocks of materials, supplies and finished goods held by businesses.

'Others' groups minor items that have no sizeable influence on GDP growth: changes in inventories of financial corporations and households and investment of financial corporations.

3.2.3. Nominal growth from a mixed income/expenditure perspective

In the euro area, household final consumption represents about two thirds of GDP (2009 data). It is therefore important to understand the main determinants of movements in this aggregate and how they may indirectly contribute to GDP growth.

Given the budget constraint, the final consumption of households is constrained in the medium to long term by their income. It is then interesting to relate consumption to income components, the remainder being household saving.

([35]) I am grateful to Hervé Rennié (Eurostat) who seasonally adjusted the series.

In national accounts terms, this translates into the following equation:

Household final consumption =
Household income – Household saving

Household income may be further broken down into (mainly) gross wages, gross operating surplus, net property income and net social benefits minus income taxes.

This leads to equation (II), which provides a mixed income/expenditure breakdown of growth based on income/saving for households and on expenditure categories for the other sectors.

(II) GDP = Household gross wages
+ Household gross operating surplus
+ Household net property income
+ (Household net social benefits
– income taxes)
– Household saving
+ Household investment
+ Government final consumption
+ Government investment
+ Business investment
+ Business changes in inventories
+ Net exports
+ Others

In the above equation, household gross wages include social contributions paid by employees and employers.

Net social benefits represent the additional (or reduced) income accruing from the surplus (or deficit) of social benefits received over social contributions paid.

Household gross operating surplus mainly records the value of rents which are imputed to the owner of dwellings that they occupy themselves. This accounting treatment is meant to create some measure of comparability between the disposable income of households in countries with different proportions of households that own rather than rent their dwellings. It also includes mixed income, which represents the operating profits of self-entrepreneurs.

Household net property income records the receipts that accrue from financial assets (e.g. interest on deposits or bonds, dividends on shares) placed at the disposal of other economic agents (e.g. banks, corporations, other households) minus the payments related to household borrowing (in particular mortgage loans).

In equation (II), the 'Others' category includes changes in inventories of financial corporations and households, investment of financial corporations and other (net) current transfers received by households.

3.2.4. Recent developments in euro area nominal growth

Variables listed in equation (II) have been seasonally adjusted and then used to derive by addition a consistent estimate of GDP. Euro area series have been seasonally adjusted directly, using the Tramo-Seats algorithm in the Demetra software.

Equation (II) translates readily into a breakdown of nominal growth. However, as nominal growth derives from European quarterly sector accounts, it may differ from other quarterly national accounts data due to different methodologies applied in compiling the European aggregates (e.g. keeping or withdrawing intra-euro area flows and resulting asymmetries, direct versus indirect seasonal adjustment) and/or different reporting periods.

As shown in Table 3.2.1, the quarterly nominal growth fluctuated between 1.0 % and 1.5 % over the 2005Q4–2007Q3 period, which appears as the peak quarters of the previous business cycle.

Figure 3.2.1 shows the contribution of each component to nominal growth over the 2007Q3–2009Q4 period. It is then possible to analyse how the latest economic slowdown relates to individual sectors, on the demand side, with the final consumption of households being broken down further into income components and saving.

Nominal growth of GDP was still 1.4 % in the third quarter of 2007, with the main contributions coming from gross wages (+ 0.5 percentage point), government final consumption (+ 0.3 pp), business investment (+ 0.2 pp) and the gross operating surplus of households (+ 0.2 pp).

The next period, between 2007Q4 and 2008Q3, was characterised by lower nominal growth, below 1 %, with wages still contributing + 0.4–0.5 pp, but with a negative contribution of net exports. The negative impact of net exports was generally offset by government final consumption until 2008Q3, when the latter contributed + 0.1 pp only, against – 0.5 pp for net exports. This translated into lower nominal growth (+ 0.3 %) while the contribution of government transfers to households (net social benefits minus income taxes) turned positive (+ 0.3 pp).

In the fourth quarter of 2008, nominal growth became negative in the euro area (– 1.2 %) with

the highest negative contributions stemming from business investment (– 0.9 pp), net property income of households (– 0.6 pp) and household investment (– 0.4 pp). Gross wages made no positive contribution to growth, for the first time since the beginning of the euro area (1999Q1), while the gross operating surplus of households contributed negatively (– 0.2 pp) for the first time as well.

Nominal GDP decreased at a higher rate in the first quarter of 2009, bottoming out at – 3 %. The main determinants of this fall were business destocking (– 1 pp) and lower investment (– 0.9 pp). On the household side, gross wages contributed negatively by – 0.7 pp and household investment by – 0.5 pp, while higher household saving also played a part (– 0.6 pp of GDP growth) in lower consumption and then lower nominal growth measured from the expenditure side. These negative movements were mitigated somewhat by automatic stabilisers, namely net social benefits and income taxes, contributing + 0.6 pp together. Growth in the final consumption of government also made a positive contribution of + 0.3 pp.

Nominal growth turned positive in 2009Q2, with stabilising business investment and lower destocking. Net social benefits and income taxes also contributed substantially (+ 0.8 pp).

The nominal growth of GDP reached 1.0 % in 2009Q3, mainly due to lower household saving (contribution of + 0.4 pp against – 0.3 pp in 2009Q2) and lower business destocking (+ 0.2 pp against – 0.4 pp).

Finally, household saving and business destocking stabilised in 2009Q4, while government final consumption remained almost unchanged, thus leading to lower nominal growth compared with 2009Q3.

Contributions of gross wages remained modest (+ 0.1/0.2 pp) over the last three quarters of 2009, while net exports contributed positively (+ 0.3/0.4 pp).

Figure 3.2.1: Breakdowns of the quarterly growth of nominal GDP (%)
(EA–16, seasonally adjusted, current prices)

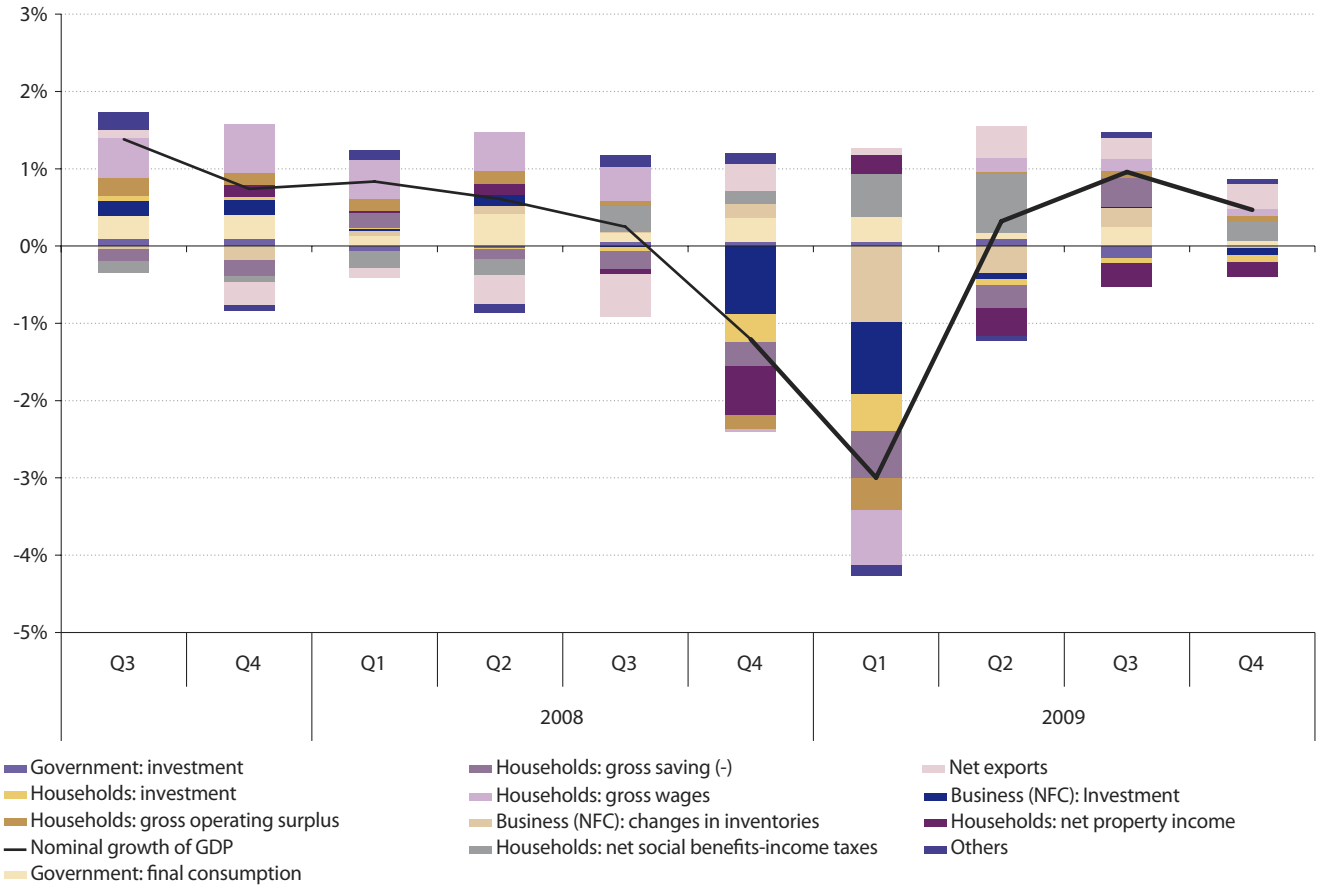


Table 3.2.1: Breakdown of the quarterly growth of GDP (%)
(EA–16, seasonally adjusted, current prices)

Period	Government: final consumption (P3/S13)	Government: investment (P5/S13)	Non-financial corporations: investment (P51/S11)	Non-fin corp.: changes in inventories (P5N/S11)	Hholds: net social benefits - income taxes (D62REC-D61PAY)-D5PAY/S1M	Hholds: gross saving (–) (B8G/S1M)	Hholds: investment (P51/S1M)	Hholds: gross wages (D1REC/S1M)	Hholds: gross operating surplus (B2B3G/S1M)	Hholds: net property income (D4REC-D4PAY/S1M)	Net exports (P6-P7/S2)	Others	Nominal growth of GDP
1999Q2	0.2 %	0.1 %	0.3 %	0.1 %	– 0.4 %	0.4 %	0.1 %	0.7 %	0.2 %	– 0.1 %	0.1 %	0.0 %	1.7 %
1999Q3	0.3 %	0.0 %	0.3 %	– 0.2 %	– 0.3 %	0.4 %	0.1 %	0.7 %	0.2 %	0.2 %	– 0.1 %	0.2 %	1.7 %
1999Q4	0.2 %	0.0 %	0.3 %	0.2 %	– 0.3 %	0.3 %	0.1 %	0.7 %	0.2 %	0.1 %	– 0.2 %	0.0 %	1.5 %
2000Q1	0.4 %	0.1 %	0.3 %	0.0 %	– 0.3 %	0.0 %	0.1 %	0.6 %	0.2 %	0.2 %	– 0.5 %	– 0.1 %	1.0 %
2000Q2	0.1 %	– 0.1 %	0.2 %	0.1 %	0.0 %	– 0.1 %	0.0 %	0.6 %	0.2 %	0.0 %	– 0.1 %	0.2 %	1.0 %
2000Q3	0.3 %	0.1 %	0.2 %	0.1 %	0.1 %	– 0.6 %	0.0 %	0.6 %	0.2 %	0.2 %	0.0 %	– 0.1 %	1.2 %
2000Q4	0.2 %	0.0 %	0.2 %	0.1 %	0.0 %	– 0.1 %	0.0 %	0.6 %	0.2 %	0.0 %	0.0 %	0.2 %	1.2 %
2001Q1	0.2 %	0.1 %	0.0 %	– 0.3 %	0.0 %	– 0.3 %	0.0 %	0.5 %	0.2 %	0.4 %	0.5 %	– 0.1 %	1.3 %
2001Q2	0.3 %	0.0 %	0.0 %	– 0.1 %	– 0.2 %	0.0 %	0.0 %	0.5 %	0.2 %	0.0 %	0.3 %	– 0.1 %	1.0 %
2001Q3	0.2 %	0.0 %	– 0.1 %	0.0 %	0.2 %	– 0.6 %	0.0 %	0.5 %	0.2 %	– 0.1 %	0.2 %	0.3 %	0.8 %
2001Q4	0.5 %	0.1 %	– 0.1 %	– 0.5 %	– 0.2 %	– 0.1 %	0.0 %	0.5 %	0.1 %	0.0 %	0.8 %	– 0.4 %	0.8 %
2002Q1	0.1 %	0.0 %	0.0 %	– 0.1 %	0.3 %	– 0.2 %	0.0 %	0.5 %	0.2 %	– 0.5 %	0.2 %	0.2 %	0.7 %
2002Q2	0.4 %	0.0 %	– 0.1 %	0.2 %	0.0 %	– 0.3 %	0.0 %	0.3 %	0.2 %	0.2 %	0.1 %	0.0 %	1.0 %
2002Q3	0.3 %	0.1 %	0.0 %	0.0 %	0.0 %	0.3 %	0.1 %	0.3 %	0.2 %	– 0.2 %	0.3 %	0.0 %	1.4 %
2002Q4	0.2 %	– 0.4 %	0.0 %	– 0.2 %	0.2 %	– 0.2 %	0.1 %	0.3 %	0.1 %	0.2 %	– 0.3 %	0.3 %	0.4 %
2003Q1	0.2 %	0.3 %	0.0 %	0.6 %	– 0.1 %	– 0.2 %	0.0 %	0.3 %	0.1 %	0.2 %	– 0.6 %	– 0.2 %	0.4 %
2003Q2	0.1 %	0.1 %	0.1 %	– 0.2 %	0.1 %	0.2 %	0.1 %	0.3 %	0.1 %	– 0.2 %	0.1 %	0.0 %	0.8 %
2003Q3	0.5 %	0.1 %	0.0 %	– 0.3 %	– 0.1 %	0.1 %	0.1 %	0.5 %	0.1 %	0.1 %	0.4 %	0.0 %	1.4 %
2003Q4	– 0.1 %	0.0 %	0.1 %	0.3 %	0.0 %	– 0.1 %	0.1 %	0.3 %	0.2 %	– 0.1 %	– 0.2 %	0.1 %	0.7 %
2004Q1	0.3 %	– 0.1 %	0.1 %	– 0.2 %	0.2 %	– 0.4 %	0.1 %	0.4 %	0.2 %	0.3 %	0.3 %	0.0 %	1.2 %
2004Q2	0.2 %	0.0 %	0.1 %	0.2 %	– 0.1 %	0.2 %	0.1 %	0.3 %	0.2 %	0.0 %	– 0.1 %	– 0.1 %	1.0 %
2004Q3	0.0 %	0.0 %	0.2 %	0.4 %	0.0 %	– 0.1 %	0.1 %	0.2 %	0.2 %	0.0 %	– 0.4 %	0.1 %	0.7 %
2004Q4	0.2 %	0.0 %	0.1 %	0.0 %	– 0.1 %	0.0 %	0.1 %	0.3 %	0.1 %	0.3 %	– 0.2 %	0.1 %	1.1 %
2005Q1	0.2 %	0.0 %	0.2 %	– 0.4 %	– 0.2 %	0.2 %	0.1 %	0.3 %	0.2 %	0.0 %	0.1 %	– 0.3 %	0.4 %
2005Q2	0.2 %	0.1 %	0.2 %	0.3 %	0.1 %	– 0.2 %	0.2 %	0.4 %	0.2 %	0.2 %	– 0.2 %	0.1 %	1.4 %
2005Q3	0.1 %	0.0 %	0.2 %	– 0.3 %	– 0.2 %	0.2 %	0.2 %	0.4 %	0.1 %	0.3 %	– 0.3 %	– 0.1 %	0.7 %
2005Q4	0.4 %	0.0 %	0.2 %	0.5 %	– 0.2 %	– 0.2 %	0.1 %	0.6 %	0.2 %	0.0 %	– 0.4 %	0.2 %	1.5 %
2006Q1	0.1 %	0.0 %	0.2 %	0.1 %	– 0.4 %	0.3 %	0.2 %	0.4 %	0.2 %	0.2 %	– 0.1 %	– 0.1 %	1.2 %
2006Q2	0.3 %	0.1 %	0.3 %	– 0.2 %	– 0.1 %	– 0.2 %	0.2 %	0.6 %	0.2 %	0.1 %	– 0.1 %	0.0 %	1.2 %
2006Q3	0.1 %	0.0 %	0.2 %	0.0 %	– 0.2 %	– 0.3 %	0.2 %	0.5 %	0.3 %	0.0 %	0.1 %	0.1 %	1.2 %
2006Q4	0.2 %	0.1 %	0.2 %	– 0.3 %	– 0.1 %	– 0.3 %	0.2 %	0.4 %	0.3 %	0.2 %	0.6 %	0.0 %	1.4 %
2007Q1	0.2 %	0.1 %	0.3 %	0.3 %	– 0.2 %	– 0.2 %	0.1 %	0.6 %	0.2 %	0.1 %	0.1 %	– 0.1 %	1.6 %
2007Q2	0.2 %	0.0 %	0.2 %	0.0 %	– 0.3 %	0.2 %	0.1 %	0.5 %	0.2 %	0.2 %	0.0 %	– 0.2 %	1.0 %
2007Q3	0.3 %	0.1 %	0.2 %	0.0 %	– 0.2 %	– 0.1 %	0.1 %	0.5 %	0.2 %	0.0 %	0.1 %	0.2 %	1.4 %
2007Q4	0.3 %	0.1 %	0.2 %	– 0.2 %	– 0.1 %	– 0.2 %	0.0 %	0.6 %	0.2 %	0.2 %	– 0.3 %	– 0.1 %	0.7 %
2008Q1	0.1 %	– 0.1 %	0.0 %	0.1 %	– 0.2 %	0.2 %	0.0 %	0.5 %	0.2 %	0.0 %	– 0.1 %	0.1 %	0.8 %
2008Q2	0.4 %	0.0 %	0.1 %	0.1 %	– 0.2 %	– 0.1 %	0.0 %	0.5 %	0.2 %	0.1 %	– 0.4 %	– 0.1 %	0.6 %
2008Q3	0.1 %	0.1 %	0.0 %	0.0 %	0.3 %	– 0.2 %	0.0 %	0.4 %	0.1 %	– 0.1 %	– 0.5 %	0.1 %	0.3 %
2008Q4	0.3 %	0.1 %	– 0.9 %	0.2 %	0.2 %	– 0.3 %	– 0.4 %	0.0 %	– 0.2 %	– 0.6 %	0.3 %	0.1 %	– 1.2 %
2009Q1	0.3 %	0.1 %	– 0.9 %	– 1.0 %	0.6 %	– 0.6 %	– 0.5 %	– 0.7 %	– 0.4 %	0.2 %	0.1 %	– 0.1 %	– 3.0 %
2009Q2	0.1 %	0.1 %	– 0.1 %	– 0.4 %	0.8 %	– 0.3 %	– 0.1 %	0.2 %	0.0 %	– 0.4 %	0.4 %	– 0.1 %	0.3 %
2009Q3	0.3 %	– 0.2 %	0.0 %	0.2 %	0.0 %	0.4 %	– 0.1 %	0.2 %	0.1 %	– 0.3 %	0.3 %	0.1 %	1.0 %
2009Q4	0.1 %	0.0 %	– 0.1 %	0.0 %	0.3 %	0.0 %	– 0.1 %	0.1 %	0.1 %	– 0.2 %	0.3 %	0.1 %	0.5 %

3.3. Improving statistical production by standardisation based on SDMX

By Emmanuel Clement, August Götzfried and Håkan Linden, Eurostat, Reference Databases and Metadata

3.3.1. Introduction

The Statistical Data and Metadata eXchange (SDMX) technical standards and statistical content guidelines, together with the IT service architecture and IT tools, can support improved business processes in any statistical organisation, enabling data and metadata to be transmitted, disseminated and shared in the most efficient way.

SDMX was adopted within the European Statistical System in February 2007 by the Statistical Programme Committee, and the implementation of SDMX in Eurostat is fully supported by its top management. SDMX is also seen as one of the main responses to the EU 2020 requirements ([36]) and Eurostat's vision for improving the production methods of EU statistics ([37]). The use of SDMX improves the harmonisation of the statistical business processes, reduces manual intervention, and ensures the standardisation of statistical metadata, IT applications and IT infrastructure.

This article aims to make SDMX concepts easier to understand and to present associated IT tools. It also gives some guidance on SDMX in the statistical production process.

3.3.2. Key concepts and deliverables

The SDMX initiative consists of technical and statistical standards and guidelines, together with an IT service infrastructure and IT tools, for a more efficient exchange and sharing of statistical data and metadata. The use of SDMX is a business choice by public administrations with a view to enhancing the efficiency and effectiveness of data and metadata exchange.

Seven European and international organisations (the Bank for International Settlements, the European Central Bank, Eurostat, the International Monetary Fund, the Organisation for Economic Cooperation and Development, the United Nations Statistical Division and the World Bank) sponsor SDMX.

Standardised file formats for statistical data and metadata and standardised file content are a precondition for the automated production, processing and exchange of SDMX data and metadata files between national and international statistical organisations. For SDMX, the preferred syntax is XML, with SDMX-ML as the data and metadata exchange format. However, the SDMX standard also includes the GESMES/TS standard using EDIFACT syntax (now known as SDMX-EDI).

The first version of the SDMX technical standard (Version 1.0), which was finalised in 2004, has been approved as an ISO standard (ISO/TS 17369:2005). SDMX Version 2.0 was approved by its sponsors in 2005. SDMX version 2.1 is expected to be finalised in spring 2011.

In SDMX, the term metadata is used in a very broad sense, and a distinction is made between structural metadata and reference metadata.

— *Structural metadata* are identifiers and descriptors of data, such as names of variables or dimensions of statistical cubes. Data must be linked to structural metadata or they cannot be identified, retrieved or browsed.

— *Reference metadata* describe the content and quality of the statistical data: conceptual metadata, describing the concepts used and their practical implementation; methodological metadata, describing methods used for generation of the data; and quality metadata, describing the different quality dimensions of the resulting statistics (e.g. timeliness, accuracy). While these reference metadata exist and may be exchanged independently of the data and their structural metadata, they are linked to the data.

([36]) Europe 2020: A European strategy for smart, sustainable and inclusive growth.

([37]) Communication from the Commission to the European Parliament and the Council on the production method of EU statistics: a vision for the next decade (COM(2009) 404).

(a) Technical standards for data and metadata

Based on the SDMX information model (which builds upon the GESMES information model), data structure definitions (DSDs) are created for particular statistical domains. This is done not only by the SDMX sponsors (also involving their respective member countries), but also by all statistical organisations implementing SDMX.

Where data collections common to several national or international organisations are concerned, the DSDs are developed and used jointly by those international and national organisations. For example, Eurostat and the European Central Bank (ECB) have worked together with their respective working groups to develop DSDs for national accounts and many other statistical domains. About half of the incoming data at Eurostat already use SDMX-compliant DSDs (as the GESMES format is covered as well).

Existing and new DSDs are based on established or revised datasets used in the various statistical domains. In future, SDMX-compliant DSDs will increasingly use harmonised structural metadata (i.e. harmonised codes based on an agreed list of countries, an agreed list of economic activities, etc.). These lists will be successively released by Eurostat and the SDMX sponsors.

Figure 3.3.1: Example of data structure definition (DSD) in short-term business statistics

DATA STRUCTURE DEFINITION	
ID	EUROSTAT_STS
Name	Short-Term Statistics
Version	2.0
AgencyID	ESTAT
Valid From	
Valid To	

DIMENSIONS

Position in Key	CONCEPT					REPRESENTATION				Dimension Type
	ID	Name	CONCEPT SCHEME			CODELIST			TEXT FORMAT	
			ID	VER	AGENCY	ID	VER	AGENCY		
1	FREQ	Frequency	GESMES_ CONCEPTS	1.0	ESTAT	CL_FREQ	1.0	ESTAT		Frequency
2	REF_AREA	Reference area	GESMES_ CONCEPTS	1.0	ESTAT	CL_AREA_EE	1.0	ESTAT		
3	ADJUSTMENT	Adjustment indicator	GESMES_ CONCEPTS	1.0	ESTAT	CL_ ADJUSTMENT	1.0	ESTAT		
4	STS_ INDICATOR	STS Indicator	GESMES_ CONCEPTS	1.0	ESTAT	CL_STS_ INDICATOR	1.0	ESTAT		
5	STS_ACTIVITY	Economic Activity code	GESMES_ CONCEPTS	1.0	ESTAT	CL_STS_ ACTIVITY	1.0	ESTAT		
6	STS_ INSTITUTION	Institution originating STS dataflow to ECB	GESMES_ CONCEPTS	1.0	ESTAT	CL_STS_ INSTITUTION	1.0	ESTAT		
7	STS_BASE_ YEAR	Series variation in short-term statistics	GESMES_ CONCEPTS	1.0	ESTAT	CL_STS_BASE_ YEAR	1.0	ESTAT		
TIME	TIME_PERIOD	Time period or range	GESMES_ CONCEPTS	1.0	ESTAT					

(b) Content-oriented guidelines for metadata

The SDMX content-oriented guidelines (version 2009) comprise Statistical cross-domain concepts (Annex 1), Cross-domain code lists (Annex 2), Statistical subject-matter domains (Annex 3) and the Metadata common vocabulary (Annex 4). The SDMX content-oriented guidelines have been used to define a new structure for reference metadata for the European Statistical System: the Euro SDMX Metadata Structure (ESMS). This ESMS is being successively implemented within the European Statistical System ([38]).

([38]) See also the Commission Recommendation 2009/498/EC of 23 June 2009 on reference metadata for the European Statistical System (OJ L 168, 30.6.2009, p. 50).

The ESMS concepts include quality criteria for better measurement of data quality in statistical domains.

In addition to the ESMS, a more detailed (producer-oriented) quality reporting structure for the European Statistical System is under construction. This is the ESS Standard Quality Report Structure (ESQRS), which reuses the standard quality criteria shown above and described in EP and Council Regulation (EC) No 223/2009 ([37]).

Figure 3.3.2: The Euro SDMX Metadata Structure (ESMS) release 3-03-2009

	Concept Name
1	**Contact**
1.1	Contact organisation
1.2	Contact organisation unit
1.3	Contact name
1.4	Contact person function
1.5	Contact mail address
1.6	Contact email address
1.7	Contact phone number
1.8	Contact fax number
2	**Metadata update**
2.1	Metadata last certified
2.2	Metadata last posted
2.3	Metadata last update
3	**Statistical presentation**
3.1	Data description
3.2	Classification system
3.3	Sector coverage
3.4	Statistical concepts and definitions
3.5	Statistical unit
3.6	Statistical population
3.7	Reference area
3.8	Time coverage
3.9	Base period
4	**Unit of measure**
5	**Reference period**
6	**Institutional mandate**
6.1	Legal acts and other agreements
6.2	Data sharing

	Concept Name
7	**Confidentiality**
7.1	Confidentiality - policy
7.2	Confidentiality - data treatment
8	**Release policy**
8.1	Release calendar
8.2	Release calendar access
8.3	User access
9	**Frequency of dissemination**
10	**Dissemination format**
10.1	News release
10.2	Publications
10.3	On-line database
10.4	Micro-data access
10.5	Other
11	**Accessibility of documentation**
11.1	Documentation on methodology
11.2	Quality documentation
12	**Quality management**
12.1	Quality assurance
12.2	Quality assessment
13	**Relevance**
13.1	User needs
13.2	User satisfaction
13.3	Completeness
14	**Accuracy and reliability**
14.1	Overall accuracy
14.2	Sampling error
14.3	Non-sampling error

	Concept Name
15	**Timeliness and punctuality**
15.1	Timeliness
15.2	Punctuality
16	**Comparability**
16.1	Comparability - geographical
16.2	Comparability - over time
17	**Coherence**
17.1	Coherence - cross domain
17.2	Coherence - internal
18	**Cost and burden**
19	**Data revision**
19.1	Data revision - policy
19.2	Data revision - practice
20	**Statistical processing**
20.1	Source data
20.2	Frequency of data collection
20.3	Data collection
20.4	Data validation
20.5	Data compilation
20.6	Adjustment
21	**Comment**

3.3.3. Overview of SDMX IT architecture and available IT tools

SDMX supports two complementary modes for data and metadata exchange and sharing: 'push' mode (where data/metadata are transmitted from one organisation to another) and 'pull' mode (where one organisation retrieves data/metadata from another organisation). One specific 'pull' mode is the 'hub' concept, where users obtain data from a central hub which itself automatically assembles the required datasets by querying other data sources (e.g. national statistical institutes).

To support the use of SDMX, several IT tools have been developed by the SDMX sponsoring organisations and by other organisations. They can generally be freely downloaded from the SDMX website (http://www.sdmx.org).

The source code is available so that they can be used as components for building IT systems in statistical organisations.

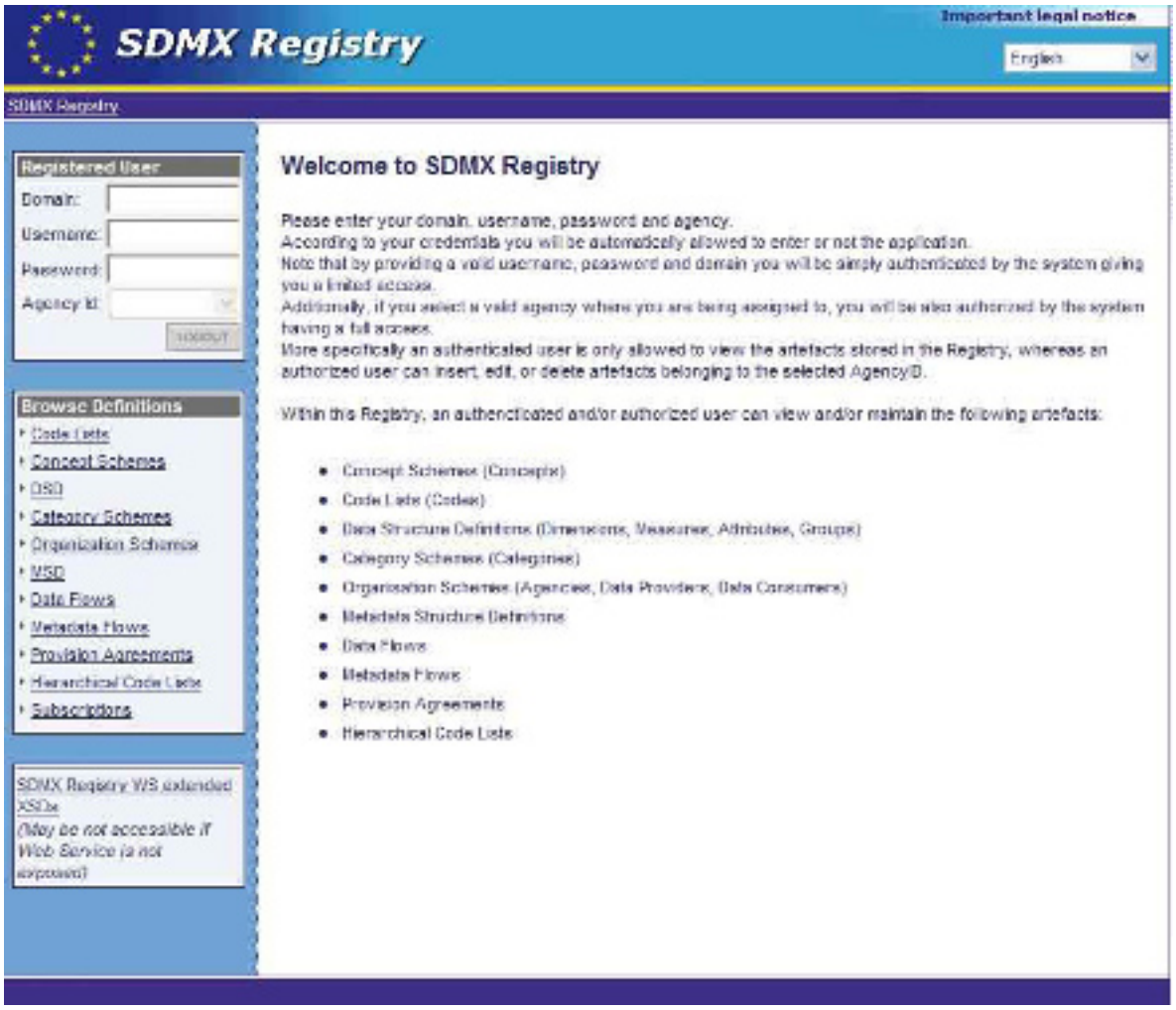
Eurostat has provided several of these IT tools, including an SDMX converter (for converting data to and from SDMX formats), the Data Structure Wizard (for creating and viewing DSDs), the Euro SDMX Registry (for storing and interacting with SDMX harmonised structural metadata) and the SDMX Mapping Tool (a desktop IT application for mapping statistical concepts and code lists stored in a 'local' dissemination database with concepts and code lists used in SDMX data structure definitions).

([37]) See Article 12 of Regulation (EC) No 223/2009 of the European Parliament and of the Council (OJ L 87, 31.3.2009, p. 164).

(a) The Euro SDMX Registry

Eurostat has put in place its own SDMX infrastructure, based on the Euro SDMX Registry, which will include harmonised structural metadata, the DSDs designed for statistical domains, metadata structure definitions (such as the ESMS) and other related information. This IT application will be the main repository for the SDMX data and metadata standards for the European Statistical System and beyond.

Figure 3.3.3: Screenshot of the first page of the Euro SDMX Registry



(b) The National Reference Metadata Editor

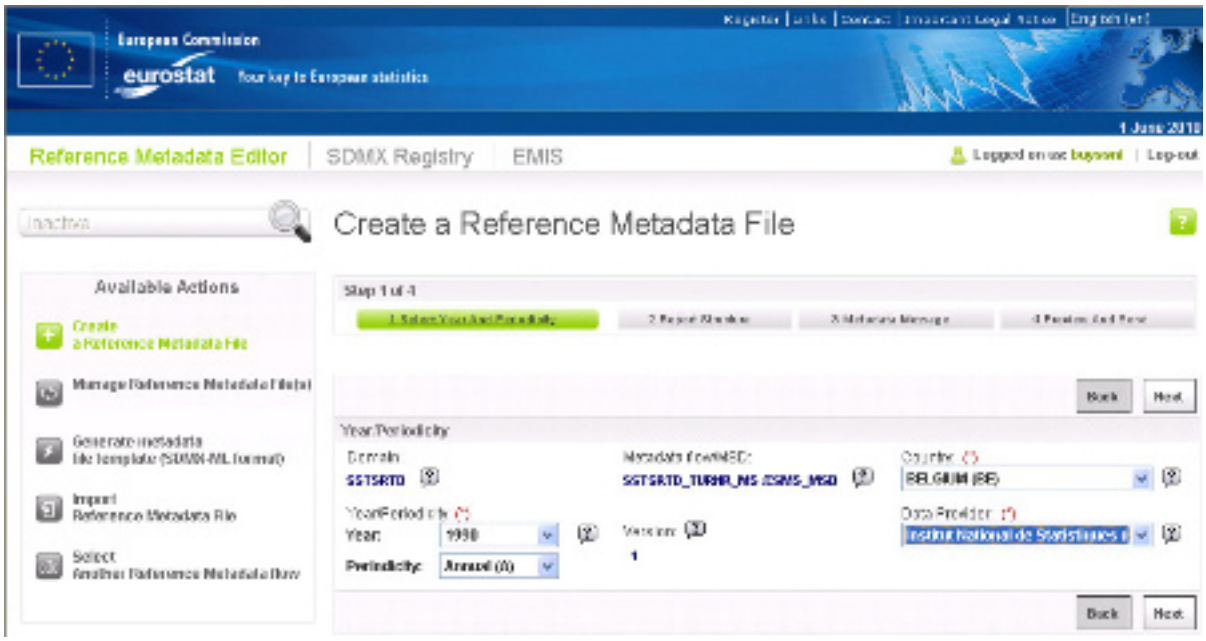
The National Reference Metadata Editor is a Web application ([40]), intended for the production and the transmission of national reference metadata. It enables national statistical institutes ([41]) within the European Statistical System to produce national reference metadata based on the Euro SDMX Metadata Structure (ESMS), the ESS Standard Quality Report Structure (ESQRS) or other reference metadata structures to come, and transmit them to Eurostat via eDAMIS.

At a later stage the National Reference Metadata Editor will offer its users the possibility to use tailor-made reporting structures if necessary, e.g. for reporting additional categories of metadata (such as process oriented metadata).

([40]) An application that is accessed via a Web browser via a network such as the Internet or an intranet.

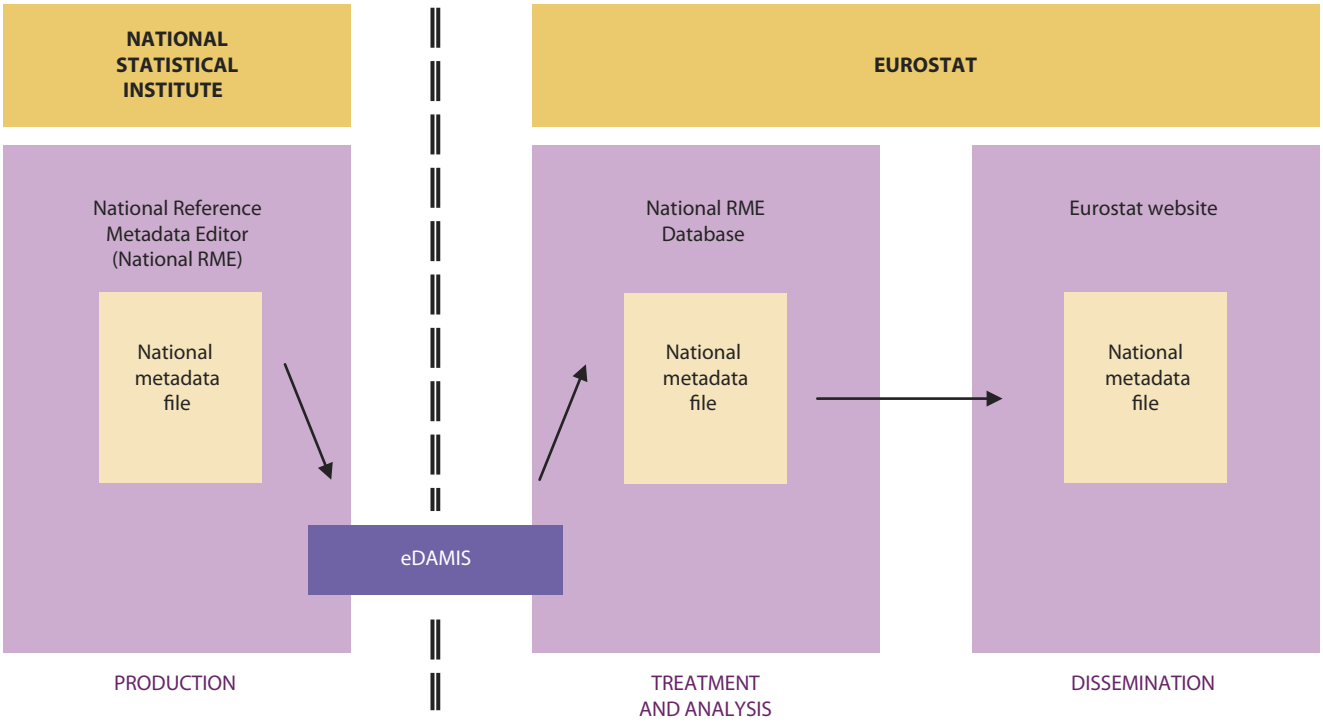
([41]) Or any other authorised institute belonging to the ESS.

Figure 3.3.4: Screenshot of the first page of the National Reference Metadata Editor



The national reference metadata entered by means of the National Reference Metadata Editor are sent to Eurostat via eDAMIS (the Eurostat Single Entry Point). After processing by eDAMIS, the data are stored in the National RME database, from where they can be retrieved by Eurostat domain managers or centrally, for verification and validation purposes. It can then be decided whether the reference metadata should be published or not on the Eurostat website (pending agreement by the data provider or any other authorised institute belonging to the ESS). The National Reference Metadata Editor will be available in the course of 2010.

Figure 3.3.5: The creation, transmission and release of a national metadata file



3.3.4. The implementation of SDMX in statistical domains

In April 2009, the Eurostat Directors reaffirmed that they wanted to see SDMX used more within the European Statistical System and set some priorities.

'As a first step before making SDMX compulsory for all domains in Eurostat, the use of SDMX would be made compulsory for all new or considerably changed datasets and metadata sets.'

The first stage of implementation of SDMX in a statistical domain consists in a number of analyses. This is a matter for the Eurostat production units and the general services units in Eurostat concerned with SDMX (responsible for IT development, metadata, etc.). The various analyses can be conducted independently, though some of them may be interrelated.

(a) Analysis of the local IT production systems

Eurostat has a number of IT production systems. So before it is decided to use SDMX in a statistical domain (such as energy statistics or short-term business statistics), an analysis of the production system of this domain is needed.

Some production systems are already SDMX compliant, but some are not.

When a statistical domain decides to redesign its production system, it has an important opportunity to render it SDMX compliant and to implement SDMX in this statistical domain.

(b) Analysis of current data flows and formats

One of the main steps before SDMX implementation is to analyse the data flows and the format in which data are collected.

As a matter of fact, it is the data collections which drive the implementation of SDMX in a statistical domain.

This analysis aims at deciding how many data structure definitions (DSDs) will be created for the various data flows in the particular statistical domain.

Much attention is paid here to the data collections shared with other international organisations (ECB, OECD, etc.). Where there are common data collections, there is a need for agreement on the DSDs.

Priorities for certain data flows within the statistical domain can also be set.

(c) Analysis of data structure definitions

In some statistical domains, data structure definitions may already exist. These are often built in GESMES format.

Their composition and use are analysed to ascertain whether they are still up to date or if modifications are needed.

(d) Analysis of the structural metadata in use

Structural metadata (code lists) are used in every statistical domain for the respective datasets (see also Figure 6).

Eurostat is working on harmonising the whole set of code lists on its website and is strongly promoting the use of harmonised code lists for SDMX in any statistical domain.

(e) Analysis of national reference metadata

Along with data, reference metadata are also exchanged between national statistical institutes and Eurostat in several statistical domains.

The structure of these files is not homogeneous between statistical domains and even sometimes not between countries within a statistical domain.

Eurostat is therefore analysing the metadata flows with national statistical institutes and is encouraging the statistical domains to use the standard ESMS structure for exchanging reference metadata with NSIs.

This harmonisation drive is also supported by Commission Recommendation 2009/498/EC.

(f) Analysis of national quality reports

Eurostat also collects quality reports sent by national statistical institutes in certain statistical domains.

The same analysis as for reference metadata is made for these reports, with the objective of harmonising their structure.

In this context, the aim is to standardise quality reporting by using a harmonised report structure: the ESS Standard for Quality Report Structure (ESQRS).

SDMX use in statistical domains is always launched in close cooperation with the national statistical institutes, or any other authorised institute belonging to the ESS. The implementation of SDMX is normally programmed and monitored by the domain-

specific Member States working groups and the development and implementation work is undertaken by specific task forces involving Eurostat and some of the Member States.

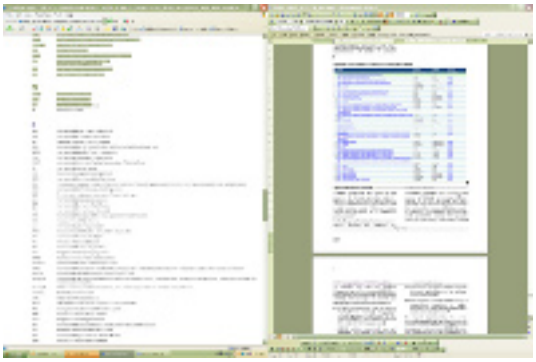


Figure 3.3.6: Harmonised code lists in Eurostat (June 2010)

	Name	English abbreviation	Family	General description
1	General information on the "Standard code lists" project		Other	
2	SCL - Age / Duration / Working time / ...	AGE	Other	View
3	SCL - Classification of Fields of Education and Training (1999)	FIELD	Education	View
4	SCL - Classification of the Functions of Government (COFOG 1999)	COFOG99	National Accounts	View
5	SCL - Currency	CURRENCY	Other	View
6	SCL - Distance	DISTANCE	Measurement	View
7	SCL - European Schedule of Occupational Diseases (ESOD 2003)	ESOD	Health	View
8	SCL - Field of science and technology classification (FOS 2007)	FOS07	Other	View
9	SCL - Geographical code list	GEO	Geographic	View
10	SCL - Hazardousness of waste	HAZARD	Environment	View
11	SCL - Housing	HOUSING	Other	View
12	SCL - International Classification of Diseases - clinical modification (ICD-9-CM)	ICD9CM	Health	View
13	SCL - International Standard Classification of Occupations 2008 (ISCO-08)	ISCO08	Occupations	View
14	SCL - International Standard Classification of Occupations for European Union purposes (ISCO-88(COM))	ISCO88	Occupations	View
15	SCL - International Statistical Classification of Diseases and Related Health Problems (ICD-10 2007)	ICD10	Health	View
16	SCL - Languages	LANGUAGE	Other	View
17	SCL - Loading status	LOADSTAT	Transport	View
18	SCL - Marital status	MARSTA	Other	View
19	SCL - Mode of transport	TRA_MODE	Transport	View
20	SCL - Month	MONTH	Other	View
21	SCL - Nomenclature for the analysis and comparison of scientific programmes and budgets (NABS 1992)	NABS92	Other	View
22	SCL - Nomenclature for the analysis and comparison of scientific programmes and budgets (NABS 2007)	NABS07	Other	View
23	SCL - Plantation density	DENSITY	Measurement	View
24	SCL - Quantile	QUANTILE	Measurement	View
25	SCL - Sex	SEX	Other	View
26	SCL - Standard goods classification for transport statistics (NST 2007)	NST07	Transport	View
27	SCL - Standard International Trade Classification (SITC Rev. 4, 2006)	SITC06	Products	View
28	SCL - Standard International Trade Classification (SITC Rev.3, 1988)	SITC88	Products	View
29	SCL - Statistical Classification of Economic Activities in the European Community (NACE Rev. 1.1)	NACE_R11	Activities	View
30	SCL - Statistical Classification of Economic Activities in the European Community (NACE Rev. 2)	NACE_R2	Activities	View
31	SCL - Taxes	TAX	Other	View
32	SCL - Time frequency	T_FREQ	Other	View
33	SCL - Type of building	BUILDING	Other	View
34	SCL - Waste consistency	CONSIST	Environment	View
35	SCL - Waste operations	WST_OPER	Environment	View
36	SCL - Year of arrival / birth / construction	Y_CONST	Other	View

(g) SDMX training courses

Training courses are also offered to the members of Eurostat production units to introduce them to SDMX in general and to give them a better idea of how SDMX is used in their statistical domain. Additional training courses are also given for IT experts in production units.

For the European Statistical System, numerous training activities are organised for statisticians, managers and IT staff. These courses and tutorials cover many different aspects of SDMX, including the basic principles of SDMX and the construction of data and metadata structure definitions, as well as techniques for building IT applications to work with SDMX. Eurostat often provides support for organisations working with SDMX.

3.3.5. Recapitulation of SDMX benefits

In February 2008, the UN Statistical Commission agreed to recommend SDMX as the preferred standard for data and metadata exchange and encouraged all national and international organisations to implement it.

— SDMX implementation costs are modest, especially for statistical organisations already experienced with GESMES/TS. The reusable SDMX IT tools and infrastructure help reduce IT development costs.

— SDMX includes standardised data and metadata file formats (SDMX-ML) to facilitate the automated production and processing of the underlying files.

— The SDMX content-oriented guidelines facilitate mutual understanding of the content of the SDMX data and metadata files by using common statistical concepts in the underlying metadata.

— XML technology enables the production and use of a range of IT tools for SDMX users.

— Standardisation based on SDMX improves the quality and efficiency of the exchange of data and metadata.

— The adoption of SDMX within statistical organisations contributes to quality assurance and integration throughout their statistical business processes.

To support implementation, the seven sponsoring organisations are concentrating on a range of capacity building activities such as international conferences on SDMX (the next one is planned for May 2011 in Washington), the creation of self-learning packages for SDMX (available on the SDMX website) and various training activities.

3.3.6. Conclusions

The SDMX technical and statistical standards are now mature enough for broad implementation within and across statistical business processes. The standards are also receiving more and more support with the requisite IT tools.

The implementation of SDMX in a statistical institute is highly strategic — in particular when it comes to standardisation and harmonisation of data and metadata. The SDMX information model needs to be linked to whatever business process models are in use, and clear strategies communicated on how implementation should be pursued throughout the statistical business process.

For statistical production units, temporary resources are needed when implementing the SDMX standards and guidelines. This is likely to be inexpensive given the corporate benefits resulting from the widespread use of SDMX. Of course, for an individual process it will depend on the complexity of work to be done: the number of players involved and the scale and complexity of the data and metadata.

Experience shows that it is content rather than technology that takes the time, e.g. mainly on agreeing common data structure definitions. Work is required to accelerate this process among the various national and international statistical organisations so that full advantage can be taken of SDMX in more standardised and better integrated production systems in the future.

3.4. Data analysis in official statistics

By Emilio Di Meglio, Eurostat, Methodology and Research, and Carlo De Gregorio, ISTAT

3.4.1. Introduction

Data analysis can be defined as the process of transforming raw data into usable information, then into knowledge, in order to add value to the statistical output. It consists in systematically applying statistical and logical techniques to describe, summarise and compare data so that its meaning, structure, relationships, origins, etc. are understood.

The role of data analysis in official statistics is an old discussion topic; a few articles on this subject have been written in the last 20 years ([42]). In this respect there are two contrasting views.

— On the one hand, official statistics should only give 'objective facts'. Thus, the way statistics are presented should refrain from taking particular views by way of elaborate analysis and interpretation.

— On the other hand, there are several reasons for statistics producers to use data analysis, as this could be gainful to statistics users. Statistics producers know about both data and statistical methodology; being the closest to the data, they are well placed to perform helpful data analysis. Analysis work can also give statistics producers insights which may be valuable for both communication with users and future improvements of statistics, and will ultimately improve quality.

In this paper we will explore descriptive and exploratory multidimensional data analysis techniques that have the potential to improve the processes of data production, as they make for a better understanding of data and an assessment of the main relationships and patterns in the data. Some supporting examples of current applications of data analysis in Eurostat and ISTAT that can have a positive impact on quality will be described.

3.4.2. Exploratory multidimensional techniques

Data analysis is an extremely broad subject. Here we suggest focusing on exploratory and visual data analysis techniques. These have the advantage of not depending on a priori hypothesis. The methods are suitable for exploring the patterns hidden in the data and for generating hypotheses requiring further exploration.

One of the main features of exploratory data analysis is the key role of graphics. The human eye is a very powerful pattern recognition tool and '… graphical excellence is that which gives to the viewer the greatest number of ideas in the shortest time with the least ink in the smallest space' (Edward R. Tufte).

Statisticians in national statistical institutes deal with different kinds of datasets that are the raw material for building aggregates, statistics and indicators. The data have their history, their specificity, their patterns, their quality. Exploratory techniques may enable statisticians to readily assess the quality of the data, using the power of graphical displays and synthetic measures that reveal the main patterns hidden in the data. This enables analysts to familiarise themselves with the data and to better select the subsequent phases of their processing, so that the quality of the final product is ultimately better.

Here we will concentrate on multidimensional techniques, where better knowledge and application promise maximum benefit. We are most of the time confronted with complex phenomena, and univariate analysis is not sufficient to grasp the various dimensions of an economic, social or environmental problem. We will describe further the main multidimensional analysis techniques applicable in official statistics.

([42]) For example: J.-C. Deville and E. Malinvaud, ' Data analysis in official socio-economic statistics', *Journal of the Royal Statistical Society*, Series A (General), Vol. 146, No 4 (1983), pp. 335–361 or J. Kardaun and T. Alanko, 'Exploratory data analysis and data mining in the setting of national statistical institutes', *Proceedings of NTTS 1998*, Vol. 2, pp. 259–264.

(a) Principal component analysis (PCA)

PCA is a very common method that has found a large number of applications in a wide range of disciplines. The central idea is to reduce the dimensionality of a dataset in which there are a large number of interrelated continuous variables, while retaining as much as possible of the variation in the dataset.

PCA aims at creating linear combinations of the original variables, called the principal components, which are uncorrelated and contain as much variability of the original data as possible. The first few components condense a large quantity of the information contained in the original dataset, allowing a reduction of the dimensions of our problem.

Graphical displays of the components bring out the main pattern contained in the data.

The most important reason for using PCA is the highly descriptive nature of the method. PCA enables us to examine graphically the correlations among many variables and helps us to understand multidimensional datasets better. When dealing with databases with a large number of data points and variables, even reading a correlation matrix is not so simple. On the other hand, reading the component plot can reveal correlations between variables that might otherwise pass unnoticed, adding insight for any further use of the data.

(b) Correspondence analysis (CA)

Correspondence analysis is a popular statistical method for categorical data which is used widely in the social sciences. The primary goal is to transform a data table into a graphical display to bring out connections between the cells of the table and, mainly, between the attributes used to construct the table. Correspondence analysis is designed to analyse simple two-way and multi-way tables. In the case of a two-way table we talk about simple correspondence analysis, while if we have a multi-way table (often the case for social surveys) we talk about multiple correspondence analysis. The results yield information which is similar in nature to those produced by factor analysis or principal components techniques; they allow us to explore the structure of categorical variables in the table.

An important feature of the method is that it is based on minimum assumptions. In fact the researcher does not assume any particular model and just tries to reveal any structure by using a graphical representation of the data.

Correspondence analysis is a method of data analysis which is particularly suitable for official statistics purposes. It can reveal interesting associations without imposing structure on the data, and hence it can be a first step towards a variety of different methodological approaches taken by different users of the data.

(c) Cluster analysis

Cluster analysis is the art of finding groups in data (Kaufmanns, 1990); this term refers to many algorithms of classification used to develop taxonomies. Classification aims at gathering the statistical units in a restricted number of homogeneous clusters and consists of a family of techniques for categorising large datasets into smaller but more homogeneous groups — what we call clusters.

The main objectives of cluster analysis are data exploration, taxonomy, data reduction, hypothesis generation and prediction based on groups. Cluster analysis can be said to have been successful if it brings to light previously unnoted groupings in a set of data or helps to formalise its hierarchical structure.

Cluster analysis uses clustering algorithms. A clustering algorithm attempts to find natural groups of components (or data) based on some similarity measure. To determine cluster membership, most algorithms evaluate the distance between a point and the cluster centroids. The output from a clustering algorithm is basically a statistical description of the cluster centroids with the number of components in each cluster. Cluster analysis is a valid complement of PCA or CA as it helps to interpret their results.

3.4.3. Logistic regression

Modelling techniques, used in an exploratory framework, can likewise help to gather insight on the data and improve their production and collection. Regression analysis is the most common technique for explaining and predicting linear relations as it is used in the most common spreadsheet software. Here we focus on the use of regression to explore the data.

Of particular interest for official statistics is logistic regression. This is a form of regression which is used when the dependent is a dichotomic variable. Multinomial logistic regression is used to handle the case of dependents with more than two classes.

Logistic regression can be used: to explain a dependent variable on the basis of continuous and/or categorical independents and to determine the effect of the independent variables on the dependent; to rank the relative importance of independents; to assess interaction effects; and to understand the impact of covariate control variables. The impact of predictor variables is usually explained in terms of odds ratios. It is therefore very useful to explore the relations among qualitative variables, as has already been done successfully for some Eurostat publications.

3.4.4. Data analysis and quality in production processes

As mentioned in section 1, the role of data analysis in official statistics is a subject for discussion. Its use may differ between countries and between subject-matter areas. Presently, multivariate techniques are frequently used by official statistics users, but albeit at the production stage. Some of the main factors responsible for the slow adoption of these methods are:

— many NSIs are somewhat reticent about the application of subject matter analysis; in official statistics, bias is highly undesirable, and it is precisely the fear of bias induced by subjective interpretation of results or instability of results that is preventing the wider use of these methods;

— the limitation of resources in statistical institutes.

Nevertheless, exploratory and visualisation methods have begun to find use for data editing and missing values exploration within statistical offices. Some other applications exist and will be described in the following paragraph.

The techniques described have the potential to improve processes in data production as they make it easier to understand data and to assess the main relationships and patterns in the data. Some possibilities, at different levels, could be:

— simplification of the survey questionnaire: by multivariate methods and graphical representations finding redundancies between variables;

— imputation: definition of imputation classes by cluster analysis or related methods;

— stratified designs: simplification of stratification on the basis of a (between classes) separation/(within classes) homogeneity criterion;

— quality: Visual assessment of quality (robustness, missing value patterns, novel ways of communicating the results to the public);

— thoughtful design of traditional tables and graphs, to highlight essential information;

— illuminating breakdown of aggregates;

— advanced graphical visualisation tools;

— advanced analysis with interpretation and conclusions on causes etc.

Some of the possibilities are already in use, some need further investigation, while many of them should be more widely used. Both basic and advanced methods should have potential for improving information quality without compromising the integrity of official statistics and without making excessive resource demands in regular production. All these techniques are used in the most common statistical software and are also widely available via the open source statistical language R. There is a need for harmonised guidelines and standardised tools to share results and best practices among NSIs.

3.4.5. Some examples

In Eurostat, logistic regression was used recently in an SIF (*Statistics in focus*) on health and access to healthcare ([43]) and clustering was used on ageing in the EU ([44]) . Several projects are ongoing in different domains, and a forum of experts

([43]) Statistics in focus 24/2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-09-024/EN/KS-SF-09-024-EN.PDF).

([44]) Statistics in focus 26/2010 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-10-026/EN/KS-SF-10-026-EN.PDF).

called 'the network of methodologists' (subgroup data analysis) has been created to promote these techniques internally.

In Member States there are several cases of fruitful application of data analysis techniques in several domains. We shall take as an example the experience in ISTAT.

In ISTAT, data analysis techniques have been used in several application domains to improve production processes, as indicated in the examples below.

— In 2001 a tandem approach (CPI + Cluster) was applied to develop a project for compiling short-term statistics for wholesale trade (responding to the STS regulation) ([45]). In 2002 a tandem approach was also used to investigate the discrepancy between survey data and administrative sources concerning profit-and-loss account data for structural business statistics ([46]).

— In 2005–07 a method for partitioning the market for cellular phones into consumption segments was developed, starting from a dataset of characteristics that was built and continuously updated, relating to all the models placed on the market by the six leading producers in the Italian market. This enabled the consumption segments for this market to be defined and the procedure for collecting prices and for compiling the consumer price index to be derived. This analysis was very important in defining actual production processes ([47]).

A tandem approach on HICP data ([48])

In 2008–09 a tandem approach was used to analyse and classify the dynamic patterns of the whole set of sub-indices that make up the Harmonised Index of Consumer Prices (HICP) and suggest a method for assessing the comparability across countries of the sub-indices related to the same elementary aggregate ([49]). The objective of this study was to provide evidence to inform the work of a Eurostat task force on HICP sampling harmonisation. For this purpose, it used a data base of some 1 200 monthly sub-indices related to the whole set of the nearly 100 elementary aggregates (corresponding to the third digit of the HICP-COICOP classification), compiled by 14 EU countries ([50]) in the period 2004–08. By the sequential use of principal components and a Ward clustering algorithm, it provided a classification of these series: several partitions are analysed in a context in which about 25 % of the series belong to clusters with an appreciable variability. On the basis of the first five components (91 % of total inertia) it also came up with a measurement of the degree of heterogeneity of the series within each elementary aggregate: a ranking of the most problematic aggregates followed from this analysis as areas which might warrant further efforts to harmonise the approaches to sampling in order to improve the comparability of the estimates across countries.

Figure 3.4.1 sets out the position of the scatter on the space given by the first two principal components (68 % of total inertia), where the majority of elementary series are positioned strictly around the negative side of the first component, thus reflecting low variability and smooth behaviours. Nevertheless, a significant part of the series show more lively dynamics, with quite differentiated profiles as measured on the vertical axis.

([45]) See P. Anitori, C. De Gregorio (2004), 'A proposal of classification of wholesale trade enterprises on the base of structural and performance indicators' in: H.-H. Bock, M. Chiodi and A. Mineo (eds), Advances in multivariate data analysis, Springer-Verlag, Berlin-Heidelberg, pp. 169–180.

([46]) See G. Dabbicco G. and C. De Gregorio (2002),'L'utilizzo dei dati dei bilanci civilistici per l'integrazione delle mancate risposte totali alla rilevazione sul sistema dei conti delle imprese (SCI)', paper prepared within the ISTAT working group on the use of administrative sources for structural business statistics (UDAS).

([47]) This experience is only partly reported in C. De Gregorio, S. Fatello, R. Lo Conte, S. Mosca and F. Rossetti 2008. 'Sampling design and treatment of products in ISTAT centralised CPI surveys', Contributi ISTAT, No 1, 34 pp. (http://www.istat.it/dati/pubbsci/contributi/Contributi/contr_2008/01_2008.pdf).

([48]) This application has been developed in Eurostat by C. De Gregorio.

([49]) C. De Gregorio (2010), 'The dynamics of inflation components and their comparability among countries: the case of the HICP' (mimeo.).

([50]) Euro area 12 minus Luxembourg plus Sweden, the UK and Denmark.

Figure 3.4.1: Scatter of the sub-indices in the space given by the first two components

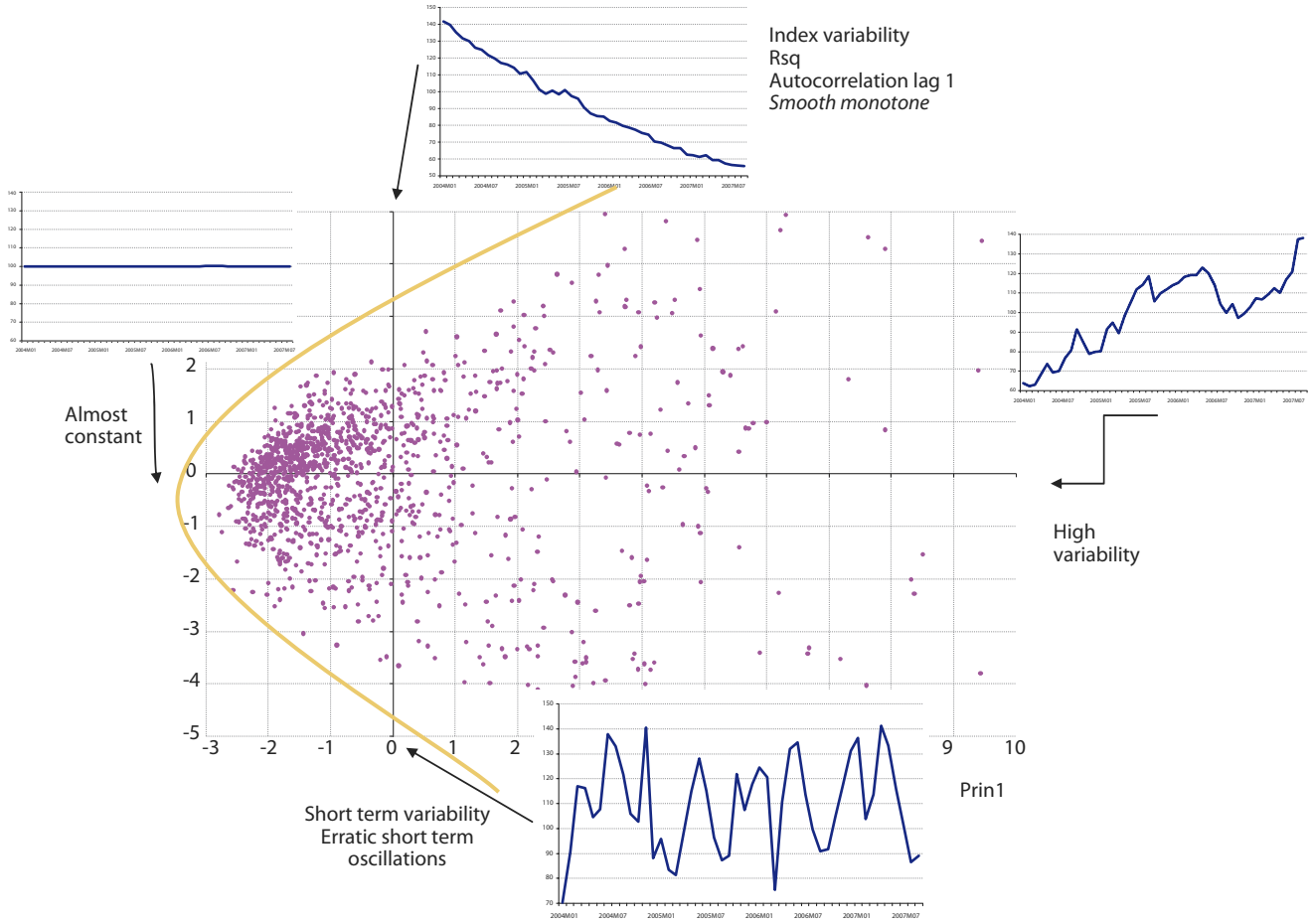
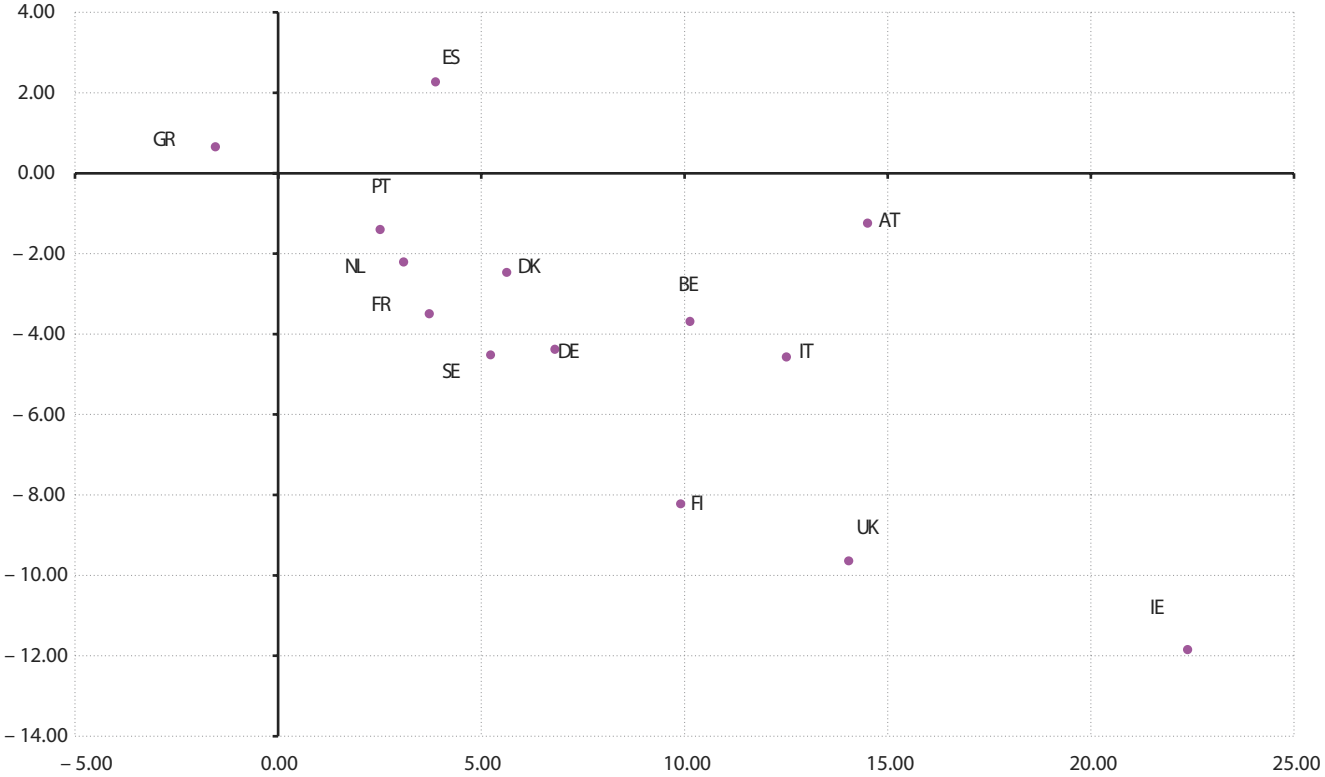


Figure 3.4.2 reports the case of the indices for air transportation, which is the most heterogeneous aggregate. Countries appear distributed along the diagonal running from north-west to south-east. With the sole exception of Greece and Spain, all countries present positive coordinates on the first principal component and negative on the second. The series with a higher variability in the level of the index appear influenced by short-term variability and in some cases by seasonal behaviour. Greece is the only country with a negative coordinate on the first factor: its sub-index moves discretely and remains constant for several months (nearly one year). Spain, whose sub-index has a relatively low variability, is the only case of a positive coordinate on the second component: in fact it shows a time-linear pattern, with an upward trend. The remaining countries all show very sharp monthly changes and fluctuations: the differences among them mainly concern the intensity of these movements. The case of air transport seems paradigmatic of a likely lack of methodological harmonisation, and it has been targeted together with other indices by the Eurostat task force in order to induce common approaches to the estimates.

Figure 3.4.2: Coordinates of the sub-indices for air transport on the space given by the first two principal components, by country; air transports (January 2004 to December 2008)



3.4.6. Conclusions and future perspectives

Data analysis is a very broad subject. We have described some techniques and given a concrete example of how it could improve production processes in official statistics. The widespread and standardised use of multidimensional analysis techniques can not only improve communication with users but can, above all, improve production processes. Well conducted analysis can in fact:

— enable the statistics producer to understand the data better and detect anomalies;

— improve data-gathering via a feedback process;

— improve quality.

In order to achieve these results there is a need for:

— exchanges of knowledge and tools;

— training and knowledge transfer;

— international comparability of analysis and visualisation methods.

New open questions and needs for exploratory data analysis and visualisation related to common problems in official statistics should be outlined as a basis for future research.

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4 Statistical annex

Table 4.1: GDP at current prices, millions of euros

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	9 942 347	10 109 801	10 607 866	11 062 203	11 682 468	12 363 930	12 501 668	11 805 662
Euro area (EA-16)	7 324 468	7 546 297	7 855 437	8 146 204	8 553 597	9 003 265	9 260 469	8 978 677
Belgium (BE)	268 256	275 716	290 825	302 845	318 193	334 948	344 676	337 284
Bulgaria (BG)	16 623	17 767	19 875	21 882	25 238	28 899	34 118	33 877
Czech Republic (CZ)	80 004	80 924	88 262	100 190	113 696	127 331	147 879	137 212 f
Denmark (DK)	184 744	188 500	197 070	207 367	218 747	227 025	233 027	222 893
Germany (DE)	2 143 180	2 163 800	2 210 900	2 242 200	2 325 100	2 428 200	2 495 800	2 409 100
Estonia (EE)	7 776	8 719	9 685	11 182	13 229	15 627	16 073	13 730
Ireland (IE)	130 258	139 763	149 098	162 091	176 759	189 751	181 816	163 543
Greece (EL)	156 615	172 431	185 813 p	195 366 p	210 459 p	226 437 p	239 141 p	237 494 p
Spain (ES)	729 206	782 929	841 042	908 792	984 284	1 052 730	1 088 502	1 051 151
France (FR)	1 548 555	1 594 814	1 660 189	1 726 068	1 806 429	1 895 284	1 948 511	1 907 145
Italy (IT)	1 295 226	1 335 354	1 391 530	1 429 479	1 485 377	1 546 177	1 567 851	1 520 870
Cyprus (CY)	11 170	11 785	12 728	13 659	14 673	15 951	17 248	16 947
Latvia (LV)	9 911	9 978	11 176	13 012	16 047	21 111	23 160	18 768
Lithuania (LT)	15 052	16 497	18 158	20 870	23 979	28 577	32 203	26 650
Luxembourg (LU)	23 992	25 834	27 456	30 282	34 150	37 466	39 348	37 755
Hungary (HU)	70 874	74 186	82 666	88 646	89 894	101 087	105 536	93 086
Malta (MT)	4 489	4 421	4 509	4 778	5 111	5 459	5 697	5 712
Netherlands (NL)	465 214	476 945	491 184	513 407	540 216	568 664	595 883	570 208
Austria (AT)	218 848	223 302	232 782	243 585	256 162	270 782	281 868	276 892
Poland (PL)	209 617	191 644	204 237	244 420	272 089	311 002	362 415	310 075
Portugal (PT)	135 434	138 582	144 128	149 123	155 447	163 052	166 462	163 891
Romania (RO)	48 615	52 577	61 064	79 802	97 751	124 729	139 753	115 869
Slovenia (SI)	24 527	25 736	27 136	28 758	31 056	34 568	37 135	34 894
Slovakia (SK)	25 953	29 468	33 970	38 462	44 537	54 898	64 778	63 332
Finland (FI)	143 541	145 416	152 148	157 307	165 643	179 536	184 179	170 971
Sweden (SE)	266 740	278 914	291 634	298 353	318 171	337 944	334 165	293 196
United Kingdom (UK)	1 710 421	1 647 056	1 772 546	1 833 954	1 944 751	2 044 133	1 818 947	1 566 741
Iceland (IS)	9 474	9 709	10 660	13 124	13 316	14 932	10 274	8 688
Liechtenstein (LI)	2 857	2 718	2 782	2 943	3 189	3 363	3 363	:
Norway (NO)	204 074	199 146	208 256	242 935	268 363	283 366	309 251	275 060
Switzerland (CH)	296 018	287 754	292 382	299 554	311 873	317 202	341 330	354 681
Croatia (HR)	28 089	29 993	32 754	35 722	39 093	42 824	47 365	45 376 f
FYR of Macedonia (MK)	4 001	4 105	4 325	4 676	5 081	5 792	6 481 f	6 557 f
Turkey (TR)	243 440	268 331	314 584	386 937	419 232	471 972	498 602	441 022
Japan (JP)	4 161 547	3 743 560	3 706 697	3 666 309	3 474 625	3 197 026	3 313 302	3 638 502
United States (UK)	11 254 547	9 849 806	9 540 799	10 158 669	10 671 313	10 271 872	9 818 738	10 221 035

Source: Eurostat (nama_gdp_c)

: = Not available

f = Forecast

p = provisional value

Table 4.2: GDP per capita in purchasing power standards (PPS), European Union = 100

	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	100	100	100	100 b	100	100	100
Euro area (EA-16)	111	111	109	110 b	109	109	108
Belgium (BE)	125	123	121	120 b	118	116	115
Bulgaria (BG)	31	32	34	34 b	36	38	41
Czech Republic (CZ)	70	73	75	76 b	77	80	80
Denmark (DK)	128	124	126	124 b	124	121	120
Germany (DE)	115	117	116	117 b	116	116	116
Estonia (EE)	50	55	57	62 b	65	69	67
Ireland (IE)	138	141	142	144 b	145	148	135
Greece (EL)	90	93	94 p	92 p	93 p	93 p	94 p
Spain (ES)	100	101	101	102 b	105	105	103
France (FR)	116	112	110	111 b	109	108	108
Italy (IT)	112	111	107	105 b	104	104	102
Cyprus (CY)	89	89	90	91 b	91	94	96
Latvia (LV)	41	43	46	49 b	52	56	57
Lithuania (LT)	44	49	50	53 b	55	59	62
Luxembourg (LU)	240	248	253	255 b	272	275	276
Hungary (HU)	62	63	63	63 b	63	63	64
Malta (MT)	80	78	77	78 b	77	76	76
Netherlands (NL)	133	129	129	131 b	131	132	134
Austria (AT)	126	127	127	124 b	125	123	124
Poland (PL)	48	49	51	51 b	52	54	56
Portugal (PT)	77	77	75	77 b	76	76	76
Romania (RO)	29	31	34	35 b	38	42	:
Slovenia (SI)	82	83	86	88 b	88	89	91 b
Slovakia (SK)	54	55	57	60 b	63	68	72
Finland (FI)	115	113	116	114 b	114	118	117
Sweden (SE)	122	124	126	122 b	123	125	122
United Kingdom (UK)	121	122	124	122 b	120	117	116
Iceland (IS)	130	125	131	131 b	123	122	121
Norway (NO)	155	156	164	176 b	184	179	191
Switzerland (CH)	141	137	136	133 b	136	141	141 p
Croatia (HR)	52	54	56	57 b	57	60	63
FYR of Macedonia (MK)	25	26	27	29 b	29	31	:
Turkey (TR)	36	36	40	42 b	44	45	46
Japan (JP)	112	112	113	113 b	113	112	:
United States (UK)	154	156	157	159 b	158	156	155

Source: Eurostat (nama_gdp_c)

: = Not available

b = Break in series

p = provisional value

Table 4.3: Gross value added by industry, % of total gross value added, 2009

	Agriculture, hunting,forestry and fishing	Total industry (excluding construc-tion)	Construction	Trade, transport and communication services	Financial services and business activities	Other services
European Union (EU-27)	1.7	18.1	6.3	20.8	29.1	24
Euro area (EA-16)	1.6	17.8	6.4	20.7	29.3	24.2
Belgium (BE)	0.6	16.7	5.2	21.7	30.3	25.3
Bulgaria (BG)	6	21.8	8.6	22.8	24.6	16.2
Czech Republic (CZ)	:	:	:	:	:	:
Denmark (DK)	1.1	17.3	5	19.5	27.4	29.8
Germany (DE)	0.8	22.1	4.5	17.5	31.1	24
Estonia (EE)	2.7	19.5	6.8	25.2	24.7	21.1
Ireland (IE)	1.4	23.9	8.5	17.5	28.7	20
Greece (EL)	3.8 p	11.8 p	4.5 p	33.5 p	19.8 p	26.6
Spain (ES)	2.4	15.1	10.7	25	23.7	22.9
France (FR)	1.7	12.4	6.4	19	33.7	26.7
Italy (IT)	1.8	18.8	6.3	22.2	28.8	22.1
Cyprus (CY)	2.1	9.6	9	25.9	28.1	25.3
Latvia (LV)	3.1	13.6	6.5	28	26.7	22.1
Lithuania (LT)	4.2	20.4	6.3	32	16.3	20.8
Luxembourg (LU)	0.3	8.2	5.7	19.4	49.4	17
Hungary (HU)	3	24.9	4.8	21.2	23.6	22.5
Malta (MT)	1.9	15.7	3.4	23.8	24.1	31
Netherlands (NL)	1.6	17.9	6	20.2	28.5	25.9
Austria (AT)	1.5	22.1	7.5	22.9	24	22.1
Poland (PL)	3.6	23	7.5	27.1	20.2	18.6
Portugal (PT)	2.3	16.7	5.6	24	22.9	28.6
Romania (RO)	7	26.4	10.9	23.6	16.8	15.4
Slovenia (SI)	2.1	23.8	7.6	22.1	23	21.4
Slovakia (SK)	2.6	25.5	8.8	24.3	21.9	16.9
Finland (FI)	2.6	21.6	6.7	18.4	25.6	25.2
Sweden (SE)	1.7	19.7	5.4	20.2	24.9	28.1
United Kingdom (UK)	0.9	16.2	5.8	20.2	33.1	23.8
Iceland (IS)	:	:	:	:	:	:
Norway (NO)	1	35.8	5.1	16	19.6	22.4
Switzerland (CH)	1.1	22	5.7	22.8	22.3	26.1
Croatia (HR)	:	:	:	:	:	:
FYR of Macedonia (MK)	:	:	:	:	:	:
Turkey (TR)	9.1	20.8	4.2	29.3	24.2	12.5

Source: Eurostat (nama_nace06_c)

: = Not available

p = provisional value

Table 4.4: Expenditure components, % of GDP, 2008

	Private final consumption		Government final consumption		Gross capital formation		External balance of goods and services	
European Union (EU-27)	:		22.3		18.4		1.0	
Euro area (EA-16)	:		22.0		19.1		1.3	
Belgium (BE)	50.9		24.6		20.5		2.8	
Bulgaria (BG)	65.0		16.1		26.2		– 7.7	
Czech Republic (CZ)	:		22.1	f	21.5	f	5.7	f
Denmark (DK)	48.4		29.7		17.7		3.4	
Germany (DE)	56.9		19.7		17.1		4.7	
Estonia (EE)	51.5		22.2		19.4		5.4	
Ireland (IE)	:		19.2		13.9		17.2	
Greece (EL)	71.5	p	19.0	p	18.1	p	– 9.7	
Spain (ES)	55.0		21.2		24.9		– 2.1	
France (FR)	56.9		24.6		19.0		– 1.9	
Italy (IT)	59.5		21.6		18.9		– 0.4	
Cyprus (CY)	67.8		19.9		17.2		– 5.8	
Latvia (LV)	60.0		21.1		19.0		– 0.9	
Lithuania (LT)	68.1		21.7		11.0		– 1.1	
Luxembourg (LU)	31.7		16.8		16.0		33.6	
Hungary (HU)	51.4		21.5		18.5		7.0	
Malta (MT)	62.7		21.6		11.6		2.6	
Netherlands (NL)	45.5		28.2		18.2		7.2	
Austria (AT)	53.1		19.9		21.3		4.2	
Poland (PL)	60.6		18.3		20.2		0.1	
Portugal (PT)	63.7		22.7		19.1		– 7.6	
Romania (RO)	61.4		18.1		25.1		– 5.9	
Slovenia (SI)	54.0		20.2		23.5		1.5	
Slovakia (SK)	59.5		19.6		20.6		– 0.2	
Finland (FI)	52.8		25.1		17.4		2.8	
Sweden (SE)	47.1		27.7		16.6		6.9	
United Kingdom (UK)	62.7		23.5		13.6		– 2.3	
Iceland (IS)	49.6		26.1		14.2		8.0	
Norway (NO)	40.4		22.2		20.9		14.7	
Switzerland (CH)	:		11.3		20.6		9.9	
Croatia (HR)	:		19.5	f	28.5	f	– 4.8	f
FYR of Macedonia (MK)	:		18.7	f	24.8	f	– 20.4	f
Turkey (TR)	71.6		14.7		14.9		– 1.2	
Japan (JP)	58.2		19.8		20.3	f	0.3	
United States (UK)	:		17.0		15.2	f	– 2.8	

Source: Eurostat (nama_nace06_c)

: = Not available

f = Forecast

p = provisional value

Table 4.5: Income components, % of GDP, 2008

	Compensation of employees		Wages and salaries		Employer's social contributions		Gross operating surplus and mixed income		Taxes onproduction and imports less subsidies	
European Union (EU-27)	48.5		38.4		10.1		39.7		11.8	
Euro area (EA-16)	47.9		37.1		10.8		40.5		11.7	
Belgium (BE)	51.2		38.0		13.2		38.0		10.9	
Bulgaria (BG)	36.2		29.8		6.4		46.3		17.5	
Czech Republic (CZ)	44.3		33.7		10.6		46.7		9.0	
Denmark (DK)	56.7		51.4		5.3		28.6		14.8	
Germany (DE)	49.0		39.9		9.1		39.5		11.4	
Estonia (EE)	51.3		38.7		12.6		37.8		10.9	
Ireland (IE)	43.7		40.5		3.2		45.6		10.9	
Greece (EL)	34.6	p	26.5	p	8.1		54.0	p	11.3	p
Spain (ES)	48.4		37.7		10.7		43.0		8.6	
France (FR)	51.6		38.0		13.6		35.2		13.2	
Italy (IT)	41.9		30.6		11.3		45.3		12.8	
Cyprus (CY)	44.0		38.5		5.5		39.1		16.9	
Latvia (LV)	49.6		42.9		6.7		41.2		9.2	
Lithuania (LT)	44.1		34.3		9.8		45.3		10.6	
Luxembourg (LU)	44.2		38.3		5.9		45.4		10.5	
Hungary (HU)	46.5		36.4		10.1		39.5		14.0	
Malta (MT)	43.8		39.6		4.2		43.3		12.9	
Netherlands (NL)	49.5		38.8		10.7		39.2		11.3	
Austria (AT)	49.1		39.7		9.4		40.3		10.6	
Poland (PL)	37.1		32.4		4.7		49.7		13.2	
Portugal (PT)	50.2		:		:		36.8		13.0	
Romania (RO)	39.3	f	:		:		:		:	
Slovenia (SI)	51.0		43.9		7.1		36.8		12.2	
Slovakia (SK)	35.9		27.6		8.3		55.6		8.5	
Finland (FI)	49.5		39.7		9.8		39.1		11.5	
Sweden (SE)	53.5		40.6		12.9		30.2		16.3	
United Kingdom (UK)	53.3		45.1		8.2		35.2		11.5	
Iceland (IS)	55.6		:		:		30.6		13.8	
Norway (NO)	42.4		34.5		7.9		48.5		9.3	
Switzerland (CH)	61.3		51.1		10.2		35.5		3.2	
Croatia (HR)	49.1		:		:		34.0		14.4	
FYR of Macedonia (MK)	34.3	f	:		:		:		:	
Turkey (TR)	20.1	f	:		:		:		:	

Source: Eurostat (nama_gdp_c, nama_nace06_c)

: = Not available

f = Forecast

p = provisional value

Table 4.6: GDP and main components – volumes, % change on previous period

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	1.2	1.3	2.5	2	3.2	2.9	0.7	– 4.2
Euro area (EA-16)	0.9	0.8	2.2	1.7	3	2.8	0.6	– 4.1
Belgium (BE)	1.4	0.8	3.2	1.8	2.8	2.9	1	– 3
Bulgaria (BG)	4.5	5	6.6	6.2	6.3	6.2	6	– 5
Czech Republic (CZ)	1.9	3.6	4.5	6.3	6.8	6.1	2.5	– 4.2 f
Denmark (DK)	0.5	0.4	2.3	2.4	3.4	1.7	– 0.9	– 4.9
Germany (DE)	0	– 0.2	1.2	0.8	3.2	2.5	1.3	– 4.9
Estonia (EE)	7.9	7.6	7.2	9.4	10	7.2	– 3.6	– 14.1
Ireland (IE)	6.5	4.4	4.6	6.2	5.4	6	– 3	– 7.1
Greece (EL)	3.4	5.9	4.6 p	2.2 p	4.5 p	4.5 p	2 p	– 2 p
Spain (ES)	2.7	3.1	3.3	3.6	4	3.6	0.9	– 3.6
France (FR)	1	1.1	2.5	1.9	2.2	2.4	0.2	– 2.6
Italy (IT)	0.5	0	1.5	0.7	2	1.5	– 1.3	– 5
Cyprus (CY)	2.1	1.9	4.2	3.9	4.1	5.1	3.6	– 1.7
Latvia (LV)	6.5	7.2	8.7	10.6	12.2	10	– 4.6	– 18
Lithuania (LT)	6.9	10.2	7.4	7.8	7.8	9.8	2.8	– 14.8
Luxembourg (LU)	4.1	1.5	4.4	5.4	5.6	6.5	0	– 3.4
Hungary (HU)	4.4	4.3	4.9	3.5	4	1	0.6	– 6.3
Malta (MT)	2.6	– 0.3	0.7	3.9	3.6	3.8	2.1	– 1.9
Netherlands (NL)	0.1	0.3	2.2	2	3.4	3.6	2	– 4
Austria (AT)	1.6	0.8	2.5	2.5	3.5	3.5	2	– 3.6
Poland (PL)	1.4	3.9	5.3	3.6	6.2	6.8	5	1.7
Portugal (PT)	0.8	– 0.8	1.5	0.9	1.4	1.9	0	– 2.7
Romania (RO)	5.1	5.2	8.5	4.2	7.9	6.3	7.3	– 7.1
Slovenia (SI)	4	2.8	4.3	4.5	5.8	6.8	3.5	– 7.8
Slovakia (SK)	4.6	4.8	5	6.7	8.5	10.6	6.2	– 4.7
Finland (FI)	1.8	2	4.1	2.9	4.4	4.9	1.2	– 7.8
Sweden (SE)	2.5	2.3	4.2	3.2	4.3	3.3	– 0.4	– 5.2
United Kingdom (UK)	2.1	2.8	3	2.2	2.9	2.6	0.5	– 4.9
Iceland (IS)	0.1	2.4	7.7	7.5	4.6	6	1	– 6.5
Norway (NO)	1.5	1	3.9	2.7	2.3	2.7	1.8	– 1.6
Switzerland (CH)	0.4	– 0.2	2.5	2.6	3.6	3.6	1.8	– 1.5
Croatia (HR)	5.4	5	4.2	4.2	4.7	5.5	2.4	– 5.8 f
FYR of Macedonia (MK)	0.9	2.8	4.1	4.1	4	5.9	4.9 f	– 0.7 f
Turkey (TR)	6.2	5.3	9.4	8.4	6.9	4.7	0.9	– 4.7 f
Japan (JP)	0.3	1.4	2.7	1.9	2	2.4	– 1.2	– 5.2
United States (UK)	1.8	2.5	3.6	3.1	2.7	2.1	0.4	– 2.4

Source: Eurostat (nama_gdp_k)

: = Not available

f = Forecast

p = provisional value

Table 4.7: Labour productivitity per person employed, % change on previous period

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	0.9	1	1.8	1	1.5	1.1	– 0.2	– 2.4
Euro area (EA-16)	0.2	0.4	1.4	0.7	1.3	1	– 0.1	– 2.2
Belgium (BE)	1.5	0.8	2.3	0.4	1.6	1.3	– 0.8	– 2.6
Bulgaria (BG)	4.3	2	3.9	3.5	2.9	3.3	2.7	– 2.2 f
Czech Republic (CZ)	1.3	5	4.1	5.2	4.8	3.4	1.2	– 3.1 f
Denmark (DK)	0.4	1.5	2.9	1.4	1.3	– 1.2	– 2.2	– 1.3
Germany (DE)	0.6	0.7	0.8	0.9	2.5	0.8	– 0.1	– 4.9
Estonia (EE)	6.6	6	7.3	7.3	4.3	6.4	– 3.7	– 4.6
Ireland (IE)	4.8	2.5	1.2	1.2	1	2.3	– 1.9	1.2
Greece (EL)	1.2	4.7	2.4 p	1.3 p	2.4 p	3.1 p	1.9 p	– 0.8 p
Spain (ES)	0.3	0	– 0.3	– 0.5	0.1	0.5	1.5	3.2
France (FR)	0.4	1	2.4	1.3	1.2	0.9	– 0.4	– 1.4
Italy (IT)	– 1.2	– 1.5	1.1	0.1	0.1	0.2	– 1.6	– 3.4
Cyprus (CY)	0	– 1.8	0.4	0.3	2.3	1.8	1	– 1.1
Latvia (LV)	3.4	5.1	7.4	8.9	7	6.2	– 5.4	– 5.1
Lithuania (LT)	3.1	7.8	7.4	5.2	5.9	6.9	3.3	– 8.5
Luxembourg (LU)	0.8	– 0.3	2.1	2.5	1.9	2	– 4.5	– 4.3
Hungary (HU)	4.6	4.2	6.4	3.8	3.3	1.3	1.9	– 2.8
Malta (MT)	2	– 1.3	1.4	2.3	2.2	0.6	– 0.4	– 1.3
Netherlands (NL)	– 0.4	0.8	3.1	1.5	1.7	1	0.5	– 3.1
Austria (AT)	1.7	0.9	1.1	1	2	1.7	0.3	– 2.7
Poland (PL)	4.6	5.1	4.1	1.4 b	2.9	2.3	1.2	1.3 f
Portugal (PT)	0.2	– 0.2	1.6	1.2	0.9	1.9	– 0.4	– 0.1
Romania (RO)	17	5.3	10.3	5.8	7.1	5.9	7.6	– 6.2 f
Slovenia (SI)	2.4	3.2	4	4.7	4.2	3.7	0.7	– 5.8
Slovakia (SK)	4.5	3.7	5.3	5.2	6.1	8.3	3.3	– 2.4
Finland (FI)	0.9	1.9	3.7	1.5	2.5	2.7	– 0.3	– 4.9
Sweden (SE)	2.4	2.9	5	2.9	2.6	0.8	– 1.3	– 3.3
United Kingdom (UK)	1.3	1.8	1.9	1.1	2	1.9	– 0.2	– 3.4
Iceland (IS)	1.6	2.3	8.2	4.1	– 0.5 f	1.4 f	0.2 f	– 0.5 f
Norway (NO)	1.1	2.1	3.4	1.5	– 1.3	– 1.3	– 1.3	– 1.3
Switzerland (CH)	0	0	2.2	2.2	1.3	0.7 f	– 0.1 f	– 2.3 f
Croatia (HR)	1.2	4.3	2.5	3.4 f	5.4 f	1.9 f	1.3 f	– 3.4 f
FYR of Macedonia (MK)	1.4	4.8	6.4	2	0.8	1.5	1.7 f	– 4 f
Turkey (TR)	8.1 f	6.3 f	6.1 f	6.9 f	5.5 f	3.5 f	– 1.3 f	– 5.1 f
Japan (JP)	1.9	1.7	2.5	1.5	1.6	:	:	– 3.7 f
United States (UK)	2.1	1.6	2.5	1.3	0.8	1 f	0.9 f	1.4 f

Source: Eurostat (nama_aux_lp)

: = Not available

b = Break in series

f = Forecast

p = provisional value

Table 4.8: Household saving rate

Calculated in % as: gross saving / gross disposable income (D8 is included)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	11.4 %	12.3 %	12.2 %	12.1 %	11.6 %	11.3 %	10.9 %	10.8 %	11.0 %
Euro area (EA-16)	13.4 %	14.1 %	14.6 %	14.4 %	14.3 %	13.8 %	13.5 %	13.9 %	14.1 %
Belgium (BE)	16.7 %	17.8 %	17.3 %	16.7 %	15.4 %	15.0 %	15.8 %	16.2 %	16.6 %
Bulgaria (BG)	:	:	:	:	:	:	:	:	:
Czech Republic (CZ)	8.5 %	7.4 %	8.1 %	7.4 %	5.7 %	8.1 %	9.4 %	10.7 %	10.2 %
Denmark (DK)	4.3 %	9.6 %	9.5 %	9.8 %	6.4 %	3.7 %	5.4 %	4.8 %	5.5 %
Germany (DE)	15.1 %	15.2 %	15.7 %	16.0 %	16.1 %	16.3 %	16.4 %	16.8 %	17.2 %
Estonia (EE)	4.1 %	3.1 %	0.5 %	– 1.6 %	– 4.8 %	– 4.5 %	– 3.2 %	– 0.5 %	3.0 %
Ireland (IE)	:	:	9.0 %	9.2 %	12.5 %	11.0 %	10.0 %	8.2 %	10.0 %
Greece (EL)	3.2 %	2.2 %	– 0.2 %	1.2 %	1.0 %	– 0.8 %	– 3.2 %	2.2 %	– 1.4 %
Spain (ES)	11.1 %	11.1 %	11.4 %	12.0 %	11.3 %	11.3 %	11.1 %	10.6 %	12.9 %
France (FR)	14.9 %	15.6 %	16.7 %	15.6 %	15.6 %	14.6 %	14.8 %	15.3 %	15.1 %
Italy (IT)	14.2 %	16.0 %	16.8 %	16.0 %	16.0 %	15.8 %	15.2 %	14.5 %	15.1 %
Cyprus (CY)	:	:	:	:	:	:	:	:	:
Latvia (LV)	2.3 %	– 1.0 %	1.1 %	2.7 %	4.4 %	1.4 %	– 3.5 %	– 4.2 %	0.8 %
Lithuania (LT)	6.5 %	4.9 %	4.7 %	2.9 %	1.2 %	1.2 %	1.1 %	– 5.3 %	– 1.3 %
Luxembourg (LU)	:	:	:	:	:	:	:	:	:
Hungary (HU)	14.0 %	13.5 %	11.3 %	9.2 %	11.5 %	10.7 %	12.2 %	9.6 %	8.2 %
Malta (MT)	:	:	:	:	:	:	:	:	:
Netherlands (NL)	11.9 %	14.5 %	13.7 %	13.0 %	13.0 %	12.2 %	12.2 %	13.9 %	13.0 %
Austria (AT)	13.9 %	12.9 %	12.9 %	14.0 %	14.1 %	14.4 %	15.4 %	16.0 %	16.7 %
Poland (PL)	12.4 %	14.2 %	10.4 %	10.0 %	10.1 %	9.3 %	8.9 %	9.5 %	6.5 %
Portugal (PT)	10.2 %	10.9 %	10.6 %	10.5 %	9.7 %	9.2 %	8.1 %	6.1 %	6.4 %
Romania (RO)	:	:	:	:	:	:	:	:	:
Slovenia (SI)	14.0 %	15.5 %	16.1 %	13.9 %	15.4 %	17.4 %	17.6 %	15.4 %	16.4 %
Slovakia (SK)	11.1 %	9.1 %	8.7 %	6.9 %	6.1 %	6.7 %	6.0 %	7.6 %	6.7 %
Finland (FI)	7.5 %	7.7 %	7.8 %	8.3 %	9.2 %	7.8 %	6.1 %	6.4 %	6.7 %
Sweden (SE)	7.4 %	11.8 %	11.6 %	11.4 %	10.3 %	9.5 %	10.5 %	12.0 %	14.2 %
United Kingdom (UK)	4.7 %	6.0 %	4.8 %	5.1 %	3.7 %	3.9 %	2.9 %	2.2 %	1.7 %
Norway (NO)	9.2 %	8.2 %	12.7 %	13.3 %	11.8 %	14.5 %	5.5 %	6.9 %	8.8 %
Switzerland (CH)	16.9 %	17.1 %	16.1 %	14.8 %	14.4 %	15.4 %	16.6 %	17.8 %	:

Source: Eurostat (tsdec240)

*D8 - Adjustment for the change in net equity of households in pension funds reserves

: = Not available

Table 4.9: Investment rate of households

Calculated in % as: gross fixed capital formation / gross disposable income (D8 is included)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	9.1 %	8.8 %	8.7 %	8.9 %	9.2 %	9.4 %	10.0 %	10.3 %	9.7 %
Euro area (EA-16)	10.2 %	9.7 %	9.5 %	9.6 %	9.8 %	10.1 %	10.7 %	10.9 %	10.5 %
Belgium (BE)	9.2 %	8.4 %	8.2 %	8.5 %	9.1 %	10.3 %	10.4 %	10.5 %	10.4 %
Bulgaria (BG)	:	:	:	:	:	:	:	:	:
Czech Republic (CZ)	9.0 %	9.1 %	9.0 %	8.5 %	8.5 %	8.3 %	8.7 %	10.1 %	9.1 %
Denmark (DK)	10.9 %	9.8 %	8.8 %	9.1 %	9.2 %	11.3 %	12.5 %	12.8 %	11.1 %
Germany (DE)	10.8 %	9.7 %	9.0 %	8.8 %	8.5 %	8.3 %	8.9 %	9.2 %	9.3 %
Estonia (EE)	5.5 %	6.3 %	7.2 %	8.6 %	10.0 %	12.5 %	15.3 %	13.9 %	9.8 %
Ireland (IE)	:	:	16.8 %	20.0 %	22.7 %	26.0 %	27.2 %	23.9 %	15.8 %
Greece (EL)	14.5 %	14.2 %	15.6 %	16.2 %	15.5 %	14.8 %	15.5 %	14.8 %	13.5 %
Spain (ES)	10.9 %	11.4 %	12.0 %	13.0 %	13.9 %	14.5 %	15.2 %	15.1 %	12.9 %
France (FR)	8.6 %	8.5 %	8.4 %	8.7 %	8.9 %	9.4 %	10.0 %	10.4 %	10.4 %
Italy (IT)	9.1 %	8.8 %	9.2 %	8.8 %	8.9 %	9.3 %	9.6 %	9.8 %	9.7 %
Cyprus (CY)	:	:	:	:	:	:	:	:	:
Latvia (LV)	2.0 %	2.1 %	2.0 %	3.9 %	5.2 %	7.6 %	7.4 %	8.2 %	5.5 %
Lithuania (LT)	5.3 %	5.6 %	5.3 %	6.3 %	6.6 %	6.2 %	5.6 %	6.2 %	5.3 %
Luxembourg (LU)	:	:	:	:	:	:	:	:	:
Hungary (HU)	8.4 %	9.5 %	9.8 %	10.1 %	10.3 %	8.8 %	7.5 %	8.3 %	8.8 %
Malta (MT)	:	:	:	:	:	:	:	:	:
Netherlands (NL)	12.3 %	11.8 %	11.4 %	11.7 %	11.5 %	12.4 %	13.4 %	13.7 %	14.2 %
Austria (AT)	8.6 %	8.3 %	7.8 %	7.8 %	7.7 %	7.6 %	7.6 %	7.9 %	8.0 %
Poland (PL)	6.6 %	6.2 %	6.4 %	6.8 %	6.9 %	7.1 %	7.0 %	7.7 %	8.2 %
Portugal (PT)	10.7 %	10.4 %	10.0 %	8.6 %	8.5 %	8.3 %	7.6 %	7.7 %	7.6 %
Romania (RO)	:	:	:	:	:	:	:	:	:
Slovenia (SI)	9.2 %	8.9 %	8.0 %	8.1 %	8.6 %	8.7 %	9.9 %	10.0 %	10.4 %
Slovakia (SK)	10.4 %	9.0 %	9.8 %	9.1 %	8.1 %	9.0 %	9.1 %	8.9 %	8.8 %
Finland (FI)	10.4 %	9.5 %	9.2 %	9.6 %	10.0 %	10.9 %	11.5 %	11.6 %	10.5 %
Sweden (SE)	3.5 %	3.4 %	3.7 %	3.9 %	4.5 %	4.9 %	5.4 %	5.7 %	5.3 %
United Kingdom (UK)	5.8 %	6.1 %	6.7 %	7.1 %	8.1 %	7.9 %	8.5 %	9.0 %	7.0 %
Norway (NO)	9.0 %	9.7 %	8.7 %	8.3 %	9.6 %	10.0 %	11.5 %	11.9 %	10.7 %
Switzerland (CH)	7.4 %	6.8 %	6.5 %	7.0 %	7.4 %	7.5 %	7.2 %	7.1 %	:

Source: Eurostat (tec00098)

*D8 - Adjustment for the change in net equity of households in pension funds reserves

: = Not available

Table 4.10: Gross debt-to-income ratio of households

Calculated in % as: loans, liabilities / gross disposable income (D8 is included)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	:	:	:	:	:	:	:	:	:
Euro area (EA-16)	74.1 %	73.9 %	76.7 %	79.6 %	83.1 %	87.6 %	91.5 %	93.4 %	93.2 %
Belgium (BE)	62.1 %	58.4 %	60.3 %	62.6 %	65.4 %	70.1 %	74.1 %	77.0 %	79.2 %
Bulgaria (BG)	:	:	:	:	:	:	:	:	:
Czech Republic (CZ)	13.0 %	14.9 %	17.7 %	20.9 %	26.1 %	33.9 %	37.2 %	:	:
Denmark (DK)	184.0 %	180.8 %	187.8 %	195.8 %	210.4 %	232.0 %	238.1 %	251.0 %	265.7 %
Germany (DE)	104.9 %	102.6 %	102.6 %	101.6 %	100.3 %	98.3 %	96.0 %	93.0 %	89.4 %
Estonia (EE)	15.2 %	19.1 %	25.0 %	33.5 %	45.3 %	60.7 %	79.6 %	87.9 %	:
Ireland (IE)	:	:	107.5 %	120.4 %	135.5 %	163.1 %	182.6 %	193.4 %	196.7 %
Greece (EL)	17.1 %	22.4 %	28.7 %	34.1 %	42.0 %	50.9 %	59.7 %	64.5 %	70.7 %
Spain (ES)	68.8 %	72.4 %	79.2 %	88.0 %	98.7 %	110.4 %	122.9 %	129.9 %	127.8 %
France (FR)	55.3 %	55.6 %	56.0 %	58.3 %	60.9 %	65.9 %	69.6 %	72.6 %	75.3 %
Italy (IT)	32.0 %	32.0 %	37.8 %	41.1 %	45.1 %	49.6 %	53.2 %	56.8 %	56.6 %
Cyprus (CY)	:	:	:	:	:	:	:	:	:
Latvia (LV)	8.6 %	9.7 %	14.5 %	21.7 %	30.9 %	48.0 %	68.3 %	79.7 %	73.7 %
Lithuania (LT)	2.2 %	2.7 %	4.8 %	8.0 %	13.9 %	21.4 %	31.8 %	44.6 %	45.6 %
Luxembourg (LU)	:	:	:	:	:	:	:	:	:
Hungary (HU)	9.4 %	12.5 %	18.5 %	27.0 %	31.8 %	37.5 %	42.1 %	49.5 %	61.8 %
Malta (MT)	:	:	:	:	:	:	:	:	:
Netherlands (NL)	151.8 %	153.1 %	164.0 %	179.5 %	189.8 %	205.5 %	218.9 %	220.2 %	227.9 %
Austria (AT)	73.9 %	75.4 %	77.6 %	76.8 %	80.1 %	84.9 %	83.6 %	84.4 %	82.4 %
Poland (PL)	9.8 %	11.8 %	17.3 %	18.7 %	19.8 %	23.4 %	28.8 %	35.8 %	49.4 %
Portugal (PT)	87.2 %	92.2 %	99.3 %	105.8 %	112.3 %	118.8 %	126.2 %	136.0 %	134.9 %
Romania (RO)	:	:	:	:	:	:	:	:	:
Slovenia (SI)	:	23.4 %	23.5 %	24.6 %	25.5 %	29.1 %	34.0 %	40.0 %	41.4 %
Slovakia (SK)	9.5 %	10.8 %	13.6 %	17.0 %	17.5 %	26.2 %	33.6 %	40.4 %	46.4 %
Finland (FI)	61.2 %	61.5 %	65.2 %	70.4 %	76.5 %	85.6 %	93.0 %	97.7 %	99.1 %
Sweden (SE)	94.7 %	95.4 %	98.9 %	104.2 %	112.5 %	121.2 %	128.7 %	133.4 %	137.2 %
United Kingdom (UK)	100.4 %	104.5 %	114.1 %	122.8 %	135.4 %	137.3 %	147.5 %	153.5 %	152.6 %
Norway (NO)	118.5 %	128.0 %	128.1 %	133.4 %	142.1 %	148.2 %	172.1 %	177.0 %	177.7 %
Switzerland (CH)	155.8 %	154.7 %	160.9 %	170.1 %	172.2 %	173.2 %	173.2 %	169.6 %	:

Source: Eurostat (tec00104)

*D8 - Adjustment for the change in net equity of households in pension funds reserves

: = Not available

Table 4.11: Investment rate of non-financial corporations

Calculated in % as: gross fixed capital formation / gross value added of non-financial corporations)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	23.0 %	22.5 %	21.8 %	21.3 %	21.2 %	22.1 %	22.7 %	23.2 %	23.2 %
Euro area (EA-16)	23.1 %	22.4 %	21.6 %	21.2 %	21.4 %	22.0 %	22.7 %	23.3 %	23.1 %
Belgium (BE)	23.1 %	22.6 %	20.4 %	20.5 %	21.4 %	21.8 %	22.5 %	23.5 %	24.5 %
Bulgaria (BG)	:	:	:	:	:	:	:	:	:
Czech Republic (CZ)	33.2 %	33.6 %	31.8 %	30.6 %	28.7 %	26.5 %	25.0 %	25.2 %	23.2 %
Denmark (DK)	25.6 %	25.0 %	26.0 %	25.8 %	25.2 %	23.9 %	25.9 %	27.0 %	25.8 %
Germany (DE)	21.1 %	19.8 %	17.9 %	17.7 %	17.4 %	17.5 %	18.3 %	19.0 %	19.1 %
Estonia (EE)	31.4 %	30.4 %	33.7 %	36.1 %	35.0 %	33.8 %	34.6 %	34.9 %	29.1 %
Ireland (IE)	:	:	16.2 %	16.4 %	18.0 %	19.3 %	18.0 %	18.1 %	14.7 %
Greece (EL)	20.1 %	20.3 %	21.5 %	21.3 %	20.0 %	19.6 %	20.1 %	19.8 %	17.6 %
Spain (ES)	30.5 %	29.9 %	29.8 %	30.4 %	31.5 %	33.9 %	35.4 %	36.2 %	33.2 %
France (FR)	19.7 %	19.8 %	18.7 %	18.2 %	18.6 %	19.1 %	19.7 %	20.8 %	21.3 %
Italy (IT)	23.8 %	23.8 %	24.8 %	24.1 %	24.1 %	24.3 %	25.1 %	25.2 %	24.9 %
Cyprus (CY)	:	:	:	:	:	:	:	:	:
Latvia (LV)	35.9 %	36.0 %	34.8 %	32.0 %	34.7 %	37.4 %	38.2 %	38.8 %	34.0 %
Lithuania (LT)	24.3 %	25.7 %	23.9 %	24.0 %	24.1 %	25.1 %	28.3 %	31.2 %	26.1 %
Luxembourg (LU)	:	:	:	:	:	:	:	:	:
Hungary (HU)	31.4 %	27.7 %	24.5 %	26.1 %	25.4 %	27.5 %	24.9 %	24.2 %	24.8 %
Malta (MT)	:	:	:	:	:	:	:	:	:
Netherlands (NL)	18.2 %	17.4 %	16.8 %	15.2 %	15.1 %	15.2 %	15.2 %	15.9 %	15.6 %
Austria (AT)	31.5 %	30.5 %	28.1 %	29.5 %	29.1 %	28.8 %	28.4 %	28.8 %	28.6 %
Poland (PL)	38.2 %	29.4 %	25.2 %	23.8 %	22.4 %	22.9 %	25.0 %	27.9 %	27.9 %
Portugal (PT)	33.0 %	31.8 %	29.7 %	28.4 %	27.0 %	28.2 %	27.5 %	27.2 %	27.4 %
Romania (RO)	:	:	:	:	:	:	:	:	:
Slovenia (SI)	31.7 %	29.0 %	27.5 %	28.7 %	29.4 %	31.0 %	30.8 %	31.1 %	33.1 %
Slovakia (SK)	32.2 %	39.9 %	37.9 %	36.5 %	35.4 %	40.8 %	38.7 %	38.2 %	35.8 %
Finland (FI)	19.8 %	20.5 %	17.6 %	17.1 %	16.8 %	17.6 %	18.0 %	19.6 %	20.8 %
Sweden (SE)	23.1 %	22.6 %	20.8 %	20.0 %	19.8 %	21.0 %	21.6 %	22.4 %	23.3 %
United Kingdom (UK)	18.5 %	18.3 %	17.9 %	16.9 %	16.3 %	19.1 %	16.8 %	17.8 %	17.8 %
Norway (NO)	18.4 %	17.3 %	17.5 %	16.8 %	16.5 %	17.5 %	17.9 %	21.5 %	21.9 %
Switzerland (CH)	23.6 %	22.9 %	22.7 %	21.0 %	20.9 %	21.6 %	22.7 %	23.6 %	:

Source: Eurostat (tec00099)

: = Not available

Table 4.12: Profit share of non-financial corporations

Calculated in % as: gross operating surplus / gross value added of non-financial corporations

	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union (EU-27)	37.0 %	36.9 %	36.8 %	37.0 %	37.7 %	38.1 %	38.8 %	38.8 %	38.2 %
Euro area (EA-16)	37.8 %	38.3 %	38.2 %	38.2 %	38.7 %	38.9 %	39.2 %	39.6 %	39.0 %
Belgium (BE)	34.9 %	33.5 %	33.8 %	35.1 %	37.0 %	38.1 %	38.1 %	39.1 %	38.0 %
Bulgaria (BG)	:	:	:	:	:	:	:	:	:
Czech Republic (CZ)	47.6 %	48.1 %	47.2 %	45.7 %	46.7 %	47.4 %	48.2 %	47.7 %	44.9 %
Denmark (DK)	40.8 %	38.3 %	37.5 %	37.4 %	38.5 %	38.4 %	38.6 %	35.6 %	33.7 %
Germany (DE)	36.3 %	37.2 %	37.5 %	37.7 %	38.7 %	40.1 %	41.2 %	41.9 %	41.2 %
Estonia (EE)	44.7 %	46.1 %	46.8 %	48.0 %	48.1 %	49.0 %	47.2 %	43.4 %	39.8 %
Ireland (IE)	:	:	59.0 %	57.9 %	56.1 %	54.6 %	54.6 %	55.4 %	52.1 %
Greece (EL)	55.9 %	57.8 %	54.3 %	56.2 %	57.9 %	58.0 %	59.4 %	59.4 %	59.5 %
Spain (ES)	35.8 %	35.8 %	36.0 %	36.0 %	36.6 %	35.8 %	35.4 %	35.0 %	35.9 %
France (FR)	31.2 %	31.3 %	30.7 %	31.0 %	30.8 %	30.8 %	31.0 %	31.6 %	31.3 %
Italy (IT)	46.9 %	47.0 %	46.3 %	45.6 %	45.7 %	44.2 %	43.2 %	43.2 %	42.5 %
Cyprus (CY)	51.9 %	51.8 %	49.4 %	44.5 %	43.0 %	43.1 %	42.2 %	41.7 %	42.3 %
Latvia (LV)	49.8 %	52.7 %	55.7 %	54.1 %	52.8 %	49.7 %	47.0 %	44.0 %	44.8 %
Lithuania (LT)	51.4 %	56.4 %	56.4 %	56.2 %	55.4 %	54.4 %	52.0 %	52.0 %	50.3 %
Luxembourg (LU)	:	:	:	:	:	:	:	:	:
Hungary (HU)	38.6 %	39.5 %	41.7 %	40.4 %	41.6 %	39.8 %	42.4 %	41.7 %	40.9 %
Malta (MT)	51.0 %	46.8 %	49.5 %	48.8 %	49.7 %	51.6 %	52.6 %	54.3 %	57.3 %
Netherlands (NL)	39.1 %	38.7 %	38.7 %	38.0 %	38.4 %	40.2 %	40.8 %	40.9 %	40.2 %
Austria (AT)	39.7 %	38.6 %	39.1 %	39.5 %	41.0 %	41.7 %	42.4 %	42.6 %	42.1 %
Poland (PL)	36.7 %	33.8 %	38.0 %	42.1 %	47.4 %	47.2 %	47.1 %	47.0 %	45.5 %
Portugal (PT)	36.7 %	37.2 %	37.0 %	35.5 %	36.9 %	35.9 %	35.4 %	36.1 %	34.1 %
Romania (RO)	:	:	:	:	:	:	:	:	:
Slovenia (SI)	28.9 %	29.5 %	30.5 %	32.2 %	31.7 %	31.1 %	32.6 %	34.7 %	33.9 %
Slovakia (SK)	48.6 %	50.1 %	47.8 %	50.1 %	54.8 %	52.0 %	54.3 %	54.6 %	55.0 %
Finland (FI)	45.7 %	45.8 %	45.6 %	45.0 %	45.2 %	43.8 %	45.3 %	46.2 %	43.8 %
Sweden (SE)	30.3 %	27.1 %	28.1 %	28.5 %	30.2 %	31.2 %	33.0 %	31.6 %	29.4 %
United Kingdom (UK)	33.8 %	32.7 %	32.6 %	33.3 %	34.2 %	34.4 %	35.7 %	35.2 %	35.2 %
Norway (NO)	55.1 %	54.5 %	51.4 %	52.4 %	55.5 %	58.9 %	59.6 %	55.9 %	58.7 %
Switzerland (CH)	34.0 %	32.5 %	31.8 %	31.8 %	34.3 %	34.0 %	35.4 %	35.6 %	:

Source: Eurostat (tec00100)

: = Not available

Table 4.13: Total general government expenditure europer inhabitant

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	9 560	9 800	10 148	10 538	10 950	11 388	11 744	11 965
Euro area (EA-16)	11 017	11 387	11 647	11 964	12 313	12 708	13 224	13 825
Belgium (BE)	12 943	13 589	13 798	15 095	14 656	15 261	16 103	16 981
Bulgaria (BG)	851	918	1 017	1 115	1 200	1 568	1 673	1 823
Czech Republic (CZ)	3 632	3 754	3 903	4 404	4 845	5 242	6 082	6 028
Denmark (DK)	18 751	19 258	19 897	20 200	20 754	21 174	21 990	23 622
Germany (DE)	12 498	12 715	12 621	12 736	12 802	12 893	13 283	13 992
Estonia (EE)	2 043	2 239	2 436	2 788	3 345	4 049	4 779	4 647
Ireland (IE)	11 086	11 614	12 289	13 227	14 283	15 888	17 189	17 718
Greece (EL)	6 427	6 998	7 624	7 711	8 146	9 110	9 958	10 626
Spain (ES)	6 864	7 157	7 660	8 051	8 575	9 198	9 802	10 451
France (FR)	13 232	13 695	14 131	14 636	15 022	15 549	16 046	16 570
Italy (IT)	10 738	11 201	11 419	11 744	12 275	12 460	12 798	13 090
Cyprus (CY)	6 330	7 339	7 361	7 854	8 251	8 576	9 262	9 814
Latvia (LV)	1 511	1 493	1 729	2 011	2 675	3 315	3 942	3 571
Lithuania (LT)	1 507	1 584	1 761	2 038	2 373	2 949	3 591	3 447
Luxembourg (LU)	22 330	23 901	25 505	27 027	27 683	28 259	29 939	32 149
Hungary (HU)	3 572	3 618	3 982	4 404	4 638	5 005	5 174	4 622
Malta (MT)	4 893	5 300	5 118	5 312	5 481	5 647	6 172	6 099
Netherlands (NL)	13 313	13 846	13 910	14 094	15 056	15 804	16 640	17 805
Austria (AT)	13 797	14 167	15 389	14 856	15 349	15 879	16 552	17 146
Poland (PL)	2 427	2 242	2 280	2 782	3 130	3 442	4 116	3 621
Portugal (PT)	5 782	6 039	6 384	6 731	6 797	7 041	7 231	7 856
Romania (RO)	781	809	944	1 235	1 598	2 086	2 442	2 180
Slovenia (SI)	5 696	5 980	6 228	6 496	6 884	7 264	8 132	8 535
Slovakia (SK)	2 176 e	2 200 p	2 380 p	2 714 p	3 051 p	3 497 p	4 170	4 768
Finland (FI)	13 482	13 989	14 566	15 049	15 421	16 054	17 149	17 797
Sweden (SE)	16 798	17 526	17 773	18 017	18 677	19 006	18 814	17 425
United Kingdom (UK)	11 849	11 646	12 717	13 426	14 148	14 811	14 024	13 102
Iceland (IS)	14 580	15 311	16 050	18 723	18 220	20 269	18 586	14 024
Norway (NO)	21 156	21 016	20 609	22 135	23 300	24 768	26 076	26 168
Switzerland (CH)	14 694	14 267	14 223	14 205	13 954	13 533	:	:

Source: Eurostat (gov_a_main)

: = missing value

e = estimated value

p = provisional value

Figures rounded to whole euro

Table 4.14: Total general government expenditure % of GDP

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	46.7	47.3	46.9	46.9	46.3	45.7	46.9	50.7
Euro area (EA-16)	47.6	48.1	47.5	47.4	46.7	46.0	46.8	50.7
Belgium (BE)	49.8	51.1	49.4	52.2	48.6	48.4	50.0	54.2
Bulgaria (BG)	40.3	40.3	39.7	39.3	36.5	41.5	37.3	40.7
Czech Republic (CZ)	46.3	47.3	45.1	45.0	43.7	42.5	42.9	46.1
Denmark (DK)	54.6	55.1	54.6	52.8	51.6	50.9	51.8	58.6
Germany (DE)	48.1	48.5	47.1	46.8	45.4	43.7	43.7	47.6
Estonia (EE)	35.8	34.8	34.0	33.6	34.0	34.8	39.9	45.4
Ireland (IE)	33.5	33.2	33.5	33.9	34.4	36.6	42.0	48.4
Greece (EL)	45.1	44.7	45.4	43.8	43.2	45.0	46.8	50.4
Spain (ES)	38.9	38.4	38.9	38.4	38.4	39.2	41.1	45.9
France (FR)	52.6	53.3	53.2	53.4	52.7	52.3	52.8	55.6
Italy (IT)	47.4	48.3	47.7	48.2	48.7	47.8	48.8	51.9
Cyprus (CY)	40.2	45.0	42.8	43.6	43.4	42.2	42.6	46.4
Latvia (LV)	35.6	34.8	35.8	35.6	38.1	35.7	38.6	42.9
Lithuania (LT)	34.7	33.2	33.3	33.3	33.6	34.8	37.4	43.0
Luxembourg (LU)	41.5	41.8	42.6	41.5	38.3	36.2	37.2	42.4
Hungary (HU)	51.2	49.4	48.7	50.1	52.0	49.8	49.2	49.8
Malta (MT)	43.2	47.8	45.5	44.8	43.7	42.4	44.8	44.3
Netherlands (NL)	46.2	47.1	46.1	44.8	45.5	45.5	45.9	51.6
Austria (AT)	51.0	51.5	54.0	50.2	49.5	48.7	49.0	51.8
Poland (PL)	44.3	44.7	42.6	43.4	43.9	42.2	43.3	44.5
Portugal (PT)	44.3	45.5	46.5	47.6	46.3	45.8	46.1	51.0
Romania (RO)	35.0	33.5	33.5	33.5	35.3	36.0	37.6	40.4
Slovenia (SI)	46.3	46.4	45.8	45.2	44.5	42.4	44.3	49.9
Slovakia (SK)	45.1	40.2	37.7	38.0	36.9	34.4	34.8	40.8
Finland (FI)	48.9	50.1	50.0	50.2	49.0	47.3	49.5	55.6
Sweden (SE)	56.7	57.0	55.6	55.2	54.1	52.5	53.1	56.5
United Kingdom (UK)	41.1	42.1	42.9	44.1	44.1	44.2	47.3	51.7
Iceland (IS)	44.3	45.6	44.1	42.2	41.6	42.3	57.8	51.5
Norway (NO)	47.1	48.2	45.4	42.1	40.5	41.1	40.2	45.8
Switzerland (CH)	36.2	36.4	35.9	35.3	33.5	32.2	:	:

Source: Eurostat (gov_a_main)

: = missing value

e = estimated value

p = provisional value

Figures rounded to whole euro

Table 4.15: Total general government expenditure

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	4 642 206	4 778 469	4 970 653	5 185 781	5 410 025	5 652 417	5 856 570	5 988 922
Euro area (EA-16)	3 487 223	3 626 804	3 733 381	3 858 528	3 992 204	4 144 386	4 335 971	4 552 438
Belgium (BE)	133 704	140 954	143 733	158 100	154 516	162 100	172 426	183 224
Bulgaria (BG)	6 697	7 160	7 891	8 606	9 217	11 979	12 729	13 800
Czech Republic (CZ)	37 047	38 292	39 838	45 070	49 737	54 110	63 430	63 315
Denmark (DK)	100 806	103 802	107 506	109 466	112 842	115 608	120 771	130 442
Germany (DE)	1 030 840	1 049 210	1 041 210	1 050 250	1 054 480	1 060 650	1 090 780	1 145 270
Estonia (EE)	2 781	3 036	3 291	3 757	4 498	5 435	6 408	6 229
Ireland (IE)	43 589	46 420	49 985	55 025	60 861	69 359	76 369	79 166
Greece (EL)	70 614	77 143	84 333	85 626	90 816	101 968	111 900	119 654
Spain (ES)	283 597	300 643	327 015	349 383	377 876	412 751	446 910	482 623
France (FR)	815 144	849 587	883 073	921 454	952 121	991 335	1 028 855	1 067 843
Italy (IT)	613 734	645 251	664 303	688 306	723 485	739 841	765 748	788 810
Cyprus (CY)	4 496	5 305	5 445	5 952	6 375	6 724	7 346	7 861
Latvia (LV)	3 533	3 471	3 998	4 626	6 121	7 546	8 933	8 053
Lithuania (LT)	5 228	5 472	6 052	6 958	8 053	9 954	12 060	11 510
Luxembourg (LU)	9 964	10 794	11 684	12 573	13 083	13 564	14 628	15 997
Hungary (HU)	36 284	36 650	40 248	44 420	46 710	50 328	51 935	46 319
Malta (MT)	1 937	2 112	2 053	2 143	2 235	2 317	2 553	2 532
Netherlands (NL)	214 960	224 621	226 403	229 965	246 028	258 829	273 553	294 258
Austria (AT)	111 512	115 011	125 720	122 192	126 904	131 813	137 990	143 364
Poland (PL)	92 772	85 621	87 053	106 176	119 350	131 205	156 870	138 008
Portugal (PT)	59 945	63 057	67 040	71 009	71 944	74 697	76 806	83 563
Romania (RO)	17 020	17 589	20 460	26 698	34 489	44 933	52 509	46 785
Slovenia (SI)	11 365	11 938	12 439	12 998	13 823	14 665	16 443	17 424
Slovakia (SK)	11 703	11 835	12 807	14 619	16 445	18 871	22 543	25 833
Finland (FI)	70 120	72 925	76 138	78 934	81 212	84 902	91 121	95 015
Sweden (SE)	149 923	156 998	159 849	162 694	169 604	173 863	174 144	162 762
United Kingdom (UK)	702 893	693 574	761 088	808 782	857 202	903 069	860 810	809 262
Iceland (IS)	4 193	4 429	4 696	5 539	5 545	6 312	5 936	4 477
Norway (NO)	96 029	95 939	94 616	102 310	108 600	116 556	124 328	126 363
Switzerland (CH)	107 042	104 703	105 102	105 645	104 428	102 185	:	:

Source: Eurostat (gov_a_main)

: = missing value

Figures rounded to whole millions of euro

Table 4.16: Main components of total general government expenditure; millions of euro; 2009

	Social transfers	Compensation of employees	Intermediate consumption	Property income, incl. interest	Public investments	Other current transfers	Subsidies	Others	Total expenditure
European Union (EU-27)	2 565 134	1 318 450	813 271	310 255	341 267	279 394	155 022	206 129	5 988 922
Euro area (EA-16)	2 102 783	967 259	503 941	255 034	247 216	197 943	126 536	151 727	4 552 438
Belgium (BE)	86 006	43 188	12 879	12 720	6 140	8 919	7 546	5 827	183 224
Bulgaria (BG)	4 792	3 292	2 182	273	1 642	1 168	302	149	13 800
Czech Republic (CZ)	27 246	11 097	9 009	1 802	7 387	2 323	2 884	1 568	63 315
Denmark (DK)	40 970	43 103	22 508	4 776	4 736	6 833	5 774	1 743	130 442
Germany (DE)	640 800	177 000	113 920	63 530	40 010	44 830	32 780	32 400	1 145 270
Estonia (EE)	2 208	1 771	1 063	43	667	256	136	85	6 229
Ireland (IE)	28 421	19 835	9 811	3 444	7 430	4 219	845	5 160	79 166
Greece (EL)	48 815	29 458	14 548	11 811	6 821	3 746	306	4 149	119 654
Spain (ES)	183 458	124 285	61 103	18 847	46 003	20 520	11 560	16 847	482 623
France (FR)	479 161	254 212	104 492	44 776	63 940	61 745	31 768	27 749	1 067 843
Italy (IT)	335 816	171 578	92 718	70 205	37 040	26 750	15 103	39 600	788 810
Cyprus (CY)	2 335	2 640	949	422	696	662	22	137	7 861
Latvia (LV)	2 428	2 236	1 329	296	733	685	149	198	8 053
Lithuania (LT)	4 553	3 410	1 533	273	1 034	367	174	166	11 510
Luxembourg (LU)	7 809	2 989	1 347	189	1 345	1 142	621	556	15 997
Hungary (HU)	17 691	10 458	7 072	4 330	2 530	2 349	884	1 006	46 319
Malta (MT)	809	831	360	195	127	103	63	45	2 532
Netherlands (NL)	129 004	57 022	46 811	12 780	22 805	8 007	9 115	8 714	294 258
Austria (AT)	70 372	27 056	12 855	7 550	2 985	6 718	10 194	5 634	143 364
Poland (PL)	52 655	31 691	17 294	8 100	16 542	6 762	1 678	3 287	138 008
Portugal (PT)	36 436	22 424	7 632	4 681	3 980	3 572	2 337	2 502	83 563
Romania (RO)	15 670	12 262	7 310	1 789	6 280	1 377	1 178	919	46 785
Slovenia (SI)	6 632	4 380	2 261	500	1 708	710	755	478	17 424
Slovakia (SK)	11 922	4 943	3 379	948	1 462	1 110	1 034	1 036	25 833
Finland (FI)	34 986	25 419	18 877	2 437	4 724	5 191	2 486	895	95 015
Sweden (SE)	57 954	44 421	30 238	3 412	10 414	6 846	4 360	5 117	162 762
United Kingdom (UK)	236 185	187 452	209 792	30 127	42 087	52 485	10 969	40 165	809 262
Iceland (IS)	712	1 298	1 089	590	339	210	170	69	4 477
Norway (NO)	43 747	37 519	19 028	3 895	9 829	6 524	5 814	8	126 363
Switzerland (CH)	36 948	24 454	11 521	3 935	6 031	4 525	11 231	3 541	102 185

Source: Eurostat (gov_a_main)

: = missing value

Figures rounded to whole millions of euro

Table 4.17: Main components of total general government expenditure; 2009

	Social transfers	Compen–sation of employees	Intermediate consumption	Property income, incl. interest	Public investments	Other current transfers	Subsidies	Others
European Union (EU-27)	42.8	22.0	13.6	5.2	5.7	4.7	2.6	3.4
Euro area (EA-16)	46.2	21.2	11.1	5.6	5.4	4.3	2.8	3.3
Belgium (BE)	46.9	23.6	7.0	6.9	3.4	4.9	4.1	3.2
Bulgaria (BG)	34.7	23.9	15.8	2.0	11.9	8.5	2.2	1.1
Czech Republic (CZ)	43.0	17.5	14.2	2.8	11.7	3.7	4.6	2.5
Denmark (DK)	31.4	33.0	17.3	3.7	3.6	5.2	4.4	1.3
Germany (DE)	56.0	15.5	9.9	5.5	3.5	3.9	2.9	2.8
Estonia (EE)	35.4	28.4	17.1	0.7	10.7	4.1	2.2	1.4
Ireland (IE)	35.9	25.1	12.4	4.4	9.4	5.3	1.1	6.5
Greece (EL)	40.8	24.6	12.2	9.9	5.7	3.1	0.3	3.5
Spain (ES)	38.0	25.8	12.7	3.9	9.5	4.3	2.4	3.5
France (FR)	44.9	23.8	9.8	4.2	6.0	5.8	3.0	2.6
Italy (IT)	42.6	21.8	11.8	8.9	4.7	3.4	1.9	5.0
Cyprus (CY)	29.7	33.6	12.1	5.4	8.9	8.4	0.3	1.7
Latvia (LV)	30.1	27.8	16.5	3.7	9.1	8.5	1.8	2.5
Lithuania (LT)	39.6	29.6	13.3	2.4	9.0	3.2	1.5	1.4
Luxembourg (LU)	48.8	18.7	8.4	1.2	8.4	7.1	3.9	3.5
Hungary (HU)	38.2	22.6	15.3	9.3	5.5	5.1	1.9	2.2
Malta (MT)	31.9	32.8	14.2	7.7	5.0	4.1	2.5	1.8
Netherlands (NL)	43.8	19.4	15.9	4.3	7.8	2.7	3.1	3.0
Austria (AT)	49.1	18.9	9.0	5.3	2.1	4.7	7.1	3.9
Poland (PL)	38.2	23.0	12.5	5.9	12.0	4.9	1.2	2.4
Portugal (PT)	43.6	26.8	9.1	5.6	4.8	4.3	2.8	3.0
Romania (RO)	33.5	26.2	15.6	3.8	13.4	2.9	2.5	2.0
Slovenia (SI)	38.1	25.1	13.0	2.9	9.8	4.1	4.3	2.7
Slovakia (SK)	46.2	19.1	13.1	3.7	5.7	4.3	4.0	4.0
Finland (FI)	36.8	26.8	19.9	2.6	5.0	5.5	2.6	0.9
Sweden (SE)	35.6	27.3	18.6	2.1	6.4	4.2	2.7	3.1
United Kingdom (UK)	29.2	23.2	25.9	3.7	5.2	6.5	1.4	5.0
Iceland (IS)	15.9	29.0	24.3	13.2	7.6	4.7	3.8	1.5
Norway (NO)	34.6	29.7	15.1	3.1	7.8	5.2	4.6	0.0
Switzerland (CH)	36.2	23.9	11.3	3.9	5.9	4.4	11.0	3.5

Source: Eurostat (gov_a_main)

Figures rounded to tenth of percentage points

Table 4.18: Total government expenditure by COFOG functions; in % of GDP; 2008

	General public services	Defence	Public order and safety	Economic affairs	Environment protection	Housing and community amenities	Health	Recreation, culture and religion	Education	Social protection	Total
European Union (EU-27)	6.3	1.5	1.8	4.2	0.8	1.0	6.9	1.1	5.2	18.2	46.8
Euro area (EA-16)	6.7	1.3	1.6	4.0	0.7	1.0	6.9	1.1	4.8	18.8	46.9
Belgium (BE)	8.5	1.1	1.7	5.4	0.6	0.3	7.4	1.2	5.9	17.8	50.0
Bulgaria (BG)	4.6	1.3	2.9	4.9	0.7	1.6	4.7	0.9	4.2	11.5	37.3
Czech Republic (CZ)	4.5	1.1	2.1	7.2	1.0	1.1	7.2	1.2	4.7	12.9	42.9
Denmark (DK)	6.7	1.5	1.0	2.9	0.5	0.5	7.8	1.6	7.0	22.4	51.8
Germany (DE)	5.5	1.0	1.6	3.5	0.6	0.7	6.6	0.7	3.9	19.7	43.7
Estonia (EE)	2.9	1.8	2.7	4.9	1.1	0.6	5.2	2.3	6.7	11.7	39.9
Ireland (IE)	3.2	0.5	1.8	5.3	1.3	2.4	7.8	0.7	5.3	13.7	42.0
Greece (EL)	8.6 p	0.6 p	1.2 p	6.7 p	0.6 p	0.3 p	5.1 p	0.4 p	3.1 p	20.2 p	48.3 p
Spain (ES)	4.7	1.0	2.0	5.1	1.0	1.0	6.1	1.7	4.6	13.9	41.1
France (FR)	7.1	1.8	1.2	2.8	0.9	1.9	7.8	1.5	5.8	21.8	52.7
Italy (IT)	9.0	1.4	1.8	3.7	0.8	0.7	7.1	0.8	4.6	18.8	48.9
Cyprus (CY)	9.8	1.7	2.1	4.2	0.3	2.5	3.0	1.2	7.8	9.9	42.6
Latvia (LV)	3.8	1.5	2.3	6.2	0.9	1.3	4.8	1.8	6.5	9.4	38.6
Lithuania (LT)	3.9	1.4	1.9	4.5	0.9	0.4	5.0	1.1	5.8	12.4	37.4
Luxembourg (LU)	4.0	0.3	0.9	4.2	1.0	0.6	4.5	1.7	4.4	15.7	37.2
Hungary (HU)	9.3	0.9	2.0	5.9	0.8	1.0	4.9	1.4	5.2	17.8	49.2
Malta (MT)	6.8	0.8	1.5	7.4	1.6	0.8	5.6	0.6	5.5	14.4	44.9
Netherlands (NL)	7.3 p	1.3 p	1.8 p	4.9 p	0.8 p	1.1 p	0.8 p	1.3 p	5.2 p	16.1 p	45.9
Austria (AT)	6.5	1.0	1.5	4.9	0.4	0.6	7.7	1.0	5.3	20.0	48.9
Poland (PL)	5.5	1.4	2.0	4.9	0.6	1.1	5.1	1.3	5.8	15.6	43.3
Portugal (PT)	7.0	1.4	2.0	4.5	0.5	– 0.3	6.4	1.0	6.0	17.5	46.0
Romania (RO)	3.8	1.5	2.3	6.2	0.5	1.4	4.2	1.0	4.8	11.9	37.6
Slovenia (SI)	5.1	1.4	1.6	4.7	0.8	0.9	6.1	1.7	6.2	15.9	44.2
Slovakia (SK)	3.7	1.4	2.3	5.4	0.6	0.6	6.7	0.9	3.3	9.8	34.8
Finland (FI)	6.6	1.5	1.3	4.7	0.3	0.4	7.1	1.1	5.9	20.4	49.5
Sweden (SE)	7.6	1.5	1.4	5.0	0.4	0.7	7.0	1.0	6.9	21.5	53.0
United Kingdom (UK)	4.5	2.5	2.6	4.8	0.9	1.3	7.4	1.1	6.3	15.9	47.3
Iceland (IS)	:	:	:	:	:	:	:	:	:	:	:
Norway (NO)	4.3	1.6	0.9	3.6	0.6	0.6	6.7	1.1	5.2	15.3	40.0
Switzerland (CH)	:	:	:	:	:	:	:	:	:	:	:

Source: Eurostat (gov_a_exp)

: = missing value

p = provisional value

Table 4.19: Total general government revenue; euro per inhabitant

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	9 041	9 154	9 522	9 982	10 605	11 178	11 175	10 366
Euro area (EA-16)	10 413	10 653	10 922	11 319	11 959	12 533	12 670	12 109
Belgium (BE)	12 904	13 540	13 686	14 270	14 712	15 184	15 708	15 084
Bulgaria (BG)	834	910	1 057	1 169	1 299	1 571	1 756	1 650
Czech Republic (CZ)	3 101	3 230	3 649	4 054	4 554	5 161	5 703	5 259
Denmark (DK)	18 840	19 228	20 587	22 121	22 783	23 155	23 451	22 486
Germany (DE)	11 548	11 657	11 608	11 836	12 340	12 950	13 295	13 023
Estonia (EE)	2 059	2 346	2 554	2 922	3 591	4 354	4 448	4 471
Ireland (IE)	10 988	11 762	12 808	13 870	15 513	15 947	14 219	12 493
Greece (EL)	5 738	6 104	6 381	6 774	7 421	8 024	8 327	7 775
Spain (ES)	6 780	7 115	7 590	8 252	9 025	9 645	8 832	7 904
France (FR)	12 436	12 636	13 168	13 824	14 361	14 736	15 032	14 314
Italy (IT)	10 055	10 380	10 568	10 679	11 434	12 076	12 097	11 767
Cyprus (CY)	5 637	6 281	6 660	7 418	8 024	9 265	9 461	8 530
Latvia (LV)	1 414	1 423	1 679	1 988	2 642	3 286	3 521	2 828
Lithuania (LT)	1 426	1 523	1 680	2 007	2 341	2 863	3 277	2 735
Luxembourg (LU)	23 459	24 166	24 847	27 030	28 669	31 091	32 259	31 591
Hungary (HU)	2 949	3 091	3 460	3 709	3 802	4 505	4 776	4 253
Malta (MT)	4 274	4 207	4 586	4 971	5 161	5 360	5 556	5 573
Netherlands (NL)	12 706	12 919	13 377	14 005	15 227	15 863	16 885	15 982
Austria (AT)	13 561	13 735	14 103	14 334	14 843	15 701	16 380	16 003
Poland (PL)	2 153	1 931	1 992	2 522	2 871	3 289	3 765	3 041
Portugal (PT)	5 404	5 647	5 919	5 876	6 218	6 634	6 776	6 402
Romania (RO)	736	773	910	1 192	1 500	1 941	2 089	1 732
Slovenia (SI)	5 395	5 635	5 926	6 290	6 683	7 268	7 820	7 597
Slovakia (SK)	1 779	2 048	2 231	2 513	2 765	3 308	3 894	3 977
Finland (FI)	14 576	14 628	15 177	15 803	16 648	17 815	18 587	17 027
Sweden (SE)	16 378	17 170	17 955	18 679	19 511	20 381	19 688	17 174
United Kingdom (UK)	11 278	10 731	11 717	12 410	13 298	13 901	12 595	10 226
Iceland (IS)	13 740	14 364	16 061	20 892	20 984	22 860	14 229	11 539
Norway (NO)	25 297	24 198	25 661	30 065	33 941	35 440	38 437	31 693
Switzerland (CH)	14 206	13 582	13 515	13 920	14 307	14 224	:	:

Source: Eurostat (gov_a_tax_ag)

: = missing value

p = provisional value

Figures rounded to whole euro

Table 4.20: Total general government revenue; % of GDP

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	44.2	44.1	44.0	44.4	44.8	44.8	44.6	43.9
Euro area (EA-16)	45.0	45.0	44.6	44.8	45.3	45.4	44.9	44.4
Belgium (BE)	49.7	50.9	49.0	49.4	48.7	48.2	48.8	48.2
Bulgaria (BG)	39.5	40.0	41.3	41.2	39.5	41.5	39.1	36.9
Czech Republic (CZ)	39.5	40.7	42.2	41.4	41.1	41.8	40.2	40.3
Denmark (DK)	54.8	55.0	56.4	57.8	56.6	55.7	55.3	55.8
Germany (DE)	44.4	44.5	43.3	43.5	43.7	43.9	43.7	44.3
Estonia (EE)	36.0	36.5	35.6	35.2	36.5	37.4	37.1	43.6
Ireland (IE)	33.2	33.6	34.9	35.6	37.4	36.7	34.7	34.1
Greece (EL)	40.3	39.0	38.0	38.5	39.3	39.7	39.1	36.9
Spain (ES)	38.4	38.2	38.5	39.4	40.4	41.1	37	34.7
France (FR)	49.5	49.2	49.6	50.4	50.4	49.6	49.5	48.1
Italy (IT)	44.4	44.8	44.2	43.8	45.4	46.4	46.2	46.6
Cyprus (CY)	35.8	38.5	38.7	41.2	42.2	45.5	43.5	40.3
Latvia (LV)	33.4	33.2	34.7	35.1	37.7	35.4	34.4	34
Lithuania (LT)	32.9	31.9	31.8	32.8	33.1	33.8	34.2	34.1
Luxembourg (LU)	43.6	42.2	41.5	41.5	39.7	39.8	40.1	41.6
Hungary (HU)	42.3	42.2	42.3	42.2	42.6	44.8	45.4	45.8
Malta (MT)	37.7	37.9	40.8	42.0	41.2	40.3	40.3	40.5
Netherlands (NL)	44.1	43.9	44.3	44.5	46.1	45.7	46.6	46.3
Austria (AT)	50.1	49.9	49.5	48.4	47.9	48.1	48.4	48.3
Poland (PL)	39.3	38.5	37.2	39.4	40.2	40.3	39.6	37.4
Portugal (PT)	41.4	42.5	43.1	41.6	42.3	43.2	43.2	41.6
Romania (RO)	33.0	32.0	32.3	32.3	33.1	33.5	32.1	32.1
Slovenia (SI)	43.9	43.7	43.6	43.8	43.2	42.4	42.6	44.4
Slovakia (SK)	36.9	37.4	35.3	35.2	33.5	32.5	32.5	34
Finland (FI)	52.8	52.4	52.1	52.7	52.9	52.5	53.6	53.2
Sweden (SE)	55.3	55.8	56.1	57.2	56.5	56.3	55.5	55.7
United Kingdom (UK)	39.1	38.8	39.6	40.8	41.4	41.5	42.5	40.3
Iceland (IS)	41.7	42.8	44.1	47.1	48.0	47.7	44.2	42.4
Norway (NO)	56.3	55.5	56.6	57.2	59.0	58.9	59.3	55.5
Switzerland (CH)	35.0	34.6	34.2	34.6	34.3	33.9	:	:

Source: Eurostat (gov_a_tax_ag)

: = missing value

e = estimated value

p = provisional value

Table 4.21: Total general government revenue; millions of euro

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	4 390 161	4 463 282	4 664 272	4 911 784	5 239 827	5 548 255	5 572 631	5 188 631
Euro area (EA-16)	3 296 112	3 393 072	3 501 035	3 650 396	3 877 402	4 087 069	4 154 347	3 987 536
Belgium (BE)	133 295	140 452	142 568	149 464	155 108	161 289	168 198	162 759
Bulgaria (BG)	6 565	7 101	8 201	9 020	9 976	11 999	13 355	12 486
Czech Republic (CZ)	31 633	32 954	37 243	41 491	46 757	53 276	59 479	55 229
Denmark (DK)	101 284	103 637	111 233	119 875	123 871	126 426	128 792	124 169
Germany (DE)	952 500	961 930	957 680	976 080	1 016 380	1 065 320	1 091 790	1 065 950
Estonia (EE)	2 802	3 181	3 451	3 938	4 829	5 845	5 964	5 993
Ireland (IE)	43 201	47 014	52 093	57 699	66 101	69 616	63 176	55 820
Greece (EL)	63 041	67 290	70 583	75 219	82 730	89 814	93 566	87 546
Spain (ES)	280 121	298 850	324 030	358 135	397 720	432 808	402 677	365 019
France (FR)	766 134	783 903	822 858	870 325	910 238	939 560	963 852	922 445
Italy (IT)	574 725	597 932	614 802	625 858	673 919	717 023	723 789	709 135
Cyprus (CY)	4 004	4 540	4 927	5 622	6 199	7 264	7 503	6 832
Latvia (LV)	3 308	3 309	3 883	4 574	6 044	7 480	7 978	6 377
Lithuania (LT)	4 947	5 261	5 773	6 853	7 945	9 664	11 003	9 132
Luxembourg (LU)	10 467	10 914	11 383	12 575	13 549	14 924	15 762	15 720
Hungary (HU)	29 954	31 313	34 972	37 408	38 292	45 299	47 940	42 627
Malta (MT)	1 692	1 676	1 840	2 005	2 105	2 199	2 298	2 314
Netherlands (NL)	205 155	209 580	217 724	228 516	248 820	259 805	277 583	264 128
Austria (AT)	109 604	111 507	115 210	117 903	122 717	130 332	136 555	133 808
Poland (PL)	82 320	73 754	76 056	96 221	109 476	125 356	143 510	115 888
Portugal (PT)	56 032	58 964	62 164	61 986	65 817	70 372	71 978	68 106
Romania (RO)	16 047	16 803	19 716	25 774	32 369	41 804	44 924	37 164
Slovenia (SI)	10 763	11 249	11 837	12 586	13 419	14 673	15 812	15 509
Slovakia (SK)	9 569	11 016	12 005	13 536	14 906	17 851	21 050	21 544
Finland (FI)	75 809	76 254	79 332	82 888	87 674	94 219	98 758	90 903
Sweden (SE)	146 176	153 812	161 486	168 667	177 183	186 440	182 230	160 421
United Kingdom (UK)	669 014	639 087	701 225	747 568	805 683	847 598	773 110	631 610
Iceland (IS)	3 951	4 155	4 699	6 181	6 386	7 118	4 544	3 684
Norway (NO)	114 824	110 463	117 810	138 961	158 200	166 778	183 265	153 045
Switzerland (CH)	103 490	99 677	99 870	103 525	107 073	107 405	:	:

Source: Eurostat (gov_a_tax_ag)

: = missing value

Figures rounded to whole millions of euro

Table 4.22: Main components of total general government revenue; 2009

	millions of euro						% of total general government revenue				
	Taxes	Social contributions	Government sales	Property income	Others	Total revenue	Taxes	Social contributions	Government sales	Property income	Others
European Union (EU-27)	2 991 145	1 674 561	287 558	121 191	114 176	5 188 631	57.6	32.3	5.5	2.3	2.2
Euro area (EA-16)	2 197 117	1 411 467	201 399	92 916	84 637	3 987 536	55.1	35.4	5.1	2.3	2.1
Belgium (BE)	96 437	56 535	6 093	2 270	1 424	162 759	59.3	34.7	3.7	1.4	0.9
Bulgaria (BG)	7 772	2 696	1 047	480	491	12 486	62.2	21.6	8.4	3.8	3.9
Czech Republic (CZ)	25 914	21 171	3 973	1 174	2 998	55 229	46.9	38.3	7.2	2.1	5.4
Denmark (DK)	104 898	4 294	6 898	4 825	3 254	124 169	84.5	3.5	5.6	3.9	2.6
Germany (DE)	567 390	411 120	49 540	19 470	18 430	1 065 950	53.2	38.6	4.6	1.8	1.7
Estonia (EE)	3 107	1 842	352	316	376	5 993	51.8	30.7	5.9	5.3	6.3
Ireland (IE)	35 130	12 485	3 563	2 742	1 900	55 820	62.9	22.4	6.4	4.9	3.4
Greece (EL)	45 851	30 328	3 345	1 685	6 337	87 546	52.4	34.6	3.8	1.9	7.2
Spain (ES)	196 940	140 361	12 998	10 706	4 014	365 019	54.0	38.5	3.6	2.9	1.1
France (FR)	478 620	351 271	63 311	15 178	14 065	922 445	51.9	38.1	6.9	1.6	1.5
Italy (IT)	441 858	215 003	19 205	8 943	24 126	709 135	62.3	30.3	2.7	1.3	3.4
Cyprus (CY)	4 449	1 570	400	158	255	6 832	65.1	23.0	5.9	2.3	3.7
Latvia (LV)	3 322	1 644	833	306	273	6 377	52.1	25.8	13.1	4.8	4.3
Lithuania (LT)	4 632	3 209	435	150	705	9 132	50.7	35.1	4.8	1.6	7.7
Luxembourg (LU)	9 802	4 576	741	509	92	15 720	62.4	29.1	4.7	3.2	0.6
Hungary (HU)	24 335	12 134	2 811	1 180	2 166	42 627	57.1	28.5	6.6	2.8	5.1
Malta (MT)	1 623	435	117	69	70	2 314	70.1	18.8	5.1	3.0	3.0
Netherlands (NL)	137 370	83 968	20 929	18 750	3 111	264 128	52.0	31.8	7.9	7.1	1.2
Austria (AT)	75 694	45 649	5 348	3 460	3 656	133 808	56.6	34.1	4.0	2.6	2.7
Poland (PL)	63 017	35 203	7 044	4 852	5 773	115 888	54.4	30.4	6.1	4.2	5.0
Portugal (PT)	36 376	22 447	4 004	1 152	4 128	68 106	53.4	33.0	5.9	1.7	6.1
Romania (RO)	20 368	12 090	2 051	1 130	1 525	37 164	54.8	32.5	5.5	3.0	4.1
Slovenia (SI)	8 137	5 387	1 060	178	747	15 509	52.5	34.7	6.8	1.1	4.8
Slovakia (SK)	10 298	8 095	760	893	1 498	21 544	47.8	37.6	3.5	4.1	7.0
Finland (FI)	51 144	22 237	9 985	6 753	784	90 903	56.3	24.5	11.0	7.4	0.9
Sweden (SE)	103 459	34 292	13 427	6 377	2 866	160 421	64.5	21.4	8.4	4.0	1.8
United Kingdom (UK)	433 204	134 519	47 289	7 485	9 113	631 610	68.6	21.3	7.5	1.2	1.4
Iceland (IS)	2 720	249	305	369	41	3 684	73.8	6.7	8.3	10.0	1.1
Norway (NO)	85 871	26 879	7 321	31 816	1 159	153 045	56.1	17.6	4.8	20.8	0.8
Switzerland (CH)	70 080	21 445	10 572	4 585	724	107 405	65.2	20.0	9.8	4.3	0.7

Source: Eurostat (gov_a_tax_ag)

: = missing value

p = provisional value

Figures rounded to whole millions of euro

Table 4.23: Main types of tax revenues of general government and EU institutions; % of GDP; 2008

	VAT	Other taxes on products and production	Taxes on income	Social contributions	Others	Total tax revenue
European Union (EU-27)	6.9	6.5	12.3	13.7	1.1	40.5
Euro area (EA-16)	6.7	6.6	11.7	15.3	0.6	40.9
Belgium (BE)	7.0	6.1	16.0	16.1	1.3	46.5
Bulgaria (BG)	11.5	7.1	6.3	8.1	0.3	33.3
Czech Republic (CZ)	7.1	4.2	8.5	16.2	0.2	36.2
Denmark (DK)	10.1	7.3	28.7	1.8	1.1	49.0
Germany (DE)	7.0	5.8	11.0	16.3	0.5	40.6
Estonia (EE)	8.0	4.5	7.9	11.9	0.0	32.3
Ireland (IE)	7.1	5.3	11.0	6.8	0.6	30.8
Greece (EL)	7.1 p	5.3 p	7.3 p	14.7 p	0.7 p	35.1 p
Spain (ES)	5.3	4.9	10.4	13.1	0.2	33.9
France (FR)	7.0	8.0	10.4	17.9	1.3	44.6
Italy (IT)	5.9	8.2	15.0	13.6	0.5	43.2
Cyprus (CY)	11.3	7.3	12.1	7.7	0.8	39.2
Latvia (LV)	6.6	4.5	9.4	8.6	0.2	29.3
Lithuania (LT)	8.1	3.8	9.3	9.3	0.1	30.6
Luxembourg (LU)	6.0	6.0	12.8	10.9	0.7	36.4
Hungary (HU)	7.8	8.2	10.3	13.9	0.3	40.5
Malta (MT)	8.0	7.1	12.6	7.6	0.6	35.9
Netherlands (NL)	7.3	5.4	10.6	15.2	1.3	39.8
Austria (AT)	7.8	6.6	13.4	16.0	0.6	44.4
Poland (PL)	8.0	6.4	8.1	11.4	0.4	34.3
Portugal (PT)	8.7	6.1	9.6	12.9	0.4	37.7
Romania (RO)	7.9	4.1	6.4	10.1	0.3	28.8
Slovenia (SI)	8.4	5.9	8.4	14.3	0.6	37.6
Slovakia (SK)	6.9	3.9	6.2	12.1	0.2	29.3
Finland (FI)	8.4	4.8	16.9	12.2	1.1	43.4
Sweden (SE)	9.4	9.0	17.2	12.0	0.3	47.9
United Kingdom (UK)	6.3	6.0	14.3	8.4	3.9	38.9
Iceland (IS)	9.1	6.5	17.8	2.8	0.4	36.7
Norway (NO)	7.3	3.8	21.4	8.9	0.8	42.2
Switzerland (CH)	3.8	3.1	13.2	6.7	2.1	28.9

Source: Eurostat (gov_a_tax_ag)

p = provisional value

Table 4.24: Taxes on consumption

	% of GDP							implicit tax rate (%)							% of total taxation[1]
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008	2008
European Union (EU-27)	11.1	11.1	11.1	11.1	11.1	11.1	10.8	19.5	19.6	19.6	19.6	19.7	20.0	19.5	27.4
Euro area (EA-16)	10.8	10.7	10.7	10.7	10.8	10.8	10.5	19.2	19.1	19.1	19.1	19.4	19.6	19.1	26.3
Belgium (BE)	10.9	10.9	11.0	11.1	11.2	10.9	10.7	21.4	21.4	22.1	22.3	22.5	22.1	21.2	24.1
Bulgaria (BG)	13.7	15.1	16.8	18.0	18.7	18.4	18.0	18.7	20.6	23.2	24.4	25.5	26.6	26.4	54.1
Czech Republic (CZ)	10.1	10.4	11.2	11.3	10.7	10.9	10.8	19.3	19.6	21.8	22.2	21.2	22.1	21.1	29.8
Denmark (DK)	15.8	15.6	15.8	16.2	16.3	16.2	15.5	33.7	33.3	33.3	33.9	34.2	33.8	32.4	32.2
Germany (DE)	10.4	10.5	10.2	10.1	10.1	10.6	10.6	18.5	18.6	18.2	18.1	18.3	19.8	19.8	27.0
Estonia (EE)	11.9	11.6	11.7	12.8	13.1	13.3	11.8	19.9	19.8	19.7	22.0	22.8	23.8	20.9	36.8
Ireland (IE)	11.0	10.9	11.2	11.5	11.5	11.3	10.7	24.7	24.5	25.7	26.3	26.5	25.6	22.9	36.5
Greece (EL)	12.4	11.4	11.2	11.2	11.5	11.6	11.3	16.1	15.5	15.3	14.8	15.2	15.5	15.1	34.7
Spain (ES)	9.4	9.6	9.6	9.8	9.7	9.4	8.4	15.4	15.8	16.0	16.3	16.3	15.9	14.1	25.2
France (FR)	11.3	11.1	11.2	11.2	11.1	10.9	10.7	20.3	20.0	20.1	20.1	19.9	19.5	19.1	25.0
Italy (IT)	10.2	9.9	10.0	10.0	10.4	10.2	9.8	17.1	16.6	16.8	16.7	17.3	17.2	16.4	22.9
Cyprus (CY)	12.4	14.7	15.2	15.2	15.4	16.1	15.9	15.4	18.9	20.0	20.0	20.4	21.0	20.6	40.6
Latvia (LV)	10.6	11.4	11.3	12.2	12.7	11.9	10.5	17.4	18.6	18.5	20.2	20.1	19.6	17.5	36.4
Lithuania (LT)	11.7	11.1	10.6	10.8	10.9	11.4	11.4	17.9	17.0	16.1	16.5	16.7	17.9	17.5	37.7
Luxembourg (LU)	10.7	10.6	11.3	10.9	10.0	9.9	10.0	22.6	23.8	25.4	26.3	26.3	27.0	27.1	28.1
Hungary (HU)	14.1	14.7	14.9	14.5	13.9	14.5	14.5	25.3	26.0	27.4	26.3	25.7	27.1	26.9	35.8
Malta (MT)	13.4	12.4	13.3	14.5	14.0	13.9	13.9	18.1	16.5	17.5	19.7	19.9	20.3	20.0	40.4
Netherlands (NL)	11.7	11.8	12.0	12.0	12.2	12.2	12.0	23.9	24.2	24.8	25.0	26.5	26.8	26.7	30.6
Austria (AT)	12.5	12.4	12.4	12.2	11.8	11.7	11.7	22.5	22.2	22.1	21.7	21.2	21.6	22.1	27.3
Poland (PL)	11.8	11.9	11.8	12.3	12.6	12.9	12.9	17.9	18.3	18.4	19.7	20.5	21.4	21.0	37.5
Portugal (PT)	12.4	12.5	12.5	13.3	13.6	13.1	12.7	19.4	19.5	19.3	20.3	20.6	20.1	19.1	34.5
Romania (RO)	10.9	11.5	11.1	12.3	12.1	11.8	11.2	16.2	17.7	16.4	17.9	17.8	18.0	17.7	40.1
Slovenia (SI)	13.7	13.8	13.6	13.4	13.2	13.2	13.3	23.9	24.0	23.9	23.6	23.8	23.8	23.9	35.7
Slovakia (SK)	11.0	11.6	12.0	12.3	11.2	11.1	10.3	19.1	20.7	21.2	21.9	19.9	20.2	18.4	35.3
Finland (FI)	13.4	13.9	13.6	13.7	13.4	12.8	12.9	27.7	28.1	27.7	27.6	27.2	26.5	26.0	29.8
Sweden (SE)	12.7	12.7	12.6	12.8	12.6	12.7	12.9	26.8	26.9	26.9	27.3	27.4	27.8	28.4	27.3
United Kingdom (UK)	11.5	11.6	11.5	11.1	10.9	10.9	10.6	18.5	18.7	18.7	18.1	18.0	18.0	17.6	28.5
Iceland (IS)	13.3	13.9	14.7	15.8	16.1	15.1	12.8	25.8	26.3	27.9	29.3	30.6	29.1	26.2	34.8
Norway (NO)	12.8	12.4	12.2	11.7	11.7	12.0	10.6	29.3	27.9	28.1	28.7	29.9	30.3	28.5	25.2

Source: Taxation trends in the European Union. Data for the EU Member States, Iceland and Norway; 2010 edition

(1) Since category D995 (capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected), negatively contributing to total tax revenue (in denominator of the indicator), has not been included in taxation split by economic functions (in numerator of the indicator), total calculated taxation in some cases exceeds 100 %.

Table 4.25: Taxes on labour

	% of GDP							implicit tax rate (%)							% of total taxation[1]
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008	2008
European Union (EU-27)	19.9	20.0	19.6	19.6	19.5	19.3	19.7	36.1	36.3	36.0	36.0	36.2	36.2	36.5	50.0
Euro area (EA-16)	21.3	21.2	20.8	20.7	20.6	20.4	20.8	38.7	38.7	38.2	38.1	38.3	38.4	38.6	52.2
Belgium (BE)	24.8	24.6	24.0	23.8	23.0	23.0	23.6	43.3	43.1	43.8	43.6	42.5	42.4	42.6	53.3
Bulgaria (BG)	11.8	12.9	12.8	12.2	10.5	10.8	10.2	32.9	35.5	36.3	34.7	30.6	29.9	27.6	30.7
Czech Republic (CZ)	17.8	18.1	19.0	19.1	19.0	19.1	18.8	41.2	41.4	41.8	41.7	41.2	41.4	39.5	52.0
Denmark (DK)	26.1	26.0	25.2	24.8	24.6	25.0	25.7	38.8	38.1	37.5	37.1	37.2	36.5	36.4	53.3
Germany (DE)	24.1	24.1	23.1	22.6	22.1	21.4	21.8	40.4	40.4	39.2	38.8	38.9	38.6	39.2	55.5
Estonia (EE)	17.1	16.7	16.4	15.4	15.5	16.4	17.7	37.8	36.9	35.8	33.8	33.6	34.0	33.7	55.0
Ireland (IE)	10.0	9.8	10.4	10.4	10.5	10.7	11.2	26.0	25.0	26.3	25.4	25.4	25.7	24.6	38.2
Greece (EL)	13.1	13.1	12.6	12.9	13.0	13.4	14.0	34.4	35.0	33.7	34.4	34.8	35.9	37.0	42.9
Spain (ES)	16.3	16.2	16.0	16.2	16.3	16.9	16.7	29.8	29.9	29.9	30.3	30.7	31.4	30.5	50.5
France (FR)	22.8	22.9	22.8	23.1	22.9	22.5	22.6	41.2	41.5	41.4	41.9	41.9	41.4	41.4	52.7
Italy (IT)	20.2	20.3	20.1	20.4	20.5	21.2	21.6	42.0	41.9	41.6	41.3	41.1	42.6	42.8	50.5
Cyprus (CY)	10.0	10.7	10.5	11.3	11.1	10.8	11.1	22.2	22.7	22.7	24.5	24.1	24.0	24.5	28.2
Latvia (LV)	14.6	14.6	14.6	14.0	14.7	14.6	14.4	37.8	36.6	36.7	33.2	33.1	31.1	28.2	49.7
Lithuania (LT)	14.9	14.6	14.7	14.4	14.6	14.6	14.9	38.1	36.9	36.0	34.9	33.6	33.1	33.0	49.3
Luxembourg (LU)	15.4	15.3	15.4	15.4	14.7	14.9	15.4	28.4	29.2	29.5	30.0	30.2	31.0	31.5	43.2
Hungary (HU)	19.0	18.5	17.9	18.3	18.3	19.8	20.8	41.2	39.3	38.3	38.4	38.8	41.0	42.4	51.5
Malta (MT)	10.2	10.3	10.5	10.3	10.2	9.3	9.6	20.8	20.4	21.0	21.3	21.3	19.9	20.2	27.7
Netherlands (NL)	18.4	18.8	18.6	18.2	19.6	19.6	20.3	30.9	31.5	31.4	31.6	34.4	34.2	35.4	52.1
Austria (AT)	24.2	24.4	23.9	23.4	23.4	23.3	23.9	40.8	40.8	41.0	40.8	40.8	41.0	41.3	55.8
Poland (PL)	13.4	13.2	12.5	12.8	13.4	13.0	13.1	32.4	32.7	32.7	33.8	35.4	34.0	32.8	38.1
Portugal (PT)	14.5	14.8	14.8	15.2	15.3	15.7	15.9	27.6	27.8	27.9	28.1	28.6	29.6	29.6	43.4
Romania (RO)	12.4	11.1	10.7	11.0	11.6	11.8	11.6	31.2	29.6	29.0	28.1	30.1	30.2	29.5	41.2
Slovenia (SI)	20.8	20.9	20.8	20.6	20.2	19.2	19.3	37.6	37.7	37.5	37.5	37.3	35.9	35.7	51.7
Slovakia (SK)	15.0	14.4	13.3	12.5	11.5	11.6	12.3	36.7	36.1	34.5	32.9	30.4	31.0	33.5	42.4
Finland (FI)	23.6	23.3	22.7	23.2	22.9	22.3	23.0	43.8	42.5	41.5	41.5	41.6	41.3	41.3	53.3
Sweden (SE)	30.1	30.4	30.1	29.7	29.1	28.4	28.5	43.8	43.9	44.0	44.2	43.8	42.5	42.1	60.5
United Kingdom (UK)	13.3	13.3	13.6	14.0	14.1	14.1	14.1	24.1	24.3	24.9	25.6	26.0	26.0	26.1	37.7
Iceland (IS)	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway (NO)	19.0	18.8	18.2	17.0	16.5	17.2	16.6	38.7	39.0	39.2	38.5	37.9	37.4	36.9	39.2

Source: Taxation trends in the European Union. Data for the EU Member States, Iceland and Norway; 2010 edition

: = missing value

(1) Since category D995 (capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected), negatively contributing to total tax revenue (in denominator of the indicator), has not been included in taxation split by economic functions (in numerator of the indicator), total calculated taxation in some cases exceeds 100 %.

Table 4.26: Taxes on capital

	% of GDP							implicit tax rate (%)							% of total taxation(1)
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008	2008
European Union (EU-27) (2)	8.1	8.0	8.3	8.6	9.3	9.4	9.0	29.9 e	29.1 e	29.7 e	30.9 e	32.6 e	33.5 e	32.2 e	22.8
Euro area (EA-16)	7.9	7.9	8.0	8.3	9.0	9.3	8.6	27.6	27.6	27.9	28.8	30.9	31.9	30.1	21.7
Belgium (BE)	9.3	9.2	9.7	9.9	10.1	10.0	10.0	30.7	31.6	32.7	32.8	33.1	31.8	32.7	22.7
Bulgaria (BG)	4.8	5.0	4.5	4.5	4.8	5.5	5.4	:	:	12.2	:	13.9	16.9	:	16.2
Czech Republic (CZ)	6.9	7.2	7.2	6.8	7.0	7.2	6.6	23.7	24.8	24.1	22.0	21.8	22.3	21.5	18.2
Denmark (DK)	6.1	6.6	8.2	10.0	8.9	8.0	7.1	30.8	36.9	45.9	49.9	44.6	47.0	43.1	14.8
Germany (DE)	5.0	5.1	5.5	6.0	6.9	7.4	6.9	20.3	20.3	20.5	21.5	23.4	24.5	23.1	17.4
Estonia (EE)	2.1	2.5	2.5	2.4	2.4	2.6	2.6	6.4	7.8	8.1	7.7	8.2	9.2	10.7	8.2
Ireland (IE)	7.4	8.4	8.6	8.9	10.3	9.5	7.4	14.9	16.8	17.9	19.5	21.2	18.6	15.7	25.3
Greece (EL)	8.2	7.6	7.4	7.8	7.2	7.4	7.3	17.7	16.4	16.0	16.8	15.8	:	:	22.4
Spain (ES)	8.8	8.7	9.3	10.1	10.9	11.3	8.6	30.0	30.3	32.7	36.5	40.7	43.4	32.8	26.1
France (FR)	9.3	9.0	9.3	9.4	10.1	10.1	9.8	37.4	36.5	37.9	39.2	40.9	39.8	38.8	22.8
Italy (IT)	10.5	11.1	10.5	10.0	11.2	11.7	11.4	29.1	31.5	29.8	29.5	33.8	35.3	35.3	26.6
Cyprus (CY)	8.9	7.6	7.7	9.0	10.0	14.0	12.2	23.3	23.2	23.4	26.8	29.8	40.4	36.4	31.2
Latvia (LV)	3.1	2.5	2.6	2.8	3.0	3.9	4.0	9.6	8.2	8.4	9.6	11.0	14.5	16.3	13.9
Lithuania (LT)	2.0	2.5	3.1	3.3	4.0	3.8	4.0	5.7	7.1	8.5	9.1	11.6	11.3	12.4	13.1
Luxembourg (LU)	13.2	12.3	10.7	11.3	10.9	11.0	10.2	:	:	:	:	:	:	:	28.7
Hungary (HU)	4.7	4.7	4.6	4.6	5.0	5.5	5.1	16.8	17.8	16.8	17.4	16.9	18.7	19.2	12.7
Malta (MT)	7.9	8.7	9.1	9.2	9.5	11.4	11.0	:	:	:	:	:	:	:	31.9
Netherlands (NL)	7.7	6.8	6.9	7.4	7.1	7.1	6.8	24.3	21.0	20.4	18.2	17.1	15.9	17.2	17.3
Austria (AT)	7.3	7.1	7.1	6.8	6.8	7.2	7.3	29.6	28.6	27.6	24.7	24.9	26.3	27.3	17.1
Poland (PL)	7.8	7.4	7.5	8.0	8.1	9.1	8.5	22.5	20.7	19.1	20.7	21.2	23.4	22.5	24.7
Portugal (PT)	7.8	7.6	6.7	6.6	7.0	8.0	8.1	33.5	32.2	28.2	29.4	31.9	35.0	38.6	22.1
Romania (RO)	4.8	5.0	5.4	4.5	4.9	5.4	5.2	:	:	:	:	:	:	:	18.6
Slovenia (SI)	3.5	3.5	3.9	4.7	4.9	5.4	4.8	17.4	17.0	19.0	22.1	21.9	23.6	21.6	12.7
Slovakia (SK)	7.0	6.9	6.3	6.5	6.5	6.5	6.5	22.4	22.4	18.5	19.4	18.1	17.3	16.7	22.3
Finland (FI)	7.7	6.8	7.1	7.1	7.2	7.9	7.3	27.5	25.9	26.4	26.9	23.9	26.4	28.1	16.9
Sweden (SE)	5.1	5.2	6.0	7.0	7.4	7.2	5.7	29.1	30.1	28.7	35.7	29.2	32.9	27.9	12.2
United Kingdom (UK)	10.1	9.8	10.1	10.9	11.8	11.5	12.6	41.6	36.9	38.3	40.5	43.1	42.9	45.9	33.8
Iceland (IS)	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway (NO)	11.3	11.0	12.9	14.8	15.8	14.5	15.0	41.6	38.0	40.6	41.0	43.2	42.2	:	35.6

Source: Taxation trends in the European Union. Data for the EU Member States, Iceland and Norway; 2010 edition

: = missing value

(1) Since category D995 (capital transfers from general government to relevant sectors representing taxes and social contributions assessed but unlikely to be collected), negatively contributing to total tax revenue (in denominator of the indicator), has not been included in taxation split by economic functions (in numerator of the indicator), total calculated taxation in some cases exceeds 100 %.

(2) ITR on capital presented for EU25 aggregate

Table 4.27: Government surplus and deficit

	government surplus (+) /governmet deficit (–)								primary balance before interest and GFCF*	GFCF (*)	interest paid
	% of GDP								% of GDP		
	2002	2003	2004	2005	2006	2007	2008	2009	2009		
European Union (EU-27)	– 2.5	– 3.1	– 2.9	– 2.5	– 1.4	– 0.8	– 2.3	– 6.8	– 4.2	2.9	2.6
Euro area (EA-16)	– 2.6	– 3.1	– 2.9	– 2.5	– 1.3	– 0.6	– 2.0	– 6.3	– 3.5	2.8	2.8
Belgium (BE)	– 0.1	– 0.1	– 0.3	– 2.7	0.3	– 0.2	– 1.2	– 6.0	– 2.3	1.8	3.8
Bulgaria (BG)	– 0.8	– 0.3	1.6	1.9	3.0	0.1	1.8	– 3.9	– 3.1	4.8	0.8
Czech Republic (CZ)	– 6.8	– 6.6	– 3.0	– 3.6	– 2.6	– 0.7	– 2.7	– 5.9	– 4.6	5.4	1.3
Denmark (DK)	0.4	0.1	2.1	5.2	5.2	4.8	3.4	– 2.7	– 0.7	2.1	2.1
Germany (DE)	– 3.7	– 4.0	– 3.8	– 3.3	– 1.6	0.2	0.0	– 3.3	– 0.7	1.7	2.6
Estonia (EE)	0.3	1.7	1.6	1.6	2.5	2.6	– 2.7	– 1.7	– 1.4	4.9	0.3
Ireland (IE)	– 0.3	0.4	1.4	1.6	3.0	0.1	– 7.3	– 14.3	– 12.2	4.5	2.1
Greece (GR)	– 4.8	– 5.6	– 7.5	– 5.2	– 3.6	– 5.1	– 7.7	– 13.6	– 8.5	2.9	5.0
Spain (ES)	– 0.5	– 0.2	– 0.3	1.0	2.0	1.9	– 4.1	– 11.2	– 9.4	4.4	1.8
France (FR)	– 3.1	– 4.1	– 3.6	– 2.9	– 2.3	– 2.7	– 3.3	– 7.5	– 5.2	3.3	2.3
Italy (IT)	– 2.9	– 3.5	– 3.5	– 4.3	– 3.3	– 1.5	– 2.7	– 5.3	– 0.6	2.4	4.6
Cyprus (CY)	– 4.4	– 6.5	– 4.1	– 2.4	– 1.2	3.4	0.9	– 6.1	– 3.6	4.1	2.5
Latvia (LV)	– 2.3	– 1.6	– 1.0	– 0.4	– 0.5	– 0.3	– 4.1	– 9.0	– 7.4	3.9	1.6
Lithuania (LT)	– 1.9	– 1.3	– 1.5	– 0.5	– 0.4	– 1.0	– 3.3	– 8.9	– 7.9	3.9	1.0
Luxembourg (LU)	2.1	0.5	– 1.1	0.0	1.4	3.6	2.9	– 0.7	– 0.2	3.6	0.5
Hungary (HU)	– 8.9	– 7.2	– 6.4	– 7.9	– 9.3	– 5.0	– 3.8	– 4.0	0.7	2.7	4.7
Malta (MT)	– 5.5	– 9.8	– 4.7	– 2.9	– 2.6	– 2.2	– 4.5	– 3.8	– 0.6	2.2	3.2
Netherlands (NL)	– 2.1	– 3.1	– 1.7	– 0.3	0.5	0.2	0.7	– 5.3	– 3.0	4.0	2.2
Austria (AT)	– 0.7	– 1.4	– 4.4	– 1.7	– 1.5	– 0.4	– 0.4	– 3.4	– 0.7	1.1	2.7
Poland (PL)	– 5.0	– 6.2	– 5.4	– 4.1	– 3.6	– 1.9	– 3.7	– 7.1	– 4.5	5.3	2.6
Portugal (PT)	– 2.8	– 2.9	– 3.4	– 6.1	– 3.9	– 2.6	– 2.8	– 9.4	– 6.6	2.4	2.9
Romania (RO)	– 2.0	– 1.5	– 1.2	– 1.2	– 2.2	– 2.5	– 5.4	– 8.3	– 6.8	5.4	1.5
Slovenia (SI)	– 2.5	– 2.7	– 2.2	– 1.4	– 1.3	0.0	– 1.7	– 5.5	– 4.1	4.9	1.4
Slovakia (SK)	– 8.2	– 2.8	– 2.4	– 2.8	– 3.5	– 1.9	– 2.3	– 6.8	– 5.3	2.3	1.5
Finland (FI)	4.0	2.4	2.3	2.7	4.0	5.2	4.2	– 2.2	– 1.0	2.8	1.4
Sweden (SE)	– 1.2	– 0.9	0.8	2.3	2.5	3.8	2.5	– 0.5	0.4	3.6	1.2
United Kingdom (UK)	– 2.1	– 3.4	– 3.4	– 3.4	– 2.7	– 2.8	– 4.9	– 11.5	– 9.5	2.7	1.9
Iceland (IS)	:	:	:	4.9	6.3	5.4	– 13.5	– 9.1	– 2.3	3.9	6.8
Norway (NO)	9.3	7.3	11.1	15.1	18.5	17.7	19.1	9.7	11.1	3.6	:

Source: gov_dd_edpt1-Government deficit/surplus, debt and associated data

: = missing value

(*) Gross fixed capital formation

Table 4.28: Government consolidated gross debt

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	60.4	61.9	62.2	62.7	61.4	58.8	61.6	73.6
Euro area (EA-16)	68.0	69.1	69.5	70.1	68.3	66.0	69.4	78.7
Belgium (BE)	103.5	98.5	94.2	92.1	88.1	84.2	89.8	96.7
Bulgaria (BG)	53.6	45.9	37.9	29.2	22.7	18.2	14.1	14.8
Czech Republic (CZ)	28.2	29.8	30.1	29.7	29.4	29.0	30.0	35.4
Denmark (DK)	49.5	47.2	45.1	37.8	32.1	27.4	34.2	41.5
Germany (DE)	60.4	63.9	65.8	68.0	67.6	65.0	66.0	73.2
Estonia (EE)	5.7	5.6	5.0	4.6	4.5	3.8	4.6	7.2
Ireland (IE)	30.7	31.0	29.5	27.3	24.9	25.0	43.9	64.0
Greece (EL)	101.7	97.4	98.6	100.0	97.8	95.7	99.2	115.1
Spain (ES)	52.5	48.7	46.2	43.0	39.6	36.2	39.7	53.2
France (FR)	58.8	62.9	64.9	66.4	63.7	63.8	67.5	77.5
Italy (IT)	105.7	104.4	103.8	105.8	106.5	103.5	106.1	115.8
Cyprus (CY)	64.6	68.9	70.2	69.1	64.6	58.3	48.4	56.2
Latvia (LV)	13.5	14.6	14.9	12.4	10.7	9.0	19.5	36.1
Lithuania (LT)	22.3	21.1	19.4	18.4	18.0	16.9	15.6	29.3
Luxembourg (LU)	6.3	6.2	6.3	6.1	6.5	6.7	13.7	14.5
Hungary (HU)	55.6	58.4	59.1	61.8	65.6	65.9	72.9	78.3
Malta (MT)	60.1	69.3	72.3	70.1	63.7	61.9	63.7	69.1
Netherlands (NL)	50.5	52.0	52.4	51.8	47.4	45.5	58.2	60.9
Austria (AT)	66.5	65.5	64.8	63.9	62.2	59.5	62.6	66.5
Poland (PL)	42.2	47.1	45.7	47.1	47.7	45.0	47.2	51.0
Portugal (PT)	55.6	56.9	58.3	63.6	64.7	63.6	66.3	76.8
Romania (RO)	24.9	21.5	18.7	15.8	12.4	12.6	13.3	23.7
Slovenia (SI)	28.0	27.5	27.2	27.0	26.7	23.4	22.6	35.9
Slovakia (SK)	43.4	42.4	41.5	34.2	30.5	29.3	27.7	35.7
Finland (FI)	41.5	44.5	44.4	41.7	39.7	35.2	34.2	44.0
Sweden (SE)	52.6	52.3	51.1	50.8	45.7	40.8	38.3	42.3
United Kingdom (UK)	37.5	39.0	40.9	42.5	43.5	44.7	52.0	68.1
Norway (NO)	36.2	45.3	46.5	44.5	55.3	52.4	49.9	43.7

Source: Eurostat (gov_q_ggdebt)

: = missing value

Table 4.29: Structure of government consolidted gross debt, 2009

	millions of euro						% of government consolidated gross debt				
	Currency and deposits	Short-term securities other than shares (*)	Long-term securities other than shares (*)	Short-term loans	Long-term loans	Total	Currency and deposits	Short-term securities other than shares (*)	Long-term securities other than shares (*)	Short-term loans	Long-term loans
European Union (EU-27)	367 807	877 124	6 231 730	166 137	1 045 444	8 688 243	4.2	10.1	71.7	1.9	12.0
Euro area (EA-16)	216 680	768 259	5 007 966	129 661	940 059	7 062 625	3.1	10.9	70.9	1.8	13.3
Belgium (BE)	1 279	42 026	249 731	5 456	28 113	326 606	0.4	12.9	76.5	1.7	8.6
Bulgaria (BG)	0	0	2 992	7	1 998	4 998	0.0	0.0	59.9	0.1	40.0
Czech Republic (CZ)	0	2 805	39 085	293	6 262	48 443	0.0	5.8	80.7	0.6	12.9
Denmark (DK)	1 992	711	72 192	1 184	16 534	92 612	2.2	0.8	78.0	1.3	17.9
Germany (DE)	10 335	106 336	1 190 966	64 309	390 266	1 762 211	0.6	6.0	67.6	3.6	22.1
Estonia (EE)	0	4	234	11	742	991	0.0	0.4	23.6	1.1	74.9
Ireland (IE)	10 302	20 514	70 948	774	2 128	104 666	9.8	19.6	67.8	0.7	2.0
Greece (EL)	1 493	10 820	241 865	1 303	17 926	273 407	0.5	4.0	88.5	0.5	6.6
Spain (ES)	3 468	86 001	385 528	9 005	75 648	559 650	0.6	15.4	68.9	1.6	13.5
France (FR)	20 348	261 075	1 000 468	24 210	182 924	1 489 025	1.4	17.5	67.2	1.6	12.3
Italy (IT)	155 740	139 911	1 330 105	8 658	126 351	1 760 765	8.8	7.9	75.5	0.5	7.2
Cyprus (CY)	0	626	5 736	0	3 166	9 527	0.0	6.6	60.2	0.0	33.2
Latvia (LV)	226	637	1 314	135	4 425	6 737	3.4	9.5	19.5	2.0	65.7
Lithuania (LT)	2	331	6 284	15	1 225	7 857	0.0	4.2	80.0	0.2	15.6
Luxembourg (LU)	194	0	2 000	391	2 879	5 464	3.5	0.0	36.6	7.2	52.7
Hungary (HU)	65	7 539	48 426	377	19 110	75 517	0.1	10.0	64.1	0.5	25.3
Malta (MT)	37	474	3 216	16	204	3 948	0.9	12.0	81.5	0.4	5.2
Netherlands (NL)	593	57 580	210 190	10 668	67 990	347 021	0.2	16.6	60.6	3.1	19.6
Austria (AT)	0	8 954	151 870	1 055	22 226	184 105	0.0	4.9	82.5	0.6	12.1
Poland (PL)	0	12 620	131 905	1 163	21 231	166 918	0.0	7.6	79.0	0.7	12.7
Portugal (PT)	12 288	20 080	86 039	1 308	6 194	125 910	9.8	15.9	68.3	1.0	4.9
Romania (RO)	557	5 733	8 279	0	12 938	27 507	2.0	20.8	30.1	0.0	47.0
Slovenia (SI)	40	739	10 660	68	1 012	12 519	0.3	5.9	85.1	0.5	8.1
Slovakia (SK)	84	941	19 455	269	1 837	22 585	0.4	4.2	86.1	1.2	8.1
Finland (FI)	480	12 182	49 189	2 171	11 195	75 217	0.6	16.2	65.4	2.9	14.9
Sweden (SE)	3 981	14 100	83 649	13 903	10 587	126 220	3.2	11.2	66.3	11.0	8.4
United Kingdom (UK)	144 303	64 387	829 405	19 390	10 335	1 067 819	13.5	6.0	77.7	1.8	1.0

Source: Eurostat (gov_q_ggdebt)

(*) xcluding derivatives

Table 4.30: Annual average inflation rates by product group, for euro area and EU (%)

Euro area (1)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All-items	2.1	2.3	2.2	2.1	2.1	2.2	2.2	2.1	3.3	0.3
COICOP - main components										
Food and non-alcoholic beverages	1.2	5.0	2.8	2.1	1.0	0.7	2.3	2.7	5.5	0.0
Alcohol and tobacco	2.2	2.8	4.1	5.9	7.5	4.9	2.7	3.4	3.3	4.0
Clothing	0.7	0.4	2.1	0.9	0.7	0.1	0.4	1.0	0.7	0.3
Housing	3.9	2.9	1.3	2.5	2.5	4.7	4.7	2.7	5.2	0.0
Household equipment	1.0	1.8	1.7	1.3	0.9	0.8	1.0	1.7	2.1	1.6
Health	1.7	1.2	2.5	2.2	7.9	2.1	1.4	1.7	1.9	1.4
Transport	5.2	1.2	1.7	2.3	3.1	4.4	3.1	2.4	4.5	– 2.8
Communications	– 7.1	– 4.1	– 0.3	– 0.6	– 2.0	– 2.3	– 3.2	– 1.9	– 2.2	– 1.0
Recreation and culture	– 0.2	1.4	1.4	0.2	– 0.1	– 0.1	0.1	0.2	0.2	0.5
Education	2.8	3.0	4.0	3.5	3.3	3.1	2.9	7.8	4.4	1.0
Restaurants and hotels	2.8	3.4	4.6	3.2	2.8	2.5	2.6	3.2	3.4	1.9
Miscellaneous	2.3	3.1	2.9	2.6	2.2	1.8	2.1	2.3	2.4	2.3
Selected special aggregates										
All- items excluding energy	1.1	2.4	2.5	2.0	1.9	1.4	1.6	2.1	2.5	1.2
All- items excl. energy, food, alcohol & tobacco	1.0	1.8	2.4	1.8	1.8	1.4	1.4	1.9	1.8	1.4
Energy	13.0	2.2	– 0.6	3.0	4.5	10.1	7.7	2.6	10.3	– 8.1
Food, alcohol & tobacco	1.4	4.5	3.1	2.8	2.3	1.6	2.4	2.8	5.1	0.7
European Union	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
All- items	1.9	2.2	2.1	2.0	2.0	2.2	2.2	2.3	3.7	1.0
COICOP – main components										
Food and non- alcoholic beverages	1.0	4.7	2.5	1.9	1.1	0.8	2.3	3.5	6.4	1.0
Alcohol and tobacco	2.7	3.0	3.5	4.9	6.1	4.0	2.6	3.8	4.5	5.6
Clothing	– 0.5	– 0.7	0.8	0.2	– 0.2	– 0.8	– 0.6	0.1	– 0.6	– 1.0
Housing	3.6	2.9	1.5	2.6	2.7	4.9	5.4	3.3	6.1	1.5
Household equipment	0.6	1.5	1.5	1.0	0.7	0.6	0.6	1.6	2.1	1.9
Health	1.9	1.6	2.7	2.3	7.1	2.4	1.7	2.2	2.4	1.8
Transport	4.8	1.0	1.6	2.5	3.2	4.3	3.0	2.5	4.8	– 2.1
Communications	– 6.8	– 4.4	– 0.1	– 0.5	– 1.8	– 2.1	– 2.5	– 2.0	– 1.9	– 0.4
Recreation and culture	0.1	1.4	1.4	0.0	– 0.4	– 0.3	– 0.3	– 0.1	0.1	0.8
Education	3.8	3.7	4.2	4.7	3.8	3.7	4.0	8.6	6.3	3.1
Restaurants and hotels	2.9	3.6	4.3	3.2	2.9	2.8	2.8	3.4	3.9	2.2
Miscellaneous	2.1	3.1	2.8	2.5	2.5	2.3	2.6	2.3	2.6	2.5
Selected special aggregates										
All-items excluding energy	1.0	2.2	2.3	1.8	1.8	1.4	1.6	2.2	2.8	1.7
All-items excl. energy, food, alcohol & tobacco	0.9	1.7	2.2	1.7	1.7	1.4	1.4	1.9	1.9	1.6
Energy	12.1	1.7	– 0.5	3.1	4.5	9.6	8.4	3.1	11.0	– 5.1
Food, alcohol & tobacco	1.4	4.3	2.7	2.6	2.2	1.6	2.4	3.5	6.0	2.0

Source: Eurostat (prc_hicp_aind)

(1) variable composition, i.e. EA11–2000, EA12–2006, EA13–2007, EA15–2008, EA16–2009

Table 4.31: Annual average inflation rates by Member States

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	1.9	2.2	2.1	2.0	2.0	2.2	2.2	2.3	3.7	1.0
Euro area (1)	2.1	2.3	2.2	2.1	2.1	2.2	2.2	2.1	3.3	0.3
Belgium (BE)	2.7	2.4	1.6	1.5	1.9	2.5	2.3	1.8	4.5	0.0
Bulgaria (BG)	10.3	7.4	5.8	2.3	6.1	6.0	7.4	7.6	12.0	2.5
Czech Republic (CZ)	3.9	4.5	1.4	– 0.1	2.6	1.6	2.1	3.0	6.3	0.6
Denmark (DK)	2.7	2.3	2.4	2.0	0.9	1.7	1.9	1.7	3.6	1.1
Germany (DE)	1.4	1.9	1.4	1.0	1.8	1.9	1.8	2.3	2.8	0.2
Estonia (EE)	3.9	5.6	3.6	1.4	3.0	4.1	4.4	6.7	10.6	0.2
Ireland (IE)	5.3	4.0	4.7	4.0	2.3	2.2	2.7	2.9	3.1	– 1.7
Greece (EL)	2.9	3.7	3.9	3.4	3.0	3.5	3.3	3.0	4.2	1.3
Spain (ES)	3.5	2.8	3.6	3.1	3.1	3.4	3.6	2.8	4.1	– 0.2
France (FR)	1.8	1.8	1.9	2.2	2.3	1.9	1.9	1.6	3.2	0.1
Italy (IT)	2.6	2.3	2.6	2.8	2.3	2.2	2.2	2.0	3.5	0.8
Cyprus (CY)	4.9	2.0	2.8	4.0	1.9	2.0	2.2	2.2	4.4	0.2
Latvia (LV)	2.6	2.5	2.0	2.9	6.2	6.9	6.6	10.1	15.3	3.3
Lithuania (LT)	1.1	1.6	0.3	– 1.1	1.2	2.7	3.8	5.8	11.1	4.2
Luxembourg (LU)	3.8	2.4	2.1	2.5	3.2	3.8	3.0	2.7	4.1	0.0
Hungary (HU)	10.0	9.1	5.2	4.7	6.8	3.5	4.0	7.9	6.0	4.0
Malta (MT)	3.0	2.5	2.6	1.9	2.7	2.5	2.6	0.7	4.7	1.8
Netherlands (NL)	2.3	5.1	3.9	2.2	1.4	1.5	1.7	1.6	2.2	1.0
Austria (AT)	2.0	2.3	1.7	1.3	2.0	2.1	1.7	2.2	3.2	0.4
Poland (PL)	10.1	5.3	1.9	0.7	3.6	2.2	1.3	2.6	4.2	4.0
Portugal (PT)	2.8	4.4	3.7	3.3	2.5	2.1	3.0	2.4	2.7	– 0.9
Romania (RO)	45.7	34.5	22.5	15.3	11.9	9.1	6.6	4.9	7.9	5.6
Slovenia (SI)	8.9	8.6	7.5	5.7	3.7	2.5	2.5	3.8	5.5	0.9
Slovakia (SK)	12.2	7.2	3.5	8.4	7.5	2.8	4.3	1.9	3.9	0.9
Finland (FI)	2.9	2.7	2.0	1.3	0.1	0.8	1.3	1.6	3.9	1.6
Sweden (SE)	1.3	2.7	1.9	2.3	1.0	0.8	1.5	1.7	3.3	1.9
United Kingdom (UK)	0.8	1.2	1.3	1.4	1.3	2.1	2.3	2.3	3.6	2.2
Iceland (IS)	4.4	6.6	5.3	1.4	2.3	1.4	4.6	3.6	12.8	16.3
Norway (NO)	3.0	2.7	0.8	2.0	0.6	1.5	2.5	0.7	3.4	2.3
Switzerland (CH)	:	:	:	:	:	:	1.0	0.8	2.3	– 0.7
Turkey (TR)	53.2	56.8	47.0	25.3	10.1	8.1	9.3	8.8	10.4	6.3

Source: Eurostat (prc_hicp_aind)

(1) variable composition, i.e. EA11–2000, EA12–2006, EA13–2007, EA15–2008, EA16–2009

Table 4.32 Household consumption pattern used for the HICP, 2009 (per 1000)

	EU	EA (1)	BE	BG	CZ	DK	DE	EE	IE	EL	ES
All-items	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Food	159.3	156.2	178.1	230.5	165.6	132.1	123.2	213.1	137.7	175.9	181.3
Alcohol and tobacco	42.7	37.0	30.1	43.7	92.1	42.1	45.0	83.1	71.5	45.8	25.6
Clothing	64.2	67.8	57.0	39.0	49.6	57.0	53.1	76.8	50.7	85.8	88.6
Housing	153.4	156.3	172.6	99.6	162.9	176.1	235.7	144.3	104.8	93.9	109.1
Household equipment	68.1	71.0	66.6	52.3	62.1	69.5	61.1	42.3	45.6	68.7	71.2
Health	38.3	41.7	37.9	49.1	38.3	31.5	44.1	36.5	36.7	62.9	31.3
Transport	146.3	151.4	138.1	185.6	116.8	162.2	140.0	127.9	134.3	130.9	146.6
Communications	31.8	32.2	28.7	55.5	39.4	24.4	29.7	40.0	37.2	37.7	36.5
Recreation and culture	102.7	96.6	123.5	57.5	112.2	131.3	121.5	78.3	110.8	56.1	78.9
Education	12.1	10.4	5.4	10.0	8.0	8.3	10.4	15.8	24.4	22.5	13.3
Restaurants and hotels	94.5	94.3	91.9	137.7	84.4	57.3	51.8	80.5	176.9	156.1	148.5
Miscellaneous	86.1	84.7	69.4	39.0	68.2	107.5	83.8	60.7	68.9	63.1	68.7
	FR	**IT**	**CY**	**LV**	**LT**	**LU**	**HU**	**MT**	**NL**	**AT**	**PL**
All-items	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Food	163.0	176.8	180.8	232.0	250.7	109.6	202.4	185.6	133.4	130.8	223.0
Alcohol and tobacco	35.5	30.2	29.3	70.2	77.9	120.7	80.8	49.0	36.2	29.9	81.1
Clothing	53.9	96.7	83.7	66.8	77.6	47.9	46.7	60.5	63.9	56.8	42.0
Housing	147.4	103.7	87.2	129.8	120.8	101.8	137.9	91.9	178.5	143.4	198.7
Household equipment	67.2	91.8	61.0	52.6	67.0	79.4	60.2	86.2	77.8	79.8	48.9
Health	43.4	36.4	52.8	49.2	55.7	19.2	45.9	30.4	28.8	53.0	45.9
Transport	175.4	157.1	159.9	129.9	107.9	205.9	147.7	140.8	137.3	140.7	88.9
Communications	32.4	28.7	38.0	43.0	37.6	21.7	45.6	24.8	47.1	21.4	34.7
Recreation and culture	98.7	66.0	67.2	72.9	67.7	80.3	86.7	88.4	124.4	114.7	73.3
Education	5.9	10.5	28.4	13.7	15.4	5.8	11.5	10.8	6.5	10.0	14.6
Restaurants and hotels	73.1	117.0	123.7	89.4	72.5	89.6	84.3	178.1	64.6	150.4	34.5
Miscellaneous	103.4	84.4	87.4	50.0	48.6	118.1	49.6	52.9	101.0	68.6	113.8
	PT	**RO**	**SI**	**SK**	**FI**	**SE**	**UK**	**IS**	**NO**	**CH**	**TR**
All-items	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Food	184.6	372.5	172.0	180.6	165.3	157.2	118.0	156.1	133.3	107.0	280.3
Alcohol and tobacco	29.7	64.3	48.9	56.3	60.2	45.3	44.0	33.7	31.9	16.5	45.8
Clothing	50.6	74.6	69.3	46.1	54.1	62.7	57.0	60.1	70.5	43.0	72.2
Housing	100.9	178.5	90.1	218.4	152.2	170.0	126.0	128.0	173.5	193.0	186.2
Household equipment	58.7	48.9	72.8	62.9	61.9	61.6	66.0	85.2	75.5	49.0	75.2
Health	81.8	27.5	41.3	46.2	53.6	36.2	22.0	37.5	32.6	144.9	25.0
Transport	161.9	65.6	173.2	92.1	149.9	156.1	151.0	166.4	213.2	111.1	126.4
Communications	31.9	58.1	34.4	38.1	37.0	35.5	23.0	32.8	24.9	27.2	45.9
Recreation and culture	62.4	50.3	95.6	85.8	109.3	114.7	145.0	139.2	143.3	102.6	25.4
Education	21.5	8.4	15.6	17.7	6.0	4.7	21.0	9.3	3.2	8.6	24.7
Restaurants and hotels	134.9	16.4	102.2	83.5	83.4	74.7	128.0	75.0	41.0	95.3	54.6
Miscellaneous	80.5	34.5	84.0	71.6	66.6	80.6	99.0	76.2	56.6	101.3	37.8

Source: Eurostat (prc_hicp_aind)

(1) variable composition, i.e. EA11–2000, EA12–2006, EA13–2007, EA15–2008, EA16–2009

Table 4.33: Long term interest rates, annual averages ([1])

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	:	:	:	:	:	:	4.0	4.5	4.5	4.1
Euro area (EA) ([2])	5.4	5.0	4.9	4.1	4.1	3.4	3.8	4.3	4.3	3.8
Belgium (BE)	5.5	5.1	4.9	4.1	4.1	3.4	3.8	4.3	4.4	3.9
Bulgaria (BG)	:	:	:	6.4	5.3	3.8	4.1	4.5	5.3	7.2
Czech Republic (CZ)	:	6.3	4.8	4.1	4.8	3.5	3.8	4.3	4.6	4.8
Denmark (DK)	5.6	5.0	5.0	4.3	4.3	3.4	3.8	4.2	4.2	3.5
Germany (DE)	5.2	4.8	4.7	4.0	4.0	3.3	3.7	4.2	3.9	3.2
Estonia (EE) ([3])	:	:	:	:	:	:	:	:	:	:
Ireland (IE)	5.5	5.0	5.0	4.1	4.0	3.3	3.7	4.3	4.5	5.2
Greece (EL)	6.1	5.3	5.1	4.2	4.2	3.5	4.0	4.5	4.8	5.1
Spain (ES)	5.5	5.1	4.9	4.1	4.1	3.3	3.7	4.3	4.3	3.9
France (FR)	5.3	4.9	4.8	4.1	4.1	3.4	3.8	4.3	4.2	3.6
Italy (IT)	5.5	5.1	5.0	4.2	4.2	3.5	4.0	4.4	4.6	4.3
Cyprus (CY)	:	7.6	5.7	4.7	5.8	5.1	4.1	4.4	4.6	4.6
Latvia (LV)	:	7.5	5.4	4.9	4.8	3.8	4.1	5.2	6.4	12.3
Lithuania (LT)	:	8.1	6.0	5.3	4.5	3.7	4.0	4.5	5.6	14.0
Luxembourg (LU) ([4])	5.5	4.8	4.7	3.3	2.8	2.4	3.3	4.4	4.6	4.2
Hungary (HU)	:	7.9	7.0	6.8	8.1	6.6	7.1	6.7	8.2	9.1
Malta (MT)	:	6.1	5.8	5.0	4.6	4.5	4.3	4.7	4.8	4.5
Netherlands (NL)	5.4	4.9	4.8	4.1	4.1	3.3	3.7	4.2	4.2	3.6
Austria (AT)	5.5	5.0	4.9	4.1	4.1	3.3	3.8	4.3	4.3	3.9
Poland (PL)	:	10.6	7.3	5.7	6.9	5.2	5.2	5.4	6.0	6.1
Portugal (PT)	5.5	5.1	5.0	4.1	4.1	3.4	3.9	4.4	4.5	4.2
Romania (RO)	:	:	:	:	:	:	7.2	7.1	7.7	9.6
Slovenia (SI)	:	:	8.7	6.4	4.6	3.8	3.8	4.5	4.6	4.3
Slovakia (SK)	:	8.0	6.9	4.9	5.0	3.5	4.4	4.4	4.7	4.7
Finland (FI)	5.4	5.0	4.9	4.1	4.1	3.3	3.7	4.2	4.2	3.7
Sweden (SE)	5.3	5.1	5.3	4.6	4.4	3.3	3.7	4.1	3.8	3.2
United Kingdom (UK)	5.3	5.0	4.9	4.5	4.9	4.4	4.3	5.0	4.5	3.3
Japan (JP)	6.0	5.0	4.6	4.0	4.2	4.2	4.7	4.6	3.6	3.2
United States (US)	1.7	1.3	1.2	0.9	1.5	1.3	1.7	1.6	1.4	1.3

Source: Eurostat (gov_q_ggdebt)

: = missing value

([1]) Central government bond yields with around 10 years' residual maturity. For EU countries the EMU convergence criterion series is shown. Annual averages.

([2]) variable composition, i.e. EA11–2000, EA12–2006, EA13–2007, EA15–2008, EA16–2009

([3]) Estonia does not have long term government debt. For further information see the metadata of Maastricht criterion interest rates.

([4]) The indicator for Luxembourg is based on private bonds with a residual maturity of 10 years.

Table 4.34: 3-month money market rates, annual averages

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	5.4	5.0	3.8	2.8	2.8	2.7	3.4	4.5	4.9	1.5
Euro area (EA) (1)	4.3	4.2	3.3	2.3	2.1	2.1	3.0	4.2	4.6	1.2
Bulgaria (BG)	4.6	5.0	4.9	3.6	3.7	3.6	3.6	4.9	7.1	5.7
Czech Republic (CZ)	5.3	5.1	3.5	2.2	2.3	2.0	2.3	3.1	4.0	2.1
Denmark (DK)	5.0	4.7	3.5	2.4	2.2	2.2	3.1	4.4	5.2	2.4
Estonia (EE)	5.6	5.3	3.8	2.9	2.5	2.3	3.1	4.8	6.6	5.9
Cyprus (CY) (2)	6.4	5.9	4.4	3.9	4.7	4.2	3.3	4.1	:	:
Latvia (LV)	5.4	6.8	4.3	3.8	4.2	3.0	4.3	8.6	8.0	13.0
Lithuania (LT)	8.6	5.9	3.7	2.8	2.6	2.4	3.1	5.1	6.0	7.0
Hungary (HU)	11.3	10.8	9.2	8.5	11.5	6.7	7.2	7.8	8.7	9.1
Malta (MT) (2)	4.8	4.9	4.0	3.2	2.9	3.1	3.4	4.2	:	:
Poland (PL)	18.7	16.0	8.9	5.6	6.2	5.2	4.2	4.7	6.3	4.4
Romania (RO)	50.7	41.2	27.3	17.7	19.1	8.3	8.0	7.2	12.2	11.3
Slovenia (SI) (2)	10.9	10.8	8.0	6.7	4.6	4.0	3.5	:	:	:
Slovakia (SK) (2)	8.5	7.7	7.7	6.1	4.6	2.9	4.3	4.3	4.1	:
Sweden (SE)	4.0	4.1	4.2	3.2	2.3	1.8	2.5	3.8	4.7	0.9
United Kingdom (UK)	6.1	5.0	4.0	3.7	4.6	4.7	4.8	6.0	5.5	1.2
Japan (JP)	0.2	0.1	0.0	0.0	0.0	0.0	0.3	0.7	0.9	0.4
United States (US)	6.5	3.7	1.7	1.2	1.6	3.5	5.2	5.3	2.9	0.6

Source: ECB and Eurostat (tec00034)

(1) variable composition, i.e. EA11–2000, EA12–2006, EA13–2007, EA15–2008, EA16–2009

(2) For euro-zone countries the EURIBOR (euro interbank offered rate) replaces the rates of participating countries upon euro adoption.

Table 4.35: Euro exchange rates, annual averages (1 € = … National currency)

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
BGN	New Bulgarian Lev	1.9522	1.9482	1.9492	1.9490	1.9533	1.9558	1.9558	1.9558	1.9558	1.9558
CZK	Czech Koruna	35.599	34.068	30.804	31.846	31.891	29.782	28.342	27.766	24.946	26.435
DKK	Danish Krone	7.4538	7.4521	7.4305	7.4307	7.4399	7.4518	7.4591	7.4506	7.4560	7.4462
EEK	Estonian Kroon	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466
LVL	Latvian Lats	0.5592	0.5601	0.5810	0.6407	0.6652	0.6962	0.6962	0.7001	0.7027	0.7057
LTL	Lithuanian Litas	3.6952	3.5823	3.4594	3.4527	3.4529	3.4528	3.4528	3.4528	3.4528	3.4528
HUF	Hungarian forint	260.04	256.59	242.96	253.62	251.66	248.05	264.26	251.35	251.51	280.33
PLN	New Polish Zloty	4.0082	3.6721	3.8574	4.3996	4.5268	4.0230	3.8959	3.7837	3.5121	4.3276
RON	New Romanian leu	1.9922	2.6004	3.1270	3.7551	4.0510	3.6209	3.5258	3.3353	3.6826	4.2399
SEK	Swedish Krona	8.4452	9.2551	9.1611	9.1242	9.1243	9.2822	9.2544	9.2501	9.6152	10.6191
GBP	Pound Sterling	0.60948	0.62187	0.62883	0.69199	0.67866	0.68380	0.68173	0.68434	0.79628	0.89094
ISK	Iceland Krona (1)	72.58	87.42	86.18	86.65	87.14	78.23	87.76	87.63	143.83	172.67
NOK	Norwegian Krone	8.1129	8.0484	7.5086	8.0033	8.3697	8.0092	8.0472	8.0165	8.2237	8.7278
CHF	Swiss Franc	1.5579	1.5105	1.4670	1.5212	1.5438	1.5483	1.5729	1.6427	1.5874	1.5100
JYP	Yen (Japan)	99.47	108.68	118.06	130.97	134.44	136.85	146.02	161.25	152.45	130.34
USD	United States Dollar	0.9236	0.8956	0.9456	1.1312	1.2439	1.2441	1.2556	1.3705	1.4708	1.3948

Source: ECB and Eurostat (tec00033)

(1) "official rate" in 2009.

Table 4.36: Main world traders: exports, imports and trade balance, 2000–2008 (EUR Bn)

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Exports	EU-27	849.7	884.7	891.9	869.2	953.0	1052.7	1160.1	1241.5	1306.5
	United States	844.9	816.2	733.1	639.7	657.5	726.9	825.9	848.3	883.8
	China (*)	269.8	297.1	344.3	387.4	477.0	612.5	771.7	888.6	971.4
	Japan	518.9	450.4	440.7	417.3	454.8	478.2	515.1	521.2	531.3
	Canada	300.0	291.5	267.1	240.7	255.0	289.8	309.2	306.4	309.2
Imports	EU-27	992.7	979.1	937.0	935.3	1027.5	1179.6	1352.8	1434.0	1565.0
	United States	1362.1	1317.6	1271.5	1153.7	1226.2	1392.4	1528.4	1471.8	1471.9
	China (*)	243.7	271.9	312.2	364.9	451.2	530.5	630.3	697.5	769.4
	Japan	411.1	390.0	357.0	339.0	366.0	414.7	461.2	454.0	518.4
	Canada	259.9	247.5	235.2	212.5	220.1	252.7	278.8	277.5	277.1
Trade balance	EU-27	– 143.0	– 94.4	– 45.1	– 66.0	– 74.6	– 126.8	– 192.7	– 192.5	– 258.5
	United States	– 517.3	– 501.4	– 538.3	– 514.0	– 568.7	– 665.5	– 702.4	– 623.6	– 588.1
	China (*)	26.1	25.2	32.2	22.5	25.8	82.0	141.3	191.0	202.0
	Japan	107.8	60.4	83.7	78.3	88.8	63.6	53.9	67.2	12.8
	Canada	40.1	44.0	31.9	28.2	34.9	37.1	30.4	28.9	32.1

Source: Eurostat (tet00018)

* excluding Kong Kong

Table 4.37: Extra-EU-27 imports, exports and balance, by SITC-1 product group, 2000-2009 (EUR Bn)

sitc	flow	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Food and drink	Exports	47.7	49.3	50.1	48.5	48.6	52.0	57.9	62.0	68.4	62.1
	Imports	54.8	58.1	58.1	57.3	58.8	63.0	68.0	75.6	80.8	72.0
	Trade balance	– 7.1	– 8.8	– 8.0	– 8.8	– 10.3	– 11.0	– 10.1	– 13.6	– 12.4	– 9.8
Raw materials	Exports	17.8	17.0	18.5	18.3	21.0	23.8	28.5	30.3	32.1	27.7
	Imports	49.2	48.0	44.5	43.1	48.5	52.7	63.2	70.5	75.6	46.8
	Trade balance	– 31.4	– 31.1	– 26.1	– 24.8	– 27.4	– 28.9	– 34.7	– 40.2	– 43.5	– 19.1
Energy products	Exports	29.1	24.9	26.2	27.4	32.9	45.9	59.0	63.7	81.4	56.4
	Imports	161.1	157.8	149.1	157.9	183.4	272.6	339.7	335.0	456.4	290.3
	Trade balance	– 132.0	– 132.8	– 122.9	– 130.5	– 150.5	– 226.7	– 280.6	– 271.3	– 375.1	– 233.8
Chemicals	Exports	118.9	130.2	141.1	141.1	152.6	164.9	184.6	197.9	198.8	186.6
	Imports	70.5	76.9	80.8	80.5	88.5	96.4	109.2	120.6	124.3	105.0
	Trade balance	48.4	53.3	60.4	60.6	64.1	68.4	75.4	77.3	74.5	81.6
Machinery and vehicles	Exports	393.5	412.0	401.5	391.6	430.1	470.3	504.3	543.2	569.0	454.3
	Imports	371.5	352.0	329.1	326.8	354.5	378.7	403.0	418.6	415.5	341.9
	Trade balance	21.9	59.9	72.4	64.8	75.6	91.6	101.3	124.6	153.5	112.4
Other manufactured goods	Exports	224.1	232.7	234.7	223.9	246.2	265.8	293.9	309.8	316.8	255.9
	Imports	250.5	253.5	244.3	238.5	262.3	290.3	341.2	382.1	374.9	292.4
	Trade balance	– 26.4	– 20.8	– 9.6	– 14.7	– 16.1	– 24.4	– 47.3	– 72.3	– 58.1	– 36.5
Other	Exports	18.7	18.7	19.8	18.5	21.5	30.0	31.9	34.6	40.2	51.4
	Imports	35.0	32.8	31.1	31.2	31.5	25.8	28.5	31.6	37.4	51.4
	Trade balance	– 16.3	– 14.1	– 11.3	– 12.7	– 9.9	4.2	3.4	3.0	2.7	0.0
Total-All products	Exports	849.7	884.7	891.9	869.2	953.0	1052.7	1160.1	1241.5	1306.5	1094.4
	Imports	992.7	979.1	937.0	935.3	1027.5	1179.6	1352.8	1434.0	1565.0	1199.7
	Trade balance	– 143.0	– 94.4	– 45.1	– 66.0	– 74.6	– 126.8	– 192.7	– 192.5	– 258.5	– 105.3

Source: Eurostat (tet00061)

Table 4.38: Extra-EU–27 imports, exports and balance, by main partners, 2000-2009 (EUR Bn)

partner	flow	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
United States	Exports	238.2	245.6	247.9	227.3	235.5	252.7	269.1	261.5	249.9	204.5
	Imports	206.3	203.3	182.6	158.1	159.4	163.5	175.5	181.6	186.8	160.0
	Trade balance	31.9	42.3	65.3	69.2	76.1	89.2	93.6	79.9	63.2	44.5
China (*)	Exports	25.9	30.7	35.1	41.5	48.4	51.8	63.8	71.9	78.4	81.6
	Imports	74.6	82.0	90.1	106.2	128.7	160.3	194.9	232.6	247.9	214.7
	Trade balance	– 48.8	– 51.3	– 55.0	– 64.7	– 80.3	– 108.5	– 131.1	– 160.7	– 169.5	– 133.1
Russian Federation	Exports	22.7	31.6	34.4	37.2	46.0	56.7	72.3	89.1	105.0	65.7
	Imports	63.8	65.9	64.5	70.7	84.0	112.6	140.9	144.5	177.9	115.4
	Trade balance	– 41.0	– 34.3	– 30.1	– 33.5	– 37.9	– 55.9	– 68.6	– 55.4	– 72.8	– 49.7
Switzerland	Exports	72.5	76.5	72.8	71.4	75.2	82.6	87.8	92.8	98.0	88.6
	Imports	62.6	63.6	61.7	59.1	62.0	66.6	71.6	76.9	80.3	73.8
	Trade balance	10.0	12.9	11.1	12.3	13.2	16.0	16.1	16.0	17.7	14.8
Norway	Exports	26.4	27.2	28.2	27.7	30.8	33.8	38.5	43.6	43.8	37.6
	Imports	47.2	46.4	48.0	51.0	55.3	67.2	79.2	76.6	95.9	68.7
	Trade balance	– 20.8	– 19.2	– 19.9	– 23.4	– 24.5	– 33.4	– 40.7	– 33.1	– 52.1	– 31.1
Japan	Exports	45.5	45.5	43.5	41.0	43.4	43.7	44.8	43.7	42.3	36.0
	Imports	92.1	81.1	73.7	72.4	74.7	74.1	77.5	78.4	75.2	55.8
	Trade balance	– 46.6	– 35.6	– 30.2	– 31.4	– 31.3	– 30.3	– 32.7	– 34.7	– 32.9	– 19.8
Turkey	Exports	31.9	21.9	26.6	30.9	40.1	44.6	50.0	52.7	54.1	43.9
	Imports	18.7	22.1	24.6	27.3	32.7	36.1	41.7	47.0	46.0	36.1
	Trade balance	13.2	– 0.2	2.0	3.6	7.4	8.5	8.3	5.7	8.2	7.8
South Korea	Exports	16.7	15.8	17.7	16.4	17.9	20.2	22.9	24.8	25.6	21.5
	Imports	27.0	23.3	24.6	26.0	30.7	34.5	40.8	41.4	39.6	32.0
	Trade balance	– 10.2	– 7.4	– 6.9	– 9.6	– 12.7	– 14.2	– 18.0	– 16.6	– 14.0	– 10.5
India	Exports	13.7	13.0	14.3	14.6	17.2	21.3	24.4	29.5	31.6	27.5
	Imports	12.8	13.5	13.7	14.1	16.4	19.1	22.6	26.6	29.5	25.4
	Trade balance	0.8	– 0.5	0.6	0.5	0.8	2.2	1.8	2.9	2.1	2.1
Brazil	Exports	16.9	18.6	15.7	12.4	14.2	16.1	17.7	21.3	26.3	21.6
	Imports	18.7	19.6	18.4	19.1	21.7	24.1	27.2	32.8	35.9	25.6
	Trade balance	– 1.8	– 1.0	– 2.6	– 6.7	– 7.6	– 8.1	– 9.5	– 11.5	– 9.5	– 4.0

Source: Eurostat (tet00040)

(*) excluding Kong Kong

Table 4.39: Member States' contribution to the extra- EU–27 trade, shares in the EU imports (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Share in the EU imports (%)										
European Union (EU-27)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Belgium (BE)	5.6	5.7	6.1	5.9	6.1	6.1	5.9	6.2	6.1	6.1
Bulgaria (BG)	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.6	0.7	0.6
Czech Republic (CZ)	0.9	1.1	1.3	1.4	1.1	1.0	1.1	1.2	1.4	1.4
Denmark (DK)	1.4	1.4	1.4	1.4	1.6	1.5	1.4	1.4	1.3	1.5
Germany (DE)	20.0	19.6	19.0	19.4	19.2	18.8	19.4	19.0	18.7	19.6
Estonia (EE)	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Ireland (IE)	2.0	1.9	2.0	1.9	1.7	1.6	1.4	1.3	1.1	1.3
Greece (EL)	1.3	1.3	1.6	1.8	1.6	1.5	1.6	1.6	1.7	1.3
Spain (ES)	5.5	5.5	5.7	6.0	6.5	7.1	7.4	7.3	7.4	6.6
France (FR)	12.1	12.2	11.7	11.2	11.2	11.2	9.8	9.8	9.9	10.3
Italy (IT)	10.2	10.3	10.4	10.3	10.5	10.6	11.1	11.0	11.1	10.6
Cyprus (CY)	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Latvia (LV)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Lithuania (LT)	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4
Luxembourg (LU)	0.2	0.3	0.2	0.3	0.4	0.4	0.5	0.4	0.3	0.4
Hungary (HU)	1.2	1.3	1.5	1.6	1.5	1.4	1.4	1.5	1.5	1.5
Malta (MT)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands (NL)	11.1	11.0	11.1	11.3	11.7	12.5	12.3	12.5	13.1	13.5
Austria (AT)	1.6	1.7	1.7	1.7	1.6	1.7	1.6	1.7	1.8	1.9
Poland (PL)	1.7	1.7	1.9	2.0	1.7	1.7	2.0	2.3	2.6	2.4
Portugal (PT)	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9
Romania (RO)	0.5	0.6	0.6	0.7	0.9	1.0	1.1	1.0	1.1	0.9
Slovenia (SI)	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.5	0.5
Slovakia (SK)	0.4	0.5	0.5	0.5	0.5	0.5	0.7	0.8	0.9	0.8
Finland (FI)	1.2	1.1	1.2	1.3	1.3	1.3	1.5	1.5	1.5	1.3
Sweden (SE)	2.5	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3
United Kingdom (UK)	18.3	18.2	17.6	16.3	16.2	15.3	15.0	14.3	12.8	13.6

Source: Eurostat (tet00038)

Table 4.40: Member States' contribution to the extra-EU–27 trade, shares in the EU exports (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Share in the EU imports (%)										
European Union (EU-27)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Belgium (BE)	5.6	5.3	6.3	5.9	5.9	5.9	5.9	6.1	5.7	5.8
Bulgaria (BG)	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4
Czech Republic (CZ)	0.5	0.6	0.7	0.6	0.7	0.9	0.9	1.1	1.2	1.1
Denmark (DK)	1.9	2.0	2.1	2.0	1.9	1.9	1.8	1.8	1.8	2.0
Germany (DE)	24.8	26.3	26.7	26.8	27.2	26.5	27.7	27.4	27.6	27.3
Estonia (EE)	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Ireland (IE)	3.5	3.7	3.6	3.5	3.3	3.0	2.7	2.6	2.4	2.9
Greece (EL)	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Spain (ES)	4.0	3.8	3.8	3.9	4.0	4.1	4.2	4.4	4.5	4.5
France (FR)	14.7	14.6	13.7	13.3	13.0	12.9	11.7	11.4	11.4	11.9
Italy (IT)	11.8	12.0	11.8	11.5	11.4	11.0	11.1	11.5	11.6	11.4
Cyprus (CY)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia (LV)	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Lithuania (LT)	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.4
Luxembourg (LU)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
Hungary (HU)	0.6	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.2	1.2
Malta (MT)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands (NL)	5.6	5.4	5.7	5.9	6.1	6.3	6.6	7.1	7.0	7.5
Austria (AT)	2.2	2.2	2.3	2.4	2.6	2.7	2.6	2.6	2.6	2.5
Poland (PL)	0.8	0.9	0.9	1.0	1.2	1.5	1.6	1.7	2.0	1.8
Portugal (PT)	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.7
Romania (RO)	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.7
Slovenia (SI)	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.5
Slovakia (SK)	0.2	0.1	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.5
Finland (FI)	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.2	1.8
Sweden (SE)	4.4	3.9	4.0	4.3	4.3	4.1	4.0	3.9	3.8	3.6
United Kingdom (UK)	14.8	13.8	12.8	12.7	12.1	12.5	11.4	10.8	10.3	10.4

Source: Eurostat (tet00038)

Table 4.41: Intra-EU-27 dispatches by SITC-1 product group, 2000-2009 (EUR Bn)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Food and drink	148.5	157.6	162.6	167.9	175.8	188.0	201.2	223.0	240.8	226.3
Raw materials	54.4	52.8	54.5	55.9	63.6	67.5	80.6	89.7	92.4	67.2
Energy products	75.2	75.3	75.5	80.1	89.4	129.1	155.6	152.4	201.8	128.9
Chemicals	223.1	239.6	261.0	268.0	294.7	325.7	358.5	394.7	407.3	352.3
Machinery and vehicles	763.3	787.6	782.8	771.9	830.1	859.4	972.5	1002.0	973.7	766.7
Other manufactured goods	505.6	520.5	526.8	530.5	576.9	611.4	693.1	755.9	750.4	585.5
Other	35.7	39.4	34.3	40.1	41.2	34.0	34.8	35.9	41.8	56.2
Total -All products	1805.8	1872.8	1897.4	1914.5	2071.8	2215.0	2496.3	2653.6	2708.3	2183.0

Source: Eurostat (ext_lt_intratrd)

Table 4.42: Member States' contribution to the Intra-EU-27 trade, in 1000 million of ECU/EURO

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Intra-EU dispatches in 1000 million of ECU/EURO										
European Union (EU-27)	1805.8	1872.8	1897.4	1914.5	2071.8	2215.0	2496.3	2653.6	2708.3	2183.0
Belgium (BE)	156.5	165.6	172.4	174.4	190.1	206.2	223.1	239.2	246.6	201.2
Bulgaria (BG)	3.0	3.5	3.8	4.2	5.0	5.5	7.1	8.2	9.1	7.6
Czech Republic (CZ)	27.1	32.2	34.9	37.6	48.3	53.7	64.8	76.2	84.8	68.7
Denmark (DK)	39.2	40.1	42.4	41.3	43.8	48.4	52.4	52.7	55.3	45.2
Germany (DE)	386.6	406.0	412.7	431.1	472.3	501.6	561.3	623.9	622.7	504.9
Estonia (EE)	3.0	3.0	3.0	3.3	3.8	4.8	5.1	5.6	5.9	4.5
Ireland (IE)	54.3	59.4	61.6	51.2	53.0	56.2	54.8	56.3	53.7	50.5
Greece (EL)	7.9	8.2	6.7	7.7	7.9	8.6	10.6	11.2	11.2	9.0
Spain (ES)	91.1	96.9	99.4	103.9	109.2	112.0	121.1	130.8	133.2	107.8
France (FR)	230.0	231.9	228.4	231.1	239.8	236.5	258.7	261.0	259.6	211.2
Italy (IT)	160.2	166.6	163.9	165.0	175.9	183.7	203.1	222.2	217.2	165.8
Cyprus (CY)	0.3	0.3	0.3	0.3	0.5	0.9	0.7	0.7	0.8	0.6
Latvia (LV)	1.6	1.8	1.9	2.0	2.5	3.2	3.6	4.4	4.7	3.7
Lithuania (LT)	2.9	3.5	3.8	3.9	5.0	6.2	7.2	8.1	9.7	7.6
Luxembourg (LU)	7.9	9.6	9.5	10.5	11.8	13.6	16.3	14.5	15.3	13.0
Hungary (HU)	25.5	28.5	30.8	32.1	37.1	40.9	47.5	55.0	57.7	47.3
Malta (MT)	0.9	1.1	1.0	1.0	1.0	1.0	1.2	1.1	0.9	0.6
Netherlands (NL)	205.2	210.0	207.5	210.4	229.5	260.7	292.3	313.8	342.4	275.6
Austria (AT)	54.8	59.2	62.3	64.7	70.0	72.3	78.4	86.6	89.0	70.8
Poland (PL)	27.9	32.6	35.3	38.9	48.5	56.5	69.7	80.7	90.2	76.4
Portugal (PT)	21.5	21.9	22.3	22.8	23.0	24.5	26.7	28.8	28.0	23.3
Romania (RO)	8.1	9.6	10.8	11.8	14.1	15.6	18.2	21.3	23.8	21.6
Slovenia (SI)	6.8	7.3	7.5	7.7	8.9	10.5	12.7	15.2	15.8	13.0
Slovakia (SK)	11.5	12.7	13.6	16.6	19.3	22.3	28.9	37.1	41.3	34.4
Finland (FI)	31.5	29.2	29.2	28.3	28.7	29.9	35.2	37.3	36.7	24.9
Sweden (SE)	56.9	49.8	50.4	53.0	58.5	62.1	70.8	75.4	74.9	54.9
United Kingdom (UK)	183.5	182.4	181.9	160.0	164.2	177.4	224.9	186.4	178.1	138.8

Source: Eurostat (tet00039)

Table 4.43: Member States' contribution to the Intra-EU–27 trade; shares in the intra-EU dispatches (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Share in the intra-EU dispatches (%)										
European Union (EU-27)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Belgium (BE)	8.7	8.8	9.1	9.1	9.2	9.3	8.9	9.0	9.1	9.2
Bulgaria (BG)	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Czech Republic (CZ)	1.5	1.7	1.8	2.0	2.3	2.4	2.6	2.9	3.1	3.1
Denmark (DK)	2.2	2.1	2.2	2.2	2.1	2.2	2.1	2.0	2.0	2.1
Germany (DE)	21.4	21.7	21.8	22.5	22.8	22.6	22.5	23.5	23.0	23.1
Estonia (EE)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Ireland (IE)	3.0	3.2	3.2	2.7	2.6	2.5	2.2	2.1	2.0	2.3
Greece (EL)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Spain (ES)	5.0	5.2	5.2	5.4	5.3	5.1	4.9	4.9	4.9	4.9
France (FR)	12.7	12.4	12.0	12.1	11.6	10.7	10.4	9.8	9.6	9.7
Italy (IT)	8.9	8.9	8.6	8.6	8.5	8.3	8.1	8.4	8.0	7.6
Cyprus (CY)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia (LV)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Lithuania (LT)	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3
Luxembourg (LU)	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.5	0.6	0.6
Hungary (HU)	1.4	1.5	1.6	1.7	1.8	1.8	1.9	2.1	2.1	2.2
Malta (MT)	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands (NL)	11.4	11.2	10.9	11.0	11.1	11.8	11.7	11.8	12.6	12.6
Austria (AT)	3.0	3.2	3.3	3.4	3.4	3.3	3.1	3.3	3.3	3.2
Poland (PL)	1.5	1.7	1.9	2.0	2.3	2.6	2.8	3.0	3.3	3.5
Portugal (PT)	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.1
Romania (RO)	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.9	1.0
Slovenia (SI)	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
Slovakia (SK)	0.6	0.7	0.7	0.9	0.9	1.0	1.2	1.4	1.5	1.6
Finland (FI)	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.1
Sweden (SE)	3.2	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.5
United Kingdom (UK)	10.2	9.7	9.6	8.4	7.9	8.0	9.0	7.0	6.6	6.4

Source: Eurostat (tet00039)

Table 4.44: Trade in services with rest of the world, in € billion

	2005			2006			2007			2008			2009 (1)		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
Belgium (BE)	45.2	41.2	4.0	47.4	42.4	5.0	54.4	50.2	4.2	59.8	56.7	3.0	58.1	53.4	4.7
Bulgaria (BG)	3.6	2.7	0.8	4.2	3.3	0.9	4.8	3.6	1.2	5.4	4.0	1.3	4.9	3.3	1.6
Czech Republic (CZ)	9.5	8.3	1.2	11.1	9.5	1.6	12.3	10.5	1.8	14.8	12.2	2.6	14.6	13.6	1.0
Denmark (DK)	35.0	29.8	5.1	41.6	36.0	5.6	45.1	39.3	5.8	49.4	42.5	6.8	39.6	36.7	2.9
Germany (DE)	134.3	170.4	– 36.2	154.8	179.9	– 25.2	166.8	190.3	– 23.5	178.1	198.0	– 19.9	165.8	182.6	– 16.7
Estonia (EE)	2.6	1.8	0.8	2.8	2.0	0.8	3.2	2.2	1.0	3.5	2.3	1.2	3.2	1.8	1.3
Ireland (IE)	48.2	57.5	– 9.3	57.1	63.9	– 6.8	68.0	69.1	– 1.1	69.2	74.6	– 5.4	69.3	74.3	– 5.0
Greece (EL)	27.3	11.9	15.4	28.4	13.0	15.3	31.3	14.7	16.6	34.1	16.9	17.1	27.0	14.3	12.6
Spain (ES)	76.2	54.0	22.2	84.8	62.5	22.2	93.3	70.3	23.1	97.4	71.3	26.1	88.1	62.4	25.7
France (FR)	98.4	85.0	13.3	102.5	89.1	13.4	109.4	94.4	15.0	111.7	97.2	14.5	100.8	90.4	10.4
Italy (IT)	71.9	72.4	– 0.5	78.7	80.0	– 1.3	81.8	88.9	– 7.1	81.4	88.8	– 7.4	73.4	83.6	– 10.1
Cyprus (CY)	5.2	2.2	3.1	5.7	2.3	3.4	6.4	2.7	3.7	8.2	3.4	4.8	7.1	2.9	4.1
Latvia (LV)	1.8	1.3	0.5	2.1	1.6	0.5	2.7	2.0	0.7	3.1	2.2	0.9	2.7	1.6	1.2
Lithuania (LT)	2.5	1.7	0.8	2.9	2.0	0.9	2.9	2.5	0.5	3.3	3.0	0.4	2.7	2.1	0.6
Luxembourg (LU)	32.9	19.8	13.1	40.4	23.8	16.6	47.8	27.6	20.1	48.4	28.1	20.4	43.8	25.8	18.0
Hungary (HU)	10.4	9.2	1.1	10.9	9.6	1.2	12.6	11.5	1.1	13.8	12.8	1.0	13.1	11.6	1.5
Malta (MT)	1.6	1.0	0.6	2.1	1.4	0.7	2.5	1.6	0.8	2.5	1.6	1.0	2.4	1.5	0.9
Netherlands (NL)	64.5	59.0	5.5	67.5	60.0	7.5	70.4	61.5	8.9	71.9	63.0	8.9	66.9	61.2	5.6
Austria (AT)	34.1	24.8	9.4	36.4	26.7	9.7	39.6	28.5	11.2	42.3	29.1	13.2	38.2	26.6	11.6
Poland (PL)	13.1	12.5	0.6	16.3	15.8	0.6	21.0	17.6	3.4	24.2	20.7	3.5	20.7	17.2	3.5
Portugal (PT)	12.2	8.3	4.0	14.7	9.6	5.1	17.0	10.4	6.6	17.9	11.2	6.7	16.3	10.2	6.1
Romania (RO)	4.1	4.4	– 0.3	5.6	5.6	0.0	6.9	6.5	0.4	8.8	8.1	0.7	7.0	7.4	– 0.4
Slovenia (SI)	3.2	2.3	0.9	3.6	2.6	1.0	4.1	3.1	1.0	5.0	3.4	1.6	4.3	3.3	1.0
Slovakia (SK)	3.6	3.3	0.3	4.3	3.8	0.5	5.1	4.8	0.4	5.8	6.3	– 0.5	4.5	5.8	– 1.2
Finland (FI)	13.7	14.2	– 0.6	13.9	14.8	– 0.9	17.0	16.5	0.5	21.8	20.7	1.1	17.9	16.3	1.5
Sweden (SE)	34.6	28.4	6.2	39.6	31.5	8.1	47.0	35.0	12.0	49.4	37.2	12.2	43.8	33.3	10.5
United Kingdom (UK)	167.1	131.1	36.0	188.9	139.4	49.5	207.8	147.1	60.7	196.2	138.1	58.1	170.0	119.8	50.2

Source: Eurostat (bop_q_eu)

(1) preliminary results

Table 4.45: EU trade in services, in € billion

Item Breakdown	2005			2006			2007			2008			2009 (1)		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
	404.5	351.5	53.0	452.8	382.2	70.6	507.3	419.5	87.8	529.5	443.3	86.2	480.8	415.5	65.3
Transportation	103.5	88.6	14.9	112.2	97.6	14.6	123.1	102.7	20.4	136.0	111.5	24.5	109.9	88.4	21.5
Travel	65.8	85.3	– 19.4	71.8	87.9	– 16.1	75.5	94.6	– 19.2	74.1	95.1	– 20.9	68.1	86.4	– 18.3
Communications services	7.5	8.0	– 0.4	8.5	9.7	– 1.1	10.1	10.5	– 0.4	11.1	11.3	– 0.1	11.9	12.2	– 0.2
Construction services	12.2	6.2	6.0	13.8	7.1	6.7	16.4	8.0	8.4	18.3	10.0	8.3	17.5	11.7	5.8
Insurance services	6.1	8.2	– 2.2	11.2	7.7	3.5	14.9	8.1	6.8	14.7	7.9	6.8	14.8	6.9	7.9
Financial services	35.1	14.2	20.8	42.9	17.2	25.6	53.4		33.3	49.7	19.1	30.6	43.1	16.9	26.2
Computer and information services	17.3	8.7	8.6	22.4	10.2	12.2	26.1	11.2	14.9	29.3	12.2	17.1	30.7	12.7	17.9
Royalties and license fees	23.6	32.9	– 9.3	23.9	31.4	– 7.5	26.4	35.5	– 9.1	24.9	38.7	– 13.8	25.3	39.2	– 13.9
Other business services	120.8	87.0	33.8	131.7	96.7	35.1	144.7	108.3	36.3	154.7	119.5	35.2	146.6	116.7	29.8
Personal, cultural and recreational services	4.9	6.3	– 1.4	4.8	7.3	– 2.5	4.8	6.1	– 1.2	5.1	6.2	– 1.0	4.9	5.8	– 0.9
Government services, n.i.e.	7.7	6.2	1.5	8.6	7.1	1.6	8.7	7.3	1.4	8.5	7.7	0.8	7.7	7.4	0.3
Services not allocated	0.1	0.1	0.0	0.9	2.3	– 1.5	3.2	7.0	– 3.8	3.0	4.2	– 1.2	0.4	11.2	– 10.7

Partner Breakdown	2005			2006			2007			2008			2009 (1)		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
Switzerland	49.9	37.3	12.6	53.6	38.4	15.2	61.9	46.4	15.6	67.6	45.3	22.3	63.6	47.5	16.1
Russia	12.4	10.0	2.4	14.8	10.9	4.0	18.8	11.9	6.9	21.3	13.9	7.4	18.5	10.9	7.6
Canada	9.0	7.5	1.5	10.6	8.5	2.0	12.1	9.8	2.2	12.0	9.8	2.2	10.6	8.2	2.5
United States of America	122.8	117.8	5.1	133.1	124.2	8.9	139.5	130.4	9.1	135.8	133.6	2.2	119.4	127.0	– 7.6
Brazil	4.6	4.0	0.6	5.6	4.6	0.9	7.0	4.9	2.0	9.5	6.3	3.2	8.8	6.4	2.4
China	12.4	9.4	3.0	14.4	12.5	2.0	16.8	14.2	2.6	20.4	15.3	5.1	18.2	13.2	5.0
Hong Kong	8.4	5.7	2.7	7.1	6.2	0.9	8.9	7.7	1.2	9.1	8.1	1.0	7.5	6.5	1.0
India	5.4	5.1	0.3	7.4	5.9	1.6	8.7	7.2	1.5	8.7	8.1	0.6	8.8	7.5	1.3
Japan	19.7	12.3	7.3	19.0	13.4	5.6	19.8	14.1	5.7	19.6	14.9	4.8	16.5	12.7	3.8

Source: Eurostat (bop_q_eu)

(1) preliminary results

Table 4.46: Current account of EU Member States, in EUR Bn

	2006			2007			2008			2009 (1)		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
Belgium (BE)	337.5	331.2	6.3	371.6	364.4	7.3	369.9	380.0	– 10.1	309.9	308.1	1.8
Bulgaria (BG)	18.3	23.0	– 4.6	20.4	28.1	– 7.8	23.2	31.4	– 8.2	19.0	22.2	– 3.2
Czech Republic (CZ)	93.1	95.8	– 2.7	109.4	113.5	– 4.1	123.6	124.6	– 1.0	101.3	102.7	– 1.5
Denmark (DK)	138.8	132.3	6.5	146.6	143.3	3.4	155.7	150.6	5.1	130.5	121.6	8.9
Germany (DE)	1278.6	1128.5	150.1	1408.6	1223.5	185.1	1425.3	1258.3	167.0	1170.4	1051.3	119.1
Estonia (EE)	11.8	14.1	– 2.2	13.0	15.8	– 2.8	13.7	15.2	– 1.5	10.9	10.2	0.6
Ireland (IE)	211.6	218.0	– 6.3	241.8	251.9	– 10.1	240.3	249.7	– 9.4	206.2	211.1	– 4.8
Greece (EL)	54.9	78.6	– 23.7	60.0	92.6	– 32.6	66.3	101.1	– 34.8	51.8	78.4	– 26.6
Spain (ES)	325.3	413.6	– 88.3	362.5	467.7	– 105.3	361.5	467.5	– 106.0	307.3	364.4	– 57.2
France (FR)	669.7	678.9	– 9.2	713.1	732.0	– 18.9	719.5	763.5	– 44.0	600.0	642.0	– 42.0
Italy (IT)	486.8	525.1	– 38.3	530.9	568.6	– 37.7	538.3	591.9	– 53.6	431.9	480.1	– 48.2
Cyprus (CY)	9.1	10.2	– 1.0	10.5	12.4	– 1.9	13.1	16.1	– 3.0	11.4	12.8	– 1.4
Latvia (LV)	9.4	13.0	– 3.6	11.3	16.0	– 4.7	12.3	15.3	– 3.0	10.3	8.5	1.8
Lithuania (LT)	15.7	18.3	– 2.6	17.5	21.7	– 4.1	21.6	25.4	– 3.8	16.9	15.9	1.0
Luxembourg (LU)	160.6	157.1	3.5	188.1	184.5	3.6	205.1	203.0	2.1	160.4	158.3	2.1
Hungary (HU)	78.5	85.0	– 6.5	93.0	99.6	– 6.6	98.9	106.3	– 7.4	82.1	81.9	0.2
Malta (MT)	6.8	7.2	– 0.5	7.4	7.7	– 0.3	7.7	8.0	– 0.3	6.8	7.1	– 0.2
Netherlands (NL)	495.8	445.3	50.4	539.4	490.1	49.3	537.4	508.9	28.5	451.6	420.9	30.7
Austria (AT)	175.6	168.5	7.1	197.8	188.2	9.6	c	c	c	c	c	c
Poland (PL)	126.4	133.8	– 7.4	145.4	160.1	– 14.7	163.3	181.6	– 18.3	137.9	142.9	– 5.0
Portugal (PT)	66.6	82.0	– 15.4	73.6	88.9	– 15.3	74.9	94.9	– 20.0	62.0	78.9	– 16.8
Romania (RO)	38.8	49.0	– 10.2	46.0	62.8	– 16.8	53.5	69.7	– 16.2	43.9	49.1	– 5.2
Slovenia (SI)	22.3	23.0	– 0.8	26.1	27.7	– 1.6	27.1	29.4	– 2.3	22.4	22.7	– 0.3
Slovakia (SK)	40.5	44.2	– 3.6	50.5	53.6	– 3.1	57.5	61.8	– 4.3	47.6	49.6	– 2.0
Finland (FI)	91.8	84.3	7.6	101.7	94.1	7.6	105.0	99.3	5.8	74.3	72.0	2.3
Sweden (SE)	202.3	175.8	26.5	223.5	195.7	27.8	229.6	198.4	31.3	176.6	155.5	21.1
United Kingdom (UK)	921.3	985.6	– 64.4	977.1	1032.4	– 55.3	866.2	893.4	– 27.2	642.3	663.1	– 20.8

Source: Eurostat (bop_q_c)

c = Confidential

Table 4.47: EU outward and inward FDI stocks by economic activity at end-2007 in € million

	EU FDI stocks held outside the EU	% share	Investments from abroad held in the EU	% share	Net assets abroad
Total	3 108 244	100 %	2 346 055	100 %	762 188
Agriculture, hunting and fishing	1 177	0 %	1 108	0 %	69
Mining and quarrying	162 872	5 %	48 876	2 %	113 997
Manufacturing	642 820	21 %	336 121	14 %	306 699
- Food products	72 045	2 %	51 162	2 %	20 882
- Textiles and wood activities	34 111	1 %	42 029	2 %	- 7 918
- Petroleum, chemical, rubber, plastic products	260 271	8 %	133 402	6 %	126 869
- Metal and mechanical products	107 756	3 %	40 518	2 %	67 238
- Machinery, computers, RTV, communication	21 126	1 %	14 121	1 %	7 005
- Vehicles and other transport equipment	71 920	2 %	23 091	1 %	48 829
- Other manufacturing	75 592	2 %	31 798	1 %	43 794
Electricity, gas and water	53 638	2 %	16 206	1 %	37 432
Construction	14 398	0 %	9 168	0 %	5 229
Services	2 176 778	70 %	1 885 767	80 %	291 011
- Trade and repairs	124 338	4 %	143 194	6 %	- 18 856
- Hotels & restaurants	11 504	0 %	8 871	0 %	2 634
- Transport and communication	141 500	5 %	45 302	2 %	96 199
- Financial intermediation	1 387 846	45 %	1 162 145	50 %	225 701
- Business services	451 482	15 %	460 009	20 %	- 8 527
- Other services	60 110	2 %	66 247	3 %	- 6 137
Other sectors	56 561	2 %	48 809	2 %	7 752

Source: Eurostat (bop_fdi_pos)

Table: 4.48: Geographical distribution of EU FDI stocks 2004-2008*

	2005	2006	2007	2008	Share (%) in 2008	2005	2006	2007	2008	Share (%) in 2008
Extra-EU-27	**2 426.2**	**2 746.0**	**3 108.2**	**3 252.9**	**100 %**	**1 835.1**	**2 022.7**	**2 346.1**	**2 421.4**	**100 %**
Europe (non-EU)	508.4	678.4	811.7	875.1	27 %	407.9	465.4	501.3	498.1	21 %
EFTA	350.4	416.5	459.6	525.6	16 %	304.0	350.6	404.4	407.7	17 %
Switzerland	309.7	364.6	404.6	453.7	14 %	245.6	282.5	312.0	306.2	13 %
Norway	38.7	50.2	53.2	67.1	2 %	45.4	55.6	77.9	89.0	4 %
Iceland	.9	.6	.7	3.2	0 %	5.5	6.6	8.1	6.5	0 %
Russia	32.9	50.5	70.4	92.0	3 %	12.1	14.6	23.6	28.4	1 %
Turkey	23.5	33.9	49.2	51.7	2 %	6.9	5.0	5.7	5.3	0 %
Africa	116.7	128.4	146.9	153.1	5 %	19.1	19.9	17.6	24.9	1 %
North African countries	24.0	29.1	34.9	47.2	1 %	3.5	3.7	3.5	7.6	0 %
Other African countries	92.7	99.3	112.0	106.0	3 %	15.6	16.2	14.1	17.3	1 %
Republic of South Africa	47.2	42.5	54.8	46.3	1 %	4.2	3.1	5.4	5.9	0 %
America	1 349.8	1 495.3	1 661.5	1 701.2	52 %	1 186.7	1 309.6	1 528.2	1 554.5	64 %
North American countries	938.8	1 064.0	1 133.9	1 198.2	37 %	937.0	1 031.4	1 147.6	1 151.3	48 %
Canada	94.3	114.1	141.3	139.9	4 %	76.2	105.2	105.9	105.1	4 %
United States	844.6	949.3	992.4	1 058.1	33 %	874.8	926.1	1 041.5	1 046.2	43 %
Central American countries	250.6	259.8	327.7	297.3	9 %	234.0	256.8	334.8	345.9	14 %
Mexico	42.5	45.1	48.7	49.0	2 %	9.1	9.7	10.4	11.4	0 %
South American countries	160.4	171.5	200.0	205.8	6 %	15.7	21.4	45.8	57.2	2 %
Argentina	38.0	40.0	39.7	44.1	1 %	2.0	1.8	1.9	1.7	0 %
Brazil	74.1	92.4	114.4	112.5	3 %	8.1	14.6	36.2	42.1	2 %
Chile	18.2	13.8	13.3	12.3	0 %	.8	.5	.6	.9	0 %
Asia	369.2	380.1	413.3	461.6	14 %	161.2	196.0	230.4	255.4	11 %
Near and Middle East countries	25.8	33.5	40.3	48.4	1 %	20.8	34.2	37.6	45.1	2 %
Other Asian countries	343.5	346.5	373.0	413.2	13 %	140.4	161.8	192.8	210.3	9 %
China	27.5	32.6	40.1	47.3	1 %	1.2	3.6	4.7	13.9	1 %
Hong Kong	87.3	86.1	88.8	88.9	3 %	16.8	17.4	16.2	19.1	1 %
India	10.6	12.4	16.0	19.4	1 %	2.5	2.3	4.4	7.0	0 %
Indonesia	11.2	10.6	10.1	13.1	0 %	– 2.6	– 3.5	– 3.2	– 3.4	0 %
Japan	90.3	75.7	72.2	76.1	2 %	78.2	97.9	120.8	116.9	5 %
South Korea	28.5	28.4	32.4	28.9	1 %	6.2	7.4	9.2	7.4	0 %
Malaysia	8.0	9.4	12.3	13.0	0 %	1.7	2.6	3.0	4.5	0 %
Singapore	49.2	52.5	64.2	80.9	2 %	28.5	26.8	41.1	41.0	2 %
Thailand	8.8	9.2	10.4	10.6	0 %	.2	.3	.6	.5	0 %
Taiwan	10.4	13.5	7.8	8.4	0 %	.6	.6	.8	.5	0 %
Oceania andpolar regions	59.9	58.9	74.8	66.9	2 %	23.2	20.4	27.1	21.9	1 %
Australia	53.9	53.6	68.2	58.7	2 %	22.7	18.8	25.2	20.7	1 %
New Zealand	5.7	5.0	5.0	4.5	0 %	1.0	1.7	1.5	1.2	0 %

Source: Eurostat (bop_fdi_pos)

* The sum of continents does not always equal total extra-EU because of not allocated flows.

Parts may be higher than totals because of disinvestment.

Table 4.49: Foreign direct investment flows with rest of the world, in EUR billion

	2006			2007			2008			2009 (1)		
	Outward	Inward	Net	Outward	Inward	Net	Outward	Inward	Net	Outward	Inward	Net
European Union (EU-27)(2)	313.0	229.0	84.0	530.7	411.4	119.4	347.7	198.7	149.0	263.3	221.7	41.6
Belgium (BE)	40.4	46.9	– 6.5	77.4	86.5	– 9.1	82.4	70.2	12.2	– 10.8	24.3	– 35.2
Bulgaria (BG)	0.1	6.2	– 6.1	0.2	8.6	– 8.4	0.5	6.5	– 6.1	– 0.1	3.2	– 3.3
Czech Republic (CZ)	1.2	4.4	– 3.2	1.2	7.6	– 6.4	1.3	7.3	– 6.0	1.0	1.9	– 1.0
Denmark (DK)	6.5	2.1	4.4	15.0	8.6	6.4	9.5	1.9	7.6	11.4	5.7	5.7
Germany (DE)	101.4	45.6	55.9	131.2	41.2	90.0	106.8	14.5	92.3	45.1	25.6	19.5
Estonia (EE)	0.9	1.4	– 0.6	1.3	2.0	– 0.7	0.7	1.3	– 0.6	1.1	1.2	– 0.2
Ireland (IE)	12.2	– 4.4	16.6	15.5	18.1	– 2.6	9.2	– 13.7	22.9	14.9	18.0	– 3.0
Greece (EL)	3.2	4.3	– 1.0	3.8	1.5	2.3	1.6	3.1	– 1.4	1.3	2.4	– 1.1
Spain (ES)	83.1	24.6	58.5	101.2	50.3	50.9	54.7	47.7	6.9	11.8	10.8	0.9
France (FR)	88.2	57.3	31.0	123.5	75.9	47.6	136.8	66.3	70.4	117.5	44.2	73.3
Italy (IT)	33.5	31.3	2.3	66.3	29.4	36.9	29.9	11.6	18.3	31.5	20.9	10.6
Cyprus (CY)	0.7	1.5	– 0.8	0.9	1.6	– 0.7	2.7	2.7	– 0.1	3.7	4.2	– 0.5
Latvia (LV)	0.1	1.3	– 1.2	0.3	1.7	– 1.4	0.2	0.9	– 0.7	0.0	0.1	– 0.1
Lithuania (LT)	0.2	1.4	– 1.2	0.4	1.5	– 1.0	0.2	1.2	– 1.0	0.2	0.3	– 0.1
Luxembourg (LU)	91.3	102.4	– 11.2	186.7	139.0	47.7	102.8	81.3	21.4	135.8	120.2	15.6
Hungary (HU) (3)	3.1	5.9	– 2.8	2.6	4.2	– 1.6	0.5	3.1	– 2.6	1.2	1.0	0.2
Malta (MT)	0.0	1.5	– 1.5	0.0	0.7	– 0.7	0.2	0.6	– 0.4	0.1	0.6	– 0.6
Netherlands (NL) (3)	51.8	6.2	45.6	20.8	84.3	– 63.5	13.7	– 5.2	18.9	12.8	19.4	– 6.6
Austria (AT) (3)	10.9	6.3	4.6	28.5	22.8	5.8	20.0	9.5	10.5	3.2	5.3	– 2.1
Poland (PL)	7.1	15.6	– 8.5	3.9	17.2	– 13.3	2.0	10.0	– 8.0	2.1	8.3	– 6.2
Portugal (PT)	5.7	8.7	– 3.0	4.0	2.2	1.8	1.4	2.4	– 1.0	0.9	2.1	– 1.1
Romania (RO)	0.3	9.0	– 8.7	0.2	7.3	– 7.1	0.2	9.5	– 9.3	0.2	4.5	– 4.4
Slovenia (SI)	0.7	0.5	0.2	1.4	1.3	0.1	0.9	1.3	– 0.4	0.6	0.0	0.7
Slovakia (SK)	0.4	3.7	– 3.3	0.4	2.6	– 2.2	0.2	2.3	– 2.2	0.3	0.0	0.3
Finland (FI)	3.8	6.1	– 2.3	5.2	9.0	– 3.9	2.3	– 4.9	7.2	2.1	1.8	0.2
Sweden (SE)	18.7	21.7	– 3.0	26.9	19.2	7.7	19.0	28.1	– 9.1	24.2	9.1	15.2
United Kingdom (UK)	68.8	124.5	– 55.7	232.5	136.1	96.4	107.7	62.5	45.2	12.9	32.5	– 19.6

Source: Eurostat (bop_fdi_flows)

Net = Outward minus inward investmentflows

Negative values denote disinvestment

: = Missing or confidential data

(1)preliminary results

(2) EU–27 investments with extra EU–27

(3) Specialpurpose entities are not included

Table 4.50: EU foreign affiliates outside the European Unionby Member State and economic activity (2007)

	Number of enterprises			Number of persons employed			Turnover (millions euro)		
	Total (*)	Manufact.	Services	Total (*)	Manufact.	Services	Total (*)	Manufact.	Services
Belgium (BE)	1083	364	690	105917	22459	65252	22327	4619	16340
Bulgaria (BG)	47	11	31	5517	4686	610	115	80	29
Czech Republic (CZ)	128	33	73	9010	944	2251	330	37	170
Denmark (DK)	2886	576	2221	218880	114737	98964	(c)	(c)	(c)
Germany (DE)	10489	3444	6611	2150510	1214578	852421	686419	273229	378170
Estonia (EE)	185	35	137	6051	2496	3338	455	110	276
Ireland (IE)	282	(c)	185	29006	(c)	7735	4912	(c)	1593
Greece (EL)	150	40	96	28370	3900	23740	3725	606	3035
France (FR)	9516	3485	5109	1517230	640633	776560	403479	166105	163214
Italy (IT)	6938	2522	3920	655387	332007	268773	134819	51315	50697
Cyprus (CY)	146	12	131	81541	38670	42369	6196	4665	1513
Latvia (LV)	89	19	63	738	244	395	249	12	228
Lithuania (LT)	208	45	150	8251	3198	4189	526	135	348
Hungary (HU)	72	15	50	28304	1730	16114	4424	95	1160
Malta (HU)	17	c	c	568	c	c	221	c	c
Netherlands (NL)	5255	1675	3255	751793	230379	494209	210586	57725	146888
Austria (AT)	855	314	481	135040	51877	74238	27574	6980	19065
Portugal (PT)	298	62	186	28041	4517	12510	7131	574	5961
Romania (RO)	3	1	1	74	24	:	11	1	9
Slovenia (SI)	1264	255	905	41241	17334	22677	2531	1154	1204
Slovakia (SK)	83	27	44	7724	2868	335	348	91	154
Finland (FI)	1477	817	596	213582	173544	33306	52176	30878	20076
Sweden (SE)	2380	1496	636	543233	296270	210562	45518	31222	7117

Source: Eurostat (bop_fats_out_ent, bop_fats_out_e, bop_fats_out_t)

: Data are not available

c = Confidential

(*) Total: sections C to O (excl. L) of NACE Rev. 1.1., i.e. *Mining and Quarrying, Manufacturing, Electricity, gas and water, Construction and Services.*

Table 4.51: Employment levels (thousand persons)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	212634.6	213379.8	214811.5	216843.0	220389.7	224318.9	226376.0	222228.4
Euro area (EA-16)	138796.6	139406.4	140523.8	141870.7	144165.6	146731.2	147804.2	145027.5
Belgium (BE)	4159.0	4160.0	4199.0	4258.0	4309.0	4379.0	4461.0	4438.0
Bulgaria (BG)	3222.1	3317.4	3403.4	3495.3	3612.0	3714.0	3835.6	3757.6 f
Czech Republic (CZ)	4990.7	4923.4	4940.4	4991.6	5088.3	5223.8	5288.4	5180.8 f
Denmark (DK)	2786.0	2756.0	2739.0	2767.0	2825.0	2908.0	2949.0	2842.0
Germany (DE)	39096.0	38726.0	38880.0	38835.0	39075.0	39724.0	40279.0	40265.0
Estonia (EE)	584.2	592.7	592.5	604.2	636.7	641.5	642.6	578.9
Ireland (IE)	1775.4	1808.5	1869.6	1961.6	2046.6	2121.9	2097.8	1926.7
Greece (EL)	4356.5	4408.0	4504.3 p	4546.3 p	4638.8 p	4701.8 p	4706.9 p	4652.3 p
Spain (ES)	17337.6	17877.6	18509.8	19267.3	20022.0	20627.4	20501.8	19134.4
France (FR)	24918.8	24950.2	24976.7	25115.6	25362.1	25705.4	25841.1	25384.0 f
Italy (IT)	23793.1	24149.6	24256.1	24395.8	24874.1	25187.9	25260.2	24838.6
Cyprus (CY)	328.3	340.7	353.6	366.3	372.7	384.8	394.9	392.3
Latvia (LV)	980.9	1000.0	1012.1	1027.9	1078.7	1117.4	1127.7	974.5
Lithuania (LT)	1394.7	1425.7	1425.4	1460.7	1487.4	1528.8	1521.5	1416.7
Luxembourg (LU)	287.4	292.6	299.1	307.8	319.0	333.1	348.8	352.1
Hungary (HU)	4223.7	4226.7	4166.0	4155.9	4181.6	4169.0	4115.7	3967.9
Malta (MT)	149.8	151.3	150.4	152.6	154.6	159.5	163.6	162.6
Netherlands (NL)	8323.9	8283.1	8211.3	8251.6	8392.0	8610.4	8734.2	8655.5
Austria (AT)	3812.1	3809.5	3862.5	3919.4	3974.5	4046.2	4117.4	4080.1
Poland (PL)	13766.3	13606.1	13773.3	14074.5 b	14529.9	15174.2	15747.2	15636.8 f
Portugal (PT)	5151.2	5122.0	5116.7	5099.9	5126.1	5124.6	5147.0	5015.9
Romania (RO)	9573.9	9569.3	9410.4	9267.2	9330.7	9364.8	9342.8	9036.8 f
Slovenia (SI)	922.8	919.2	922.1	920.3	934.2	962.3	988.9	967.2
Slovakia (SK)	2038.4	2060.5	2055.7	2084.0	2131.8	2177.0	2237.1	2184.4
Finland (FI)	2346.2	2347.6	2356.9	2389.2	2433.2	2486.0	2524.6	2449.7
Sweden (SE)	4393.4	4367.9	4337.3	4349.0	4422.7	4518.1	4559.2	4467.4
United Kingdom (UK)	27922.0	28188.0	28488.0	28779.0	29031.0	29228.0	29442.0	28978.0
Iceland (IS)	156.7	156.9	156.2	161.3	169.6 f	177.2 f	178.6 f	175.0 f
Liechtenstein (LI)	:	:	:	:	:	:	:	:
Norway (NO)	2337.0	2313.0	2323.0	2352.0	2437.0	2536.0	2615.0	2605.0
Switzerland (CH)	4173.5	4166.5	4178.1	4195.7	4291.0	4365.8 f	4484.2 f	4446.1 f
Croatia (HR)	1526.0	1535.0	1561.0	1573.0 f	1563.7 f	1617.8 f	1635.2 f	1618.8 f
FYR of Macedonia (MK)	479.9	470.7	460.5	470.1	485.1	506.0	522.1 f	507.9 f
Turkey (TR)	21356.9 f	21149.9 f	21794.0 f	22103.0 f	22394.0 f	22645.0 f	23142.9 f	22842.1 f
Japan (JP)	63747.0	63539.0	63676.0	63918.0	64198.0	:	64437.0	62503.9 f
United States (UK)	138807.0	140084.0	141569.0	143980.0	146678.0	148295.0 f	147643.0 f	142425.7 f

Source: Eurostat (nama_aux_pem)

: = Not available

b = Break in series

f = Forecast

p = provisional value

Table 4.52: Employment growth (% overprevious year)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	0.4	0.4	0.7	0.9	1.6	1.8	0.9	– 1.8
Euro area (EA-16)	0.7	0.4	0.8	1.0	1.6	1.8	0.7	– 1.9
Belgium (BE)	– 0.1	0.0	0.9	1.4	1.2	1.6	1.9	– 0.5
Bulgaria (BG)	0.2	3.0	2.6	2.7	3.3	2.8	3.3	– 2.0 f
Czech Republic (CZ)	0.6	– 1.3	0.3	1.0	1.9	2.7	1.2	– 2.0 f
Denmark (DK)	0.0	– 1.1	– 0.6	1.0	2.1	2.9	1.4	– 3.6
Germany (DE)	– 0.6	– 0.9	0.4	– 0.1	0.6	1.7	1.4	0.0
Estonia (EE)	1.3	1.5	0.0	2.0	5.4	0.8	0.2	– 9.9
Ireland (IE)	1.6	1.9	3.4	4.9	4.3	3.7	– 1.1	– 8.2
Greece (EL)	2.3	1.2	2.2 p	0.9 p	2.0 p	1.4 p	0.1 p	– 1.2 p
Spain (ES)	2.4	3.1	3.5	4.1	3.9	3.0	– 0.6	– 6.7
France (FR)	0.6	0.1	0.1	0.6	1.0	1.4	0.5	– 1.8 f
Italy (IT)	1.7	1.5	0.4	0.6	2.0	1.3	0.3	– 1.7
Cyprus (CY)	2.1	3.8	3.8	3.6	1.8	3.2	2.6	– 0.7
Latvia (LV)	2.9	1.9	1.2	1.6	4.9	3.6	0.9	– 13.6
Lithuania (LT)	3.6	2.2	0.0	2.5	1.8	2.8	– 0.5	– 6.9
Luxembourg (LU)	3.2	1.8	2.2	2.9	3.6	4.4	4.7	0.9
Hungary (HU)	– 0.2	0.1	– 1.4	– 0.2	0.6	– 0.3	– 1.3	– 3.6
Malta (MT)	0.6	1.0	– 0.7	1.5	1.3	3.2	2.5	– 0.6
Netherlands (NL)	0.5	– 0.5	– 0.9	0.5	1.7	2.6	1.4	– 0.9
Austria (AT)	– 0.1	– 0.1	1.4	1.5	1.4	1.8	1.8	– 0.9
Poland (PL)	– 3.0	– 1.2	1.2	2.2 b	3.2	4.4	3.8	– 0.7 f
Portugal (PT)	0.6	– 0.6	– 0.1	– 0.3	0.5	0.0	0.4	– 2.5
Romania (RO)	– 10.2	0.0	– 1.7	– 1.5	0.7	0.4	– 0.2	– 3.3 f
Slovenia (SI)	1.5	– 0.4	0.3	– 0.2	1.5	3.0	2.8	– 2.2
Slovakia (SK)	0.1	1.1	– 0.2	1.4	2.3	2.1	2.8	– 2.4
Finland (FI)	0.9	0.1	0.4	1.4	1.8	2.2	1.6	– 3.0
Sweden (SE)	0.0	– 0.6	– 0.7	0.3	1.7	2.2	0.9	– 2.0
United Kingdom (UK)	0.8	1.0	1.1	1.0	0.9	0.7	0.7	– 1.6
Iceland (IS)	– 1.4	0.1	– 0.4	3.3	5.1 f	4.5 f	0.8 f	– 2.0 f
Liechtenstein (LI)	:	:	:	:	:	:	:	:
Norway (NO)	0.4	– 1.0	0.4	1.2	3.6	4.1	3.1	– 0.4
Switzerland (CH)	0.4	– 0.2	0.3	0.4	2.3	1.7 f	2.7 f	– 0.8 f
Croatia (HR)	4.2	0.6	1.7	0.8 f	– 0.6 f	3.5 f	1.1 f	– 1.0 f
FYR of Macedonia (MK)	– 0.6	– 1.9	– 2.2	2.1	3.2	4.3	3.2 f	– 2.7 f
Turkey (TR)	– 1.8 f	– 1.0 f	3.0 f	1.4 f	1.3 f	1.1 f	2.2 f	– 1.3 f
Japan (JP)	– 1.6	– 0.3	0.2	0.4	0.4	:	:	– 3.0 f
United States (UK)	– 0.3	0.9	1.1	1.7	1.9	1.1 f	– 0.4 f	– 3.5 f

Source: Eurostat (nama_aux_pem)

e = Estimated value

f = Forecast

Table 4.53: Employment rates (15-64 years old), males plus females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	62.4	62.6	63.0	63.5	64.5	65.4	65.9	64.6
Euro area (EA-16)	62.3	62.6	63.1	63.7	64.6	65.6	66.0	64.7
Belgium (BE)	59.9	59.6	60.3	61.1	61.0	62.0	62.4	61.6
Bulgaria (BG)	50.6	52.5	54.2	55.8	58.6	61.7	64.0	62.6
Czech Republic (CZ)	65.4	64.7	64.2	64.8	65.3	66.1	66.6	65.4
Denmark (DK)	75.9	75.1	75.7	75.9	77.4	77.1	78.1	75.7
Germany (DE)	65.4	65.0	65.0	66.0 b	67.5	69.4	70.7	70.9
Estonia (EE)	62.0	62.9	63.0	64.4	68.1	69.4	69.8	63.5
Ireland (IE)	65.5	65.5	66.3	67.6	68.6	69.1	67.6	61.8
Greece (EL)	57.5	58.7	59.4	60.1	61.0	61.4	61.9	61.2
Spain (ES)	58.5	59.8	61.1	63.3 b	64.8	65.6	64.3	59.8
France (FR)	63.0	64.0	63.8	63.7	63.7	64.3	64.9	64.2
Italy (IT)	55.5	56.1	57.6 b	57.6	58.4	58.7	58.7	57.5
Cyprus (CY)	68.6	69.2	68.9	68.5	69.6	71.0	70.9	69.9
Latvia (LV)	60.4	61.8	62.3	63.3	66.3	68.3	68.6	60.9
Lithuania (LT)	59.9	61.1	61.2	62.6	63.6	64.9	64.3	60.1
Luxembourg (LU)	63.4	62.2	62.5	63.6	63.6	64.2	63.4	65.2
Hungary (HU)	56.2	57.0	56.8	56.9	57.3	57.3	56.7	55.4
Malta (MT)	54.4	54.2	54.0	53.9	53.6	54.6	55.3	54.9
Netherlands (NL)	74.4	73.6	73.1	73.2	74.3	76.0	77.2	77.0
Austria (AT)	68.7	68.9	67.8 b	68.6	70.2	71.4	72.1	71.6
Poland (PL)	51.5	51.2	51.7	52.8	54.5	57.0	59.2	59.3
Portugal (PT)	68.8	68.1	67.8	67.5	67.9	67.8	68.2	66.3
Romania (RO)	57.6 b	57.6	57.7	57.6	58.8	58.8	59.0	58.6
Slovenia (SI)	63.4	62.6	65.3	66.0	66.6	67.8	68.6	67.5
Slovakia (SK)	56.8	57.7	57.0	57.7	59.4	60.7	62.3	60.2
Finland (FI)	68.1	67.7	67.6	68.4	69.3	70.3	71.1	68.7
Sweden (SE)	73.6	72.9	72.1	72.5 b	73.1	74.2	74.3	72.2
United Kingdom (UK)	71.4	71.5	71.7	71.7	71.6	71.5	71.5	69.9
Iceland (IS)	:	83.3	82.3	83.8	84.6	85.1	83.6	78.3
Norway (NO)	76.8	75.5	75.1	74.8	75.4	76.8	78.0	76.4
Switzerland (CH)	78.9	77.9	77.4	77.2	77.9	78.6	79.5	79.2
Croatia (HR)	53.4	53.4	54.7	55.0	55.6	57.1	57.8	56.6
FYR of Macedonia (MK)	:	:	:	:	39.6	40.7	41.9	43.3
Turkey (TR)	:	:	:	:	44.6	44.6	44.9	44.3
Japan (JP)	68.2	68.4	68.7	69.3	70.0	70.7	70.7	:
United States (UK)	71.9	71.2	71.2	71.5	72.0	71.8	70.9	:

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.54: Employment rates (15 to 64 years old), females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	54.4	54.9	55.6	56.3	57.3	58.3	59.1	58.6
Euro area (EA-16)	53.1	53.8	54.6	55.6	56.7	57.9	58.7	58.3
Belgium (BE)	51.4	51.8	52.6	53.8	54.0	55.3	56.2	56.0
Bulgaria (BG)	47.5	49.0	50.6	51.7	54.6	57.6	59.5	58.3
Czech Republic (CZ)	57.0	56.3	56.0	56.3	56.8	57.3	57.6	56.7
Denmark (DK)	71.7	70.5	71.6	71.9	73.4	73.2	74.3	73.1
Germany (DE)	58.9	58.9	59.2	60.6 b	62.2	64.0	65.4	66.2
Estonia (EE)	57.9	59.0	60.0	62.1	65.3	65.9	66.3	63.0
Ireland (IE)	55.4	55.7	56.5	58.3	59.3	60.6	60.2	57.4
Greece (EL)	42.9	44.3	45.2	46.1	47.4	47.9	48.7	48.9
Spain (ES)	44.4	46.3	48.3	51.2 b	53.2	54.7	54.9	52.8
France (FR)	56.7	58.2	58.3	58.4	58.6	59.7	60.4	60.1
Italy (IT)	42.0	42.7	45.2 b	45.3	46.3	46.6	47.2	46.4
Cyprus (CY)	59.1	60.4	58.7	58.4	60.3	62.4	62.9	62.5
Latvia (LV)	56.8	57.9	58.5	59.3	62.4	64.4	65.4	60.9
Lithuania (LT)	57.2	58.4	57.8	59.4	61.0	62.2	61.8	60.7
Luxembourg (LU)	51.6	50.9	51.9	53.7	54.6	56.1	55.1	57.0
Hungary (HU)	49.8	50.9	50.7	51.0	51.1	50.9	50.6	49.9
Malta (MT)	33.9	33.6	32.7	33.7	33.4	35.7	37.4	37.7
Netherlands (NL)	66.2	66.0	65.8	66.4	67.7	69.6	71.1	71.5
Austria (AT)	61.3	61.6	60.7 b	62.0	63.5	64.4	65.8	66.4
Poland (PL)	46.2	46.0	46.2	46.8	48.2	50.6	52.4	52.8
Portugal (PT)	61.4	61.4	61.7	61.7	62.0	61.9	62.5	61.6
Romania (RO)	51.8 b	51.5	52.1	51.5	53.0	52.8	52.5	52.0
Slovenia (SI)	58.6	57.6	60.5	61.3	61.8	62.6	64.2	63.8
Slovakia (SK)	51.4	52.2	50.9	50.9	51.9	53.0	54.6	52.8
Finland (FI)	66.2	65.7	65.6	66.5	67.3	68.5	69.0	67.9
Sweden (SE)	72.2	71.5	70.5	70.4 b	70.7	71.8	71.8	70.2
United Kingdom (UK)	65.2	65.3	65.6	65.8	65.8	65.5	65.8	65.0
Iceland (IS)	:	80.1	78.8	80.5	80.8	80.8	79.6	76.5
Norway (NO)	73.7	72.6	72.2	71.7	72.2	74.0	75.4	74.4
Switzerland (CH)	71.5	70.7	70.3	70.4	71.1	71.6	73.5	73.8
Croatia (HR)	46.7	46.7	47.8	48.6	49.4	50.0	50.7	51.0
FYR of Macedonia (MK)	:	:	:	:	30.7	32.3	32.9	33.5
Turkey (TR)	:	:	:	:	22.7	22.8	23.5	24.2
Japan (JP)	56.5	56.8	57.4	58.1	58.8	59.5	59.7	:
United States (UK)	66.1	65.7	65.4	65.6	66.1	65.9	65.5	:

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.55: Employment rates (15 to 64 years old), males

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	70.4	70.3	70.4	70.8	71.6	72.5	72.8	70.7
Euro area (EA-16)	71.6	71.5	71.5	71.8	72.6	73.3	73.3	71.2
Belgium (BE)	68.3	67.3	67.9	68.3	67.9	68.7	68.6	67.2
Bulgaria (BG)	53.7	56.0	57.9	60.0	62.8	66.0	68.5	66.9
Czech Republic (CZ)	73.9	73.1	72.3	73.3	73.7	74.8	75.4	73.8
Denmark (DK)	80.0	79.6	79.7	79.8	81.2	81.0	81.9	78.3
Germany (DE)	71.8	70.9	70.8	71.3 b	72.8	74.7	75.9	75.6
Estonia (EE)	66.5	67.2	66.4	67.0	71.0	73.2	73.6	64.1
Ireland (IE)	75.4	75.2	75.9	76.9	77.7	77.4	74.9	66.3
Greece (EL)	72.2	73.4	73.7	74.2	74.6	74.9	75.0	73.5
Spain (ES)	72.6	73.2	73.8	75.2 b	76.1	76.2	73.5	66.6
France (FR)	69.5	69.9	69.5	69.2	68.9	69.2	69.6	68.5
Italy (IT)	69.1	69.6	70.1 b	69.9	70.5	70.7	70.3	68.6
Cyprus (CY)	78.9	78.8	79.8	79.2	79.4	80.0	79.2	77.6
Latvia (LV)	64.3	66.1	66.4	67.6	70.4	72.5	72.1	61.0
Lithuania (LT)	62.7	64.0	64.7	66.1	66.3	67.9	67.1	59.5
Luxembourg (LU)	75.1	73.3	72.8	73.3	72.6	72.3	71.5	73.2
Hungary (HU)	62.9	63.5	63.1	63.1	63.8	64.0	63.0	61.1
Malta (MT)	74.7	74.5	75.1	73.8	73.3	72.9	72.5	71.5
Netherlands (NL)	82.4	81.1	80.2	79.9	80.9	82.2	83.2	82.4
Austria (AT)	76.4	76.4	74.9 b	75.4	76.9	78.4	78.5	76.9
Poland (PL)	56.9	56.5	57.2	58.9	60.9	63.6	66.3	66.1
Portugal (PT)	76.5	75.0	74.2	73.4	73.9	73.8	74.0	71.1
Romania (RO)	63.6 b	63.8	63.4	63.7	64.6	64.8	65.7	65.2
Slovenia (SI)	68.2	67.4	70.0	70.4	71.1	72.7	72.7	71.0
Slovakia (SK)	62.4	63.3	63.2	64.6	67.0	68.4	70.0	67.6
Finland (FI)	70.0	69.7	69.7	70.3	71.4	72.1	73.1	69.5
Sweden (SE)	74.9	74.2	73.6	74.4 b	75.5	76.5	76.7	74.2
United Kingdom (UK)	77.7	77.8	77.9	77.7	77.5	77.5	77.3	74.8
Iceland (IS)	:	86.3	85.8	86.9	88.1	89.1	87.3	80.0
Norway (NO)	79.9	78.3	77.9	77.8	78.4	79.5	80.5	78.3
Switzerland (CH)	86.2	85.1	84.4	83.9	84.7	85.6	85.4	84.5
Croatia (HR)	60.5	60.3	61.8	61.7	62.0	64.4	65.0	62.4
FYR of Macedonia (MK)	:	:	:	:	48.3	48.8	50.7	52.8
Turkey (TR)	:	:	:	:	66.9	66.8	66.6	64.5
Japan (JP)	79.9	79.8	80.0	80.4	81.0	81.7	81.6	:
United States (UK)	78.0	76.9	77.2	77.6	78.1	77.8	76.4	:

Source: Eurostat, EU LFS (lfsi_emp_a): = Not available

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.56: Employment rates, older workers (aged 55-64), males plus females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	38.5	40.0	40.7	42.3	43.5	44.6	45.6	46.0
Euro area (EA-16)	36.2	37.7	38.5	40.3	41.6	43.2	44.2	45.1
Belgium (BE)	26.6	28.1	30.0	31.8	32.0	34.4	34.5	35.3
Bulgaria (BG)	27.0	30.0	32.5	34.7	39.6	42.6	46.0	46.1
Czech Republic (CZ)	40.8	42.3	42.7	44.5	45.2	46.0	47.6	46.8
Denmark (DK)	57.9	60.2	60.3	59.5	60.7	58.6	57.0	57.5
Germany (DE)	38.9	39.9	41.8	45.4 b	48.4	51.5	53.8	56.2
Estonia (EE)	51.6	52.3	52.4	56.1	58.5	60.0	62.4	60.4
Ireland (IE)	48.0	49.0	49.5	51.6	53.1	53.8	53.7	51.0
Greece (EL)	39.2	41.3	39.4	41.6	42.3	42.4	42.8	42.2
Spain (ES)	39.6	40.7	41.3	43.1 b	44.1	44.6	45.6	44.1
France (FR)	34.7	37.0	37.8	38.5	38.1	38.2	38.2	38.9
Italy (IT)	28.9	30.3	30.5 b	31.4	32.5	33.8	34.4	35.7
Cyprus (CY)	49.4	50.4	49.9	50.6	53.6	55.9	54.8	56.0
Latvia (LV)	41.7	44.1	47.9	49.5	53.3	57.7	59.4	53.2
Lithuania (LT)	41.6	44.7	47.1	49.2	49.6	53.4	53.1	51.6
Luxembourg (LU)	28.1	30.3	30.4	31.7	33.2	32.0	34.1	38.2
Hungary (HU)	25.6	28.9	31.1	33.0	33.6	33.1	31.4	32.8
Malta (MT)	30.1	32.5	31.5	30.8	29.8	28.5	29.2	28.1
Netherlands (NL)	42.3	44.3	45.2	46.1	47.7	50.9	53.0	55.1
Austria (AT)	29.1	30.3	28.8 b	31.8	35.5	38.6	41.0	41.1
Poland (PL)	26.1	26.9	26.2	27.2	28.1	29.7	31.6	32.3
Portugal (PT)	51.4	51.6	50.3	50.5	50.1	50.9	50.8	49.7
Romania (RO)	37.3 b	38.1	36.9	39.4	41.7	41.4	43.1	42.6
Slovenia (SI)	24.5	23.5	29.0	30.7	32.6	33.5	32.8	35.6
Slovakia (SK)	22.8	24.6	26.8	30.3	33.1	35.6	39.2	39.5
Finland (FI)	47.8	49.6	50.9	52.7	54.5	55.0	56.5	55.5
Sweden (SE)	68.0	68.6	69.1	69.4 b	69.6	70.0	70.1	70.0
United Kingdom (UK)	53.4	55.4	56.2	56.8	57.3	57.4	58.0	57.5
Iceland (IS)	:	83.0	81.8	84.3	84.3	84.7	82.9	80.2
Norway (NO)	66.2	66.9	65.8	65.5	67.4	69.0	69.2	68.7
Switzerland (CH)	64.6	65.8	65.2	65.1	65.7	67.2	68.4	68.4
Croatia (HR)	24.8	28.4	30.1	32.6	34.3	35.8	36.7	38.4
FYR of Macedonia (MK)	:	:	:	:	27.9	28.8	31.7	34.6
Turkey (TR)	:	:	:	:	27.7	27.2	27.5	28.2
Japan (JP)	61.6	62.1	63.0	63.9	64.7	66.1	66.3	:
United States (UK)	59.5	59.9	59.9	60.8	61.8	61.8	62.1	:

Source: Eurostat, EU LFS (lfsi_emp_a): = Not available

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.57: Employmentby NACE (thousands persons)

	2009						
	NACE A-B	NACE C-E	NACE F	NACE G-I	NACE J-K	NACE L-P	Total
European Union (EU-27)	12611.5	35029.6	15936.1	56578.5	33753.7	65895.2	222228.4
Euro area (EA-16)	5556.1	22804.2	10350.4	37238.2	23118.6	44836.2	145027.5
Belgium (BE)	80.0	:	262.0	1049.0	923.0	1527.0	4438.0
Bulgaria (BG)	:	:	:	:	:	:	3757.6 f
Czech Republic (CZ)	:	:	:	:	:	:	5180.8 f
Denmark (DK)	80.0	357.0	173.0	732.0	461.0	1020.0	2842.0
Germany (DE)	866.0	7458.0	2200.0	10082.0	6922.0	12381.0	40265.0
Estonia (EE)	23.7	114.9	50.2	151.5	61.8	161.8	578.9
Ireland (IE)	102.0	233.1	170.8	521.4	283.8	593.4	1926.7
Greece (EL)	547.1 p	487.7 p	355.8 p	1532.0 p	414.3 p	1279.1 p	4652.3 p
Spain (ES)	850.1	:	1848.3	5560.8	2406.2	5699.5	19134.4
France (FR)	:	:	:	:	:	:	25384.0 f
Italy (IT)	979.0	4793.9	1924.1	6052.3	3705.7	7215.5	24838.6
Cyprus (CY)	17.8	37.6	37.4	134.5	43.7	118.7	392.3
Latvia (LV)	84.0	133.9	77.4	300.9	115.5	246.3	974.5
Lithuania (LT)	131.5	233.0	124.9	385.0	123.1	391.9	1416.7
Luxembourg (LU)	5.4	34.7	38.3	90.4	101.1	80.2	352.1
Hungary (HU)	280.6	841.4	292.1	992.9	412.1	1084.3	3967.9
Malta (MT)	4.1	27.6	10.9	51.9	17.3	46.1	162.6
Netherlands (NL)	253.3	911.3	492.3	2221.8	1863.0	2872.5	8655.5
Austria (AT)	211.8	640.5	270.6	1134.9	614.7	1171.4	4080.1
Poland (PL)	:	:	:	:	:	:	15636.8 f
Portugal (PT)	576.4	:	484.8	1414.2	431.4	1219.7	5015.9
Romania (RO)	:	:	:	:	:	:	9036.8 f
Slovenia (SI)	83.6	214.5	88.4	218.1	139.9	207.1	967.2
Slovakia (SK)	69.0	474.9	190.7	660.6	238.0	511.9	2184.4
Finland (FI)	121.1	401.1	178.9	570.1	328.2	826.1	2449.7
Sweden (SE)	97.5	639.5	281.0	968.1	700.0	1740.6	4467.4
United Kingdom (UK)	:	:	:	:	:	:	28978.0
Iceland (IS)	:	:	:	:	:	:	175.0 f
Norway (NO)	72.0	280.0	180.0	651.0	372.0	990.0	2605.0
Switzerland (CH)	:	:	:	:	:	:	4446.1 f
Croatia (HR)	:	:	:	:	:	:	1618.8 f
FYR of Macedonia (MK)	:	:	:	:	:	:	507.9 f
Turkey (TR)	:	:	:	:	:	:	22842.1 f
Japan (JP)	:	:	:	:	:	:	62503.9 f
United States (UK)	:	:	:	:	:	:	142425.7 f

	2002						
	NACE A-B	NACE C-E	NACE F	NACE G-I	NACE J-K	NACE L-P	Total
European Union (EU-27)	14844.7	38136.6	14692.0	53203.5	29027.0	60015.7	212634.6
Euro area (EA-16)	6296.3	25064.6	10209.2	35136.2	20132.6	40743.9	138796.6
Belgium (BE)	85.0	643.8	241.0	1029.0	764.0	1367.0	4159.0
Bulgaria (BG)	771.6	656.4	131.5	729.3	167.9	671.4	3222.1
Czech Republic (CZ)	216.3	1387.7	423.7	1271.9	550.7	1016.6	4990.7
Denmark (DK)	92.0	436.0	163.0	698.0	384.0	995.0	2786.0
Germany (DE)	904.0	7958.0	2439.0	9836.0	6060.0	11502.0	39096.0
Estonia (EE)	40.0	127.8	38.2	157.4	52.1	152.6	584.2
Ireland (IE)	122.4	289.4	186.0	473.8	227.5	456.5	1775.4
Greece (EL)	659.8	517.3	318.9	1400.5	342.7	1074.7	4356.5
Spain (ES)	1023.1	3044.5	2020.5	4713.0	1815.9	4604.7	17337.6
France (FR)	930.5	3600.2	1527.7	5788.5	4415.4	8451.6	24918.8
Italy (IT)	1079.5	5034.4	1697.8	5798.7	3261.7	6738.5	23793.1
Cyprus (CY)	20.1	34.7	28.5	116.8	33.6	92.4	328.3
Latvia (LV)	144.1	170.2	58.5	270.2	78.8	240.0	980.9
Lithuania (LT)	247.9	257.9	90.5	321.1	68.9	375.7	1394.7
Luxembourg (LU)	4.1	33.8	28.7	75.5	80.9	62.5	287.4
Hungary (HU)	469.9	1017.9	267.8	1009.7	325.5	1043.4	4223.7
Malta (MT)	3.6	34.5	9.3	42.5	11.8	47.2	149.8
Netherlands (NL)	283.0	1007.7	502.0	2197.5	1677.6	2613.6	8323.9
Austria (AT)	218.8	649.6	268.1	1084.5	501.8	1051.4	3812.1
Poland (PL)	2661.1	2575.1	845.3	3034.0	989.3	3143.5	13766.3
Portugal (PT)	634.1	1002.0	588.7	1299.5	374.0	1211.0	5151.2
Romania (RO)	3389.5	2085.4	427.7	1487.5	298.0	1525.1	9573.9
Slovenia (SI)	100.3	252.1	66.2	195.6	111.2	180.4	922.8
Slovakia (SK)	101.9	508.4	131.9	535.7	178.4	526.9	2038.4
Finland (FI)	125.9	454.1	154.8	549.2	276.0	763.6	2346.2
Sweden (SE)	115.2	780.8	235.5	930.0	601.2	1694.4	4393.4
United Kingdom (UK)	:	:	:	:	:	:	27922.0
Iceland (IS)	:	:	:	:	:	:	156.7
Norway (NO)	88.0	285.0	140.0	611.0	286.0	874.0	2337.0
Switzerland (CH)	172.6	:	295.8	1158.2	701.5	1107.6	4173.5
Croatia (HR)	233.0	:	105.0	405.0	97.0	338.0	1526.0
FYR of Macedonia (MK)	58.5	126.2	31.6	112.7	19.3	110.8	479.9
Turkey (TR)	:	:	:	:	:	:	21356.9 f
Japan (JP)	3912.0	:	6460.0	15617.0	2864.0	24235.0	63747.0
United States (UK)	2311.0	:	9981.0	36653.0	23651.0	46347.0	138807.0

Source: Eurostat (nama_nace06_e)

Table 4.58: Part-time jobholders, males plus females (% total jobholders)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	16.2	16.5	17.2	17.8	18.1	18.2	18.2	18.8
Euro area (EA-16)	16.0	16.4	17.5	18.6	19.2	19.4	19.5	20.0
Belgium (BE)	19.1	20.5	21.4	22.0	22.2	22.1	22.6	23.4
Bulgaria (BG)	2.5	2.3	2.4	2.1	2.0	1.7	2.3	2.3
Czech Republic (CZ)	4.9	5.0	4.9	4.9	5.0	5.0	4.9	5.5
Denmark (DK)	20.0	21.3	22.2	22.1	23.6	24.1	24.6	26.0
Germany (DE)	20.8	21.7	22.3	24.0 b	25.8	26.0	25.9	26.1
Estonia (EE)	7.7	8.5	8.0	7.8	7.8	8.2	7.2	10.5
Ireland (IE)	16.5	16.9	16.8	:	:	18.0	18.6	21.2
Greece (EL)	4.4	4.3	4.6	5.0	5.7	5.6	5.6	6.0
Spain (ES)	8.0	8.2	8.7	12.4 b	12.0	11.8	12.0	12.8
France (FR)	16.4	16.6	16.8	17.2	17.2	17.3	16.9	17.3
Italy (IT)	8.6	8.5	12.7 b	12.8	13.3	13.6	14.3	14.3
Cyprus (CY)	7.2	8.9	8.6	8.9	7.7	7.3	7.8	8.4
Latvia (LV)	9.7	10.3	10.4	8.3	6.5	6.4	6.3	8.9
Lithuania (LT)	10.8	9.6	8.4	7.1	9.9	8.6	6.7	8.3
Luxembourg (LU)	10.7	13.4	16.4	17.4	17.1	17.8	18.0	18.2
Hungary (HU)	3.6	4.4	4.7	4.1	4.0	4.1	4.6	5.6
Malta (MT)	8.3	9.2	8.7	9.6	10.0	10.9	11.5	11.3
Netherlands (NL)	43.9	45.0	45.5	46.1	46.2	46.8	47.3	48.3
Austria (AT)	19.0	18.7	19.8 b	21.1	21.8	22.6	23.3	24.6
Poland (PL)	10.8	10.5	10.8	10.8	9.8	9.2	8.5	8.4
Portugal (PT)	11.2	11.7	11.3	11.2	11.3	12.1	11.9	11.6
Romania (RO)	11.8 b	11.5	10.6	10.2	9.7	9.7	9.9	9.8
Slovenia (SI)	6.1	6.2	9.3	9.0	9.2	9.3	9.0	10.6
Slovakia (SK)	1.9	2.4	2.7	2.5	2.8	2.6	2.7	3.6
Finland (FI)	12.8	13.0	13.5	13.7	14.0	14.1	13.3	14.0
Sweden (SE)	21.5	22.9	23.6	24.7 b	25.1	25.0	26.6	27.0
United Kingdom (UK)	25.3	25.6	25.7	25.2	25.3	25.2	25.3	26.1
Iceland (IS)	:	22.1	22.2	22.2	17.1	21.7	20.5	23.6
Norway (NO)	26.4	28.8	29.2	28.2	28.7	28.2	28.2	28.6
Switzerland (CH)	31.7	32.7	33.0	33.1	33.3	33.5	34.3	34.6
Croatia (HR)	8.3	8.5	8.5	10.1	9.4	8.6	8.8	9.0
FYR of Macedonia (MK)	:	:	:	:	6.6	6.7	5.8	5.6
Turkey (TR)	:	:	:	:	7.6	8.4	9.3	11.3

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.59: Part-time jobholders, females (% total jobholders)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	28.5	29.0	30.0	30.9	31.2	31.2	31.1	31.5
Euro area (EA-16)	30.1	30.7	32.3	33.9	34.5	34.6	34.5	34.9
Belgium (BE)	37.4	39.1	40.5	40.5	41.1	40.6	40.9	41.5
Bulgaria (BG)	3.0	2.6	2.7	2.5	2.5	2.1	2.7	2.7
Czech Republic (CZ)	8.3	8.5	8.3	8.6	8.7	8.5	8.5	9.2
Denmark (DK)	30.3	32.7	33.8	33.0	35.4	36.2	36.5	37.9
Germany (DE)	39.5	40.8	41.6	43.5	b 45.6	45.8	45.4	45.3
Estonia (EE)	10.7	11.8	10.6	10.6	11.3	12.1	10.4	13.8
Ireland (IE)	30.6	31.0	31.5	:	:	32.3	32.4	33.8
Greece (EL)	8.0	7.7	8.5	9.3	10.2	10.1	9.9	10.4
Spain (ES)	16.8	17.1	17.9	24.2	b 23.2	22.8	22.7	23.0
France (FR)	29.8	29.5	29.9	30.2	30.3	30.3	29.4	29.8
Italy (IT)	16.9	17.3	25.0 b	25.6	26.5	26.9	27.9	27.9
Cyprus (CY)	11.3	13.2	13.6	14.0	12.1	10.9	11.4	12.5
Latvia (LV)	12.0	12.7	13.2	10.4	8.3	8.0	8.1	10.2
Lithuania (LT)	12.3	11.8	10.5	9.1	12.0	10.2	8.6	9.5
Luxembourg (LU)	25.3	30.7	36.3	38.2	36.2	37.2	38.3	35.1
Hungary (HU)	5.1	6.2	6.3	5.8	5.6	5.8	6.2	7.5
Malta (MT)	18.3	21.3	19.3	21.1	21.5	24.6	25.6	23.6
Netherlands (NL)	73.1	74.1	74.7	75.1	74.7	75.0	75.3	75.8
Austria (AT)	35.9	36.0	38.0 b	39.3	40.2	41.2	41.5	42.9
Poland (PL)	13.4	13.2	14.0	14.3	13.0	12.5	11.7	11.6
Portugal (PT)	16.4	16.9	16.3	16.2	15.8	16.9	17.2	16.4
Romania (RO)	13.0 b	12.2	11.2	10.5	9.8	10.4	10.8	10.6
Slovenia (SI)	7.5	7.5	11.0	11.1	11.6	11.3	11.4	13.2
Slovakia (SK)	2.7	3.8	4.2	4.1	4.7	4.5	4.2	4.7
Finland (FI)	17.5	17.7	18.4	18.6	19.2	19.3	18.2	19.0
Sweden (SE)	33.1	35.5	36.3	39.6	b 40.2	40.0	41.4	41.2
United Kingdom (UK)	43.8	43.9	43.8	42.6	42.5	42.2	41.8	42.5
Iceland (IS)	:	36.2	36.8	37.5	30.1	36.7	33.7	36.4
Norway (NO)	43.3	45.3	45.4	44.2	45.2	44.1	43.6	43.4
Switzerland (CH)	57.0	58.4	58.8	58.8	58.4	59.0	59.0	59.3
Croatia (HR)	10.5	11.2	11.2	13.4	11.7	11.3	11.5	11.6
FYR of Macedonia (MK)	:	:	:	:	7.6	7.2	7.6	7.0
Turkey (TR)	:	:	:	:	17.3	19.1	20.2	23.7

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.60: Part-time jobholders, males (% total jobholders)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	6.6	6.7	7.1	7.4	7.7	7.7	7.9	8.3
Euro area (EA-16)	5.6	5.7	6.2	6.9	7.3	7.4	7.5	8.0
Belgium (BE)	5.6	6.4	6.8	7.6	7.4	7.5	7.9	8.6
Bulgaria (BG)	2.1	1.9	2.1	1.7	1.5	1.3	2.0	2.0
Czech Republic (CZ)	2.2	2.3	2.3	2.1	2.2	2.3	2.2	2.8
Denmark (DK)	11.1	11.6	12.1	12.7	13.3	13.5	14.2	15.3
Germany (DE)	5.8	6.1	6.5	7.8 b	9.3	9.4	9.4	9.7
Estonia (EE)	4.8	5.4	5.4	4.9	4.3	4.3	4.1	7.0
Ireland (IE)	6.5	6.6	6.1	:	:	7.2	7.8	10.5
Greece (EL)	2.3	2.2	2.2	2.3	2.9	2.7	2.8	3.2
Spain (ES)	2.6	2.6	2.8	4.5 b	4.3	4.1	4.2	4.9
France (FR)	5.2	5.4	5.4	5.8	5.8	5.7	5.8	6.0
Italy (IT)	3.5	3.2	4.8 b	4.6	4.7	5.0	5.3	5.1
Cyprus (CY)	4.0	5.5	4.8	5.0	4.3	4.4	4.8	5.2
Latvia (LV)	7.6	7.9	7.7	6.3	4.7	4.9	4.5	7.5
Lithuania (LT)	9.4	7.4	6.5	5.1	7.9	7.0	4.9	7.0
Luxembourg (LU)	1.8	1.6	2.5	2.5	2.6	2.6	2.7	5.6
Hungary (HU)	2.3	2.8	3.2	2.7	2.6	2.8	3.3	3.9
Malta (MT)	3.9	3.8	4.1	4.5	4.9	4.4	4.5	5.1
Netherlands (NL)	21.2	22.0	22.3	22.6	23.0	23.6	23.9	24.9
Austria (AT)	5.1	4.7	4.9 b	6.1	6.5	7.2	8.1	8.7
Poland (PL)	8.5	8.2	8.2	8.0	7.1	6.6	5.9	5.8
Portugal (PT)	7.0	7.3	7.1	7.0	7.4	8.0	7.4	7.5
Romania (RO)	10.9 b	10.9	10.2	10.0	9.5	9.2	9.1	9.1
Slovenia (SI)	4.9	5.2	7.9	7.2	7.2	7.7	7.1	8.4
Slovakia (SK)	1.1	1.3	1.4	1.3	1.3	1.1	1.4	2.7
Finland (FI)	8.3	8.7	9.0	9.2	9.3	9.3	8.9	9.2
Sweden (SE)	11.1	11.2	12.0	11.5 b	11.8	11.8	13.3	14.2
United Kingdom (UK)	9.6	10.1	10.3	10.4	10.6	10.8	11.3	11.8
Iceland (IS)	:	9.4	9.2	8.7	7.0	9.3	9.5	12.2
Norway (NO)	11.2	14.0	14.6	13.8	13.9	13.9	14.4	15.2
Switzerland (CH)	10.9	11.6	11.8	11.8	12.6	12.4	13.5	13.5
Croatia (HR)	6.6	6.3	6.3	7.3	7.5	6.4	6.7	6.9
FYR of Macedonia (MK)	:	:	:	:	6.0	6.5	4.7	4.7
Turkey (TR)	:	:	:	:	4.3	4.7	5.3	6.5

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.61: Fixed-term contracts, males plus females (% total employees)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	12.3	12.7	13.3	14.0	14.4	14.5	14.0	13.5
Euro area (EA-16)	14.5	14.6	15.3	16.1	16.5	16.5	16.2	15.2
Belgium (BE)	8.1	8.4	8.7	8.9	8.7	8.6	8.3	8.2
Bulgaria (BG)	5.3	6.5	7.4	6.4	6.2	5.2	5.0	4.7
Czech Republic (CZ)	8.1	9.2	9.1	8.6	8.7	8.6	8.0	8.5
Denmark (DK)	9.1	9.3	9.5	9.8	8.9	8.7	8.4	8.9
Germany (DE)	12.0	12.2	12.4	14.1 b	14.5	14.6	14.7	14.5
Estonia (EE)	2.7	2.5	2.6	2.7	2.7	2.1	2.4	2.5
Ireland (IE)	5.3	5.2	4.1	3.7	3.4	7.3	8.5	8.5
Greece (EL)	11.7	11.2	11.9	11.8	10.7	10.9	11.5	12.1
Spain (ES)	31.8	31.8	32.5	33.3 b	34.0	31.7	29.3	25.4
France (FR)	13.5	13.5	13.5	14.1	14.1	14.4	14.2	13.5
Italy (IT)	9.9	9.9	11.8 b	12.3	13.1	13.2	13.3	12.5
Cyprus (CY)	9.1	12.5	12.9	14.0	13.1	13.2	13.9	13.4
Latvia (LV)	13.9	11.1	9.5	8.4	7.1	4.2	3.3	4.3
Lithuania (LT)	7.2	7.2	6.3	5.5	4.5	3.5	2.4	2.2
Luxembourg (LU)	5.1	3.1	4.8	5.3	6.1	6.8	6.2	7.2
Hungary (HU)	7.3	7.5	6.8	7.0	6.7	7.3	7.9	8.5
Malta (MT)	4.3	3.6	4.0	4.5	3.7	5.1	4.3	4.8
Netherlands (NL)	14.4	14.5	14.8	15.5	16.6	18.1	18.2	18.2
Austria (AT)	7.4	6.9	9.6 b	9.1	9.0	8.9	9.0	9.1
Poland (PL)	15.4	19.4	22.7	25.7	27.3	28.2	27.0	26.5
Portugal (PT)	21.5	20.6	19.8	19.5	20.6	22.4	22.8	22.0
Romania (RO)	1.0 b	2.0	2.5	2.4	1.8	1.6	1.3	1.0
Slovenia (SI)	14.3	13.7	17.8	17.4	17.3	18.5	17.4	16.4
Slovakia (SK)	4.9	4.9	5.5	5.0	5.1	5.1	4.7	4.4
Finland (FI)	16.0	16.3	16.1	16.5	16.4	15.9	15.0	14.6
Sweden (SE)	15.2	15.1	15.5	16.0 b	17.3	17.5	16.1	15.3
United Kingdom (UK)	6.4	6.1	6.0	5.8	5.8	5.9	5.4	5.7
Iceland (IS)	:	7.9	6.7	6.9	11.5	12.3	9.5	9.7
Norway (NO)	2.8	9.5	10.0	9.5	10.1	9.6	9.1	8.1
Switzerland (CH)	12.2	12.0	12.1	12.8	13.5	12.9	13.2	13.2
Croatia (HR)	10.9	11.3	12.2	12.4	12.9	12.6	12.1	11.6
FYR of Macedonia (MK)	:	:	:	:	11.9	12.6	14.7	15.5
Turkey (TR)	:	:	:	:	12.5	11.9	11.2	10.7

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.62: Fixed-term contracts, males plus females (% total employees)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	13.2	13.5	13.9	14.5	15.0	15.2	14.9	14.4
Euro area (EA-16)	15.8	15.8	16.3	17.0	17.5	17.5	17.3	16.5
Belgium (BE)	11.2	11.1	11.7	11.4	10.9	10.8	10.2	10.2
Bulgaria (BG)	4.7	6.0	7.0	6.2	6.1	5.5	4.4	4.2
Czech Republic (CZ)	9.3	10.7	10.7	9.8	10.1	10.2	9.8	10.2
Denmark (DK)	10.3	10.4	10.3	11.3	10.0	10.0	9.1	9.6
Germany (DE)	12.2	12.3	12.2	13.8 b	14.1	14.5	14.6	14.6
Estonia (EE)	1.5	1.8	1.8	2.0	2.2	1.6	1.4	2.0
Ireland (IE)	6.3	6.0	4.6	4.2	3.9	8.6	9.8	9.6
Greece (EL)	13.6	13.3	14.0	14.3	13.0	13.1	13.7	14.1
Spain (ES)	34.8	34.6	35.2	35.7 b	36.7	33.1	31.4	27.3
France (FR)	15.3	15.3	14.9	15.1	14.9	15.5	15.4	14.9
Italy (IT)	12.0	12.2	14.5 b	14.7	15.8	15.9	15.6	14.6
Cyprus (CY)	12.7	17.1	17.7	19.5	19.0	19.2	19.9	19.8
Latvia (LV)	10.8	9.1	7.3	6.2	5.4	2.9	2.0	2.9
Lithuania (LT)	4.9	4.8	3.9	3.6	2.7	2.3	1.9	1.6
Luxembourg (LU)	5.6	4.2	5.8	5.8	6.6	7.6	6.6	8.4
Hungary (HU)	6.6	6.7	6.1	6.4	6.0	6.8	7.0	7.8
Malta (MT)	5.9	4.8	5.8	6.1	5.8	7.7	5.7	6.7
Netherlands (NL)	17.1	16.4	16.5	16.9	18.0	19.7	20.0	20.3
Austria (AT)	7.3	6.7	9.0 b	8.8	8.9	9.0	9.1	9.0
Poland (PL)	14.4	17.8	21.5	24.7	26.0	27.9	27.7	26.6
Portugal (PT)	23.4	22.3	21.1	20.4	21.7	23.0	24.1	23.2
Romania (RO)	0.8 b	1.7	2.0	1.9	1.6	1.5	1.2	1.0
Slovenia (SI)	16.1	14.9	19.1	19.3	19.3	20.8	19.7	17.8
Slovakia (SK)	4.5	4.6	5.1	4.9	5.2	5.3	4.8	4.1
Finland (FI)	19.5	20.0	19.5	20.0	20.0	19.4	18.7	18.3
Sweden (SE)	17.6	17.4	17.5	17.7 b	19.1	19.9	18.7	17.6
United Kingdom (UK)	7.2	6.9	6.6	6.3	6.5	6.4	6.0	6.1
Iceland (IS)	:	8.3	7.9	7.8	12.7	13.6	9.9	10.5
Norway (NO)	3.5	11.3	11.8	11.6	12.6	11.7	11.1	9.8
Switzerland (CH)	12.7	12.4	12.5	13.0	13.9	13.1	13.1	13.6
Croatia (HR)	10.4	10.7	12.4	12.3	12.6	13.2	12.3	11.9
FYR of Macedonia (MK)	:	:	:	:	10.1	10.5	12.4	12.6
Turkey (TR)	:	:	:	:	12.1	11.5	11.6	11.5

Source: Eurostat, EU LFS (lfsi_emp_a): = Not available

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.63: Fixed-term contracts, males plus females (% total employees)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	11.6	12.0	12.8	13.6	13.9	13.8	13.3	12.7
Euro area (EA-16)	13.4	13.6	14.4	15.4	15.7	15.7	15.2	14.2
Belgium (BE)	5.8	6.2	6.4	6.8	6.9	6.8	6.6	6.5
Bulgaria (BG)	5.9	7.0	7.7	6.7	6.3	5.0	5.6	5.2
Czech Republic (CZ)	7.0	7.9	7.8	7.6	7.5	7.3	6.5	7.0
Denmark (DK)	7.9	8.2	8.7	8.5	8.0	7.6	7.6	8.3
Germany (DE)	11.8	12.1	12.7	14.4 b	14.7	14.7	14.7	14.4
Estonia (EE)	3.9	3.2	3.5	3.4	3.3	2.7	3.4	3.0
Ireland (IE)	4.5	4.4	3.7	3.1	2.9	6.0	7.2	7.4
Greece (EL)	10.5	9.7	10.5	10.1	9.1	9.3	9.9	10.6
Spain (ES)	29.9	29.9	30.6	31.7 b	32.0	30.6	27.6	23.8
France (FR)	11.9	12.0	12.2	13.3	13.3	13.3	13.0	12.1
Italy (IT)	8.4	8.2	9.9 b	10.5	11.2	11.2	11.6	10.8
Cyprus (CY)	5.8	8.1	8.5	9.0	7.9	7.6	8.2	7.5
Latvia (LV)	17.0	13.1	11.6	10.7	8.8	5.5	4.7	5.8
Lithuania (LT)	9.8	9.6	8.7	7.6	6.4	4.9	2.9	2.9
Luxembourg (LU)	4.7	2.4	4.1	4.9	5.7	6.2	5.9	6.3
Hungary (HU)	7.9	8.3	7.5	7.6	7.4	7.7	8.7	9.0
Malta (MT)	3.4	3.0	3.1	3.7	2.7	3.7	3.4	3.7
Netherlands (NL)	12.1	12.9	13.4	14.3	15.4	16.6	16.6	16.4
Austria (AT)	7.6	7.1	10.2 b	9.3	9.1	8.8	8.9	9.2
Poland (PL)	16.4	20.8	23.7	26.5	28.5	28.4	26.3	26.3
Portugal (PT)	19.9	19.0	18.7	18.7	19.5	21.8	21.7	20.9
Romania (RO)	1.1 b	2.2	2.9	2.8	2.0	1.7	1.3	1.1
Slovenia (SI)	12.6	12.6	16.7	15.7	15.5	16.5	15.3	15.1
Slovakia (SK)	5.2	5.3	6.0	5.1	5.0	4.9	4.6	4.6
Finland (FI)	12.5	12.6	12.6	12.9	12.6	12.4	11.2	10.6
Sweden (SE)	12.8	12.8	13.5	14.2 b	15.4	15.0	13.4	13.0
United Kingdom (UK)	5.7	5.4	5.5	5.3	5.2	5.3	4.9	5.3
Iceland (IS)	:	7.4	5.5	6.0	10.4	11.0	9.1	8.9
Norway (NO)	2.1	7.7	8.4	7.5	7.8	7.6	7.1	6.5
Switzerland (CH)	11.8	11.7	11.8	12.6	13.1	12.7	13.3	12.9
Croatia (HR)	11.3	11.8	12.1	12.4	13.1	12.2	11.9	11.4
FYR of Macedonia (MK)	:	:	:	:	13.2	14.1	16.2	17.4
Turkey (TR)	:	:	:	:	12.6	12.0	11.1	10.5

Source: Eurostat, EU LFS (lfsi_emp_a)

: = Not available

b = Break in series

TR – data source: national Labour Force Survey

CH – data refers to quarter 2

Table 4.64: Actual hours worked, annual

EU-27	Total hours worked		Average hours/ person	
	Levels	growth	Levels	growth
2009	369 693 695	– 2.8	1663.6	– 1.0
2008	380 305 858	0.8	1680.0	– 0.1
2007	377 294 566	1.8	1682.0	0.0
2006	370 771 823	1.4	1682.3	– 0.2
2005	365 692 695	0.8	1686.4	– 0.1
2004	362 758 996	0.9	1688.7	0.2
2003	359 628 630	– 0.1	1685.4	– 0.5
2002	360 054 542	– 0.5	1693.3	– 0.8

EA-27	Total hours worked		Average hours/ person	
	Levels	growth	Levels	growth
2009	230 791 666	– 3.0	1591.4	– 1.2
2008	237 960 231	0.6	1610.0	– 0.2
2007	236 588 582	1.6	1612.4	– 0.1
2006	232 765 250	1.2	1614.6	– 0.4
2005	229 897 066	0.6	1620.5	– 0.4
2004	228 537 560	1.0	1626.3	0.2
2003	226 169 438	0.1	1622.4	– 0.4
2002	226 036 137	– 0.2	1628.5	– 0.9

Source: Eurostat (nama_nace06_e)

Table 4.65: Unemployment rates, males plus females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	8.9	9.0	9.1	8.9	8.2	7.1	7.0	8.9
Euro area (EA-16)	8.4	8.8	9.0	9.0	8.3	7.5	7.5	9.4
Belgium (BE)	7.5	8.2	8.4	8.5	8.3	7.5	7.0	7.9
Bulgaria (BG)	18.2	13.7	12.1	10.1	9.0	6.9	5.6	6.8
Czech Republic (CZ)	7.3	7.8	8.3	7.9	7.2	5.3	4.4	6.7
Denmark (DK)	4.6	5.4	5.5	4.8	3.9	3.8	3.3	6.0
Germany (DE)	8.4	9.3	9.8	10.7	9.8	8.4	7.3	7.5
Estonia (EE)	10.3	10.0	9.7	7.9	5.9	4.7	5.5	13.8
Ireland (IE)	4.5	4.6	4.5	4.4	4.5	4.6	6.3	11.9
Greece (EL)	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5
Spain (ES)	11.1	11.1	10.6	9.2	8.5	8.3	11.3	18.0
France (FR)	8.6	9.0	9.3	9.3	9.2	8.4	7.8	9.5
Italy (IT)	8.6	8.4	8.0	7.7	6.8	6.1	6.7	7.8
Cyprus (CY)	3.6	4.1	4.7	5.3	4.6	4.0	3.6	5.3
Latvia (LV)	12.2	10.5	10.4	8.9	6.8	6.0	7.5	17.1
Lithuania (LT)	13.5	12.5	11.4	8.3	5.6	4.3	5.8	13.7
Luxembourg (LU)	2.6	3.8	5.0	4.6	4.6	4.2	4.9	5.4
Hungary (HU)	5.8	5.9	6.1	7.2	7.5	7.4	7.8	10.0
Malta (MT)	7.5	7.6	7.4	7.2	7.1	6.4	5.9	6.9
Netherlands (NL)	2.8	3.7	4.6	4.7	3.9	3.2	2.8	3.4
Austria (AT)	4.2	4.3	4.9	5.2	4.8	4.4	3.8	4.8
Poland (PL)	20.0	19.7	19.0	17.8	13.9	9.6	7.1	8.2
Portugal (PT)	5.1	6.4	6.7	7.7	7.8	8.1	7.7	9.6
Romania (RO)	8.6	7.0	8.1	7.2	7.3	6.4	5.8	6.9
Slovenia (SI)	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9
Slovakia (SK)	18.7	17.6	18.2	16.3	13.4	11.1	9.5	12.0
Finland (FI)	9.1	9.0	8.8	8.4	7.7	6.9	6.4	8.2
Sweden (SE)	6.0	6.7	7.6	7.7	7.0	6.1	6.2	8.3
United Kingdom (UK)	5.1	5.0	4.7	4.8	5.4	5.3	5.6	7.6
Norway (NO)	3.7	4.2	4.3	4.5	3.4	2.5	2.5	3.1
Croatia (HR)	14.8	14.2	13.7	12.7	11.2	9.6	8.4	9.6
Turkey (TR)	:	:	:	9.2	8.7	8.8 b	9.7	12.5
Japan (JP)	5.4	5.3	4.7	4.4	4.1	3.9	4.0	5.1
United States (US)	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3

Source: Eurostat, EU LFS (une_rt_a)

: = Not available

b = Break in series

Table 4.66: Unemployment rates, females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	9.7	9.7	9.8	9.6	8.9	7.8	7.5	8.8
Euro area (EA-16)	9.7	10.0	10.1	10.0	9.4	8.5	8.3	9.6
Belgium (BE)	8.6	8.9	9.5	9.5	9.3	8.5	7.6	8.1
Bulgaria (BG)	17.3	13.2	11.5	9.8	9.3	7.3	5.8	6.6
Czech Republic (CZ)	9.0	9.9	9.9	9.8	8.9	6.7	5.6	7.7
Denmark (DK)	5.0	6.1	6.0	5.3	4.5	4.2	3.7	5.4
Germany (DE)	7.9	8.7	9.1	10.1	9.5	8.3	7.2	6.9
Estonia (EE)	9.7	9.9	8.9	7.1	5.6	3.9	5.3	10.6
Ireland (IE)	4.1	4.1	4.0	4.1	4.2	4.1	4.9	8.0
Greece (EL)	15.7	15.0	16.2	15.3	13.6	12.8	11.4	13.2
Spain (ES)	15.7	15.3	14.3	12.2	11.6	10.9	13.0	18.4
France (FR)	9.7	9.9	10.3	10.3	10.1	9.0	8.4	9.8
Italy (IT)	11.5	11.3	10.5	10.0	8.8	7.9	8.5	9.3
Cyprus (CY)	4.5	4.8	6.0	6.5	5.4	4.6	4.2	5.5
Latvia (LV)	10.9	10.4	10.2	8.7	6.2	5.6	6.9	13.9
Lithuania (LT)	12.7	12.2	11.8	8.3	5.4	4.3	5.6	10.4
Luxembourg (LU)	3.5	4.9	6.8	6.0	6.0	5.1	5.9	6.1
Hungary (HU)	5.4	5.6	6.1	7.4	7.8	7.7	8.1	9.7
Malta (MT)	9.3	9.1	9.0	8.9	8.7	7.5	6.6	7.6
Netherlands (NL)	3.1	3.9	4.8	5.1	4.4	3.6	3.0	3.5
Austria (AT)	4.4	4.7	5.4	5.5	5.2	5.0	4.1	4.6
Poland (PL)	21.0	20.5	20.0	19.2	14.9	10.4	8.0	8.7
Portugal (PT)	6.1	7.3	7.7	8.8	9.1	9.7	9.0	10.3
Romania (RO)	7.9	6.4	6.9	6.4	6.1	5.4	4.7	5.8
Slovenia (SI)	6.8	7.1	6.9	7.1	7.2	5.9	4.8	5.8
Slovakia (SK)	18.7	17.8	19.2	17.2	14.7	12.7	10.9	12.8
Finland (FI)	9.1	8.9	8.9	8.6	8.1	7.2	6.7	7.6
Sweden (SE)	5.6	6.2	7.3	7.7	7.2	6.4	6.5	8.0
United Kingdom (UK)	4.5	4.3	4.2	4.3	4.9	5.0	5.1	6.4
Norway (NO)	3.5	3.9	3.9	4.3	3.3	2.5	2.3	2.6
Croatia (HR)	16.6	15.8	15.7	13.9	12.8	11.2	10.1	10.6
Turkey (TR)	:	:	:	9.3	9.1	9.1 b	10.0	12.6
Japan (JP)	5.1	4.9	4.4	4.2	3.9	3.7	3.8	4.8
United States (US)	5.6	5.7	5.4	5.1	4.6	4.5	5.4	8.1

Source: Eurostat, EU LFS (une_rt_a)

: = Not available

b = Break in series

Table 4.67: Unemployment rates, males

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	8.3	8.4	8.5	8.3	7.6	6.6	6.6	9.0
Euro area (EA-16)	7.4	7.9	8.1	8.1	7.5	6.7	6.9	9.3
Belgium (BE)	6.7	7.7	7.5	7.6	7.4	6.7	6.5	7.8
Bulgaria (BG)	18.9	14.1	12.6	10.3	8.7	6.5	5.5	7.0
Czech Republic (CZ)	6.0	6.2	7.1	6.5	5.8	4.2	3.5	5.9
Denmark (DK)	4.3	4.8	5.1	4.4	3.3	3.5	3.0	6.5
Germany (DE)	8.8	9.8	10.3	11.2	10.2	8.5	7.4	8.0
Estonia (EE)	10.8	10.2	10.4	8.8	6.2	5.4	5.8	16.9
Ireland (IE)	4.7	4.9	4.8	4.6	4.6	4.9	7.4	14.9
Greece (EL)	6.8	6.2	6.6	6.1	5.6	5.2	5.1	6.9
Spain (ES)	8.1	8.2	8.0	7.1	6.3	6.4	10.1	17.7
France (FR)	7.7	8.1	8.4	8.4	8.4	7.8	7.3	9.2
Italy (IT)	6.7	6.5	6.4	6.2	5.4	4.9	5.5	6.8
Cyprus (CY)	2.9	3.6	3.6	4.3	4.0	3.4	3.1	5.1
Latvia (LV)	13.3	10.6	10.6	9.1	7.4	6.4	8.0	20.3
Lithuania (LT)	14.2	12.7	11.0	8.2	5.8	4.3	6.1	17.1
Luxembourg (LU)	2.0	3.0	3.6	3.6	3.6	3.4	4.1	4.8
Hungary (HU)	6.2	6.1	6.1	7.0	7.2	7.1	7.6	10.3
Malta (MT)	6.6	6.9	6.6	6.4	6.3	5.9	5.6	6.6
Netherlands (NL)	2.5	3.5	4.3	4.5	3.5	2.8	2.5	3.4
Austria (AT)	4.0	4.0	4.5	4.9	4.3	3.9	3.6	5.0
Poland (PL)	19.2	19.0	18.2	16.6	13.0	9.0	6.4	7.8
Portugal (PT)	4.2	5.6	5.9	6.8	6.6	6.7	6.6	9.0
Romania (RO)	9.2	7.6	9.1	7.8	8.2	7.2	6.7	7.7
Slovenia (SI)	5.9	6.3	5.9	6.1	4.9	4.0	4.0	5.9
Slovakia (SK)	18.6	17.4	17.4	15.5	12.3	9.9	8.4	11.4
Finland (FI)	9.1	9.2	8.7	8.2	7.4	6.5	6.1	8.9
Sweden (SE)	6.4	7.1	7.9	7.8	6.9	5.8	5.9	8.6
United Kingdom (UK)	5.7	5.5	5.1	5.2	5.8	5.6	6.1	8.6
Norway (NO)	3.8	4.5	4.6	4.7	3.5	2.6	2.7	3.6
Croatia (HR)	13.3	12.9	12.1	11.6	9.9	8.4	7.0	8.7
Turkey (TR)	:	:	:	9.1	8.6	8.7 b	9.6	12.5
Japan (JP)	5.5	5.5	4.9	4.6	4.3	3.9	4.1	5.3
United States (US)	5.9	6.3	5.6	5.1	4.6	4.7	6.1	10.3

Source: Eurostat, EU LFS (une_rt_a)

: = Not available

b = Break in series

Table 4.68: Unemployment rates, young persons (aged 15-24), males plus females

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	18.0	18.1	18.5	18.4	17.1	15.3	15.4	19.6
Euro area (EA-16)	16.0	16.6	17.4	17.5	16.4	14.9	15.4	19.4
Belgium (BE)	17.7	21.8	21.2	21.5	20.5	18.8	18.0	21.9
Bulgaria (BG)	37.0	28.2	25.8	22.3	19.5	15.1	12.7	16.2
Czech Republic (CZ)	16.9	18.6	21.0	19.2	17.5	10.7	9.9	16.6
Denmark (DK)	7.4	9.2	8.2	8.6	7.7	7.9	7.6	11.2
Germany (DE)	9.1	9.8	11.9	14.2	12.8	11.1	9.9	10.3
Estonia (EE)	17.6	20.6	21.7	15.9	12.0	10.0	12.0	27.5
Ireland (IE)	8.4	8.7	8.7	8.6	8.6	8.9	13.3	24.4
Greece (EL)	26.8	26.8	26.9	26.0	25.2	22.9	22.1	25.8
Spain (ES)	24.2	24.6	23.9	19.7	17.9	18.2	24.6	37.8
France (FR)	19.3	19.2	20.6	21.1	22.1	19.6	19.1	23.3
Italy (IT)	23.1	23.7	23.5	23.9	21.7	20.3	21.2	25.3
Cyprus (CY)	8.1	8.9	10.5	13.0	10.5	10.1	8.8	13.8
Latvia (LV)	22.0	18.0	18.1	13.6	12.2	10.7	13.1	33.6
Lithuania (LT)	22.4	25.1	22.7	15.7	9.8	8.2	13.4	29.2
Luxembourg (LU)	7.0	11.2	16.4	14.3	15.8	15.6	17.3	17.5
Hungary (HU)	12.7	13.4	15.5	19.4	19.1	18.0	19.9	26.5
Malta (MT)	17.1	17.2	16.8	16.2	16.5	13.8	11.9	14.3
Netherlands (NL)	5.0	6.3	8.0	8.2	6.6	5.9	5.3	6.6
Austria (AT)	6.7	8.1	9.7	10.3	9.1	8.7	8.0	10.0
Poland (PL)	42.5	41.9	39.6	36.9	29.8	21.7	17.3	20.6
Portugal (PT)	11.6	14.5	15.3	16.1	16.3	16.6	16.4	20.0
Romania (RO)	23.2	19.6	21.9	20.2	21.4	20.1	18.6	20.8
Slovenia (SI)	16.5	17.3	16.1	15.9	13.9	10.1	10.4	13.6
Slovakia (SK)	37.7	33.4	33.1	30.1	26.6	20.3	19.0	27.3
Finland (FI)	21.0	21.8	20.7	20.1	18.7	16.5	16.5	21.5
Sweden (SE)	16.5	17.9	21.6	22.9	21.5	19.1	20.0	25.0
United Kingdom (UK)	12.0	12.2	12.1	12.8	14.0	14.3	15.0	19.1
Norway (NO)	10.8	11.2	11.2	11.4	8.6	7.3	7.2	8.9
Croatia (HR)	35.4	35.8	33.2	32.3	28.9	24.0	21.9	25.5
Turkey (TR)	:	:	:	17.4	16.4	17.2 b	18.4	22.7
Japan (JP)	10.0	10.1	9.5	8.7	8.0	7.7	7.3	9.1
United States (US)	12.0	12.4	11.8	11.3	10.5	10.5	12.8	17.6

Source: Eurostat, EU LFS (une_rt_a)

: = Not available

b = Break in series

Table 4.69: Long-term unemployment rates, males plus females (% active population)

	2002	2003	2004	2005	2006	2007	2008	2009
European Union (EU-27)	4.0	4.1	4.2	:	3.7	3.1	2.6	3.0
Euro area (EA-16)	3.7	4.0	4.2	4.1	3.9	3.3	3.0	3.4
Belgium (BE)	3.7	3.7	4.1	4.4	4.2	3.8	3.3	3.5
Bulgaria (BG)	12.0	9.0	7.2	6.0	5.0	4.1	2.9	3.0
Czech Republic (CZ)	3.7	3.8	4.2	4.2	3.9	2.8	2.2	2.0
Denmark (DK)	0.9	1.1	1.2	1.1	0.8	0.6	0.5	0.5
Germany (DE)	4.0	4.6	5.5	5.7 b	5.5	4.7	3.8	3.4
Estonia (EE)	5.4	4.6	5.0	4.2	2.9	2.3	1.7	3.8
Ireland (IE)	1.3	1.5	1.6	1.5	1.4	1.4	1.7	3.4
Greece (EL)	5.3	5.3	5.6	5.1	4.8	4.1	3.6	3.9
Spain (ES)	3.7	3.7	3.4	2.2 b	1.8	1.7	2.0	4.3
France (FR)	3.0	3.5	3.8	3.8	3.9	3.4	2.9	3.3
Italy (IT)	5.1	4.9	4.0 b	3.8	3.4	2.9	3.1	3.5
Cyprus (CY)	0.8	1.0	1.2	1.2	0.9	0.7	0.5	0.6
Latvia (LV)	5.5	4.4	4.6	4.1	2.5	1.6	1.9	4.6
Lithuania (LT)	7.2	6.0	5.8	4.3	2.5	1.4	1.2	3.2
Luxembourg (LU)	0.7	1.0	1.0	1.2	1.4	1.2	1.6	1.2
Hungary (HU)	2.5	2.4	2.7	3.2	3.4	3.4	3.6	4.2
Malta (MT)	3.2	3.2	3.4	3.3	2.8	2.7	2.5	3.0
Netherlands (NL)	0.7	1.0	1.6	1.9	1.7	1.3	1.0	0.8
Austria (AT)	1.1	1.1	1.4 b	1.3	1.3	1.2	0.9	1.0
Poland (PL)	10.9	11.0	10.3	10.3	7.8	4.9	2.4	2.5
Portugal (PT)	1.8	2.2	3.0	3.7	3.9	3.8	3.7	4.3
Romania (RO)	4.6 b	4.3	4.8	4.0	4.2	3.2	2.4	2.2
Slovenia (SI)	3.5	3.5	3.2	3.1	2.9	2.2	1.9	1.8
Slovakia (SK)	12.2	11.4	11.8	11.7	10.2	8.3	6.6	6.5
Finland (FI)	2.3	2.3	2.1	2.2	1.9	1.6	1.2	1.4
Sweden (SE)	1.2	1.2	1.5	:	1.1	0.8	0.8	1.1
United Kingdom (UK)	1.1	1.1	1.0	1.0	1.2	1.3	1.4	1.9
Iceland (IS)	:	0.2	0.3	0.3	0.2	0.2	0.1	0.4
Norway (NO)	0.5	0.6	0.8	0.8	0.8	0.5	0.3	0.5
Switzerland (CH)	:	:	:	:	:	:	:	:
Croatia (HR)	9.0	8.4	7.4	7.4	6.7	5.9	5.3	5.2
FYR of Macedonia (MK)	:	:	:	:	:	:	:	:
Turkey (TR)	:	:	:	:	2.7	2.3	2.3	2.8
Japan (JP)	1.7	1.8	1.6	1.5	1.4	1.2	1.3	:
United States (UK)	0.5	0.7	0.7	0.6	0.5	0.5	0.6	:

Source: Eurostat, EU LFS (une_rt_a)

: = Not available

b = Break in series

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