COUNTRY ADJUSTMENT IN THE EURO AREA: WHERE DO WE STAND?

Almost five years since the start of the financial crisis, a number of euro area countries have seen a significant correction of their external and domestic imbalances. In this article, the progress made so far in the adjustment process is examined using a number of key macroeconomic and structural indicators. It shows that significant adjustment has been achieved over the past five years; however, with some heterogeneity across countries. Although driven, to a large extent, by the cyclical weakness in domestic demand, part of the adjustment has been structural, and supported by national policies. In particular, many countries have started a long-awaited process of structural reform, the potential pay-off of which – in terms of increased productivity, growth and employment – could be very large, if reforms are properly implemented. Notwithstanding these improvements, the process of adjustment is clearly not yet complete, not least with regard to stock imbalances (e.g. the reduction of debt ratios). There is, therefore, an urgent need to proceed with a comprehensive reform effort in a determined manner, especially in those countries which have the most demanding agenda, in terms of policy response and economic adjustment.

1 INTRODUCTION

Since the start of European Monetary Union (EMU), euro area countries have experienced very diverse macroeconomic developments.[1] Some countries saw a boom in external demand and a significant improvement in their current account balances during the period preceding the 2008-09 crisis; this was supported by significant competitiveness gains, as reflected, for example, in the sizeable reductions in unit labour cost (ULC) relative to their trading partners. In contrast, other countries experienced a sustained loss of competitiveness, often associated with mounting current account deficits. For most countries, large and persistent competitiveness losses were linked to booms in domestic demand, as nominal interest rates declined significantly and consumers, firms and banks were overly optimistic about future income and profit prospects. This was often accompanied or intensified by countries' insufficiently tight underlying fiscal stance, even where fiscal headlines (such as the deficit or the debt ratio) were in line with the Maastricht fiscal criteria.

Excessive demand and the associated credit boom led to the build-up of large domestic and external debt in several euro area countries. In some cases, this was associated with unsustainable booms in real estate markets. House prices nearly tripled between 1998 and 2007 in Spain and Ireland, and they more than doubled in Greece. On the supply side, capital inflows were not sufficiently channelled towards investment in the tradable sector, which would have yielded the returns necessary to service and repay the accumulated external debt. The heavy reliance on debt financing, rather than on equity-based foreign direct investment, tended to further accentuate the problem of repayment. The lack of ambitious reform efforts to tackle the existing structural rigidities and inefficiencies led to a further weakening of the supply side, and made the subsequent adjustment more difficult.

The correction of macroeconomic imbalances and structural vulnerabilities began in 2008; the pace of adjustment varied significantly across countries and accelerated after the 2010 sovereign debt crisis. Between 2010 and 2012, Greece, Ireland and Portugal entered into fully fledged European Union (EU)/International Monetary Fund (IMF) financial assistance programmes, involving far-reaching economic policy adjustments, including those pertaining to structural reform. Spain entered into an EU financial assistance programme for the recapitalisation of its financial institutions,

1 This article focuses on the countries which adopted the euro prior to 2007 and started a rebalancing process after the 2008-09 global financial crisis. For this group of countries, a clear path of accumulation and subsequent unwinding of imbalances can be identified.

and other vulnerable countries such as Italy implemented a series of fiscal consolidation measures and some structural reforms. However, there are some countries in which the adjustment, both in terms of underlying imbalances and policy response, has, so far, been relatively limited.

In this article, the adjustment observed for the period up until 2012 will be examined, and some policy lessons derived. This article is structured as follows: Section 2 describes the adjustment in current account balances and competitiveness; Section 3 deals with the adjustment observed in private and public sector debt levels; Section 4 discusses the role of structural reforms in the adjustment process; and Section 5 concludes with some policy considerations.

2 THE ADJUSTMENT IN CURRENT ACCOUNT BALANCES AND COMPETITIVENESS

Some divergence in current account balances across euro area countries is to be expected, as capital flows favour Member States and regions with better growth prospects and higher expected rates of return on capital (e.g. the catching-up economies). These considerations were particularly relevant at the start of EMU, which triggered greater integration in the product and financial markets.[2] While ex ante expectations of fast convergence across euro area countries might have been reasonable, given the favourable environment created by EMU, the degree of sustainable convergence ex post turned out to be relatively limited in some cases. The acceleration of productivity expected to follow euro area membership did not fully materialise and investment spending was often not channelled towards activities capable of generating high future returns. As a result, the high current account deficits proved to be unsustainable.

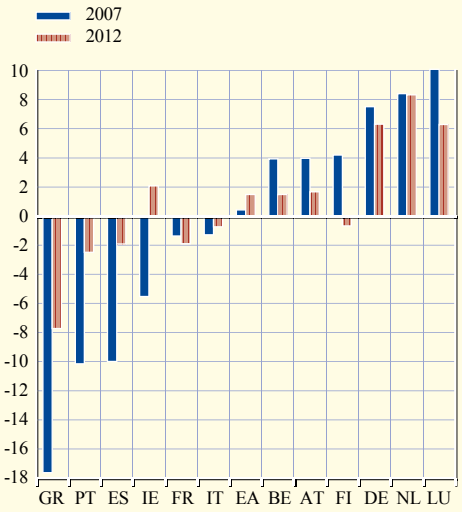
THE ROLE OF DOMESTIC DEMAND

The adjustment of external imbalances started in 2008. By the end of 2012, the correction of current account deficits had been sizeable in Greece, Portugal, Spain and Ireland (see Chart 1). While adjustment also took place in most surplus countries, it was more limited overall. As a result, the euro area experienced a slight improvement in its current account balance. In the countries which had been characterised by high deficits, the sharp fall in domestic demand appears to have been a strong driving force behind the significant current account corrections. This is, for example, suggested by the very strong correlation between changes in domestic demand and current account balances over the period 2008-12 (see Chart 2).

From an institutional sector perspective, the adjustment of current account deficits was

Chart 1 Current account balances

(as a percentage of GDP)



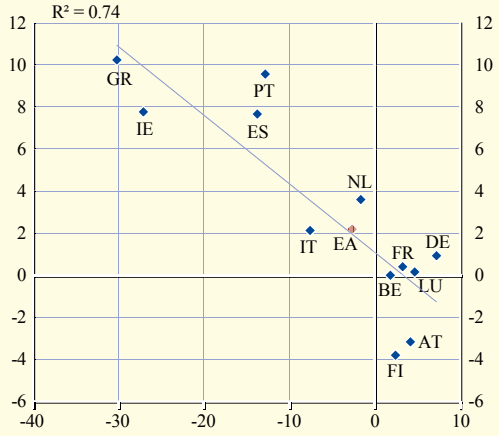
Source: European Commission.
Note: Countries are listed in ascending order according to their current account balances in 2007.

2 For more details, see Blanchard, O. and Giavazzi, F., "Current account deficits in the euro area. The end of the Feldstein Horioka puzzle?", *Brooking papers on Economic Activity*, Vol. 33, No 2, September 2002, pp. 147-210.

Chart 2 Changes in the current account and domestic demand (2008-12)

(as a percentage of GDP; in percentage points)

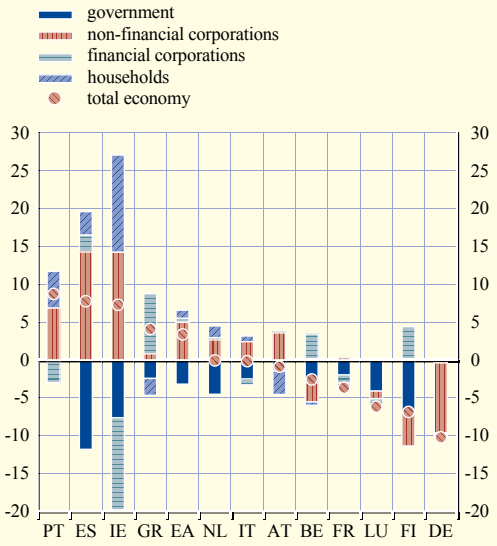
x-axis: cumulated change in domestic demand
y-axis: change in the current account



Sources: European Commission and ECB computations.
Note: The starting point is 2007.

Chart 3 Changes in the net lending/borrowing of institutional sectors (2008-12)

(as a percentage of GDP; in percentage points)



Source: Eurostat.
Notes: Countries listed in descending order according to changes in net lending/borrowing. The starting point is 2007. The latest data are for the third quarter of 2012. The changes for Luxembourg are for 2008-11.

driven by the private sector (see Chart 3). This reflected adjustments made by both non-financial corporations (NFCs) and households, especially in Portugal, Spain and Ireland. Both sectors increased their savings rates, with NFCs also reducing their investment spending. A large part of the NFCs' investment decline reflects developments in the construction sector, which underwent significant adjustment in Greece, Spain and Ireland, following unsustainable trends up until 2007.[3]

The improvement in the private sector borrowing position was, to some extent, offset by an increase in net borrowing by the government sector, especially in Spain and Ireland. This reflected, at least initially, attempts to stabilise the economy by adopting a counter-cyclical fiscal policy stance and by introducing fiscal measures to support the financial sector, combined with a sharp fall in revenues.

HOW MUCH FURTHER EXTERNAL ADJUSTMENT IS NEEDED?

In order to assess how much further external adjustment is needed, it is useful to focus on three issues: (i) the link between current account balances and net international investment positions (NIIPs), with the aim of bringing the latter to sustainable levels; (ii) the breakdown of the observed demand-driven current account adjustment into structural and cyclical elements in order to gauge the sustainability of the adjustment; and (iii) the structural improvements made in countries' export performance, as opposed to cyclical improvements driven merely by foreign demand.

3 See the box entitled "Changes in the allocation of gross value added in the euro area: a sectoral perspective", *Monthly Bulletin*, ECB, Frankfurt am Main, February 2013.

With regard to the first issue, stressed countries have accumulated substantial net external liabilities, as reflected in large negative NIIPs; this being a consequence of the large current account deficits. High net external liabilities normally imply high debt servicing costs and make the economy vulnerable to changes in asset prices and financing conditions. Reversing the trend in the NIIP would require further improvements in the current account balances of the countries with the highest net external liabilities. For example, to bring the net external liabilities down from a level of 100% of GDP – which corresponds to the average NIIP reached in 2012 by the programme countries – to the sustainable threshold of 35% of GDP within 15 years (in line with the macroeconomic imbalance procedure), a positive current account balance of close to 3% per year would need to be maintained over the whole period. This suggests that significant and sustained further improvements in current account balances may be necessary in some countries.

As to the second issue, in order to sustain current account improvements in the years ahead, it is important not to reverse the observed import compression once the economic recovery gains traction. Breaking down the observed current account adjustment into cyclical and structural component parts is not straightforward. This is due to the fact that the breakdown depends on variables which are either not observable, such as potential output, or measurable with some delay, such as improvements in export specialisation or sustained improvements in cost competitiveness. Bearing these caveats in mind, part of the domestic demand-driven current account adjustment observed so far can be considered to be structural and thus likely to be sustainable. This reflects the fact that the crisis has resulted in a reduction in the growth rate of potential output and domestic demand, and has triggered a series of structural policies aimed at rebalancing the economy towards the tradable sector. It is, therefore, unlikely that current account balances will return to pre-crisis levels for some time.

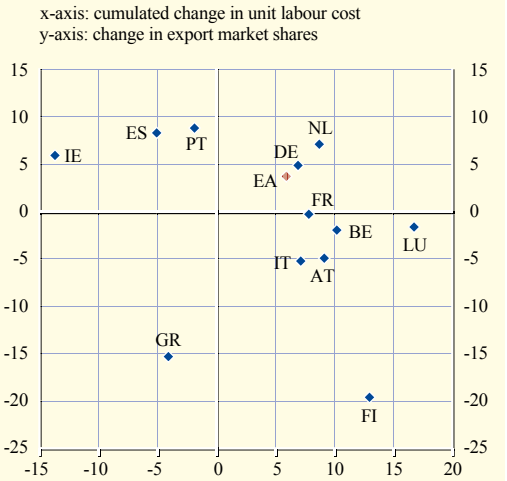
Regarding the third issue, exports from Ireland, Portugal and Spain have not only benefited from the recovery in global trade following the 2009 collapse, but they have also been supported by an increase in export market shares outside the euro area. Partly as a result of this, the export contribution to growth for 2010-12 has been almost twice as large as that in the pre-crisis period in Portugal and Spain. While there is still no conclusive evidence that this export improvement can be sustained, a clear positive correlation between the developments in exports and the adjustment of cost competitiveness, as measured by the change in ULC since 2008, can be observed.

Chart 4 shows that the countries that saw the strongest increase in export market shares were also those that improved their cost competitiveness to a greater extent, with the notable exception of Greece, where structural rigidities may have inhibited the shift in specialisation and the expansion of exports.

The role of non-price factors, which is more difficult to assess, is also gaining prominence in some of the euro area countries, thereby suggesting that there has been a structural improvement in export performance (see Box 1).

Chart 4 Cumulated changes in unit labour costs and changes in the export market shares (2008-12)

(in percentage points)



Sources: European Commission and ECB.

Box 1

BOOSTING EXPORTS VIA NON-PRICE COMPETITIVENESS: THE ROLE OF TECHNOLOGICAL SPECIALISATION

Cost and price competitiveness is only one driver of export performance: non-price aspects, such as the quality and level of innovation of a product, are just as important in supporting export growth.[1] This box looks at one specific aspect of non-price competitiveness: the technological content of exports, and finds that it has evolved in a direction that potentially supports export growth in the euro area countries which had experienced a loss in price competitiveness before the 2008 crisis. Exports can be classified as having high, medium-high, medium-low or low technology content, based on the intensity of the research and development (R&D) invested. Information and Communications Technology (ICT) goods are also considered (in line with the Organisation for Economic Co-operation and Development (OECD) methodology).

Having a high level of technical specialisation can work in favour of a country's export performance for two reasons: first, high-tech products, which are innovative and made up of high value added components, can command higher prices than low-tech, undifferentiated products. Second, approximately half of world trade takes place in medium-high-tech and high-tech goods (about 30% and 20% respectively) and the share of medium-low-tech goods has increased most dramatically, from about 13% in 2000 to 19% in 2011. By contrast, the shares of low-tech and ICT goods in world exports have been falling continuously since 2000. As a consequence, countries specialising in low-tech goods are facing falling world demand for their products, with respect to those countries which specialise in more high-tech products.

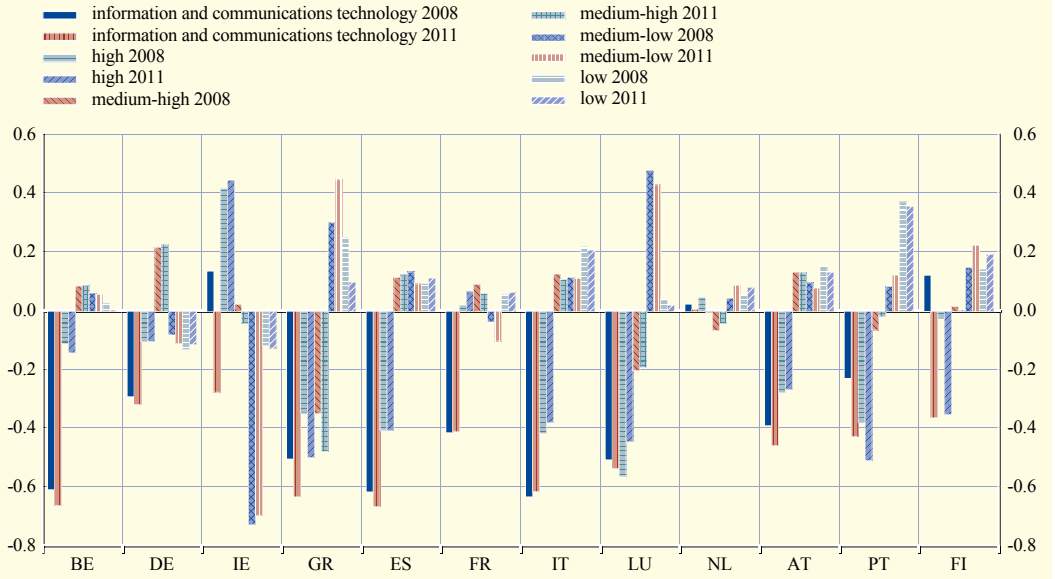
Specialisation patterns generally tend to change very slowly; nonetheless, important signs of improvement in the technological content of exports emerged in some countries between 2008 and 2011 (the last year for which data are available; see the chart below).

A standard measure of a country's level of export specialisation is the revealed comparative advantage (RCA) index. The RCA is calculated by dividing the share of a country's exports in a given industry by the share of that industry in world exports. After normalisation, the RCA is given as a figure between -1 and 1, where 1 indicates the maximum comparative advantage in an industry and 0 indicates that a country's specialisation does not deviate from the world's average. Increases in the comparative advantage in a class of goods typically correspond to improved export performance in that product class.

In line with the normal sluggish change in specialisation patterns, countries such as Germany and Italy have kept their specialisation almost unchanged, with Germany's comparative advantage being in medium-high technology goods (which include chemicals, machinery and motor vehicles) and Italy's in a wider range of goods (from low to medium-high technology goods). By contrast, Ireland has shifted further from ICT and more towards high-tech industries including pharmaceuticals. This can be seen in the light of a general tendency in the production of ICT goods – particularly of lower value added goods – to shift towards countries where the costs are lower. Greece has shifted very quickly from low-tech to medium-low-tech products,

1 For a comprehensive review of the role of price and non-price competitiveness in the rebalancing process, see Dieppe, A. et al., "Competitiveness and external imbalances within the euro area", *Occasional Paper Series*, No 139, ECB, Frankfurt am Main, December 2012.

Technological content specialisation of exports (2008-11)



Source: OECD STAN Bilateral Trade Database.
Notes: Normalised revealed comparative advantage. Positive numbers indicate a comparative advantage. The latest data for Spain refer to 2010.

which include plastics, basic metals, and ship building and repairing materials, thus aligning its export goods supply to better satisfy the increasing global demand for such goods. Portugal has also increased its specialisation in medium-low technology goods, but has not reduced its specialisation in low-tech products as drastically as Greece.

To summarise, this analysis indicates that the export specialisation of euro area countries which had accumulated current account deficits has been shifting in a direction which could potentially support further structural export expansion and contribute positively to the external adjustment process.

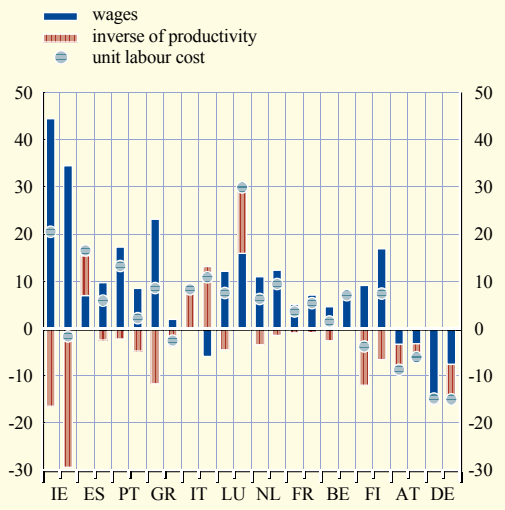
THE ADJUSTMENT OF RELATIVE COSTS AND PRICES

Since 2008, a competitiveness adjustment process has been underway in some euro area countries where labour costs had previously increased persistently and significantly to a rate above the euro area average. The contribution of nominal wage growth to the adjustment in ULC has been particularly strong in Greece (see Chart 5). In contrast, in Ireland, Spain and Portugal, the largest contribution to improved labour cost competitiveness has come from increased average productivity, largely reflecting labour shedding in low productivity sectors.[4] Nominal wage adjustment was instead limited and, to a large extent, driven by wage cuts in the public sector in these three countries. In Italy, cost competitiveness has not improved since 2008. Among the countries with a sizeable current account

4 See the box entitled "Rebalancing of competitiveness within the euro area and its implication for inflation", *Monthly Bulletin*, ECB, Frankfurt am Main, June 2012.

Chart 5 Cumulative unit labour cost, wage and productivity growth relative to the euro area

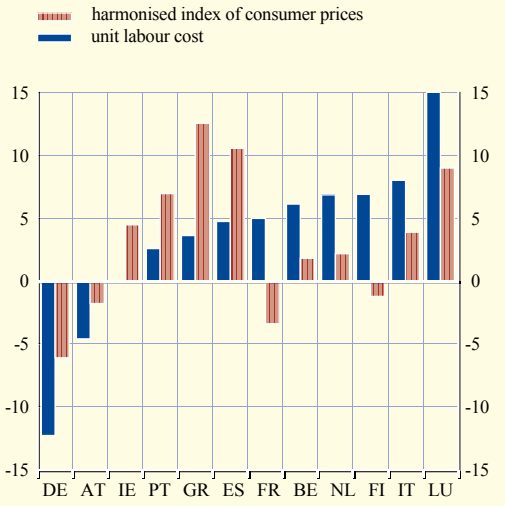
(in percentage points)



Source: European Commission.
Notes: Countries are listed in descending order according to cumulative unit labour cost growth in 1999-2007. For each country, the left-hand bar refers to the period 1999-2007 and the right-hand bar refers to the period 1999-2012.

Chart 6 Cumulative growth of HICP and unit labour cost relative to the euro area

(in percentage points)



Source: European Comission.
Notes: Countries are listed in ascending order according to cumulative unit labour cost growth in 1999-2012. The cumulative growth for Greece starts in 2001.

surplus prior to the crisis, Finland lost significant cost competitiveness in cumulative terms in 2008-12, in line with the significant deterioration in its current account position.

Although the adjustment of labour cost is underway, the corresponding relative price adjustment was relatively limited up until 2012 (see Chart 6), owing to indirect taxation and the resilience of profit margins[5]. Composition effects (e.g. only profitable firms have been able to survive the crisis) and capital deepening (via labour shedding) may explain a proportion of the increase in profit mark-ups. However, the resilience of relative domestic prices may also reflect a lack of competition in certain sectors of the economy, which allows firms to earn excessive economic rents, as they are not forced – by competition – to transfer any improvements in labour costs to final prices.

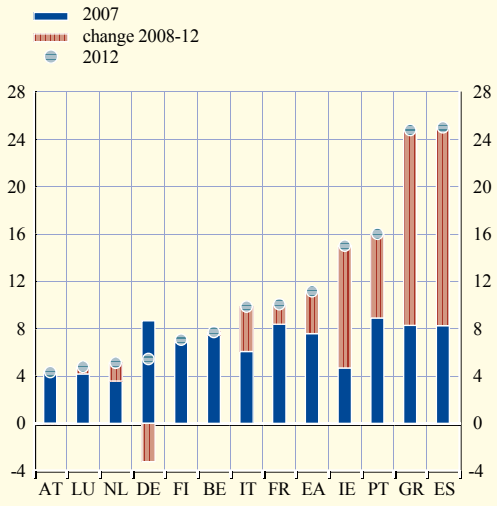
THE IMPACT OF ADJUSTMENT ON EMPLOYMENT

As can be seen in Chart 5, labour productivity has contributed, in large part, to the competitiveness adjustment observed over the past five years. The decline in employment has exceeded that in output, especially in Ireland, Spain and Portugal, and struck low-skilled workers hardest, leading to a labour market composition effect that may have underpinned the observed increase in the average measured productivity per worker.[6] As employment has fallen, unemployment (particularly that among young people) has risen; this has been most acute in the countries where the crisis has been most intense; for example, unemployment reached rates of around 25% in Greece and Spain in 2012 (see Chart 7).

5 For more details on the resilience of profit margins, see the article entitled "Inflation differentials in the euro area during the last decade", *Monthly Bulletin*, ECB, Frankfurt am Main, November 2012.
6 See Anderton, R. et al., "Euro area labour market and the crisis", *Occasional Paper Series*, No 138, ECB, Frankfurt am Main, October 2012.

Chart 7 Unemployment rate

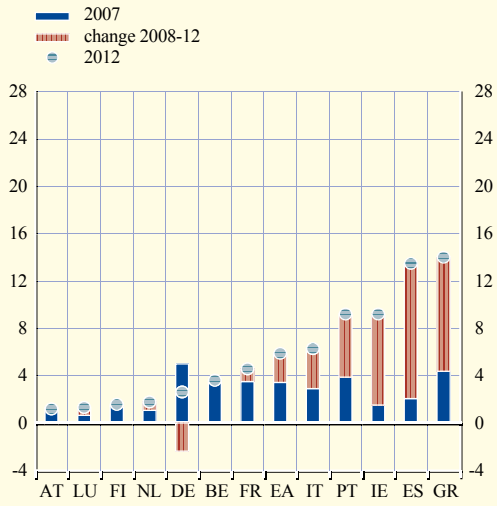
(as a percentage of the labour force)



Source: Labour Force Survey.
Note: Countries are listed in ascending order according to their unemployment rate.

Chart 8 Long-term unemployment rate

(as a percentage of the labour force)



Source: Labour Force Survey.
Notes: Long-term unemployment is defined as a period of unemployment of 12 months or more. Countries are listed in ascending order according to their long-term unemployment rate.

As long as unemployment rates remain high, particularly for the programme countries, further adjustments in labour costs are likely because of the associated downward pressure on compensation. Whether the measured improvement in productivity, and thus labour costs, can be sustained once those who are currently unemployed are reabsorbed into the labour market will depend largely on whether they can find sufficiently productive jobs. The continuous increase in the unemployment rate, particularly the notable increase in the long-term unemployment rate (see Chart 8), indicates some persisting rigidities in euro area labour markets (see Section 4).

3 REDUCING DEBT: HOW MUCH HAS BEEN ACHIEVED SO FAR?

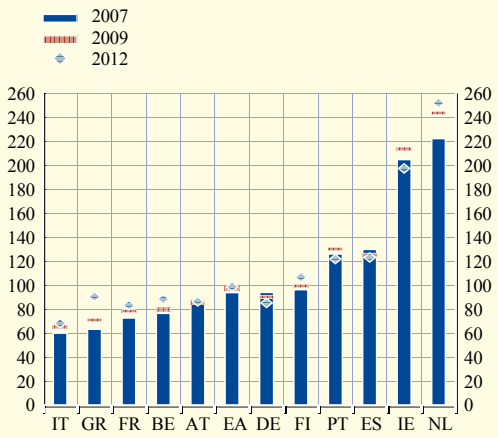
PRIVATE DEBT DELEVERAGING

Empirical studies have shown that high levels of debt make economies more vulnerable to adverse shocks, as they hinder the ability of households and firms to smooth consumption and investment spending decisions, and the ability of governments to cushion adverse shocks.[7] Following significant increases in the run-up to the crisis, household debt increased by only a relatively small amount across all euro area countries during the 2008-09 global financial crisis (see Chart 9). This was due to the fact that the household saving ratio increased sharply in most countries, as the crisis brought about high uncertainty as to the developments in income and employment. In contrast, the increase in NFC debt was significantly more pronounced than that in household debt between 2008 and 2009, partly reflecting the rise in the real

7 For a summary of the literature, see Sutherland, D. and Hoeller, P., "Debt and macroeconomic stability: an overview of the literature and some empirics", *Working Papers*, No 1006, OECD Economics Department, December 2012.

Chart 9 Household debt

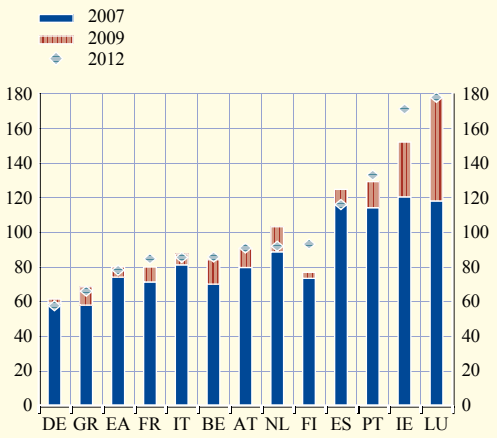
(as a percentage of disposable income)



Sources: ECB and Eurostat.
Notes: Countries are shown in ascending order according to household debt in 2012. The data are not consolidated. The latest data are for the third quarter of 2012. Data on disposable income for Luxembourg are not available.

Chart 10 Non-financial corporations' debt

(as a percentage of GDP)



Sources: ECB and Eurostat.
Notes: Countries are shown in ascending order according to the non-financial corporations' debt in 2012. Non-financial corporation debt is consolidated for domestic inter-sectoral loans. The latest data are for the third quarter of 2012. The data for Luxembourg are truncated – non-financial corporation debt fell from 259% of GDP in 2009 to 229% of GDP in the third quarter of 2012.

cost of financing and, in the case of Ireland, the ability of multinational corporations to increase borrowing from non-domestic firms (see Chart 10)[8].

After 2009, the general upward trend in private sector debt was brought to a halt as the deleveraging efforts of households and corporations resulted in some actual reductions in debt levels. However, owing to the sizeable fall in nominal GDP, private sector debt-to-GDP ratios are not yet visibly decreasing. The most pronounced household debt adjustment so far has taken place in Ireland, Spain and, to a lesser extent, Portugal. Ireland and Spain are also the two countries which experienced the largest run-up in house prices and household leverage prior to 2008. In Greece, the reduction in household debt has, so far, been more than compensated for by the sharp fall in nominal disposable income.

Among the stressed countries, corporate debt has fallen most prominently in Spain; it has broadly stabilised in Greece and Portugal, and continued to increase in Ireland – mainly owing to the increased activity of multinational corporations.

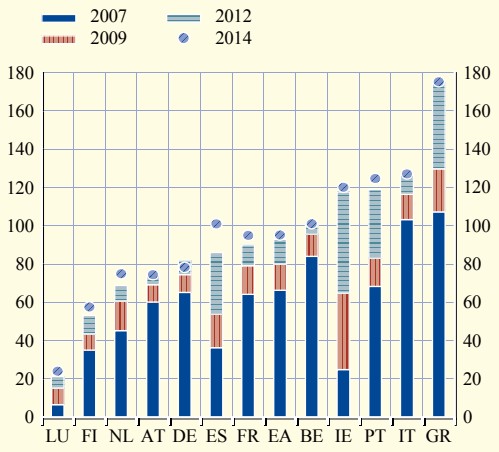
PUBLIC DEBT AND THE ROLE OF FISCAL POLICY IN THE ADJUSTMENT PROCESS

Many euro area countries have not only had to deal with an elevated level of private sector debt, but also with a high stock of public debt – the main focus of the sovereign debt crisis. Public sector debt levels continued to increase between 2009 and 2012, especially in Ireland, Greece, Portugal and Spain (see Chart 11); this partly reflected the fact that, where there were high levels of debt across

8 In Ireland, the large increase in NFCs' debt can be explained by the substantial and increasing activity of multinational corporations. While NFCs have significantly reduced borrowing from credit institutions through net loan repayments and loan write-downs, their borrowing from non-residents has increased substantially. See Central Bank of Ireland, *Quarterly Financial Accounts for Ireland Q2 2012*, November 2012.

Chart 11 Government debt

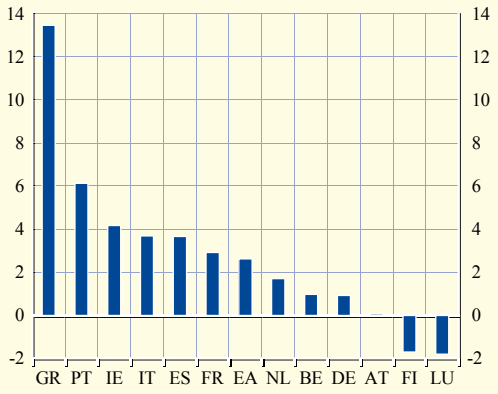
(as a percentage of GDP)



Source: European Commission.
Notes: Data for 2014 are forecasts from the European Commission. Countries are shown in ascending order according to government debt in 2012.

Chart 12 Cumulative change in the structural primary balance (2010-12)

(in percentage points)



Source: European Commission.
Notes: Structural primary balance is the fiscal primary balance adjusted for the business cycle and one-off factors. The year 2009, as opposed to 2007, is taken as the starting point, as the fiscal consolidation effort started two years after the financial crisis began. Countries are listed in descending order according to the cumulative change in the structural primary balance.

sectors, balance sheet problems in one sector migrated to others, particularly the government sector. Following the 2008-09 recession, government budgets were affected by a contraction in domestic demand, as boom-related revenues faded away and counter-cyclical automatic stabilisers intensified. In some countries, discretionary counter-cyclical measures were adopted, mainly in 2009, to compensate for declining private demand. Moreover, a number of euro area governments have provided financial support to the financial sector and, sometimes, even to parts of the non-financial (often state-owned) corporate sector.

From 2010 onwards, the fiscal stance of many euro area countries became significantly more restrictive in response to market participants' concerns over the sustainability of government finances, which was reflected in increasing sovereign debt risk premia. Therefore, the public sector adjustment followed private sector deleveraging with a lag of one-to-two years. Owing to strong economic headwinds, the magnitude of measures that were needed to improve the budgetary positions was much higher than the actual reductions in headline fiscal deficits, particularly in the stressed countries.

While some of the short-run reduction in growth was probably also a reflection of the adjustment measures, the latter were unavoidable in addressing the crisis, as the cost of financing would have increased even more dramatically in the absence of fiscal consolidation.[9] Since 2010 the increase in public debt ratios has been driven mainly by unfavourable output developments and rising interest costs. By contrast, structural primary balances

9 For a comprehensive review of the issue of fiscal sustainability, see the article entitled "Ensuring fiscal sustainability in the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, April 2011.

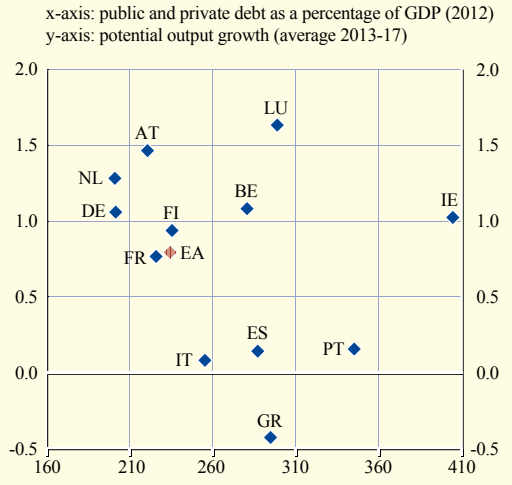
improved, especially in the countries which had seen the largest increase in government debt (see Chart 12). This was especially the case in Greece, Portugal, Ireland, Italy and Spain, as dictated by the need to ensure fiscal sustainability.[10] Government debt ratios are expected to level off significantly above pre-crisis levels in the most highly indebted countries in 2014 and then gradually decline thereafter, assuming that an appropriately prudent policy stance is maintained.

INDEBTEDNESS AND GROWTH

Empirical literature has increasingly shown that high levels of debt (both public and private) are detrimental to growth. Some of these studies derive implicit thresholds for debt ratios and find that, beyond a certain level of debt which is maintained for a number of years, there is evidence that GDP growth remains subdued. While there is significant uncertainty surrounding such threshold estimates, there appears to be some empirical evidence that, on average, levels of public or private sector debt above 90% of GDP impair an economy's growth.[11]

While high debt usually has a negative effect on growth, low growth can equally make it difficult for a country to reduce its indebtedness. Thus, some of the highly indebted euro area countries with low rates of potential output growth may find it particularly difficult to reduce their debt levels quickly, especially where financing costs are high owing to elevated sovereign risk premia. In particular, Greece, Italy, Portugal and Spain are characterised by very low expected growth potential while, at the same time, also having debt levels significantly above the euro area average in most cases (see Chart 13).

Chart 13 Public and private debt, and potential output growth



Sources: European Commission and ECB computations. IMF for potential output growth.

The fact that high debt levels depress growth implies that efforts to reduce debt should contribute to strengthening an economy's growth potential, at least in the medium-term to long-term.[12] Nevertheless, there may be tension in the short-term between the need to repair private and public sector balance sheets by increasing net savings, and the need to support growth. However, an adjustment is inevitable and, if adequately frontloaded, can be expected to reduce the overall costs in terms of growth and employment. The Japanese case shows that, if financial sector adjustments are delayed

10 It should be noted that measuring the consolidation effort by looking at the structural primary balance gives only an approximation of the underlying adjustment effort because of the difficulties involved in taking account of the impact of the cycle, particularly at a time of severe crisis.

11 For the relationship between public debt and growth, see Checherita-Westphal, C. and Rother, P., "The impact of high government debt on economic growth and its channels: An empirical investigation for the euro area", *European Economic Review*, Vol. 56, No 7, October 2012, pp. 1392-1405.
For the relationship between private debt and growth, see Cecchetti, S., Mohanty, M. and Zampolli, F., "The real effects of debt", *Working Papers*, No 352, Bank of International Settlements, September 2011.
For a summary, see the box entitled "Growth effects of high government debt", *Monthly Bulletin,* ECB, Frankfurt am Main, March 2013.

12 See Tang G. and Upper, C., "Debt reduction after crises", *Quarterly Review*, Bank of International Settlements, September 2010, pp. 25-38.

and structural deficiencies not sufficiently addressed, balance sheet adjustments can have a very protracted impact on GDP growth.[13]

4 THE ROLE OF STRUCTURAL REFORMS IN THE ADJUSTMENT PROCESS

The sovereign crisis has served as a catalyst for some countries to start a long-needed process of structural reform. Notable progress has been made in the EU/IMF programme countries, where a deep-seated and far-reaching reform agenda has been undertaken. There has been a surge in the implementation of politically sensitive reforms, to different extents in different countries, including those on public administration, health and pension systems, education, judicial systems, competition frameworks, industrial relations, labour markets, energy markets, network industries, services sectors and regulated professions. If well designed and fully implemented, these reforms support the overall adjustment process, thanks to their strong positive impact on price competitiveness, medium-term to long-term growth, employment and fiscal sustainability. Studies based on general equilibrium model simulations have confirmed that the impact of such reforms on growth in the euro area in the long-run is, indeed, positive and potentially substantial (see Box 2).[14] Nevertheless, the structural adjustment process is still at an early stage and there are numerous bottlenecks and challenges relating to fiscal, structural, and product and labour market reform still to be tackled.

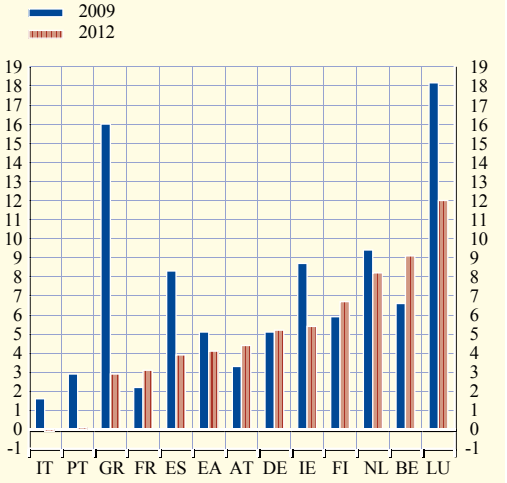
LONG-TERM FISCAL SUSTAINABILITY AND GROWTH-FRIENDLY FISCAL CONSOLIDATION

In an effort to minimise the potential negative short-term growth effects of the necessary fiscal consolidation, many euro area countries have implemented a number of growth-friendly consolidation measures aimed at improving longer-term fiscal sustainability. There has been, for example, significant progress made in reforming pension and early retirement schemes, particularly in the programme countries. Partly as a reflection of such reforms, there was an increase in labour market participation and the employment rates of older workers during the 2008-09 crisis, unlike in previous crises.[15]

Growth-friendly fiscal consolidation strategies have also included tax reforms to broaden the tax base, tackle tax evasion, simplify tax collection, reduce tax compliance costs (e.g. in Greece, Italy and Portugal), reform property taxation (e.g. in Greece, Ireland and Portugal) and increase the efficiency of the tax structure.

Chart 14 Total increase in age-related expenditure (for the period 2010-60) projected in 2009 and 2012

(as a percentage of GDP; in percentage points)



Source: The 2012 Ageing Report, European Commission.
Notes: The total age-related expenditure includes pensions, health and long-term care, education and unemployment benefits. The study does not include reforms implemented after December 2011, which would likely reduce the projected expenditures in Belgium, France, the Netherlands and Austria. Countries are listed in ascending order according to their total increase in age-related expenditure as projected in 2012.

13 See the article entitled "Comparing the recent financial crisis in the United States and the euro area with the experience of Japan in the 1990s", *Monthly Bulletin*, ECB, Frankfurt am Main, May 2012.
14 See Bayoumi, T., Laxton, D. and Pesenti, P., "Benefits and spillovers of greater competition in Europe: a macroeconomic assessment", *Discussion Paper*, No 4481, Centre for Economic Policy Research, July 2004.
15 See "Euro area labour markets and the crisis", *Structural Issues Report*, ECB, Frankfurt am Main, October 2012.

The depth of these reforms has, however, varied somewhat across countries and there has been less emphasis on growth-friendly tax reforms that shift the tax burden away from the labour force and reduce the impediments to work and investment.

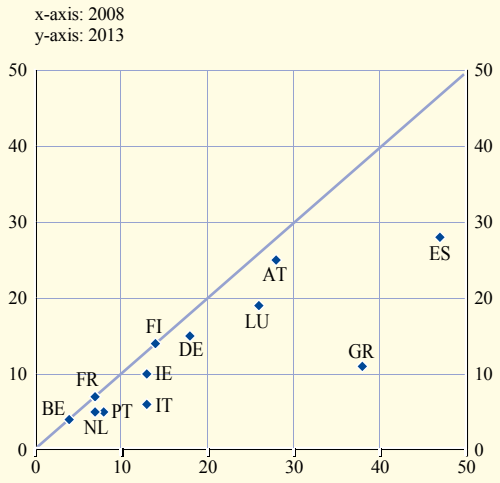
On the spending side, the focus has been on improving the efficiency of public expenditure and efforts have been made to reorganise and rationalise public services. In the most financially stressed countries, public procurement processes (e.g. in Greece, Italy and Portugal) and public health measures have been reformed in order to rationalise procurement, and strengthen and better monitor prescription rules (e.g. in Greece and Portugal). Furthermore, means-tested benefits have been introduced (e.g. in Greece); unemployment benefit rates or duration have been reduced (e.g. in Ireland and Portugal); and public remuneration scales and benefits have been redesigned (e.g. in Greece). As a result of pension and health care reforms, the increase in projected age-related spending has also drastically declined in some countries (see Chart 14).

COMPETITION AND PRODUCTIVITY-ENHANCING REFORMS

Reforming the euro area product markets and easing unduly restrictive regulations are important for better growth performance, particularly in those economies that have been characterised by relatively low productivity growth in the past. Many euro area countries have begun working towards implementing potentially far-reaching measures. Reforms implemented since 2008, particularly in the EU/IMF programme countries, include moves to streamline registration and licensing procedures; create one-stop shops to facilitate start-ups; strengthen the competition framework, including in the energy sector, services sector and network industries; and reduce barriers to competition in retail trade and professional services (see Charts 15 and 16). Privatisation

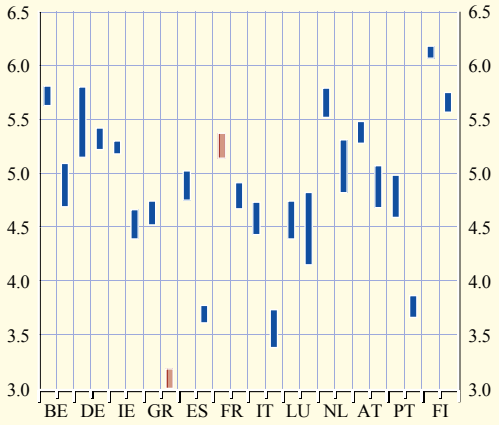
Chart 15 Time taken to start a business

(in number of days)



Source: Doing Business 2012, The International Bank for Reconstruction and Development/The World Bank.
Note: Countries to the right of the 45 degree line have reduced the number of days it takes to start a business.

Chart 16 Progress with higher education and training, and innovation



Sources: Global Competitiveness Report 2008-2009 and 2012-2013, World Economic Forum.
Notes: Units are scores on a scale of one to seven, where a higher number indicates more higher education and training, and innovation. Red bars indicate declining efficiency between 2008 and 2012; blue bars indicate an improvement. For each country, the left-hand bar refers to higher education and training and the right-hand bar refers to innovation.

programmes have been designed to raise public revenues and reorganise public-private partnerships (e.g. in Portugal), and some countries have been active in improving the design of their innovation policies (e.g. Ireland and Italy) and strengthening the links between universities and industry (e.g. Ireland). Less progress has been made towards removing barriers to foreign direct investment.[16] The evidence presented in Section 2, showing the resilience of profit margins and the slow downward adjustment of relative prices in the stressed euro area countries up until 2012, may be indicative of a possible lack of competition in certain sectors of the economy.

EMPLOYMENT-ENHANCING REFORMS

As a result of the 2008-09 recession, there were almost 4 million fewer people in employment in the euro area. As an immediate response to the recession, some countries tried to improve the social safety net for workers who were losing their jobs by increasing the generosity and coverage of unemployment benefits. Some of these temporary measures were subsequently phased out. At the same time, resources for job assistance and training programmes were increased. Most effective in mitigating the impact of the crisis on employment, and undertaken in two thirds of euro area countries, were measures encouraging flexible working time arrangements. Such policies tend to lead to labour hoarding and a greater attachment of workers to the labour market, although they risk hindering the reallocation of labour from declining to growing sectors if subsidised by the public sector.

Relatively limited wage adjustment was initially observed in several countries, despite the severity of the recession; this was consistent with the presence of downward wage rigidity in the euro area.[17] More recently, labour market reforms to deliver greater wage and employment flexibility have begun to be implemented. The ongoing labour market reforms in countries such as Greece, Ireland, Portugal, Spain and Italy include some important measures to increase the flexibility of wage bargaining structures and working time arrangements, and reduce excessive employment protection; they constitute first steps towards improving labour market performance and competitiveness in these countries, and in the euro area as a whole. There are also signs that downward wage flexibility has been increasing, particularly in the programme countries.

16 See "Economic Policy Reforms 2012: Going for growth", OECD, February 2012.
17 See Du Caju P., Gautier E., Momferatou D. and Ward-Warmedinger M., "Institutional features of wage bargaining in 23 European countries, the US and Japan", *Ekonomia*, Vol 12, No 2, 2009, pp. 57-108.

Box 2

MODEL SIMULATIONS OF THE SHORT-TERM AND MEDIUM-TERM IMPACT OF STRUCTURAL REFORMS

This box illustrates model simulations of the impact of structural reforms on a small euro area economy. In line with most of the literature, these reforms are modelled as a reduction in the level of wage and price mark-ups, reflecting increased competition and efficiency in product and labour markets. The EAGLE model, a large-scale new-Keynesian dynamic general equilibrium model of the euro area and the global economy, is used to simulate the impact.[1]

1 Gomes S., Jacquinot, P. and Pisani, M., "The EAGLE: A model for policy analysis of macroeconomic interdependence in the euro area", *Working Paper Series*, No 1195, ECB, Frankfurt am Main, May 2010; and Gomes S., Jacquinot, P., Mohr, M. and Pisani, M., "Structural reforms and macroeconomic performance in the euro area countries: A model-based assessment", *Working Paper Series*, No 1323, ECB, Frankfurt am Main, April 2011.

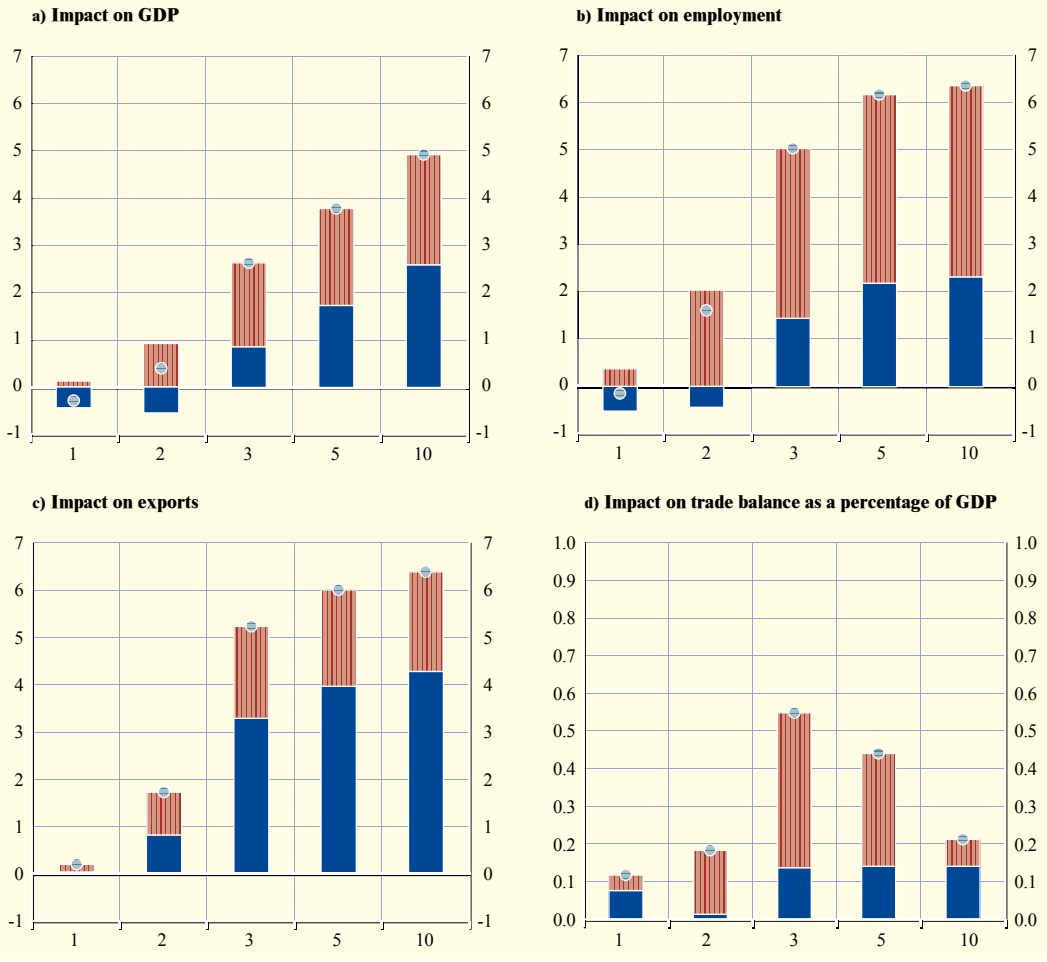
The model features monopolistic competition in product and labour markets. There is a mark-up between the marginal cost and output prices, and between the marginal rate of substitution between consumption and leisure, and wages. A reduction of both mark-ups can be obtained by implementing labour and product market reforms which increase flexibility in wage setting and improve responsiveness to productivity and labour market developments, as well as boost competition in product markets.

Regarding labour market reforms, the simulation entails a wage mark-up reduction of ten percentage points over a period of five years. The size of the reduction reflects the cumulative gross wage differential between Germany and the rest of the euro area countries between

The macroeconomic impact of a reduction in wage and price mark-ups

x-axis: year
y-axis: percentage change (charts a — c); percentage points (chart d)

price mark-up
wage mark-up
price and wage mark-up



Source: EAGLE.

2005 and 2010. In order to obtain a comparable set of results for product market reforms, the price mark-up is also reduced by ten percentage points over five years, by means of a gradual adjustment mechanism.

The simulation results are shown in the chart in this box. Focusing on the wage mark-up reduction, the simulation indicates that, in the first year, the reform – which is gradually implemented – has a negligible but positive impact on GDP, employment and the trade balance. This is because a short-term reduction in real wages boosts employment and the number of hours worked, given that firms have a stronger incentive to increase labour input; competitiveness also improves immediately, thanks to reduced labour costs. Therefore, in the first year, the competitiveness and employment channels – which lead to an increase in exports and labour supply – compensate for the weakened income channel – which instead leads to a reduction in private consumption. From the second year onwards, the impact of the declining wage mark-up on GDP and employment increases, with sizeable gains being felt from the third year onwards.

Turning to the price mark-up reduction, which is assumed to take place both in the tradable and in the non-tradable sectors, the simulation shows that, in the very short term, the impact on GDP is marginally negative. This is due to the fact that a cut in the price mark-up immediately leads to higher real wages, which trigger a reduction in employment in the short run. Therefore the competitiveness and the employment channels – which lead to a decrease in exports and labour supply – initially override the income channel – which leads to an increase in private consumption. This negative impact is reversed after two years, thanks to strong competitiveness gains arising from falling prices, the positive effects of which are passed on to wages and which, in turn, lead to a reduction in relative prices.

According to the model, the impact on exports is larger in the case of product market reform than in the case of labour market reform; however, the impetus given to investment leads to increased imports and, therefore, the overall impact on the trade balance is not sizeable for either type of reform. In view of this, structural reforms should not necessarily be counted upon to contribute to the adjustment of external imbalances. The primary objective should be to increase the capacity of economies to adjust to various shocks, stimulate employment and raise growth potential.

While the quantitative impact clearly depends on calibrated elasticities, the presented findings are in line with related recent findings in the literature.[2] All in all, the two simulations show that labour and product market reforms have a positive impact on GDP and employment. The simulations also show that the impact on GDP may be mildly negative in the first year but, over time, the impact is very positive. Given that confidence effects are not taken into consideration, implementing reforms may also generally boost confidence and lead to higher short-run gains than those emerging from the model simulations.

2 Vogel, L., "Structural reforms and external rebalancing in the euro area: a model-based analysis", *Economic Paper Series*, No 443, European Economy, July 2011; and Cacciatore, M., Duval, R. and Fiori, G., "Short-Term Gain or Pain? A DSGE Model-Based Analysis of the Short-Term Effects of Structural Reforms in Labour and Product Markets", *Working Papers*, No 948, OECD Economics Department, March 2012.

5 CONCLUSIONS

In this article, the developments in macroeconomic and structural indicators over the past five years have been examined. The article has shown a number of ways in which the adjustment of macroeconomic imbalances has been advancing. In particular, countries which had accumulated

sizeable competitiveness losses have significantly improved their current account positions; this has been supported by adjustments in relative labour costs, and gains in export market shares. It appears that the improvement is both cyclical and structural, and can thus be expected to be, in part, sustainable.

Improvements on the structural side are, by and large, encouraging. Further efforts are needed to complete the adjustment process, especially with regard to reducing high levels of debt, and to lay the foundations for robust and sustainable growth in the future. Measures also need to be taken to ensure a reduction in the high rates of unemployment, particularly youth unemployment. Reforms to reduce structural rigidities in labour markets would provide a cost-effective tool to this end. Furthermore, product market reforms, which, to date, may have been held back in several countries, are particularly important for enhancing competition and allowing flexible price adjustment.

While efforts are needed most in the countries with the largest remaining imbalances, reform is required in all euro area countries, albeit to varying degrees and in different areas. In the absence of a fully fledged financial assistance programme and the associated conditionality, the adjustment process is to be supported by a strengthened economic governance framework at the EU level, most notably the macroeconomic imbalance procedure. The effective implementation of this framework – at the EU and the national levels – is essential for ensuring an orderly unwinding of existing imbalances and preventing the renewed emergence of such imbalances in the future.[18]

18 See the box entitled "The 2012 macroeconomic imbalance procedure", *Monthly Bulletin*, ECB, Frankfurt am Main, June 2012.