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ANNUAL REPORT

The Portuguese Economy

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Introductory Note • In 2014, the concluding year of the Economic and Financial Assistance Programme for Portugal, the Annual Report – The Portuguese Economy provides a medium term analysis of the Portuguese economy and of the ongoing adjustment process, with an eminently structural nature.

The analysis of the Portuguese economy in 2013 was published in the April 2014 issue of the economic Bulletin.

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Photograph of the cover "Curtains" 2012 • Art intervention at the former church of S. Julião • Fernanda Fragateiro • Hand painted on silk • Various sizes

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PART I

Overview

Recent evolution of the Portuguese economy

The labour market in Portugal

The Portuguese economy's deleveraging process: facts and challenges

Recent institutional reforms in the European Union

Overview

The recent conclusion of the Economic and Financial Assistance Programme, agreed in May 2011 between the Portuguese authorities and the European Commission, European Central Bank and International Monetary Fund was a milestone in the evolution of the Portuguese economy. During the period of the Programme's execution remarkable progress was achieved in correcting a series of macroeconomic imbalances affecting the Portuguese economy and in implementing structural measures in multiple areas. Notwithstanding such progress, the return of the Portuguese economy to regular market financing conditions must be based on sustained GDP growth. This is also necessary for the reduction of the high levels of unemployment prevailing in the economy, which is one of the most damaging dimensions of the adjustment process.

The evolution of economic activity is the result of a complex interaction between trend and cyclical factors, being affected by the superimposition of shocks with different origins and durations. The international economic and financial crisis and the ensuing sovereign debt crisis in the euro area rendered the correction of the Portuguese macroeconomic imbalances urgent. Many of these imbalances were rooted in structural problems whose solution was successively delayed over the course of the last few decades. An analysis of the Portuguese economy's main structural aspects is provided in the first part of this Annual Report, whereas the analysis of different facets of the adjustment process, under the Economic and Financial Assistance Programme, is provided in the second part (see essay "The ongoing adjustment process of the Portuguese Economy").

The trend evolution of GDP is contingent upon the endowment of productive factors, capital and labour, as well as on their characteristics, in interaction with technological and institutional aspects. As regards labour, the Portuguese economy has been characterised by marked demographic developments: a fall in birth rates and an increase in life expectancy – with consequent population ageing – and changes in migration flows. Although, in general, demographic trends are strongly associated with the state of development of an economy, several medium term dynamics, such as the Portuguese economy's adjustment process, may also produce relevant effects. This is clearly exemplified by the recent behaviour of migration flows in the Portuguese economy, with the simultaneous departure of immigrants which had arrived over the last two decades and the emigration of Portuguese nationals, in a context of high unemployment. Accordingly, the quantity of labour has, over the last few years, contributed negatively to the growth of the Portuguese economy (see text "The labour market in Portugal"). Frequent reference is made to the serious limitations in the quality of this productive factor, approximated by average educational attainment. In fact, the average level of qualification of the labour force is much lower than in most euro area countries. Nevertheless, the progress achieved in terms of improving qualifications since the end of the 1990s has been remarkable.

As regards capital, the Portuguese economy also suffers from important weaknesses. In comparison to most advanced economies, the capital stock per worker in Portugal is very low and globally consistent with the productivity gap *vis-à-vis* those economies. This has important implications in terms of growth. Countries with lower capital ratios per worker tend to be penalised when technological progress is concentrated in sectors with a more intensive use of this productive factor. The estimated reduction of the stock of machinery and equipment in the Portuguese economy, related to limited gross fixed capital formation, hampers the capacity to incorporate new technologies in the productive process.

The prevalence of high corporate indebtedness is recognised as a factor of vulnerability in the Portuguese economy, given that it limits investment prospects. In the context of participation in the euro area, leveraging was fuelled by low, stable interest rates, which gave an opportunity to increase the trend growth

of the Portuguese economy. This opportunity, however, failed to materialise as the rate of return on investments was limited. Excessive corporate leveraging results from investment decisions based on incorrect risk assessments and unfounded expectations of higher income levels. Given the experience of the last few decades, the efficient use of capital available in the Portuguese economy and the reinforcement of firms' equity should be a priority (see text "The Portuguese economy's deleveraging process: facts and challenges"). It should be noted that these problems are not exclusive to the Portuguese economy and there are issues regarding the persistence of excessive leveraging in the international financial markets, which has proved to be harmful in the recent past.

The adequate functioning of markets is a *sine qua non* for the right allocation of resources in the economy. Incentives transmitted to economic agents by the pricing system are fundamental and must be complemented by the intervention of the political and regulatory authorities, when there are market failures that can be attenuated or corrected. The Portuguese economy has made important progress in terms of the functioning of markets since the end of the 1990s. However, several problems persist, including the segmentation of the labour market and the existence of excessive rents in several regulated sectors, which call for further structural reforms. Microeconomic analyses appear to indicate that, over the last few years, there was an increase in the weight of companies with higher labour productivity in the economy as a whole. Recent export growth, partly based on relatively young firms, also appears to be a promising development. The evolution of export capacity will be crucial to the success of the Portuguese economy's adjustment process and will require an economic policy focused on promoting competitiveness and the growth of the most productive firms, particularly in the tradables sector.

The Portuguese economy's evolution is heavily conditioned by the framework of the economic and financial policies of the European Union (EU), especially under the Economic and Monetary Union (EMU). The recent changes in the European institutional framework, comprising the "Fiscal Compact", the creation of the Banking Union and the European Stability Mechanism, have been designed to strengthen the sustainability of the public finances and create risk-sharing mechanisms. The efficacy of these changes in preventing and solving crises is contingent upon the Member States' appropriation of a series of good practices in the conduct of domestic policies (see text "Recent institutional reforms in the European Union").

The correction of accumulated imbalances and the restructuring of sectors and firms are challenges that are shared by many euro area economies, but are particularly urgent in Portugal. The maintenance of these problems has delayed real convergence with the EU and has contributed to the deterioration of the income conditions of segments in the Portuguese society. In a context of low trend productivity, private savings' levels tend to be lower than required to fund investment decisions. Therefore, a framework in which different domestic institutional sectors simultaneously require financing inevitably results in external deficits. In turn, external funding crises imply abrupt contractions of expenditure, especially in terms of investment decisions, which limits future productivity gains.

Following the resolution of external funding crises, economies frequently experience a growth in demand, including in goods and services with a higher imported content, often as a means of meeting investment needs created during the adjustment period. However, in the absence of a correct allocation of productive factors, the demand recovery fuels new external imbalances and adjustment needs. Avoiding these cycles requires the existence of an institutional environment which favours the allocation of capital and labour to activities which generate higher value added over the medium term. The quality of institutions is also decisive in attracting foreign direct investment and thus accelerating the growth process.

Recent evolution of the Portuguese economy

The recent evolution of the Portuguese economy is part of a scenario of reduced trend growth and correction of macroeconomic imbalances. On the one hand, the existence of a series of difficulties associated with the functioning of several markets and the accumulation and use of productive factors have prevented convergence to the average *per capita* income levels of the European Union (EU). On the other, the undelayable process of correction of the macroeconomic imbalances existing in the Portuguese economy, visible in the need to reduce the high indebtedness levels of the various institutional sectors and accelerated by the sovereign debt crisis in the euro area, has also limited the evolution of activity. The economic and social implications of the macroeconomic imbalances' correction process have been significant, albeit mitigated in comparison to a situation of sudden and disorderly adjustment. In any event, this process is a sine qua non for the increase of the Portuguese economy's trend growth over the next few years.

Economic performance is the result of a complex interaction between trend and cyclical aspects. The trend evolution of economic activity is not only contingent upon productive factors and their characteristics but also upon technological and institutional aspects. The latter factors include rules governing the interaction between economic agents and their incentive structures, namely in terms of the functioning of the labour and product markets, as well as in terms of long term orientation of macroeconomic policies. The adequate functioning of labour and product markets is a determinant for the correct allocation of resources in the economy in a framework of sectoral restructuring and heterogeneity of the universe of firms. The Portuguese economy's trend evolution should, accordingly, be analysed in line with a vast series of factors, with several signs pointing to the materialisation of a slow structural transformation process beginning prior to the international economic and financial crisis.

In such a context, the remainder of this essay begins with an analysis of Portuguese economy's convergence to the EU average over the last three decades and proceeds with a sequential analysis of the elements that contribute to GDP developments in the perspective of the classical decomposition of growth factors. This set of elements includes labour and capital accumulation and total factor productivity, to which contribute the functioning of markets and the institutional framework, namely as regards the stability of the macroeconomic framework.

Convergence to average European income levels has still not been resumed

The Portuguese GDP growth rate in 2013 was -1.4 per cent, following reductions of 1.3 and 3.2 per cent in 2011 and 2012, respectively. In 2013 Portuguese economic growth continued to be one of the lowest in the EU, with a reduction of *per capita* GDP corrected for purchasing power parities as a percentage of the UE15 of 0.4 percentage points, following falls of around 2 pp in 2011 and 2012 (Chart 1). In 2013, this convergence indicator was at a level of around 68 per cent of the EU's average *per capita* GDP, close to the level recorded at the inception of the Economic and Monetary Union.

In the years following accession to the European Economic Community, Portugal closed in quickly on the levels of *per capita* income of the other Member States. The real convergence process, however, slowed during the 1990s and has been interrupted since 2000. Within the set of industrialised countries with lower *per capita* income levels, Portugal is one of those with a low average growth rate in the period 1995-2013 (Chart 2). This evolution of the Portuguese economy is rooted in structural problems that limited productivity growth and the capacity to react to adverse shocks, accompanied by the accumulation of

macroeconomic imbalances (see "The adjustment process in progress in the Portuguese economy", of this Report).

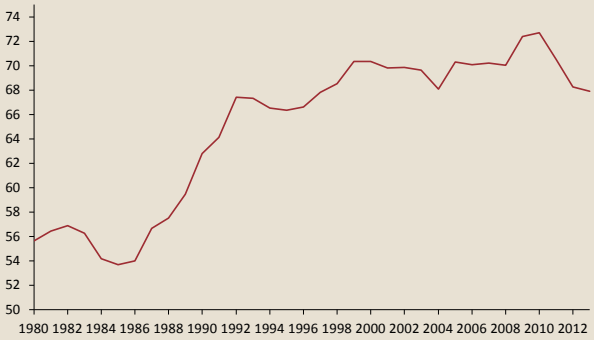
The correction of accumulated imbalances and sectoral restructuring of firms are challenges which are common to many euro area economies. The failure to solve these problems acts as a brake on convergence processes, *i.e.* the evolution of national economies in monetary areas may have features similar to the inter-regional divergence of economic activity within a country. In this context, a sharp deterioration of the Portuguese economy may have a lasting negative impact on growth potential. Such an impact essentially comprises a continuous reduction of the level of capital stock, with the consequent difficulty in incorporating new technologies in the productive process, depreciation of the human capital of unemployed workers and emigration of young people, many of whom highly qualified.

Both the accumulation of productive factors and their total productivity have contributed to the low growth of *per capita* GDP over the last few years

Albeit conditioned by the emergency circumstances in which it was implemented, the Economic and Financial Assistance Programme aimed to contribute to the resolution of several structural problems and to correct the existing of macroeconomic imbalances in the Portuguese economy.

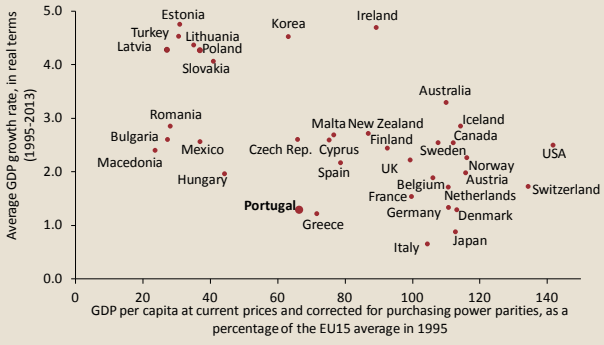
There was a 0.4 per cent reduction of *per capita* GDP in 2013, following falls of 1.4 and 2.8 per cent in 2011 and 2012, respectively. In average annual terms in the period 2011-2013, the labour factor contributed negatively

Chart 1 • GDP *per capita* at current prices and corrected for purchasing power parities | Portugal as a percentage of EU 15



Source: European Commission (AMECO).
Note: EU15 refers to the 15 initial Member-States of the European Union.

Chart 2 • Level and growth rate of GDP | Per cent



Source: European Commission (AMECO).
Note: EU15 refers to the 15 initial Member-States of the European Union.

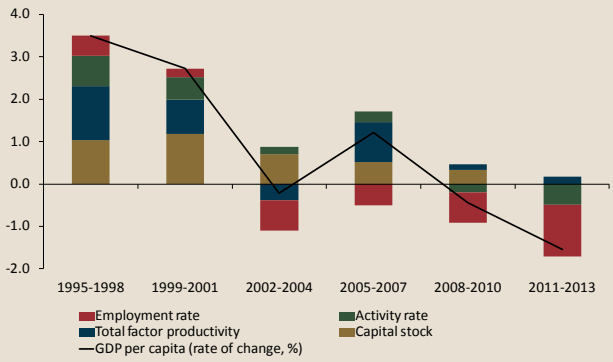
to this evolution (1.7 percentage points), divided between a fall in the activity rate (0.5 pp) and, particularly, the employment rate (1.2 pp) (Chart 3). The contribution of the capital factor to the growth of *per capita* GDP, as in the preceding two years, was virtually nil in 2013. Lastly, the contribution of total factor productivity to the evolution of *per capita* GDP, obtained as a residual in the breakdown of growth, was also very small in the period 2011-2013 (0.2 pp).

An analysis of the accumulated evolution of *per capita* GDP over the last two decades is indicative of major structural fragilities in the Portuguese economy (Chart 4). Following the turn of the century, real *per capita* GDP did not grow in a sustained way. The contribution of employment, which was particularly affected by the occurrence of major job destruction over the last few years, accompanied this pattern. In turn, capital stock maintained an accumulation dynamic that lasted up to the inception of the Economic and Financial Assistance Programme, reverting latter with reductions in investment flows, already visible since the beginning of the euro area. In addition, the contribution of total factor productivity has always been limited and recorded a slowdown, even prior to 2000.

A comparison of total factor productivity growth in euro area countries is indicative of an unfavourable situation for the Portuguese economy (Chart 5). Notwithstanding the fact that the accumulated growth of total factor productivity in the period 1995-2013 was slightly higher than the euro area average, it was much lower than recorded in a large number of countries.

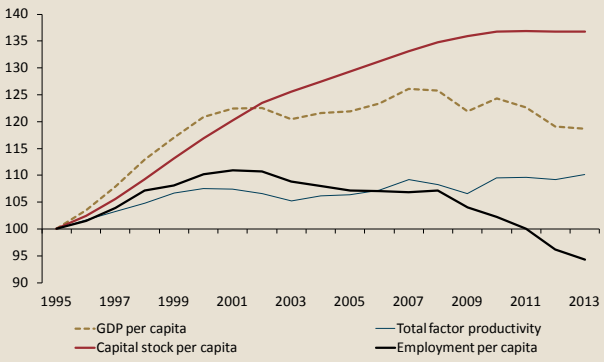
This approach, based on growth factors is useful to describe the structural evolution of the economy, but has several limitations. Firstly this methodological approach does not establish causality relationships between growth determinants. In addition, the adequate identification of the quantity of productive factors, the choice of the functional form for the production function and the identification of its parameters are essential for assessing the contribution to growth resulting from total factor productivity. This element is determined residually, includes all measurement errors in the quantity of productive factors, does not control for their quality and is influenced by a broad range of other elements that are difficult to measure.

Chart 3 • Breakdown of GDP *per capita* | Percentage points



Sources: *INE* and Banco de Portugal.
Note: The methodology bases on a Cobb-Douglas production function.

Chart 4 • Evolution of contributions to real change in GDP *per capita* | Index 1995=100



Sources: *INE* and Banco de Portugal.
Note: The methodology bases on a Cobb-Douglas production function.

Negative demographic evolution and unfavourable situation in the labour market

According to the *INE*'s Unemployment Survey, total population was down 1.0 per cent in 2013 (Chart 6). This result is highly significant, as demographic phenomena have an intrinsically persistent nature. The population dynamic has been fuelled by the intensification of emigration flows and, to a lesser extent, by the trend reduction in fertility rates which, over the last few years, have remained at very low levels.

Demographic evolution, especially in terms of emigration, has an important impact on the evolution of the working population. The last few years have witnessed a reversal of the migratory balances in the Portuguese economy, with the departure of immigrants and emigration of nationals. The year 2013 saw a highly significant reduction of the working population, which was down 1.9 per cent, following falls of 0.2 and 0.9 per cent in 2011 and 2012, respectively. This accentuates the negative trend noted over the last few years, which is very significant in historical terms (see essay on: "The labour market in Portugal", of this Report). Another important demographic characteristic is the increased average life expectancy and consequent ageing of the population. This process, which is common to various European countries, has led to a progressive increase in the retirement age, interacting with the evolution of the working population and pension costs.

The major net destruction of jobs is a marked aspect of the adjustment process in progress in the Portuguese economy, making the level of this variable, at the end of 2013, similar to the mid 1990s. In consequence, the average unemployment rate remained at a very high level (16.3 per cent), up 0.6 pp over the preceding year (Chart 7). This hike in the unemployment rate was more moderate than recorded in 2011 and 2012 (hikes of 0.9 and 2.9 pp, respectively). A contributory factor was the positive evolution of intra-annual economic activity.

The recent evolution of the unemployment rate is part of an increasing trend visible since 2000 and one of the more serious elements in the evolution of the Portuguese economy. The estimated structural unemployment rate currently stands at around 11 per cent and has grown continuously since 1995. However, as in the calculation of potential GDP, the evolution of structural unemployment derives from the application of statistical methods and different formulations for the production function, mostly reflecting the structural characteristics of the economy, as well as actual cyclical

Chart 5 • Total factor productivity in the euro area | Accumulated growth rate, in percentage

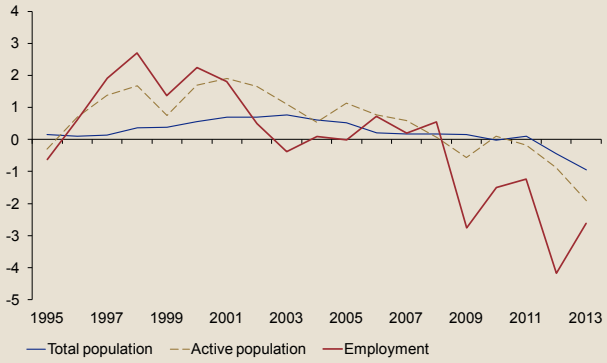
Source: European Commission (AMECO)

developments. Accordingly, this type of indicator does not allow for conclusions on the future evolution of the economy, especially in a context of structural transformation and economic adjustment.

The difficulty in reabsorbing the unemployment existing in the Portuguese economy is also shown by the sharp rise in long term unemployment (more than 12 months) since 1995, to around 60 per cent in 2013 (Chart 8). The reabsorbing of structural unemployment constitutes an important challenge in the Portuguese economy. This process must be based on the correction of the distortions in the labour market and the resumption of the convergence process with the EU, involving sectoral restructuring and gearing Portuguese companies towards new technologies and products, as well as efficiency improvements in existing processes and products. There is, however, a possibility that the restructuring process will be centred on less labour intensive sectors or technologies, laying the groundwork for the persistence of this type of unemployment. Long term unemployment involves highly relevant personal and social costs, induces the depreciation of professional skills, poverty and social exclusion, which reduces society's capacity to undertake structural transformations and adopt correct economic policies. In fact, in a context of marked income distribution asymmetries, the capacity to generate consensus in society tends to diminish. The year 2013 witnessed an increase in the number of individuals benefiting from unemployment subsidies. The proportion of unemployed benefiting from this insurance mechanism was close to 35 per cent, one of the lowest figures of the last decade, albeit slightly higher than in 2011 and 2012 (Chart 9).

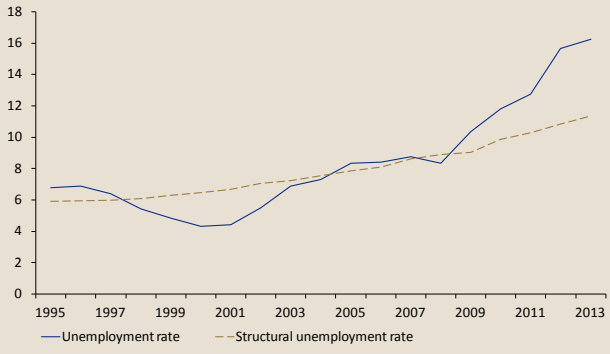
An important element in the assessment of the labour's contribution to growth resides in the level of existing qualifications. This explanation has been repeatedly indicated as a cause of the low productivity of the Portuguese economy. The Portuguese workforce's average qualification levels are much lower than in other euro area countries. In 2013, only 40 per cent of the Portuguese working population had secondary or higher educational qualifications as opposed

Chart 6 • Total population, active population and employment | Year-on-year growth rate



Sources: *INE* and Banco de Portugal.
Note: Employment and active population corrected for the series break in 2011.

Chart 7 • Observed and structural unemployment rate | Per cent



Sources: *INE* and Banco de Portugal.
Notes: Unemployment rate corrected for the series break in 2011. Structural unemployment results from a unobserved components method (UCM) and the Kalman filter, as explained in "The Portuguese Economy in the Context of Economic, Financial and Monetary Integration", Economics and Research Department, Banco de Portugal, Chapter 4.

to a euro area average of around 70 per cent (Chart 10). However, the progress recorded in Portugal since the end of the 1990s has been remarkable. The proportion of the workforce with secondary or higher educational qualifications rose by almost 25 pp between 1998 and 2013 (Chart 11). The maintenance of this trend should, in the future, permit a resumption of the convergence process with the EU, in a scenario where higher qualifications translate into an effective quality of the workforce, measured by its capacity to adopt new productive technologies, to move between activities as a result of sectoral shocks and to contribute to the innovation process.

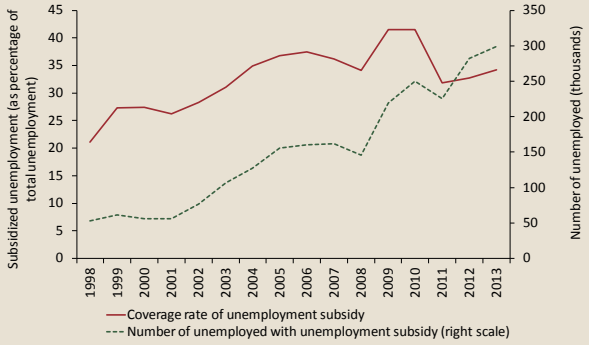
Low accumulation of capital with changes in investment patterns

The accumulation of capital per worker is one of the classic trend growth mechanisms in economic development models. At times of deterioration of the cyclical position, the rate of use of installed capital is reduced. In manufacturing, this rate stood around 74 per cent in 2013, lower than recorded in the preceding two years and much lower than the average for the period 1995-2007 (around 80 per cent), which also reflects the economy's structural conditions (Chart 12).

Chart 8 • Unemployment and long-term unemployment

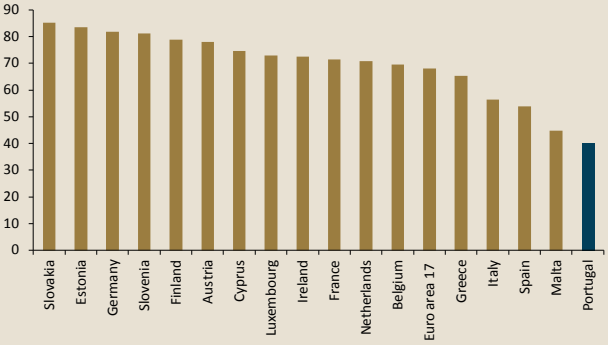
Sources: *INE* and Banco de Portugal.
Notes: Long-term unemployment includes those that are unemployed and look for a job for 12 or more months. Unemployment rate corrected for the series break in 2011.

Chart 9 • Unemployment subsidy coverage rate



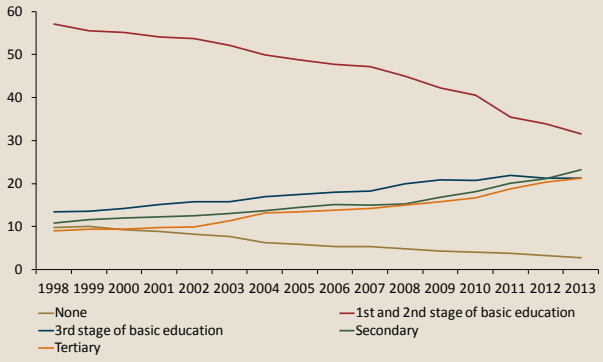
Source: *INE* (Employment Survey).

Chart 10 • Population with upper secondary or tertiary education attainment in total working age population in 2013 | Per cent



Source: Eurostat.

Chart 11 • Break-down of employment by educational attainment level | Per cent



Source: *INE* (Employment Survey).

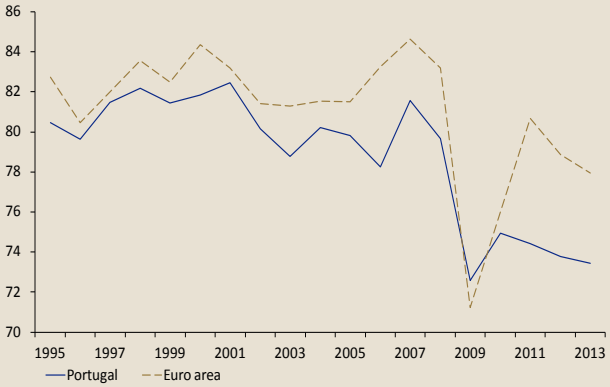
The level of capital stock per worker in Portugal is very low, especially in international terms. Even in the context of a sharp reduction in the level of employment, as in 2013, this ratio is around half the average for euro area countries as a whole (Chart 13). This result has important implications on growth, even considering the imprecise measurement of capital stock in an economy. In a context in which technological progress is biased towards the usage of capital, which is normally also accompanied by greater human capital needs, countries with lower capital per worker ratios, such as Portugal, tend to be penalised in terms of productivity and growth.

Although there are limitations in terms of classification methods, an analysis of the recent dynamics of real investment flows in the Portuguese economy by type of investment and by institutional sector provides useful indications of the composition of the accumulated capital stock over the last few years. In fact, the progressive change in the structure of investment noted in the Portuguese economy is associated with the sectoral restructuring process beginning in the period preceding the crisis.

The increase in investment in construction between 1995 and 2001 has been followed ever since by a continuous reduction. In 2013, the level of investment in construction was around 60 per cent of 1995 values (Chart 14). In nominal terms, investment in construction represented on average around 60 per cent of the total in the period 1995-2013, with a slight reduction over the last few years. Investment in transport materiel accounts for a much smaller proportion (around 9 per cent in nominal terms for the post 1995 period). In real terms, the qualitative evolution of this type of investment has been similar to that of construction, with the exception of an important growth in the period 2005-2007. Investment in machinery and equipment increased almost continuously from 1995 to 2008, only suffering from a highly significant decline in the following years. In 2013, the growth rate of this type of investment returned to positive territory (2.5 per cent), to a level of around 75 per cent above that recorded in 1995. In nominal terms, the weight of investment in machinery totalled a quarter of total investment in the economy, in 2013.

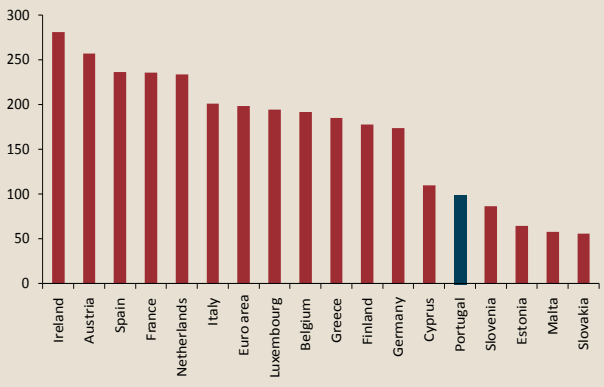
The evolution of the investment pattern by institutional sector also shows several marked aspects of the adjustment process, with a potential impact on the evolution of productivity. Household investment is currently at a level of around half the amount recorded in

Chart 12 • Capacity utilization rate in manufacturing sector in Portugal and in the euro area | Per cent



Source: European Commission.

Chart 13 • Net capital stock per person employed | Thousand euros, 2005 prices



Source: European Commission (AMECO).

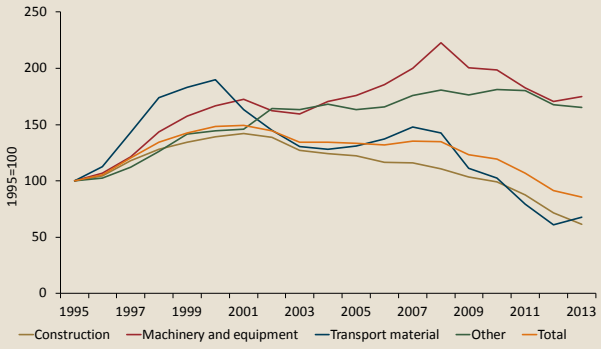
1995, following successive reductions since 2000 (Chart 15). In a context of stabilisation of interest rates at low levels, the need to adjust investment to expected income and the high indebtedness levels that were accumulated in the meantime, explain the evolution recorded. On the other hand, the fact that the housing stock surpasses demand justifies a major reduction in this type of investment, which is intrinsically linked to household's decisions.

In 2013 there was a new fall of real investment in the general government sector (13 per cent), following reductions of 32.4 and 38.5 per cent in 2011 and 2012, respectively. The current level of investment in this institutional sector is less than half the 1995 figure, in line with the major fiscal consolidation endeavours made in the context of the Economic and Financial Assistance Programme. However, the downward evolution of public investment noted since 1995 has been influenced by the contracting of investment with private companies in the context of public-private partnerships and by several changes that occurred in the general government consolidation perimeter. In terms of recent evolution, special reference should be made to the occurrence of a major increase in investment in 2010, which contributed to the deterioration of the fiscal situation.

Real investment in the corporate sector, which directly affects the evolution of productivity, was also down in 2013 (6.4 per cent), following similar evolutions in former years. This evolution of corporate investment raises issues regarding the capacity to incorporate new technologies in the productive process and to increase levels of capital per worker in firms, which are essential aspects for the trend increase in productivity and progress of the economy's sectoral restructuring process. The prevalence of high corporate leveraging is a recognised factor of fragility in the Portuguese economy, suggesting the need to reinforce capital levels (see essay on: "The Portuguese economy's deleveraging process: facts and challenges", of this Report. In this context, in order to increase the capitalisation of firms and promote higher growth potential, the creation of incentives for the development of funding mechanisms alternative to bank credit is fundamental.

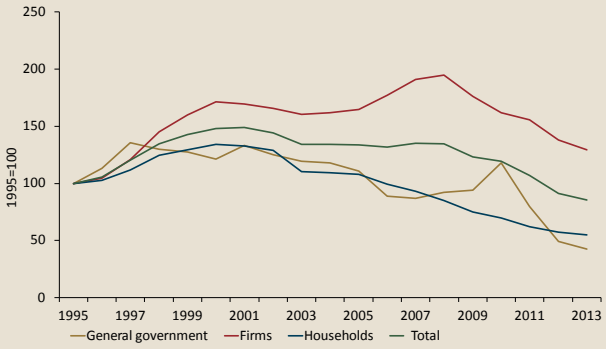
Complementary to the evolution of investment, an analysis of the evolution of capital stock provides indications on installed productive capacity, although such analyses are contingent upon hypotheses regarding depreciation rates and amortisation methods. The evolution of the different types of investment is not similar to that of their respective capital stocks as each type of asset is associated with

Chart 14 • Real change in gross fixed capital formation by type of investment



Source: *INE*.

Chart 15 • Real change in gross fixed capital formation by institutional sector



Source: *INE*.

different depreciation rates. The higher depreciation rates on machinery and equipment have entailed an important decline of their stock over the last few years. The residential capital stock also recorded a reduction starting in 2009, as a result of continuous reductions in investment levels. In turn, public capital levels and construction in companies are likely to have virtually stagnated in 2013, in a framework of a trend reduction in growth rates (Chart 16).

Imperfect functioning of labour and product markets and progress in the allocation of resources

The Portuguese economy's sectoral restructuring process, which is occurring in parallel with the correction of the macroeconomic imbalances accumulated over the last few decades, will entail the transfer of productive resources to tradables sectors. This transformation is an important condition for the sustainability of the external balance achieved over the last two years and requires the adequate functioning of labour and product markets. Adjustment processes taking place in contexts of reduced efficiency of markets tend to be more prolonged and have higher costs in terms of growth and employment.

The level of participation and flexibility of those that remain active, are important dimensions in the functioning of the labour market. In terms of participation in the labour market, Portugal has recorded a rate higher than the average of the EU. In this context, pressures on the containment of general government expenditure, reinforced by population ageing, have required the extension of working lives, accompanying the reforms being carried out in other European countries. This evolution poses an additional challenge for the Portuguese economy, which is characterised by low average productivity and low levels of schooling, particularly in the older age groups.

As regards the flexibility of the labour market, the OECD's qualitative indicators, which measure employment protection for the different types of contracts, place Portugal in an intermediate position in the euro area context. In spite of the fact that these indicators mainly concentrate on the contents of the legislation in force, not capturing implementation aspects, a significant level of progress was achieved between 1998 and 2013 (Charts 17 and 18). In terms of flexibility regarding the type of contract, the high level of segmentation in the labour market , which makes it difficult to match workers with jobs and reduces

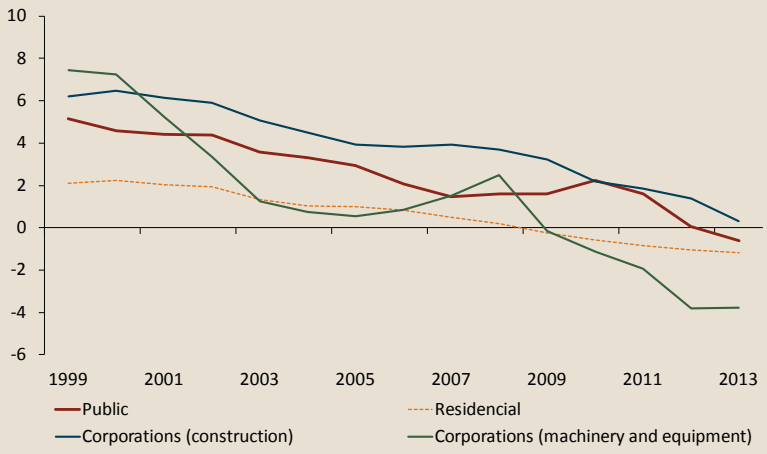


Chart 16 • Capital stock | Annual growth rate, per cent

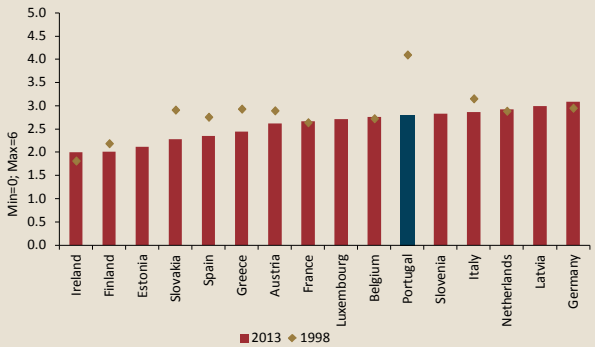
Source: Banco de Portugal.

incentives for the accumulation of specific human capital in the segment of workers without open-ended work contracts, has been highlighted. As regards this situation, the percentage of workers with fixed-term contracts grew in 2013, following the declines noted in the preceding two years (Chart 19).

As regards the capacity to adjust real wages, there have been past episodes of marked flexibility. However, these adjustments were made in macroeconomic circumstances characterised by high rates of inflation. On the contrary, in circumstances of reduced trend GDP growth and very low inflation, such as in the present, barriers to the reduction of nominal wages may condition firm's reactions to negative shocks, leading them to cut jobs instead of wages. Additionally, notwithstanding whether or not wages are an important competitive factor for many firms, the centralising of the wage negotiation process makes it harder to adjustment in a context of heterogeneity within each sector. It should, herein, be noted that the wage adjustment process in the economy has also occurred in the form of reductions of variable wage components, in addition to lower wages offered to new hirings, frequently following periods of unemployment (see essay on: "The labour market in Portugal", of this Report).

Regulation, interpreted as State intervention on market decisions, competition, quasi-monopolies, entry and exit of firms and regulatory complexity, also has a significant impact on economic growth. Regulation designed to facilitate the entry and exit of firms tends to generate an increase in market competition, leading to higher productivity and more investment. On the other hand, the excessive complexity of several regulatory processes and the need to interact with different general government structures forces companies to face costs that have a negative impact on their performance. The evolution of the Portuguese economy in these dimensions has, over the last few years, been positive and it is well positioned in the 2013 update of the OECD's Index of Product Market Regulation (Chart 20). This index aims to assess product market regulation through the State's intervention in markets, barriers to the establishing of companies and barriers to international trade and investment. As in the case of job protection, this qualitative indicator essentially captures legislative aspects, while also signalling a positive evolution between 1998 and 2013. However, there are still important challenges in several regulated sectors regarding the quality of the institutional framework, namely in terms of the capacity to apply the legislation, which is associated with the functioning of the judicial system.

Chart 17 • Strictness of employment protection – individual and collective dismissals (regular contracts) | Lower values of the index indicate lower strictness



Source: OECD. Version 2 of indicator, for more details see OECD Indicators of Employment Protection.

Chart 18 • Strictness of employment protection – temporary employment | Lower values of the index indicate lower strictness

Source: OECD. Version 1 of indicator, for more details see OECD Indicators of Employment Protection.

Efficiency in the allocation of resources is higher when more efficient companies increase their market share. This process is important for the increase in aggregate productivity in the Portuguese economy, especially in a context of unemployed resources. The analysis of efficiency in the allocation of resources in companies is, intrinsically, a microeconomic-based exercise, which implies a certain time lag in terms of the information available. A simple indicator of efficiency in a reallocation consists of the covariance between labour productivity in firms and their respective market shares (Olley-Pakes gap). The increase of this covariance, calculated on the basis of GVA levels per worker and market shares in terms of sales, for a broad range of markets in the Portuguese economy, appears to indicate an improvement in the allocation of resources in the period 2007-2012.This is relevant even if it is potentially influenced by selection effects, typically present in adjustment processes. In the manufacturing sector, a set of markets equivalent to three quarters of GVA posted a positive change in covariance (two thirds, if only firms with positive GVA are considered) (Chart 21). In parallel, in the other sectors the positive change in covariance occurred in a set of markets representing 88 per cent of the sector's GVA (57 per cent, if only firms with positive GVA are considered) (Chart 22).

The growth capacity of firms with higher productivity levels is also important in terms of export performance. As in past years, real growth of exports of goods and services, in 2013, was a robust 6.1 per cent, making a fundamental contribution to the progress of the Portuguese economy's adjustment process. Although the decline in domestic demand has contributed to reinforce incentives for firm's participation in the external markets, export growth seems to occur over a longer time frame and in parallel with a restructuring of the export sector, following the shocks faced at the start of the 1990s. This restructuring translates into an important contribution of younger firms to the level and growth of exports of goods and services. However, the continuation of this process presupposes that such exporters are able to growth, which links with other productivity determinants, namely financing capacity and firms' capital structures, as well as with institutional aspects relevant for the adoption of more efficient management methods.

Chart 19 • Share of fixed term contracts in dependent employment | Per cent

Source: *INE (Employment Survey)*

Chart 20 • Index of product market regulation | Lower values of the index indicate less restrictive regulation

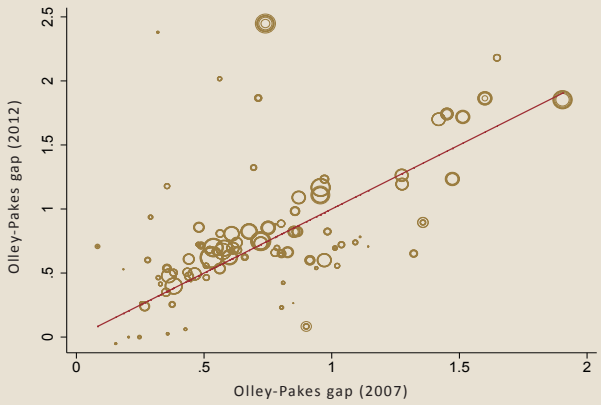
Source: OECD.

Transformation of the European institutional structure and the challenges of macroeconomic stability and deleveraging

The institutional framework is a decisive factor in determining the behaviour of companies, households and economic policy decisions-makers, as it defines an important part of the existing incentives' structure. Institutional aspects condition the evolution of productivity and encompass many dimensions, ranging from informal interaction mechanisms between economic agents up to the rules for the management of economic policies. The Portuguese economy's institutional structure has a strong international dimension, inherent to the statute of a Member State of the EU and to the participation in the monetary union. In such a context, the existence of fragilities in the European macroeconomic monitoring system and the non-existence of risk-sharing mechanisms have accentuated the impact of the economic and financial crisis on the Portuguese economy. This impact was clear in terms of the interaction between sovereign's and banking system's risks. However, in 2013, there were progresses in the supervisory and risk-sharing frameworks in the EU, which will be very important for the future of the Portuguese economy. The appropriation of new European rules by domestic economic agents is essential for the future stability of the Portuguese economy's macroeconomic framework, understood as a predictable environment for activity and the absence of serious imbalances (see essay on: "Recent Institutional Reforms in the European Union", of this Report).

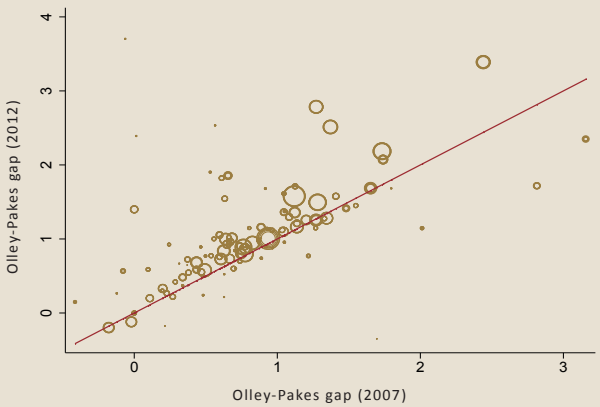
The stability of the macroeconomic framework enables the maintenance of leeway

Chart 21 • Olley-Pakes gap: labour productivity - manufacturing | Computed with the logarithm of labour productivity by market. Size of the circle represents the share of market in total GVA



Source: Banco de Portugal with data from *IES* database.
Note: The weighted average labour productivity in a market can be decomposed as the sum of the unweighted average of labour productivity of firms that operate in that market and the covariance between labour productivity and the market share of firms. The second components is designated as Olley-Pakes gap and can be used as an indicator of efficiency in the allocation of resources in the market. An increase in this gap indicates an improvement in the allocation of resources as firms with larger labour productivity tend to present larger market shares.

Chart 22 • Olley-Pakes gap: labour productivity - other sectors | Computed with the logarithm of labour productivity by market. Size of the circle represents the share of market in total GVA



Source: Banco de Portugal with data from *IES* database.
Note: The weighted average labour productivity in a market can be decomposed as the sum of the unweighted average of labour productivity of firms that operate in that market and the covariance between labour productivity and the market share of firms. The second components is designated as Olley-Pakes gap and can be used as an indicator of efficiency in the allocation of resources in the market. An increase in this gap indicates an improvement in the allocation of resources as firms with larger labour productivity tend to present larger market shares.

for economic policies and also contributes towards a positive behaviour of trend productivity. The Portuguese economy's current situation illustrates the costs deriving from inadequate fiscal policy management. Policy stance has been predominantly pro-cyclical over the last few decades, contributing towards an accumulation of imbalances, especially in the period preceding the onset of the economic and financial crisis, when the monetary policy framework was characterised by relatively low interest rates. In a scenario of undelayable consolidation, fiscal policy stance over the last three years has been restrictive, with a primary structural balance of 1.2 per cent of GDP in 2013 and a consolidation equivalent to 1.5 pp of GDP (Chart 23).

The efforts to adjust the trajectory of the public accounts led to a significant increase in the fiscal burden. In structural terms, this indicator rose to around 37 per cent of GDP in 2013, around 6 pp up over the level recorded in 1995 (Chart 24). Increases in the fiscal burden accentuate distortions in the functioning of the various markets, limiting the level of economic activity and productivity. In this context, the continuation of fiscal consolidation efforts based on a strategy of sustainable reduction of public expenditure is an important element in promoting Portuguese economic growth. However, a sustainable reduction of expenditure should not be incompatible with greater social cohesion and the provision of goods and services considered to be socially desirable. In particular, the preservation of technical capacity in vital areas of the administration of the state constitutes a *sine qua non* for the quality of decision-making and tends to be incompatible with transversal reductions of expenditure and elimination of performance bonuses.

The prevalence of low levels of productivity in the Portuguese economy, notably in several non-tradable sectors, constitutes a cause for the existence of macroeconomic imbalances, whose correction contributes to limit short term growth. The difficulty in generating a level of income which, given the level of consumption desired by the private sector, permits a level of savings compatible with the funding of investment and general government, has frequently led to external imbalances. The maintenance of this situation over an extended time frame has led to the accumulation of high debt levels in all institutional sectors. The last three years have witnessed a braking of the leveraging process, which is an essential dimension of the adjustment of the Portuguese economy (Chart 25) (see essay on: "The Portuguese economy's deleveraging process: facts and challenges", of this Report). This adjustment, however, is not

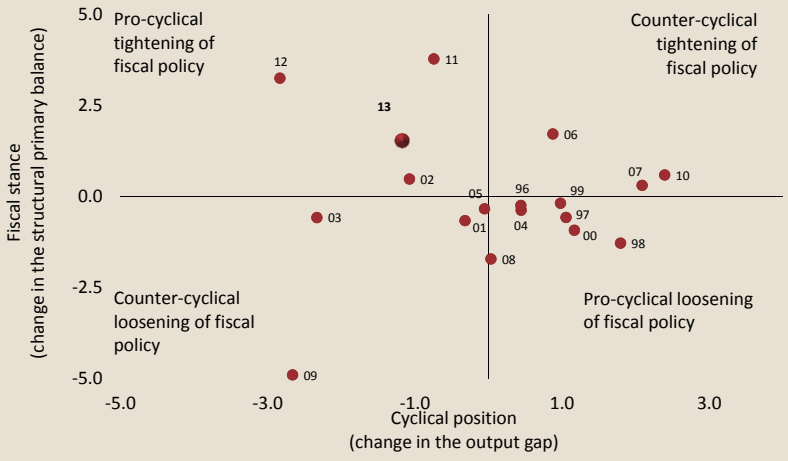


Chart 23 • Fiscal policy and cyclical position, 1996-2013 | Percentage points of GDP

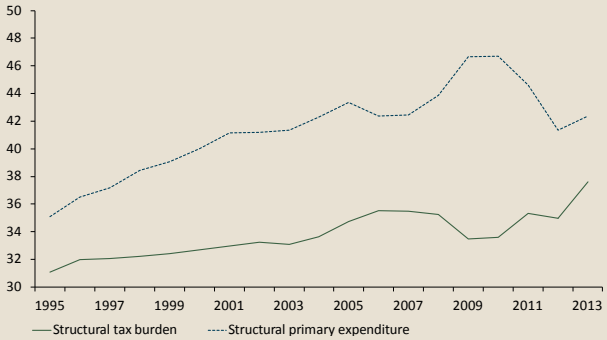
Sources: European Commission and Banco de Portugal.
Note: The cyclical position of the economy is assessed by the change in the output gap, which represents the difference between GDP and trend GDP growth rates.

complete and there continue to be deficits in the public accounts and, particularly, high debt ratios in the different institutional sectors. As the last decade has clearly demonstrated, the persistence of high debt levels creates serious risks in scenarios of crisis in the international economy, especially when accompanied by incorrect economic policy management at the domestic level. In such a context, the resumption of a private consumption growth trend above that of income, in addition to public investment decisions not based on projects' cost-benefit analyses, may endanger the success of this process.

Another fundamental aspect for the sustainability of the adjustment process consists of the further consolidation of the structural reforms' agenda. The set of structural reforms required in the Portuguese economy is extremely vast, having been partially integrated in the Economic and Financial Assistance Programme. The integral implementation of the structural reforms' agenda involves different types of challenges, namely in terms of the stability of the juridical framework and the need to overcome the resistance of those that benefit from rents and existing distortions. It is fundamental that the reforms now being implemented are not seen as transitional. On the one hand, the implementation of successive reforms prevents the observation of practical results and an assessment of their merits. On the other hand, the stability of the juridical framework is of value in itself, as it reduces uncertainty for economic agents.

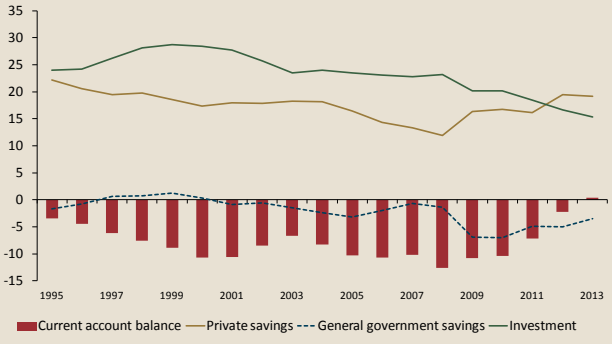
Economic growth based on the dynamics of total factor productivity is a sine qua non for the continuation of the adjustment of the Portuguese economy and the resumption of the convergence process to EU income levels. The complexity of the mechanisms involved in the growth process is not compatible with a dirigiste approach from economic policy decision-makers. Instead, it requires them to operate as catalysts, implementing reforms which reduce distortions and correct market failures. In this context, the increase and the qualitative improvement of human capital, as well as a dynamics of firms based on the principles of creative destruction and participation in global value chains may permit the sustained increase of levels of well-being in Portuguese society.

Chart 24 • Tax burden and primary structural expenditure | As a percentage of trend GDP



Sources: *INE* and Banco de Portugal.
Notes: Structural values are adjusted for the impact of the economic cycle and for the effect of temporary measures. Cyclical components and temporary measures are computed by Banco de Portugal according to the methodologies used in the Eurosystem. For more details on the cyclical adjustment, see Braz, C. (2006), "The Calculation of Cyclically Adjusted Balances at Banco de Portugal: An update", Banco de Portugal, *Economic Bulletin, Winter*.

Chart 25 • Savings, investment and current account | As a percentage of GDP



Sources: *INE* and Banco de Portugal.

The labour market in Portugal

There have been significant transformations in the structure of the Portuguese labour market, over the last few decades. These changes have not only reflected the evolution of productive structure and the population's qualifications, but also the current institutional framework. The most marked features of the last decade have been the growth of unemployment – reflected in the high proportion of long term unemployment – job losses, marked segmentation – different employment and unemployment contracts and protections – and wage inequality, which is the highest in the Euro Zone. Wage evolution in this period has been characterised by wage growth in line with global productivity conditions which, in a context of low inflation and low growth, failed to avoid a sharp growth of unemployment. A part of this adverse evolution derived from the workings of the labour market, which attributes a more permanent aspect to new employment and unemployment thresholds. Accordingly for the economy's cyclical recovery it will be necessary to consolidate structural reforms to improve the allocation of economic resources.

> The last few years have been marked by a reduction of the total and working population

This evolution contrasts with the recent past in which the working population's structural growth factors contrasted with the experience of several European countries. In particular, the high and growing participation rate of women (65 per cent in 2001 against 60 per cent for the EU15), a younger population and positive migratory flows were several of the mechanisms contributing to the growth differences of the working population. Between 2001 and 2007, the activity rate for 15 to 64 year olds was up 2.1 pp (Table 1). However, after 2010, the number of workers fell 2.8 per cent, following more than 40 years of non-stop growth.[1] This reduction is concentrated in the under 24 year old age bands. Job offers were also influenced by the high number of working hours registered in Portugal, in comparison to other European countries. For example, a Portuguese worker, in 2001, worked, on average, 1795 hours a year whereas the average in Germany was 1453 hours/year; between 2001 and 2013, the number of hours worked was down in both countries, to 1691 hours and 1397 hours, respectively.

Prior to the period of economic recession, Eurostat's population projections, available for 2006 implied very small changes in the labour market, associated with changes in age structure, as the ageing process was approaching a (stable) maturity stage. However, a comparison between this projection and the effective population shows that the population is down in all age groups in comparison to expectations, by a total 136 thousand individuals. This fall was more marked in the 25-34 years old age band, with a reduction of 57 thousand individuals. This is the age group with greater propensity to participation in the labour market and consequently, emigration. These demographic projections can be used to forecast the working population between 2007 and 2013, based on the assumption of a constant activity rate at the level of 2006. The projection indicates that there are currently fewer than expected participants (employed and unemployed) in the labour market. In particular, in 2013 there were around 70 thousand fewer workers in the under 25 years old age band and 51 thousand fewer workers in the 25 to 34 years old band. Although not available from the data, this reduction of the younger working population is, on the one hand, probably associated with migratory flows in search of better opportunities and, on the other, an increase in inactivity motivated by increased levels of schooling and/or discouragement from entering an adverse labour market.

Following a slight increase of employment at the turn of the century, around 680 thousand jobs have been lost over the last 5 years

Between 2001 and 2013, the highest job losses occurred in Industry, with a reduction of 360 thousand jobs. A part of this loss is explained and offset by the secular process of the tertiarisation of the developed economies. Even prior to the recent economic and financial crisis 143 thousand jobs were lost in industry between 2001 and 2007. This sectoral recomposition of employment created a situation in which employment in services, in 2013, comprised 66 per cent of total employment, up 12.5 pp over 2001. Due note should, however, be taken of specific aspects of this sectoral reconfiguration. The growth of employment in Services is not disassociated with more jobs in the General Government, Education and Health subsector. The period of recent crisis has merely accentuated changes in the employment structure. In several sectors, such as Construction, in which 270 thousand jobs were lost, between 2007 and 2013 and whose level of employment, in 2013, was around half the year 2001 total, the changes were sudden.

Highly marked evolution in the educational structure of employment

The number of workers with higher educational qualifications almost doubled between 2001 and 2013, with the proportion of workers

Table 1 • Employment

	2001	2007	2013
Population (thoushands)	10294.1	10604.5	10499.3
Employment	5111.7	5169.7	4513.5
Unemployment	213.5	448.6	875.9
Inactive	4968.9	4986.2	5110.0
Marginally attached	74.7	74.8	278.6
Students	733.2	729.8	764.6
Activity rate	72.0	74.1	73.6
Employment rate	68.9	66.1	61.1
Unemployment rate	4.0	8.5	16.3
Hours worked	39.4	39.0	39.5
Sectors (thousands)			
Agriculture	652.6	601.4	448.1
Industry	1150.0	1007.0	790.1
Construction	578.8	570.8	300.5
Public administration, Health and Education	898.0	999.3	1022.4
Other services	1832.3	1991.2	1952.4
Employment structure (thousands)			
Salaried on open-ended contract	2957.0	3029.5	2779.8
Salaried on temporary contract	556.4	684.8	629.2
Self-employed	1258.0	1186.8	943.1
Others	340.3	268.6	132.0

Source: *INE (Inquérito ao Emprego).*

with less than 6 years of schooling in employment declining from 63 per cent to 34 per cent (Table 2). In an opposite movement to the improvement of the qualifications of the workforce, labour market segmentation, measured by the proportion of workers with fixed-term employment contracts increased from 10.8 per cent to 14.3 per cent.

Sustained growth of unemployment over the period 2001-2013

In 2001, unemployment had fallen to its lowest level since the 1970s, at only 4 per cent. In 2013, the rate had almost quadrupled to a peak of around 17 per cent (Table 3). The difficult labour market situation is also reflected in the sharp increase in the population classified as being "discouraged" – who, while wanting to work were not actively seeking work – which increased from 75 thousand up to 2007 to 279 thousand in 2013 (Table 1). The problem is more serious because it has not only been the incidence of unemployment that has increased, but also its duration. In particular, the percentage of long term unemployed – 12 months or more – increased from 40 per cent in 2001 to 62 per cent in 2013. At the beginning of the period, around a half had been unemployed for more than 2 years, which percentage rose to 61 per cent in 2013. The sharp growth of the unemployment rate has affected all age groups but has been more sharply felt in the 25 to 34 years old group. For these workers, the long term unemployment rate also recorded its highest increase of around 21 pp.

The unemployment rate for 15 - 24 year olds increased from 9.4 per cent in 2001 to 37.7 per cent in 2013 (Table 3). These values compare, respectively, with 3.0 per cent and 13.8 per cent, for the 45 - 54 years old age band. The highest unemployment rates among young workers are not associated with the longer duration of unemployment, but rather employment/unemployment characteristics. On the one hand, a new group of young people enters the labour market every year and initially has higher unemployment rates as they endeavour to find their first job. On the other hand, in their search for better jobs, individuals in these age bands naturally suffer from greater job instability, although the highest incidence of fixed-term work contracts also increases the difficulty in the transition to stable employment. Owing to the importance of initial conditions on professional career paths, the almost doubling of the percentage

Table 2 • Employment structure by age and education (thousands)

	2001	2007	2013
Age groups (years)			
15-24	615.6	432.5	243.7
25-34	1324.1	1331.9	1010.9
35-44	1262.7	1325.4	1271.1
45-54	1033.7	1120.0	1113.8
55-64	559.5	626.8	610.5
Schooling			
None	450.4	273.3	125.3
Up to 6 years	2762.8	2441.1	1422.9
Up to 9 years	770.6	945.7	961.4
High school	629.3	776.6	1044.6
College	498.6	733.0	959.3

Source: *INE (Inquérito ao Emprego)*.

Table 3 • Unemployment

	2001	2007	2013
Registered unemployed (thousands)	324.7	410.2	707.8
Subsidized unemployed (thousands)	172.7	270.0	395.7
Unemployment duration (months)	18.4	22.2	29.2
Unemployment rate by age group			
15-24	9.4	16.6	37.7
25-34	4.1	9.8	19.0
35-44	3.2	6.7	14.3
45-54	3.0	6.6	13.8
55-64	3.2	6.5	13.8
Long-term unemployment by age group			
15-24	24.1	30.5	44.5
25-34	37.6	43.7	58.7
35-44	50.5	53.9	64.9
45-54	58.3	66.0	71.6
55-64	63.9	70.0	78.0
Unemployment rate by education			
Basic education	4.0	8.0	17.1
High school	4.6	8.2	17.2
College	3.4	7.5	12.9
Long-term unemployment by education			
Basic education	43.3	53.8	65.6
High school	37.0	43.7	59.4
College	32.0	36.0	57.2

Sources: *IEFP*, *INE (Inquérito ao Emprego)* and Social Security.

of long term unemployment among young people may create negative stigma. This aspect is, to a certain extent, mitigated by the fact that young people account for the lowest incidence of long term unemployment, which, in 2013, was around 45 per cent. The problem is also mitigated by the fact that the younger generation is also the most educated, as workers with higher levels of schooling are more likely to find employment, with consequently shorter unemployment periods. However, during the recent crisis, the duration of the job-seeking periods has been lengthier for individuals with higher educational levels.

The evolution of unemployment is, in part, associated with the already referred to secular changes in the population's age composition. The decline in the proportion of young people in the working population over the last few years and persistence of differences in unemployment rates among the different age groups has had a non negligible impact on the overall unemployment rate in Portugal. The proportion of young people (between 16 and 24 years old) in the working population fell from 22 per cent in 1986 to 13 per cent at the turn of the century and to 7 per cent in 2013. This evolution is not only the result of a smaller proportion of young people in the population, but also a reduction of this age group's participation rate, associated with the increase in levels of schooling and, more recently, a reversal of the net migratory flow trend.

To isolate the impact of demographic evolution

on unemployment in Portugal, an analysis based on a constant age structure[2] may be developed. In particular, the following analysis assumes that the age composition has remained constant at the average level noted between 1992 and 2007, whereas each group's unemployment rates correspond to those observed. Accordingly, for example, an "unemployment rate with a constant age composition", has been defined for 2013, reweighting the unemployment rate observed for each age group in 2013 by the average weight of each group in the working population between 1992 and 2007.

The adjustment in comparison to the age evolution of the unemployment rate in a given year is the difference between the observed unemployment rate and the unemployment rate using constant weights. A negative value of this difference indicates that demographic factors are contributing to a reduction of unemployment. The results for the period 1992 to 2013 are set out in Table 3. In column 2, the age adjustment is calculated by using the average weights for 1992-2007 for the working population. The results, however, are not particularly sensitive to the choice of the base period, e.g. 2007. Changes in the age structure contributed towards a 1.9 pp reduction of the unemployment rate, in 2013. Put differently, if the population's age structure had remained constant at average 1992-2007 levels, the increase in the unemployment rate for 2013 would have been even more significant.

Flows of workers between jobs or between different states in the labour market are relatively high, associated with the high segmentation of the labour market. The sharp contraction of hirings, in the more recent period has been noticeable, as opposed to workers' exit rates which have remained relatively stable

According to the Social Security's employment records, on average in the period analysed, the flow rates reported in Table 5 are the result of 235 thousand new hirings in each quarter and 228 thousand exits in the same period. Following the onset of the economic crisis in 2009, labour market flows, particularly hiring flows, were down and, in 2012, did not surpass 136 thousand new contracts per quarter. There was a smaller reduction of exits, at around 188 thousand. Companies enter and leave the market every quarter, contributing to worker hiring and exit flows. In the case of such companies, there are also marked differences between the pre and post crisis period. As a quarterly average between 2001 - 2008, around 13 thousand companies entered and exited the market, resulting in 31 thousand

Table 4 • The age composition of the labour force and unemployment

Year	Unemployment rate (1)	Age-constant unemployment rate, 1992-2007 (2)	Age adjustment difference (3) = (1)-(2)
1992	4.0	3.7	0.3
2001	3.8	3.9	-0.1
2007	8.0	8.6	-0.6
2013	16.3	18.2	-1.9

Sources: Eurostat, *INE (Inquérito ao Emprego)* and Banco de Portugal calculations.

Table 5 • Quarter labour market flows

	2001	2007	2013
Social security (2001, 2007 e 2012)			
Creation rate	6.2	5.0	3.3
Destruction rate	5.1	4.3	5.8
Hiring rate	11.5	10.1	6.5
Separation rate	10.4	9.4	9.0
Employment Survey			
Employment-Unemployment	0.7	1.1	2.3
Employment-Inactivity	1.4	1.0	3.7
Unemployment-Inactivity	0.8	1.2	2.3
Unemployment-Employment	0.8	1.4	2.8
Inactivity-Employment	1.5	0.9	3.4
Inactivity-Unemployment	0.9	1.2	2.6

Sources: *INE (Inquérito ao Emprego)* and Social Security.

worker hirings and 32 thousand exits.[3] These figures were down over more recent years, particularly in terms of job creation, to only around 9 thousand new companies hiring no more than 22 thousand workers. Worker exits from the around 12 thousand companies ceasing to trade each quarter remained at around 32 thousand.

According to Employment Survey data, which corroborate the information available from the Social Security services, flows between labour market states in Portugal are among the highest in the Euro Area.[4] Flow composition, however, may differ greatly between countries. In highly segmented economies, the flows are concentrated on a minority proportion of the working population with low levels of job (contractual) and unemployment (i.e. without access to unemployment insurance) protection Table 4 shows that, in each quarter, 7 per cent of the working population is in a transitional employment/unemployment stage (unemployment and inactivity). Around 90 per cent of those finding employment, have fixed-term contracts. Only 15 per cent of all fixed-term work contracts are converted into open-ended contracts in the same company. As a consequence, the high level of segmentation in the Portuguese labour market is reflected in the growing incidence of fixed-term work contracts.[5]

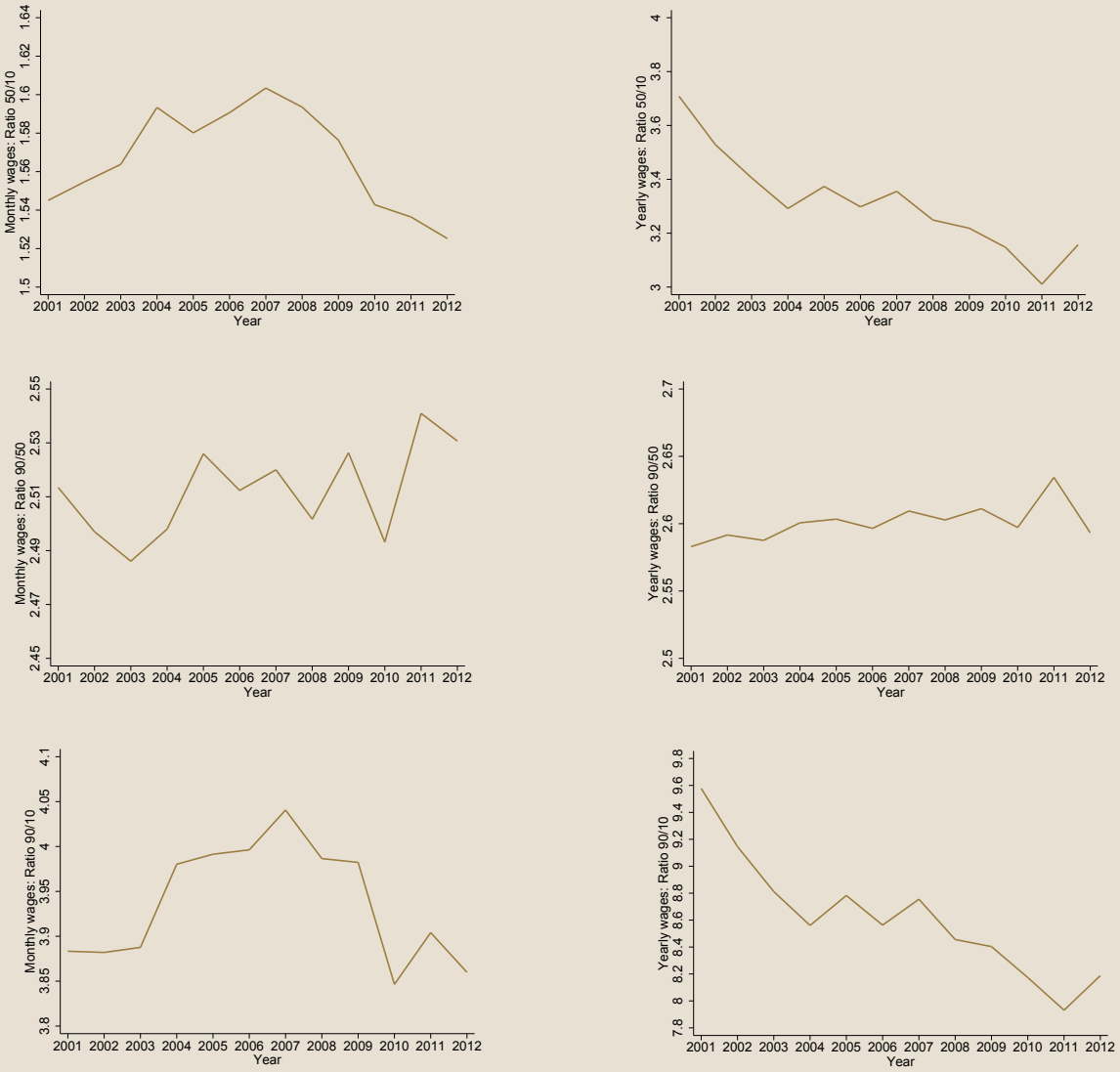
This segmentation has consequences for investments in human capital as it affects the prospects for career advancement within companies. Similarly, this situation has fuelled the adjustment of wage costs, not only because employment protection is paid for by workers in the form of lower wages, but also on account of the existence of a negative wage premium for workers with fixed-term contracts. Such workers pay a part of the adjustment costs.[6]

> A significant number of companies have adjusted their wage structure by reducing wages and readjusting their workforce

Wage evolution, over the course of this period, was characterised by significant increases in

the minimum wage (an average of 5.3% from 2007 to 2010) and the existence of significant wage restructuring.[7] According to the Payroll Tables, on average for the period 2002 to 2013, the basic wages of 13 per cent of workers remaining with the same company for two consecutive periods, have been cut and of greater relevance in terms of corporate competitiveness, the total wages of 29 per cent have been reduced. For the same period, as an annual average, 28 per cent of basic wages have been frozen and only 10 per cent of total wages were not changed from one year to the next. The recent crisis period has witnessed an increase in the percentage of wage freezes, a significant part of which is explained by the freezing of the minimum wage and increase in the number of workers earning the minimum wage.

Chart 1 • Inequality: Wage ratio percentiles



Sources: Social Security and Banco de Portugal calculations.
Notes: Left panel: Inequality computed with monthly (October) wages. Right panel: Inequality computed with annual wages.

In the 80s and 90s, wage inequality increased in a context of growth and low unemployment. Increases in the minimum wage and higher unemployment, in the last decade, have entailed a reduction of wage inequality

The different qualifications of workers and their age structure naturally result in wage inequality. On average the fact that more qualified, more senior workers earn higher wages results in wage inequality. Equality, however, is also determined by other factors. For example, the Portuguese economy shares the job seeking movements characterising the development of the advanced economies and influencing the observed inequality. The 1980s and early 1990s were particularly characterised by an increase in demand for higher, as opposed to lower qualifications. The following period, from the mid 1990s to the onset of crisis, was characterised by a polarisation of the search for employment, with a preference for both higher and lower qualifications.[8]

Wage inequality is usually analysed on the base of the distribution of the monthly wage for a certain month. In this case, Social Security data show that the period of greater inequality in the left hand area (wage ratio in the 50 and 10 percentiles, Chart 1, top left panel), was followed by a reduction of inequality between 2007 and 2012. On the one hand, the increase in the minimum wage directly reduced wage dispersion. On the other, the low phase of the cycle fuelled the destruction of lower quality employment, with low wages, compressing wage distribution. In the case of higher wages, inequality measured by the 90/50 ratio, is higher with greater behavioural stability in the period (Chart 1, middle left panel).

The inequality measurement, based on income accumulated over a year's work changes the assessment of inequality on the left hand side (right hand panel). There is a tripling of the ratio between mid-level and lower wages which even surpasses the inequality levels of the upper level of the monthly wage distribution. This measure captures the existence of casual and low paid workers, in contrast to the greater employment stability of workers who are represented in the wage distribution median.

It should, however, be noted that the same labour market exclusion mechanisms which may generate wage compression fuel an increased dispersion of income (not analysed in this essay), as many workers lose their jobs and therefore their sole source of income. Job insecurity and eligibility for unemployment benefits prevent many workers from benefiting from this form of social security, aggravating the segmentation of the labour market and inequality.

Notes

1.It should be noted that the discontinuity in *Inquérito ao Emprego* series difficults the comparison between 2010 and 2011 years.

2. Centeno, M., J. Maria, e Á. Novo, 2009, "Unemployment: Supply, Demand, and Institutions" in Departamento de Estudos Económicos, "The Portuguese Economy in the Context of Economic, Financial and Monetary Integration", Banco de Portugal, Lisboa.

3. The Social Security data do not allow a formal identification of start-ups and shutdowns. However, it is inferred that firms that stopped registering workers ceased activity and those that reported workers for the first time in a quarter are startups.

4. Banco de Portugal, 2012, "Job and worker flows in the labor market", Banco de Portugal, *Relatório Anual*.
Banco de Portugal, 2013a, "Hiring, Rotation and Job Creation", Banco de Portugal, *Boletim Económico de Verão*, 31-36.

5. Centeno, M. e Á. Novo, 2012, "Segmentation", Banco de Portugal, *Boletim Económico da Primavera*.

6. Centeno, M. e Á. Novo, 2013, "Segmenting wages", Banco de Portugal, *Boletim Económico de Inverno*.

7. Banco de Portugal, 2013b, "Recent Wage Developments in Portugal", Banco de Portugal, *Boletim Económico de Outono*, 35-36.

8. Alves, N., M. Centeno e Á. Novo, 2010, "Investment in Education in Portugal: Returns and Heterogeneity", Discussion Theme, Banco de Portugal, *Boletim Económico da Primavera*.

The Portuguese economy's deleveraging process: facts and challenges

1. Introduction

Access to credit allows for the intertemporal smoothing of public and private consumption decisions, enabling the accommodation of adverse shocks. In addition, households, companies and the public sector also need to use credit to fund investment over long horizons. The excessive accumulation of debt, however, implies fragilities, particularly when this may put repayment capacity at risk. An assessment of the optimality of leverage in different sectors of an economy is complex and there is no unequivocal benchmark that identifies the point from which debt becomes excessive. This level will not be the same for different sectors, different points of time and different institutional frameworks.

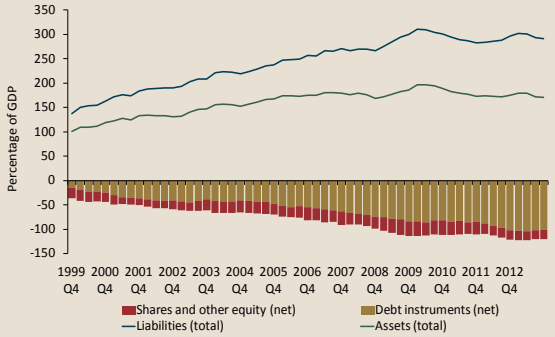
This section begins by characterising the building up of leverage of the various institutional sectors in the Portuguese economy prior to the global financial crisis, being followed by an analysis of the deleveraging process during the crisis and a discussion of several vulnerabilities and imbalances that still persist.

2. Building up of leverage in the Portuguese economy prior to the global financial crisis

The years preceding the recent economic and financial crisis witnessed a sharp deterioration of the Portuguese economy's net external position *vis-à-vis* the rest of the world. The negative position of around 30 per cent of GDP at the inception of the euro area expanded to more than 90 per cent in mid 2008 (Chart 2.1). The evolution in euro area countries currently undergoing an adjustment process, such as Spain, Greece and Ireland was similar (Chart 2.2). The evolution of the Portuguese economy's pre-crisis net external position essentially derived from the increase in debt, with shares and other equity remaining relatively stable at around 20 per cent of GDP.

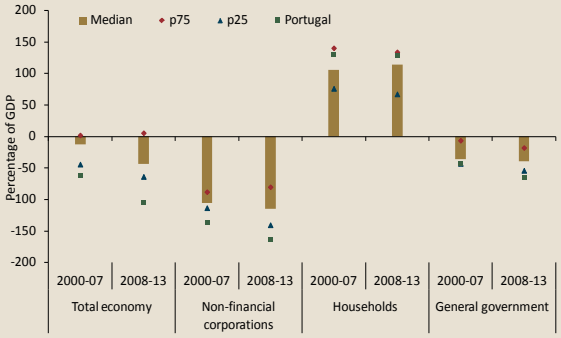
The elimination of foreign exchange risk deriving from participation in the euro area, the greater risk sharing resulting from financial integration, in parallel with financial innovation and technological evolution helped to expand economic agents' portfolio diversification possibilities, increasing the importance of financial

Chart 2.1 • Assets and liabilities of the economy *vis-à-vis* the rest of the world



Sources: *INE* and Banco de Portugal.

Chart 2.2 • Net financial assets | Portugal and euro area

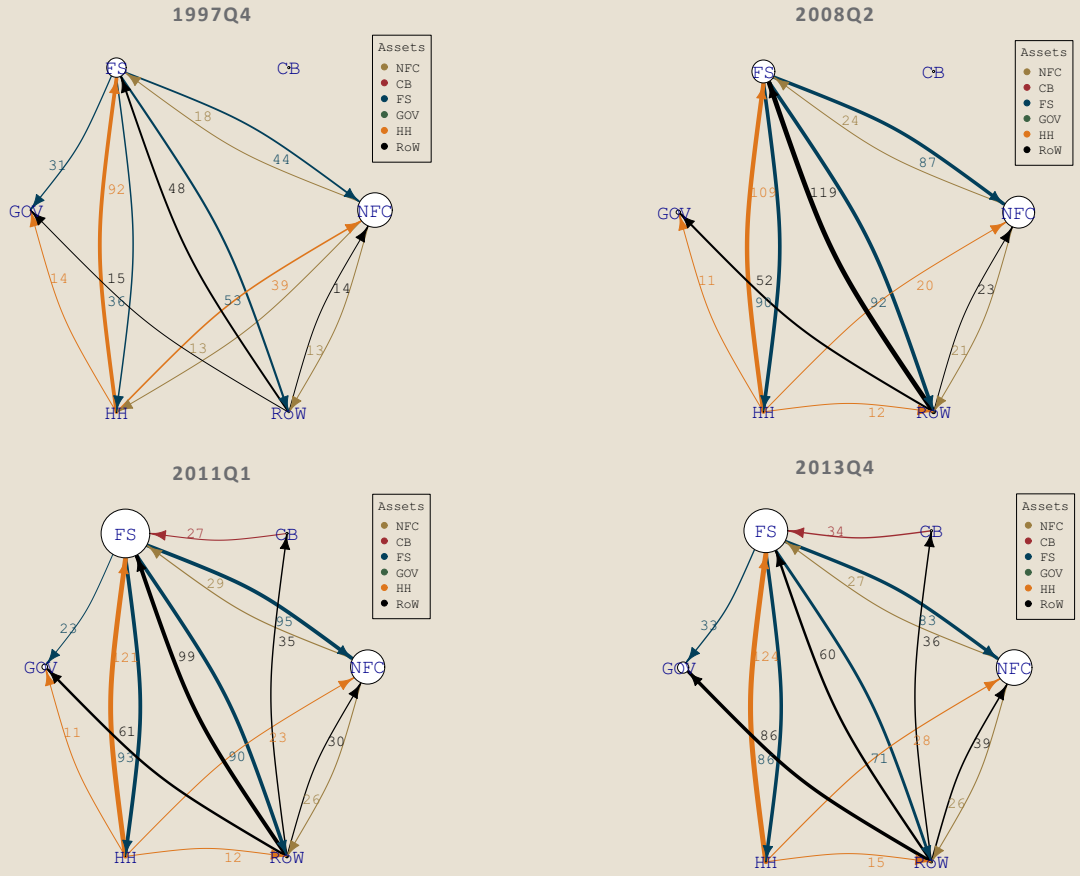


Sources: Eurostat and Banco de Portugal.
Note: The figures for the euro area are the median, the 25th percentile (p25) and the 75th percentile (p75); the figures for the euro area are available until 2012.

intermediation. Up to the onset of the global financial crisis, increased demand for funding from households, companies and the public sector was met by lending by Portuguese banks which, in turn, borrowed on the international financial markets on equal terms with their European peers. The graphical representation of the bilateral gross exposures between the various institutional sectors, at the end of 1997 and mid 2008 (prior to the bankruptcy of Lehman Brothers) provides a good illustration of the intensification of the financial connections between the non-financial private sector and the financial system occurring between these two points of time (Chart 2.3).[1] Particular note should be taken of the expansion of the debt positions of households and companies in the financial system, in addition to the debt position of the financial sector *vis-à-vis* the rest of the world. In the case of general government, the increase of this sector's debt position *vis-à-vis* the rest of the world was particularly expressive.

Three benchmarks may be used to assess the

Chart 2.3 • Gross bilateral exposures in the Portuguese economy



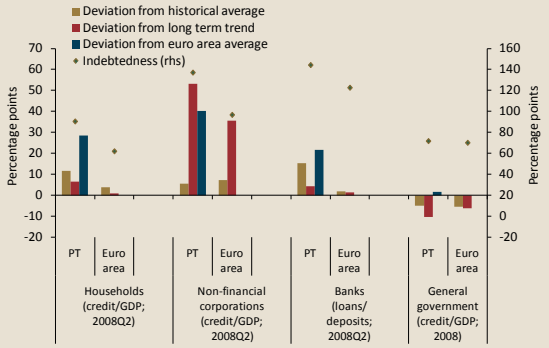
Sources: *INE* and Banco de Portugal.
Note: The charts present the intra-sector exposures and the bilateral exposures between the institutional sectors: NFC - Non-financial corporations; CB - Central bank; FS - Financial system; Gov - General government; HH - Households; RoW - Rest of the world. Only debt instruments were considered. The arrow width is proportional to inter-sector asset holdings and the area of the circle proportional to intra-sector exposures. Figures are presented as a percentage of GDP (all exposures that are worth less than 10 per cent of GDP were eliminated for ease of exposition). The colour legend indicates the asset holder (for example the colour ochre represents assets of non-financial corporations and yellow assets of households). The arrow indicates the debtor. Therefore, for example, in 2008Q2 households' assets *vis-à-vis* the financial system stood at 109 per cent of GDP and liabilities of non-financial corporations *vis-à-vis* the financial system stood at 87 per cent of GDP. The numbers presented are not official numbers from Banco de Portugal. They are estimated with maximum entropy from national financial accounts and then improved by iteratively imposing restrictions on some bilateral claims and rebalancing the matrices. For a description of the methodology see N. Silva (2010), "Inter-sector relations in the Portuguese economy: an application of contingent claim analysis", Banco de Portugal, *Financial Stability Report*, November 2010.

indebtedness of different sectors: deviations from the euro area average, from the historical average and from long term trends.[2] Deviations from these benchmarks in the financial sector were calculated for the loan-to-deposit ratio of Portuguese banks, while the ratio between financial debt and GDP was considered in the remaining sectors.[3]

In the **financial sector**, prior to the onset of the global financial crisis, deviations from these three benchmarks were positive, illustrating Portuguese banks' major reliance on funding from wholesale debt markets (Chart 2.4). As shown in Chart 2.3, this funding was essentially obtained from non-residents, causing the financial system to be relatively exposed to changes of sentiment in international financial markets.

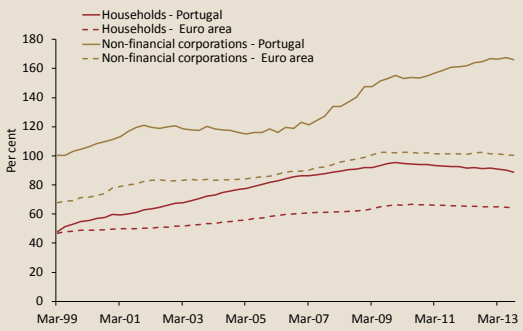
Access to credit enables **households** to smooth fluctuations in lifetime consumption, in addition to house purchases at their life cycles' early stages, within the limits imposed by their intertemporal budget constraint. With euro area integration, the change to an environment of structurally lower, less volatile interest rates and the growth of permanent household income are likely to have contributed towards an increase in the number of households with access to credit, as well as to debt levels considered to be sustainable by indebted households.[4] Notwithstanding the fact that a similar evolution had occurred in other euro area countries, Portuguese households' debt trajectories diverged sharply from the euro area average up until the onset of the global financial crisis in 2008 (Chart 2.5). Taking the three above referred benchmarks into consideration, an analysis of the indebtedness of Portuguese households in mid 2008 suggests an "excessive" accumulation of debt in the period preceding the crisis (Chart 2.4). When the evolution of financial assets in the possession of households is also considered, the net credit position of Portuguese households does not diverge significantly from the euro area average (Chart 2.2). Reference should also be made to the fact that a large

Chart 2.4 • Indebtedness levels before the financial crisis



Sources: BIS, ECB, Eurostat and Banco de Portugal.
Notes: the indebtedness of households and non-financial corporations is based on BIS long series (in the latest period, it corresponds to non-consolidated financial accounts). The indebtedness of the banking system is measured by the ratio between loans and deposits based on Monetary and Financial Statistics of the ECB. General government debt data is based on the Excessive Deficit Procedure. Historical averages were calculated with data since 1999. Long-term trends were calculated by applying an HP filter using the longest series available for each series. The parameters of the smoothing filters were adjusted based on the frequency of observations in each series and the average cycle duration (400,000 for households and non-financial corporations, 129,600 for banks and 100 for the general government). For more details on this last point, see Bonfim, D. and N. Monteiro (2013), "The implementation of the countercyclical capital buffer: rules versus discretion", Banco de Portugal, *Financial Stability Report*, November 2013.

Chart 2.5 • Ratio between credit and GDP



Sources: BIS, Eurostat and Banco de Portugal.

proportion of Portuguese household leverage comprises debt for house purchases, which therefore has a real counterpart in the sector's balance sheet, which is not the case in all euro area economies. The percentage of households with mortgage loans in Portugal is one of the highest in the euro area.[5] The information available on a microeconomic level is highly relevant for complementing the analysis of aggregate data enabling the identification of indebted households, an analysis of debt distribution and a detection of eventual situations of greater vulnerability. In particular, the fact that the participation of lower income households in the credit market is low (in 2010 only 7.6 per cent of households in the first income quintile had mortgage loans) helps to explain the low levels of loan defaults in this segment.[6] In addition, as most loans have been contracted at variable interest rates, the recent evolution of monetary policy has enabled the evolution of debt servicing costs to be contained.

The net financial position of Portuguese **non-financial corporations**, as in most other countries, is negative (Chart 2.2). The financing structure of Portuguese companies is, however, less balanced than the euro area average, having one of the highest debt to capital ratios in the area as a whole (Chart 2.6). As regards the leverage of Portuguese companies, the fact that the deviations from the three previously referred to benchmarks were positive in mid 2008, is also suggestive of the high level of debt accumulation by this sector in the period preceding the crisis, a situation which was very similar in Spain and Ireland (Chart 2.4). In an environment of structurally lower and less volatile interest rates, in this period there was an increase in the number of companies with access to the debt markets and in corporate leverage.[7] Expectations of higher productivity in companies based on the prospects of euro area integration might also have contributed to a situation in which debt levels were considered sustainable. The information available on a microeconomic level also shows a marked degree of heterogeneity in the distribution of debt levels among companies with different characteristics. Almost half of Portuguese private companies have no type of debt, owing to the high proportion of very small companies (around 85 per cent of companies are classified as microenterprises).[8] However, although the leverage ratios of indebted companies are high in all size categories and sectors, this is especially the case with smaller companies and in several specific sectors, such as construction and trade. The fact that the companies in these sectors combine low levels of productivity and high leverage makes them vulnerable, most notably to domestic demand shocks.

Lastly Portuguese **general government**, as in most euro area countries, has a debt position (Chart 2.2). In mid 2008, general government leverage[9] was marginally higher than the euro area average, but slightly lower than the historical average and long term trend (Chart 2.4).

Therefore, in global terms, the evidence available in mid 2008 suggests the existence of vulnerabilities associated with excessive leverage on several fringes of the non financial private sector, particularly companies, in addition to possible difficulties in accommodating negative shocks, especially in a context of high reliance on funding from international financial markets.[10] The transmission of the financial crisis to economic activity and unemployment was reflected in an increase in the number of loan defaults, especially in the case of loans to corporations and households for consumption and other purposes, which reached unprecedentedly high historical levels. The maintenance of an accommodative monetary policy also contributed to the maintenance of defaults on mortgage loans at contained levels. Additionally, the presumable absence of a property bubble in the housing market will have helped to attenuate the potential negative effect of default situations noted during the crisis on the financial system.

3. The deleveraging process during the crisis

The global financial crisis and subsequent sovereign debt crisis significantly changed the

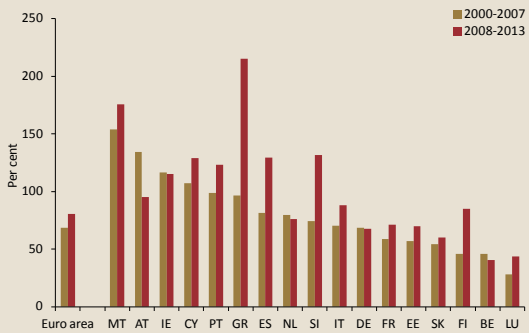
framework of the Portuguese economy, triggering an adjustment process on the above mentioned vulnerabilities on various fronts. This adjustment was fuelled by a sharp contraction of demand and a negative revision of economic agents' expectations, which will have had a structural effect on their permanent income forecasts. In parallel, the adjustment was underpinned by a financial channel, which was particularly important on account of the Portuguese economy's significant net foreign debt position. The banks and, at a later stage, the public sector, were confronted with substantial restrictions in access to funding from foreign sources. In this context, the start of the Portuguese economy's deleveraging process was underpinned by the simultaneous contraction of supply of and demand for credit. The precise quantification of the contribution made by each of these dimensions to the adjustment is complex.[11]

Accordingly, for a better understanding of the adjustment dynamics of the leverage of the Portuguese economy, it is relevant to bear two different periods in mind. During the global financial crisis (2008-2010), funding restrictions faced by national economic agents were not markedly different from those noted in other advanced economies. The already referred to high leverage levels in several sectors of the economy may, however, have conditioned their capacity to accommodate negative shocks. During this initial period, the banks continued to ensure the funding of the economy. The operations of foreign banks active in Portugal enabled stronger deleveraging by domestic banks to be attenuated, accordingly contributing to the relative stability of credit supply to the economy and, in particular, to a more subdued deceleration of mortgage lending.[12] Notwithstanding the credit deceleration in this period, its growth continued to be higher than for the euro area countries as a whole (Chart 3.1). It should, however, be noted that in this period several of the difficulties recorded by the banks in access to foreign funding were mitigated by state-backed guarantees on banks' debt issuances.

The second period, marked by the sovereign debt crisis and the Economic and Financial Assistance Programme (EFAP) (2011-2013), witnessed fragmentation within the euro area, with the Portuguese economy being among the more vulnerable. This fragmentation may be exemplified by the significant increase in the spread between interest rates charged on bank loans in Portugal (and other countries under pressure) in comparison to the euro area average.[13] Deleveraging, in this period, reflected not only conditioning factors in access to foreign funding, but also internal economic adjustment dynamics, as discussed in the section "Recent evolution of the Portuguese economy", of this Report.

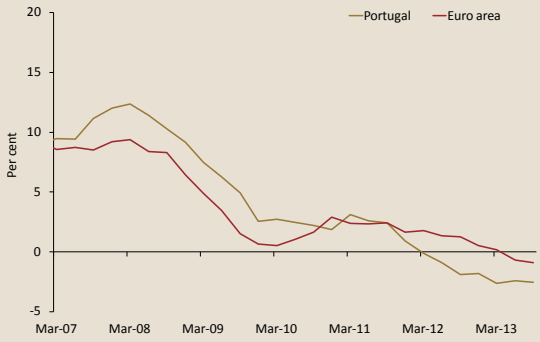
A certain heterogeneity in the dynamics of the different institutional sectors, in addition to a

Chart 2.6 • Debt to equity ratio of non-financial corporations



Sources: Eurostat and Banco de Portugal.
Note: The figures for the Euro Area are available until 2012.

Chart 3.1 • Credit to the private non-financial sector



Source: BIS.

reallocation of financial flows between sectors, was noted in both adjustment periods.

Significant **banking system** deleveraging was clearly visible in the substantial reinforcement of own funds adequacy ratios and reduction of loans-to-deposits ratios (Chart 3.2). This adjustment enabled Portuguese banks to register loans-to-deposits ratios closer to the euro area average, even in a scenario in which other countries also made significant adjustments. The deleveraging of the Portuguese banking system was transversal to the two adjustment periods, even if their determinants were different. During the global financial crisis, the adjustment essentially reflected a sharp growth in deposits,[14] in a context of increased household savings and reallocations of financial investments, pursuant to an across-the-board increase in uncertainty and risk perception and higher interest paid by the banks. In turn, during the period of application of the EFAP, the deleveraging of Portuguese banks predominantly reflected a contraction of their assets, with implications on the funding of the remaining sectors of the economy, particularly households and private companies.

The reduction of the leverage of Portuguese **households** was concentrated on the period of the EFAP. In this period, household's disposable income was reduced, reflecting job losses and a fall in net compensation per employee. The strong correction to expectations on the

Chart 3.2 • Changes in indebtedness

Sources: BIS, ECB, Eurostat and Banco de Portugal.
Notes: The indebtedness of households and non-financial corporations is based on BIS long series (in the latest period, it corresponds to non-consolidated financial accounts). The indebtedness of the banking system is measured by the ratio between loans and deposits based on Monetary and Financial Statistics of the ECB. General government debt data is based on the Excessive Deficit Procedure.

evolution of future income translated into a marked contraction of consumption and higher savings. Uncertainty over macroeconomic evolution in general and particularly as regards the measures needed to correct the public accounts deficit is likely to have contributed to an increase in precautionary savings (Chart 3.3).[15] Latterly and particularly during the course of 2012, the evolution of savings was also affected by composition effects on the evolution of disposable income. In this period, income from labour made a negative contribution to the evolution of disposable income and the contribution of income from property and capital was positive. This dichotomy is likely to have been a determinant in the evolution of savings, to the extent that holders of such income have a clearly higher average savings propensity than holders of employee income.[16] Globally, these adjustments should have translated into a more balanced financial situation of Portuguese households. However, the asymmetry of the adjustment should have implied an increase in situations of economic vulnerability, particularly associated with the expressive increase in unemployment.

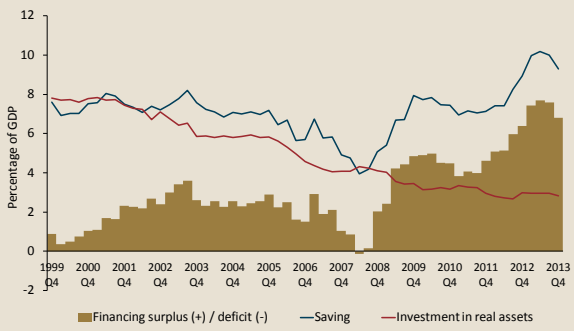
A highly significant contraction of loans for consumption and other purposes was noted in this period. This evolution is likely to have reflected an adjustment of expectations on permanent household income, as well as, to a certain extent the customary pro-cyclical nature of this type of funding. In turn, loans for house purchases also decreased over the course of this period. According to the Bank Lending Survey, this evolution reflected an increase in the restrictiveness of the criteria applied to the approval of loans in this segment, in addition to a retraction of demand. In spite of the adjustment, Portuguese households continue to be among the most leveraged in the euro area, as adjustment processes have also taken place in other countries.[17]

The deleveraging process of **non-financial corporations** has been very gradual. The fall in investment and a slight recovery in savings led to a reduction of the sector's financing deficit, which has continued to be essentially met by credit (Chart 3.3). Given the high accumulated debt, a sudden adjustment would entail significant risks, particularly in a scenario of low inflation and low growth. The total debt of Portuguese companies increased both during the global financial crisis and in the period of the EFAP (Chart 3.2). The deviations in the ratio between debt and GDP in this sector have increased in comparison to their historical average, their long term trend and euro area average. However, as the evolution is not transversal to all Portuguese companies, it is crucial to explore the various dimensions of this heterogeneous process.

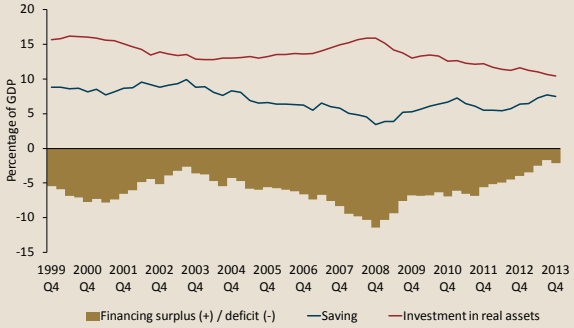
Firstly, a distinction should be made regarding the evolution between private and state-owned companies not included in the general government. Leverage of the latter companies increased during the global financial crisis, but has been corrected over the course of the last

Chart 3.3 • Saving, investment and financing surplus / deficit

Households



Non-financial corporations

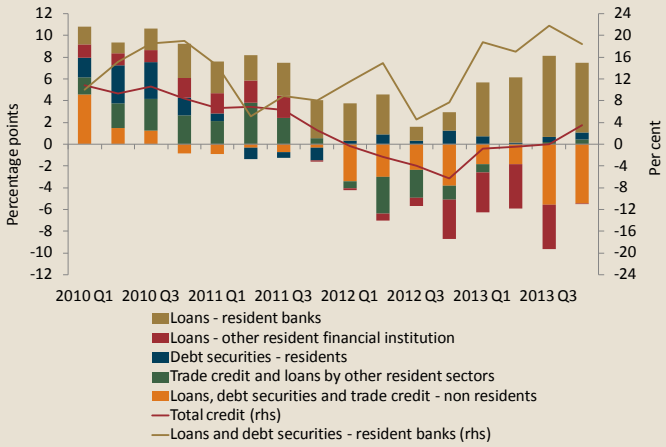


Sources: *INE* and Banco de Portugal.

few years. In spite of the fact that their leverage at the end of 2013 was similar to mid 2008, there has been a profound recomposition of their financing structure (Chart 3.4): most of these companies ceased to enjoy access to funding from non-residents during the period under analysis, with a part of their financing needs having been met by Portuguese banks. The evolution was diametrically opposite in the case of private companies (Chart 3.5), with a contraction of funding from resident financial institutions, particularly since the inception of the EFAP, having been partly replaced by funding from non-residents.

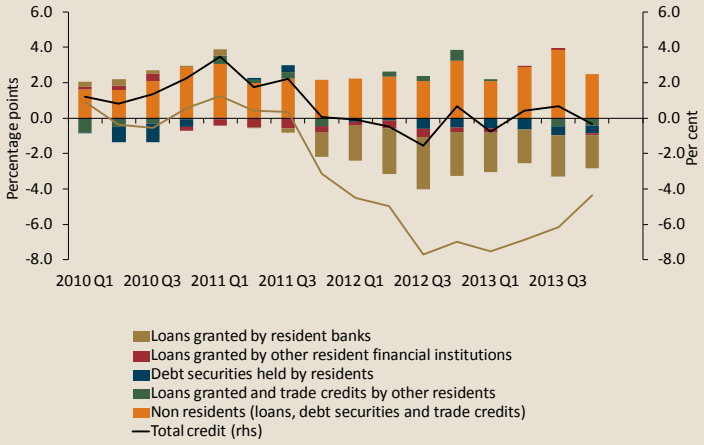
Secondly, Portuguese banks' more restrictive lending criteria necessarily have implications on the funding of companies of different sizes (Table 3.1). As only the larger companies succeed in gaining access to funding from non-residents, the evolution of leverage by corporate size has been very heterogeneous. Therefore, the increased leverage of private companies has essentially affected major enterprises. In sectoral terms, available data show that deleveraging was concentrated in several specific sectors, notably construction, real estate activities and trade. Companies operating in these sectors have been particularly exposed to the adjustment of the Portuguese economy, given their reliance on domestic demand, in a framework of cyclical economic adjustment. There has also been a

Chart 3.4 • Credit to state-owned non-financial corporations not included in the general government | Contributions to the annual rate of change



Source: Banco de Portugal.

Chart 3.5 • Credit to private non-financial corporations | Contributions to the annual rate of change



Source: Banco de Portugal.

structural decline in demand (private and public) in the construction and real estate activities sectors, which was already evident prior to the global financial crisis. In this context, the deleveraging of such companies may reflect not only restrictions on the credit supply side, in a context of an increased perception of risk underlying such activities, but also a significant retraction in demand, in a context of moderation of activity. In such an environment, the increase in non-financial corporations' leverage levels during the Portuguese economy's adjustment period is concentrated in several specific sectors, including several major enterprises: electricity, gas and water, transport and non-financial holding companies.

Lastly, it is possible to identify a certain reallocation between tradable and non-tradable activities, exemplified by the slight increase in the funding of manufacturing corporations, partly from non-residents, reflecting the channels opened by the export activity of a growing proportion of such companies. The sectoral evolution of credit herein appears to be compatible with the Portuguese economy's adjustment in favouring productive investment in a context in which consumption remains at sustainable levels, as discussed in the section of the "Recent evolution of the Portuguese economy" of this Report.

In turn, there has not been any deleveraging process in **general government** towards a reduction of the sector's debt levels, in the EFAP period. Public debt as a percentage of GDP went up by 35 pp of GDP between 2010 and 2013, reaching 129.0 per cent at the end of the period (Chart 3.6). It should, however, be noted that there had already been a very significant increase in this ratio in 2009 and 2010, a fact that is certainly associated with the triggering of the sovereign debt crisis in 2011.

The evolution of public debt over the last three years largely derives from highly significant positive deficit-debt adjustments, particularly in the first two years of the EFAP (Chart 3.7). For the period as a whole, these amounted to 14.8 pp of GDP and are essentially explained by the accumulation of financial assets from higher general government deposits and the issuance of contingent capital instruments in the context of the capitalisation processes of a series of domestic banks. Chart 3.6 illustrates the evolution of the debt ratio, excluding general government deposits.

The impact of the cyclical evolution of the economy on general government debt has been highly unfavourable in the recent period. Nominal GDP reductions, in 2011 and 2012, reversed the sign of the denominator effect on the debt ratio, leading to its increase. The indirect impact through the cyclical component ofthe fiscal balance also contributed to a rise

Table 3.1 • Indebtedness

	2008 Q2	2011 Q1	2013 Q4
Percentage of GDP			
Households	99.5	102.5	96.5
Housing loans	68.5	72.1	68.7
Loans for consumption and other purposes	31.0	30.4	27.8
Public corporations not included in the general government	11.2	14.3	11.0
Private corporations	162.3	178.4	185.3
Micro corporations	43.2	46.1	45.3
Small corporations	30.7	29.5	26.4
Medium corporations	27.5	29.9	28.0
Large corporations	37.9	45.8	53.7

Sources: *INE* and Banco de Portugal.

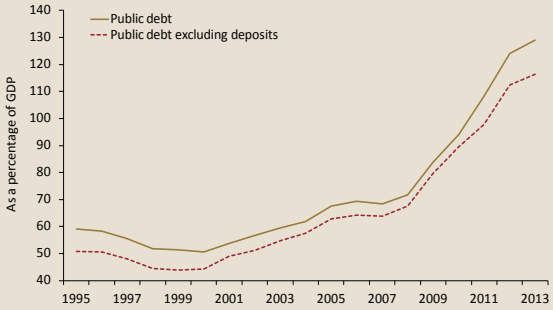
in the debt ratio. As a whole, these two effects accounted for around 7.5 pp of the evolution of the debt ratio between 2010 and 2013.

In addition to the cyclical component, it is useful to identify other factors underpinning fiscal balance developments. Firstly, interest expenditure as a percentage of GDP went up considerably in 2011, as a result of an increase in both the implicit interest rate and the debt stock. In 2012 and 2013, EFAP funding and recourse to issuances of short term securities at low interest rates enabled an attenuation of the upward trend. Notwithstanding, the cumulative contribution of interest expenditure to debt ratio dynamics between 2010 and 2013 was approximately 12.5 pp. Secondly, some temporary measures were adopted that allowed a certain reduction of the debt ratio, but their effect was mitigated by the unfavourable impact of special factors and other transitional operations (such as those deriving from financial system support).[18] Lastly, the consolidation effort, measured by the change in the structural primary balance, reached an unprecedented magnitude over the last three years, which represented a reversal of the expansionary policies of the past. Notwithstanding, it was only in 2013 that the structural primary balance was positive. This means that, in cumulative terms, this indicator also contributed to the rise of the debt ratio in the 2010-2013 period.

The evolution of the debt ratio in the recent period was much more unfavourable than originally anticipated in the context of the EFAP. Several factors contributed to this result, including more adverse macroeconomic developments, upwards revisions of the deficit targets and deficit-debt adjustments of a greater magnitude than anticipated at the time of the production of the EFAP. It is important, herein, to emphasise that the inclusion of entities in the general government perimeter had an effect in the public debt level, but not on its evolution, given the retropolation of the series and lower growth of such entities' debt in comparison to the aggregate. The difference in the debt ratio between the current and the 2008 perimeter totalled around 9.5 pp at the end of 2013.

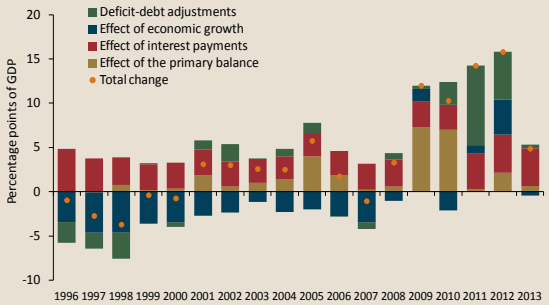
In short, the last few years have witnessed a significant adjustment of the financing structure of the different institutional sectors, as well as of their interconnections. The graphical representation of the of the gross bilateral exposures between sectors enables the processes' main dimensions to be summarised (Chart 2.3). Firstly, a decline of financial system liabilities *vis-à-vis* the rest of the world is visible, having been partially replaced by public sector funding (partly associated with the EFAP) and the central bank (reflecting access to funding from the Eurosystem). In turn, household adjustments are visible in an increase in their

Chart 3.6 • Public debt



Sources: *INE* and Banco de Portugal.

Chart 3.7 • Breakdown of the change in the public debt ratio



Sources: *INE* and Banco de Portugal.

assets in the financial system, in addition to a slight decline of their liabilities. In contrast, the assets and liabilities of non-financial corporations with Portuguese banks have not recorded any significant changes, although there has, in the meantime, been a strengthening of their assets and liabilities positions with the rest of the world. Lastly, an increase of public sector funding by the banks is evident.

4. What imbalances persist?

In spite of the marked deleveraging of the Portuguese economy over the course of the last few years, the preceding analysis has illustrated the heterogeneity of this adjustment process, evidencing the persistence of several areas of vulnerability.

There has been a sharp decline in the leverage of the **banking system,** which has converged to values more in line with other euro area countries. Portuguese banks' capital ratios have been significantly strengthened and their current funding structure implies less reliance on access to funding from the international financial markets, as discussed in Banco de Portugal's May 2014 *Financial Stability Report*.

In turn, the magnitude of the adjustment of Portuguese **households** leverage has been significant. However, global leverage remains high in aggregate terms, while there is evidence that debt servicing capacity is strongly associated with interest rate levels, in a context in which variable interest rate loans predominate.[19] It should be noted, notwithstanding, that the likelihood of the tightening of monetary conditions in the euro area over the short to medium term does not appear to be likely.

The heterogeneity characterising the adjustment of Portuguese **non-financial corporations** raises a complex set of questions on the persistence of eventual imbalances. In spite of the fact that an aggregate analysis of corporate leverage suggests the need to proceed with the deleveraging process, over the short term, it is necessary to ensure that viable, productive companies continue to have access to bank funding. Available microeconomic evidence suggests that banks have differentiated their corporate lending in terms of prices and quantities, in conformity with the level of risk and economic and financial viability. Notwithstanding, over the medium/long term there continues to be a need to promote a more balanced capital structure for several non-financial corporations, particularly small and medium sized enterprises, with very high leverage and very low levels of capitalisation. The increase of such companies' interests in alternative funding sources should be associated with greater management skills, with an improvement in their coordination capacity to obtain joint funding solutions and, eventually, with an adoption of measures to limit the distortions produced by the differences in fiscal treatment between interest on debt and equity return. These measures have implications on fiscal revenues which are limited by the need for fiscal consolidation, but they have recently been the subject of study in several countries and merit more detailed discussion.[20] In contrast, it should be noted that many companies, particularly the smaller ones, operate without recourse to financial debt or with relatively inexpressive debt levels, as already discussed. For such companies, it is necessary to ensure that access to funding does not comprise an active restriction to the exploitation of growth opportunities. The objective of bank funding should, herein, be remembered. Even prior to the global financial crisis, there was evidence to the effect that a highly significant proportion of bank loans was taken out to meet working capital requirements and for debt restructuring operations, with the funding of productive investment being much less expressive. However, to ensure the sustained growth of the Portuguese economy and in a context of scarce resources, it is desirable that available funding is primarily geared to productive, competitive projects. Incentivising non-banking investors' interest in corporate funding operations may also play an important role. Venture capital companies, for example, geared to funding high risk investments with high potential returns could play a fundamental role in funding innovative companies, indispensable to sustained growth.

The **general government** sector has not witnessed a decline in the level of gross debt over the last few years, in spite of the considerable adjustment in terms of fiscal consolidation. This result largely derives from the evolution of economic activity and a very significant accumulation of assets. The absence of a deleveraging process may be harmful to the economy. High levels of public debt imply high annual interest expenditure which may be funded by tax hikes with distortionary effects or a reduction of productive public investment. The significant use of resources by the public sector also fuels negative externalities on the remaining sectors of the economy, essentially on account of the privileged access to funds. Lastly, high levels of general government leverage limit the leeway for adopting counter-cyclical fiscal policies and generate greater uncertainty in economic agents. In this context, it is crucial that the Portuguese debt ratio enters a downwards trajectory, based on sound public finances, not only to consolidate the full access to international markets and compliance with European commitments, but also to avoid potential negative effects on long term economic growth.

Notes

1.For a description of the methodology underpinning this analysis, see Silva, N. (2010), "Inter-sector relations in the Portuguese economy: an application of the contingent claim analysis", Banco de Portugal, *Financial Stability Report,* November 2010.

2.The historical average was calculated for the period 1999 to 2013. The long term trend was estimated by the application of a Hodrick-Prescott filter, using the longest series available for each aggregate. For more details on the methodology used, see Bonfim, D. and N. Monteiro (2013), "The implementation of the countercyclical capital buffer: rules versus discretion", Banco de Portugal, *Financial Stability Report*, November 2013.

3.This implies that the analysis of the financial system underpinning this indicator includes only the banking system which, notwithstanding plays a central role in the Portuguese financial system.

4.The evolution of the number of households with access to bank loans is discussed in Farinha, L. (2004), "Households' debt burden: an analysis based on microeconomic data", Banco de Portugal, September Economic Bulletin and Farinha, L. (2008), "Indebtedness of Portuguese Households: Recent Evidence Based on the Household Wealth Survey 2006-2007", Banco de Portugal, *Financial Stability Report* 2007.

5.For more detail on the financial situation of households in euro area countries see "Household finance and consumption survey: report on the first wave of the survey", European Central Bank 2013.

6.This information is analysed in greater depth in Farinha, L. (2008), "Indebtedness of Portuguese Households: Recent Evidence Based on the Household Wealth Survey 2006-2007", Banco de Portugal, Financial Stability Report 2007 and Costa, S. and L. Farinha (2012), "Households' indebtedness: a microeconomic analysis based on the results of the households' financial", Banco de Portugal, *Financial Stability Report* May 2012.

7.For the evolution of the number of companies with access to credit see Bonfim, D., D. Dias and C. Richmond (2012), "What happens after corporate default? Stylized facts on access to credit", Journal of Banking and Finance, 36(7), 2007-2025.

8.According to a recommendation of the European Commission (2003/361/EC), microenterprises are companies which have fewer than 10 employees and whose total turnover and/or annual balance sheet does not exceed €2 million.

9.In this text, the definition of public debt used is in conformity with the Maastricht concept, *i.e.*, debt is defined in gross terms, consolidated between general government subsectors, at its face value, excluding trade credits.

10.See, for example, the risks identified in Banco de Portugal, *Financial Stability Report,* 2007.

11.For an analysis of the relative contribution of restrictions on supply and demand in the evolution of loans, see Box: "Decomposing credit growth on the basis of the Bank Lending Survey", Banco de Portugal, *Financial Stability Report*, November 2013.

12.Costa, S. and L. Farinha (2011), "The behaviour of domestic and non-domestic banks in the housing credit market: an analysis based on microeconomic data", Banco de Portugal, *Financial Stability Report*, May 2011.

13.During the sovereign debt crisis, interest rate spreads on new loans to Portuguese non-financial corporations, in comparison to the euro area, were close to 3 pp, in comparison to average values of slightly more than 1 pp prior to the onset of the global financial crisis.

14.Between June 2008 and March 2011, the deposits of the non-financial private sector increased by around 14 per cent (based on Monetary and Financial Statistics data).

15.See Alves, N. and F. Cardoso (2010) "Household Saving in Portugal: Micro and Macroeconomic Evidence", Banco de Portugal, *Winter Economic Bulletin* 2010.

16.See Box 5.1 "The rise in households' saving rates in 2012: an explanation based on macro and microeconomic evidence", Banco de Portugal, *Annual Report*, 2013.

17.In addition, most household debt refers to the stock of loans for house purchases, with a high average residual maturity. As such, the adjustment of household debt ratios is by nature slow.

18.For more details on temporary measures and special factors in the period 2011-2013 see Banco de Portugal's *Annual Reports* for 2011 and 2012 and the April 2014 *Economic Bulletin*.

19.See Alves, N. and N. Ribeiro (2011), "Modelling the evolution of households' defaults", Banco de Portugal, *Financial Stability Report,* November 2011.

20.For example, there is empirical evidence that in Belgium it was possible to improve corporate capitalisation using tax incentives (Panier, F. F. Pérez--González and P. Villanueva (2013), Capital Structure and Taxes: What Happens When You (Also) Subsidise Equity?, Stanford University, mimeo).

Recent institutional reforms in the European Union

1. Introduction

The initial structure of the Economic and Monetary Union (EMU) was based on three main pillars: i) an independent monetary authority, the European Central Bank (ECB), responsible for the conduct of monetary policy in the euro area as a whole; ii) a "no bail-out" clause, in order to prevent free-riding and possible negative contagion effects; iii) fiscal rules defined in the Stability and Growth Pact (SGP), in 1997, with the objective of avoiding major errors in the design and implementation of fiscal policies, which continued to be the responsibility of national authorities. It should be noted that no provision was made for a mechanism to permit orderly debt restructuring, or for any possibility of exit from the euro area.

In the first years of the SGP, European fiscal surveillance focused on the headline fiscal balance, relegating the debt criterion to a minor role and disregarding the evolution of the structural balance. The reform of 2005 shifted the SGP's emphasis to structural variables (adjusted for the cycle and temporary measures), based on the definition of a specific medium term objective for each Member State, set down taking into account the debt ratio, economic growth and a safety margin. As a consequence, the concern over the sustainability of the public finances materialized in operational terms and the assessment of growth prospects and the implementation of structural reforms gained increased visibility.

The first reform of the SGP, in 2005, changed the analytic framework of fiscal surveillance, but not the essential features of the EMU's initial architecture. In such a framework, dealing with a sovereign debt or banking crisis would be an unanticipated endeavour, necessarily a difficult task for any Member State. In a country with its own currency, notwithstanding the ex ante undesirability of high rates of inflation and volatile exchange rates, adjustments based on high inflation rates and nominal devaluations ensured the fulfilment of the intertemporal budget constraints of general government and the other economic agents (provided that debts were not denominated in a foreign currency or inflation-linked).This would not require political agreements at the national level or between countries and any sort of interference from the judicial system. In addition, as banks' balance sheets fundamentally comprise nominal securities and the State had the capacity to create money, dealing with a banking crisis could entirely be a national affair.

2. Sovereign debt crisis and the reform of EU economic governance

The international financial crisis of 2008-2009 and the subsequent crisis in the euro area sovereign debt market confirmed the existence of various vulnerabilities in the EMU's design, which may be grouped into four main blocks. Firstly, in spite of including a preventive arm, the SGP did not succeed in ensuring the adoption of prudent fiscal policies in periods of economic growth. When fiscal risks actually materialised in a more acute way, the deficits and public debt of most Member States reached unsustainable levels. Secondly, macroeconomic imbalances were not adequately monitored. In the context of the crisis, these proved to be aggravating factors of financial tensions and helped to undermine the sustainability of public finances. Thirdly, the absence of procedures for managing a sovereign debt crisis created uncertainty and increased the time required to find solutions. Indeed, no mechanism was in place to avoid sovereign debt crises based on expectations, even in cases in which public debt would, in principle, be sustainable. Lastly, the absence of a sufficiently comprehensive and credible banking supervision system at

the European level, together with the strong linkages between banks and sovereign states, increased the difficulties in the funding conditions of both, with an impact on the economy as a whole.

The sovereign debt crisis in the euro area therefore brought about a strong pressure on policymakers for the adoption of measures to re-establish the single currency's credibility. The lack of confidence in the financial markets and the ECB stance of only proceeding with unconventional monetary policy measures with a guarantee of fiscal discipline and significant advances in the implementation of structural reforms, made a comprehensive reform of economic governance in the EU and particularly in the euro area, inevitable.

The second reform of the Stability and Growth Pact and the Treaty on Stability, Coordination and Governance aimed to reinforce fiscal discipline, a major issue for the stabilisation of the Portuguese economy.[1] In this context, the second reform of the SGP was a gradual process, comprising three initiatives. Firstly, the European Semester, which was implemented for the first time in 2011, aimed at providing Member States with advanced guidelines on their economic and financial policies, to be taken into account in the production of the main national policy documents, particularly the draft budgets for the following year budget. Secondly, a collection of directives and regulations known as the "Six-pack", in force since December 2011, which, in addition to a new mechanism for the prevention and correction of macroeconomic imbalances, introduced five relevant changes in the fiscal area: i) a rule constraining the real growth of structural expenditure and an automatic correction mechanism in the event of any deviation, complementing the convergence of the structural deficit to the medium-term objective; ii) an operational rule for the reduction of the public debt ratio, when it exceeds the reference value of 60 per cent of GDP; iii) the introduction of reverse majority voting in the Council, on several key issues, increasing the difficulty of rejecting the Commission's proposals; iv) the possibility of imposing sanctions under the SGP's preventive arm, increasing its disciplinary capacity, particularly in periods of economic growth; v) the definition of minimum requirements to be met by national fiscal frameworks, to facilitate the adoption of prudent fiscal policies, in line with SGP guidelines. Finally, the two regulations referred to as the "Two-pack", in force since May 2013, which introduced a continuous oversight and coordination process on national fiscal policies, with particular emphasis on the euro area. The objective is the assessment of the compliance with European obligations and subsequent action in good time, if it is not the case. They also aim to improve the efficiency of the excessive deficit procedure.

In addition to the changes in the SGP and not being a part, in a strict sense, of the legal framework of the European Union (EU), the Treaty on Stability, Coordination and Governance was signed by 25 Member States, including Portugal. The Treaty, whose dispositions more directly linked to the SGP are usually referred to as the "Fiscal Compact" establishes the obligation of signatory countries to incorporate the medium term objective for the structural balance and convergence trajectory to be complied with, as defined in the SGP, into their national legislation, preferably at the constitutional level. Compliance with these rules should be monitored at the national level, by independent fiscal councils. In addition, signatory countries undertake to support the Commission's recommendations at all stages of the excessive deficit procedure, unless opposed by a qualified majority of Member States. Lastly, the obligation to report public debt issuance programmes to the Council and Commission is established.

The reform of the SGP and the "Fiscal Compact", as a whole, significantly modify the design of the fiscal institutions, rules and procedures in the EU, in various aspects. Firstly, there has been an increase in the number of operational rules, in principle consistent in most of the foreseeable scenarios. Secondly, the crucial importance of the national fiscal frameworks was fully recognised, in both the "Six-pack" and

the "Fiscal Compact", strengthening the conditions for the adoption of prudent fiscal policies in the various Member States. Thirdly, the Commission and the Council have been given additional capacity to influence national budgets as a result of the "Two-pack" and in the context of the European Semester. Fourthly, there has been a shift in terms of decision-making capacity from the Council to the European Commission, owing to the reverse majority voting. Fifthly, the discipline imposed by the SGP has been stepped up by the introduction of sanctions in the preventive arm, creating further incentives for the adoption of policies compatible with the sustainability of the public finances, in periods of economic growth. Lastly, the relevance of the interdependence between the fiscal sphere and macroeconomic developments, structural reforms and financial stability has been fully recognised.

3. The new insurance mechanisms

As already referred to, monetary financing is not an option for a euro area Member State and sovereign debt is accordingly a risky asset (in nominal terms). This fact is particularly important given the interactions between sovereign risk and the risks in the banking system (Chart 1). Whenever markets perceive that a sovereign state is vulnerable – owing, for example, to the possibility of a banking crisis or the need to redeem large amounts of debt – their debt depreciates and the sovereign state faces difficulties in managing the debt. A national banking system, when heavily exposed to the respective sovereign state, may be relevantly affected. It should be noted that, in this context, in addition to the sovereign state's higher credit risk, the risk profile of other bank assets may be affected if, in response to the public debt problem, restrictive fiscal measures with an impact on the private sector are applied. Given the distortion bias of bank portfolios in favour of domestic assets, the process ends up by affecting the risk profile of the banks themselves and, accordingly, their borrowing costs. Given that the majority of bank liabilities are deposits implicitly backed by the sovereign, the deterioration of banks' risk profiles contributes even more to aggravating credit risk on sovereign debt securities. This relationship tends to be even stronger in periods of crisis as fears of a collapse of the banking system usually lead the sovereign to save banks that would otherwise become insolvent. Given that, in several cases, the dimension of the banking system (measured for example by total assets) may be substantially greater than a country's GDP, this bank-sovereign relationship may have a substantial impact on the market valuation of sovereign risk.

In addition to the transmission of credit risk emphasised in chart 1, the banks-sovereign relationship also has an impact on monetary policy transmission. The fact that banks in different Member States have very different balance sheet conditions – associated with their exposure to the sovereign state – may generate sudden falls in credit in countries in difficulty and situations in which companies with the same risk profile in different countries are faced with very different borrowing costs. In addition to jeopardizing competition in the single market, this may exacerbate negative shocks and increase the probability of sharp falls in economic activity that, owing to the major fiscal restrictions being faced by the sovereign state, lead it to take contractionary fiscal measures having an additional negative effect on the balance sheets of companies and households.

The materialisation of the risks of a negative bank-sovereign interaction has made it clear, in the context of the recent crisis, that, in addition to the stricter constraints on fiscal policies, it will be necessary for the institutional framework to evolve in such a way as to strengthen the safety net of both sovereigns and banks.

As regards the above, it should be noted that the compromises reached had to respect the concerns of the national electorates concerning the level of redistribution that such forms of insurance could imply (being essentially insurance mechanisms, they do not entail systematic fiscal transfers). Such mechanisms are, however, fundamental to the improvement of

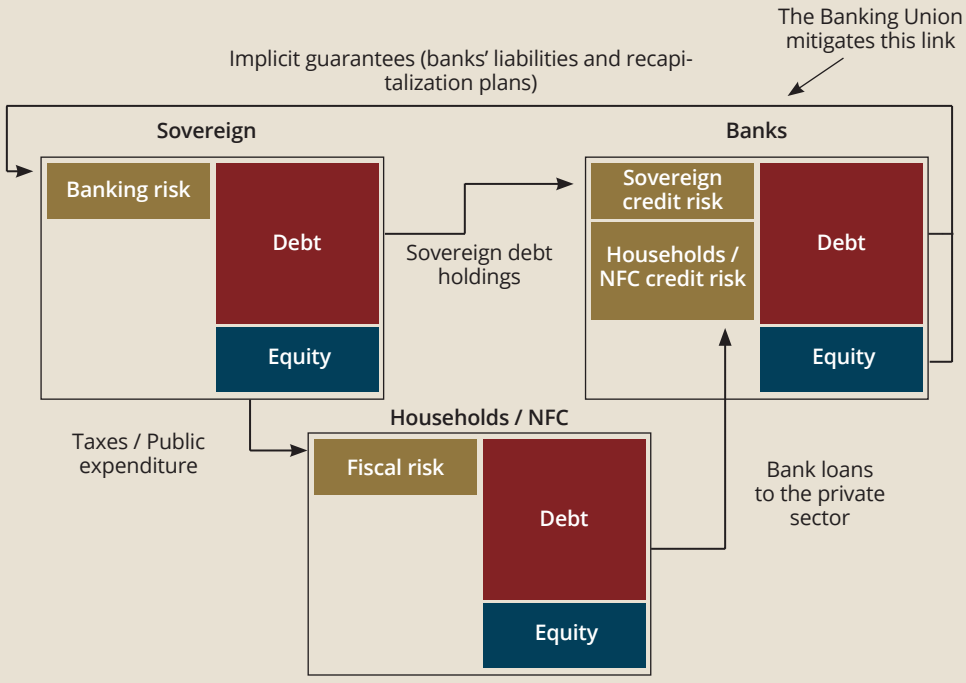
the working of EMU and to ensure the euro area's integrity, in a context of exacerbated turmoil.

3.1. The European Stability Mechanism and the ECB's OMT (Outright Monetary Transactions) Programme

The monetary union was planned without a lender of last resort for sovereigns. In this regard, and following the sovereign debt crisis, the European Stability Mechanism (ESM) and the Outright Monetary Transactions Programme (OMT) were created.

The ESM resulted from an intergovernmental treaty, in February 2012, replacing the European Financial Stability Facility and the European Financial Stabilisation Mechanism, which had been created at the time of the onset of the sovereign debt crisis in May 2010. The ESM provides financial support to euro area countries threatened by serious funding problems based on the use of a series of instruments: direct loans, primary and secondary market purchases, precautionary credit lines and direct recapitalisation of the banks. To a certain extent, the ESM replaces the safety net of sovereign issuance. One way of interpreting the role of monetary issuance is that the government, on a consolidated basis, exchanges public debt securities for securities without nominal risk. Both types of debt are subject to inflation risk, but only public debt is *stricto sensu* subject to credit risk. For a small economy whose debt is considered by the market to be at risk, an alternative means of performing this exchange comprises the issuance of debt guaranteed by countries with a reduced risk level. The ESM may perform this exchange as long as the amounts involved are a small fraction of the total debt of ESM members and within its financial capacity. For a large economy, this exchange is naturally more difficult. However, the ECB announced, in September 2012, a sovereign debt securities purchase programme, without specified limits and referred to as OMT, which has proved to be an important element in the strengthening of sovereign states safety net in relation to sudden changes in the risk perception of the financial markets. Indeed, the mere announcement of the OMT has contributed towards the strengthening of this safety net. This would be the expected outcome if the crisis had been based not on countries' fundamentals but on the negative expectations of creditors

Chart 3.1 • Credit risk transmission: the banks-sovereign link



Source: Banco de Portugal.
Notes: The arrows indicate the direction of the credit risk transmission in agents' balance-sheets following an accounting perspective. Other risks would have to be considered if one would follow a macroeconomic perspective (e.g. credit flows and their impact on non-financial corporations and households).

regarding the sovereign's debt roll-over capacity (see Cole and Kehoe, 2000).[2] The activation of OMT requires the existence of an ESM programme with the respective conditionality.

The ESM is undoubtedly an important safety net for sovereigns. However, the fact that a request for assistance has a high political cost both for those asking for protection as for the other Member States of the ESM, has the effect of making the activation of the mechanism lengthy and generates instability. Any form of financial assistance requires unanimity by the Member States of the ESM, unless the Commission decides that the non-approval of a form of assistance puts "the economic and financial sustainability of the euro area at risk". In this case, 85% of the votes are sufficient (in accordance with the ESM capital key). In spite of this democratic accountability being understandable, given the potential involvement of the taxpayers of each of the Member States in this type of process, it is also necessary to bear in mind the low probability of losses (ESM loans are senior in relation to other debts) and the significant turmoil associated with some past developments. Given such difficulties, the existence of an automatic support mechanism, applicable to countries terminating a bail-out programme, with the aim of strengthening the safety net would be desirable. The additional conditionality and surveillance could be discussed in the context of the European Semester and be foreseen at the outset.

3.2. Banking Union construction process

The Banking Union was promptly recognised by European leaders as essential to break the link between banks and sovereigns in addition to strengthening the single market for financial services. The plans to achieve this were drawn up taking into account three dimensions: i) a single supervisory mechanism; ii) a single resolution mechanism for banks in difficulties; iii) a single deposit insurance system.

The Single Supervisory Mechanism for the banking system, mandatory for euro area Member States and led by the ECB, will be in full swing starting October 2014. All banks considered to be "significant" will come under the direct supervision of the ECB. All other banks will be directly supervised by the national authorities, with the ECB staying as the ultimate supervisory authority. The ECB may, at any time, call upon itself to exercise the direct supervision of any bank, which leads to a hybrid system based on cooperation. Once in full swing, it will help to reduce sovereign states' and banks' mutual influence, providing a guarantee of more stringent, impartial supervision. In addition, the existence of a common supervisor will contribute towards a greater homogenisation of regulatory practices and better coordination between national supervisors with positive effects on the control of institutions with more significant international activities. Such elements, as a whole, should lead markets to have greater confidence in the banking system, which will diminish the probability of the occurrence of bank runs and flight-to-quality movements.

A Single Resolution Mechanism for banks in difficulties will also be created, operating in line with the Bank Recovery and Resolution Directive, which emphasizes the principle that bank creditors (in addition to shareholders) should absorb some of the losses in case of financial distress (bail-in). This mechanism aims to manage future banking crises, preferably outside the courts and at minimum cost to taxpayers. European institutions have, herein, stated that if the bail-in principle had been in force in the period preceding the sovereign debt crisis, the costs for taxpayers would have been substantially lower. It is, however, important to bear in mind that the changes in agents' risk perceptions will undoubtedly have impacts on banks' capital structure decisions and accordingly increase the difficulty of any extrapolations for the future.

The Single Resolution Mechanism will be directly responsible for the resolution of all banks in the Banking Union, with its Executive Board being responsible for the entities supervised directly by the ECB and cross-border groups, whereas the national resolution authorities are responsible for all other entities provided that

their resolution plan does not include the use of the single resolution fund. Member States may, in the meantime, delegate authority and responsibilities in respect of all institutions to the Executive Board of the Single Resolution Mechanism. In any event, the national resolution authorities are responsible for the implementation of the resolution decisions in line with the Single Resolution Mechanism regulations and national legislation, in particular, the one resulting from the transposition of the European directive and the insolvency legislation. The Single Resolution Mechanism should be in full swing starting January 2016.

This mechanism will have a Single Resolution Fund resulting from banking sector contributions with the aim of attaining 1 per cent of the total covered deposits in the Banking Union. In spite of the fact that the fund will initially be based on national compartments, these will be gradually merged over a transitional period of 8 years and regulated by an intergovernmental agreement. This fund may issue guarantees or loans ensuring that the "resolved" banks continue to operate during their restructuring period. It should, herein, be noted that the fund's primary objective is not to absorb losses or inject capital into the banks, though that possibility exists. The mechanism imposes strong conditionality associated to the use of the fund; as a general rule, prior to the use of the fund shareholders and creditors must absorb losses or participate in the recapitalization in an amount of at least 8 per cent of the total liabilities of the institution, along with a maximum amount that can be loaned to an institution corresponding to 5 per cent of its liabilities.

Accordingly, these reforms will tend to reduce the accumulation of risks in specific countries and uncertainty when problems occur, particularly as regards the resolution of cross-border institutions in which international coordination is highly important. It is, however, important to emphasise that any resolution decision will only be implemented if no objection is raised by the European Commission and European Council. In addition, if the Council has objections to the resolution plan with the justification that the non-approval thereof does not put the public interest at risk, "[...], the entity is orderly wound up in accordance with the applicable national law".

Lastly, the discussion around the Banking Union has been pointing towards the creation of a common deposit insurance mechanism. However, it should be highlighted that, although some steps in this direction have been given, there is yet no final agreement on this issue. Still, with the objective of guaranteeing some uniformity in the system it has been decided that, in addition to contributing to the Single Resolution Fund, the banks should also set up a deposit guarantee fund. This fund should fulfil the objective of 0.8 per cent of covered deposits in the next 10 years. The directive related to deposit insurance points to the possibility of loans between national funds. In case no agreement is reached regarding the common deposit insurance mechanism, the Banking Union achieves a hybrid configuration, in which, in spite of the existence of a single supervisory and resolution mechanism, not all banking system risks are mutualised.

In spite of the general opinion in European institutions that, once the already referred mechanisms have been established, the need for emergency measures will be rare, at the European Council meeting of 29 June 2012 it was decided that the European Stability Mechanism could directly recapitalise the banks upon the request of a Member State provided that several criteria were verified. It should also be emphasised that at the Eurogroup meeting of 20 June 2013 a general agreement pointing to a substantial mutualisation of the risks involved was also reached. The Member State involved is responsible for recapitalising the beneficiary bank until it achieves a core tier 1 capital ratio of 4.5 per cent of risk-weighted assets, in a prudent scenario. Above this level, the Member State will be responsible for only 20 per cent of the public contributions in the first 2 years and 10 percent in the following years.

In spite of the fact that the Banking Union represents a milestone in the institutional evolution of the Monetary Union, its format, as known to-date, leaves several issues open.

Firstly, the Banking Union's impact on the so-called domestic bias of banks' balance sheets may be limited. Accordingly, banks may continue to be heavily reliant on national economies. This is particularly important in light of the sovereign debt crisis, which generated an additional concentration of national public debt in the national banking systems of countries in difficulty. In this context and in spite of the fact that the Banking Union mitigates the transmission of banking system credit risk to the sovereign, it does not avoid the possibility of deterioration in monetary policy transmission through the so-called bank lending channel. The appearance of more cross-border groups and/or the consolidation/expansion of a business model generally referred to as originate-to-distribute, as long as able of adequately dealing with incentives alignment problems, may have an important role in the reduction of the domestic bias of banking systems.[3]

Secondly, reference should be made to the high level of complexity of Banking Union procedures. In particular, the existence of various legal systems could have a major impact on the actual enforceability of a European resolution system. Reference should be made to the fact that decisions involving the redistribution of assets and liabilities (for example, at the time of a resolution or insolvency procedure) are in general a jurisdictional matter while there is no European Court with such powers. Accordingly, in spite of the fact that administrative decisions may be sufficient in many cases, there is currently some doubt over the role of national courts and their interaction with European instances. This uncertainty may generate the perception of the existence of an idiosyncratic judicial risk associated with each country.

Thirdly, Banking Union has still not been provided with the means to avoid free riding by national law makers. Imagine the case of a legislature that approves a law establishing that recourse mortgage loans are now converted into non-recourse loans. Such a ruling, albeit legitimate, has an immediate impact on the value of the assets of banks whose liabilities are (in part) guaranteed by a European mechanism. In spite of the possibility of the existence of mechanisms that discourage this type of decision (for example, macroprudential policies), it will legally be very difficult to avoid them. More generally, the normal working of legislatures may distort decisions which potentially induce costs for the taxpayers of other countries.

Lastly, reference should be made to the fact that there has been no evolution regarding the ECB becoming the lender of last resort for all banks. In spite of the existence of an emergency liquidity mechanism for banks, provided that they are solvent and with adequate collateral although not eligible by the ECB, this continues to be performed by the national central banks, which normally have the fiscal backing of the sovereign (fundamental in case of the need to recapitalise the central bank).

4. Conclusions and next steps

The institutional reforms approved over the last few years in the EU, which are presently being implemented, strengthen the Economic and Monetary Union. On the one hand, they introduce changes in the EU governance, particularly the strengthening of fiscal surveillance in the sphere of the SGP, but also involving a framework of prevention and correction of macroeconomic imbalances. On the other hand, they address the vulnerabilities of the EMU's initial architecture, laid bare by the sovereign debt crisis in the euro area. The Banking Union endeavours to avoid negative interactions between banks and sovereign states and the European Stability Mechanism has set up a strong safety net for sovereigns. Taken globally, these decisions are an important step in increasing the robustness and resilience of the Economic and Monetary Union. Notwithstanding, the reforms adopted comprise a complex system in terms of rules and procedures which needs to be tested in

practice. Reference should also be made to the fact that there continues to exist some uncertainty on the ambition and final outlines of several of the changes in question.

To a certain extent, the reforms adopted were the possible response to the crisis given the lack of credibility of the "no bail-out" clause and to the unfeasibility, in the current context, of additional transfers of fiscal sovereignty to the EU level (like a more centralised coordination of fiscal policies and joint bond issuance).

Accordingly and with the aim of ensuring a level of consensus, the European debate was centred on the design of an insurance system for sovereign states with an even more comprehensive nature, as set out in the "road map towards a genuine economic and monetary union" in the report of the four presidents (Van Rompuy, Barroso, Juncker and Draghi, December 2012). The creation of what is referred to as a "fiscal capacity" which should be capable of mitigating temporary pressures on the public accounts of a certain Member State based on transfers between countries has, for example, been suggested. However, having been designed as an insurance mechanism, net transfers should, on average, be zero, which means that they would not have any impact on the intertemporal government budget constraint of the countries involved. On the one hand, such mechanisms alleviate the budgetary restrictions imposed by the SGP. On the other hand, they may generate a growing complexity of the union's institutional structure and relevant deviations in relation to the principle of subsidiarity. This is because, as insurance mechanisms, they require that associated moral hazard problems are dealt with.[4]

Notwithstanding the desirability of several of the above described developments, there will always be a need to guarantee the fiscal responsibility and macroeconomic soundness of each Member State, fundamental requirements for the good working of the EMU. Its full materialisation is, in the last resort, contingent upon national authorities' appropriation of a set of rules and procedures to be followed in the management of national economic and fiscal policies. In the current European political context, the principle of national responsibility in a framework of major restrictions, albeit complex and potentially capable of generating conflicts, is essential for the evolution of the European project.

Notes

1. For a full presentation of the current version of the Stability and Growth Pact see European Commission (2013), "Vade mecum on the Stability and Growth Pact", Occasional Paper No.151.

2. Cole, H. L. and Kehoe, T. (2000), "Self-Fulfilling Debt Crises", The Review of Economic Studies, Vol. 67, No. 1 (Jan.).

3. A business model in which the bank grants a loan with the intention of selling part or all of it to investors, instead of holding it until maturity.

4. The road map, admits, for example, the creation of a common unemployment insurance system. With the objective of mitigating moral hazard, it may accordingly be possible to foresee the need to promote structural reforms and/or the creation of common rules for unemployment subsidies which are potentially in conflict with current national regulations.

PART II

The ongoing adjustment process in the portuguese economy

The ongoing adjustment process in the Portuguese economy

1. Introduction

Over the last few years, the Portuguese economy has faced a succession of shocks without precedent in recent history. Following full monetary integration and greater financial integration deriving from the introduction of the euro, coupled with structural constraints to economic growth, the Portuguese economy accumulated a series of macroeconomic imbalances leading to a high external deficit. The international economic and financial crisis and the subsequent sovereign debt crisis in the euro area hit the Portuguese economy in this context of particular vulnerability. The ensuing sudden stop of access to external funding in 2010 proved that a balance of payments crisis was a possibility within a monetary union. In this context, pursuing a macroeconomic adjustment aimed at re-establishing the intertemporal sustainability of economic agents' balance sheets became both inescapable and urgent.

The evolution of the Portuguese economy over the last few years is representative of the mechanisms and possibilities of adjustment in a monetary union. Over the course of 2011-13 marked progress was achieved in terms of macroeconomic stability, in a framework of predictable external funding due to the Economic and Financial Assistance Programme (Programme). The economic and social implications of this adjustment were significant, albeit mitigated when set against a situation of a sudden and disorderly adjustment of imbalances. In particular, the contraction of domestic income and the rise in unemployment levels were especially marked in this period. More recently, in a context of economic recovery and increasing confidence of international investors in the sovereign debt of euro area countries under adjustment, the Portuguese sovereign regained access to financing in international markets. This result should be catalysed as a means of anchoring a commitment to macroeconomic stability and to the continuation of the structural reforms needed to increase productivity growth and social cohesion over the medium and long term.

This article aims to analyse the ongoing adjustment process in the Portuguese economy. It does not encompass all analytical dimensions of such a complex period and is inevitably selective. In particular, this essay is characterized by five overarching issues. Firstly, the importance of the institutional framework and of policy constraints, which determine the set of incentives in which economic agents make their decisions, is emphasised throughout the text. To exemplify, the participation in the euro area and the integration in international financial markets is fundamental to understand the process of accumulation and correction of economic imbalances in a small open economy. Secondly, the evolution of the Portuguese economy over the last decade reflects a combination of structural trends with cyclical factors. Given that the adjustment process is still in progress, the identification of these features is necessarily tentative. Notwithstanding, this identification is crucial to assess the sustainability of the recent progress in correcting macroeconomic imbalances. Thirdly, the analysis aims to highlight the dispersion underlying the evolution of macroeconomic aggregates. This breakdown enables to uncover the high level of heterogeneity inherent to the functioning of labour and product markets. Fourthly, and as far as possible, the recent experience will be used to draw conclusions for the future. In particular, understanding the mechanisms leading to the crisis is crucial for assessing the institutional constraints and the intertemporal sustainability conditions which should guide future decisions of both public and private economic agents. Lastly, the approach

will be essentially positive and not normative. Accordingly, the focus will not lie on assessing the welfare implications of the policies pursued, but mainly on describing their impact in terms of the allocation of resources in the economy.

The article is organised as follows. Section 2 characterizes the period of economic stagnation and accumulation of imbalances leading to the payments crisis in 2010. Section 3 describes the shock of absence of external funding in the context of a monetary union. Section 4 sets out the adjustment strategy underpinning the Economic and Financial Assistance Programme. This strategy will be compared, in broad terms, with those adopted in the past episodes of financial assistance to Portugal. Section 5 analyses the ongoing adjustment process and aims at identifying the set of economic shocks affecting the Portuguese economy – both domestic and external – as well as the transmission mechanisms to households and firms. Lastly, Section 6 provides an assessment of the sustainability of the adjustment in progress, including an analysis of the risks and challenges facing the economy. The article concludes that the adjustment of the Portuguese economy is still incomplete and requires an additional commitment by domestic agents for the medium and long term.

2. The accumulation of imbalances and the absence of growth

The existence of external imbalances does not necessarily represent an economic risk. In fact, the accumulation of foreign debt may help to improve the well-being of economic agents, to the extent that it promotes a better allocation of capital, ensures the intertemporal smoothing of consumption and helps to increase the growth potential of the economy (see Blanchard and Giavazzi, 2002). However, as described in this section, the evolution of the external indebtedness of the Portuguese economy did not correspond to an equilibrium consistent with the intertemporal budget constraint, in particular because it was not efficiently geared towards promoting the economy's growth potential.

2.1 The unsustainable trajectory of the Portuguese economy

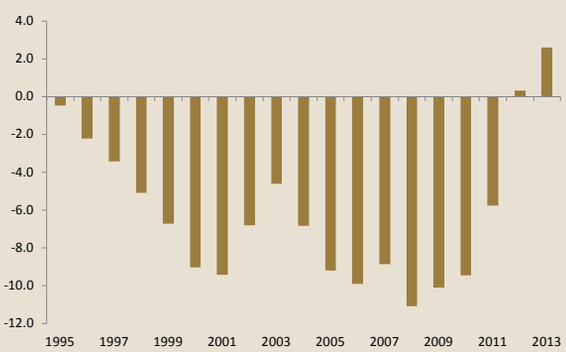
To characterise the adjustment process of the Portuguese economy, it is important to go back to the genesis of the accumulation of the external imbalance. In the mid 1990s, the current and capital account and the international investment position as a percentage of GDP (i.e. the net foreign debt flow and stock) were at levels close to zero (Charts 2.1.1 and 2.1.2). In the second half of the 1990s, in a context of nominal convergence to the euro area and of growing financial integration, there was a substantial increase in the indebtedness of agents, particularly in the private sector (Chart 2.1.3). This debt was essentially funded from abroad and intermediated by the domestic financial system.

To a certain extent, the increase in private sector indebtedness was a rational response of economic agents to the new framework (Fagan and Gaspar, 2007). Firstly, the introduction of the euro implied a transition to a regime of lower and less volatile interest rates, contributing to increase the agents' permanent net wealth. Secondly, the economic growth prospects were exacerbated by an expansionary and pro-cyclical fiscal policy and by expectations of additional economic integration arising from monetary integration. Lastly, the institutional framework in force at the time also contributed to an increase in household and corporate indebtedness. In particular, on the household side, housing investment was associated with the liberalisation of the credit market – allowing access to funding by a substantially larger fraction of households –, with the non-existence of an effective rental market and with the existence of fiscal incentives for house purchases and subsidised interest regimes. On the side of non-financial corporations, the incentives in the tax system favouring debt also contributed to their reduced capitalisation levels.

Following the introduction of the euro, the optimistic expectations regarding economic growth proved to be unfounded. The revision of expectations implied a reversal of investment decisions by the private sector, contributing to the ensuing economic deceleration (Chart 2.1.4). Private sector indebtedness, however, maintained an upward trend. In fact, in a context of increasing integration of financial markets and of low levels of risk aversion by international investors and by the domestic banking sector, large volumes of external private capital continued to flow into the Portuguese economy. These capital inflows were the counterpart to the marked fall of the savings rate in the economy, particularly in the private sector. In turn, the public sector maintained net borrowing requirements at levels systematically higher than 3 per cent over the course of this period. Between 1995 and 2008, the decline of savings in the private sector amounted to 10 percentage points (pp) of GDP (Chart 2.1.4). The case of non-financial corporations is particularly revealing. In fact, the borrowing requirements of non-financial corporations amounted to more than 10 per cent of GDP in 2008, essentially deriving from a progressive decline in their saving rates. A comparison with the euro area average – based on the gross operating surplus generated by firms – shows that relatively lower corporate savings in Portugal were associated with relatively higher payments of taxes and interest, with the payment of dividends being in line with the average of the euro area.

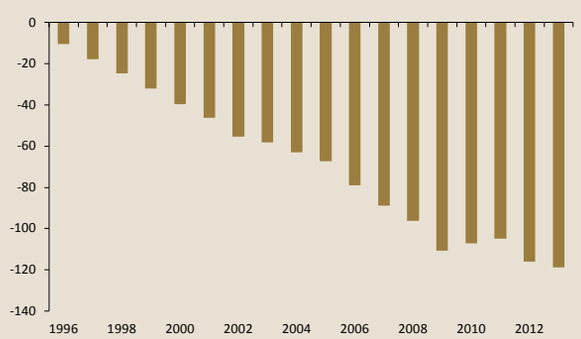
The stability framework provided by the monetary union contributed to the continued intermediation by the financial system of increasing indebtedness levels. In the absence of market incentives – in terms of risk premium

Chart 2.1.1 • Current and capital account | As a percentage of GDP



Sources: *INE* and Banco de Portugal.

Chart 2.1.2 • International investment position | As a percentage of GDP

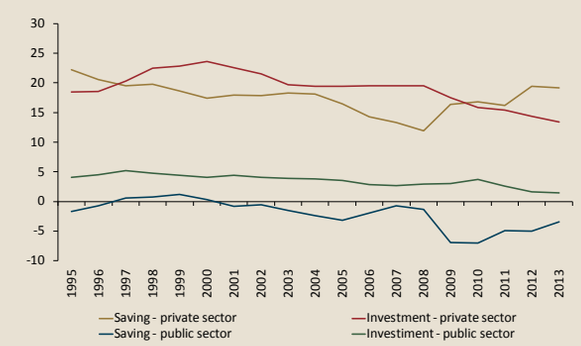


Sources: *INE* and Banco de Portugal.

Chart 2.1.3 • Indebtedness of public and private sectors | As a percentage of GDP

Sources: *INE* and Banco de Portugal.

Chart 2.1.4 • Investment and saving, public and private sectors | As a percentage of GDP



Sources: *INE* and Banco de Portugal.

differentiation – and of countercyclical policies inducing macroeconomic adjustment – in particular fiscal policy – the Portuguese economy entered an unsustainable trajectory. Not even the onset of the international economic and financial crisis in 2008 promoted a reversal of this dynamic. In fact, the international investment position deteriorated continuously between 1995 and 2009, reaching a net debt position of around 110 per cent of GDP (Chart 2.1.2). For the economy as a whole, this growing imbalance was only interrupted with the sudden stop of external financing in 2010 (see Section 3).

A distinctive element of the leveraging process of the Portuguese economy was the fact that it occurred in a framework of low economic growth (see Chart 2.1.5). The Portuguese experience is therefore different from the case of an exacerbated overheating of an economy funded with external credit. In the Portuguese case, there was a mutual interaction between the leveraging dynamic and the absence of growth. On the one hand, in a framework of gradual downward revisions of trend growth expectations, an upward trajectory of leveraging is expectable for a prolonged period (Cao and L'Huillier, 2014). On the other hand, as will be underlined in the following section, the inefficient allocation of external financing flows shall also have contributed to mitigate the growth dynamics (Reis, 2013). The following subsection focuses precisely on the issue of low growth in the Portuguese economy.

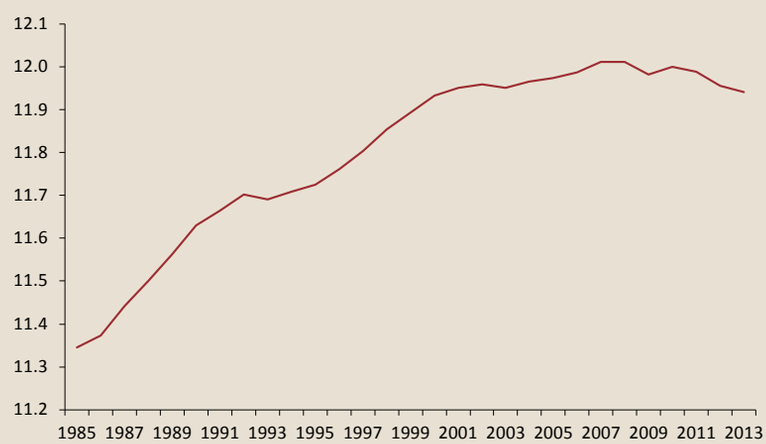
2.2 A view on the lost decade in terms of growth

Since the inception of the euro area, the Portuguese economy recorded low growth levels and diverged in real terms from the European Union average (see Part 1 of this Annual Report). In 2010, GDP *per capita* in Portugal was only about 7 per cent above the level recorded in 1999 (which corresponds to an average annual growth rate of 0.6 per cent). The persistence of such low growth rates cannot be exclusively attributed to cyclical factors or to idiosyncratic temporary shocks which affected the Portuguese economy. This subsection aims to assess the set of structural fragilities which may have contributed to this result (see also Economics and Research Department, 2009, and Alexandre *et al*., 2014).

A useful starting point for the analysis is a growth accounting exercise focusing on the recent decades. This type of breakdown has several limitations, associated with its eminently descriptive nature, in addition to the difficulty in measuring the quality and degree of utilization of the production factors. The accounting exercise does, however, provide a conceptual framework identifying important features characterizing the growth and real

Chart 2.1.5 • GDP level, in real terms | In logarithm

Source: Banco de Portugal.



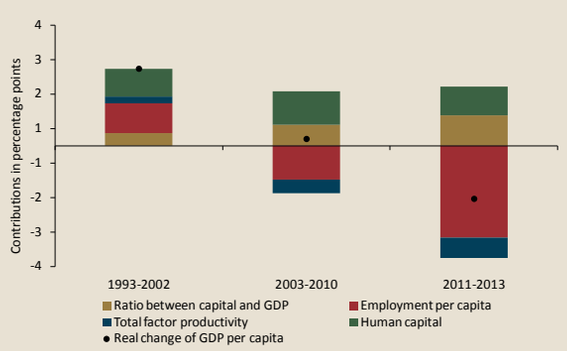
convergence process of an economy. Based on this conceptual framework, two exercises are presented in what follows: the first analyses the Portuguese economy's growth factors over time; the second assesses the factors contributing to the gap in GDP per capita between Portugal and the European Union average.

Chart 2.2.1 provides a breakdown of the growth in Portuguese GDP *per capita* in four factors, following Hsieh and Klenow (2010): the capital to GDP ratio (which, in steady state, does not depend on the level of human capital or on total factor productivity in a neoclassical growth model), employment per capita (*i.e.* the rate of participation in the economy), the level of human capital (measured by the average number of years of schooling of the labour force) and total factor productivity (obtained as a residual of the equation).

Chart 2.2.1 highlights four main ideas. Firstly, the main engine of growth in the Portuguese economy in the last two decades was the accumulation of human capital. This conclusion, based solely on the average number of years of schooling, would be reinforced by taking into account the evolution of the quality of human capital in Portugal (see Pereira, 2011). Secondly, the evolution of the rate of participation in the labour market contributed negatively to growth over the last decade – particularly in more recent years – in contrast to the positive contribution observed in the 1990s. This change was, in part, associated with the reversal of the profile of net migration flows in Portugal (see Part 1 of this Report). Thirdly, the contribution of the capital to GDP ratio was positive over the whole period under analysis. This fact reflects a sharper deceleration of labour productivity *vis-à-vis* capital per worker. Lastly, there was a deceleration of total factor productivity during the period under analysis, actually recording a negative contribution to GDP *per capita* growth over the last decade.

The conceptual framework described above may also be used to analyse the factors which explain the gap between GDP *per capita* in Portugal and in the European average, as well as the absence of real convergence over the last decade. Table 2.2.1 presents the main results of this exercise. GDP *per capita* in Portugal currently amounts to only 53 per cent of the average of the fifteen initial members of the European Union (EU15). This gap does not reflect a lower level of labour market participation or a lower relative level of capital (when controlling for the differences in the level of GDP per capita). In fact, the exercise suggests that the income gap between Portugal and the European average is fundamentally explained by differences in the level of human capital and in total factor productivity. These conclusions confirm the results reported in Reis (2011). In both of these dimensions, the gap between Portugal and the European average has not

Chart 2.2.1 • Breakdown of the growth in GDP *per capita*



Sources: Barro and Lee (2013), *INE (Quadros de Pessoal)* and Banco de Portugal.
Notes: The growth accounting exercise of GDP per capita is based on a Cobb-Douglas production function described in equation (3) in Hsieh and Klenow (2010). The measures of human capital were constructed from the data of Barro and Lee (2013). For Portugal, these series were annualized and extended using the profile of the average years of education of employment of *Quadros de Pessoal* (until 2012) and of the Labour Force Survey of *INE* (2013).

changed substantially over the last two decades. In particular, the result for the relative level of human capital indicates that the progress achieved in Portugal in recent decades – which is reflected in the important contribution to growth visible in Chart 2.2.1 – was in line with the one recorded for the European average[1].

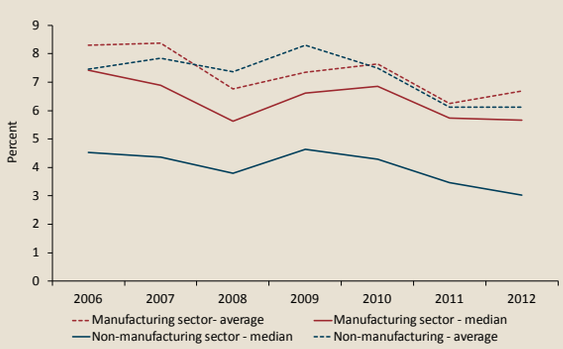
In the case of total factor productivity, the gap *vis-à-vis* the European average is usually attributed to lower levels of efficiency in the allocation of productive factors across firms and sectors. This is the result of a complex interaction between institutions, the functioning of markets, the macroeconomic policies and the quality of production factors. In the Portuguese case, the literature has identified, as important factors, the excessive length and uncertainties related with the judicial system (Banco de Portugal, 2008), the small size of firms (Braguinsky *et al.*, 2011), the low economic weight of innovation – notably given the lag in issues such as the number of patents and licences –, deficiencies in the quality of corporate management (Bloom and Van Reenen, 2010), the prevalence of a marked level of segmentation in the labour market (Centeno and Novo, 2012) or the existence of product markets with little competition and contestability. In this latter dimension, Chart 2.2.2 illustrates the recent evolution of the price-cost margin in the Portuguese economy (admittedly an imperfect measure of the level of competition in the economy). In the Portuguese economy,

Table 2.2.1 • Analysis of the convergence between Portugal and the European Union | Portugal as a percentage of the European Union (EU15)

	1993-2002	2003-2010	2011-2013
GDP *per capita*	56.0	54.5	53.1
Ratio between capital and GDP	86.3	95.9	96.8
Employment *per capita*	110.1	105.9	99.5
Total factor productivity	78.8	78.9	79.9
Human capital	80.1	76.4	77.2

Sources: Barro and Lee (2013), European Commission (AMECO database), Eurostat, *Quadros de Pessoal*, INE and Banco de Portugal.
Notes: EU15 refers to the original 15 Member States of the European Union. The growth accounting exercises of GDP *per capita* for Portugal and the EU15 are based on a Cobb-Douglas production function described in equation (3) in Hsieh and Klenow (2010). The measures of human capital were constructed from the data of Barro and Lee (2013). For Portugal, these series were annualized and extended using the profile of the average years of education of employment of *Quadros de Pessoal* (until 2012) and of the Labour Force Survey of *INE* (2013). For the EU15, the series were annualized and extended using the profile of the average years of education of employment of the Labour Force Survey of Eurostat for the EU15 as a whole.

Chart 2.2.2 • Price-cost margin



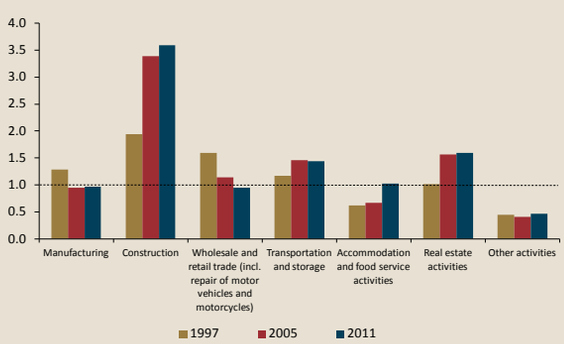
Sources: Ministry of Justice, Ministry of Finance and Ministry of Internal Administration and Banco de Portugal calculations (*IES*).
Note: Firms reporting null or missing values for sales of goods and services or intermediate inputs were excluded from the analysis. Additionally, firms in the financial sector or having head office in Madeira off-shore were disregarded. The price-cost margin was calculated as the ratio of the difference between sales of goods and services and the sum of intermediate inputs with labour costs to sales of goods and services. Intermediate inputs include the cost of materials and services. Labour costs include wages and other benefits, including contributions to Social Security. This indicator is used in the literature as a measure of the level of competition, though it presents some limitations. For more information about this indicator, see Amador and Soares (2012).

there are non-manufacturing segments with relatively high price-cost margins. Chart 2.2.2 also points to this conclusion, given that the average price-cost margin in the non-manufacturing sector is clearly higher than the median. It should also be noted that in more recent years the price-cost margin recorded a globally downward trend, both in the manufacturing and non-manufacturing sectors.

The reasons underlying the persistent deceleration of total factor productivity may be found in the combination of the above described fragilities with several structural dynamics impacting the Portuguese economy starting from the mid 1990s. In particular, reference should be made to the enlargement of the European Union – notably given the ensuing diversion of foreign direct investment flows coming from countries in the European centre –, as well as to the growing participation of emerging market economies in global trade, with revealed comparative advantages similar to those of the Portuguese economy (see Eichenbaum *et al.*, 2013). In addition, the intermediation of external capital flows by the banking system was also relatively inefficient (Reis, 2013). Some supporting evidence of this claim can be found in Charts 2.2.3 and 2.2.4. Chart 2.2.3 shows that, since 1995, the sectors with the highest increase in bank indebtedness, expressed as a fraction of their respective value added, were construction and real estate. In contrast, manufacturing industries saw a decline in the ratio between indebtedness and gross value added over the period as a whole. In addition, Chart 2.2.4 also shows that the stock of bank loans is biased towards firms with a relatively high risk, as measured by z-scores (see Antunes and Martinho, 2012). The Chart also suggests that the recent period witnessed a sensible change in the distribution of banks' credit risk portfolios, although this movement is fundamentally determined by the fact that the distribution of corporate risk, as a whole, has deteriorated over the last few years. These factors may contribute to explain the results presented in Dias *et al.* (2014) for the Portuguese economy, which point to an increasingly inefficient allocation of resources across firms over the course of the last fifteen years.

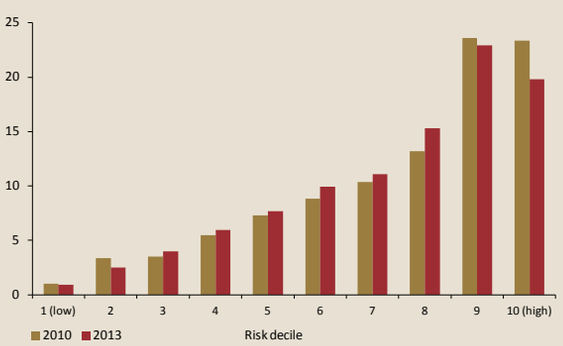
As expectable, the low growth observed in the Portuguese economy is a result of a combination of several shocks and fragilities, whose impact was more marked in the 2000s. In this low growth regime, the growing imbalance of the external accounts became unsustainable. Under the prevailing European institutional framework, the change in international investors' perceptions triggered a payments crisis, as described in the following section.

Chart 2.2.3 • Ratio of outstanding loans to gross value added, by sector of activity



Sources: *INE*, Central Credit Register (CCR) and Banco de Portugal calculations.

Chart 2.2.4 • Weight of each risk decile in the total credit portfolio of the banking system | Per cent



Sources: Central Credit Register (CCR) and Banco de Portugal calculations.
Note: The credit risk indicator and the respective deciles were calculated for each year separately.

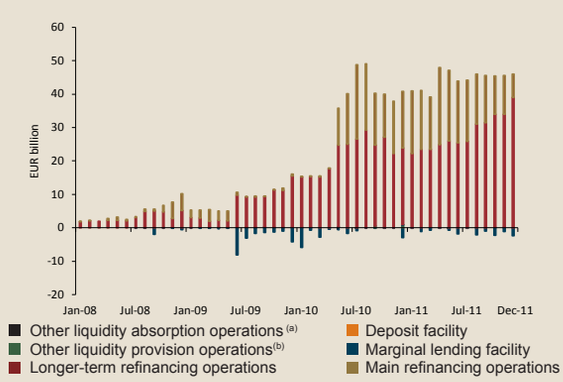
3. The absence of external financing inside a monetary union

The accumulation of external deficits over the course of the first decade of the euro was not exclusive to the Portuguese economy. In fact, throughout this period, there was a significant intensification of financial integration on a global level, as reflected in the strong growth of gross and net debt flows between countries (Lane and Milesi-Ferretti, 2012). Such flows implied an accumulation of high imbalances in the current and capital accounts of various countries. These debt flows occurred in a persistent context of low global risk aversion, both in countries accumulating deficits and in countries accumulating external surpluses. This complacency was clearly visible in the euro area, which contributed to an inefficient allocation of such capital flows.

In the first years of monetary integration, the economic and financial risks associated with the accumulation of external imbalances were largely ignored. Although the implications on the evolution of intra-area competitiveness were recognised, as well as the need to correct such imbalances over the course of time, the idea that a sudden payments crisis could occur in the euro area was not seriously pondered (see ECB, 2008). Portugal was no exception in this regard. The reality ended up showing that – under the institutional framework in force at the time – a country in the euro area was just as vulnerable to a payment crisis as an emerging country indebted in foreign currency. The absence of a lender of last resort to sovereign states in the monetary union was the fundamental source of vulnerability in this regard (De Grauwe, 2011). In this institutional framework, the loss of confidence in the intertemporal solvency of a sovereign state in the euro area may imply a sudden stop in funding by international investors. In addition, the existence of multiple equilibria – situations in which changes to agents' expectations may significantly alter the macroeconomic equilibrium – tends to exacerbate contagion effects between countries. It is worth underlining that, in theoretical terms, even small differences in macroeconomic fundamentals between countries may be heavily penalised by financial investors, in which case a "separating equilibrium" segmenting sovereign debt markets occurs. Similarly, large differences in fundamentals may be ignored in periods in which investors do not discriminate among sovereigns, in which case there is an "aggregating equilibrium" (see Banco de Portugal, 2012).

In the case of Portugal, the beginning of the external financing crisis may be dated back to April 2010, the month in which Greece submitted a request for financial assistance (see also Merler and Pisani-Ferry, 2012). The evolution of the recourse of Portuguese banks to Eurosystem funding is particularly illustrative in this regard (Chart 3.1). In fact, in May the Portuguese banks' financing from the ECB

Chart 3.1 • Outstanding amounts of monetary policy operations of Portuguese banks



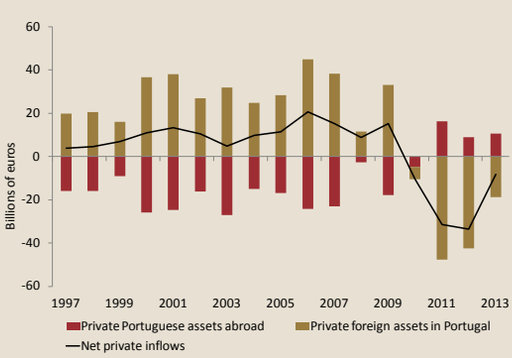
Source: Banco de Portugal.
Notes: (a) Includes "fixed-term deposits" and "reserve transactions". (b) Includes "free-tunning operations" and "structural operations". Last observation: December 2011.

jumped €18 billion (more than 10 per cent of GDP). This evolution reflected the marked deterioration of access to the international debt markets, in terms of prices and quantities, which affected all economic agents. Chart 3.2 illustrates the reversal of capital inflows to the Portuguese economy recorded in 2010 and which persisted through the following years. It should be noted that, in parallel, the resident sector partially offset the reduction of funding from non-residents through a decline in foreign assets. These two movements implied a reversal of the financial integration process which had been observed uninterruptedly in preceding years.

A typical economy facing a sudden stop in funding must rapidly ensure the rebalancing of external funding flows. This process requires a relative expansion of the tradable sector, in particular of exports, as a counterpart to a contraction of the non-tradable sector. The efficiency of this factor reallocation is contingent upon the flexibility of the movement of physical and human resources between sectors, in addition to the financial system's capacity to intermediate funding flows consistent with this reallocation (Lane, 2013). Given the existence of various types of rigidities in the economy, both real and nominal, the reallocation of resources tends to be associated with strong contractions in output and with the materialisation of risks to financial stability (Mendoza, 2010). In a monetary union – and in the absence of significant movements in the single currency – this adjustment process may be exacerbated, given that the adjustment of the real exchange rate requires significant changes in relative prices between the various economies. The existence of constraints to these relative price changes, particularly as regards changes in nominal wages, tends to accentuate the impact of a sudden stop in output and employment (Schmitt-Grohé and Uribe, 2011).

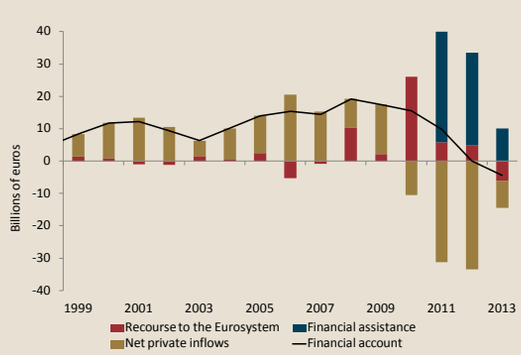
In contrast to this general characterization, it should be emphasised that the adjustment process of the Portuguese economy was not abrupt. In fact, over the course of 2010 and 2011, the Portuguese economy continued to record net external funding requirements. Chart 3.3 reveals how it was possible to continue funding external deficits in the absence of access to international debt markets. In a first stage, external private capital was replaced by Eurosystem funding, as referred to above. In a second stage, funding was ensured by official funds under the request for financial assistance submitted to the European Union and the International Monetary Fund. The design of the request for financial assistance is described in the following section. It should be noted that these official funding flows helped to ensure a gradual and orderly adjustment of the Portuguese economy, while simultaneously enabling national agents to redeem their financial obligations on maturity.

Chart 3.2 • Private financial flows



Source: Banco de Portugal.
Note: Positive values indicate an increase in indebtness *vis-à-vis* the rest of the world. Net private inflows do not include the amounts of the Financial Assistance Programme and recourse to the Eurosystem.

Chart 3.3 • Financial flows



Source: Banco de Portugal.
Nota: Positive values indicate an increase in indebtness *vis-à-vis* the rest of the world. Net private inflows do not include the amounts of the Financial Assistance Programme and recourse to the Eurosystem.

4. The strategy of the economic and financial assistance programme

In March 2011, the sovereign debt crisis in the euro area fell inexorably on the Portuguese sovereign. In a context of domestic political instability and uncertainties regarding the temporary and permanent financial assistance mechanisms in the European Union, there was a significant increase in the risk perception regarding the sustainability of public finances and the intertemporal dynamics of the Portuguese external debt. The rating agencies successively downgraded their ratings on the Portuguese debt, as well as on banks and several non-financial corporations. In June 2011 more than €5 billion in long term bonds would reach their maturity and could not be refinanced by the national banking system as a whole (whose exposure to sovereign debt had already increased substantially in the preceding months). Accordingly, the absence of sustainable funding alternatives, coupled with high short term public and private debt refinancing needs, made the request for external financial assistance unavoidable. The request was submitted in early April 2011.

The Economic and Financial Assistance Programme was agreed with the European Commission, the International Monetary Fund and the European Central Bank in May 2011. The Programme included a financial envelope of €78 billion, of which €12 billion were consigned to possible recapitalisation needs of private banks. The total amount was calibrated to essentially meet the State's borrowing requirements – excluding very short term issuances – for a period of three years. It should, however, be noted that the Programme did not cover the borrowing requirements of state-owned companies classified outside the general government perimeter. In this context, the recourse of these state-owned companies to the resident banking system may have crowded out the global funding for the private sector.

The Programme's objectives comprised the structural correction of the imbalances in public finances and external accounts, the deleveraging of the economy in a framework of financial stability and the implementation of reforms aimed at eliminating some structural constraints to economic growth identified in section 2. The Programme's three year horizon aimed at guaranteeing a gradual and orderly adjustment of imbalances. This process would contribute towards a recovery of the credibility and confidence of international investors and accordingly ensure a return to the regular market financing by national issuers. This essay does not detail the specific measures envisaged in the initial memoranda – as well as in the respective quarterly reviews – agreed with the IMF and the European Union (for further details see the Programme's quarterly reviews published by the IMF and the European Commission).

The design of the Programme was conditioned by important institutional constraints, in particular the participation in the euro area. The absence of an exchange rate instrument represents a fundamental contrast to the stand-by arrangements agreed with the IMF in 1977 and 1983. A comparison between the three adjustment processes allows drawing several conclusions on the adjustment trajectories in the different institutional frameworks (for a more detailed analysis, see Banco de Portugal, 2013a). To this end, the panel of Charts 4.1-4.10 compares the evolution of several of the main macroeconomic variables in the three adjustment processes.

In past arrangements with the IMF, the adjustment of relative prices needed to rebalance the external accounts was achieved by sizeable currency devaluations, not only in nominal but also in real terms (Charts 4.1 and 4.2). This strategy implied a sharp increase in inflation, reflecting an increase in the prices of tradable goods measured in terms of the price of non-tradable goods (Chart 4.3). In this framework, the exporting sector benefited from an improvement in price competitiveness, which contributed to a significant increase in market shares (Chart 4.4). In the current adjustment process, and in spite of a mitigated change in relative prices, there were also gains in export market shares, albeit relatively smaller than in former instances. As regards the adjustment of real variables, the evolution in terms of activity and

unemployment was clearly more unfavourable in the current Programme (Charts 4.5 and 4.6). In fact, in past adjustment processes, GDP did not even record a contraction in annual average terms. Various factors contributed to the relatively more adverse evolution in the current Programme, including a more unfavourable external environment, higher levels of leveraging in the economy (Chart 2.1.3) and a stronger fiscal consolidation effort (Chart 4.7). These elements will be analysed in more detail in section 5. Globally, the adjustment trajectory of external imbalances was very similar across the three programmes (Chart 4.8). The Portuguese economy therefore stands out as an important example of how it is possible, in the framework of a monetary union, to undertake a macroeconomic adjustment following a sudden stop.

The absence of a foreign exchange instrument – or an equivalent combination of policy instruments (see Correia, 2012) – merits additional thoughts. Firstly, it should be underlined that a devaluation is never a substitute for real structural reforms which increase competitiveness. Systematic recourse to a devaluation strategy distorts the incentives for firms to improve their productivity against foreign competitors. The recent export performance of Portuguese firms bears witness to the fundamental role of non-price competitiveness factors, as well as to the agents' capacity to react under a correct

Chart 4 • Portugal - Comparison with previous financial assistance programs (t = 1st year of the programme; variable=100 in t-1; data in real terms, unless otherwise indicated)

Chart 4.1 • Nominal effective exchange rate

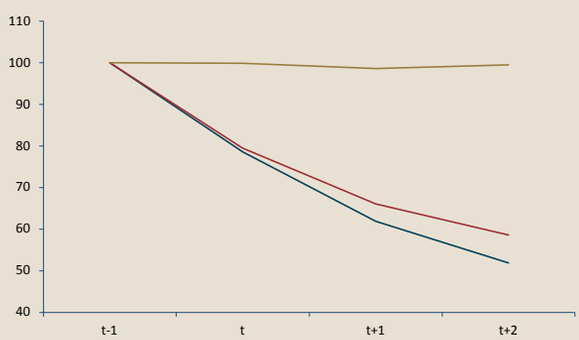


Chart 4.2 • Real effective exchange rate[a] (based on unit labour costs)

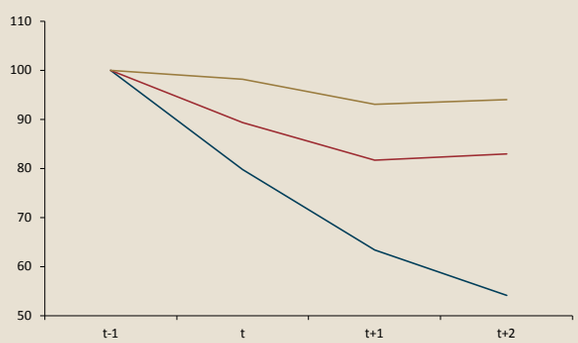


Chart 4.3 • Private consumption deflator | Change in percentage

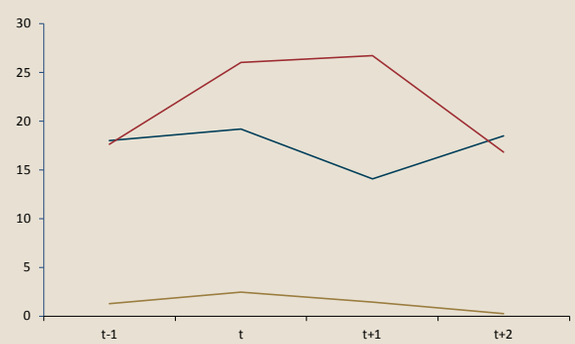
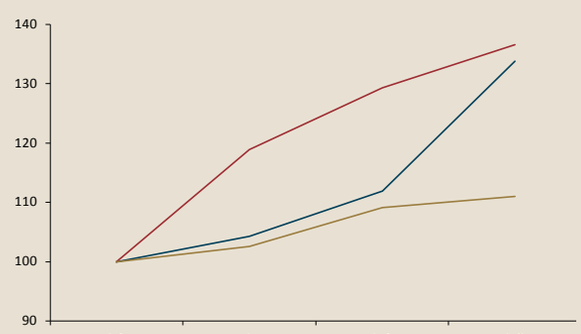


Chart 4.4 • Export market share[b]



1977 1983 2011

Sources: ECB, *INE*, OECD and Banco de Portugal.
Notes: (a) There are differences in the computation methodology of the nominal and real effective exchange rates between the most recent period and the previous periods of IMF-supported stabilization programs, namely in terms of the currencies/countries coverage and respective weights. (b) External demand for goods and services: source OECD in 1977, source ECB in 1983 and 2011.

framework of incentives. Secondly, the sudden increase in inflation deriving from devaluation has important redistributive effects. Behind the veil of monetary illusion lie real effects which are not immediately recognised by economic agents. This is exemplified by Charts 4.9 and 4.10, which show that real wages per worker fell relatively less in the current adjustment programme, in spite of the fact that nominal wages increased strongly in

Chart 4 • Portugal - Comparison with previous financial assistance programs (t = 1st year of the programme; variable=100 in t-1; data in real terms, unless otherwise indicated)

Chart 4.5 • GDP

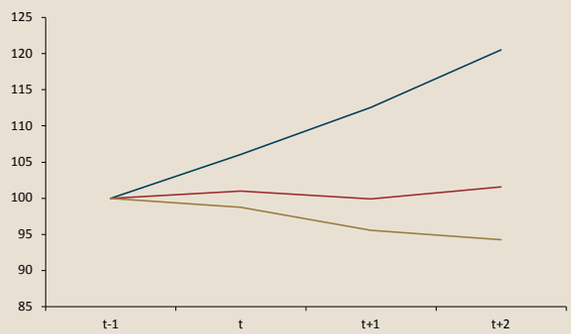


Chart 4.6 • Unemployment rate | Change in percentage points

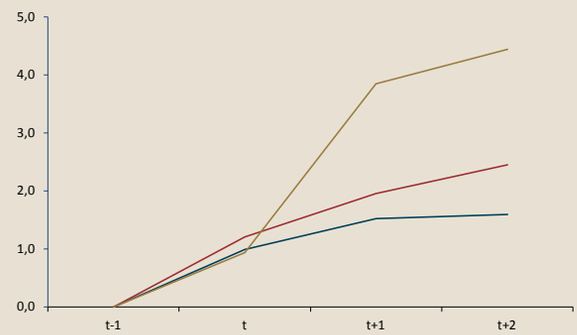


Chart 4.7 • General government structural primary balance[(c)] | As a percentage of GDP

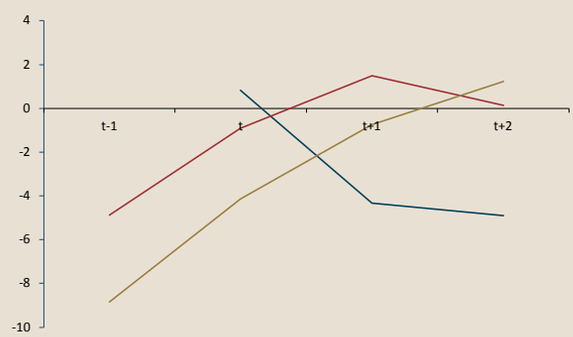


Chart 4.8 • Current+Capital account Balance[(d)] | As a percentage of GDP

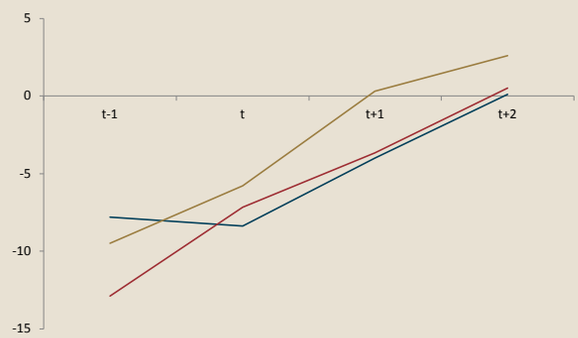


Chart 4.9 • Compensation per employee – nominal - Total economy

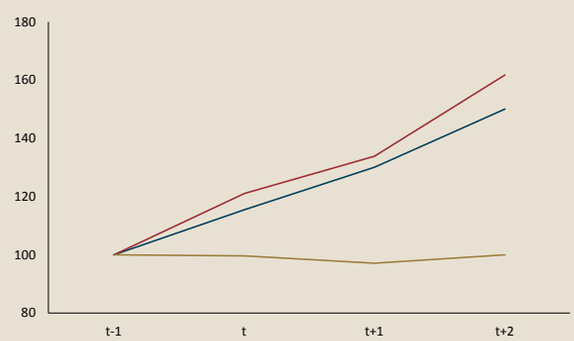
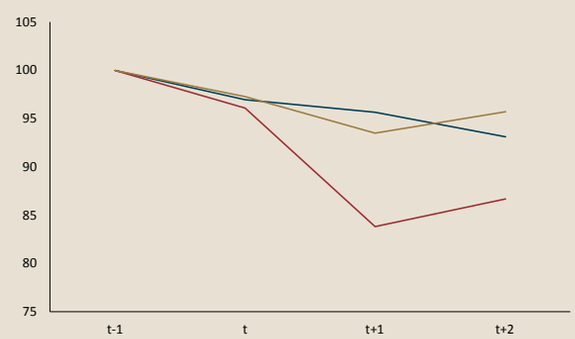


Chart 4.10 • Compensation per employee – real - Total economy



—1977 —1983 —2011

Sources: ECB, *INE*, OECD and Banco de Portugal.
Notes: (c) The general government structural primary balance is corrected for cyclical effects. For the most recent period, it is also adjusted for temporary measures and special effects. There is a break in the series for the primary balance and in the methodology adopted for the computation of the cyclical component between the most recent period and the previous periods of IMF-supported stabilization programs. (d) Current account balance in 1977 and 1983.

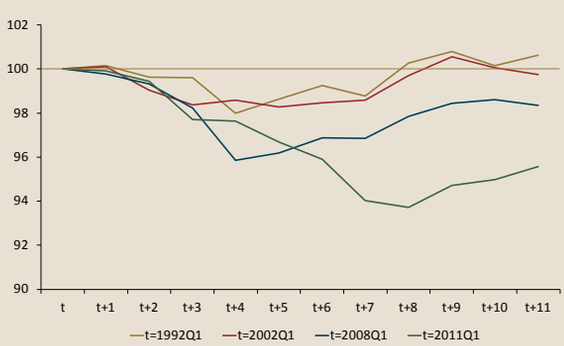
the past agreements with the IMF. The redistributive effect of inflation also has a significant impact on segments of the population whose incomes are not necessarily linked to inflation, such as the retired. In contrast, price stability ensures the transparency of the distributive effect of policies, contributing to more rational decisions by economic agents. Lastly, the current adjustment is occurring in a framework of particularly low inflation. Given the existence of downward nominal wage rigidity, this may constrain the wage adjustments required to achieve an efficient allocation of resources in the labour market.

5. The anatomy of the shocks and the macroeconomic adjustment

Over the course of the last three years, the Portuguese economy recorded a contraction of GDP and employment without precedent in recent history (see Charts 5.1, 5.2 and 4.5). This conclusion would naturally be reinforced if the whole period following the global financial crisis in 2008 was considered. At the end of 2013, GDP was still 4.5 per cent lower than the level observed at the beginning of 2011 (7 per cent in terms of employment). At the trough of the recession, activity was down by over 6 per cent (9 per cent in terms of employment).

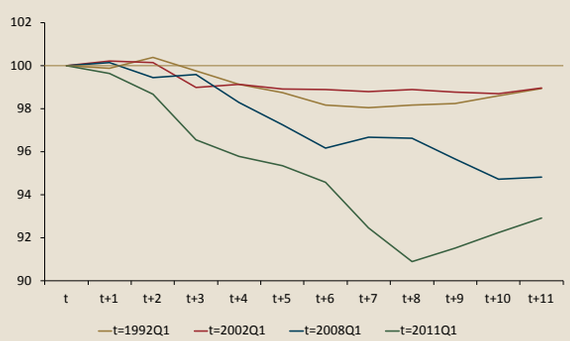
The re-balancing of the external accounts – in the absence of a permanent productivity shock or instruments that could promote a rapid correction of relative prices between tradable and non-tradable goods and services – would always imply a real transfer of resources in the economy, with a decline in domestic demand and a channelling of resources to the exporting sector (see Blanchard, 2007, and Bento, 2010). This reallocation of resources constitutes an important feature of the current adjustment process, with an increase in the weight of exports in GDP of almost 10 pp between 2010 and 2013 (Chart 5.3).

Chart 5.1 • Evolution of GDP in the last recessions (quarter t=100)



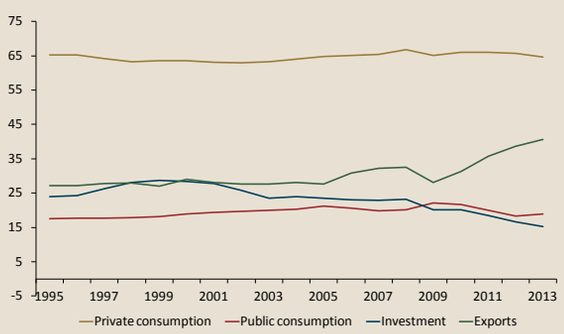
Source: *INE*.

Chart 5.2 • Evolution of employment in the last recessions (quarter t=100)



Source: *INE*.

Chart 5.3 • Weight of global demand components in GDP | Per cent



Source: *INE*.

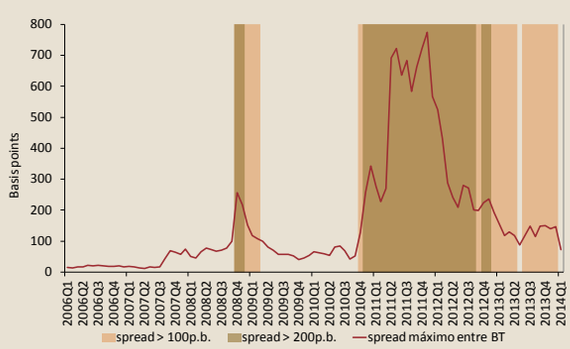
However, as described in this section, the impact of this process on the real side of the economy – particularly employment – was particularly marked. Several factors contributed to this evolution, including the adverse external environment (subsection 5.1), the need for a major fiscal consolidation effort (subsection 5.2), as well as the fact that the shock on the permanent income of agents occurred in a framework characterised by high levels of debt and by restrictive credit supply conditions (subsection 5.3). In addition, the interaction between these factors had a stronger impact owing to the structural constraints on the efficient reallocation of resources described in Section 2. The depth of the recessionary period beginning in 2011 and persisting up until the start of 2013 is associated with the combination of these elements, which are analysed in this section.

5.1 The adverse external environment

The urgency of the correction of the Portuguese economy's external imbalance coincided with the sovereign debt crisis and with the financial fragmentation in the euro area. Starting from the end of 2011, the euro area went into a recession, which was similar in terms of duration to the one experienced by the Portuguese economy. This evolution was associated, on the one hand, with the need of households and firms in several countries to intensify their balance sheet adjustment, together with a generalised synchronisation of fiscal consolidation efforts. On the other hand, reference should be made to the turmoil in financial markets on a global level, as well as to the uncertainty over the European Union's ability to perfect the institutional framework in order to ensure financial stability. In this context, international investors questioned the integrity of the euro area itself. This is illustrated in Chart 5.1.1, which shows the evolution of interest rate spreads on Treasury Bills issued by sovereign states in the euro area. Given that the default risk associated with these securities is virtually nil, a substantial increase in such spreads tends to translate the existence of redenomination risk in the euro area.

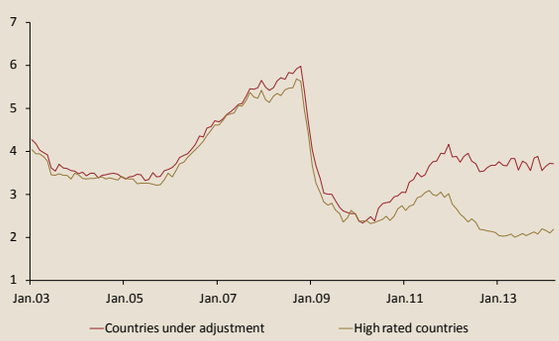
The successive waves of the sovereign debt crisis in the euro area contributed to the high level of macroeconomic dispersion and to the persistence of financial fragmentation in the area. The transmission of the ECB's accommodative monetary policy continued to be heterogeneous across euro area jurisdictions, notwithstanding the significant strengthening of the set of non-conventional monetary policy measures adopted over the course of this period. This segmentation was particularly visible in the evolution of interest rates on loans to non-financial corporations,

Chart 5.1.1 • Assessment of redenomination risk in euro area | Maximum difference in short-term sovereign debt yields among a selected group of euro area countries



Source: Banco de Portugal calculations.
Note: The periods in which the differentials in euro area short-term sovereign debt yields (which have a very low default risk) increased significantly can be interpreted as periods of high redenomination risk in the euro area. Data used in graph do not include Greece.

Chart 5.1.2 • Interest rates on bank loans to non-financial corporations - new business | Per cent



Sources: ECB and Banco de Portugal calculations.
Note: Countries under adjustment include Spain, Italy, Ireland, Portugal, Greece and Cyprus. High rated countries include Germany, France, Netherlands, Belgium, Austria and Finland.

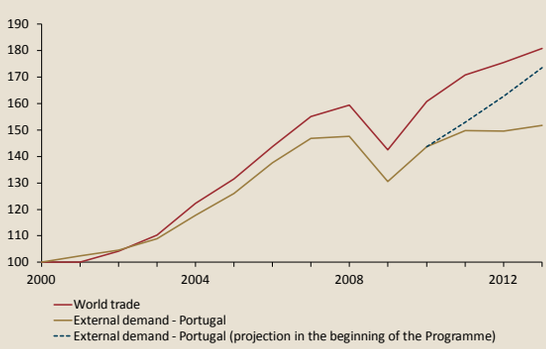
in which a differentiation between countries with high credit ratings and countries undergoing adjustment processes was clearly visible (Chart 5.1.2). Only to a small extent can such differentiation be attributed to greater risk deriving from firms' intrinsic characteristics (see Antunes and Martinho, 2012, for an illustration applied to the case of Portugal).

Starting in the second half of 2012, there was a significant improvement in the Portuguese economy's external environment. Globally, economic activity and commercial flows continued to be characterised by moderate growth. However, in the euro area, there was an easing of the turmoil in financial markets and a favourable evolution of international investors' risk perceptions. Following ECB interventions aimed at influencing the strategies and expectations of economic agents – particularly the announcement of the Outright Monetary Transactions (OMT) programme – in addition to the progress achieved in the correction of macroeconomic imbalances in several Member States, the redenomination risk in the euro area was virtually eliminated. This set the stage for a gradual and moderate economic recovery in the euro area as a whole.

These developments directly conditioned the duration and depth of the Portuguese economy's adjustment process, given its strong real and financial integration in the euro area. In the Programme's initial design, the macroeconomic scenario pointed to a strong growth in external demand for Portuguese exports, in line with the average observed prior to the onset of the global financial crisis. This projection turned out to be unfounded. In fact, following the financial crisis, the economic recovery in developed economies was clearly weaker than suggested by past evidence and the rate of growth of global trade was also more mitigated than the one recorded in the decade preceding the crisis (Chart 5.1.3). In addition, the geographical orientation of Portuguese exports, relatively concentrated in EU countries, made a negative contribution to the evolution of external demand for Portuguese exports. Accordingly, whereas the projections at the start of the Programme pointed to a real accumulated growth of external demand of around 20 per cent between 2011 and 2013, actual growth was only 5.5 per cent.

This evolution had significant macroeconomic implications (see Table 5.1.1). In fact, assuming the materialisation of the external demand initially projected in the Programme, as well as the observed export market share gains, the macroeconometric model usually employed in Banco de Portugal's projections suggests that the accumulated fall of GDP in these three years would be mitigated by around 3 pp and the drop in employment by around 1.2 pp. In this counterfactual scenario, the correction of the imbalances in public finances and external accounts would also be facilitated. The adverse evolution of the external environment thus explains a substantial part of the macroeconomic projection errors recorded during the course of the Programme. Another non-negligible

Chart 5.1.3 • Foreign demand and world trade | Index 2000=100



Sources: ECB and Banco de Portugal calculations.

Table 5.1.1 • Macroeconomic impact of the revision of external demand (*vis-à-vis* the initial Economic and Financial Assistance Programme projection)

	Differences *vis-à-vis* the observed outcome (in percentage points)			
	2011	2012	2013	(accum.)
Rate of change of external demand	2.1	6.6	5.2	14.6
Rate of change of GDP	0.2	1.1	1.5	2.9
Rate of change of private consumption	0.0	0.3	0.7	1.0
Rate of change of GFCF	0.2	1.1	1.8	3.1
Fiscal balance (in % of GDP)	0.1	0.4	1.0	
Inflation (HICP)	0.0	0.1	0.5	0.6
Employment - annual rate of change	0.1	0.4	0.7	1.2
Current plus capital account (in % of GDP)	0.2	1.1	2.2	

Sources: ECB and Banco de Portugal calculations.
Note: Calculations using the Quarterly Macroeconometric Model of Banco de Portugal ("M").

part derived from the additional fiscal consolidation measures undertaken, which is the subject of the following subsection.

5.2 The demanding fiscal consolidation process

The public finances at the beginning of the Programme were particularly challenging. Since the introduction of the euro, the public debt ratio had recorded an upward trend, in a context of almost economic stagnation and maintenance of fiscal deficits above the objectives laid out in the Stability and Growth Pact. Following the onset of the international financial crisis, Portugal implemented a countercyclical fiscal policy which implied a significant deterioration of public finances in 2009 (Chart 5.2.1). This evolution was observed in most Member States of the European Union, albeit in very different degrees, following the European Economic Recovery Plan agreed at the end of 2008 (Chart 5.2.2). However, the implications for the Portuguese economy were quite different. With the emergence of the sovereign debt crisis in the euro area, the sustainability of the Portuguese public finances was called into question by international investors. This evolution contributed to anchor the perception that, following Greece and Ireland, the Portuguese economy was characterised by severe fundamental fragilities in the euro area. In a context of segmentation of sovereign debts in the euro area (see Section 2), fiscal policy thus contributed to the self-fulfilling process which made the request for financial assistance inevitable.

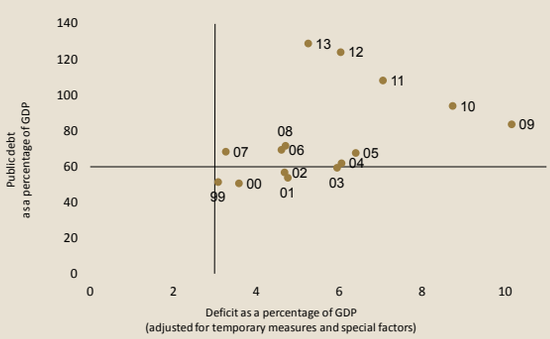
In the public finance domain, the Programme aimed not only to achieve a structural fiscal consolidation, in order to correct the excessive deficit in public accounts, but also to improve fiscal rules and procedures, in line with the requirements of the Stability Pact on national fiscal frameworks (see Cunha and Braz, 2014). In terms of the composition of the fiscal consolidation effort, the Programme recommended that this adjustment should be based on a structural decline of expenditure and, to a lesser extent, on a structural increase in revenues. This would contribute to correct the trajectory associated with an unsustainable growth of expenditure. This consolidation strategy was also in agreement with the idea that a high fiscal burden creates adverse incentives to economic growth and that an increase in the efficiency of public expenditure programmes could induce significant savings. The economic rationale of this strategy can also be confirmed by a general equilibrium analysis of a permanent decline in public expenditure, accompanied by a decline in taxes consistent with the reduction of the weight of interest expenditure (Chart 5.2.3). It should be emphasised that although this fiscal consolidation has a short term contractionary impact, there is a permanent positive effect on the level of activity in

the long term, owing to a decline in the distortionary effects of the tax burden.

The fiscal policy stance was restrictive over the course of the adjustment process. It should be underlined that the fiscal consolidation effort was very substantial. In fact, the primary structural balance as a percentage of GDP (i.e. adjusted for cyclical effects, temporary measures and special factors) increased by around 8.5 pp (Chart 5.2.4). This consolidation effort was relatively more marked in 2011 and 2012. In 2013, the primary structural balance recorded a surplus of 1.2 per cent of GDP, for the first time since the introduction of the euro. In terms of the composition of the adjustment, the accumulated contributions from revenue and expenditure were of a similar magnitude. It should be noted that the consolidation effort on the expenditure side in the three year period 2011-13 was only sufficient to undo the structural increase of expenditure recorded in the preceding three years (Chart 5.2.4).

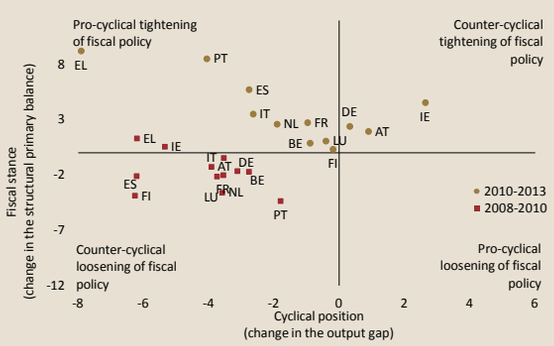
Notwithstanding the progress achieved in the evolution of the fiscal balance, the public debt ratio increased continuously over the Programme's horizon, from 94.0 per cent of GDP in 2010 to 129.0 per cent of GDP in 2013 (an increase of 35 per cent of GDP). Chart 5.2.5 provides a breakdown of the contributions underlying this change. The most important contribution results from debt-deficit adjustments. In cumulative terms, these adjustments

Chart 5.2.1 • Fiscal balance and public debt | As a percentage of GDP



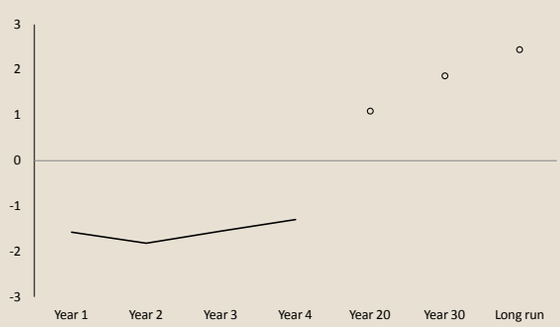
Sources: *INE* and Banco de Portugal.

Chart 5.2.2 • Fiscal policy and cyclical position in the euro area



Sources: European Commission and Banco de Portugal.
Note: The structural primary balance is measured according to calculations by the European Commission, except in the case of Portugal, for which the figure was computed by Banco de Portugal (taking into account the methodology adopted in the Eurosystem and correcting for the impact of special factors).

Chart 5.2.3 • The GDP impact of an expenditure-based fiscal consolidation | Percentage deviations against initial steady-state GDP



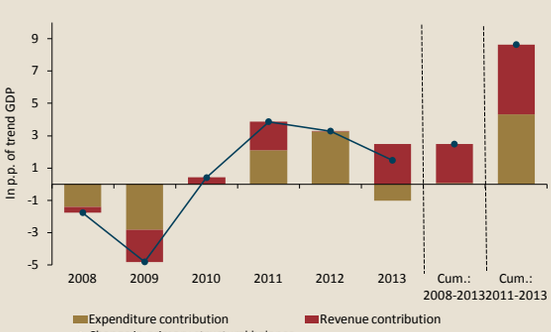
Source: Almeida *et al.* (2013).
Note: This chart depicts percentage deviations of GDP against initial steady-state levels. The simulations are based on the general equilibrium model PESSOA. The simulated consolidation strategy corresponds to a permanent decrease in government consumption and transfers to households, each contributing with 0.5% of initial GDP levels.

totalled around 15 per cent of GDP and were mainly associated with the accumulation of general government deposits (totalling 12.6 per cent of GDP at the end of 2013) and the impact of the issuance of contingent capital instruments in the context of the capitalisation of several banks. The second most relevant contribution to the increase in debt resulted from interest expenditures (12.6 per cent of GDP over the three year period). Lastly, reference should be made to the fact that, in cumulative terms, the effects of the primary deficit and the change in nominal GDP also contributed, albeit to a lesser extent, to the increase in the debt ratio. An assessment of the sustainability of public debt over the medium to long term is discussed in section 6.

A comparison between the initial ambition of the Programme's fiscal objectives and the successive revisions of the fiscal consolidation measures and of the fiscal deficit targets reveals several features of the implementation of the Programme which should be emphasised (Table 5.2.1). Fiscal execution, excluding temporary measures and special factors, always fell short of the initial objectives. The fiscal execution only succeeded in surpassing the targets in 2013 (but only after being revised twice). In addition, the estimates of the impact of fiscal consolidation measures contained in successive State Budgets were always higher that the estimates contained in the initial Programme. Lastly, the overall fiscal consolidation effort, albeit unprecedented, was below the one originally envisaged in the Programme.

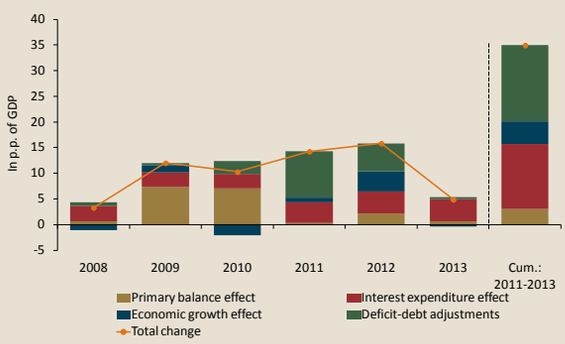
These facts appear, at first sight, to be mutually inconsistent. However, three issues contribute to explain the apparent contradiction. Firstly, the quantification of the fiscal measures, as well as of their impact on fiscal developments, proved to be clearly imperfect. In fact, the set of consolidation measures initially foreseen was not consistent with the ambition of the fiscal targets drawn up initially. Accordingly, the successive State Budgets had to introduce new measures, even though aimed at achieving less ambitious fiscal consolidation goals. Secondly, it should be noted that failure to comply with the objectives implied a dynamic effect in the following years, associated with the carry-over effect. Thirdly, as referred to in the preceding subsection, the macroeconomic scenario was revised downwards in the successive reviews of the Programme, particularly up to mid-2013. The downward revision of the external demand targeted to the Portuguese economy accounts by itself for the change in the deficit target agreed in August 2012 (0.5 pp) and around half of the change of the objective for 2013 (which was revised upwards on two occasions, 1.5 pp in August 2012 and 1.0

Chart 5.2.4 • The composition of structural consolidation | In percentage points of trend GDP



Sources: *INE* and Banco de Portugal.
Note: The expenditure contribution is the symmetrical of the change in structural primary expenditure as a percentage of trend GDP while the revenue contribution is the change in total structural revenue as a percentage of trend GDP.

Chart 5.2.5 • Breakdown of the change in the public debt ratio



Sources: *INE* and Banco de Portugal.

Table 5.2.1 • Change in fiscal targets throughout the Programme | Percentage points of GDP

	2011	2012	2013
DEFICIT[a]			
Targets			
Initial targets (May 2011)	5.9	4.5	3.0
1st revision (5th review, August 2012)		5.0	4.5
2nd revision (7th review, February 2013)			5.5[b]
Outturn			
Deficit	4.3	6.4	4.9
Deficit adjusted for temporary measures and special factors[c]	7.1	6.0	5.3
FISCAL CONSOLIDATION			
Ex-ante estimates			
Change in the structural primary balance - Fiscal Strategy Document August 2011	5.7	4.1	1.4
Impact of measures in the initial Programme (European Commission and IMF)	5.7	3.0	1.9
Impact of measures in the Fiscal Strategy Document August 2011		4.6	2.5
Impact of measures in the State Budget 2012		5.3	
Impact of measures in the State Budget 2013			3.2
Outturn			
Change in the structural primary balance - Fiscal Strategy Document April 2014	3.5	2.9	0.8

Sources: *INE*, Ministry of Finance, IMF, European Commission and Banco de Portugal.
Notes: (a) In national accounts, for the general government sector. (b) Including the effect of the reclassification of the capital injection in Banif, the target comparable with the outturn is a deficit of 5.9 per cent of GDP. (c) According to the Eurosystem definition.

pp in February 2013). On the other hand, the implementation of additional fiscal consolidation measures also had a short term contractionary effect – particularly given the crisis context (Castro et al., 2013) – thus contributing to the downward revisions of the macroeconomic scenario.

5.3 The shock on the permanent income of households and firms

Economic agents reacted fast to the change in incentives deriving from the adjustment process. In aggregate terms, households and firms' decisions were consistent with expectations of a marked and persistent decline of income in the Portuguese economy. In a framework of contraction of domestic demand and deterioration of labour market conditions, agents adjusted their balance sheets in order to ensure intertemporal sustainability – albeit with high heterogeneity, particularly in the case of non-financial corporations. This subsection presents the main features of the reaction of private agents in the context of the ongoing economic adjustment process. It should be noted that the decisions made by different agents interact strongly and simultaneously. However, for ease of exposition, this subsection will initially focus on the evidence relative to non-financial corporations, followed by that on households.

Over the course of the last three years, there was an orientation of firms towards external markets and productivity grew significantly in the tradable sectors. These facts are consistent with a structural correction of the external imbalances in the economy. The contrast between the evolution of real gross value added (GVA) generated in the various sectors of activity and the evolution of the respective productivity per worker illustrates these trends (Charts 5.3.1 and 5.3.2). In fact, in the last three years, there was a decline in GVA in most sectors of the economy, coexisting with major productivity gains, particularly in the industrial and agricultural sectors. In aggregate terms,

productivity improvements in these tradable sectors essentially derived from net job destruction. It should be noted that, to the extent that this evolution was associated with a greater resilience of firms with higher productivity and with the elimination of non-viable firms, the progress observed in aggregate productivity shall have a structural nature.

Underlying the aggregate macroeconomic outcomes there is always a myriad of situations, whose heterogeneity is not always easily perceived. The Portuguese economy is no exception in this respect. A comparison between the distribution of the level of GVA and its rate of change illustrates this fact (Charts 5.3.3 and 5.3.4). In particular, it can be noted that, in 2012, there was a clear shift to the left in the distribution of GVA (as well as in the distribution of the rate of change of GVA). Notwithstanding, it should be noted that, even in this year characterised by a strong contraction of activity, around 40 per cent of firms remaining active recorded an increase in GVA.

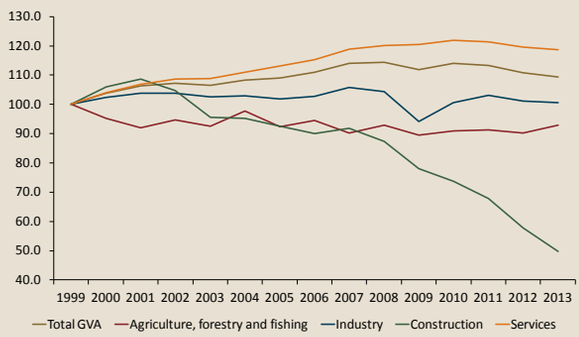
Among the most dynamic firms in the recent past the exporting firms clearly stand out. The increasing orientation of national firms to exporting activities is a marked feature of the current adjustment process. This dynamic is part of a gradual process of adaptation to the evolving pattern of comparative advantages and of integration in global value chains. This process – visible both in the exports of goods and services – preceded the current adjustment period (Banco de Portugal, 2013b). Available evidence suggests that between 2010 and 2012, firms which had begun to operate less than 10 years beforehand were responsible for around one third of the average nominal growth of exports. Moreover, their exports amounted to around a quarter of the total level of exports in 2012 (Chart 5.3.5).

More recently this dynamic was strengthened by the persistent fall in domestic demand, which also fuelled the reorientation of productive factors to exporting activities. In this context, significant export market share gains were recorded between 2011 and 2013, totalling around 12 pp in cumulative terms. This favourable performance of exporting companies suggests that there was no significant price competitiveness problem in the Portuguese economy, which is also indicated by the moderate appreciation of the real exchange rate registered since the inception of the monetary union. This real appreciation has been fully reversed in more recent years (Chart 5.3.6). A relevant issue in this context refers to the degree of persistence of the export market share gains recorded over the last few years. In this regard, it is worth underlining that a decision to export requires firms to invest resources, particularly in the case of new exporting firms (Amador and Opromolla, 2013). When the return on this investment is favourable, the evidence suggests that firms tend not to abandon their exporting activities, even in a context of recovery of domestic demand.

The experience of exporting companies was naturally not representative of the Portuguese economy as a whole. In fact, in the three year period 2011-13, firms more exposed to the domestic market faced an unprecedented demand shock (current and prospective)[2]. In many cases, the contraction of domestic demand was permanent, particularly in the case of the construction sector, real estate activities, restaurants and retail trade. This contraction interacted with two additional constraints on firms over the course of this period: the increased restrictiveness in lending standards by the financial system and the challenges deriving from the rigidity of cost structures, particularly due to the existence of downward nominal wage rigidity. A brief assessment of the potential contribution of each of these factors is now provided.

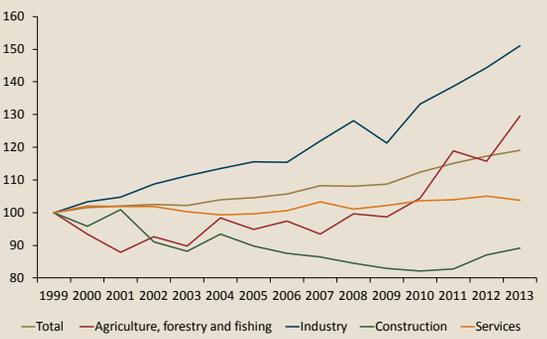
As stated in section 5.1, the sovereign debt crisis in the euro area implied a fragmentation of financial markets and disturbances in the transmission of monetary policy. In this context, Portuguese banks made significant changes to their lending standards over the course of 2011 and 2012, making them effectively more restrictive in terms of prices and quantities. As regards interest rates on new loans to non-financial corporations, Chart 5.3.7 shows

Chart 5.3.1 • Real GVA by main sectors of activity (index 1999=100)



Source: *INE*.

Chart 5.3.2 • Real GVA per worker by main sectors of activity (index 1999=100)



Source: *INE*.

Chart 5.3.3 • Distribution of nominal GVA (euros)

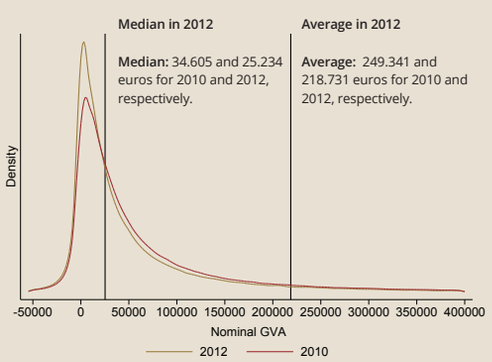
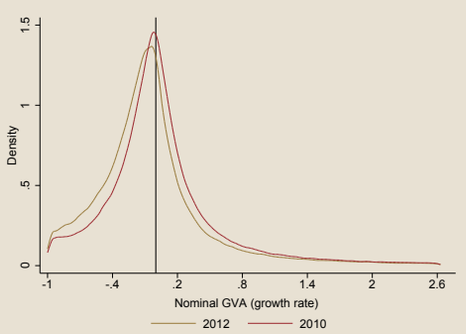
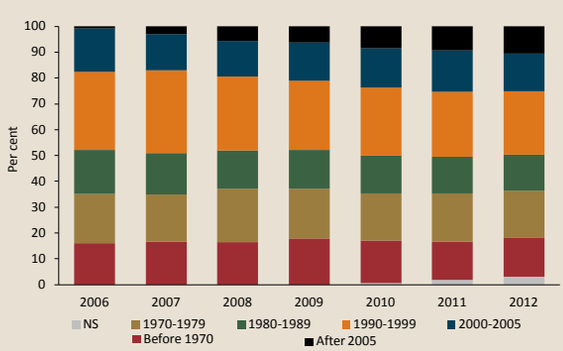


Chart 5.3.4 • Distribution of thr growth rate of nominal GVA



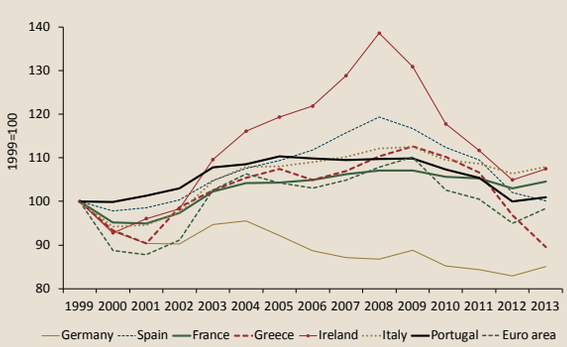
Sources: Ministry of Justice, Ministry of Finance and Ministry of Internal Administration and Banco de Portugal calculations (*IES*).
Notes: Gross value added was obtained as the difference between the value of output and intermediate inputs. The value of production includes sales of goods and services, work by the firm and change in stocks. Intermediate inputs include the cost of materials and services. Firms reporting missing or null figures for sales of goods and services or intermediate inputs were excluded from the analysis. Additionally, firms in financial sector or having head office in Madeira off-shore were disregarded. The distribution of nominal GVA is truncated at 400.000 euros and -50.000 euros. Means and medians were calculated in the original distribution. The distribution of the growth rate of GVA was only calculated for firms reporting a positive GVA in consecutive years. This distribution is truncated at 5th and 95th percentile.

Chart 5.3.5 • Export decomposition by firms' birth year



Sources: Ministry of Justice, Ministry of Finance and Ministry of Internal Administration and Banco de Portugal calculations (*IES*).
Note: This chart was published in Banco de Portugal (2013b).

Chart 5.3.6 • Developments in the real effective exchange rate deflated by the relative unit labour costs – international comparison



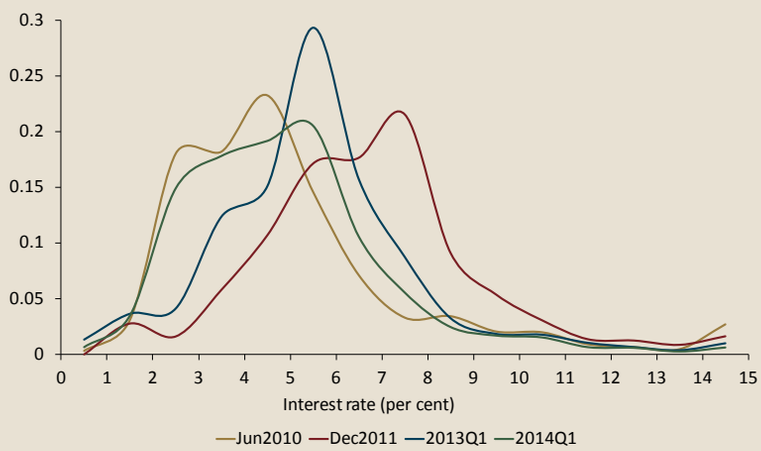
Source: ECB.

that there was a significant shift to the right of the whole distribution of interest rates in that period. This shift was related, on the one hand, to an increase in the materialisation of credit risk and in banks' risk perceptions. The deterioration of credit quality affected banks' profitability and was generalised across the various sectors of activity, being particularly concentrated in those most exposed to domestic developments. On the other hand, the increase in loan rates was associated with an increase in banks' funding costs, which remained high in comparison to the returns on interest-bearing assets held in their balance sheets. Over the course of 2013 and 2014, the distribution of interest rates shifted gradually to the left, in a framework of significant improvements in the banking system's aggregate solvency and liquidity levels, of adoption of a broad set of conventional and non-conventional measures by the Eurosystem and of an improved macroeconomic situation.

In this context, there was a significant contraction of bank loans between 2011 and 2013, particularly in the case of smaller firms, as well as firms with greater exposure to the domestic market (with the exception of state-owned enterprises). It is particularly difficult to identify whether this loan contraction is associated with demand or supply side effects, in particular given the financial market segmentation observed in the euro area (see Banco de Portugal, 2013c). In turn, total credit[3] to larger firms and to the most dynamic firms – including exporters – remained resilient and consistent with the sectoral rebalancing of the economy towards tradable goods and services sectors (Chart 5.3.8). Reference should, herein, be made to the fact that the share of bank credit to new firms declined substantially over the course of these years (from around 4 per cent prior to the international financial crisis to less than 1 per cent in more recent years). This evolution may have an impact on the economy's growth prospects, given that the dynamism of new firms is crucial for the incorporation of innovation and knowledge, as well as to a rapid and sustainable job creation.

In addition to restrictive credit conditions, a second element which might have conditioned firms' decisions was the fact that downward nominal wage rigidity became an increasingly binding constraint. This nominal rigidity derives from employers' reluctance to cut nominal wages, given the impact on the morale of workers who bear such cuts (Bewley, 2002)[4]. In a framework of low inflation and low GDP growth, this rigidity could hamper an efficient allocation of resources (Akerlof *et al.*, 1996). This situation tends to be accentuated in the absence of decentralised wage negotiating mechanisms (Portugal *et al.*, 2010). Chart 5.3.9

Chart 5.3.7 • Distribution of interest rates on new loans to private non-financial corporations

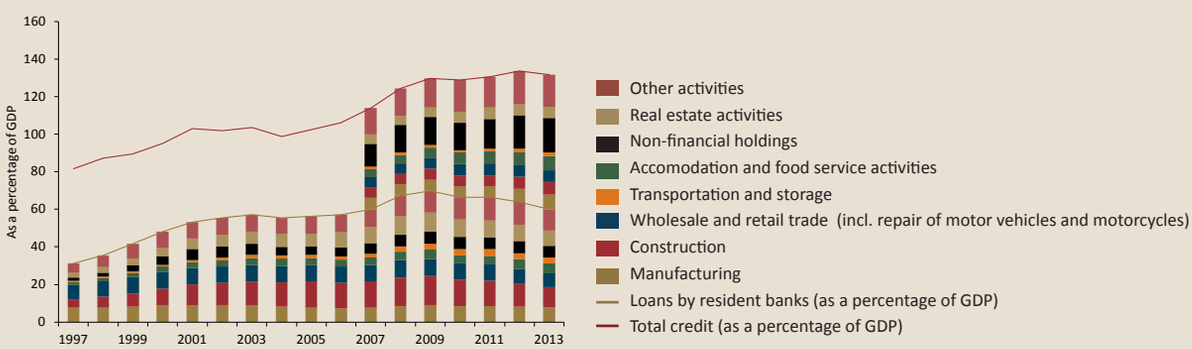


Source: Banco de Portugal.
Note: Individual loans where weighted by their corresponding amounts.

presents evidence of the existence of high downward nominal wage rigidity in Portugal, particularly in the case of base wages (the share of unchanged base wages reached an all time high of 75 per cent in 2012). In this context, firms resorted to alternative margins of adjustment of their wage costs per worker. Such mechanisms included, for many firms, a cut in remunerations in excess of the base wage, which contributed to the lesser prevalence of unchanged total wages (Chart 5.3.9)[5]. In addition, there has been a significant increase in the share of new hires with wages close to or equal to the minimum wage (Chart 5.3.10). In 2012, around 45 per cent of new hires earned less than €535.

During the course of 2011, 2012 and early 2013, corporate investment in physical capital and net job creation fell to particularly low levels. In a context of exacerbated uncertainty, of adverse demand prospects and of unused productive capacity, the investment decisions in physical capital accentuated the downward trend already observed prior to the beginning of the adjustment programme (Chart 5.3.11). The fall was generalised as regards the various types of investment. In turn, net job creation during this period was strongly negative. This dynamic was mainly associated with a lower hiring rate and, only to a lesser extent, to an increase in the separation rate (Chart 5.3.12). In this context, employment fell sharply and

Chart 5.3.8 • Debt developments of non-financial corporations

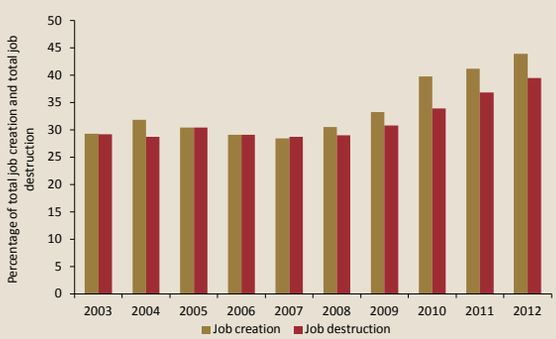


Sources: Central credit register (CCR) and Banco de Portugal.
Note: The breakdown of total credit to non-financial corporations is not availabe prior to 2007.

Chart 5.3.9 • Evolution of the share of unchanged wages

Sources: Ministry of Solidarity, Employment and Social Security (*Quadros de Pessoal*) and Banco de Portugal calculations.
Notes: Nominal wages correspond to full-time workers with full compensation which stay in the same firm working the same number of hours.
The values for 2010 are not presented given that they are affected by a statistical break (from the transition of *Quadros de Pessoal* to *Inquérito Único*).

Chart 5.3.10 • Share of job creation and job destruction for wages close to the minimum wage

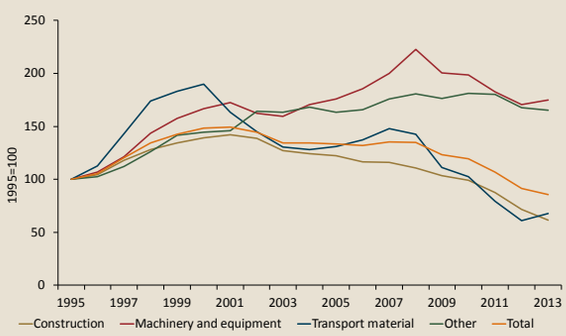


Sources: Ministry of Solidarity, Employment and Social Security (*Quadros de Pessoal*) and Banco de Portugal.
Notes: For each year the chart presents the percentage of matches for each flow - job creation and job destruction - whose wage lies in the interval between the minimum wage and up to 10 per cent above the minimum wage. The wage is measured as the permanent compensation, in nominal terms.

the unemployment rate rose to levels above 16 per cent, clearly above the European average (Charts 5.3.13 and 5.3.14). In particular, there was a strong upward trend in long-term unemployment. It should also be noted that the increase in unemployment was mitigated by a decline in the labour force, in part associated with migration flows, as well as by an increase in the number of discouraged workers. In more recent quarters, investment flows in physical capital and net job creation began an upward trajectory.

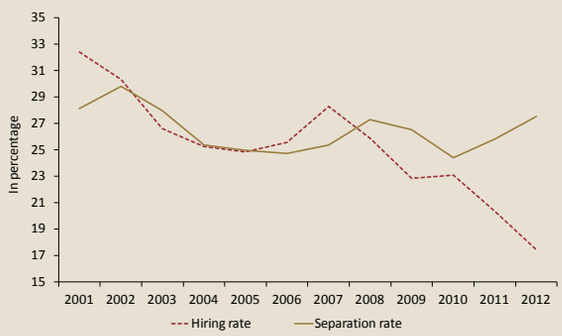
In this framework of marked deterioration in labour market conditions, total compensation of employees, in real terms, declined around 10 per cent between 2010 and 2013 (Chart 5.3.15). This evolution was particularly marked in the case of the public sector – due to a decline of public employment and, to a lesser extent, of nominal compensation per employee – but was also observed in the case of the private sector, predominantly owing to a decline in the number of employees. This evolution of compensation of employees largely contributed to the fall in household disposable income in 2011 and 2012 (Chart 5.3.16). In

Chart 5.3.11 • Real change in gross fixed capital formation, by type of investment | Accumulated variations; index 1995=100



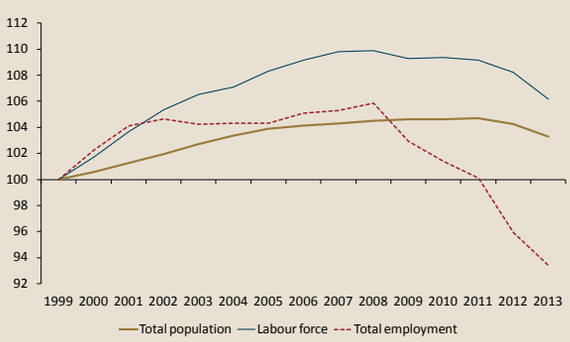
Source: *INE*.

Chart 5.3.12 • Hiring rate and separation rate in the labour market



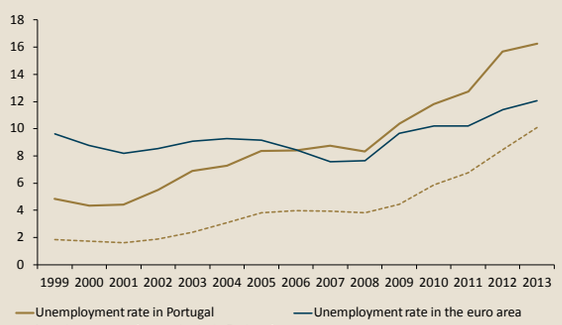
Sources: Social Security and Banco de Portugal.
Notes: Hiring rate: number of total hirings in all firms in the economy over total employment. Separation rate: number of separations in all firms in the economy over total employment. For more details see "The labour market in Portugal" in this Annual Report.

Chart 5.3.13 • Total population, labour force and employment | Index 1999 = 100



Sources: *INE* and Banco de Portugal.
Note: The series of total employment and labour force were corrected for the break in the series recorded in 2011.

Chart 5.3.14 • Unemployment rate in Portugal and in the euro area | Per cent of the labour force



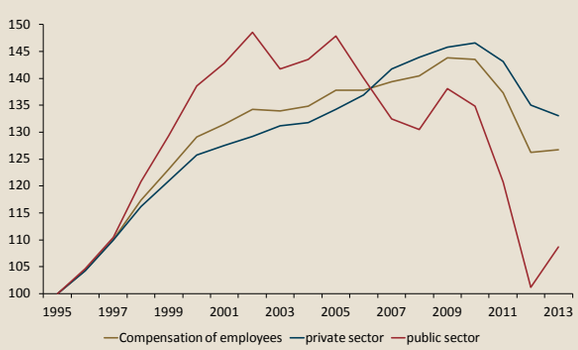
Sources: Eurostat, *INE* and Banco de Portugal.
Notes: The Portuguese unemployment rate was corrected for the break in the series recorded in 2011.

2013, the largest contribution to the decline in disposable income was the significant increase in the personal income tax.

In this context, household disposable income fell to the level recorded in the middle of the last decade (Chart 5.3.17). In turn, consumption declined to the level observed at the start of the last decade. Accordingly, in 2013 households' savings and saving rates reached their highest levels since the inception of the euro area (Chart 5.3.18). In a framework of highly restrictive bank lending, households continued to implement a gradual balance sheet deleveraging process, in line with what had been observed since 2009 (Chart 2.1.3).

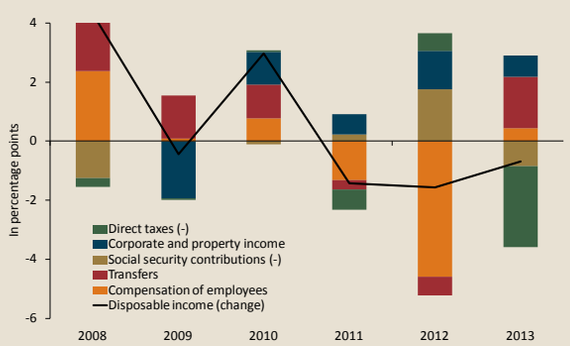
These results suggest that households interpreted the shock on disposable income as being essentially of a permanent nature. Evidently, other factors also contributed to the increase in household savings rates, including a high level of uncertainty associated with labour market developments, as well as confidence levels persisting at minimum values between the end of 2011 and the end of 2012. The dynamics of consumer confidence was similar across the whole income distribution (Chart 5.3.19). These factors fuelled an increase in precautionary savings, particularly

Chart 5.3.15 • Compensation of employees, in real terms (index 1995=100)



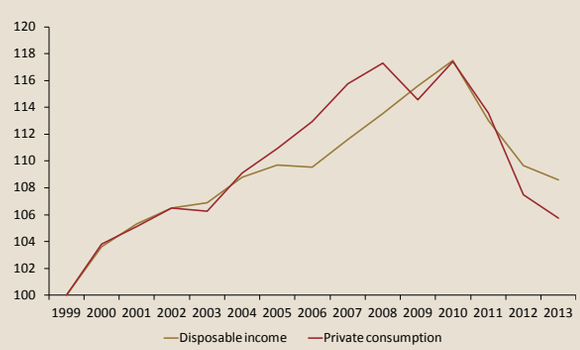
Source: *INE*.

Chart 5.3.16 • Households' disposable income: contributions to the annual rate of change, in percentage points



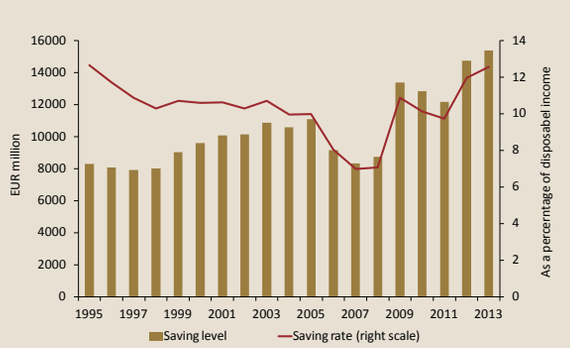
Source: *INE*.

Chart 5.3.17 • Disposable income and private consumption, in real terms | Index 1999=100



Source: *INE*.

Chart 5.3.18 • Households' savings and saving rates



Source: *INE*.

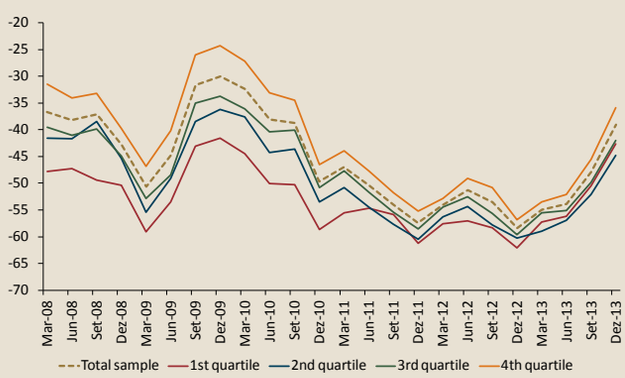
in the case of higher income households[6]. As the reasons underlying these precautionary savings fade out, a slight reversal of the saving rate is expected. In this context, it should be noted that sustaining household saving rates at levels close to those currently observed is fundamental to maintain a medium and long term current account surplus.

As regards the situation of lower income households, the available evidence points to a reversal of the downward trend in the poverty rate (Chart 5.3.20). The poverty rate – defined as the share of individuals with an income below the poverty line – increased 0.8 pp in 2012, which corresponds to about 85 thousand individuals. It should be noted that the fall in median income observed in recent years implied a decline in the poverty line[7]. In fact, assuming instead a poverty line "anchored in time", *i.e.* a threshold remaining constant in real terms, the increase of the poverty rate would be clearly more marked (Chart 5.3.20). Lastly, it should also be underlined that the poverty rate in Portugal continues to be one of the highest in the euro area, with an important contribution from the working poor (the share of workers in Portugal living in poverty amounts to around 10 per cent). By contrast, there has been a sustained decline in the poverty rate of retired individuals over the last few years. This evolution reflects the structural maturation of Social Security in Portugal, in which the average value of new pensions is relatively higher.

The recent evolution of the poverty rate is particularly associated with the increase in unemployment. In 2012, the poverty rate of unemployed individuals stood at around 40 per cent, more than double the poverty rate of the population as a whole (Chart 5.3.20). The impact on household income is likely to have been accentuated by the significant increase in the member of unemployed without unemployment benefits, in addition to the increase in the number of discouraged workers (*i.e.* individuals who are available to work but are not actively seeking employment). Between the start of 2011 and the end of 2012, the number of individuals in these two situations increased by more than 250 thousand, having declined only slightly in recent quarters (Chart 5.3.21). Lastly, it should be emphasised that, in Portugal, whereas entry rates into poverty stand at levels comparable with the European average, exit rates are clearly lower. This contributes to the relatively high persistence of poverty in Portugal (see European Commission, 2013). It is worth noting that the exit transitions from poverty are primarily associated with job creation which, as evidenced in Chart 5.3.12, has been at particularly low levels in recent years.

Chart 5.3.19
• Consumer confidence indicator, by income quartile

Source: European Commission
Note: Quartely averages of consumer confidence indicators.



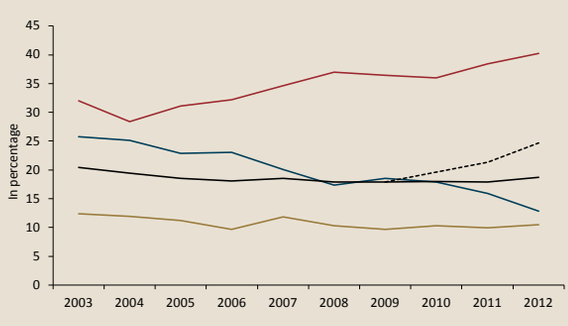
6. Challenges of the road still ahead

At the end of the Economic and Financial Assistance Programme, it can be concluded that the main goals originally defined have been broadly achieved. The stable financing framework provided by the Programme ensured a gradual and orderly adjustment process. In this context, the main macroeconomic imbalances of the Portuguese economy recorded a marked correction over the last three years. The macroeconomic evolution was, however, substantially more adverse than initially projected, particularly as regards the high levels of unemployment prevailing in the economy. In a framework of important institutional deepening in Europe and more comprehensive interventions by the ECB, in addition to the gradual recovery of the economy, the Portuguese sovereign regained access to the international debt markets. However, the structural rebalancing process of the economy is still incomplete. The challenges associated with this process cannot be underestimated and are discussed in this final section.

The macroeconomic adjustment undertaken over the last few years allowed correcting, from a flows perspective, important imbalances characterising the Portuguese economy. Reference should herein be made to the marked improvement of the current and capital account, from a deficit of 9.5 per cent of GDP in 2010 to a surplus of 2.6 per cent in 2013. This evolution simultaneously benefited from an orientation of productive factors to the goods and services exporting sectors – of an eminently structural nature – and from a decline in domestic demand, combining cyclical and structural elements. In terms of public finances, the primary balance adjusted for the cycle, temporary measures and special factors increased 8.5 per cent of GDP between 2010 and 2013, reaching a surplus of 1.2 per cent of GDP in 2013. The Portuguese economy thus demonstrates the possibility of adjustment of macroeconomic imbalances in the framework of a monetary union.

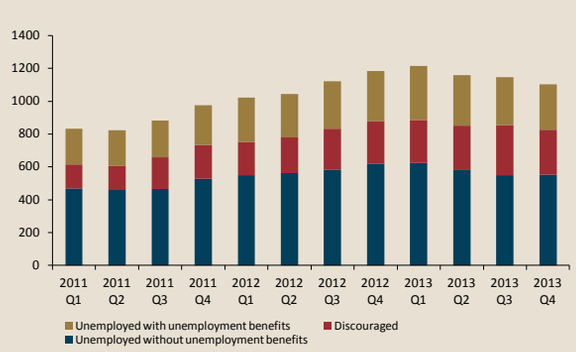
This adjustment of flows requires deepening and consolidation in the future, in order to promote a correction of accumulated imbalances in terms of stocks. Given that the public debt currently amounts to 129 per cent of GDP and the net debt position of the Portuguese economy *vis-à-vis* the rest of the world is 119 per cent of GDP, there is no margin for complacency in furthering the adjustment process. This conclusion is strengthened by the risks – domestic and external – still pending on the Portuguese economy. In this context, it is expectable that the scrutiny of financial markets will be particularly sensitive to adverse economic shocks or to erratic policy decisions. It should be noted that the current assessment by markets of the Portuguese debt is stricter than the euro area average (Chart 6.1).

Chart 5.3.20 • At risk of poverty rates, by most frequent activity in the previous year



Source: *INE*.

Chart 5.3.21 • Evolution of the number of unemployed and discouraged individuals | In thousands



Source: *INE*.

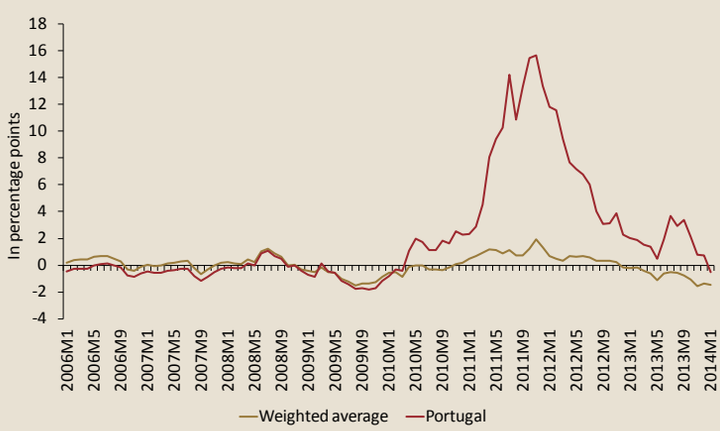
In this context, it is fundamental to remain firmly committed to the continuation of the adjustment process.

Strict compliance with the commitments assumed by the authorities under the Stability Pact and the Fiscal Compact is imperative. In this context, there are three main commitments: the correction of an excessive deficit situation by 2015; the convergence to a structural fiscal balance of -0.5 per cent of GDP (the "medium term objective" in the Stability and Growth Pact) at a rate of at least 0.5 pp of GDP per annum; and, the decline of the public debt ratio to the reference value of 60 per cent of GDP, with an average annual rate of reduction corresponding to one twentieth of the difference between the debt ratio in each year and the reference value. Given the Portuguese economy's current fiscal position, as well as the more recent macroeconomic projections, it can be concluded that these three commitments are mutually consistent. It should be emphasised that, notwithstanding the progress achieved over the last few years, the fiscal consolidation effort still needed is significant and will require agreement on an effective reform of the State (Cardoso, 2013). The challenges associated with population ageing make this reform even more pressing.

Strict compliance with these fiscal commitments ensures the sustainability of the public debt, even in a conservative macroeconomic scenario (Chart 6.2). The fulfilment of the commitments set out in the Fiscal Compact is therefore not a binding constraint but actually the adequate policy for the Portuguese economy from an intertemporal perspective. It should also be noted that the currently projected macroeconomic evolution is also consistent with a correction of the international investment position (Chart 6.3).

Simultaneously, public policies should be geared towards the creation of incentives for innovation, factor mobility and investment in physical and human capital. The legal and institutional framework should contribute to allocate productive resources to firms integrated in global value chains. A higher level of capitalisation of firms, in addition to investment in intangible capital, will be crucial in this regard. This growing external focus should guarantee the sustainability of the correction of the external imbalances undertaken in the last few

Chart 6.1 • Difference between the observed two-year government bond yields and the fair yield: euro area average and Portugal

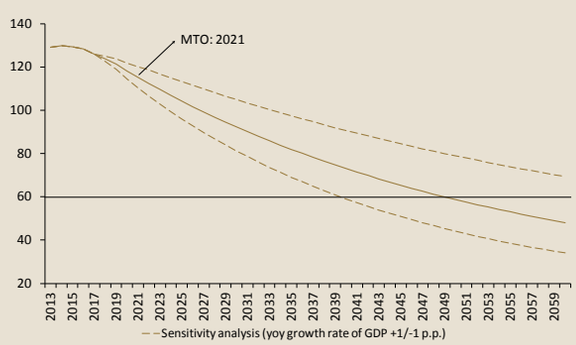


Source: European Commission.
Notes: The sovereign fair yield is computed using a monthly panel of countries and taking into account separating equilibria (based on economic fundamentals such as the nominal interest rate, the inflation rate, stock market returns and one-year forecasts of GDP growth). The euro area countries of the panel are Austria, Belgium, Germany, Spain, Finland, France, Ireland, Italy, the Netherlands and Portugal, covering the period from January 2001 until January 2014 and considering random effects at the country level. The average is GDP-weighted. For more details, see Banco de Portugal (2012).

years. This will also determine the possibilities of resuming the real convergence process between Portugal and the euro area average. This challenge is particularly demanding in the context of Programme exit. On the one hand, it is well known that economic recoveries following major financial crises tend to be relatively slow. In the case of Portugal, this trend is reinforced by a high level of leveraging in the economy, particularly as regards non-financial corporations. On the other hand, it should be recognised that the deep recessionary environment over the course of the last three years had non--negligible implications on the level of potential GDP. In this context, reference should be made to the decline of the labour force – in particular with the reversal of net migration flows in comparison to the recent past – to the high level of long-term unemployment – implying a permanent decline in accumulated human capital – and to the postponement of investment decisions, which conditioned the incorporation of new technologies and qualifications in the productive process.

The fulfilment of these objectives requires a consistency of policies and an institutional framework which anchors agents' incentives over an extended period. This long-term vision requires a broad agreement and coordination among agents, anchored on the recognition that this is a national goal which has not yet been fulfilled. The impending risks on the Portuguese economy should help broadening the consensus in this regard. It is worth emphasising that the absence of this intertemporal perspective was at the root of the recurrent economic crises observed over the last decades, with high economic and social costs. Agreement on a long-term agenda for the Portuguese economy requires a demanding process of negotiation, commitment and, finally, appropriation by political and social agents of a fundamental set of strategic options and policies. This appropriation is an unavoidable challenge of the ongoing adjustment process.

Chart 6.2 • Public debt ratio: fulfilment of the European commitments | As a percentage of GDP



Source: Banco de Portugal.
Notes: Until 2017 the assumptions considered in the exercise follow the Banco de Portugal projections published in the April 2014 Economic Bulletin. From 2018 onwards it is assumed a 3 per cent annual nominal GDP growth and a 4.3 per cent implicit interest rate on debt. The primary balance is considered to improve by 0.5 p.p. of GDP annually until the Medium Term Objective is reached (-0.5% of GDP). This hypothesis is maintained in the sensitivity analysis.

Chart 6.3 • International Investment Position | As a percentage of GDP

Source: Banco de Portugal.
Note: Until 2017 the assumptions considered in the exercise follow the Banco de Portugal projections published in the April 2014 Economic Bulletin. From 2018 onwards it is assumed a 3 per cent annual nominal GDP growth and a 4.3 per cent implicit interest rate on debt. It is additionally assumed a gradual reduction in the goods and services account, reaching a balanced position in 2020. Current transfers and capital account are assumed to stabilize in 1.5 per cent of GDP from 2020 onwards.

Notes

1. It should be noted that, in this exercise, each percentage point decline in the total factor productivity gap implies a reduction of 1.5 percentage points in the gap of GDP per capita, whereas in the case of human capital the elasticity is unitary (for more details see Hsieh and Klenow, 2010). It should also be noted that a real convergence process in any of these dimensions would imply a consentaneous increase in capital per worker.

2. At least 20 per cent of firms in Portugal have an exporting activity.

3. Total credit includes loans, debt securities and commercial credit (by residents and non-residents).

4. In the case of Portugal, there are also legal and institutional restrictions on cuts in base wages.

5. The lower prevalence of unchanged total wages is also related with the evolution of income earned by workers which is contingent upon the number of working days (*e.g.* meal allowances).

6. The two highest deciles in the income distribution are responsible for more than 80 per cent of savings in Portugal (see Banco de Portugal, 2013d).

7. The European Union defines the poverty line as 60 per cent of the median income per equivalent adult.

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