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Contents

THE PORTUGUESE ECONOMY IN 2014

Presentation

In 2014 the Portuguese economy saw an output growth of 0.9 per cent, after contracting for three years. Albeit moderate, this growth is particularly important, as it occurs simultaneously with progress in terms of resuming some fundamental macroeconomic balances, particularly as regards the external account balance and the continued fiscal consolidation process. Such progress occurred in the framework of the Economic and Financial Assistance Programme concluded in May 2014. The situation of the Portuguese economy, however, continues to be characterised by high indebtedness levels of the public and private sectors, reflected in the external indebtedness level, which will continue to be an active restriction on economic agents' decisions.

In recent years, there were important adjustments in the domestic output structure and also in the balance between general government revenue and primary expenditure. Such adjustments provided more favourable conditions for the continued correction of macroeconomic imbalances, and cannot be reversed without significantly affecting the growth prospects of the economy. Moreover, the onset of the economic recovery, evident in 2014, starts from very high levels of unused productive resources, especially in the labour market. The gradual correction of this situation must be associated, *inter alia*, with the continued channelling of productive resources to sectors more exposed to international competition. In this context, the behaviour of some variables influencing the innovation level and the capacity to respond to shocks – such as the quality of productive capital, employment skills and unemployment duration – is of essential importance for an increase in potential growth of the Portuguese economy.

In 2014 private consumption in the Portuguese economy increased in the context of favourable labour market developments, namely as regards employment growth in the private sector. Private consumption growth is also associated with the decline in the interest rates applied by national banks, liaised with ECB's accommodative monetary policy. In this context, and against the background of a decline in uncertainty and an increase in consumer confidence, the savings rate declined in 2014. This occurred in parallel with a fall in credit granted to households, contributing to a decline in the indebtedness levels of this institutional sector. The amount of new loans for consumption rose in 2014 but remained at levels much lower than at the onset of the international and economic financial crisis. The desirable increase in private consumption by the different segments of the population – in a context of correction of the fundamental macroeconomic balances – cannot be out of line with concerns regarding inequality, a dimension where the Portuguese economy shows fragilities when compared with the European situation. Societies with high inequality levels tend to face lower social cohesion and higher difficulties in reaching compromises for undertaking reforms.

Public consumption, a variable that measures the level of goods and services provided by the general government as a whole, plays a key role in ensuring social cohesion, defined through choices made by the society. In 2014 public consumption declined again, in connection with the continued fiscal consolidation process, with its weight in output falling by approximately 2 percentage points over the last five years. In 2014, the decline in the weight of this variable in output was associated with the fall in compensation of civil servants. However, although the statistical accounting of public consumption is based on the level of resources used, the actual level of goods and services provided also depends on the efficiency of the utilisation of those resources. Maintaining the fiscal consolidation process, in line with the commitments assumed at European level implies that an increase in the efficiency of using public resources continues to be a priority.

Developments in exports of goods and services in the Portuguese economy were again very positive in 2014, reinforcing the perspective that it corresponds to a structural change, evident over the last decade. The weight of exports in output has increased by 10 percentage points since 2010, reflecting expressive rises in market share. The creation of new export-oriented firms, adjusted to the current pattern of comparative advantages, as well as the concurrent reorientation of resources to sectors more exposed to international competition, are important traits in the adjustment process of the Portuguese economy. The rise in the weight of exports in output makes it possible to create room for manoeuvre so that, under conditions of international economy growth, an increase in imports due to growth of private consumption and investment does not translate into external imbalances.

Gross Fixed Capital Formation (GFCF) grew in 2014, after five years of significant falls. This aggregate is at much lower levels than in the beginning of the Economic and Financial Assistance Programme, in spite of a clear recovery in machinery and equipment and transport material. The strong decrease in GFCF levels does not permit the writing up of depreciated capital (Box 'Capital accumulation and recent developments in investment in Portugal'), with unfavourable consequences for productivity growth. Sustained reductions in the capital per worker ratio in the Portuguese economy, especially in the context of a starting level below the European average, may limit the incorporation of new technologies in the productive process and jeopardise growth of exports of goods and services. To the extent possible, this effect shall be mitigated by greater selectivity of investment made, raising the rates of return relatively to what was observed in the past. The rise in the level of capital per worker cannot be disconnected from the accumulation of human capital, a dimension where the Portuguese economy is still weak and the efficiency in the use of public resources is also very important.

As regards public investment, a variable that also contributed to fiscal consolidation in 2014, there has been a very significant accumulated decline since 2010. These developments concur with the general government debt-reducing effort, tending to limit the deterioration of the debt ratio. In addition, new infrastructures are today less required than a few decades ago, but it is nonetheless necessary to assure its conservation.

The accumulation of private productive capital in the Portuguese economy is strongly affected by firms' indebtedness levels. The excessive dependence of Portuguese firms on bank credit and the concurrent equity shortage are structural weaknesses that have long been diagnosed. A number of factors contribute to this situation, among which the small average size of firms, as well as fiscal and legal aspects.

As in the case of households, 2014 saw an easing of bank financing conditions to firms. Although the level of resident bank credit to firms has continued to decline, there was as acceleration to slightly positive rates at the end of the year in manufacturing and trade. Financing difficulties and financial weaknesses are higher in the sectors where the restructuring process of the economy is stronger, and are amplified by the fact that the process is taking place in a period of higher risk premia associated with the financial fragmentation prevailing in the euro area (Box 'The pass-through of monetary policy in the euro area and non-standard measures in 2014'). In this context, the deleveraging effort of Portuguese firms as a whole should be pursued in an orderly manner, while aiming to preserve those that are deemed viable under a competitive environment. Any deleverage occurring mainly on account of the exit of firms from the market tends to weaken the balance sheets of credit institutions, with adverse consequences for their capital ratios (Box 'Enterprises' exit from the market and the deleveraging process'). Disturbances in the link between corporate financing and banks' risk management, as the case that led to the application of a resolution measure to Banco Espírito Santo in 2014, may not imply a disruption in the financial intermediation process, but generate inefficiencies and costs for the economy as a whole.

The current and capital account balance and developments in the international investment position reflect the progress of the adjustment process of the Portuguese economy. The maintenance of a positive current and capital account balance in 2014, although smaller than in the previous year, points to a reversal of the long process of rising external indebtedness, which is essential for maintaining conditions of access to the markets under normal conditions. Indeed, this development has contributed to an improvement of the international investment position, which was also due to the loss in value of national assets held by foreigners. In parallel, in 2014 the financial account balance had a negative contribution of portfolio investment and, to a lesser extent, of net flows in direct investment. The net inflow of foreign direct investment is undoubtedly a requirement of the adjustment process of the Portuguese economy, making it possible to diversify financing sources and to raise external risk sharing. However, it is important to create the conditions for its materialisation, chiefly through the creation of new capacity in sectors with high competitiveness levels, subject to international competition.

Developments in the labour market in 2014 mirror the trend of activity and also the strong imbalances accumulated in recent years. In this context, employment grew and the unemployment rate declined. In spite of these favourable developments, however, the use of the labour input in the Portuguese economy has remained at levels well below those prevailing before the onset of the international crisis. In addition, an analysis of total labour market flows among the different labour situations shows less buoyancy, with fewer job cuts but also limited creation of new jobs (see the Special issue in this *Economic Bulletin*). The persistently high unemployment levels involve very significant economic and social costs. Therefore, the capacity to absorb a high number of unemployed persons continues to be among the main challenges of the Portuguese economy, which is structurally harder to overcome, the longer the unemployment lasts. Measures involving a reduction in labour market segmentation and an increase in wage flexibility are important in this context.

Demographic developments are closely linked to labour market developments and involve a limitation to medium and long-term economic growth of the Portuguese economy, in parallel with the existing limitations in terms of productive capital accumulation. The number of persons in the labour force declined again in 2014, due to a negative natural rate and an intensification of outward migration flows. These flows tend to be associated with the situation in the internal and external labour markets but are also strongly persistent, to the extent that emigration costs decline as communities abroad grow and because of imitation and household reunification phenomena. The Portuguese emigration has intensified in recent years, also involving older age brackets, while the number of new immigrants has declined sharply. Emigration tends to limit the potential growth of the economy, an effect that may be reversed if qualified resources return. In parallel, emigrants' remittances have also increased (Box 'Developments in emigrants' remittances').

The evolution of prices of goods, services and inputs in an economy is a complex process, influenced by factors such as the level of demand, production cost developments, changes in taxes and competitive conditions, and external price developments in national currency. The harmonised index of consumer prices in the Portuguese economy saw a slight fall in 2014, in a context of stability in taxation and lower international oil prices, especially at the end of the year. In addition, the moderate growth of consumption and investment has created the conditions for lower prices, while maintaining the negative differential *vis-à-vis* inflation in the euro area, which also had a downward trend over the course of the year. Although these developments are part of the process of recovery of Portuguese external competitiveness, there are increased risks when the general price level does not rise continuously. In the Portuguese case, maintaining very low inflation for a protracted period constrains the deleveraging effort of the different institutional sectors, posing increased difficulties to its sustainability. The monetary expansion measures recently adopted by the ECB will tend to ease such risks.

The decline in the labour input price in the Portuguese economy, evident since the start of the adjustment programme and translating into a cut in real wages, is consistent with the conditions prevailing in the labour market, especially due to the persistently high unemployment rates and the need for a cost reduction by firms, particularly in the sectors most affected by the restructuring process and with higher deleveraging needs. However, in the current European and global competitive context, competitiveness gains due to the fall in labour input prices cannot be seen as a means to increase the market shares of national firms in a sustainable manner. A wide range of structural reforms, namely in the product market, should contribute to this process.

The Portuguese economy must pursue the adjustment process in course, in which increases in consumption are sustainable, investment ensures capital renewal and the indebtedness levels are gradually reduced. Maintaining high indebtedness levels is a problem not only due to the continued deviation of resources associated with the debt service but also to the level of risk exposure imposed on the economy. The effects of the recent international economic and financial crisis have impacted more seriously on the economies with larger macroeconomic imbalances.

The participation of the Portuguese economy in the European Union and in the monetary union has enabled it to benefit from mechanisms that ease the magnitude of the adjustments, especially in contexts where external financing is discontinued. However, European institutional architecture has revealed weaknesses and generated tensions in contexts of persisting imbalances and sharp reductions in Member States' activity. In 2014 efforts were pursued in order to address some of these weaknesses, namely through the entry into operation of the Single Supervisory Mechanism, an integral part of the Banking Union project. In addition, the strengthening of mechanisms for the control and correction of macroeconomic imbalances, in the context of the so-called European Semester, reinforces the role played by European institutions and deepens the integration process. The action of these institutions is important to complement and strengthen the stabilisation efforts of the European economy as a whole, thus far chiefly ensured by the ECB. However, it is also necessary that European policies are developed in such a manner as to promote convergence among Member States, avoiding dualisms in the growth process. Notwithstanding the relevance of the external framework, the success of the Portuguese economy will chiefly depend on its capacity to raise the quantity and quality of productive factors, to pursue a demanding agenda of structural reforms, and to continue to adjust macroeconomic imbalances based on a correct orientation of economic policies, resting on strong institutions and a buoyant and demanding civil society.

1. International environment

In 2014 the world economy continued to grow, albeit with higher heterogeneity across regions

The world economy maintained its growth pace in 2014, albeit with higher heterogeneity across regions and countries. According to the International Monetary Fund (IMF), world growth stood at 3.4 per cent in 2014, accelerating in the advanced economies and decelerating in the emerging market economies (Table 1.1). In the first half of 2014, temporary factors – in particular more adverse weather conditions – led to more limited growth in the advanced economies, but throughout the year the main engine behind the rebound shifted from the emerging market to the advanced economies. The fall in the price of oil by about 50 per cent in the second half of the year, chiefly related to supply-side factors, is likely to have contributed to these developments. Therefore, the fall in the price of oil is expected to make a favourable contribution to the recovery in the world economy, which however may be conditioned by weak investment.

Table 1.1 • GDP | Real rate of change, percentage

	2011	2012	2013	2014
World economy	**4.2**	**3.4**	**3.4**	**3.4**
Advanced Economies	**1.7**	**1.2**	**1.4**	**1.8**
USA	1.6	2.3	2.2	2.4
Japan	-0.4	1.7	1.6	0.0
Euro area	1.7	-0.8	-0.4	0.9
Germany	3.7	0.6	0.2	1.6
France	2.1	0.4	0.4	0.4
Italy	0.7	-2.8	-1.7	-0.4
Spain	-0.6	-2.1	-1.2	1.4
United Kingdom	1.6	0.7	1.7	2.6
Emerging markets and developing economies	**6.2**	**5.2**	**5.0**	**4.6**
Central and Eastern Europe	5.4	1.3	2.9	2.8
Commonwealth of Independent States	4.8	3.4	2.2	1.0
Russia	4.3	3.4	1.3	0.6
Developing Asia	7.7	6.8	7.0	6.8
China	9.6	7.7	7.8	7.5
India	4.9	4.6	6.4	7.2
Latin America and Caribbean	4.9	3.1	2.9	1.3
Brasil	3.9	1.8	2.7	0.1
Middle East and North Africa	4.5	4.9	2.3	2.4
Sub-Saharan Africa	5.0	4.2	5.2	5.0

Sources: Eurostat, IMF (*World Economic Outlook April 2015*) and Thomson Reuters.

Advanced economies made a higher contribution to world economic growth

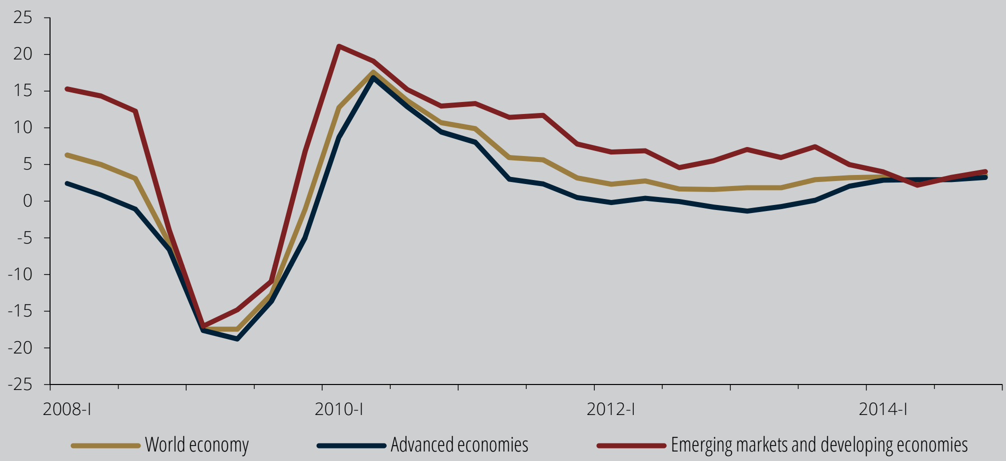
Economic activity in advanced economies grew 1.8 per cent in 2014, compared with 1.4 per cent in 2013. These developments were chiefly due to robust economic growth in the United States and the United Kingdom, but also to euro area growth.

US GDP increased by 2.4 per cent in 2014, up from 2.2 per cent in 2013. The US started the year with weak growth, largely due to more severe winter conditions. However, these developments were offset by higher-than-expected, robust growth during the rest of the year, driven by domestic demand. At the same time, labour market conditions improved significantly throughout the year. In turn, inflation remained contained due to the economy's spare capacity, falling commodity prices and the US dollar appreciation. Over the course of the year, the Federal Open Market Committee (FOMC) gradually reduced its monthly asset purchases and concluded them in November. In view of the progress made towards its objective for employment, the FOMC changed its forward guidance in April and reaffirmed the maintenance of the federal funds rate target range at the current level for a prolonged period.

Economic growth was also robust in the United Kingdom, driven by domestic demand and in particular by private consumption. Economic activity increased by 2.6 per cent in 2014, up from 1.7 per cent in 2013, accompanied by a strengthening of the labour market. The annual rate of change in the HICP remained below 2 per cent, declining in the course of the year, amid low wage pressures, an appreciation of the pound sterling in the first half of the year and falling commodity prices. In this context, the Bank of England did not change its monetary policy, maintaining an accommodative stance.

By contrast, economic activity decelerated strongly in Japan, falling into technical recession in the third quarter of the year. GDP stagnated in 2014 as a whole, after 1.6 per cent growth in 2013. Private consumption

Chart 1.1 • World volume of imports of goods | Year-on-year growth rate, percentage



Source: CPB Netherlands Bureau for Economic Policy Analysis.

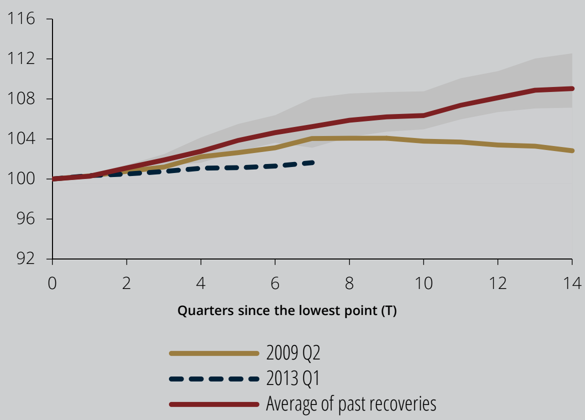
growth was far lower than expected, chiefly after an increase in the consumption tax in the second quarter. Despite the increase in this tax, inflation remained at very low levels. Against this background, the Bank of Japan expanded its quantitative and qualitative monetary easing programme[1] and the government delayed the second scheduled consumption tax increase.

Growth in emerging market economies declined in 2014

Activity in emerging market economies slowed down in 2014, with GDP increasing by 4.6 per cent, after 5.0 per cent in 2013. These aggregate developments were supported by various situations. In China, GDP slowed from 7.8 per cent in 2013 to 7.5 per cent in 2014, largely associated with developments in investment. At the end of the year, the central bank provided further monetary policy accommodation. In Russia, activity decelerated from 1.3 per cent in 2013 to 0.6 per cent in 2014, the outlook pointing to further deterioration. This scenario is driven by the strong negative impact of falling oil prices and subsequent depreciation of the Russian rouble, combined with strong geopolitical tensions. Oil price developments also had a very significant adverse impact on emerging market and developing economies – more dependent on commodity exports – in particular those with more limited leeway regarding the fiscal policy and higher external vulnerability.

International trade growth remained weak in 2014, recording rates below pre-crisis levels. Average growth of world imports in the period from 2001 to 2007 stood at 6.1 per cent, compared with rises of 3.1 per cent in 2014 and 3.5 per cent between 2011 and 2014. In the past , growth dynamics were stronger in emerging market economies, but in 2014 growth of world imports in these economies became closer to that of advanced economies (3.4 per cent and 3.0 per cent respectively) (Chart 1.1). International trade elasticity to GDP has remained

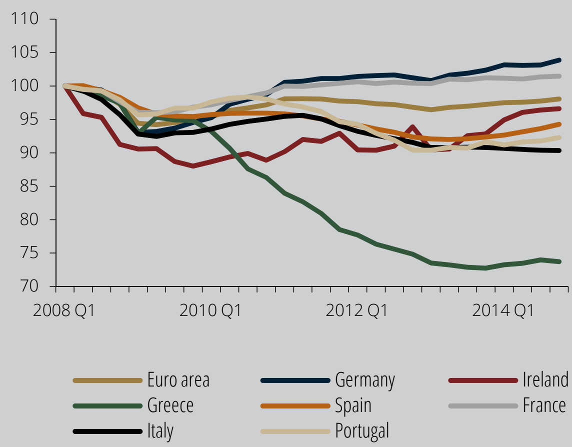
Chart 1.2 • GDP in the euro area and comparison with past recoveries | T=100



Sources: Eurostat and ECRI.

Note: The grey area corresponds to the maximum and minimum of the cycles registered since 1973, excluding the current.

Gráfico 1.3 • GDP growth in the euro area | 2008 Q1=100



Source: Eurostat.

low in the past few years, in contrast to the high figures of previous decades. Low elasticity was due to both cyclical factors, namely those associated with the global financial crisis, and structural factors, in particular the maturing of China's integration process in world trade.

Euro area economic recovery proceeded at a slow pace

Euro area economic activity recovered moderately in 2014, with GDP rising 0.9 per cent in the year as a whole, after falling by 0.4 per cent in 2013. The recovery is proceeding at a slower pace than in past episodes, even when compared with the 2009 rebound, which had also been relatively slow (Chart 1.2). Although the recovery of private consumption is also far lower than in previous episodes, this item was of essential importance in 2014, contributing 0.5 percentage points (p.p.) to GDP growth. After dropping in the past two years, GFCF made a positive contribution to activity in 2014 (0.2 p.p.). The modest recovery in the euro area masks different situations at individual country level (Chart 1.3). Growth in Germany was one of the strongest in the euro area, despite being lower than expected at the beginning of the year. GDP increased 1.6 per cent, compared with 0.2 per cent growth in 2013. In this country growth was mainly driven by private consumption and GFCF. Activity in Spain also increased significantly and above initial expectations. The rate of change in GDP rose from -1.2 per cent in 2013 to 1.4 per cent in 2014, with a strong contribution from private consumption. By contrast, activity in France and Italy remained almost stagnant. Growth in France has remained at 0.4 per cent since 2012, with public consumption making the most significant contribution. In Italy, GDP shrank for the third consecutive year, standing at 0.4 per cent in 2014 (-1.7 per cent in 2013), chiefly due to the contraction in GFCF.

Euro area labour markets maintained the slightly improving trend recorded since the second half of 2013, with higher recovery in employment than in past upswings. The average year-on-year rate of change in euro area employment stood at 0.6 per cent in 2004, accelerating in the course of the year in most industries. In turn, the average unemployment rate fell from 12.0 per cent in 2013 to 11.6 per cent in 2014.

External demand for the Portuguese economy accelerated

The rebound in euro area activity was a key driver of developments in external demand for the Portuguese economy. In 2014 this aggregate grew 4.3 per cent, with intra-euro area demand accelerating by 4.1 p.p. (Table 1.2). The economic recovery in Spain was an essential factor behind the acceleration of the external demand for the Portuguese economy. Conversely, extra-euro area external demand decelerated by 0.3 p.p. in 2014 to 2.9 per cent.

Euro area inflation fell to historically low levels, accompanied by lower inflation expectations

Euro area inflation followed a downward path in the course of the year, mainly driven by energy prices. The annual rate of change in the HICP stood at 0.4 per cent in 2014, i.e. a historically low level only comparable to that recorded in 2009 – in the height of the global economic crisis and when a very sharp fall in the price of oil was also recorded. The 50 per cent decline in the price of oil, between end-June and the end of the year, fuelled a 1.9 per cent drop in energy prices in the year as a whole (Chart 1.4). However, the rate of change in the prices of the other HICP components was also rather low in 2014. In turn, the share of the euro area HICP components with negative rates of change recorded an upward trend in 2014, reaching 30 per cent in December (Chart 1.5)

Table 1.2 • External demand of goods and services | Real year-on-year rate of change, percentage

	y-o-y									chain			
	Shares [b]	2011	2012	2013	2014	H1 2013	H2 2013	H1 2014	H2 2014	H1 2013	H2 2013	H1 2014	H2 2014
External demand (ECB) [a]	100.0	4.3	-0.7	1.6	4.3	0.2	2.9	4.1	4.4	0.2	2.8	1.3	3.0
Intra euro area external demand of which:	66.3	3.1	-3.0	0.8	4.9	-1.1	2.6	4.6	4.4	-0.6	3.2	1.4	3.8
Spain	27.1	-0.8	-6.3	-0.5	7.6	-3.1	2.1	7.1	8.1	-2.5	4.7	2.2	5.8
Germany	13.7	7.3	0.4	3.2	3.3	1.8	4.7	3.4	3.2	2.0	2.7	0.7	2.5
France	12.5	6.5	-1.2	1.9	3.8	0.7	3.1	3.5	4.0	1.1	2.0	1.5	2.5
Italy	3.9	1.2	-8.3	-2.2	1.6	-4.0	-0.4	1.6	1.6	-1.7	1.3	0.3	1.4
Extra euro area external deman of which:	33.7	6.7	4.1	3.2	2.9	2.9	3.5	3.2	4.4	1.7	1.8	1.3	1.4
United Kingdom	5.6	1.0	3.1	1.4	1.8	0.6	2.3	2.7	1.0	-0.7	3.0	-0.4	1.4
USA	3.5	5.5	2.3	1.1	3.9	0.4	1.9	3.4	4.3	0.5	1.3	2.1	2.2
Memo:													
World trade on goods and services (IMF)		6.7	2.9	3.4	3.1								
World merchandise imports (CPB)		6.1	2.1	2.6	3.5	1.7	3.4	3.5	3.5	0.7	2.7	0.7	2.7

Sources: ECB, CPB Netherlands Bureau for Economic Policy Analysis, Thomson Reuters and IMF.

Notes: (a) External demand is computed as weighted average of the imports colume of Portugal's main trading partners. Each country/region is weighted byt its share in Portuguese export. (b) Shares computed using 2011 data.

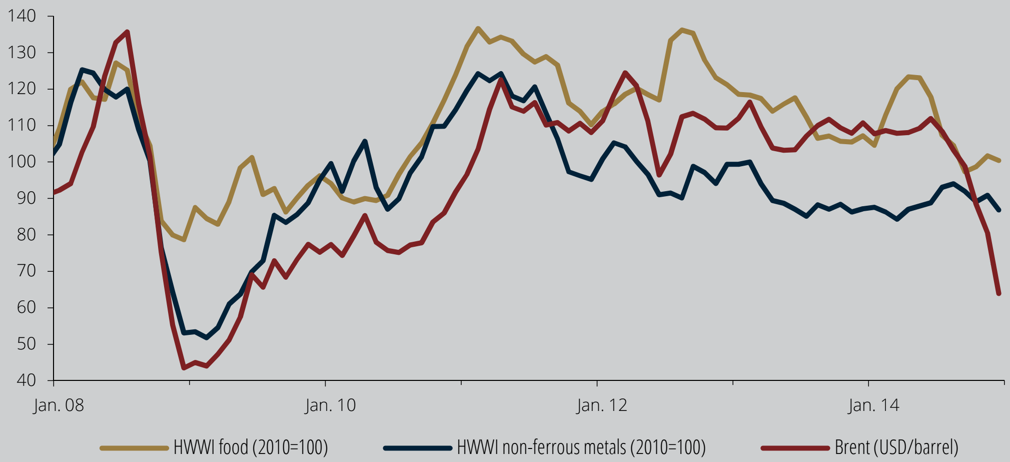
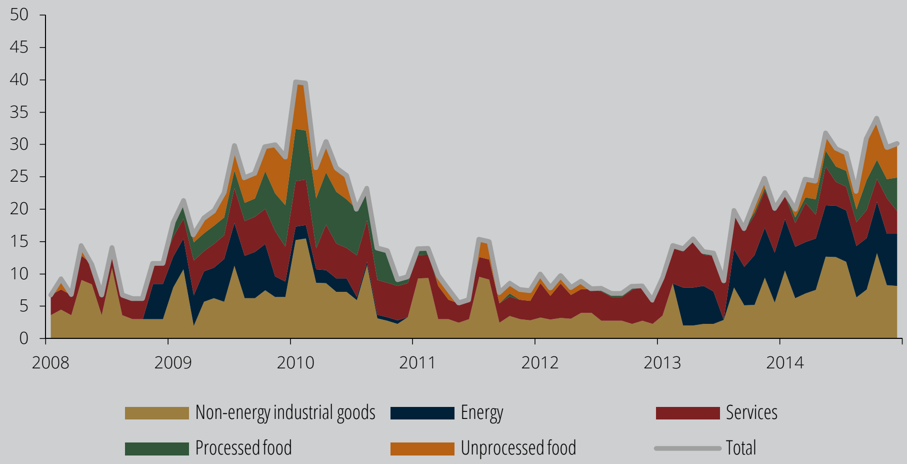


Chart 1.4 • Price of commodities (in US dollars)

Sources: Bloomberg and HWWI.

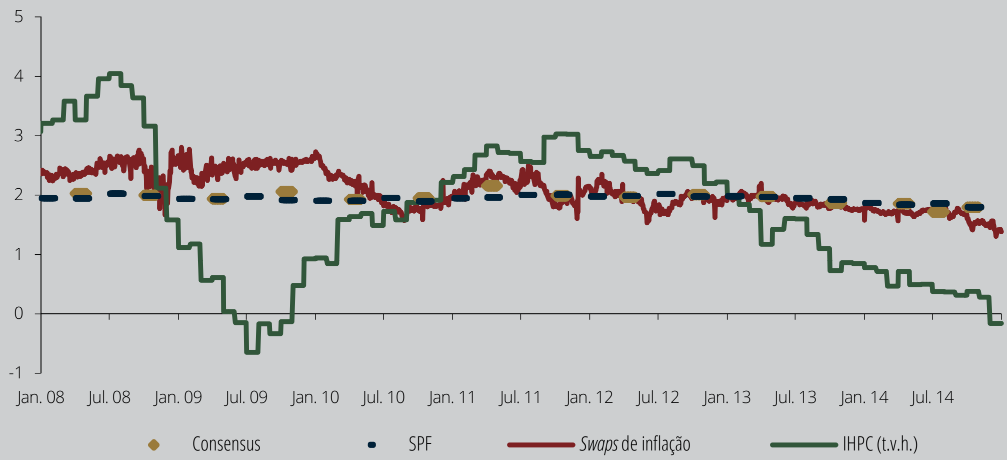
The low inflation level was common to all euro area countries. Unlike in the period before the crisis, inflation in the countries with an adjustment programme was lower than the euro area average. The very gradual reduction of the high unemployment level contributed to the maintenance of low inflation, via slow growth of wages and corporate profit margins. At the same time, in 2014 key interest rates reached their lower bound, conditioning the monetary policy response. Inflation expectations also declined throughout the year (Chart 1.6). In addition, there was a co-movement between short and long-term inflation expectations, posing considerable challenges to the credibility of monetary policy.

Chart 1.5 • Weight of the euro area HICP components with negative year-on-year rate of change | Percentage



Sources: Eurostat and calculus of the Banco de Portugal

Chart 1.6 • Observed inflation and inflation expectations 4-5 years forward | Percentage



Sources: Bloomberg, Consensus Economics, ECB and Eurostat.

2. Monetary and financial conditions

2.1. Euro area

The Governing Council increased the degree of monetary accommodation, adopting a new set of non-standard measures

Against a background of low inflation and weak economic growth, between June and October 2014 the Governing Council of the ECB introduced a package of measures aimed at increasing the degree of accommodation of monetary policy. This package consisted of three types of measures: (i) cuts in key interest rates to their lower bound, (ii) a series of targeted longer-term refinancing operations to boost credit, and (iii) two private sector asset purchase programmes.

At its June and September meetings, the Governing Council reduced the key ECB interest rates, leaving the rate on the main refinancing operations (MROs) at 0.05 per cent and the rates on the deposit and marginal lending facilities at -0.20 per cent and 0.30 per cent respectively. For the first time, the Eurosystem introduced negative interest rates, so as to increase the degree of monetary accommodation, while keeping the standing facilities corridor symmetric, thus providing an incentive to interbank market activity.

The Governing Council also launched a series of targeted longer-term refinancing operations (TLTROs). These operations provide funding for up to four years and aim at promoting the flow of credit to the non-financial private sector (excluding loans for house purchase).[2] In the two operations conducted in September and December, the ECB allotted €212.4 billion at a 0.15 per cent interest rate.

Finally, two asset purchase programmes were implemented: a new covered bond purchase programme (CBPP3) and an asset-backed securities purchase programme (ABSPP). The purpose of these programmes is to complement TLTROs so as to improve monetary policy transmission and borrowing conditions. To this end, these programmes were designed to facilitate selective intervention in markets where the pass-through of bank financing conditions to borrowing conditions is high.

Purchases under CBPP3 started in October and amounted to €29.6 billion at the end of the year, while purchases under ABSPP started in November and amounted to €1.7 billion at the end of 2014.

Amid a deterioration in the medium-term inflation outlook, in January 2015 the Governing Council considered that the degree of monetary accommodation was insufficient to address the growing risks of a prolonged period of low inflation. As such, it announced an expanded asset purchase programme (EAPP), which will cover CBPP3 and ABSPP and include the purchase of bonds issued by euro area governments, agencies and European institutions. Purchases under EAPP should amount to €60 billion/month and be conducted at least until September 2016.[3]

Financial markets remained relatively stable and long-term interest rates dropped to historically low levels

Financial markets enjoyed a period of relative stability and low risk aversion for most of the year. However, two episodes of heightened tension occurred. The first was in early 2014, when the purchase of assets by the Federal Reserve slowed down. The second took place in October, associated with a marked fall in oil prices. Emerging market economies were the most affected in both cases, particularly those facing greater internal and external imbalances. As a consequence, at the end of the year risk aversion rose somewhat, which pushed down even further public debt yields in the largest advanced economies (Chart 2.1). The outlook of weak economic growth also seems to have contributed to this.

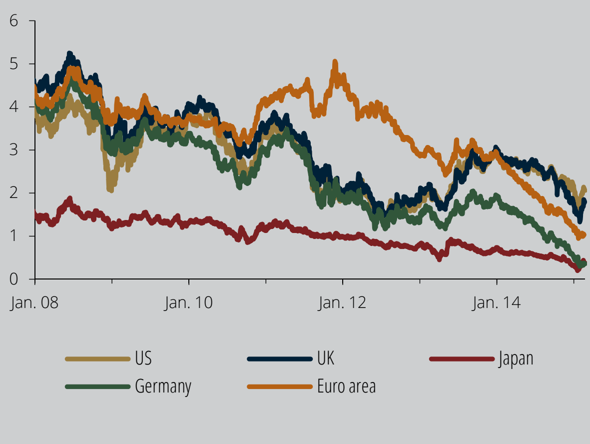
Long-term interest rates in the euro area stand at historically low levels. Ten-year government bond yield spreads against Germany continued to follow a downward path, most notably in the first half of the year (Chart 2.2). In the last quarter of 2014, political uncertainty in Greece and uncertainty associated with the completion of its financial assistance programme resulted in a further increase in spreads for this country. However, it did not trigger any contagion among other countries under economic adjustment programmes, where spreads remained relatively stable. These developments show that the ECB's Outright Monetary Transactions programme, associated with the maintenance of policies favourable to the necessary macroeconomic adjustment, makes it possible for government debt prices to remain stable in financial markets.

In 2014 the euro depreciated strongly, reflecting reflecting the different cyclical positions of world economies and the forward-looking monetary policy stance. The depreciation of the euro in nominal effective terms followed developments in the exchange rate against the US dollar, except for the end of the year, when the appreciation against the Japanese yen and the Russian rouble offset the depreciation against the US dollar. Between the end of 2013 and the end of 2014, the euro depreciated, respectively, 5 per cent and 12 per cent in nominal effective terms and against the US dollar.

A subdued recovery started in the euro area credit markets

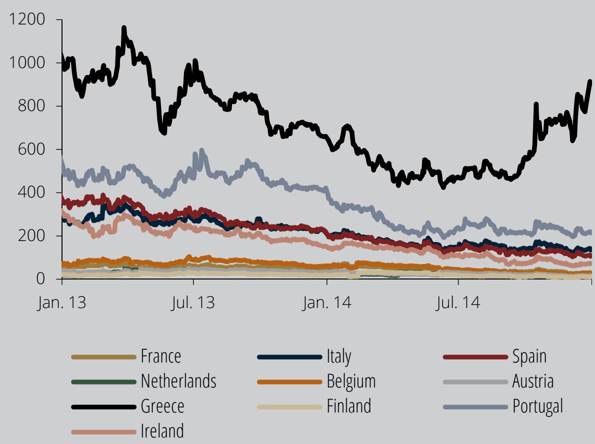
In 2014 the euro area bank credit market started to recover somewhat. Loans to non-financial corporations reached their lowest annual rate of change in February (-3.2 per cent), gradually improving to -1.1 per cent in December (Chart 2.3). Loans to households reached a trough in January (0.2 per cent), but recovered to an annual rate of change of 0.8 per cent in December (Chart 2.4). In spite of these favourable developments, substantial differences persist among euro area countries.

Chart 2.1 • 10-year government bond yields
| Percentage



Sources: ECB and Bloomberg.

Chart 2.2 • 10-year government bond yields – spreads against Germany
| Basis points



Source: Thomson Reuters.

In Portugal, the Netherlands and Ireland, in particular, loans to non-financial corporations continued to decelerate.

These slightly more favourable developments in bank loans are in line with the results of the Bank Lending Survey for the euro area (Charts 2.3 and 2.4). In fact, euro area banks reported in 2014 an improvement in the level of credit standards on loans to non-financial corporations and households. At the same time, they reported increased demand for loans, both by non-financial corporations and households. According to survey respondents, factors related to capital costs and balance sheet constraints, as well as pressure from competition, seem to have contributed to easing credit standards. On the demand side, funding needs, excluding for fixed investment, contributed to increased demand for credit by enterprises, although in the last quarter of the year demand for fixed investment also made a positive contribution.

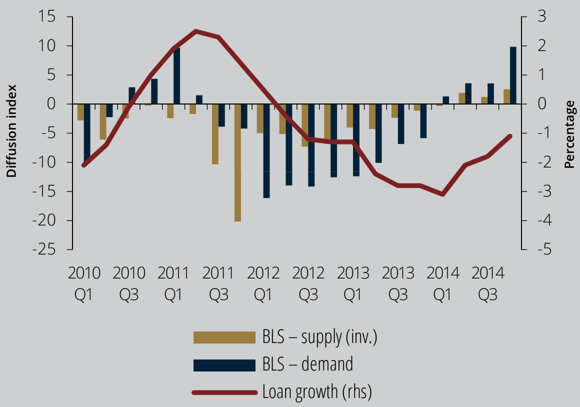
Euro area fragmentation declined in the course of the year, as shown by the narrowing of spreads of interest rates on new loans to non-financial corporations. For the euro area, interest rates on all new loans to non-financial corporations declined by 55 b.p., partly due to the reduction in key interest rates. This fall was more marked among countries under an adjustment programme than among highly rated countries (see Box 'The pass-through of monetary policy in the euro area and non-standard measured in 2014´).

2.2. Portugal

Financing conditions for households improved somewhat in 2014

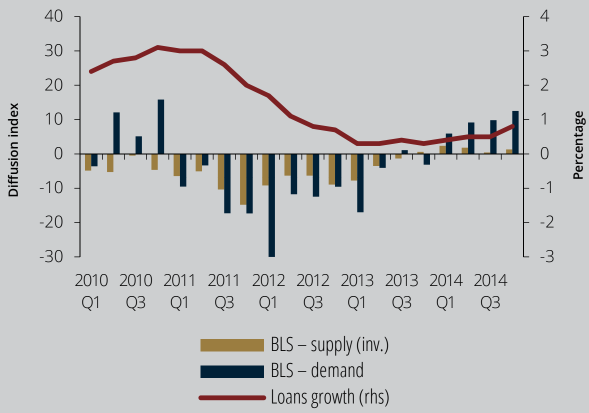
Interest rates on new loans to households declined in the course of 2014, in line with developments in market interest rates and in an environment of accommodative monetary policy (Chart 2.5). Turning to housing loans, differentials vis-à-vis key interest rates remained relatively stable, at a level close to the peak reached in 2012. With regard to consumer loans, interest rates and differentials fell more markedly during 2014. Developments in

Chart 2.3 • Bank loans to non-financial corporations in the euro area and results of the bank lending survey



Source: ECB.

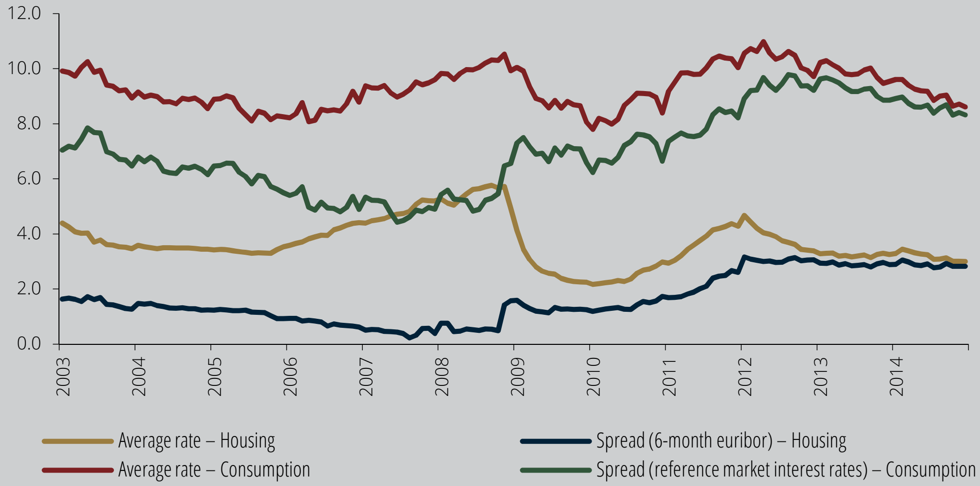
Chart 2.4 • Bank loans to households in the euro area and results of the bank lending survey



Source: ECB.

interest rates on bank loans to households are consistent with Banking Lending Survey results. According to this survey, credit standards on loans to households remained constant in 2013 and 2014, after a tightening over the 2007-12 period. Banks reported that behind these developments were an improvement in their financing conditions and lower balance sheet constraints, as well as a slight reduction in risks associated with general economic activity, the housing market and creditworthiness of consumers. However, interest rate differentials on bank loans to households, particularly housing loans, remain high compared with average

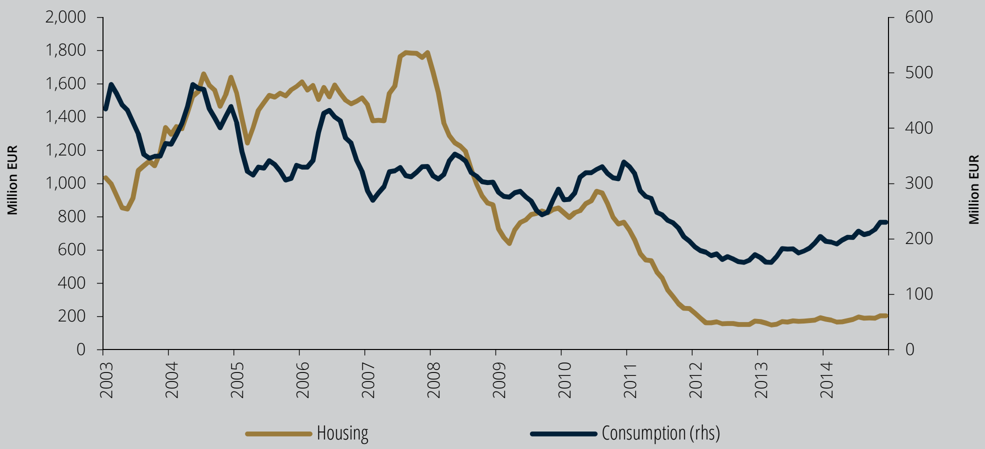
Chart 2.5 • Interest rate on new loans by resident banks to households | Per cent/ Percentage points



Sources: Thomson Reuters and Banco de Portugal.

Note: Average interest rates calculated on the basis of the new business rates of the different initial fixation periods, weighted by the amounts of the new operations in each period. For consumption the market rates used in the calculation of the spread for the initial fixation periods of less than 1-year, 1-5 years and more than 5 years were the 6-month Euribor, the 12-month Euribor and the 5-year euro swap rate, respectively.

Chart 2.6 • Amounts of new loans by resident banks to households | Three month moving average



Source: Banco de Portugal.

levels seen in the period prior to the economic and financial crisis. Furthermore, real interest rates, albeit declining in 2014, are above the average seen since the start of the euro area, which points to the existence of tight financing conditions.

New consumer loans increased while new housing loans remained stable

Improved financing conditions, together with increased consumer confidence regarding future income, contributed to a recovery in consumer credit. The monthly value of new consumer loans has increased since the beginning of 2013, standing at the end of 2014 close to that seen in mid-2011 (Chart 2.6). A recovery in car loans and, to a lesser extent, personal loans has contributed to this. In spite of this recovery, the buoyancy of new consumer loans is still much lower than that seen on average since the start of the euro area. The annual rate of change in consumer loans increased from -6.4 per cent in December 2013 to -2.3 per cent in December 2014 (Chart 2.7). Turning to housing loans, despite signs of some improvement in this market's outlook, new loans remained low. In this context, outstanding amounts continued to decline in the course of 2014, with an annual change of around -3.8 per cent.

Interest rates on loans to enterprises fell more markedly for enterprises with lower credit risk

In the case of non-financial corporations, interest rates on new loans also continued to follow a downward path in 2014, which was accompanied by a contraction in differentials vis-à-vis market interest rates, to levels close to those seen at the end of 2010 (Chart 2.8). To this contributed a decline in the fragmentation that has characterised euro area funding markets since the onset of the global financial crisis. In particular, the announcement made by the ECB in June 2014 of a new set of non-standard monetary policy measures seems to have contributed to an improvement in the monetary policy transmission mechanism (see Box 'The pass-through of monetary policy in the euro area and non-standard measures in 2014'). In spite of these favourable developments, real

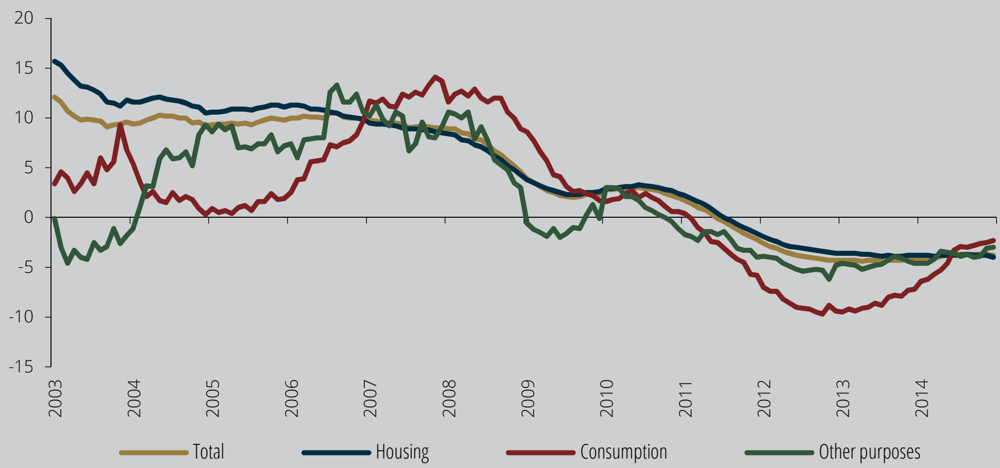


Chart 2.7 • Loans by resident banks to households | Annual growth rates, per cent

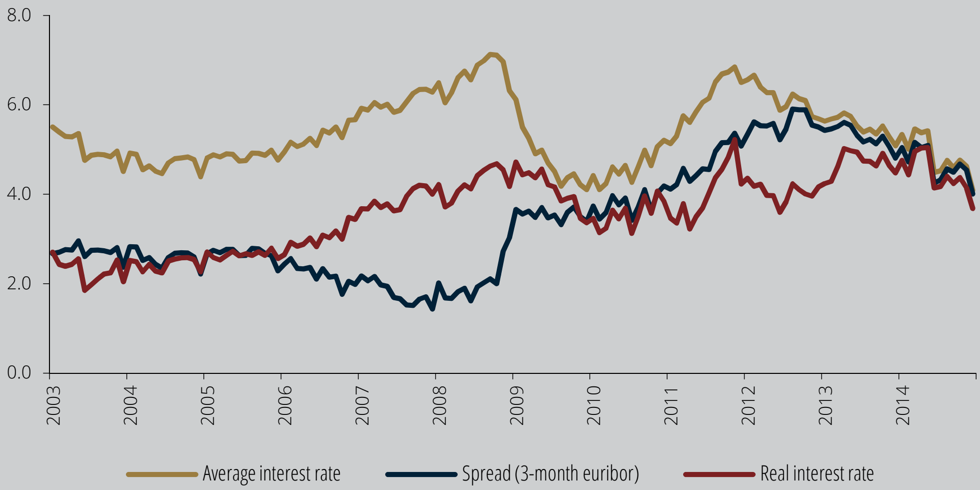
Source: Banco de Portugal.

interest rates remain, as in the case of households, above the average values for the past decades (3.7 per cent in December 2014, compared with 3.4 per cent, on average, since the start of the euro area).

According to the Bank Lending Survey, the slight easing of credit standards on loans to enterprises in 2014 benefited from an improvement in banks' financial situation and, in particular, their liquidity position, as well as a mitigation of risks to general economic activity and specific sectors or enterprises. Firm-level microeconomic data on new loan agreements indicate that resident banks differentiated credit standards more according to credit risk in 2014. Indeed, between the end of 2013 and the end

Chart 2.8 • Interest rate on new loans by resident banks to non-financial corporations

| Per cent / Percentage points



Sources: Thomson Reuters, Consensus Economics and Banco de Portugal.

Note: Average interest rates calculated on the basis of the new business rates of the different initial fixation periods, weighted by the amounts of the new operations in each period. The real interest rate is the difference between the average interest rate and inflation expectations in Portugal for a 12-month horizon.

Chart 2.9 • Distribution of the interest rate on new loans by resident banks to private non-financial corporations – Low risk

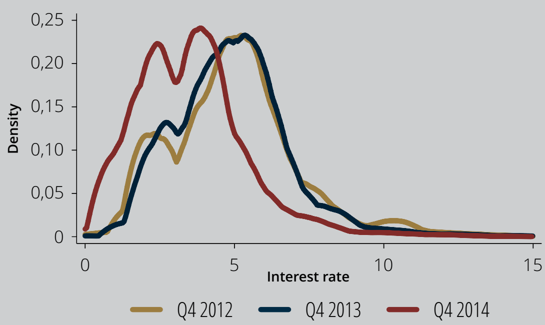
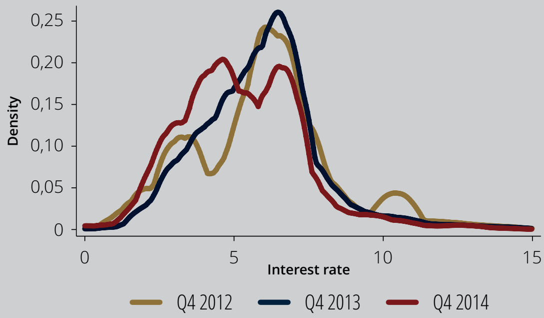


Chart 2.10 • Distribution of the interest rate on new loans by resident banks to private non-financial corporations – High risk



Source: Banco de Portugal.

Note: Interest rates weighted by loans amounts. Low (high) risk corporations correspond to corporations in the first two (last) deciles of the risk distribution. The risk is measured by the *Z-Score* estimated according to the methodology of Martinho and Antunes (2012) (Financial Stability Report of the Bank of Portugal November 2012).

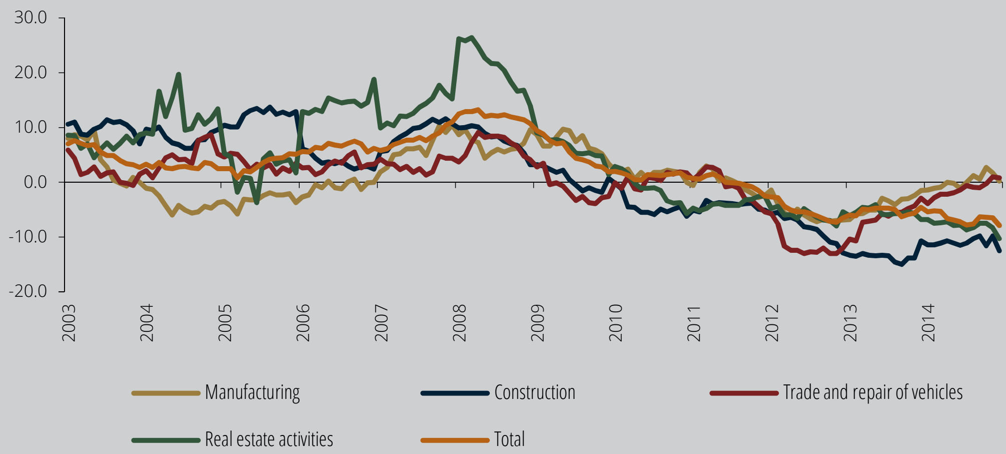
of 2014, the distribution of interest rates on new loans to enterprises with a better risk profile shifted more to the left than interest rates on new loans to riskier enterprises (Charts 2.9 and 2.10).

> Greater differentiation according to credit risk is also noticeable in the rate of change on loans granted by resident financial institutions to enterprises

The annual rate of change in loans granted by resident banks to enterprises remained in negative territory in 2014 (Chart 2.11). This was largely due to a decline in credit balances in the construction and real estate sectors, which accounted for nearly 40 per cent of the loan portfolio of resident banks to enterprises. By contrast, loans to the manufacturing sector and trade and repair of vehicles accelerated to slightly positive rates at the end of the year. Overall, the growth rate in credit granted by the financial sector to exporting enterprises was positive in 2014, as opposed to a decline for enterprises that are more geared towards the domestic market.

Mixed developments in funding according to corporate risk are also reflected in data on credit amounts. In fact, rates of change in loans granted by resident financial institutions to enterprises with lower risk levels increased in the course of 2014, reaching positive values in the second half of the year, while in the case of riskier enterprises these rates remained highly negative (Chart 2.12). These differences were absent during the period of application of the Economic and Financial Assistance Programme. The tendency towards better credit allocation should reflect not only supply factors but also developments in demand. According to the Bank Lending Survey, and for the first year since the onset of the crisis, the funding of investment, mergers/acquisitions and corporate restructuring contributed to increased demand for loans in 2014, although debt restructuring and inventories and working capital remained the main factors behind this increase in demand.

Developments in credit granted by financial institutions to enterprises in 2014 seem to reflect the maintenance of a gradual deleveraging in the economy. In particular, there is no clear evidence that corporate financing has been severely disrupted following BES' resolution. This



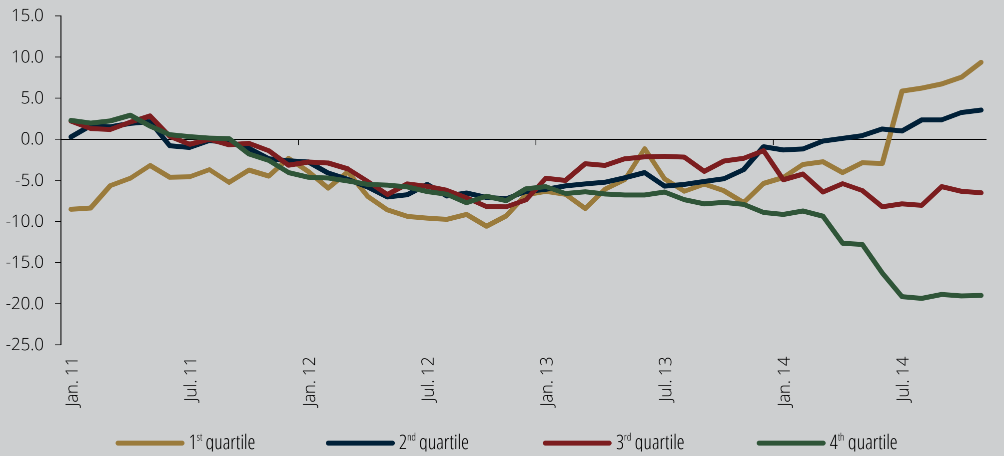
Source: Banco de Portugal.

Chart 2.11 • Loans by resident banks to non-financial corporations by sector of activity | Annual growth rates, per cent conclusion is also supported by the fact that the number of enterprises that have signed loan agreements with resident financial institutions has remained relatively stable in the course of the year, reflecting a similar number of enterprises that entered or exited the financial system during 2014 (Chart 2.13).

When analysing credit to non-financial corporations it is important to bear in mind not only loans granted by resident financial institutions but also loans granted by non-residents, debt issuance (held by residents and non-residents), trade credits (by residents and non-residents), household loans and Treasury loans, in the case of state-owned corporations that do not consolidate under General Government. In aggregate terms, this credit stock posted virtually nil annual rates of change during the 2012-13 period, reflecting the fact that, over this period, financing from non-residents offset a decline in domestic financing. At the same time, domestic credit to large enterprises was more buoyant

Chart 2.12 • Loans by resident financial institutions to private non-financial corporations by credit risk quantile

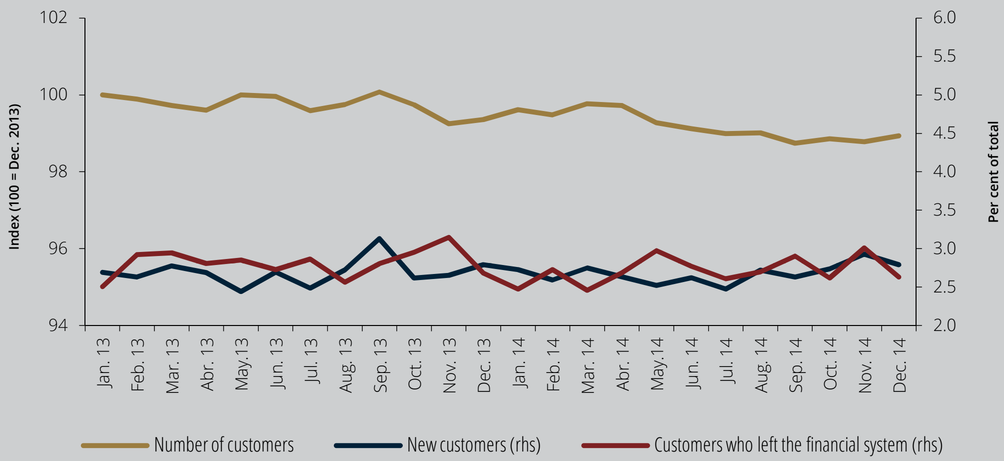
| Year-on-year rate of change, per cent



Source: Banco de Portugal.

Note: Credit risk measured by the *Z-Score* estimated according to the methodology of Martinho and Antunes (2012) (*Financial Stability Report* of the Banco de Portugal November 2012).

Chart 2.13 • Number of non-financial corporations with at least one loan from a resident financial institution



Source: Banco de Portugal.

during this period, as opposed to credit granted to smaller enterprises. In 2014 these differences in credit developments were mitigated, with total credit recording negative rates of change of around 5 per cent from the middle of the year (Chart 2.14). These developments were largely due to the fact that a number of large enterprises made very substantial debt repayments, particularly securitised debt with non-residents. Furthermore, credit granted by the resident financial sector to micro and small-sized enterprises posted successively less negative annual rates of change in the course of the year.

In 2014 indebtedness of the non-financial private sector continued to decline, but remained high

The fall in credit granted to households and enterprises helped maintain indebtedness in the non-financial private sector on a downward path in 2014. In the case of households, loans stood at 81 per cent of GDP in the fourth quarter of 2014, which reflects a reduction of approximately 10 p.p. from a peak at the end of 2009 (Chart 2.15). In the case of enterprises, the financial debt-to-GDP ratio started to narrow only in 2013, but has also declined considerably, to stand in the fourth quarter of 2014 at 108 per cent in consolidated terms and 126 per cent in non-consolidated terms (declines of around 12 p.p. and 14 p.p. from peaks in early 2013). Despite these favourable developments, these sectors remained highly leveraged, both compared with the values seen for the past decades and the average levels for the euro area countries. This should continue to negatively affect consumption and investment decisions of more heavily indebted agents.

This decline in indebtedness seems to be due to the fact that enterprises are exiting the market, but also that existing enterprises are reducing their debt

Given the high number of corporate insolvency cases over the past few years, it is important to gauge the impact on deleveraging of

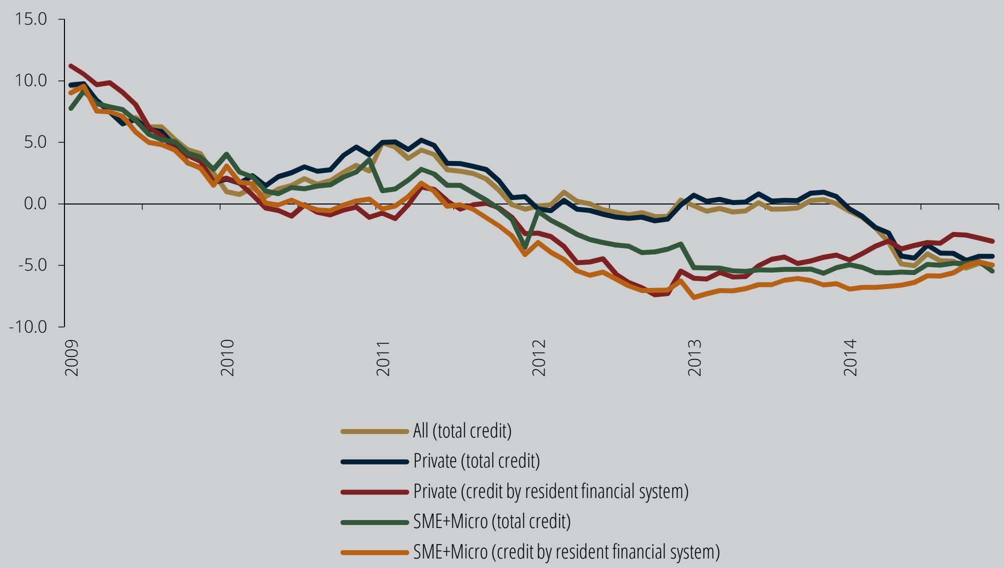


Chart 2.14 • Credit to non-financial corporations | Annual growth rates, per cent

Source: Banco de Portugal.

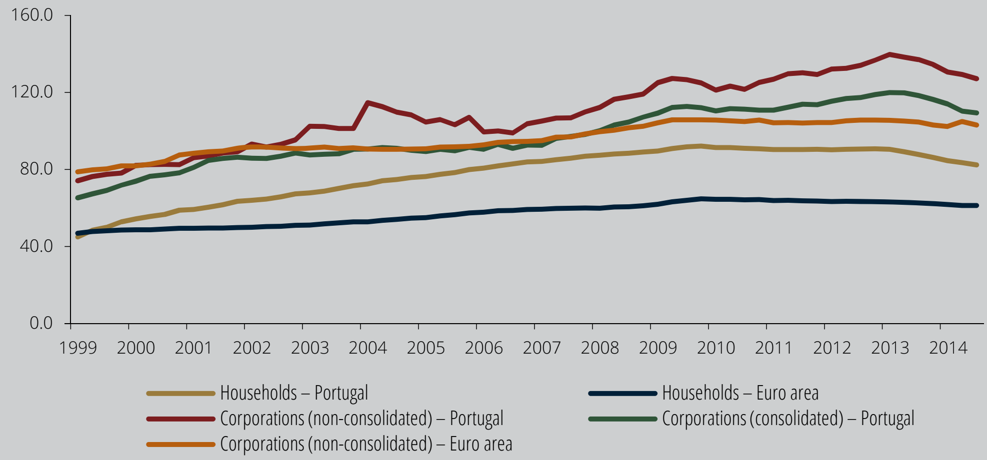
Note: Data adjusted for securitisation operations, reclassifications, write-offs/write-downs, exchange rate changes and price revaluations. Whenever relevant, the figures are additionally adjusted for credit portfolio sales.

enterprises exiting the market. Available micro-economic evidence suggests that the exit of enterprises has made a substantial contribution in the early stages of the crisis to deleveraging and indicates that this effect should remain substantial over the next few years (see Box 'Enterprises' exit from the market and the deleveraging process'). However, since 2013, enterprises remaining active in the market, which typically have lower indebtedness ratios and higher profitability, also seem to be reducing their debt.

The recomposition towards more sound enterprises and the slight improvement in the financial situation of existing enterprises seems to be behind the favourable developments in the financial situation of the sector as a whole. Indeed, aggregate data by activity sector, which are available up to the fourth quarter of 2014, indicate that leverage ratios have narrowed

Chart 2.15 • Financial debt of households and non-financial corporations

| Per cent of GDP

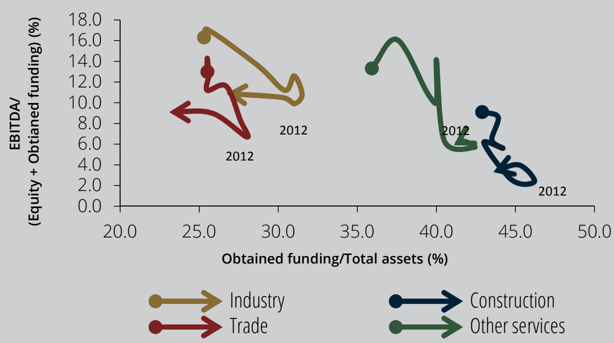


Source: Banco de Portugal.

Note: Includes loans in the case of households and loans and debt securities in the case of corporations.

Chart 2.16 • Indebtedness and profitability

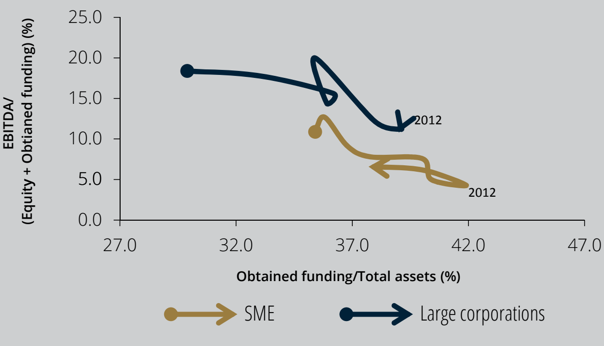
| By sector of activity, 2006-2014



Source: Banco de Portugal.

Chart 2.17 • Indebtedness and profitability

| By firms dimension, 2006-2014



Source: Banco de Portugal.

and profitability ratios have improved across all sectors since the end of 2012 (Chart 2.16). This seems to be chiefly determined by small and medium-sized enterprises, while the leverage ratio continued to increase for large enterprises as a whole (Chart 2.17). Despite these somewhat favourable developments, Portuguese enterprises continue to post reduced equity levels, low profitability levels, very high indebtedness levels and great dependence on bank loans. This situation renders them vulnerable to negative shocks on financing conditions, and limits the scope for attracting funds for investment projects.

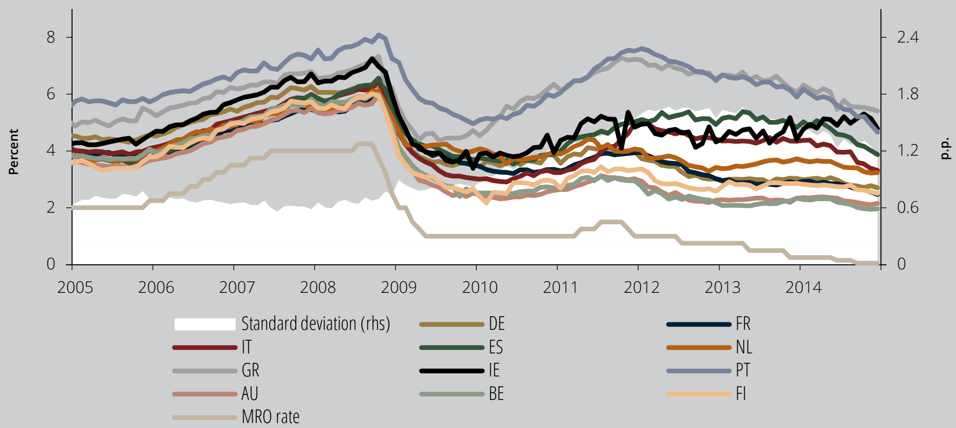
Box 2.1 | The pass-through of monetary policy in the euro area and non-standard measures in 2014

The 2010 sovereign debt crisis in the euro area, following the global financial crisis, led to the malfunctioning of the single monetary policy transmission mechanism and a fragmentation in financial markets (Chart 1).[4] For instance, the difference between interest rates applied to enterprises in Portugal and Germany increased from 1.6 p.p. in mid-2008 to 3.3 p.p. in mid-2013, while the differential between these interest rates and those on main refinancing operations (MROs) widened substantially in several countries.

In addition to standard monetary policy measures, in June and September 2014 the ECB announced further non-standard monetary policy measures, which included long-term financing comprising loans to enterprises and non-housing loans to households, as well as the purchase of asset-backed securities and covered bonds. This box aims to analyse the functioning of monetary policy transmission in this environment, particularly via the reduction of financing costs for both creditors and enterprises.

In order to analyse the pass-through of standard monetary policy to interest rates applied to enterprises, it is crucial to take into account the effect of the ECB's decisions on all euro area countries. Chart 2 illustrates fixed time effects of a regression applied to a panel of 11 euro area countries where the dependent variable is each country's average interest rate on loans below €1 million to non-financial corporations.[5] In addition to fixed time effects, the regression also includes risk and bank financing cost measures, as well as indicators of each country's macroeconomic developments. In particular, country-level explanatory variables correspond tothe average premium paid on credit default swaps for a number of national banks, expectations regarding the logarithm of sovereign debt as a percentage of GDP, the expected growth rate of GDP in the following year,

Chart 1 • Interest rate on loans under 1 million euros to non-financial corporations



Sources: ECB and Banco de Portugal's calculations.

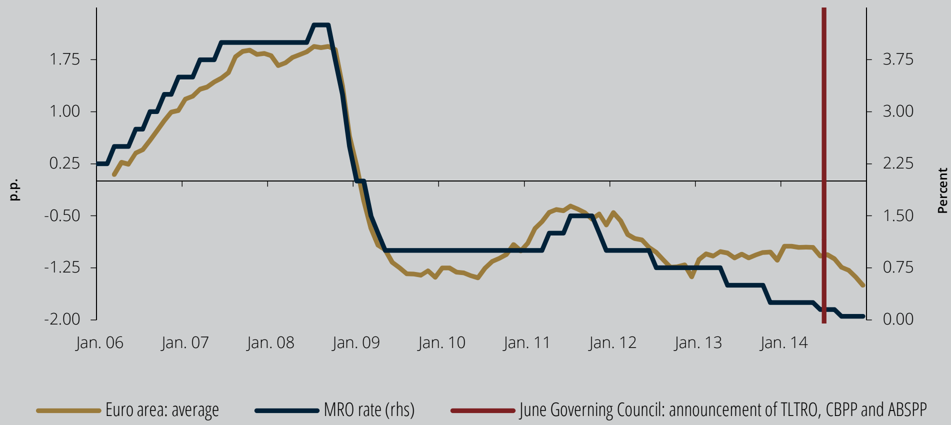
the logarithm of the liquidity amount used by banks under the LTROs and, finally, the country's competitiveness measure.[6] In order to eliminate systematic differences between countries, fixed effects per country were also considered.

The fixed time effects illustrated in Chart 2 are a measure of the average level of interest rates for the euro area as a whole, standardised to zero in January 2006 and adjusted of the effects of variables that may reasonably affect these interest rates, which means that these effects may be interpreted as interest rate developments that cannot be explained using the chosen model.

Up to around the end of 2012, interest rates applied to euro area enterprises followed developments in the MRO interest rate. As of that date, and up to mid-2014, this link was broken. In fact, over this period, the reduction in MRO interest rates by the ECB was not reflected in a decrease in the fixed effect associated with corporate borrowing rates. This suggests that the pass-through of standard monetary policy to this euro area market has malfunctioned. This impairment was concentrated in a number of euro area jurisdictions, including Portugal. As of mid-2014 – when the additional monetary policy measures were announced – the average fixed effect of interest rates applied to enterprises decreased across the euro area. This decline exceeded the cumulative reductions in MRO rates over that period, which indicates a clear improvement in the monetary policy transmission mechanism.

With regard to euro area fragmentation, in 2012 the dispersion of interest rates applied to enterprises, as measured by the standard deviation between countries, reached a peak (Chart 1). This fragmentation measure started to decline in 2013. Turning to prices in markets directly affected by the purchase programmes announced in September 2014 (Chart 3), in parallel with a widespread downward shift of yields on asset-backed securities and covered bonds in 2014, there

Chart 2 • Results of the panel regression for interest rate on loans under 1 million euros to non-financial corporations

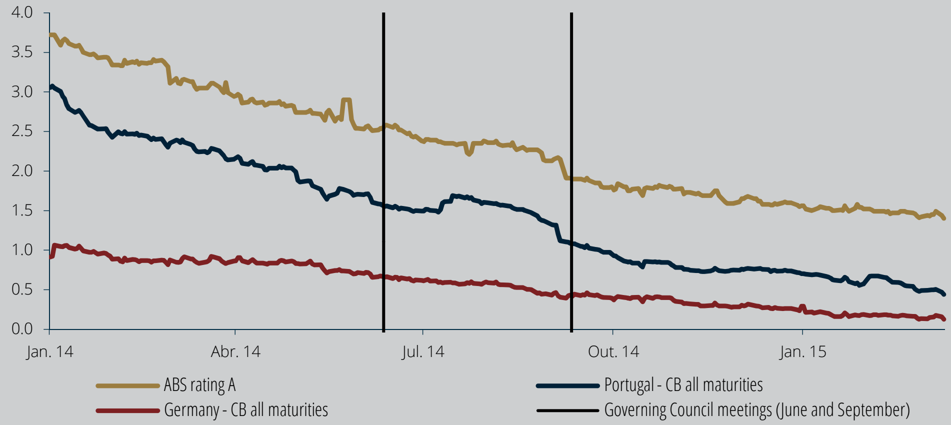


Sources: ECB, Thomson Reuters, Consensus Forecasts, World Economic Forum and Banco de Portugal's calculations.

Note: TLTRO (targeted long-term refinancing operations), CBPP (covered bond purchase programme) e ABSPP (asset backed securities purchase programme).

was a substantial fall in yields on such instruments in September, which was more marked in countries affected by sovereign debt crises, particularly Portugal. For instance, the differential between yields on covered bonds issued by Portuguese and German banks was of around 200 b.p. in early 2014, but at the end of the year it stood below 50 b.p. These mixed developments reflected a lower fragmentation in euro area financial markets, which continued in early 2015.

Chart 3 • Covered bonds and asset backed securities | per cent



Sources: Bloomberg and Thomson Reuters.

Note: CB (covered bonds) and ABS (asset backed securities).

Box 2.2 | Enterprises' exit from the market and the deleveraging process

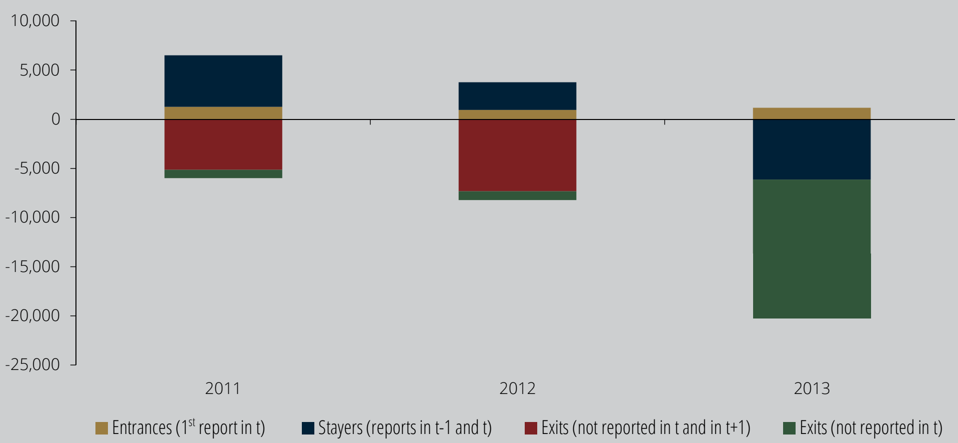
Over the past few years, a large number of enterprises in Portugal have ceased their activities. The exit of leveraged enterprises from the market naturally contributes to a reduction in the non-financial corporate sector's aggregate debt. This box uses microeconomic data to analyse this effect.

Simplified Corporate Information (*Informação Empresarial Simplificada – IES*) data for the 2010-13 period[7] allows each company's dynamics in the market to be determined, i.e. its entry and exit, as well as its debt, according to its balance sheet information.[8] The debt measure used corresponds to financing obtained, which includes total loans and securities recorded under each enterprise's liabilities.

Chart 1 breaks down the annual change in debt for Portuguese non-financial private enterprises as a whole for the 2011-13 period, on the basis of changes due to enterprises entering, exiting or remaining in the market compared with the previous year. According to this data, total debt increased by approximately 0.5 per cent in 2011 and declined by around 2 per cent in 2012 and around 9 per cent in 2013. Enterprises that entered the market made a small positive contribution to changes in debt. In turn, the negative contribution to changes in debt made by enterprises exiting the market was substantial and increased over the three years under review. Finally, for the group of enterprises that remained in the market, debt increased considerably in 2011, less in 2012, and declined in 2013.

As might have been expected, by activity sector and size class, the contribution to debt reduction resulting from the enterprises' exit is particularly substantial in the case of the construction and real estate sectors and, in general, in the case of microenterprises. In the trade sector, in addition

Chart 1 • Contributions to change in debt of private non-financial corporations – By dynamics of corporations | EUR million



Source: Banco de Portugal.

Note: The debt of corporations exiting *IES* in 2013 (green bar) is comparable to the sum of the green and red bars in each of the previous years.

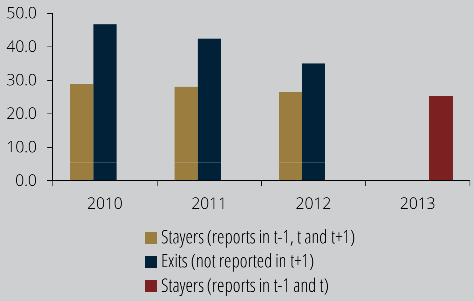
to a sizeable impact of the enterprises' exit, there was also a significant reduction in debt among enterprises remaining in the market, both in 2012 and 2013. In the main sectors, as well as in the case of SMEs and microenterprises, aggregate debt among enterprises that remained in the market fell in 2013. By contrast, large enterprises remaining in the market saw their debt increase significantly over that year.

Enterprises exiting the market post higher leverage ratios and lower profitability levels, compared with the enterprises that remain active (Charts 2 and 3). This selection effect contributes to a shift in the non-financial corporate sector towards enterprises with a better financial position.

The enterprises' exit from the market does not mean that their credit amounts are removed from the credit balances recorded in financial institutions' balance sheets, which are the main source of information when analysing growth of credit granted by the financial system. Indeed, even after an enterprise ceases its activities, the existence of assets and personal guarantees might allow some redemption of the debt.

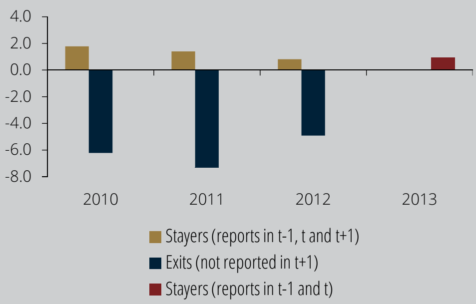
Charts 4 and 5 illustrate developments in credit positions at the Central Credit Register (*Central de Responsabilidades de Crédito – CRC*) of Banco de Portugal for enterprises that are not included in the IES database since 2011 and 2012 respectively (i.e. for two or three consecutive years respectively). In the years before enterprises exit the market, performing credit is reclassified as credit overdue and, to a lesser extent, as a write-off by banks. This situation persists over the following years, with the credit amount classified as overdue exceeding performing credit one to two years after enterprises exit the market. At the same time, some redemptions are still recorded, particularly in the period immediately after enterprises exit the market, which should reflect the enforcement of collateral or debt repayment by the enterprise's partners. At the end of 2014, i.e. three to four years after these enterprises have ceased their activities, most of the credit continues to be classified as overdue (approximately 60 per cent), although it tends to decline, to be replaced by write-offs. This suggests that, after enterprises cease their activities, the recognition of write-offs from financial institutions' balance sheets is a gradual process. As such, although the number of

Chart 2 • Indebtedness of private non-financial corporations: Debt/Total assets | Median, per cent



Source: Banco de Portugal.

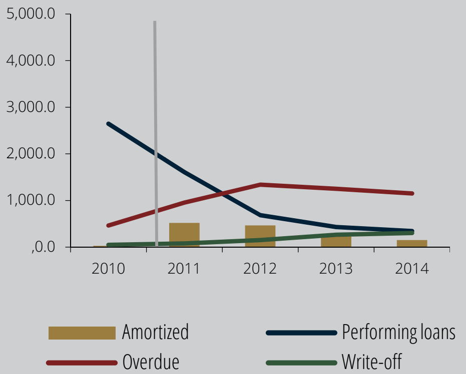
Chart 3 • Profitability of private non-financial corporations: Ebit/Total assets | Median, per cent



Source: Banco de Portugal.

corporate insolvencies has tended to fall since 2013, it is to be expected that, over the next few years, the non-financial corporate sector's deleveraging process will continue to reflect, in part, the gradual write-off of part of the credit of enterprises that have exited the market in the past few years.

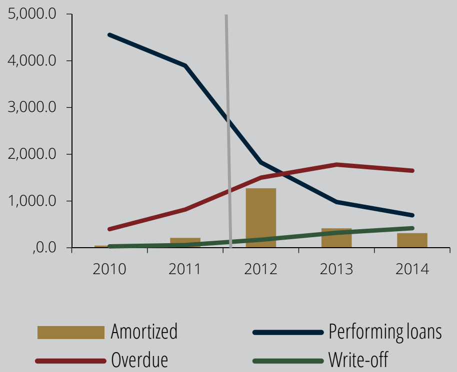
Chart 4 • Loans granted by resident financial institutions to private non-financial corporations whose last report to *IES* was in 2010 | EUR million



Source: Banco de Portugal.

Note: The amount of the amortized loans is estimated as the difference between the loans reported in periods t and t-1.

Chart 5 • Loans granted by resident financial institutions to private non-financial corporations whose last report to *IES* was in 2011 | EUR million



Source: Banco de Portugal.

Note: The amount of the amortized loans is estimated as the difference between the loans reported in periods t and t-1.

3. Fiscal policy and situation

In the period of the Economic and Financial Assistance Programme fiscal consolidation was significant with the purpose of correcting the excessive deficit in 2015, ensuring convergence of the structural balance towards the medium-term objective, and creating the conditions for a reversal of the upward trend of the debt ratio.

The fiscal consolidation process continued in 2014

In 2014, the general government deficit on a national accounts basis stood at 4.5 per cent of GDP (4.8 per cent in 2013) – (Table 3.1).[9] This result reflects a more favourable outcome than envisaged when the State Budget for 2015 was prepared (4.8 per cent of GDP), but falls short of the 4.0 per cent of GDP estimate included in the State Budget for 2014. It should be highlighted that some of the main expenditure restraint measures included in the State Budget for 2014 were reversed in the wake of the Constitutional Court decisions.[10] Part of this impact was offset by the more favourable developments in tax revenue as a result of economic recovery. In this context, the primary balance recorded a surplus of 0.5 per cent of GDP, following the 0.1 per cent surplus in 2013.

The budgetary execution in 2014 was affected by temporary measures that should be excluded for a better evaluation of public finance developments. The deficit excluding temporary measures and special factors stood at 3.6 per cent of GDP in 2014, declining 1.5 p.p. *vis-à-vis* 2013. Indeed, in line with the analytical framework used by the Eurosystem, these measures reached, in total, 0.9 per cent of GDP and were chiefly associated with the debt reclassification of two public transport enterprises outside the general government perimeter, following a change in their financing model, which is now ensured by the State (*Carris* and *STCP*).[11]

Table 3.1 • Main fiscal indicators | In percentage of GDP

	2010	2011	2012	2013	2014	Change 2013-2014 (in p.p.) [(a)]
Overall balance (1)	**-11.2**	**-7.4**	**-5.6**	**-4.8**	**-4.5**	**0.4**
Temporary measures and special factors [(a)] (2)	-2.8	-0.2	0.0	0.3	-0.9	-1.2
Overall balance excluding temporary measures and special factors (3 = 1 - 2)	**-8.4**	**-7.2**	**-5.6**	**-5.1**	**-3.6**	**1.5**
Cyclical component (4)	1.6	0.8	-1.5	-2.2	-1.4	0.8
Structural balance [(b)] (5 = 3 - 4)	**-10.0**	**-8.0**	**-4.1**	**-2.9**	**-2.2**	**0.7**
Interest expenditure (6)	2.9	4.3	4.9	4.9	5.0	0.0
Structural primary balance (7 = 5 + 6)	**-7.1**	**-3.7**	**0.8**	**2.0**	**2.8**	**0.8**
Structural Revenue (in percentage of trend GDP)	**39.9**	**41.9**	**43.0**	**44.9**	**44.7**	**-0.2**
Structural primary expenditure (in percentage of trend GDP)	**47.1**	**45.7**	**42.2**	**43.0**	**42.0**	**-1.0**
Public debt	**96.2**	**111.1**	**125.8**	**129.7**	**130.2**	**0.5**
Change in public debt (in p.p.)	12.6	14.9	14.7	3.9	0.5	-
(-) primary balance	8.2	3.0	0.7	-0.1	-0.5	-
Differential between the effects of interest and of GDP growth	0.8	6.4	10.0	4.2	2.2	-
Deficit-debt adjustments	3.5	5.5	3.9	-0.2	-1.2	-

Sources: INE and Banco de Portugal.

Notes: (a) Special factors are operations that transitorily affect the general government deficit, but cannot be treated as temporary measures according to the definition adopted in the Eurosystem. (b) Structural figures are adjusted for the impacts of the cycle, temporary measures and special factors. The cyclical components and temporary measures are computed by Banco de Portugal according to the methodologies adopted in the Eurosystem.

In contrast to the previous years, the evolution of economic activity contributed positively to fiscal developments, improving the deficit by around 0.8 p.p. of GDP.[12] In addition, given that the ratio of interest expenditure to GDP remained virtually unchanged, the change in the structural primary balance – the indicator generally used to evaluate the fiscal policy stance – reached 0.8 p.p. of GDP, reflecting the maintenance of a restrictive fiscal policy. In cumulative terms, the change in this indicator attained 9.9 p.p. of GDP in the 2011-2014 period.[12]

The improvement in the structural position in 2014 reflected a decline in structural primary expenditure

With regard to the composition of the adjustment, Chart 3.1 shows that the consolidation observed in 2014 stemmed exclusively from the evolution of structural primary expenditure, which declined by 1.0 p.p. of trend GDP, while structural revenue decreased by 0.2 p.p. of trend GDP. In cumulative terms, in the 2011-2014 period, structural primary expenditure contributed 5.1 p.p. of trend GDP to fiscal consolidation, which slightly exceeds (by around 0.3 p.p.) the contribution of structural revenue (4.9 p.p.).

Structural primary expenditure declined as a result of the evolution of compensation of employees, social benefits and capital expenditure

The decline in structural primary current expenditure in 2014 was chiefly due to cuts in compensation of employees and social benefits in cash (Chart 3.2). Indeed, compensation of employees fell by 2.7 per cent, as a result of the decline in the number of public employees (-3.4 per cent, in average quarterly terms). This effect was dampened by severance payments related to the voluntary separations programme. The cut in wages in the public sector was not as significant as set out in the State Budget for 2014, following the decision of the Portuguese Constitutional Court regarding wage cuts in 2014.[13] In fact, after the wage

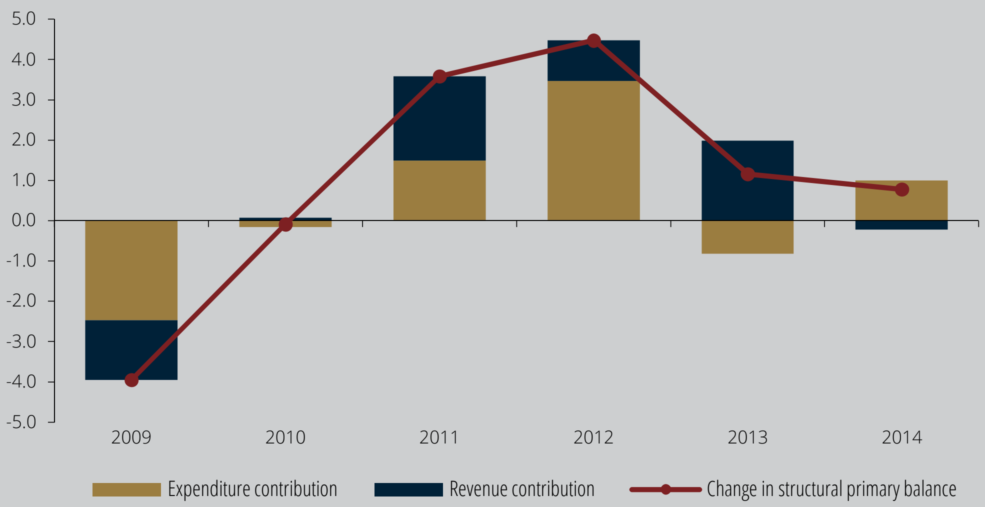


Chart 3.1 • The composition of structural consolidation | In percentage points of trend GDP

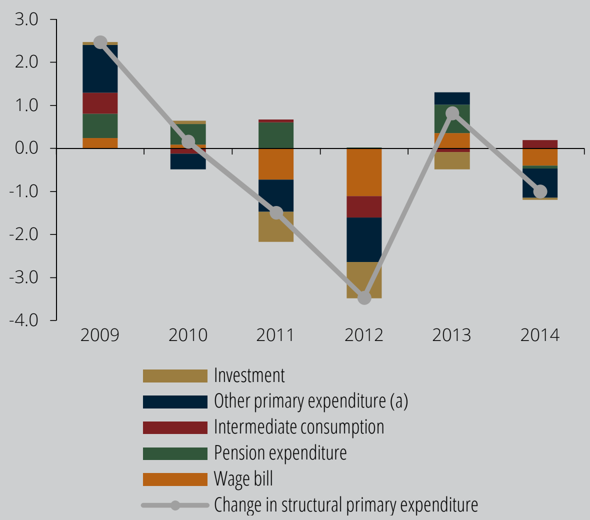
Sources: INE and Banco de Portugal.

Note: 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.

cuts introduced in 2011, further cuts were in force from January to May 2014, followed by the full payment of wages until 13 September, when the cuts adopted since 2011 were reintroduced.[14] In turn, social benefits in cash decreased by 0.3 per cent, in structural terms, mainly due to developments in unemployment benefits expenditure. Indeed, this expenditure recorded a sharp decline (-18.3 per cent), due to the decrease in the number of subsidised unemployed (-14.8 per cent, in monthly average terms), which was considerably more significant than in structural terms (-6.3 per cent), given cyclical developments in the economy. Spending on pensions decelerated quite significantly, in both the Social Security sub-system and *Caixa Geral de Aposentações – CGA* (the Portuguese public employees' retirement and survivor pensions fund). This reflects slower growth in the number of pensioners in the general social security scheme, partly explained by the increase in retirement age, and the redesign of the solidarity surcharge, both included in the State Budget for 2014. It should be added that the effect of the solidarity surcharge is more significant in pensions in the *CGA* subsystem, which on average are higher than in the general system. Moreover, expenditure on other benefits in cash maintained the downward trend recorded in previous years. By contrast, intermediate consumption grew by 4.9 per cent. This outcome was shared by all general government subsectors. Autonomous services and funds registered an increase of 6.3 per cent in intermediate consumption, largely explained by the rise in expenditure on concessions under public-private partnerships related to the road sector.

Capital transfers in 2014 were affected by a number of temporary measures related to the reclassification of debt in public transport enterprises (*Carris* and *STCP*), the assumption

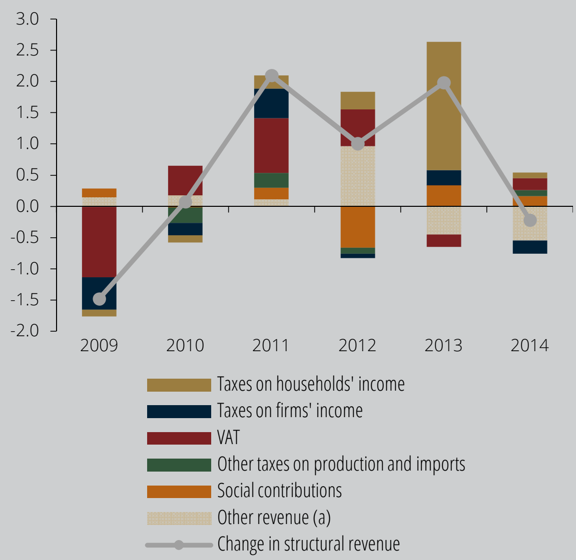
Chart 3.2 • Breakdown of the change in structural primary expenditure | In percentage points of trend GDP



Sources: INE and Banco de Portugal.

Note: (a) Other primary expenditure includes social payments excluding pensions, general government social contributions, subsidies and other current and capital expenditure.

Chart 3.3 • Breakdown of the change in structural revenue | In percentage points of trend GDP



Sources: INE and Banco de Portugal.

Note: (a) Other revenue includes other current and capital revenue.

of debt guaranteed by the Mutual Counter-guarantee Fund and the recognition of losses associated with BPN Crédito's bad loans. Excluding temporary measures and special factors,[15] capital expenditure declined by 8.9 per cent (-0.3 p.p. of trend GDP), in contrast with an increase of 7.6 per cent in overall terms. With regard to investment, the downward trend started in 2011 was eased, recording a nominal reduction of 1.3 per cent.

The evolution of structural revenue stemmed from rather differentiated trends in tax and non-tax revenue

In 2014 structural revenue recorded a decline corresponding to -0.2 p.p. of trend GDP, in spite of the positive change in the structural tax burden (Chart 3.3 – for further details see Box 3.1 Analysis of structural developments in tax revenue in 2014). Indeed, other current revenue and capital revenue both declined significantly.

The structural tax burden increased 2.2 per cent, corresponding to 0.3 p.p. of trend GDP. In actual terms, the change amounted to 1.9 per cent, reflecting the pro-cyclical behaviour of the macroeconomic bases considered in the cyclical adjustment methodology and, in the opposite direction and with slightly higher magnitude, the base effect related to the special scheme for the settlement of tax arrears that occurred at the end of 2013. In 2014, developments in the structural tax burden were mainly due to growth of taxes on production and imports (0.3 p.p. of trend GDP), namely the rise in VAT revenue, and social contributions (0.2 p.p. of trend GDP). In turn, taxes on income and wealth made a negative contribution (-0.1 p.p. of trend GDP), due to the collection of corporate income taxes.

In addition, the decline in dividends, interest and transfers from the European Social Fund received by the general government largely explain the decrease in other current revenue (-0.4 p.p. of trend GDP).

Finally, capital revenue showed a significant fall (-19.2 per cent), which translated into a decline in the weight of this item in trend GDP (-0.2 p.p.). This result was chiefly due to a decline in capital transfers from the European Union, whose final recipients are general government entities.

In a context of primary surplus for the second consecutive year, the rise in public debt ratio was explained by the interest burden

At the end of 2014, the gross public debt ratio reached 130.2 per cent of GDP (117.9 per cent of GDP, excluding general government deposits), representing an increase of 0.5 p.p. of GDP since 2013. Behind this increase was interest expenditure, which rose to 5.0 per cent of GDP. By contrast, the most important contribution to lower the debt ratio resulted from the positive developments in economic activity (-2.7 p.p. of GDP), reinforced by deficit-debt adjustments (-1.2 p.p. of GDP) and the effect of the primary balance (-0.5 p.p. of GDP).

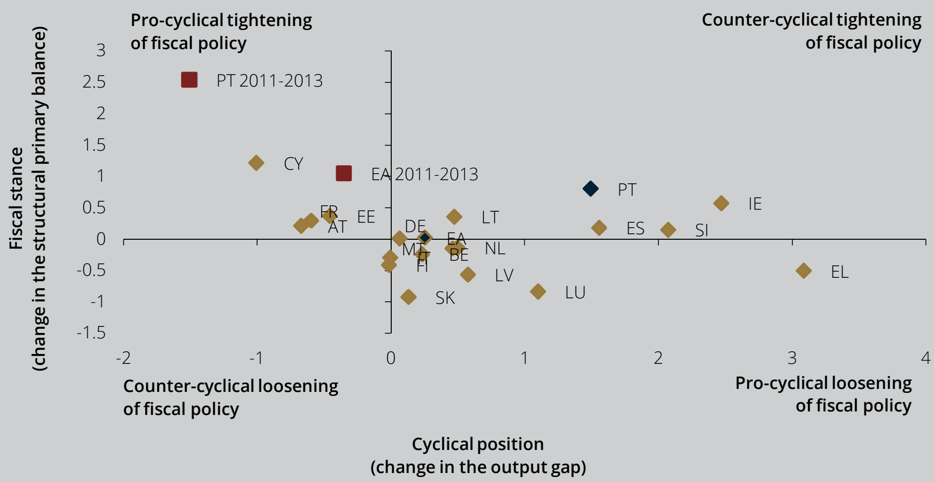
The most significant negative deficit-debt adjustments reflected the decumulation of financial assets related to the redemption of contingent capital instruments (CoCo's), used in the capitalisation of the banking sector (-1.9 p.p. of GDP), as well as the amounts received in the context of the privatisation of the corporations *Fidelidade*, *CTT Correios de Portugal* and *REN* (-1.0 p.p. of GDP). Also, the increase in public debt securities in the Social Security Stabilisation Fund's portfolio has contributed to a negative change in the general government consolidated debt (-1.1 p.p. of GDP). By contrast, there was an increase in shares and other equity associated with the capitalisation of *Novo Banco* by the Resolution Fund, an entity classified in the general government's institutional sector (2.8 p.p. of GDP).[16] It should be highlighted that in 2014 deposits held by the general government nearly stabilized, given that the amount used in the capital increase of *Novo Banco* was offset by the amount received in 2014 within the scope of the Bank Solvency Support Facility.[17] Finally, in what regards the debt valuation effects, it is important to mention the impact of the rise in the value of debt issued in foreign currency, via exchange rate fluctuations (more relevant in loans from the International Monetary Fund), partly covered by financial instruments. Conversely, it is worth mentioning the effect of the issue of debt securities above par and the difference between interest paid and interest accrued.

Over the course of 2014, the Portuguese State ensured a regular presence in sovereign debt markets, and carried out issues at different maturities, in particular, five, ten and 15-year Treasury Bonds. At the ten-year maturity, the average rate in auctions, syndicated issuance and exchange based sales stood at 4.5 per cent, which compares with 5.7 per cent in the May 2013 syndicated issuance. The average rate of Treasury Bills, in turn, stood at 0.5 per cent for one-year maturity, 1.0 p.p. below the value in 2013. In spite of these developments, the implicit interest rate of public debt[18] stabilised at 3.9 per cent, since the decrease in interest rates in new issues, more relevant in shorter maturities, was offset by the average interest rate increase associated with the assistance programme, in particular the part related to IMF loans.

Deceleration of fiscal consolidation was widespread in the euro area

According to the European Commission's winter forecast, the structural primary balance in the euro area stabilised in 2014, after a period of significant improvement between 2011 and 2013 (Chart 3.4). These developments occurred in a context marked by above potential output growth, despite a still negative output gap. Nevertheless, in 2014, the actual deficits in nine euro area Member States exceeded the 3 per cent of GDP threshold.[19] The fiscal policy stance differed considerably across countries, with the change in the structural primary balance as a percentage of potential output ranging between a minimum of -0.9 p.p. in Slovakia,

Chart 3.4 • Fiscal policy and cyclical position in the euro area in 2014



Sources: European Commission, 2014 Winter Forecast.

Note: (a) The cyclical position of the economy is assessed by the change in the output gap, which represents the difference between GDP and potential GDP growth rates.

and a maximum of 1.2 p.p. in Cyprus. In 2014, according to the Commission's estimates, Portugal had the second highest consolidation effort.[20] To remind that, in the 2011-2013 period, it had been substantially above that of the euro area as a whole.

In most euro area countries, public indebtedness has remained at very high levels. Only six out of the 19 participating Member States recorded gross public debt ratios below the 60 per cent of GDP reference value (Chart 3.5). In addition, in 2014, this ratio maintained an upward trend in the euro area, rising by 6.1 p.p. of GDP from the end of 2011 to the end of 2014. The only countries with significant declines in the debt ratio (exceeding 1 p.p.) between the end of 2013 and the end of 2014 were Germany, Malta, Slovakia and especially Ireland, with a drop of 13.5 p.p. of GDP (through a very expressive decumulation of financial assets).

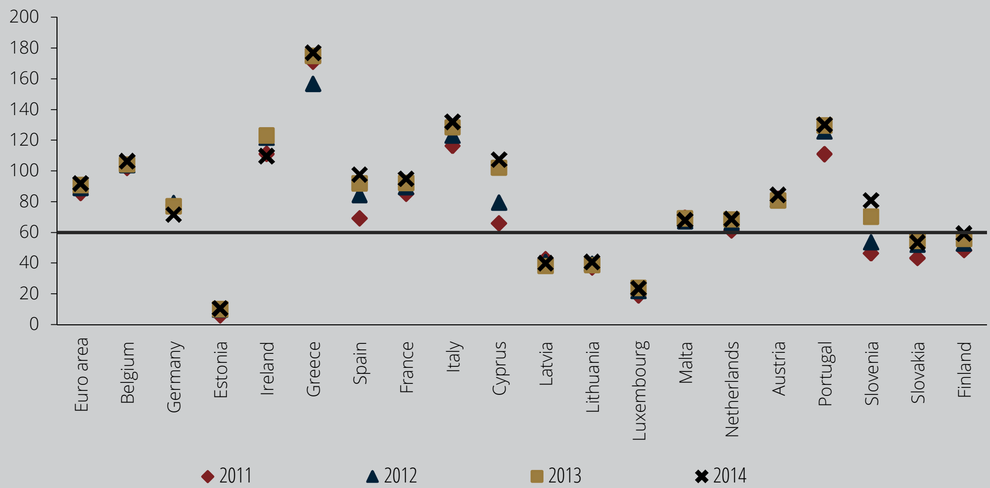


Chart 3.5 • Public debt in the euro area | As percentage of GDP

Source: European Commission.

Box 3.1 | Analysis of structural developments in tax revenue in 2014

The purpose of this box is to analyse in more detail developments in the main taxes and social contributions in structural terms, i.e., adjusted for transitory effects associated with the economic cycle and the implementation of measures of a temporary nature. The theoretical benchmark used for the analysis of structural developments is the disaggregated approach developed in the context of the European System of Central Banks.[21]

Actual tax revenue grew by 1.9 per cent in 2014. However, it is important to consider the base effect associated with the special scheme for the settlement of tax arrears in 2013, which was especially significant as regards corporate income tax, reaching almost 10 per cent of this tax revenue. Conversely, the improvement in economic activity has decisively contributed to the rise in tax revenue, with the macroeconomic bases of main taxes and social contributions recovering considerably, especially private consumption and in particular its durable goods component.

The structural change in the tax burden in 2014 stood at 2.2 per cent, corresponding to a contribution to fiscal consolidation of 0.3 p.p. of trend GDP, significantly below that seen in 2013 (Chart 1). Compared with the previous year, the main difference occurred at the level of amendments to tax legislation, which were considerably less relevant. In 2014, the discrepancy between trend nominal growth of the main macroeconomic bases and GDP contributed negatively to the consolidation, while the residual component had the opposite effect, namely as a result of developments in VAT refunds, as explained below.

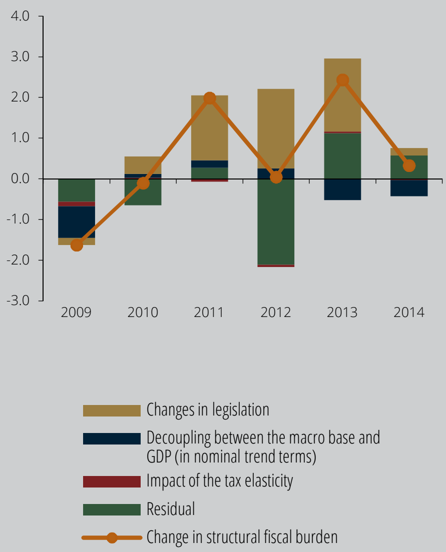
The ratio of revenue from personal income taxes to trend GDP virtually stabilised in 2014, as the remaining effect of the solidarity surcharge created in 2013 was offset by the reduction in the private sector wage bill in a context of GDP growth, both measured in trend nominal terms (Chart 2). In turn, revenue from corporate income tax declined by 0.2 p.p. of trend GDP, chiefly due to the introduction in 2013 of the extraordinary investment tax credit, with an impact on the 2014 outcome. It should be mentioned that refunds of both personal and corporate income tax increased considerably, which, in the latter case, is partially associated with the above mentioned tax credit.

As regards taxes on production and imports, the structural growth of VAT revenue (+0.2 p.p. of trend GDP), was chiefly explained by a very sharp fall in the amount of this tax refunds, which is similar to the amount of the residual obtained. The other taxes on production and imports grew by 0.1 p.p. of trend GDP, essentially as a result of a wide set of measures with low impact on revenue, with particular focus on excise duties. By tax, the increase in revenue was relatively broad based, being especially significant in municipal taxes. The stamp duty and the tax on oil products and energy were the main exceptions to this upward trend.

Finally, social contributions grew by 0.2 p.p. of trend GDP which, not being explained by any specific component in the disaggregated approach, generates a positive residual. A small part of this residual is due to developments in contributions associated with the public employees' scheme. In fact, the significant increase in beneficiaries' contributions to the public employees' health care sub-system (ADSE) was partly offset by the fall in imputed contributions.[22] Similarly to developments in the personal income tax, for which the same macroeconomic basis is used, the discrepancy between the latter and GDP makes a negative contribution to developments in this item.

In conclusion, in structural terms, 2014 was characterised by rather small changes in the tax system, with the effects underlined in this box being considerably smaller than those observed in previous years. Moreover, based on the methodology used, the unexplained component is small and does not show evidence of a sizeable increase in the effectiveness of the collection of taxes and social contributions, in aggregate terms. In fact, the relative buoyancy of tax revenue in 2014, in actual terms, was chiefly the result of the operation of automatic stabilisers.

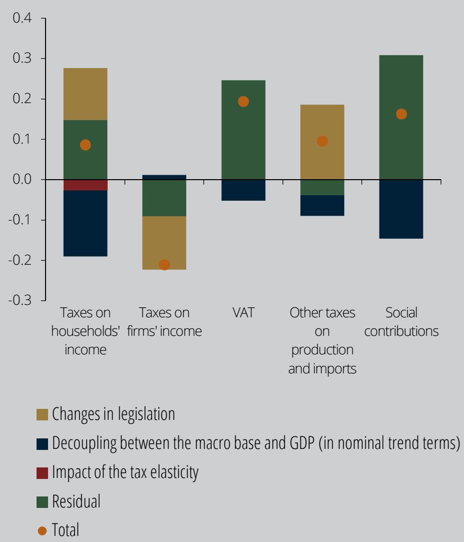
Chart 1 • Breakdown of the overall change in structural fiscal burden [(a)]
| In percentage points of trend GDP



Sources: INE and Banco de Portugal.

Note: (a) For more details on the methodology underlying the calculation of these contributions see Kremer *et al.*, (2006) and Braz, C., (2006).

Chart 2 • Breakdown of the change in structural taxes and social contributions in 2014 [(a)]
| In percentage points of trend GDP



Sources: INE and Banco de Portugal.

Note: (a) For more details on the methodology underlying the calculation of these contributions see Kremer *et al.*, (2006) and Braz, C., (2006).

4. Supply

Recent developments in the Portuguese economy in 2014 took place in the context of a low trend growth and within an extended period of correction of macroeconomic imbalances. The various inefficiencies related to the functioning of some markets and to the accumulation and utilisation of productive factors, as well as the necessary process of correction of macroeconomic imbalances existing in the Portuguese economy have hindered greater convergence towards the average income *per capita* levels of the European Union (EU) (Chart 4.1). Although the correction process of macroeconomic imbalances entails costs in the short run, it is a necessary condition for a rise in the Portuguese economy's trend growth over the next few years. These structural developments cannot be disconnected from demographic developments, developments in the labour market and in the level of capital existing in the economy (Box 'Capital accumulation and recent developments in investment in Portugal').

Moderate recovery of economic activity over the year

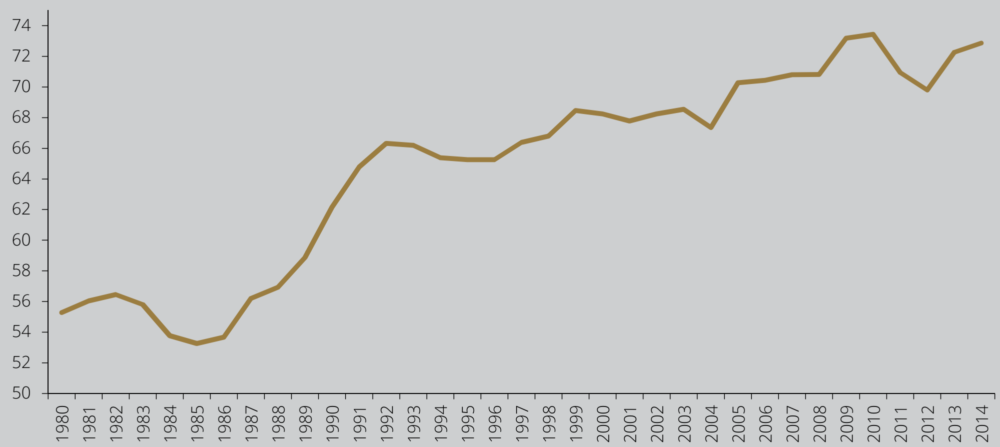
In 2014 gross value added (GVA) grew by 0.7 per cent, compared with a reduction of 1.0 per cent throughout the previous year as a whole, remaining at levels clearly below those observed in 2008 (Chart 4.2). In intra-annual terms there was a slight deceleration over the second half of the year.

Confidence indicators for the main activity sectors showed a broadly based increase over the course of the year (Chart 4.3), and in general their levels were similar to those observed at the start of the international financial crisis. The most recent data point to a relative stabilisation of these indicators over the first quarter of 2015.

Developments in activity at sectoral level continued to reflect a marked productive restructuring taking place in the Portuguese economy, leading increasingly to the channelling of recourses

Chart 4.1 • GDP *per capita* – current prices at purchasing power parity

| Portugal as a percentage of European Union (EU15)



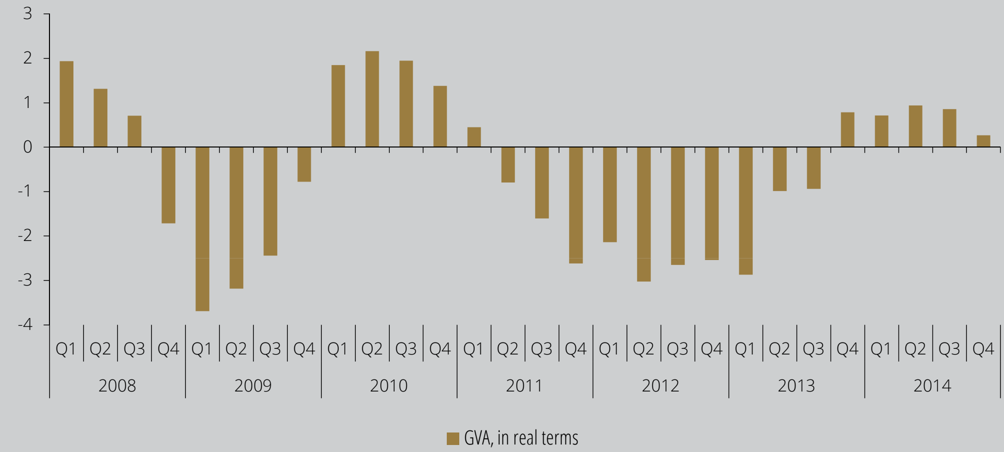
Source: European Commission (AMECO).

Note: EU15 stands for the 15 initial member states of the European Union.

towards the sectors that are more exposed to international competition (Chart 4.4).

Construction sector GVA declined further in 2014, although less sharply than in previous years. In year-on-year terms there was a 4.0 per cent decline, although there was a visible slight recovery of the activity level over the course of the year. In 2014 construction GVA accounted for a little over half of the level observed in 2008. The decline in activity in this sector over the past few years is likely to continue to reflect the structural adjustment of the housing stock level, after the high investment in construction of the 1990s. This sector's dynamics was also conditioned by the trend of public investment.

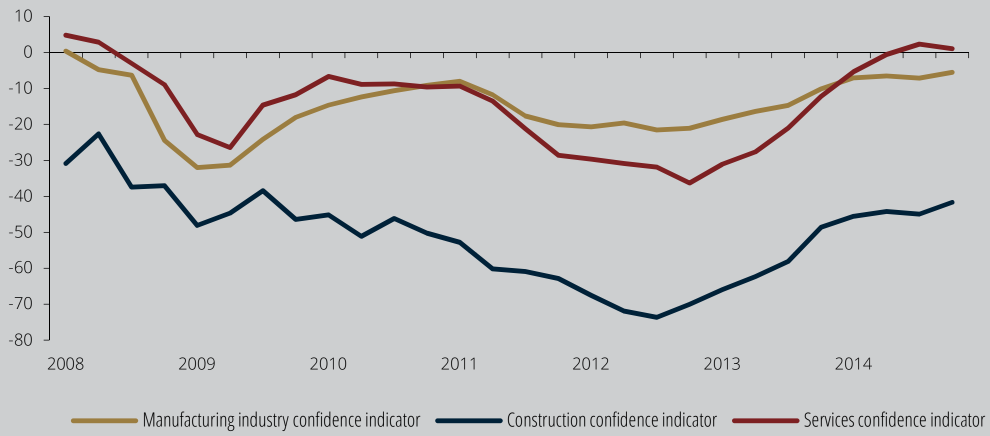
Manufacturing GVA increased by 0.9 per cent in 2014. Developments in this sector's activity were largely in line with a recovery of domestic demand, in the context of some deceleration in exports. The levels of aggregate GVA in manufacturing continue below those



Source: *INE*.

Chart 4.2 • Gross Value Added (GVA) – (2008 Q1–2014 Q4)

| Year-on-year rate of change, in per cent



Source: European Commission.

Chart 4.3 • Confidence Indicators – (2008 Q1-2014 Q4)

| Balances (quarterly mean) - s.a.

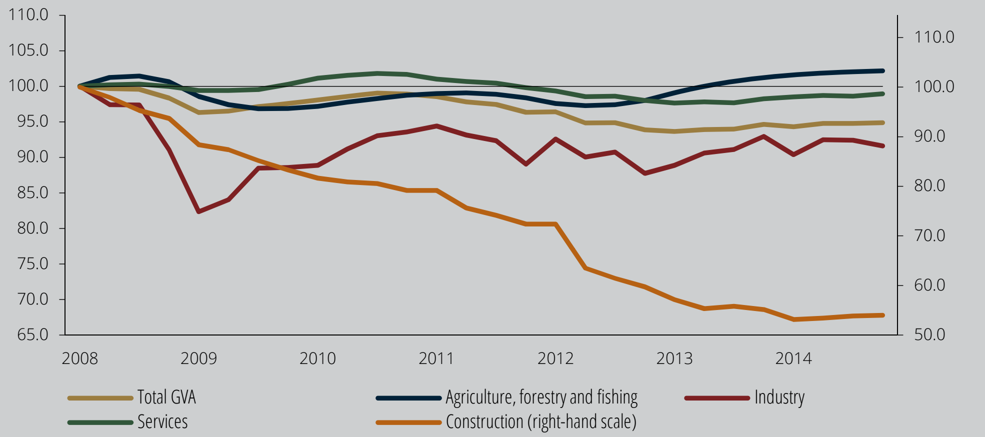
observed before the start of the international financial crisis and remained relatively stable over the past three years.

In 2014 services sector GVA grew by 0.9 per cent in year-on-year terms, after a contraction in the past three years. This increase chiefly reflected 2.6 per cent growth in activity in the sub-sectors sale and repair of motor vehicles and hotels and restaurants. The recovery of this sector's activity reflected the evolution of tourism exports and a more dynamic domestic demand.

Improved labour market conditions in the context of moderate economic activity growth and wage moderation

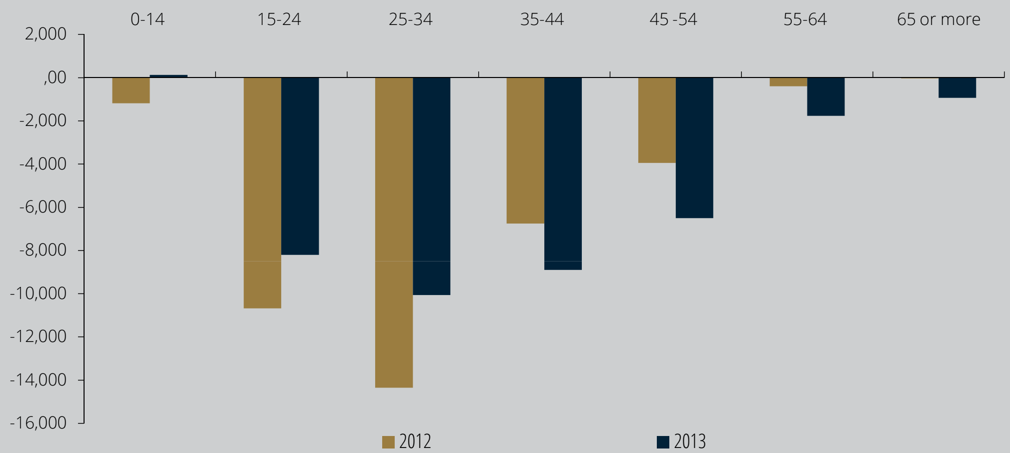
Labour market developments in 2014 were in line with the moderate economic growth. In this context, there was a rise in employment, a decline in the unemployment rate and the maintenance of wage moderation. This moderation was also observed in the field of collective agreements, with a low number of new

Chart 4.4 • GVA by main sectors of activity – (2008 Q1-2014 Q4) | Index 2008Q1=100



Source: *INE*.

Chart 4.5 • Net Migration by age – (2012-2013) | Number of individuals



Source: *INE (Estimativas Anuais de Emigração)*.

Notes: Permanent Emigrant: A person (national or foreign) who, in the reference period, and after having remained in the country continuously for at least one year, left it with the intention of residing in another country for a continuous period of one year or more. Permanent Immigrant : A person (national or foreign) who, in a certain period of reference, entered the country with the intention of remaining here for one year or more, having previously resided abroad continuously for one year or more.

agreements and reduced room for negotiation to improve wage conditions.

Intra-annual developments in employment and unemployment continued to improve gradually, as observed from the second quarter of 2013 onwards. However, this process was interrupted in the last quarter of 2014. Despite the upward trend of employment, its levels remain historically low.

In 2014 resident population and the labour force continued to decline (Table 4.1). According to statistics from INE, in 2013 the decline in the resident population continued to mainly reflect negative net migration of around 3.5 per 1,000 inhabitants (more than 36,000 individuals). This process is expected to have continued in 2014.

An analysis by age group provides further information. The decline in population was especially marked in younger age groups (those aged 15-34) and, as in 2012 and 2013, will likely continue to be associated with the recent dynamics of migration flows. This conclusion is confirmed by the fact that those aged 25-34 made a greater contribution to net migration (Chart 4.5). In the most recent period, those aged 55 and over accounted for around 10 per cent of net migration. In parallel with a more intense emigration process, the Portuguese economy has also seen a decline in inflows of immigrants.

Table 4.1 • Labour Market Indicators | Year-on-year rate of change , in per cent, unless otherwise stated

	Years		Semesters		
	2013	2014	H2 2013	H1 2014	H2 2014
Inquérito ao Emprego					
Population	-0.6	-0.6	-0.6	-0.6	-0.6
Population 15-34 years	-3.1	-2.4	-3.1	-2.6	-2.3
Labour force	-1.8	-1.1	-1.7	-1.1	-1.2
Labour force 15-34 years	-5.5	-3.6	-5.0	-3.5	-3.6
Participation rate 15-64 years (in % of population)	73.0	73.2	73.2	73.1	73.3
Total employment	-2.6	1.6	-0.7	1.8	1.3
Total unemployment	2.3	-15.1	-6.6	-15.4	-14.8
Unemployment rate (in % of labour force)	16.2	13.9	15.4	14.5	13.3
Unemployment rate 15-34 years (in % of labour force)	23.8	20.4	22.7	21.5	19.2
Long-term unemployment (in % of total unemployment)	62.1	65.5	64.0	65.4	65.7
Discouraged inactives (in % of labour force)	5.2	5.2	5.5	5.1	5.4
Ministério da Solidariedade, Emprego e da Segurança Social					
Employees – Number of workers contributing to Social Security	-3.2	1.8	-1.7	1.2	2.4
Average Income reported to *Segurança Social*	1.2	0.1	-	-	-
Direção Geral da Administração e Emprego Público					
General Government employees	-3.9	-3.4	-3.6	-3.7	-3.1

Sources: *INE, Instituto de Informática do Ministério da Solidariedade, Emprego e Segurança Social,* and *Direção Geral da Administração e Emprego Público.*

Notes: Long-term unemployment includes the unemployed individuals that have been actively seeking employment for 12 months or more. The discouraged inactives include the inactive individuals who were available for work but had not looked for a job during the period.

Ongoing decline in the unemployment rate, which still stands at very high levels

According to *INE*'s Labour Force Survey, the total number of unemployed declined by 15.1 per cent in 2014, and the unemployment rate stood at 13.9 per cent, i.e. 2.3 p.p. below the level observed in 2013. This profile was also observed in individuals seeking work for less than 12 months, with a 22.9 per cent decline, after a strong reduction already in the previous year (Chart 4.6).

One of the most serious aspects of recent developments in the Portuguese labour market was the very high level of long-term unemployment, which tends to cause a sharp depreciation of human capital, with adverse effects on the economy's potential growth. In 2014 the number of unemployed seeking work for 12 months or more declined, in contrast to the strong growth experienced in the last decade. This was largely due to the group of unemployed seeking work for 12 to 18 months. Nonetheless, the share of long-term unemployed stood at 65.5 per cent.

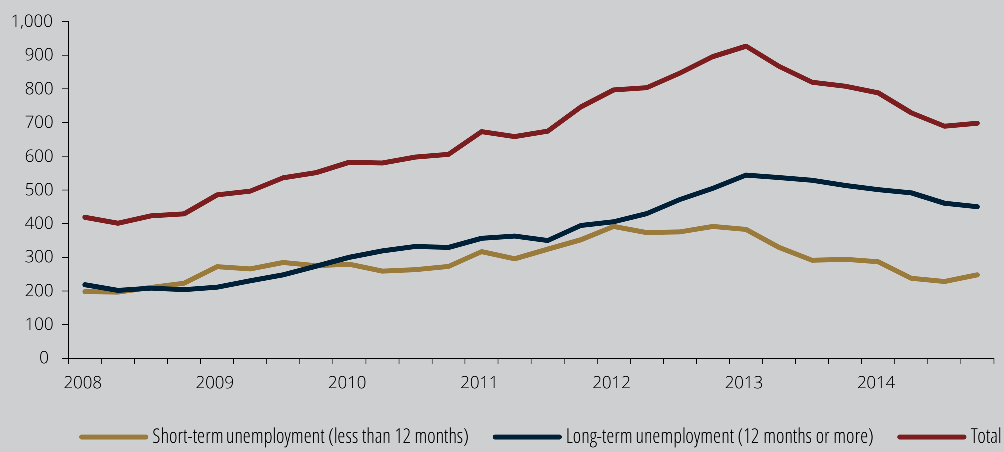
In addition, the number of discouraged workers, i.e. individuals who are not actively seeking employment but who are available to work, was similar to that observed in 2013. These inactives on the margin continued to account for around 5 per cent of the labour force (corresponding to approximately 260,000 individuals).

Employment recovered, although remaining at historically low levels in a context of marked wage moderation

According to the Labour Force Survey, total employment rose by 1.6 per cent in 2014, following strong reductions in previous years. This reflects an increase in employees and a negative contribution from the self-employed.

In the current context, the joint analysis of all the available information and indicators on the labour market in Portugal is particularly

Chart 4.6 • Number of unemployed individuals seeking employment by duration (2008 Q1-2014 Q4) | In thousands



Source: *INE* (Labour Force Survey).

relevant (Box 'Recent dynamics of employment in the Portuguese economy´ in the December 2014 issue of the *Economic Bulletin*).[23]

Based on data released by the *Ministério da Solidariedade, Emprego e Segurança Social* (*MSESS*), the number of employees paying Social Security grew by 1.8 per cent in year-on-year terms in 2014, with a clear intra-annual acceleration (Chart 4.7).[24] According to data from the *Direção Geral da Administração e Emprego Público* (DGAEP), employment in general government declined by 3.4 per cent in 2014 in year-on-year terms (Chart 4.7). This reduction is expected to cover not only the *CGA* subscribers, but also the number of public employees contributing to the Social Security Pension Scheme. In sum, the information available suggests a recovery of private sector employees during 2014, although more moderately than that implied by the Labour Force Survey. In addition, active employment policies may have also contributed to developments in employee numbers. According to data from the *Instituto do Emprego e Formação Profissional* (*IEFP*), the number of individuals in professional internships increased, particularly from the last quarter of 2013 onwards. However, even excluding this effect, private sector employees continued to increase over the course of 2014.

Based on the set of available indicators, developments in employment by sector of activity were generally in line with the sectoral behaviour of activity. According to the Labour Force Survey, in the services sector the positive change in employment started in the second half of 2013 became more intense, in spite of the deceleration in the second half of 2014. Stronger contributions to the increase in employment in this sector resulted from developments in the wholesale and retail trade sub-sectors. The increase in employment in industry contrasts with the negative evolution observed in previous years. In turn, employment in the construction sector declined further to a level corresponding to around half the employment in 2008, consistent with the structural adjustment ongoing in this sector (Chart 4.8). In 2014 employment in this sector amounted to around 275,000 workers.

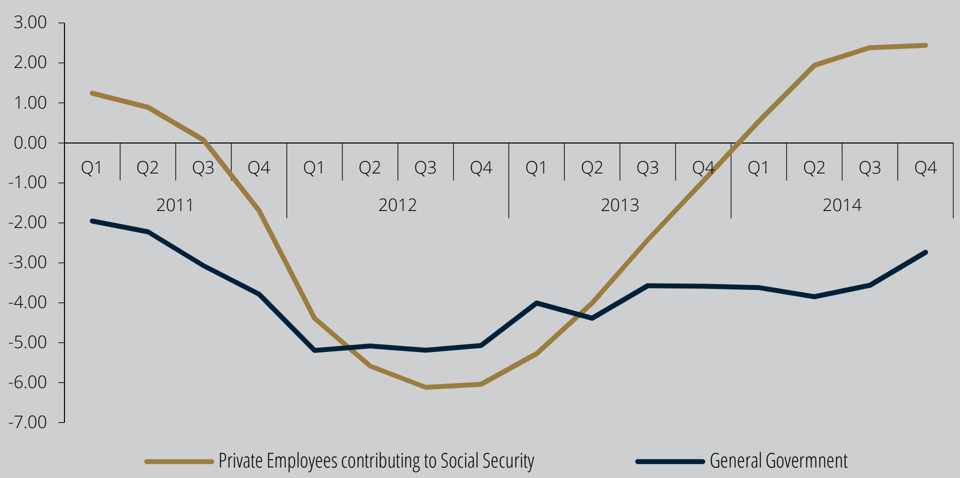


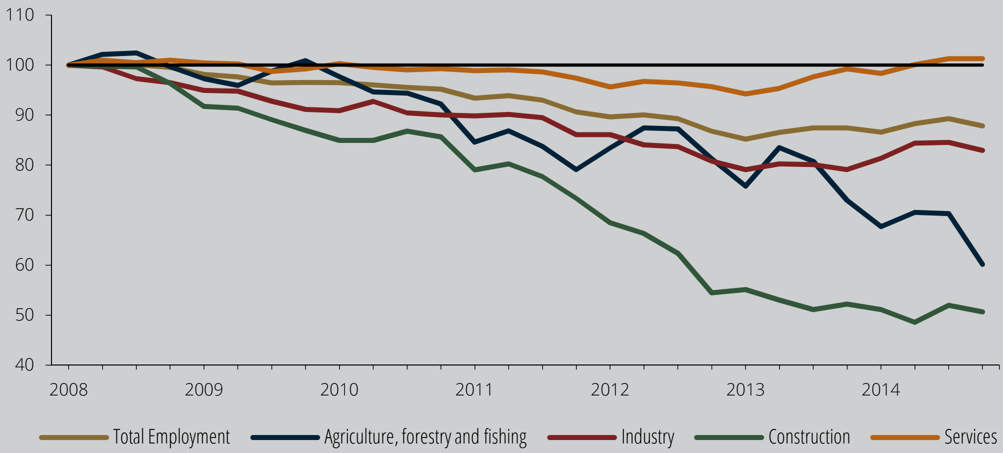
Chart 4.7 • Private and General Government employees Year-on-Year rate of change (2011 Q1-2014 Q4) | In Percentage

Sources: *MSESS* and *DGAEP*.

Note: These employees include, in addition to members of the statutory bodies, public employees contributing to the Social Security Pension Scheme. However, this trend will correspond in general to the evolution of private sector employees, given the estimated weight of each component in the recent past. This database, which is continuously updated, is missing a percentage of declarations, mainly in the last four months, which could represent around 0.4 percentage points (p.p.) of the year-on-year change in the last quarter available.

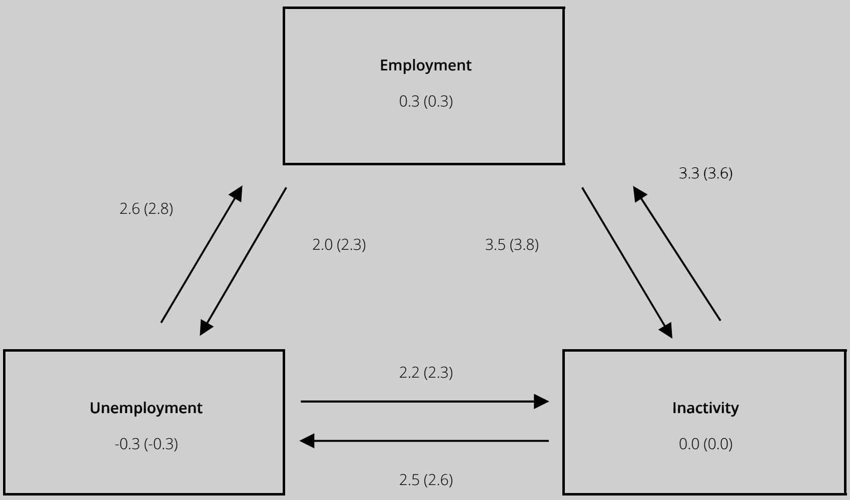
Labour market dynamics may be analysed in terms of flows between its three states: employment, unemployment and inactivity (Chart 4.9). In 2014 lower dynamics translated into a slowdown in total flows (including temporary and permanent contracts) of separation and hiring. However, the reduction of separation was more intense than the reduction of hiring, thus resulting in net employment creation, in line with the previous year. The lower dynamics of flows was also experienced in terms of inactivity and unemployment.

Chart 4.8 • Employment by main sectors of activity (2008 Q1-2014 Q4) | Index 2008Q1 = 100



Source: *INE* (Labour Force Survey)

Chart 4.9 • Quarterly average flows in the labour market | As a percentage of the labour force



Sources: *INE* and Banco de Portugal.

Note: Flows are computed using the common component of the sample of quarters t and t-1 and the population weights of quarter t. Quarterly average values. Values of 2013 in brackets.

5. Demand

GDP increased by 0.9 per cent in real terms in 2014 (Table 5.1). After three years of a strong contraction, the Portuguese economy returned to positive, albeit moderate, growth. The pace of economic recovery has been affected by moderate growth in the main trading partners and high indebtedness in the economy as a whole. Despite recovering, in 2014 GDP was 7.5 per cent below the level observed in 2008.

Table 5.1 • GDP and main components | real growth rate in percentage

	% of 2014 GDP	2012	2013	2014	2013	2014			
					Q4	Q1	Q2	Q3	Q4
GDP	100	-4.0	-1.6	0.9	0.9	0.9	1.2	0.7	0,7
Domestic demand	99	-7.3	-2.5	2.1	3.1	1.6	2.2	1.4	1,4
Private consumption	66	-5.5	-1.5	2.1	2.1	1.7	2.6	1.9	1,9
Public consumption	19	-3.3	-2.4	-0.3	-0.2	0.1	0.4	-1.4	-1,4
Investment	15	-18.1	-6.7	5.2	12.0	3.2	2.8	3.1	3,1
GFCF	15	-16.6	-6.7	2.5	0.0	3.7	4.1	2.4	2,4
Inventories (a)		-0.3	0.0	0.4	1.8	-0.1	-0.2	0.1	0,1
Exports	40	3.4	6.4	3.4	3.3	2.0	2.9	5.3	5,3
Imports	39	-6.3	3.9	6.4	9.1	3.9	5.4	7.1	7,1
Contribution of domestic demand (a)		-7.6	-2.5	2.1	0.5	-7.6	-2.5	2.1	0.5
Contribution of exports (a)		1.2	2.4	1.3	3.4	1.2	2.4	1.3	3.4
Contribution of imports (a)		2.4	-1.5	-2.5	-2.6	2.4	-1.5	-2.5	-2.6

Source: *INE* and calculations by Banco de Portugal.
Note: (a) Contributions for the real GDP growth in percentage points.

Economic growth in Portugal was similar to that estimated for the euro area (Chart 5.1), interrupting a trend of accumulation of negative growth differentials that had been observed in the past few years (-11.6 p.p. since 2000 and -7.8 p.p. in the past four years).

The economic recovery in 2014 reflects, to a large extent, growth in domestic demand (following a cumulative decline of 14.8 per cent in the previous three years), owing to private consumption and, to a lesser extent, investment (Chart 5.2). Exports decelerated compared with 2013, largely as a result of a marked drop in fuel exports. This however remained the most dynamic component of total demand.

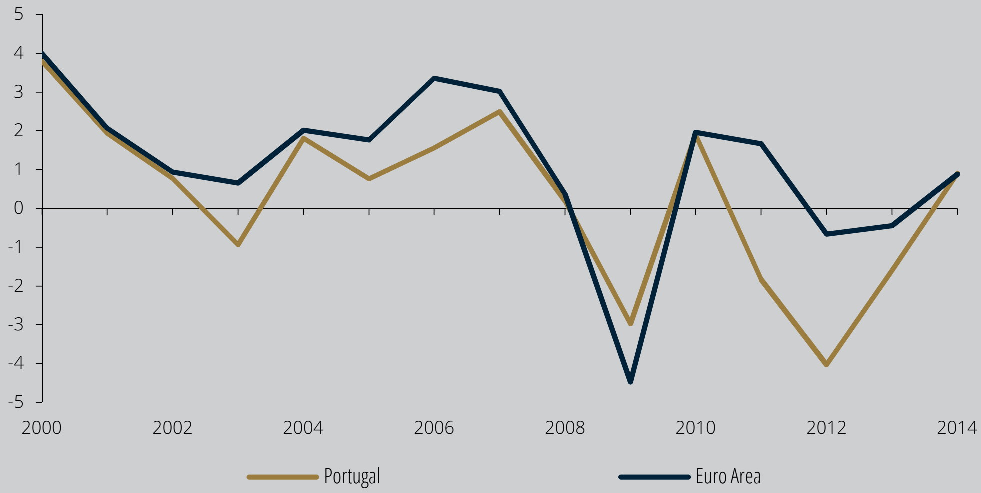
The recovery in domestic demand was visible in components that are usually more sensitive to the economic cycle, such as the consumption of durable goods and business investment, both of which accelerated amid improving confidence among private agents. Changes in inventories also made a significant contribution to GDP growth in 2014, reflecting the accumulation of stocks associated with international trade flows of fuels, in particular during the first half of the year. Given the high import content of these components, the contribution made by domestic demand, net of imports, to GDP growth in 2014 was considerably below its gross contribution (Chart 5.3). In turn, the strong import growth in 2014, amid a slowdown in exports, resulted in a decline in the goods and services balance, which nevertheless remained positive.

Recovery in private consumption amid improving labour market conditions and lower household indebtedness levels

Private consumption grew by 2.1 per cent in 2014, after recording a cumulative decline of close to 10 per cent in the previous three years. In 2014 private consumption grew in line with a continued recovery in consumer confidence, which remained consistently above its average of the past ten years (Chart 5.4). Against a background where real disposable income remained at a level close to that observed in 2013, the household saving rate is expected to have declined considerably in 2014, interrupting the upward trend of the previous two years. Current estimates point to a saving rate of 6.9 per cent (compared with 8.7 per cent in 2013). In parallel, loans to households decreased, contributing to a decline in the indebtedness levels of this institutional sector (Section 2.2).

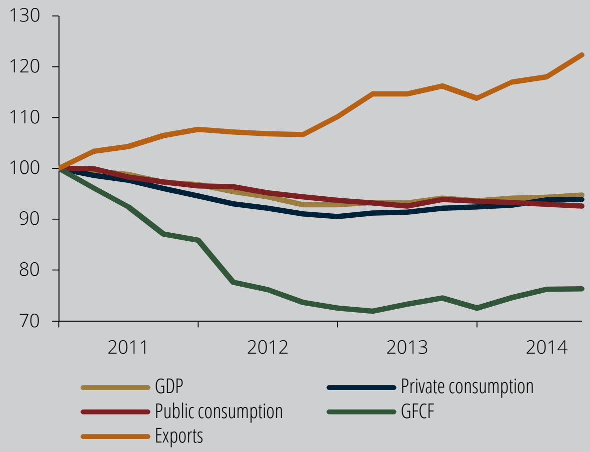
The recovery in private consumption is the result, to a large extent, of an acceleration in the consumption of non-durable goods and services (current consumption), after three years of a marked contraction (Chart 5.5), which

Chart 5.1 • GDP growth in Portugal and in the Euro Area | Percentages



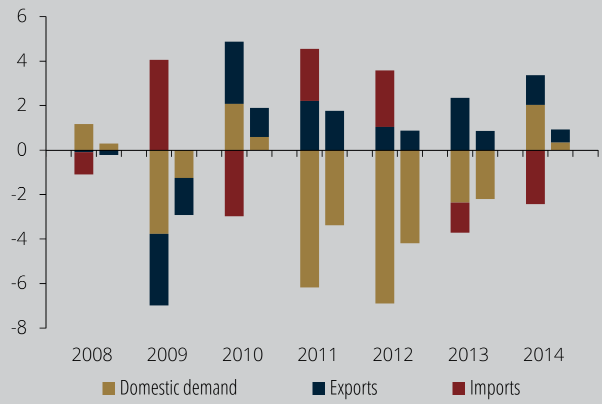
Sources: *INE* and Eurostat.

Chart 5.2 • Growth of GDP and of its main components | 2011Q1=100



Sources. *INE* and calculations by Banco de Portugal

Chart 5.3 • Contributions to GDP real growth including and excluding import content | In percentage points



Sources. *INE* and calculations by Banco de Portugal

Note: For each year two bars are shown. The one on the left represents the gross contributions whereas the one on the right represents the contributions net of the import content.

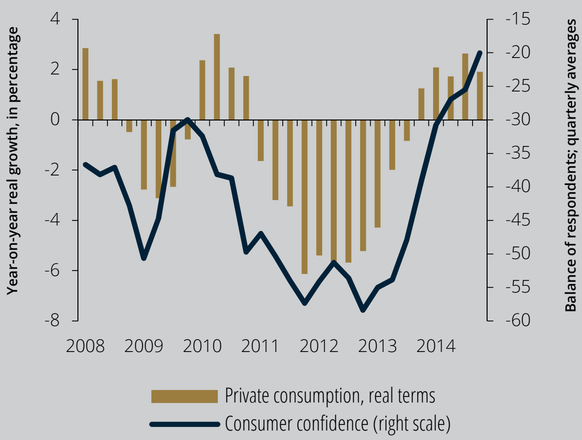
reflected, in particular, an acceleration in the non-food component, specifically in the second half of the year. Food consumption remained relatively stable, reflecting a lower elasticity of food consumption to changes in income. The consumption of durable goods remained very dynamic, in particular car purchases, continuing the trend observed since mid-2013. An increase in consumer confidence is also expected to have contributed to this. Nevertheless, the number of cars sold remained considerably below average levels recorded since 1988 (a year when the regime of quotas to car imports was discontinued).

Growth in household consumption expenditure is likely to have benefited from a moderate improvement in labour market conditions. In 2014 the unemployment rate declined whereas employment increased, despite considerable wage moderation (Chapter 4). In addition, a decrease in the household debt service may have had an impact recently, owing to a stabilisation of interest rates at lower levels and a decrease in indebtedness levels. Against this background, financing conditions improved, particularly credit to consumption and other purposes which saw its rates of change become gradually less negative throughout the year (Chapter 2). However, developments in private consumption are expected to continue to be affected by a need to reduce indebtedness levels, tight credit standards (associated with ongoing deleveraging by the banks) and developments in household disposable income.

Public consumption decreased, albeit to a lesser extent than in the past few years

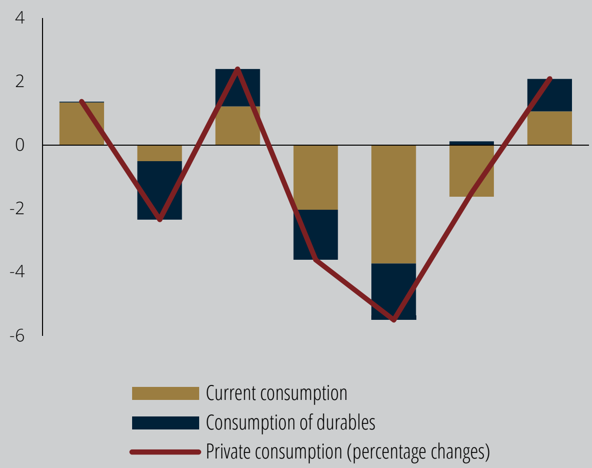
In 2014 public consumption declined slightly (-0.3 per cent) in real terms, decreasing less than in the past few years. Underlying these developments was a considerable reduction in compensation of employees, as a result of an ongoing downward trend in the number of public employees (-3.4 per cent, on average on a quarterly basis), partially offset by the lagged effect of an increase in regular working hours of public employees applicable from the end of September 2013 onwards. Expenditure on goods and services increased in real terms, largely as a result of growth in the volume of

Chart 5.4 • Private consumption and consumer confidence



Sources: *INE*, European Commission and Banco de Portugal.

Chart 5.5 • Contributions to private consumption growth | In percentage points



Sources: *INE* and calculations by Banco de Portugal.

intermediate consumption (through expenditure with concessions to public-private partnerships in the road sector), which reversed developments observed in the recent past.

Recovery in investment supported by an increase in business GFCF and a significant contribution from changes in inventories

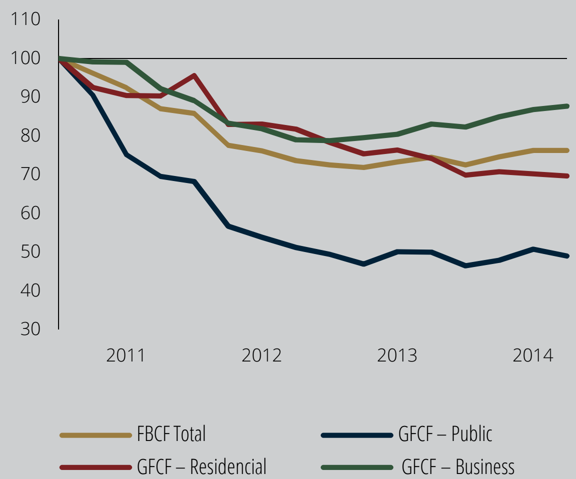
After three years of considerable declines, investment returned to positive territory in 2014 (5.2 per cent, after -6.7 per cent in 2013). Following the recovery observed in 2014, the value of aggregate GFCF stood at around 24 per cent below the level seen at the start of 2011 in real terms (Chart 5.6), reflecting considerable adjustments in the public investment and housing components (a cumulative decline of around 50 and 30 per cent, respectively, since 2011) and an important recovery in business investment levels.

The recovery in investment was supported by growth in business GFCF, which had been dropping since 2009, and a very significant contribution from changes in inventories. Public sector GFCF declined considerably further in 2014, continuing the downward trend of the past few years, associated with the ongoing budget consolidation process. This sector's current investment stands at half the level observed at the end of 2010.

Developments in GFCF were mixed across main components. GFCF in construction recorded a further negative change. The decrease in investment in construction is expected to be permanent, associated with a decline in public investment in infrastructure and a structural adjustment in the housing stock. These factors are associated with tight financing conditions, which have been particularly significant for construction firms and households planning to purchase a house, reflecting, inter alia, the high level of indebtedness of these economic agents.

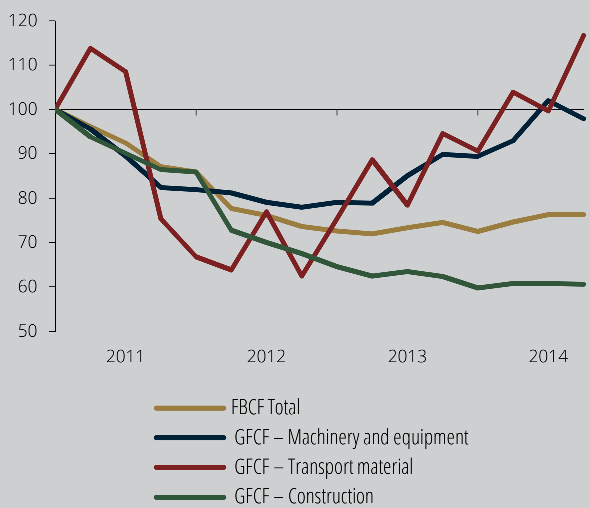
By contrast, GFCF in transport equipment has remained very buoyant since 2013, growing

Chart 5.6 • Behaviour of GFCF by institutional sector | 2011Q1=100



Sources: *INE* and calculations by Banco de Portugal.

Chart 5.7 • Behaviour of GFCF by investment type | 2011Q1=100



Sources: *INE* and calculations by Banco de Portugal.

by 21.9 per cent (24.8 per cent in 2013). In turn, GFCF in machinery and equipment grew considerably in 2014, by an estimated 14.8 per cent (Chart 5.7). Future developments in this component are expected to continue to be affected by a capacity utilisation rate that remains at levels below the average seen in the past decade, a high level of corporate indebtedness, uncertainty regarding the ongoing adjustment process and relatively weak prospects for domestic demand. According to the Investment Survey published in January 2015, 59 per cent of firms claim to have had limitations to investment in 2014, similarly to the previous year. A deterioration of sales prospects continues to be the main limiting factor mentioned by firms, although this decreased considerably in importance in 2014, compared with factors such as return on investment or self financing.

Investment dynamics is expected to continue to be affected by credit market conditions in the next few years, despite improving throughout 2014 (Chapter 2). In particular, financing conditions are likely to remain relatively tight for firms showing a high level of indebtedness and higher credit risk.

More moderate growth in goods exports, reflecting temporary factors and services exports

In 2014 exports of Portuguese goods and services grew more moderately than in the previous year, remaining nevertheless the most buoyant component of total demand. These developments are the result of a deceleration in both the goods component (from 5.8 to 3.0 per cent) and the services component (from 7.7 to 4.3 per cent). Goods exports grew more moderately in 2014 largely as a result of a marked drop in fuel exports (Chart 5.8), which strongly contributed to reduce exports of goods to the Spanish market. A drop of 11.7 per cent in the volume of fuel exports (particularly in the first half of the year) was associated with a temporary interruption of activities in a large firm belonging to this sector.

Exports of goods excluding fuels accelerated in the year as a whole, growing by 4.6 per cent, compared with 2.9 per cent in 2013. Against this background, positive developments were observed in the sales of some groups of products with an important share in the structure of Portuguese exports, in particular clothing and footwear (nominal growth of 8.1 per cent), plastic products and rubber (5.4 per cent) and animal and vegetable products (11.2 per cent). After having declined in the previous two years, car exports also grew (5.7 per cent), particularly for an important firm in the sector, which increased its sales considerably.

Owing to opposite developments in fuel exports and their high import content, it is particularly important to analyse the indicator weighing nominal exports for each type of product on the basis of the non-import content (see the Box entitled 'Developments in nominal exports of goods weighted by the non-imported content' in the April 2014 *Economic Bulletin*). Chart 5.9 shows that the year-on-year growth rate differential between exports that are weighted by the non-import content and those that are not was particularly wide in the first five months of 2014 (an average of around 4.0 p.p., compared with 2.2 p.p. in 2014 as a whole and -1.0 p.p. in 2013). This suggests that, contrary to 2013, exports of goods with a higher value added were more buoyant in 2014.

The deceleration in services exports in 2014 reflected a slowdown in exports of non-tourist services, particularly construction services and maintenance and repair services, which declined quite considerably in nominal terms in the year as a whole. By contrast, exports of tourism services remained very dynamic in 2014, growing by 11.7 per cent in real terms (6.5 per cent in 2013), which reflects an acceleration of both nominal tourism revenue and the number of overnight stays by non-residents in Portuguese hotels (Chart 5.10).

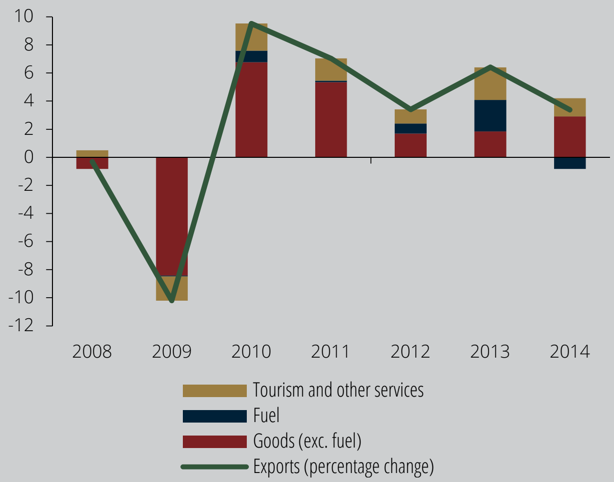
Exports of goods and services grew less in 2014 than external demand for Portuguese goods and services, resulting in a market share loss in the year as a whole (Chart 5.11). These developments are in contrast with significant market share gains seen in the past few years, but are influenced by the temporary factors affecting fuel exports in 2014. Market share gains have been a positive aspect of the adjustment process under way in the Portuguese economy, reflecting a remarkable ability of Portuguese firms to adapt to the demands of international markets. In the current context of structural adjustment in the Portuguese economy, growing exports reflect both the restructuring process visible in the export sector in the past decade and increased efforts to enter new markets on the part of Portuguese firms. Despite recording losses in 2014, exports saw a cumulative increase of 10.4 per cent in their market share from 2011 to 2014, above the levels seen at the start of the euro area. Against this background, the share of exports in GDP also increased considerably in the past few years (reaching around 40 per cent in 2014, compared with 34 per cent in 2011).

Import growth in line with more favourable developments in demand components with higher import content

Imports of goods and services accelerated in 2014, in line with developments in total demand components with higher import content (Chart 5.12), such as the consumption of durable goods and investment in machinery and transport equipment. In real terms, imports of goods and services increased for the second year in a row (6.4 per cent in 2014 and 3.9 per cent in 2013), after two years of a cumulative decline of 12.0 per cent. Some restocking of inventories is expected to have been an important part of the increase in imports seen in 2014, after a prolonged period of destocking.

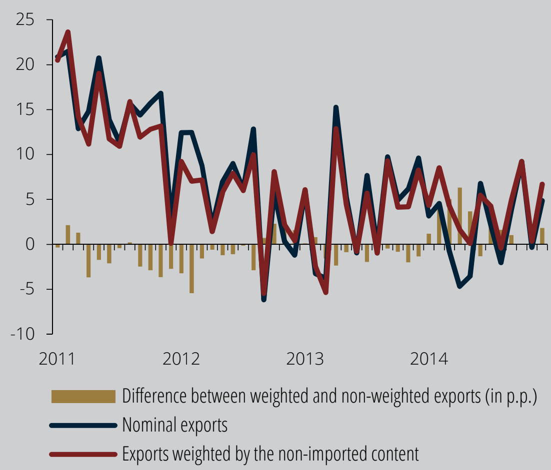
The increase in imports in 2014 is the result of an acceleration of both the goods component

Chart 5.8 • Contributions to exports growth
| In percentage points



Sources: *INE* and calculations by Banco de Portugal.

Chart 5.9 • Nominal exports of goods weighted and unweighted by import content
| Year-on-year change, in percentage

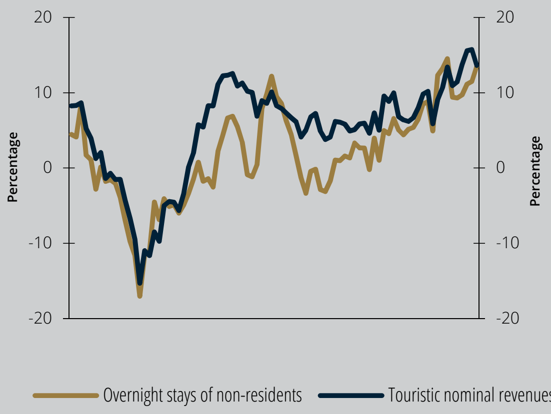


Sources: *INE* and calculations by Banco de Portugal.

(from 4.2 per cent to 6.3 per cent) and the services component (from 2.3 to 6.7 per cent). However, the decrease in fuel exports in 2014 – a component with a high import content – contributed to mitigate growth in imports in 2014. In effect, imports of goods excluding fuels grew more markedly (8.1 per cent).

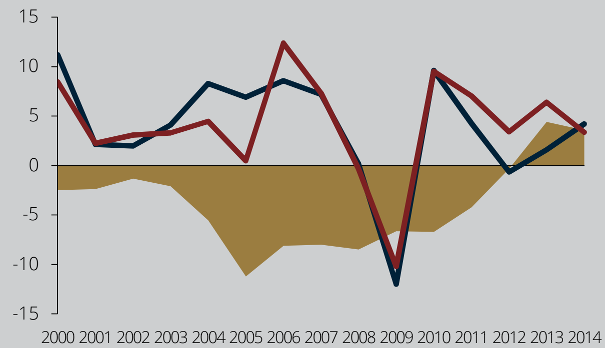
In nominal terms, imports of goods grew by 3.2 per cent (6.0 per cent, excluding fuels), particularly car imports, which increased significantly (22.2 per cent). In turn, services imports increased by 7.9 per cent in nominal terms (3.3 per cent in 2013). This reflected the stronger dynamics of several components with an important share in the structure of services imports, specifically transport services and other services provided to firms.

Chart 5.10 • Touristic nominal revenues and overnight stays by non-residents
| Year-on-year change, in percentage



Sources: *INE* and Banco de Portugal.

Chart 5.11 • Change in the market share of Portuguese exports
| Growth rate, in percentage



Sources: ECB, *INE* and calculations by Banco de Portugal.

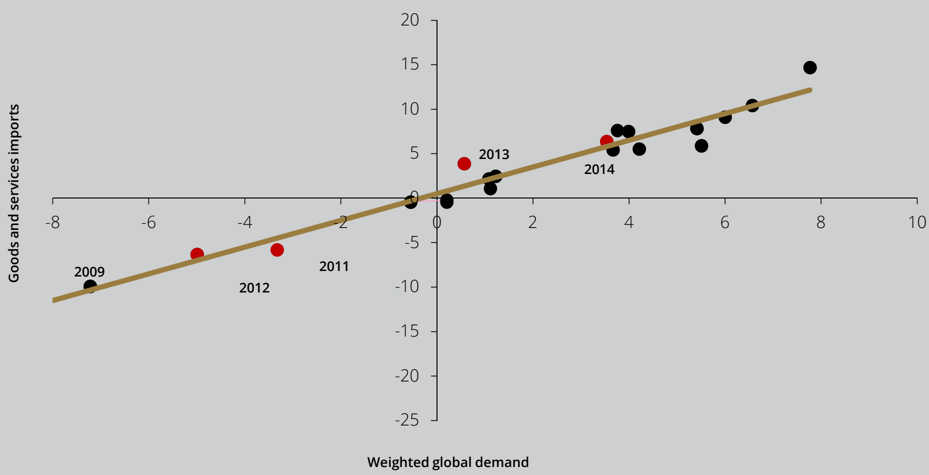


Chart 5.12 • Behaviour of imports and global demand weighted by import content
| Growth rate, in percentage

Sources: *INE* and calculations by Banco de Portugal.

Box 5.1 | Capital accumulation and recent developments in investment in Portugal

Capital accumulation per worker is a growth factor usually taken into account in economic development models. Growth acccounting exercises focusing on GDP growth *per capita* consider capital accumulation per worker as one of the main sources of growth, together with employment, the level of human capital and total factor productivity.

An economy's capital level measures the quantity of capital used in the production of goods and services, including, for example, buildings, equipment, machinery, tools or software. The change in an economy's capital level each year is the result of the difference between the level of investment in that year and the depreciation of previous capital formation. This depreciation reflects the effect of, for example, capital use (physical depreciation) or equipment obsolescence (technological depreciation). Although developments in investment are usually analysed as a determinant of aggregate demand, they also affect the capital level and, consequently, aggregate supply.[25]

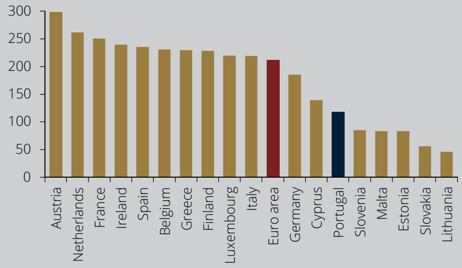
An international comparison shows that the capital level per worker in Portugal is quite small. In 2014 this ratio stood at around half the average level seen in the euro area (Chart 1).

An analysis of the dynamics of real investment flows in Portugal is an important indicator of developments in the capital level and the gradual change in the investment structure that began in the period before the crisis associated with the ongoing sectoral restructuring process. However, obtaining an estimate of the capital level largely depends on the assumptions that are taken into account regarding depreciation rates and amortisation methods. Indeed, developments in different types of investment are not similar to developments in their capital levels, as different depreciation rates are associated with each type of good. For example, the decline in the capital level of machinery and equipment in Portugal observed since 2009 reflects a marked decrease in investment in this type of good but also its higher depreciation rates (Chart 2). Despite having lower depreciation rates, the level of residential capital is also expected to have recorded a decline from 2009 onwards, as a result of continued decreases in investment levels. Finally, the levels of public capital and construction in firms are expected to have virtually stabilised more recently, in the context of a downward trend in their growth rates.

Against this background, the contribution of the capital input to economic growth has decreased considerably and is virtually nil in the most recent period (Chart 3). In effect, in the period from 2011 to 2014, output *per capita* decreased on average annual terms, despite growing by 1.5 per cent in 2014. In addition to the negligible contribution from the capital input, labour input made a negative contribution, reflecting a decline in activity and employment rates, in spite of positive developments in 2014. In addition, the contribution of total factor productivity to developments in output *per capita* (considered a residual component of growth) was also negative.

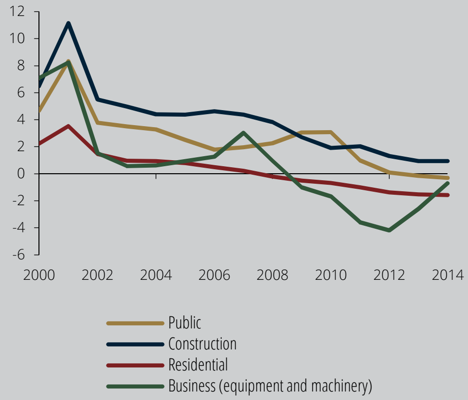
Negative developments in GDP *per capita* in Portugal have been mitigated in the past few decades by a positive contribution made by human capital accumulation, measured by the labour force's average years of schooling. This factor is expected to continue to make a positive contribution to growth in the future, amid a continued improvement of skills of the working age population. Recent developments in the level of human capital and capital stock per worker are linked. A greater incorporation of capital is only possible with a highly skilled labour force, which results in better technology and increased competition for Portuguese firms.

Chart 1 • Capital stock per worker
| Thousands of euros, 2010 prices



Source: European Commission (AMECO).

Chart 2 • Capital stock
| Annual growth rate in percentage



Source: Banco de Portugal.

Chart 3 • Breakdown of the growth in real GDP *per capita*
| Contributions in percentage points

Sources: Barro and Lee (2013), *Quadros de Pessoal*, *INE* and Banco de Portugal.

Notes: The growth accounting exercise of GDP *per capita* is based on a Cobb-Douglas production function. The measures of human capital were constructed from the data of Barro and Lee (2013) "A new data set of educational attainment in the world, 1950-2010", *Journal of Development Economics* 104, pp. 184-198. 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 and 2014).

6. Prices

Slightly negative change in the HICP in 2014 and narrowing of the differential *vis-à-vis* the euro area

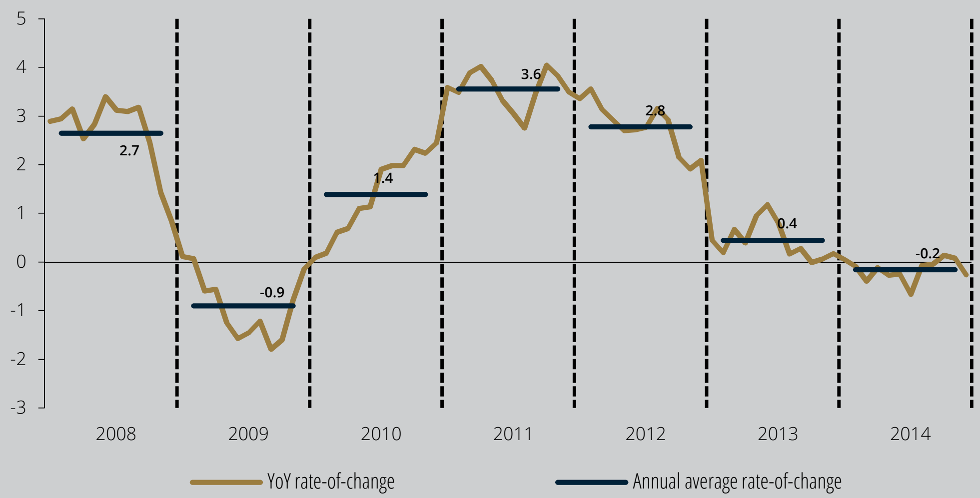
In 2014 the inflation rate in Portugal, measured by the change in the Harmonised Index of Consumer Prices (HICP), stood at -0.2 per cent, a decrease of 0.6 p.p. from 2013 (Table 6.1). Although GDP recovered in 2014, the inflation rate was negative for the first time since 2009 (Chart 6.1).

Table 6.1 • HIPC – Main components | Per cent

	Weights	Annual rate of change			Year-on-year rate of change			
	2014	2012	2013	2014	14 Q1	14 Q2	14 Q3	14 Q4
Total	100.0	2.8	0.4	-0.2	-0.1	-0.2	-0.3	0.0
Total excluding energy	92.1	1.7	0.6	0.0	0.0	-0.2	-0.2	0.3
Total excluding unprocessed food and energy	81.5	1.6	0.4	0.2	0.0	0.2	0.4	0.4
Goods	57.6	2.5	0.0	-1.1	-0.7	-1.1	-1.6	-0.9
Food	24.2	3.4	2.3	-0.7	0.4	-1.3	-1.9	0.0
Unprocessed food	10.6	2.8	2.6	-2.1	0.0	-3.3	-4.5	-0.3
Processed food	13.5	4.0	2.0	0.4	0.8	0.4	0.2	0.3
Industrial	33.5	2.0	-1.5	-1.4	-1.6	-1.0	-1.5	-1.6
Non-energy	25.6	-2.1	-1.5	-1.4	-1.5	-1.3	-1.7	-1.0
Energy	7.9	9.5	-0.7	-1.5	-1.5	0.1	-0.9	-3.6
Services	42.4	3.2	1.1	1.1	0.6	1.0	1.6	1.2
Memo items:								
Contribution of administered prices (in p.p.)	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Contribution of taxes (in p.p.)	-	1.9	0.1	0.1	0.1	0.1	0.1	0.1
Consumer Price Index (CPI)	-	2.8	0.3	-0.3	-0.1	-0.3	-0.5	-0.1
HICP – Euro Area	-	2.5	1.4	0.4	0.7	0.6	0.4	0.2

Sources: Eurostat and *INE*.

Chart 6.1 • Harmonised Index of Consumer Prices | In per cent



Source: Eurostat.

The negative change in prices in 2014 is largely the result of developments in unprocessed food, as underlying inflation, measured by the HICP excluding unprocessed food and energy, has remained positive, albeit at historically low levels (0.2 per cent). Although to a lesser extent, inflation in Portugal followed the trend observed in the euro area (where, as mentioned in Chapter 1, the rate dropped 1 p.p. to 0.4 per cent). Consequently, the inflation rate of the Portuguese economy remained below that of the euro area (a differential of -0.6 p.p.).

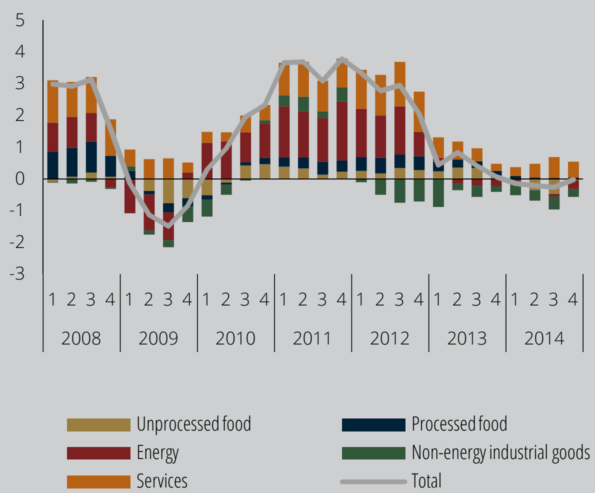
Price developments compared with 2013 were mainly influenced by unprocessed food

In 2014 the annual rate of change of food prices dropped 3 p.p. to -0.7 per cent (Table 6.1 and Chart 6.2). This is similar to developments in the euro area, where the rate of change declined from 2.7 per cent to 0.5 per cent, reflecting a broadly based decline in producer prices of agricultural products. The decrease in the Portuguese HICP mainly reflected developments in unprocessed food prices, which recorded a change of -2.1 per cent (a decrease of 4.7 p.p. from 2013). This component contributed 0.5 p.p. to the decline in the HICP compared with 2013, partly owing to base effects on the change in fruit and vegetable prices. Processed food prices increased only 0.4 per cent in 2014, a decrease of 1.6 p.p. from the previous year. Declines in farm gate prices of cereals and oil contributed to these developments, after considerable increases in 2013.

Small contribution by energy goods to the decline in the HICP, despite strong decreases in oil prices at the end of the year

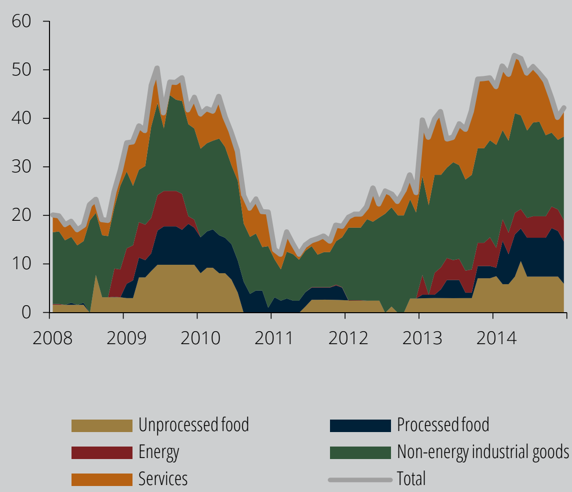
Energy prices decreased 1.5 per cent, declining more markedly than in the previous year. The main contribution to the slight decrease in energy prices was a drop in natural gas prices throughout the year. Regarding oil, the average price in euro of a barrel of oil decreased around 8 per cent compared with 2013. Although the average price of this commodity in December

Chart 6.2 • Contributions to the year-on-year rate of change of the HICP | in percentage points



Source: Eurostat.

Chart 6.3 • Weight of the IHPC components with a negative annual rate of change | In per cent



Sources: Eurostat and Banco de Portugal calculations.

was around 36 per cent lower in year-on-year terms, this decrease occurred mostly in the fourth quarter, restricting its impact on annual figures. The energy goods index consequently made a small contribution to the change in the rate of inflation in 2014. The prices of non-energy industrial goods and services recorded changes similar to those of the previous year (-1.4 per cent and 1.1 per cent respectively). Contributions made by administered prices and taxes were also similar to those of the previous year, which was in contrast with the large impacts observed in 2011 and 2012 as a result of VAT rate increases.

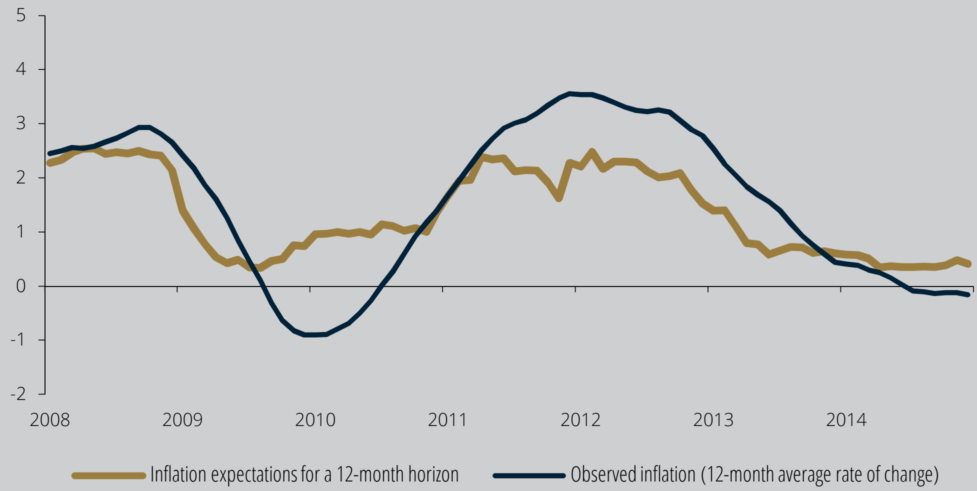
Decrease in the share of components with negative price changes

The share of HICP components with negative year-on-year rates of change increased slightly at the start of 2014, reaching a historical high of 53.3 per cent in March (Chart 6.3). The upward trend seen during the previous three years appears to have subsequently reversed, mainly as a result of developments in services subcomponents. At the end of 2014, the share of components with a negative change reached 42.5 per cent.

Inflation expected to return to positive, albeit modest, figures

Inflation expectations for 2014 released by Consensus Economics were revised downwards slightly throughout the year, accompanying the trend followed by actual average inflation (Chart 6.4). For 2015, inflation is expected to return to positive, albeit modest, figures. Inflation developments in Portugal are closely linked to the euro area inflation outlook. Against this background, expectations of a moderate economic recovery in the monetary union, combined with an expansive monetary policy, will tend to contribute to an increase in the euro area inflation rate to levels consistent with the objective of price stability over the medium term.

Chart 6.4 • Inflation expectations | In per cent



Sources: Consensus Economics and Eurostat.

7. Balance of payments

Portuguese economy's net lending remained stable in 2014, in spite of a decline from the previous year

Over the 2010-13 period, the external accounts of the Portuguese economy were subject to an extensive adjustment process, with the combined current and capital account balance improving around 12 p.p. of GDP. In 2014 the Portuguese economy maintained a significant net lending position. The combined current and capital account balance stood at 2.1 per cent of GDP in 2014, falling by 1.0 p.p. from the previous year (Table 1). The fall in the Portuguese economy's net lending resulted from both an increase in investment and a decline in domestic savings, while net capital transfers remained relatively stable (Chart 7.1). These developments occurred against a background of subdued economic recovery, following a three-year recession characterised by markedly contracting investment (Chapter 5).

Table 7.1 • Current and capital accounts | As a percentage of GDP

	2012	2013	2014
Current and capital accounts	0.0	3.1	2.1
Current account	-2.1	1.4	0.6
Goods and services account	-0.1	1.7	1.1
Goods	-5.6	-4.7	-5.2
Services	5.5	6.5	6.3
of which:			
Travel and tourism	3.4	3.6	4.1
Primary income account	-2.6	-1.1	-1.4
Secondary income account	0.6	0.8	0.9
of which:			
Emigrants/immigrants remittances	1.3	1.5	1.5
Capital account	2.1	1.6	1.5

Sources: *INE* and Banco de Portugal.

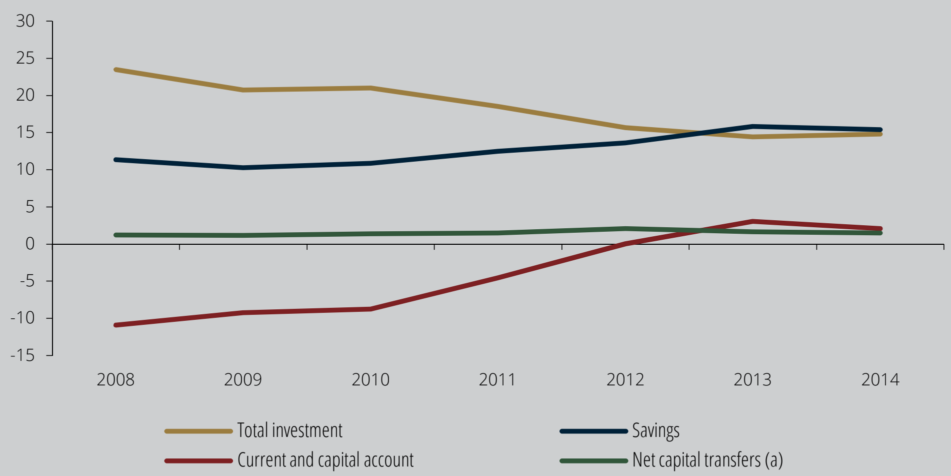


Chart 7.1 • Net borrowing / lending, whole economy | As a percentage of GDP

Sources: *INE* and Banco de Portugal

Note: (a) Includes acquisitions less disposals of non-financial non-produced assets.

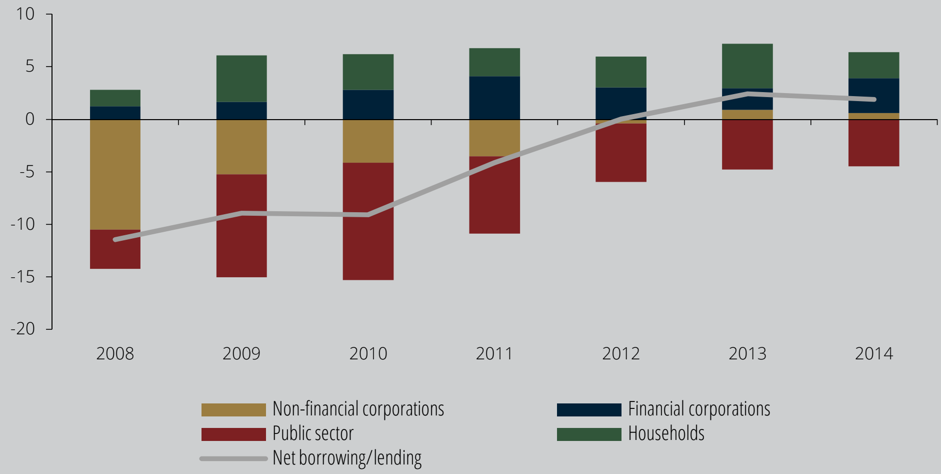
Given the high indebtedness levels cumulated over the last two decades, the maintenance of current and capital account surpluses will need to be a regular structural feature of the Portuguese economy in the future.

In 2014 only the general government sector posted a net borrowing position (Chart 7.2), albeit slightly lower than in the previous year.[26] The private sector deleveraging process was reflected in increased net lending of households and non-financial corporations in 2013. This changed in 2014, particularly for households, which contributed the most to the fall in the Portuguese economy's net lending position. Developments in the household sector were partly offset by those in the financial corporate sector, whose property income balance increased.

Maintenance of a goods and services account surplus, albeit lower than in the previous year

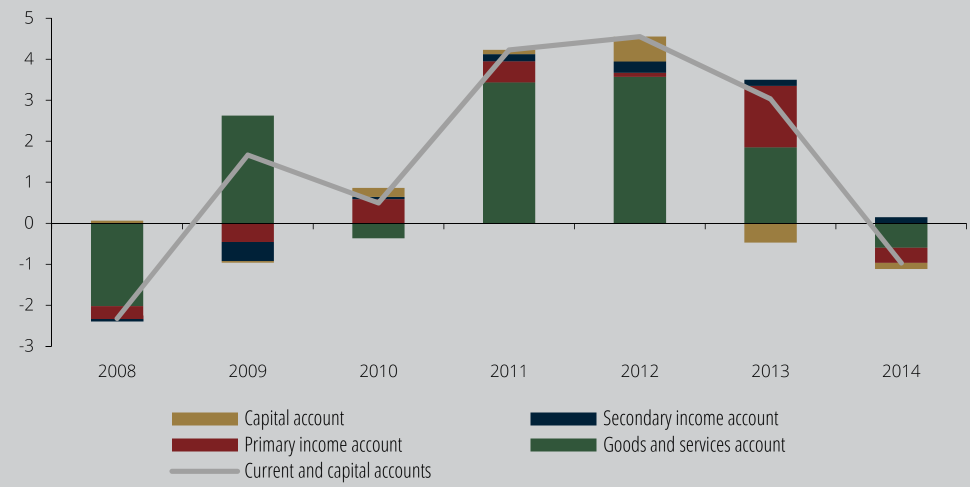
The decline in the combined current and capital account balance in 2014 was chiefly due to

Chart 7.2 • Net borrowing / lending, by institutional sector | As a percentage of GDP



Source: *INE*.

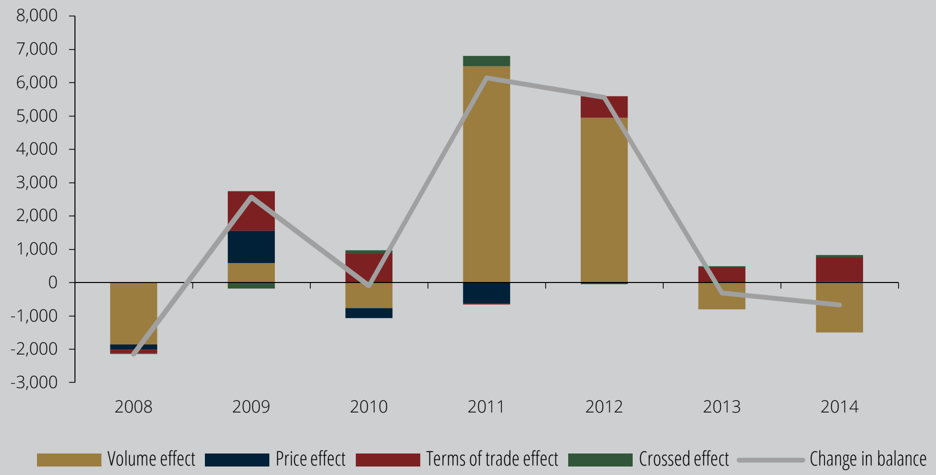
Chart 7.3 • Breakdown of change in the current and capital account | As a percentage of GDP



Sources: Banco de Portugal and *INE*.

current account developments, whose balance fell from 1.4 per cent of GDP to 0.6 per cent (Chart 7.3). In turn, the capital account posted a balance of 1.5 per cent of GDP in 2014, similarly to the previous year.

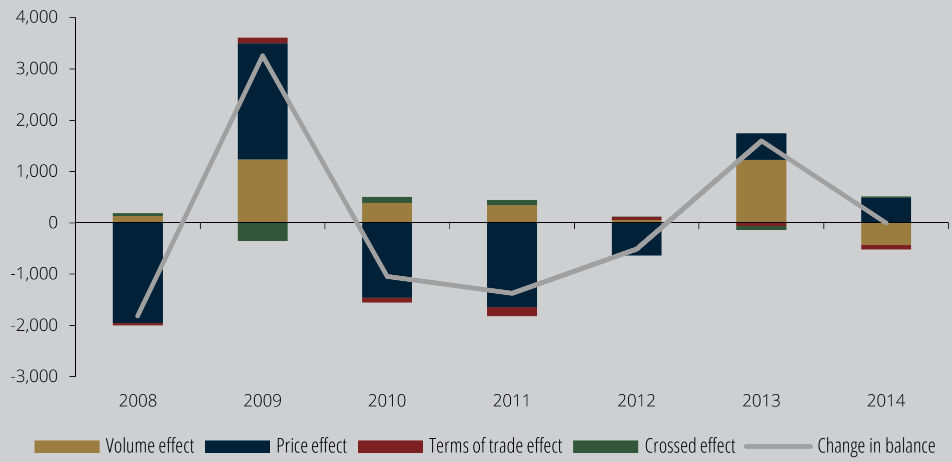
Between 2010 and 2013, developments in the goods and services account contributed significantly to improvements in the external account balance, with a major adjustment in the goods account, whose deficit fell 6 p.p. of GDP. In 2014 this path was interrupted, with a 0.5 p.p. increase in the goods deficit from 2013, to 5.1 per cent of GDP. This was conditioned by the fuel export and import dynamics (Chapter 5). In 2014 the negative change in the goods balance excluding fuels maintained its characteristics from the previous year, when an improvement in terms of trade did not offset a more marked increase in the volume of imports[27] (Chart 7.4). With regard to fuels, whose behaviour largely explained the increase in the goods deficit from 2013, the volume of exports fell, associated with temporary disruptions in the operation of an oil refining company, while imports were boosted by inventory accumulation at the beginning of the year (Chart 7.5).



Sources: Banco de Portugal and *INE*.

Note: The contribution of imports corresponds to the symmetrical of its variation.

Chart 7.4 • Breakdown of the change in the goods account balance, excluding fuel | In millions of euros



Sources: Banco de Portugal and *INE*.

Note: The contribution of imports corresponds to the symmetrical of its variation.

Chart 7.5 • Breakdown of the change in the fuel account balance | In millions of euros

The services account balance remained relatively stable in 2014, interrupting a three-year period of gains close to 1 p.p. The breakdown of the change in the balance points to less buoyant exports of services, while the remaining contributions were stable. In particular, terms of trade of services exported by the Portuguese economy did not improve over the past three years (Chart 7.6). There was a continued improvement in the travel and tourism account, which posted a 1.7 p.p. increase over the past five years and reached 4.1 per cent of GDP in 2014. In turn, several other items in the services account fell in 2014, namely transport and services provided to enterprises, which resulted in relative stability in this account's balance.

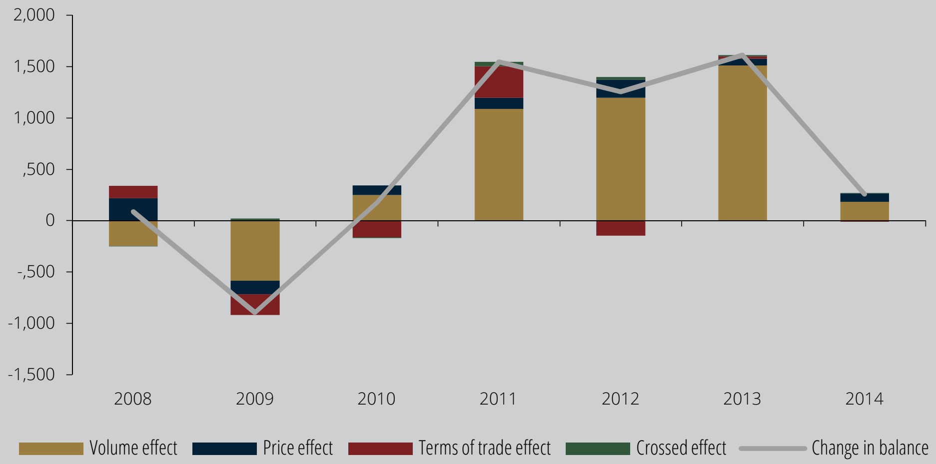
Lower primary income account balance and stable combined secondary income and capital account balance

The primary income account balance fell from -1.1 per cent to -1.4 per cent of GDP. This was due to a net decrease in investment income and other primary income.[28] Regarding the former, income from investment in long-term debt securities increased markedly, due to both an increase in income received and a decline in payments, totalling 0.6 per cent of GDP. This improvement was however exceeded by a 0.8 p.p. decrease in the direct investment balance due, in similar parts, to a reduction in income received and an increase in payments. The combined secondary income and capital account balance remained stable compared with 2013, in line with the relative maintenance, as a percentage of GDP, of European Union transfers related to structural funds. Emigrants' remittances remained virtually unchanged as well, following a gradual increase over the past few years (see Box 'Developments in emigrants' remittances').

Financial account balance reflects net external outflows

In 2014 there were net external outflows, albeit below those seen in 2013 as a percentage of GDP. Major changes were observed in the other investment and portfolio investment accounts (Chart 7.7). With regard to portfolio investment, there was a cross-cutting

Chart 7.6 • Breakdown of the change in services account balance | In millions of euros



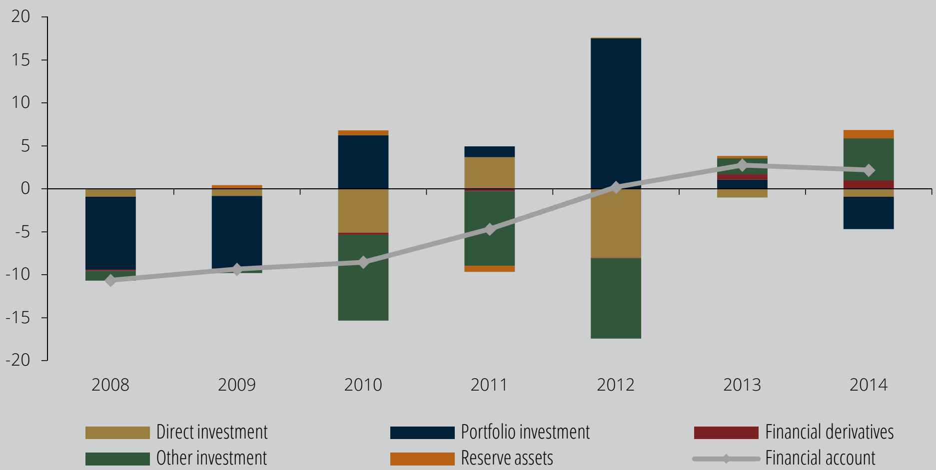
Sources: Banco de Portugal and *INE*.

Note: The contribution of imports corresponds to the symmetrical of its variation.

deterioration in the net position of long-term debt securities, short-term debt securities, and capital shares and mutual fund shares, chiefly due to a joint positive change in liabilities for the first time since 2009. As regards long-term debt securities issued by general government, there was a net increase of 3.6 per cent in securities held by non-residents, compared with a 1.2 per cent decline in the previous year, due to an increase in the sovereign borrowing from international financial markets. This was offset by an improvement in other investment, associated with a smaller increase in loans granted by non-residents, particularly in the general government sector, which points to a shift in sources of financing.

International investment position improved considerably due to the account balance and price changes

The international investment position (IIP) of the Portuguese economy increased 7.0 p.p. of GDP in 2014, reaching -111.6 per cent, which is still highly negative by historical and international standards. The positive change in the IIP measured as a percentage of GDP can be broken down into three factors of similar magnitudes. The first was a 2.2 per cent increase in nominal GDP, which led to a reduction in the relative stock value of approximately 2.5 p.p. The second was the balance of transactions (financial account), which amounted to 2.2 per cent of GDP. A third effect of a similar impact was associated with price changes in assets and liabilities, particularly equity securities (1.8 p.p.) and monetary gold bullion (0.8 p.p.). In the case of the former, the market value of direct investment held by non-resident investors with resident entities fell markedly (-2.9 per cent of GDP), particularly with other monetary financial institutions and non-financial corporations. This effect was also noticeable on portfolio investment (-4.3 per cent), but offset by the valuation of long-term debt securities (+4.8 per cent), with was related to a reduction in sovereign interest rates and a mitigation in the risk perception of Portuguese debt. In the case of monetary gold, there was a partial recovery from a strong devaluation in 2013, which had amounted to 2.8 per cent of GDP. These events led non-financial corporations and the central bank to



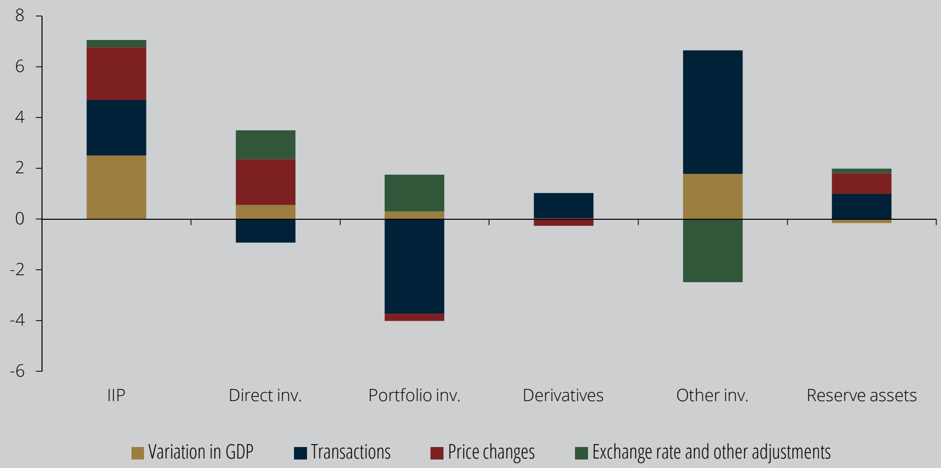
Sources: Banco de Portugal and *INE*.

Chart 7.7 • Financial Account – Balance and net change by instrument

| As a percentage of GDP

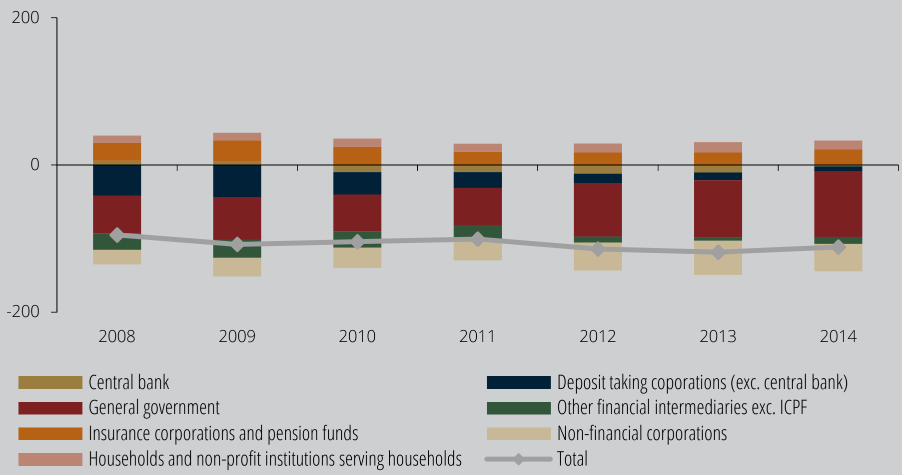
become the institutional sectors with the greatest improvement in terms of the international investment position, of 9.1 per cent and 8.5 per cent of GDP respectively (Chart 7.8). By contrast, the IIP in general government deteriorated by 11.1 per cent of GDP, i.e. more than all other sectors. Losses resulted both from borrowing requirements covered by loans and securities and from their increased valuations. This sector's IIP has deteriorated in recent years, falling almost 39 p.p. since 2010. It now stands at a deficit position of 89 per cent of GDP.

Chart 7.8 • Change in the international investment position between 2013 and 2014, by instrument | As a percentage of GDP



Sources: Banco de Portugal and *INE*.

Chart 7.9 • International investment position, by institutional sector | As a percentage of GDP

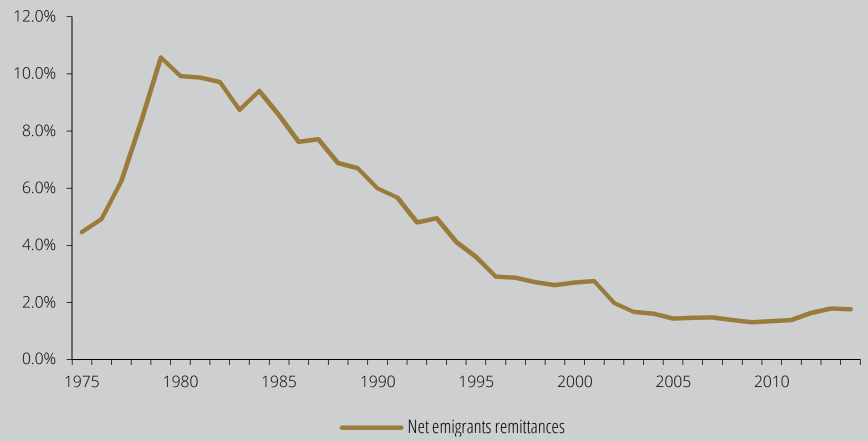


Sources: Banco de Portugal and *INE*.

Box 7.1 | Developments in emigrants' remittances

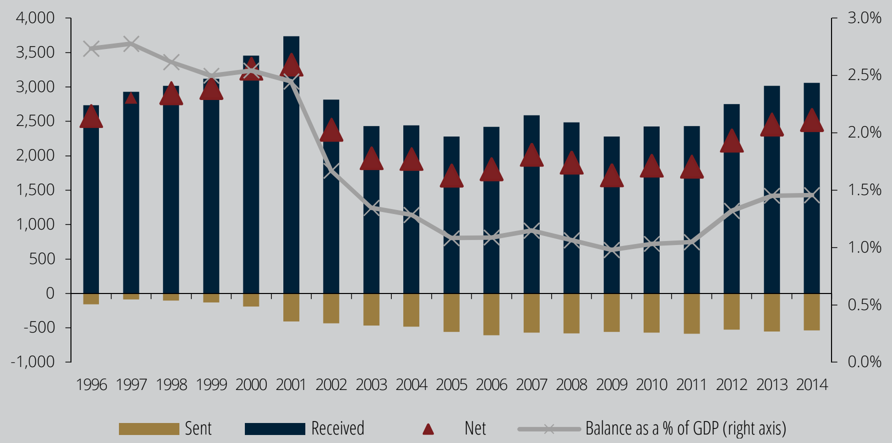
The perception of Portugal as a country of emigration is rooted in its identity. Throughout the 20th century, migration outflows were high, resulting in the establishment of significant communities in countries across the European, African and American continents. By then, remittances to residents became substantially important for the Portuguese economy, peaking at 10.6 per cent of GDP in 1979 (Chart 1). The relevance of these flows declined as the Portuguese economy grew during the 1980s and 1990s. At the turn of the 21st century, the image of a country of emigration was replaced by that of a country of immigration. Portugal then became a destination for immigrants, with substantial increases in the Brazilian, Ukrainian, Romanian and Chinese communities, inter alia.[29] In this context, the balance of net remittances as a percentage of GDP dropped to a historical low of 1 per cent in 2009 (Chart 2).

Chart 1 • Net remittances since 1975 | As a percentage of GDP



Sources: Banco de Portugal and *INE*.

Chart 2 • Evolution of remittances between 1999 and 2014 | In millions of euros



Sources: Banco de Portugal and *INE*.

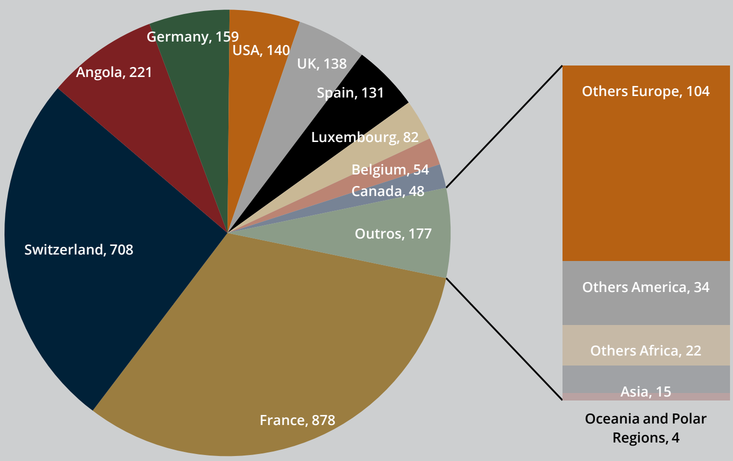
The deterioration in labour market conditions throughout the recent adjustment process of the Portuguese economy generated a new migration outflow trend (Chapter 4). In fact, there was a 46 per cent increase in nominal net remittances between 2009 and 2014, which now stand at 1.4 per cent of GDP. However, the relative weight of this phenomenon is still far below that seen in the 1970s and 1980s.

Developments in remittances hinge on various factors. On the one hand, they are related to the magnitude of the number of emigrants and immigrants, as well as their savings rate and tendency to ship funds to their country of origin. On the other hand, they depend on developments in the economic situation in their country of residence and changes in the exchange rate of this country's currency against that of the country of destination. The latter factor was key in terms of developments in remittances received by the Portuguese economy in the 1970s and 1980s, when the escudo was significantly devalued against currencies of the countries of residence of Portuguese emigrants.

Between 2009 and 2014, remittances received increased 34.2 per cent in nominal terms, which corresponds to an increase of 0.5 p.p. of GDP, while remittances sent remained relatively stable. The ten largest issuers of remittances contributed 95 per cent of the total received in 2014 (Chart 3) and were responsible for 98 per cent of the increase in remittances received since 2009. Furthermore, over 75 per cent of this increase was generated by countries outside the euro area (most notably, Switzerland and Angola).

Remittances sent were relatively stable over the past five years, with a -4 per cent change in nominal terms, but with a composition shift in receiving countries. There was a more substantial decline in terms of remittances to Brazil and Ukraine, and a significant increase in remittances to China.

Chart 3 • Origin of received remittances between 2010 and 2014
| Annual average in millions of euros



Source: Banco de Portugal.

Notes

1. This expansion translated into a programmed increase in the monetary base, an increase in asset purchases and an extension of the remaining maturity of Japanese government bonds, while maintaining asset purchases until the inflation target is achieved.

2. See the box entitled "Recent non-standard monetary policy measures", in the December 2014 issue of the *Economic Bulletin*.

3. For more details on the programme, see http://www.ecb.europa.eu/press/pr/date/2015/html/pr150122_1.en.html

4. See Special Issue 2 "Monetary policy transmission in the euro area", in the autumn 2012 issue of the *Economic Bulletin*.

5. A panel fixed effects estimator was used

6. The measure of competitiveness used here is defined by the *World Economic Forum* as the set of institutions, policies, and factors (totaling 12 pillars) that determine the level of productivity of a country.

7. The *IES* consists of annual accounting data of all Portuguese enterprises over the 2005-13 period. Given that the change introduced in accounting rules in 2010 (from POC to SNC) implied a certain degree of loss in data comparability, this box only uses data as of 2010.

8. The *IES* includes the year when enterprises were established, which makes it possible to pinpoint their entry in the market. An enterprise's exit from the market is signaled by the fact that its information ceases to be included in the IES database. Given that some enterprises do not fully comply with reporting requirements for each year, identifying exits becomes more accurate as more years go by without this specific enterprise being included in the database.

9. The deficit calculated for the March 2015 Excessive Deficit Procedure notification does not include any impact of *Novo Banco* capitalisation.

10. The decisions of the Constitutional Court that are relevant in this context are included in Decision No 413/14 of 30 May and Decision No 862/13 of 19 December.

11. The effect of the assumption of debt guaranteed by the Mutual Counterguarantee Fund and the recognition of losses associated with *BPN Crédito*'s bad loans is also included in temporary measures. For a description of temporary measures and special factors for years prior to 2014, see the 2011 and 2012 *Annual Reports* of Banco de Portugal and the April 2014 issue of the *Economic Bulletin*. In the course of 2013, the definition of temporary measures used within the Eurosystem was changed in order to include transactions related to support to the financial system, previously classified as special factors in the approach followed by Banco de Portugal.

12. The cyclical component of the fiscal balance is calculated in line with the methodology used in the Eurosystem.

13. The discontinuance of this measure was a result of the decision by the Constitutional Court in Decision No 413 of 30 May. It stated that this measure was unconstitutional but had no retroactive effects.

14. Law No 75/2014 of 12 September reintroduced the wage cuts in force since 2011.

15. The impact of the measures excluded from capital expenditure was more significant in 2014 (0.8 per cent of trend GDP) than in 2013 (0.4 per cent of trend GDP).

16. This value is consistent with the deficit calculated for the March 1015 Excessive Deficit Procedure notification (see Note 9).

17. Of the €12 billion allocated to support the financial system under the Economic and Financial Assistance Programme, €4 billion were received by Portugal in early 2014.

18. The implicit interest rate results from the ratio of interest expenditure and the simple average of the debt stock at the end of the year and at the end of the previous year.

19. According to data released by Eurostat, Belgium, Ireland, Greece, Spain, France, Cyprus, Portugal, Slovenia and Finland.

20. The European Commission methodology, relevant as regards the evaluation of compliance with European commitments, differs from the approach used in Banco de Portugal's estimations – in line with Eurosystem's procedures. The difference in the structural primary balance is due to the cyclical adjustment methodology and the definition of temporary measures taken into account.

21. For further details on the methodology underlying the calculation of these contributions see: Kremer *et al.* (2006), 'A disaggregated framework for the analysis of structural developments in public finances', *ECB Working paper no. 579*; and Braz, C. (2006), 'The Calculation of Cyclically Adjusted Balances at Banco de Portugal: An update', Winter issue of the *Economic Bulletin* of Banco de Portugal.

22. This item was affected by cuts in general government wages and salaries and, in the opposite direction, by severance payments related to the voluntary separation programme.

23. As mentioned in the October and December 2014 issues of the *Economic Bulletin* and stressed by *INE* in the employment statistics press release, the Labour Force Survey's sampling basis was updated and gradually took Census 2011 data as its basis from the third quarter of 2013 onwards (the transition process was concluded at the end of 2014). This update translated into a better coverage of the sampling basis but implies a greater uncertainty of results in the transition period.

24. These employees include, in addition to members of the statutory bodies, public employees contributing to the Social Security Pension Scheme. However, this trend will correspond in general to the evolution of private sector employees, given the estimated weight of each component in the recent past.

25. A significant change in investment in a given year may have a considerable impact on aggregate demand growth in that same year. However, its impact on the capital level after considering the depreciation is often negligible on an annual basis. This is the main reason why macroeconomic analyses typically assess the impact of investment from an aggregate demand perspective.

26. Furthermore, according to the 2012 *National Annual Accounts*, which were recently released by *INE*, households' net lending as a percentage of GDP fell

considerably compared with the previous estimates for that year (from 4.6 to 3.0 per cent). This change was chiefly associated with a downward revision of labour compensation and property and capital income. In turn, there was a significant downward revision of non-financial corporate net borrowing (from 3.1 to 0.4 per cent of GDP). These changes had a persistent impact on the private sector's savings and investment levels over the subsequent years.

27. For a more detailed explanation on how changes in an account balance can be broken down into volume, price, terms of trade and cross effects, see Box 4.2 'Change in the goods account balance in the first half of 2012, in the Autumn 2012 issue of the *Economic Bulletin*.

28. Includes rents, taxes on production and imports, and subsidies, including income received from a number of EU structural funds.

29. *INE* (2012), *A População Estrangeira em Portugal – População estrangeira cresceu cerca de 70 % na última década* ("Foreign population in Portugal – Foreign population grew by around 70% over the past decade"), of 17 December 2012.

SPECIAL ISSUE

The portuguese labour market and the great recession

The portuguese labour market and the great recession

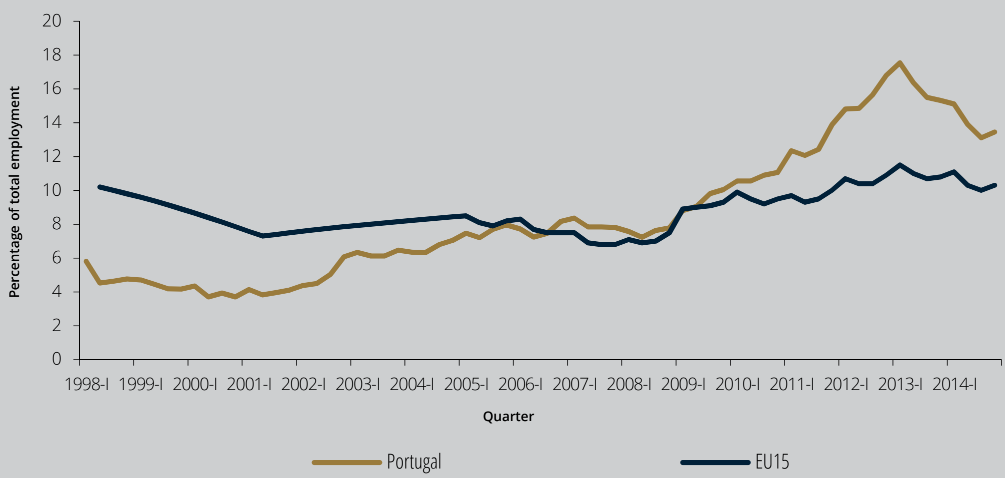
1. Introduction

The Portuguese economy, and in particular its labour market, have experienced a very challenging start to the 21st century. The boom period of the late 90s, when both real GDP growth and the unemployment rate (Chart 1) revolved around 4 to 5 per cent, ended abruptly in the 2002-2003 recession. After that, while the economy experienced a brief period of middling growth between 2004 and the end of 2007, the labour market, at least as measured by the unemployment rate, has done nothing but deteriorate. In the midst of the deepest recession in recent memory, the unemployment rate peaked at over 17.5 per cent in early 2013 and has only recently started to abate as the economy stepped back onto a recovery path.

Labour market behaviour is conditioned by the interaction of the economic cycle at-large with the actions of economic actors, like workers and firms, as well as with a country's idiosyncratic structure, such as labour market institutions and labour force (and firm) characteristics. In this respect, the Portuguese labour market has been characterized by several structural features that may make it more vulnerable to the economic cycle's downturns. The Portuguese labour force still exhibits, despite recent major improvements, low educational attainment, especially when compared to European Union (EU) countries; the firm-size distribution is still very heavy on small and medium-sized enterprises (SMEs), which tend to be less resilient under economic stress; and the characteristics of labour market institutions like the collective bargaining and wage setting systems, employment protection and unemployment insurance condition the adjustment process.

Such structural characteristics, while not unobtrusive, seemed largely innocuous in the light of the late 90s good economic performance. But once the economy started to struggle in the early 2000s, their influence began to show, and by the time Portugal was swept by the twin effects of the Great Recession and the Debt Crisis, the consequences of their inadequacy became clearer. The result has been record-high unemployment of a particularly

Chart 1 • Unemployment Rate



Sources: *INE* and Eurostat.

Notes: There is a break in the series for Portugal in the first quarter of 2011. The values for EU15 prior to the first quarter of 2005 are linearly interpolated from annual data.

costly strain: one that is accompanied by very high unemployment durations and affects mainly young workers, leading to skill erosion and scarring effects that compromise workers' future expected gains and the economy's future expected performance.

Faced with large negative shocks, firms sought to lower their total labour costs. This could have been done by a combination of real wage cuts and/or an adjustment in employment levels and its composition.[1] The existing wage bargaining system implied a degree of nominal wage rigidity that, combined with low inflation, made it harder to adjust real wages.[2] Therefore, even though there was real wage growth moderation, most of the adjustment came from large reductions in employment and changes to its composition.

In turn, the high (and unequal across types of contracts) levels of employment protection conditioned this employment adjustment. The fact that it was very costly for firms to use the separation margin (especially for open-ended contracts) meant that the adjustment process was delayed as it was achieved mostly by reducing hires (again, especially for open-ended contracts). This process also meant that the majority of the churning and net employment reduction took place for fixed-term contracts. The incidence of this type of contracts among younger workers may partly explain the increased unemployment rates experienced by this age group. To complete the story, note that unemployment insurance (UI) duration was very high. When combined with worsened employment perspectives this may have resulted in marked increases in unemployment duration.

During the recession many other important things were happening in the economy at-large (like disruptions to the bank lending channel and fiscal policy tightening) that this article simply takes as negative shocks affecting the economy. This is done not because such effects do not have implications of their own, but because doing so allows for a sharper focus on what is particular to the labour market.

To that end, the article starts by characterizing the Portuguese labour market coming into this century and leading up to the recession in terms of its underlying fundamentals, like labour supply characteristics, sectoral composition, and labour market institutions. It then goes on to document the behaviour of the labour market in terms of its most important variables, framing that behaviour as the end result of the interaction between the economic cycle, labour market institutions and labour market actors' responses.

2. Underlying fundamentals

2.1. Labour supply characteristics

The Portuguese population, just like in most Western developed economies, is ageing because of a combination of lower birth rates and increasing life expectancy. In 1998 the number of people aged 15 to 24 was roughly equal to those aged 65 or more. Today it is roughly half (Chart 2).[3] The median age has gone up over 3 years since the start of the century.[4] Also contributing to population ageing in the more recent years, has been the reversal in net immigration. Immigrants/emigrants tend to be younger than average, and at the start of the century Portugal's migratory balance was positive, but with the onset of the recession it has turned negative, with more people leaving the country than coming in.

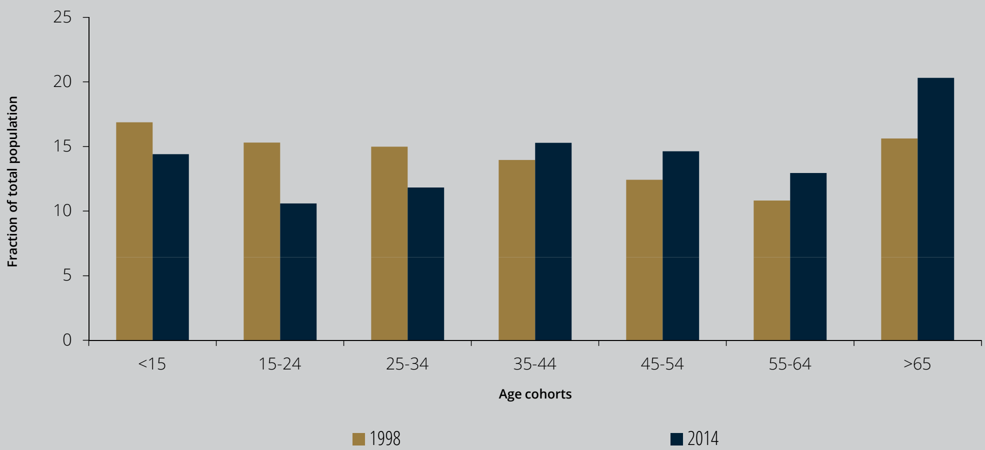
An older population does not necessarily imply an older labour force if the participation rate of older workers drops relative to that of younger workers. That has not been the case in Portugal, where the share of active 15 to 44 year-olds has gone from just over 40 per cent in 1998 to under 29 per cent today.[5] This creates a variety of challenges not only for the economy as a whole (in terms of the sustainability of social security schemes and increases in old-age dependency), but also for the labour market in particular. Older workers tend to go through longer unemployment spells and are more easily discouraged.[6]

Although the Portuguese population's educational attainment levels have increased markedly in the last few decades (Chart 3) – the share of people with completed secondary education or higher in the working-age population has doubled from 1998 to 2013 – the reality is that in terms of this measure of human capital, the country remains well behind the EU average, where this number is close to 70 per cent. This presents obvious challenges, as more educated workers tend to be more productive and command higher wages; they also exhibit smaller unemployment rates and go through shorter unemployment spells.

2.2. Business sector transformation

Portugal is treading a familiar path for developed economies when it comes to sectoral composition. Services have, for a while, been the largest employing sector, and their growth shows no sign of abating just yet (Chart 4). Indeed, services have absorbed most of the employment that has been shed by the contracting sectors: agriculture, industry, and construction. The pace of this transformation since the start of the century has been relatively fast and has posed a challenge for the Portuguese labour market, forcing workers that started their careers in shrinking sectors to quickly

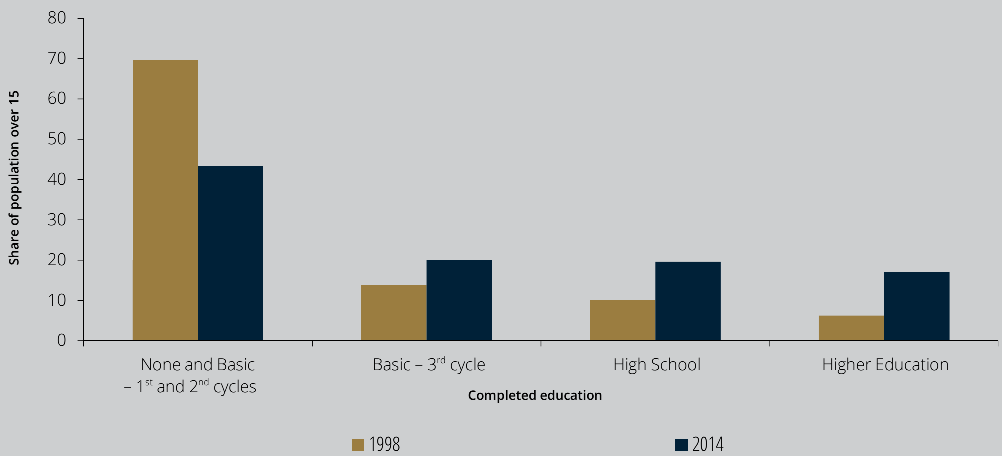
Chart 2 • Ageing Population



Source: *INE*.

Note: Break in the series in the first quarter of 2011.

Chart 3 • Improvements in education



Source: *INE*.

Note: Break in the series in the first quarter of 2011.

retool. The construction sector has become a commonly cited example in the latest recession that has seen its labour force practically cut in half.

An integral part of this development path is the growth in average firm size. As economies develop, their firm-size composition changes towards larger firms, on average.[7] This has not been the case in Portugal, where average firm sizes have been coming down in the last three decades, at least.[8] In the euro-area as a whole, two-thirds of all business employment is in SMEs, while in Portugal it is closer to three-fourths.[9] SMEs tend to be less resilient to economic shocks, especially because of worse access to credit markets compared to their larger counterparts. As a consequence, they exhibit higher failure rates and go through larger swings in employment.

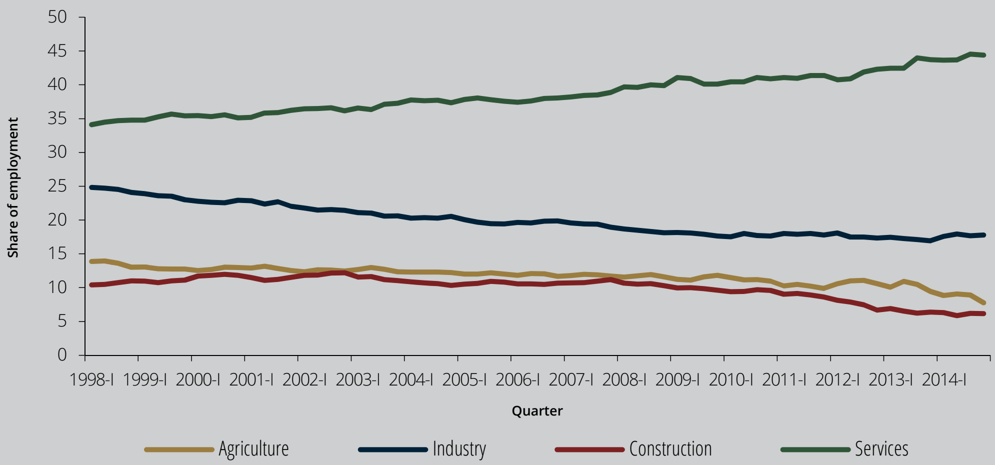
2.3. Labour market institutions

The Portuguese labour market rests upon a set of, hitherto slow-evolving, institutional features that have recently undergone some structural reforms following the adoption of the Memorandum of Understanding (MoU) of the Economic and Financial Assistance Programme (EFAP) of May 2011. Here, some of its most important features are reviewed.

Low *unionization* density – roughly around 11 per cent in the private sector and mostly concentrated in the financial and insurance sectors and in competition-protected sectors.[10] Note, although, that because of the extension mechanism described below, this number is a misleading indicator of the unions' impact, and the difference between unionized and non-unionized firms and workers is blurred. Portugal and Vilares (2013) document the existence of a sizable wage premium for firms with higher union density but are silent on the direction of causality.

A very centralized *bargaining* system, that together with an often-used extension mechanism account for collective bargaining coverage of around 90 per cent of workers.[11] Indeed, most of the collective agreements are industry/sector wide, as opposed to firm-specific or for a small group of firms. They then get extended to workers and firms beyond the ones represented by the unions and employers' associations that signed the original agreement by the government via *portarias de extensão*.[12] The MoU has brought new collective bargaining agreements to a stand-still by initially freezing extension agreements and by later making extension criteria more stringent, but coverage under existing unexpired agreements is still close to 90 per cent.[13]

Chart 4 • Structural Transformations



Source: *INE*.

Note: Break in the series in the first quarter of 2011.

The degree of *employment protection* afforded to open-ended contracts has been much higher than that afforded to fixed-term contracts. This employment protection gap resulted in a two-tier system that has been characterized by the increasing use of the latter type of contracts (Chart 5). Such contracts exhibit much higher churning rates and are the preferred margin for firms to adjust to external shocks. The policies adopted following the MoU have resulted in the reduction of this protection gap insofar as severance payments are concerned, but procedural differences in the form of judicial transaction costs remain high.

Portugal's *unemployment insurance* scheme has ranked above the EU average in terms of duration generosity. Recently, and following some recommendations in the MoU, the UI system underwent some changes. It is easier to qualify: it requires social security contributions of 360 days in the last 24 months (as opposed to 450 days) and some self-employed workers may also qualify; but the duration is shorter, as subsidies can last from 150 to 780 days depending on both age and past contributions (it used to be between 270 and 1140 days). The replacement rate is very similar to that of other European countries: 65 per cent of the average wages in the year before unemployment subject to a floor and a cap.[14] After 6 months the subsidy drops by 10 per cent. Furthermore, the unemployed workers who do not qualify for UI or have ran through the maximum duration of the subsidy, may qualify (depending on past contributions and household income) for social unemployment insurance lasting for as long as the UI itself at its minimum floor.

3. The recent behavior of the portuguese labour market

Portugal's participation rate used to be above that of the average EU country, lifted by a higher rate of women's participation, a slightly younger population and net positive migratory inflows (Chart 6). Growth in participation in Portugal has all but stopped since the Great Recession started in 2008, and rates have hovered around 73 per cent, roughly in line with the EU average.

Employment, which until the Great Recession had grown in line with overall population and had been above the EU average as a fraction of the population, has plummeted since then, with the employment-to-population ratio falling from a peak of 69 per cent to a trough of 60 per cent, well below that of European peers (Chart 7).

Unemployment had been creeping up even before the Great Recession hit, but after that, it

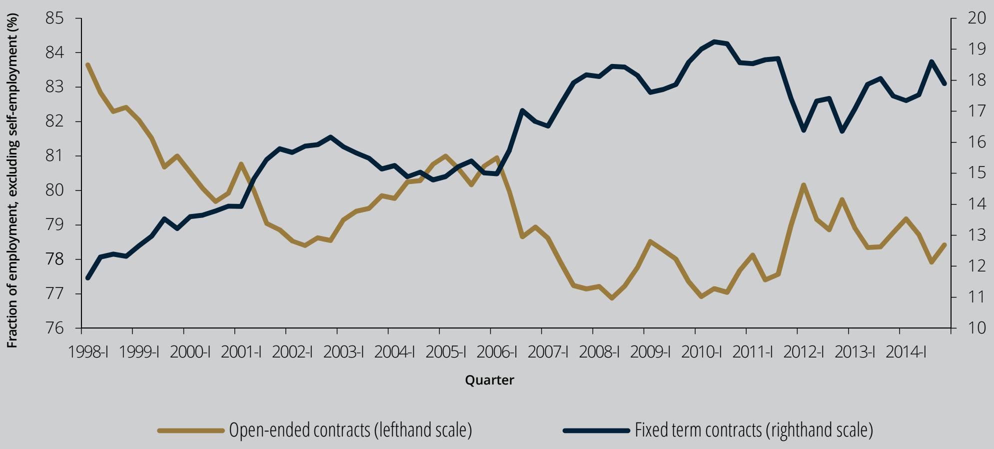


Chart 5 • Employment by type of contract

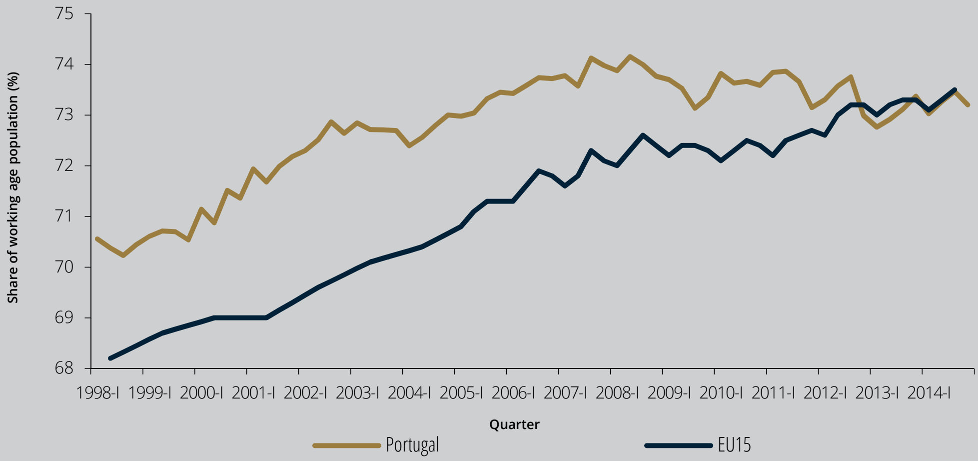
Source: *INE*.

Note: Break in the series in the first quarter of 2011.

reached heights the Portuguese economy had not experienced before. This is particularly true of long-term unemployment, whether measured by the fraction of those unemployed for more than a year (Chart 8), or by the median unemployment duration. Recessions are usually associated with increases in unemployment durations and in the fraction of workers unemployed for longer times. Two commonly cited explanations, besides the obvious demand slowdown, have been that (i) because of an unusual increase in uncertainty, firms are more hesitant in hiring than they otherwise would be; and that (ii) because recessions are times of particularly fast structural transformation, the skills of those unemployed erode faster and it is harder for them to retool and get back on the job.[15]

Factors like age and education are important statistical determinants of transitions to

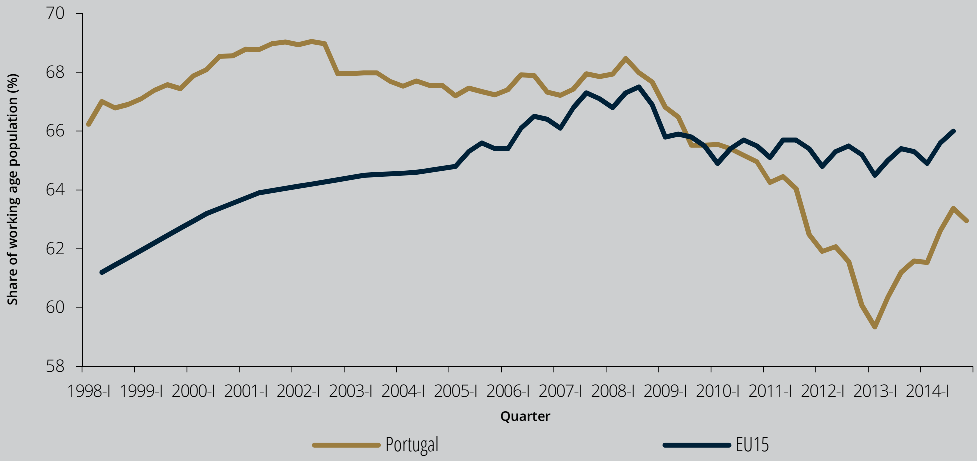
Chart 6 • Participation Rate



Sources: *INE* and Eurostat.

Notes: There is a break in the series for Portugal in the first quarter of 2011. The values for EU15 prior to the first quarter of 2005 are linearly interpolated from annual data.

Chart 7 • Employment – Population Ratio



Sources: *INE* and Eurostat.

Notes: There is a break in the series for Portugal in the first quarter of 2011. The values for EU15 prior to the first quarter of 2005 are linearly interpolated from annual data.

employment and therefore, indirectly, of long-term unemployment.[16] At the start of the century, younger workers were roughly 50 per cent less likely to be long-term unemployed than average, while older ones were about one and a half times more likely, but these differences have abated and they have become smaller with time.[17] Nowadays, the probability that someone is long-term unemployed is much more similar across ages, and of course higher, on average.

The recession has undoubtedly also interacted with the unemployment benefit system in place, which ranks amongst the most generous in the EU both in terms of replacement rates (net of taxes) and durations.[18] UI is important to guarantee that unemployed workers are not forced into a bad match and to insulate them from consumption fluctuations during unemployment spells. But it also brings in an element of moral hazard, possibly discouraging labour search and inducing longer unemployment spells that may lead to skill erosion and human capital depreciation.[19]

Unemployment incidence among the younger cohort of workers (15 to 24 year-olds) has been of particular worry, with unemployment rates topping at over 40 per cent in early 2013. It is normal for the young to have higher unemployment rates than the overall labour force – as many of them are searching for their first job, and therefore have higher attrition rates as they look for a good match. The factor of proportionality between the two rates averages 2.1 since 1998, that is, the youth unemployment rate is usually roughly twice as high as the overall unemployment rate. But currently that ratio stands at 2.4: the highest it has been this century (Chart 9).

It is important to frame the issue of youth unemployment properly. The first thing to understand is that participation among the young is falling faster than for the overall population. In 1998 the youth participation rate was roughly two-thirds of the overall rate; today it is down to less than a half (Chart 10). The relative youth employment-to-population dropped even more. This means that, as a category, not as individuals, most of the young dropping out of employment are becoming inactive, not unemployed. For every one hundred young people employed just before the start of the century, there are only fifty two of the current young in the same situation, while from the remainder, three-quarters are inactive and only a quarter is unemployed. Most of these movements to inactivity can be accounted for by increases in mandatory schooling, college enrolment and training programs. The share of

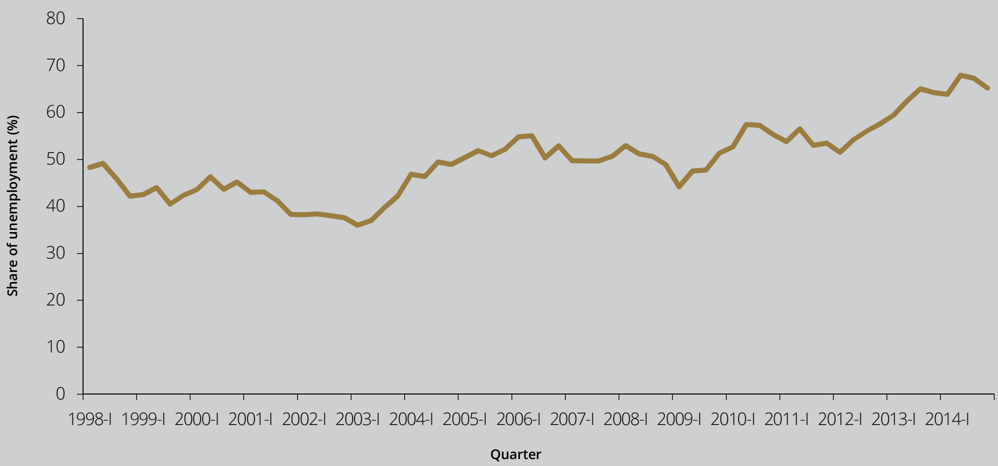


Chart 8 • Long-term unemployment

Source: *INE*.

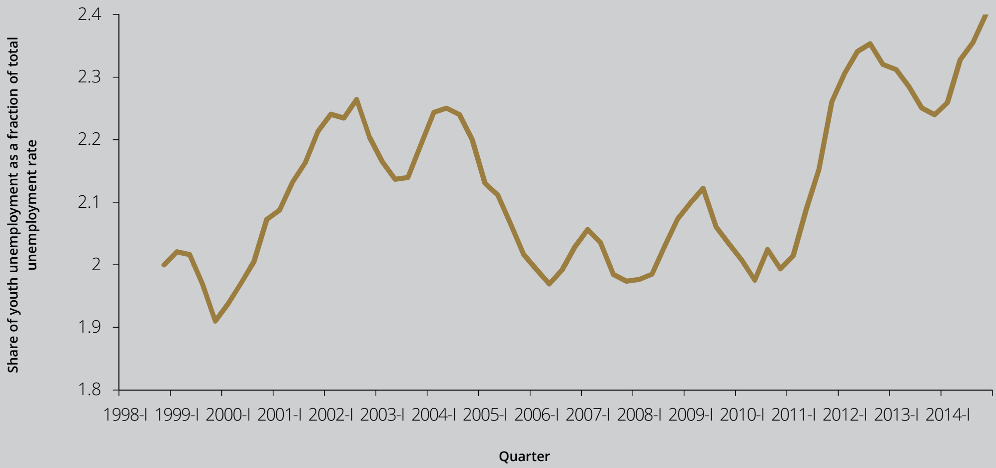
Note: Break in the series in the first quarter of 2011.

the population of young people in education and training has grown roughly 20 percentage points since 2002, from around 50 per cent to almost 70 per cent.[20]

What accounts then for the disproportionate increase in unemployment among the young? For one, younger workers tend to be more sensitive to the business cycle as their opportunity cost of employment differs from more seasoned workers (e.g. going back to school or parental support). But the answer to this question is also intimately connected to the increased use of fixed-term contracts and their high incidence on younger workers. To understand how, it will be important to examine flows in and out of employment by type of contract.[21]

Fixed-term contracts were originally introduced in the 1980s with the goal of bringing in some flexibility to the labour market. During the 1990s the rules for using this type of contracts were made more flexible, contrasting with the protection afforded to permanent jobs, which hardly changed. As a consequence, two-tiers developed in the labour market, one with temporary

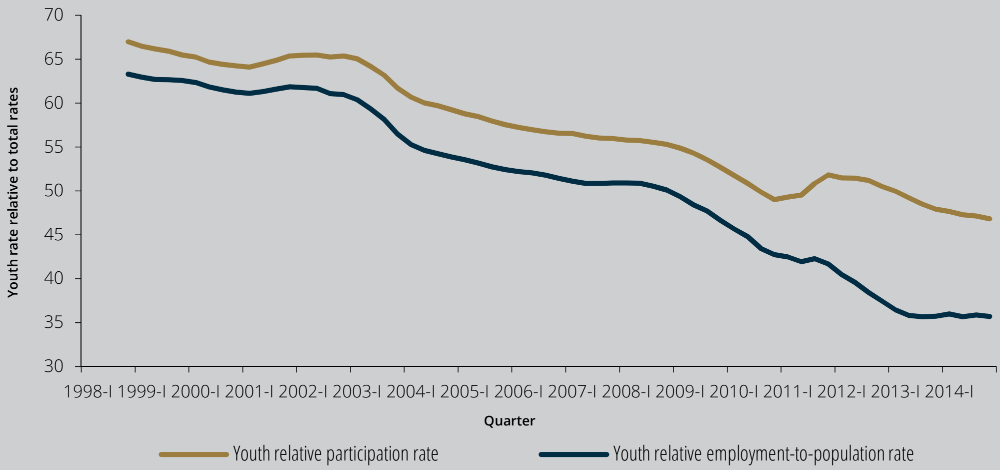
Chart 9 • Youth unemployment



Source: *INE*.

Note: There is a break in the series in the first quarter of 2011. Four quarter moving average.

Chart 10 • Youth unemployment and participation



Source: *INE*.

Note: There is a break in the series in the first quarter of 2011. Four quarter moving average.

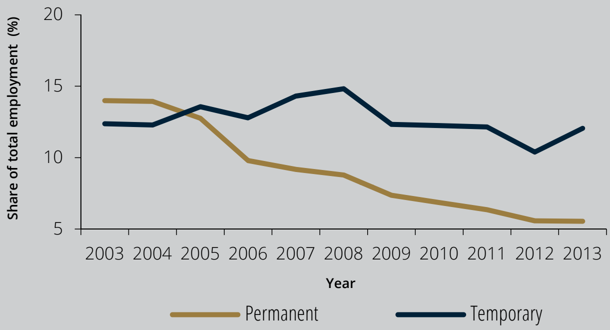
jobs mostly composed by youth and less experienced workers, and another with permanent jobs for the more qualified and experienced workers. Temporary jobs today act as a buffer stock that firms adjust in reaction to the cycle. Despite constituting only one-fifth to one-fourth of open-ended contracts, fixed-term contracts now account for roughly the same amount of flows (Charts 11 and 12), according to data from the *Quadros de Pessoal* (*QP*).[22] There is excess turnover of workers under fixed-term contracts because of the unequal levels of employment protection afforded to each type of contract.[23] Naturally, the workers most affected by this tend to be the younger ones, just coming into the labour market or at the early stages of their working career. Older workers are more likely to be working under an open-ended contract.

While job sampling in search of a good match is an important part of a starting career – and was one of the mechanisms the introduction of fixed-term contracts was supposed to help with – this is not the only type of churning that is happening. If this were the case, most workers would quickly transit to open-ended contracts. What is happening instead is that workers are finding it harder to transit, as the share of workers aged 35 to 44 on fixed-term contracts went up from 15 per cent in 1998 to 25 per cent currently, exceeding this cohort's increase in total employment.[24] The level of existing turnover is excessive and is not conducive to the accumulation of needed human capital early in a worker's career, which has implications further down the road.[25]

The behaviour of flows by type of contract during the downturn is symptomatic of two factors: the unequal degree of protection across contracts that was just discussed and the limited ability firms have to adjust wages, which will be discussed in the next section. Faced with a need to shed workers (exacerbated by the latter factor), firms did not use the separation margin much, and to the extent they did it was on fixed-term contracts – separations on open-ended contracts actually came down slightly (Chart 11). Instead, they contracted the hiring margin, in particular for open-ended contracts (Chart 12). Since this type of contract makes up for 80 per cent of salaried work, this made the adjustment process drag on for longer.

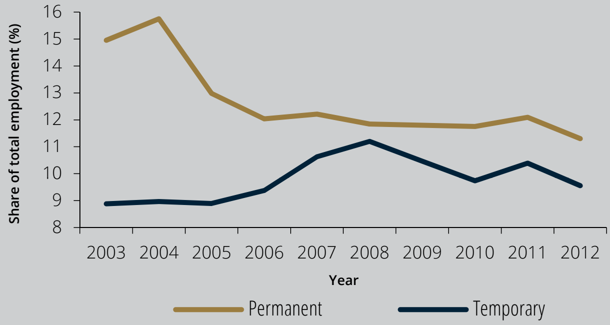
Flows should respond to the relative scarcity of jobs available, that is, to how tight the labour market is. One way to measure labour market tightness is to look at the ratio of the vacancy rate and the unemployment rate. When there is a high number of vacancies relative to unemployed people, economists talk about a tight labour market, where firms find it hard to fill a position, while if the opposite is true, the labour market is loose and it is hard for workers to find a job. Therefore, one should expect the relationship between unemployment and

Chart 11 • Hiring by type of contract



Sources: *Quadros de Pessoal* and *Relatório Único*.

Chart 12 • Separation rate by type of contract



Sources: *Quadros de Pessoal* and *Relatório Único*.

vacancies, known as the Beveridge curve (BC), to be negative.

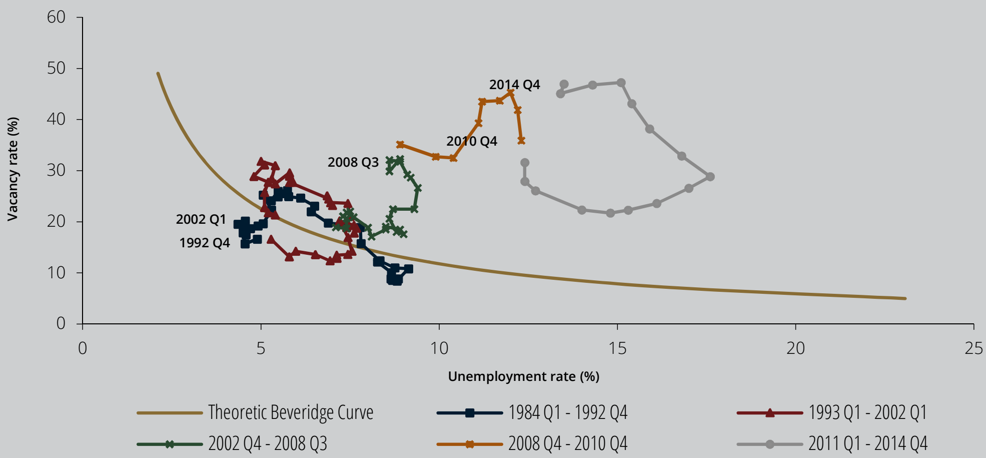
Chart 13 uses vacancies from the *Instituto do Emprego e da Formação Profissional (IEFP)* together with unemployment data, depicting the behaviour of their relationship in various recession episodes since 1984. The data seem to indicate two things. In the last two years, the labour market has been on the mend, and vacancy rates have increased at the same time that the unemployment rate has decreased; but starting around 2008, it seems that this relationship started to move outward, and the same vacancy rate is now compatible with a higher unemployment rate.[26]

To put this outward movement in perspective, a theoretical BC was estimated, using vacancy and unemployment data from 1984 to 2002 and flow data from the *QP*, according to the method described in Hobijn and Sahin (2013).[27] This is the smooth curve in Chart 13. One way to interpret this outward movement is that the increased unemployment rate is not putting enough downward pressure on vacancies. This may reflect the fact that the matching process has become less efficient because of an increasing mismatch between workers and jobs available. Hiring is harder because firms are not finding suitable matches among the pool of unemployed. Alternatively, it could also be that institutional labour market changes modified the BC relationship by increasing the separation rate.

Given that the separation rate has not moved by much, as noted when discussing flows, the latter explanation is discarded and focus is put on the former. The article already pointed out an important composition change in the unemployment pool: the increase in long-term unemployment, which can be associated with skill erosion and therefore give rise to increased mismatch. In addition to that, it is also important to look at the relationship between unemployment and vacancies by sectors and by education.

While strictly speaking there is no such thing as sectoral unemployment (unemployed workers may find work in a variety of sectors), there is some persistence in an individual's sector of employment over time. As a shortcut to avoid a more complicated analysis (see Barnichon *et al.* (2010)), the assumption was made to take sectoral unemployment to mean unemployed people last employed in a particular sector, and that

Chart 13 • Beveridge Curve



Sources: OECD, *INE* and Banco de Portugal calculations.

Notes: Seasonally adjusted data. The beginning of each subseries is related to the onset of a recessive period in Portugal, while the end corresponds to the last observation prior to the following recessive period.

was compared to vacancies in selected sectors (Chart 14). Some results were expected: registered unemployment doubled in construction, while vacancies barely fell in this sector. More unexpectedly was the fact that for services, the largest employment sector, registered unemployment and vacancies both increased by very sizable amounts, and this is ultimately what drives the aggregate BC movement.

If firms and workers are not finding suitable matches it can be because workers lack the skills firms are looking for (skill mismatch) or jobs lack the amenities workers are looking for. While the latter is less likely, there is some evidence of the former. Using five educational levels to proxy for skills, a measure of dispersion was constructed between the shares of each education category in employment and unemployment.[28] Based on this measure, there is evidence of an increase in skill mismatch from the end of 2007 onwards, with a slight reversal in the beginning of 2013. The increase in the representativeness of higher education categories in employment was larger than for unemployment, while the reverse was true for lower education categories. How seriously should these mismatch measures be taken? With a grain of salt, since educational shares in employment and unemployment are endogenous variables and do not constitute clean proxies for the sort of skills (even when defined in terms of education) that firms are looking for and workers are offering.[29]

Finally, it is important to note, when discussing match efficiency, that BC movements are also cyclical and while the downturn of the cycle may appear to move the BC outward, what ends up happening is that the recovery trajectory is a counter-clockwise movement bringing unemployment and vacancies back close to where they started from. This is something one can see happening already in the chart, and it may take longer for the same reasons that are making the employment adjustment drag on for longer.[30]

3.1. Wage adjustments during the latest recession

National Accounts data shows that average employee compensation evolved largely in line with labour productivity through the first decade of the century until the consolidation process started (Chart 15). After that, compensation fell and a gap opened up. Since compensation is basically the sum of wages and

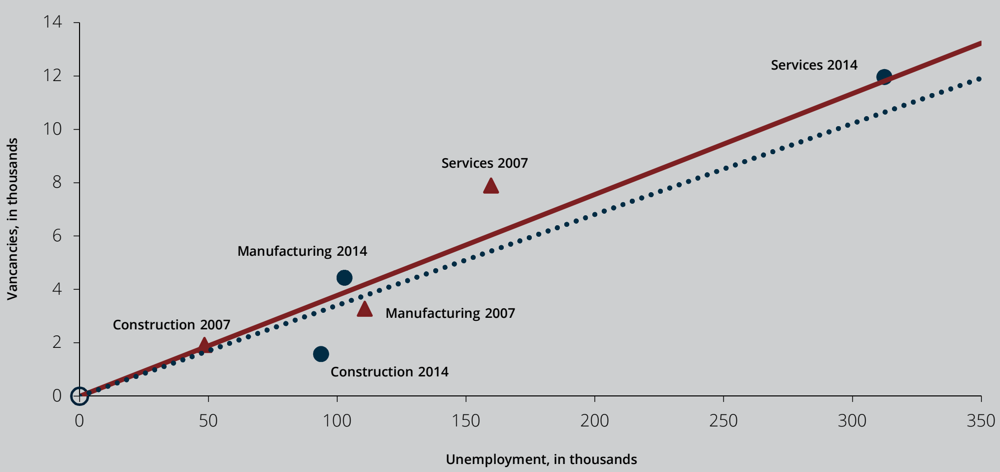


Chart 14 • Sectoral Mismatch: 2007 *vs.* 2014

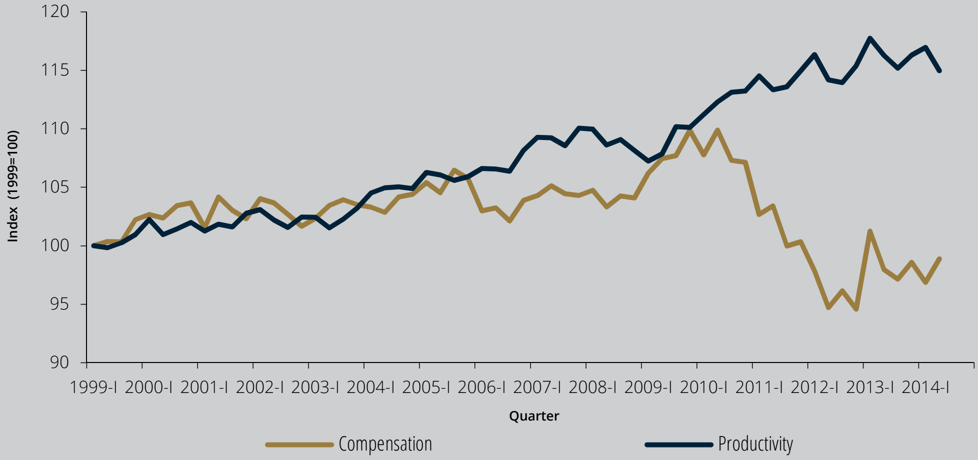
Sources: *INE*, *IEFP* and Banco de Portugal calculations.

Notes: Sectoral unemployment refers to the last sector of activity of a worker before unemployment. The lines refer to average labour market tightness in the economy in each year.

employers' contributions and the latter are a fixed proportion of wages, the evolution of wages was similar to compensation's.

To better understand where this wage adjustment came from, it is instructive to look at the real average wages of a slightly different universe of workers: those that contribute to social security. The difference being that not all public administration employees contribute to social security, only roughly one-quarter do.[31] Plotting the two together reveals that Social Security wages did not fall as much as National Accounts wages, and a gap opens that widens after 2010, suggesting that the wage adjustment was largely borne by general government employees (Chart 16).

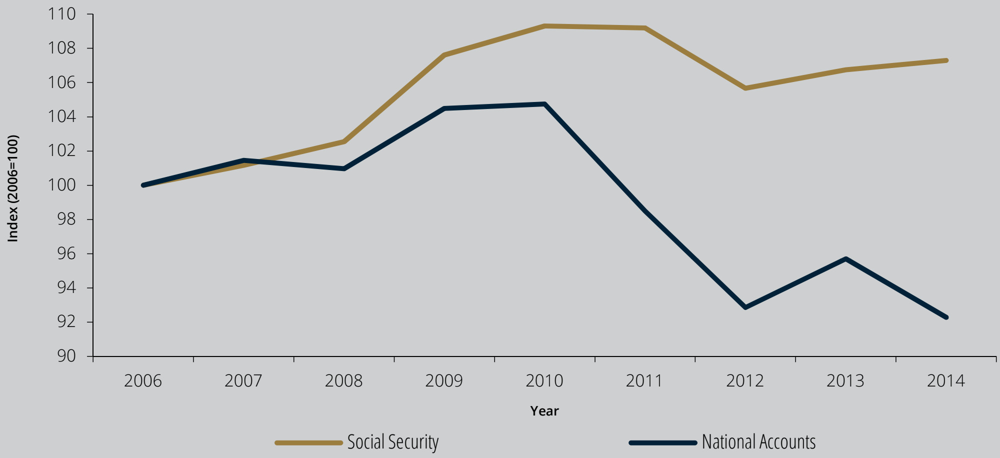
Chart 15 • Productivity and employee compensation



Sources: *INE*.

Notes: Productivity is an average over all workers. Compensation is an average of workers working for a third party.

Chart 16 • Average real wage



Sources: *Segurança Social* and *INE*.

Notes: Social security wages are averaged over registered workers. National accounts wages are averaged over workers working for a third party.

The question is then why did private wages not adjust by more? Faced with a large negative shock, firms want to reduce their wage bill. The two ways to do this are to reduce wages and/or to reduce total hours. A reduction along the second margin can be accomplished either by reducing average hours or the number of workers. Average hours worked practically did not change and all the adjustment ended up falling on the employment margin. Part of the argument here is that this employment adjustment would not have been so drastic had other wage adjustment channels been used more effectively.[32]

It is therefore crucial to understand the constraints Portuguese firms face in adjusting wages. Under the law, *regular pay* (base wages plus some other periodic components) cannot be reduced unless this is allowed by collective agreement.[33] To understand whether this works as a binding constraint for firms, it is important to look at changes in wages. From 2012 to 2013, almost 80 per cent of full-time wage earners in the QP saw no change in nominal wage adjustment channels (Chart 17, panel (a)).

The only way to cut total wages is thus to decrease fringe benefits (bonuses, commissions and other payments), or to shed workers and rehire less expensive ones. There is evidence that both margins were used. Nonetheless, because fringe benefits tend to be small compared to regular pay, firms are *a priori* limited in their scope for reducing total wages in this fashion. Looking at the distribution of changes in total wages in the *QP* for the same year as before, there is indeed more mass below zero than for the base wage change distribution, but here are still 40 per cent of workers whose total wage did not change (Chart 17, panel (b)).

There is evidence that Portugal exhibits one of the highest degrees of Downward Nominal Wage Rigidity (DNWR) among OECD countries.[34] In environments where inflation is sufficiently high, DNWR does not imply downward real wage rigidity, and real wages can fall to accommodate a negative shock. Looking at the distribution of wage changes in the 1984 recession, this was exactly what happened (Chart 17, panels (c) and (d)). Then, firms could even offer sizeable nominal wage increases, because with yearly inflation at almost 25 per cent, the vast majority of workers still experienced real wage decreases. Not by coincidence, from 1984 to 1985, the unemployment rate increased only from 9.1 per cent to 9.6 per cent.[35] This time around, with a combination of very low inflation levels (deflation for 2013) and standing against the zero wage change constraint, the economy was extremely limited when it came to adjusting real wages and experienced a large jump in unemployment rates. Even though the magnitude of the shocks hitting the economy in the two recessions was different, the contrasting behaviour of the real wage rate and unemployment in the two recession episodes serves as a reminder of the role of inflation levels in preventing DNWR from binding.

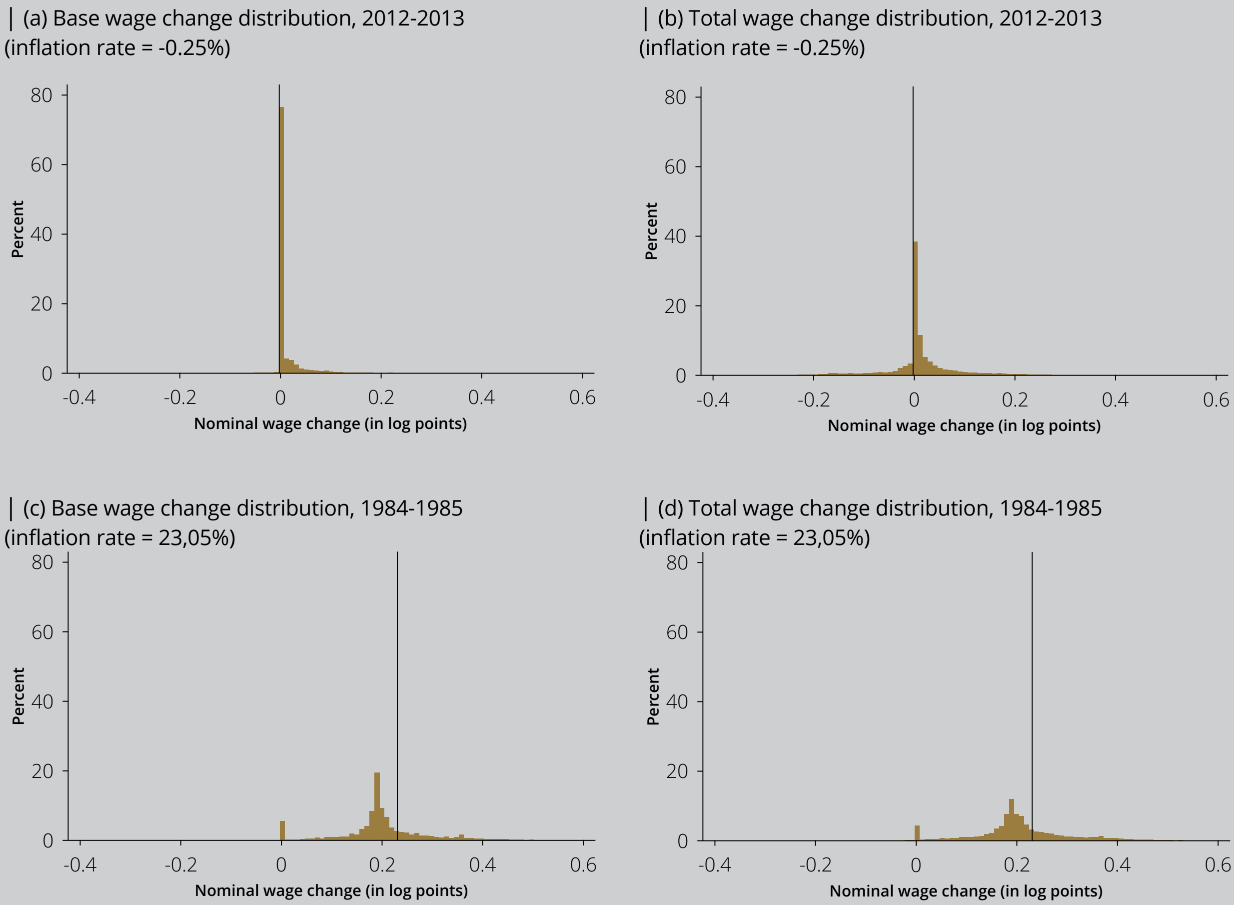
The fact that collective wage agreements defining wage floors for job titles are systematically extended to the rest of the sector via *portarias de extensão*, as discussed earlier, means firms are often forced to increase wages. Guimarães *et al* (2015) find this increases separation rates and decreases hiring rates for such firms. Moreover, it is also associated with higher failure rates. Given the prevailing wage setting and extensions system, one might think that the national minimum wage ends up not constraining firms as a nominal wage floor. After all, there are 30,000 minimum wages – one for each job description under a collective bargaining agreement that has been extended – that could make the national minimum wage largely redundant.[36] This conclusion does not follow, though. Looking at the increases in the minimum wage since 2000, they are strongly correlated with the share of workers earning that same minimum wage (Chart 18). These changes have made the minimum wage increasingly binding and have therefore contributed, at least partially, to the adjustment problems in the labour market.

Minimum wages serve important purposes, namely precluding certain exploitation relationships and assuring all workers can aspire to some minimum income level through their own effort. Nonetheless, there is a debate in the literature on whether minimum wage increases lift the incomes of some low-income households at the expense of others – by lowering their employment prospects. This would be equivalent to income redistribution among poor households and not from rich to poor households, which would be the desired outcome.[37]

Since firms were constrained along the real wage adjustment margin for continuing workers, part of the wage adjustment was done through cheaper hires. But this substitution margin is conditioned by the employment protection laws. Separations are costly, particularly under open-ended contracts. Because of this, most of the churning happened under fixed-term contracts, but these are only 20 per cent of the worker force, which necessarily delays the process. In fact, churning as a whole seems to have decreased during the recession. The QP allows for the separation of firms into four broad groups, according to the change in the number of positions they report. Firms with positive changes were job creators and either expanded or were new, while firms with negative changes were either contracting or closing (Charts 19 and 20).

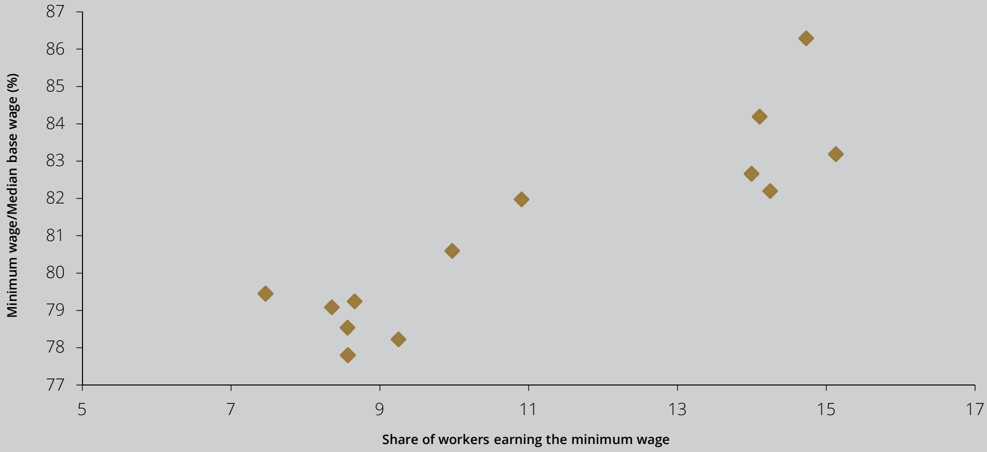
The job destruction rate increased from 10 per cent in 2007 to 12.5 per cent in 2012. Notice how before 2007, job destruction by closing firms (which tend to be smaller firms) was substantially smaller than job destruction by contracting firms (which tend to be relatively larger), but they became very similar with the recession. This resonates with the fact that employment fell more for SMEs than for larger firms.

Chart 17 • Distributions of wage changes in two recessions



Sources: *Quadros de Pessoal* and *Relatório Único*.

Chart 18 •
Minimum Wage



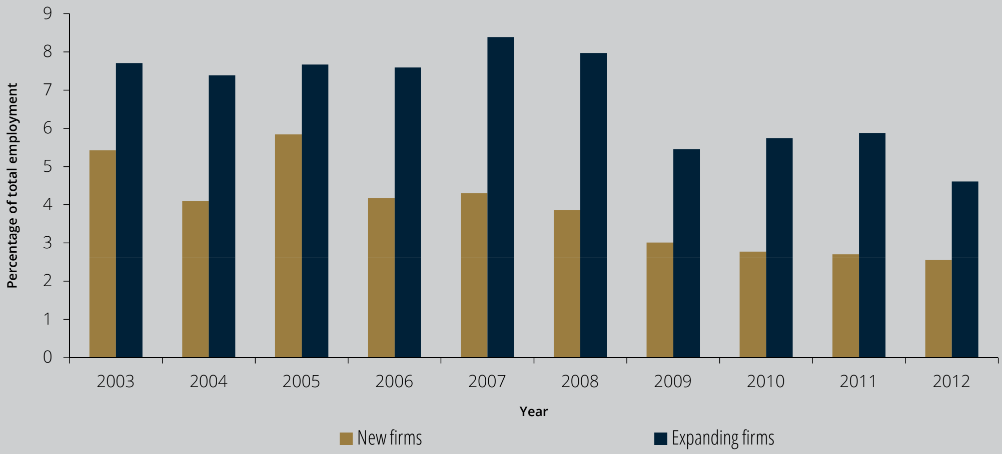
Source: *Quadros de Pessoal.*

Chart 19 •
Net Job Destruction

Sources: *Quadros de Pessoal* and *Relatório Único.*

Notas: Total employment refers to the universe of *Quadros de Pessoal*. 2009 data may not be reliable for firms that closed since the *Quadros de Pessoal* began to integrate the Relatório Único, which possibly caused problems with missing data in the survey.

Chart 20 •
Net Job Creation



Sources: *Quadros de Pessoal* and *Relatório Único.*

Notes:Total employment refers to the universe of *Quadros de Pessoal.*

Carneiro *et al.* (2014) argue that the increased lack of access to credit played an important role in firm closings, and Farinha and Félix (2014) argue that these credit restrictions were particularly severe on firms seeking credit for the first time (such firms tend to be SMEs).

What is most striking, though, is that job creation came down from 12.5 per cent in 2007 to a mere 7 per cent in 2012. This confirms the view that most of the adjustment in employment took place along the hiring margin. When firms did manage to rehire workers they were indeed able to do so at lower wages, as wages of new hires are much more sensitive to the cycle than those of incumbent workers.[38]

Since the burden of wage adjustment seems to have been unequally distributed between sectoral employment categories, as discussed above, one might suspect that wage inequality could have changed. To ascertain whether that was the case, median monthly wage ratios from the *QP* for different quartiles in the wage distribution were constructed. Measured top-to-bottom, inequality seems to have decreased, particularly in the centre of the distribution and at its lower end (recall the increase in the share of workers earning minimum wages).[39] Note that one should not try to extrapolate the result to broader measures of inequality. In particular, since the *QP* record only October wages for each year, it is unfit to capture variations in yearly income that come about because of the unequal distribution of unemployment spells across the wage distribution.

Concluding remarks

This article presents the Portuguese labour market's main features and analyzes its recent evolution. The article also identifies the measures that have been implemented since 2011 following the MoU of the EAFP. Among others, on employment protection, severance pay was lowered and reasons for just cause separations were relaxed; on unemployment insurance, statutory durations were lowered and eligibility requirements relaxed; the requirements for collective agreements to be extended through *portarias de extensão* were also modified. The cost-and-benefits analysis of these measures needs to be performed and whether these reforms, or any other, are appropriate is a matter of policy choice that needs to be taken head-on by the social partners and society as a whole.

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Notes

1. In this case firms can adjust hours worked and/or the number of workers.

2. Typically, the only way to adjust nominal wages is by changing fringe benefits.

3. *Inquérito ao Emprego (IE), Instituto Nacional de Estatística (INE).*

4. *Censos, INE*.

5. *IE, INE*.

6. US Census Bureau (2006) and Kodrzycki (2000).

7. Poschke (2014).

8. Braguinsky *et al.* (2011).

9. European Commission (2013).

10. Addison *et al.* (2014).

11. Addison *et al.* (2014).

12. See Martins (2014) for the proportion of all agreements between 2005 and 2012 that were industry- or sector-wide, as well as for those that got extended.

13. Following the MoU, in October 2012, for an agreement to get extended through a portaria de extensão, the firms subscribing the agreement would have to employ at least 50 per cent of the workers in the sector. More recently, in June 2014, a clause was added that alternatively to the 50 per cent representativeness, allows agreements where at least one third of the subscribing firms are SMEs to be extended. This is contrary to the spirit of the initial change and does not guarantee representativeness.

14. The minimum floor is the *Indexante de Apoio Social (IAS)*, currently €419,22 and the maximum cap is 2.5 times the *IAS*: €1.048,05.

15. Bloom (2009) and Choi and Loungani (2015).

16. Portugal (2008).

17. *IE, INE*.

18. Esser *et al.* (2013).

19. See Centeno and Novo (2014) for a characterization of the effect of the subsidy on unemployment durations depending on pre-spell accumulated wages.

20. Eurostat.

21. See Novo (2015) for a more thorough discussion of youth unemployment in Portugal.

22. A large administrative survey conducted by the *Ministério da Solidariedade, do Emprego e da Segurança Social*.

23. See Centeno and Novo (2012) for excess labour turnover under fixed-term contracts.

24. *IE, INE*.

25. Garcia Perez *et al.* (2014).

26. To make sure this outward movement was not a particular to the *IEFP* data, vacancy data from the *Inquérito aos Empregos Vagos* compiled by the *Ministério da Economia* was also considered. There, the outward movement seems to occur later.

27. Hobijn and Sahin (2013) also find evidence of an outward shift in the BC for Portugal.

28. The dispersion index is given by $M = \left(\frac{1}{2}\right) \sum_i \left|\frac{U_i}{U} - \frac{E_i}{E}\right|$, where i refers to the different education levels. ECB (2015) reports a similar finding.

29. Similar results were obtained using labour force to proxy for supply instead of unemployment.

30. See Tasci and Ice (2014) for the US experience.

31. The remainder contribute to the *Caixa Geral de Aposentações*.

32. Dias *et al.* (2013) finds support for the claim that Portuguese firms with more flexible base wages and/or have available other labour-cost cutting strategies, are less likely to reduce employment.

33. Article 129 d) of the Portuguese Labour Code stipulates that a worker's regular pay cannot be reduced except by collective agreement. Article 258 defines what regular pay is (base wage plus some periodic pay components), and article 260 elaborates on what does not constitute regular pay, here called fringe benefits.

34. Dickens *et al.* (2007).

35. *Séries Longas para a Economia Portuguesa*, Banco de Portugal.

36. Martins (2014).

37. See Dube *et al.* (2010), Dube (2014), Meer and West (2013), and Neumark *et al.* (2013) for the latest updates to the debate. Concerning Portugal, see Carneiro *et al.* (2011) and Centeno *et al.* (2011) for studies finding negative effects of minimum wage increases on overall employment and on low-wage employment prospects, respectively; and Portugal and Cardoso (2006) for one finding increases in teenage employment following the 1987 increases in the sub-minimum wage in Portugal.

38. Carneiro *et al.* (2012).

39. For a more thorough, longer-term, analysis of inequality, see Centeno and Novo (2014).