ANNUAL REPORT

The Portuguese Economy in 2012

Banco de Portugal
EUROSYSTEM

ANNUAL REPORT

THE PORTUGUESE ECONOMY

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Overview

The on-going adjustment process of the Portuguese economy

The Portuguese economy saw a steep fall in output and a substantial rise in unemployment in 2012. This evolution came against an external backdrop marked by a recession in the euro area and a slowdown in world economic growth, and internally, by a continuing contractionary fiscal policy and restrictive monetary and financial conditions, though the latter eased slightly. Over and against the costs stemming from the decline in activity, the adjustment of the Portuguese economy continued, namely in terms of rebalancing the current and capital account, reducing the structural primary deficit and, as a consequence, improving the perception of risk among international investors.

The recent path of the Portuguese economy reflects a process of correction of macro-economic imbalances and structural problems that have been developing over a long period of time, which the international economic and financial crisis turned impossible to postpone. Various factors contributed to the significant accumulation of macro-economic imbalances in the Portuguese economy. These factors have different natures and unfold over different time horizons but their effects overlap and reinforce each other. In particular, the Portuguese economy presented for some decades a trade deficit that stemmed from fragilities in the production of tradable goods. To this structural fragility added, as from the end of the 1980s, the gradual entrance of Asian and Central and Eastern European countries in international trade, together with the fragmentation of international productive chains, which changes the pattern of worldwide comparative advantages. In this context it is inevitable to substantially restructure sectors and enterprises, which brings short-term costs. The difficulties of reconversion were significantly complicated by structural weaknesses in the Portuguese economy, specifically the low levels of human capital and the inefficient rotation of workers associated with the segmentation of the labour market. Additionally, the participation in the euro brought stable prices along with lower and less volatile interest rates, leading to a substantial increase in internal demand, promoting the reallocation of resources towards the non-tradable sector and deteriorating the external imbalance. The new economic regime required the assumption of different behaviours from the part of economic agents and the creation of appropriate incentives. Only in this way would it be possible to ensure that the higher levels of household consumption, the higher standards in the services provided by general government and the dynamics of investment resulted from structural gains in productivity. These gains would have to be anchored in a significant rise in the openness of the economy so as to ensure the sustainability of debt levels. This, however, did not happen in full, in particular as regards fiscal policy, which was generally pro-cyclical, aggravating the imbalances that existed in the private sector. Moreover, the weak capacity to attract foreign direct investment, the fragilities in the judicial system and the inefficiencies in some administrative procedures all contributed to a sustained decline in the rate of growth of total factor productivity.

The successive imbalances in the public and external accounts and the inherent worsening of public debt levels and of the international investment position substantially increased the exposure of the Portuguese economy to the risks of an adverse external shock. This shock materialized with the international economic and financial crisis, the ensuing increase in risk and uncertainty in international financial markets and the subsequent spread to the sovereign debt crisis in 2010. The imminence of an abrupt halt in the financing to the Portuguese economy forced the adoption of an adjustment program and the sharp acceleration in the unavoidable process of correcting the macro-economic imbalances and the structural problems.

As things stand, the on-going adjustment of the Portuguese economy is hampered by the continuing stagnation in the European economic situation. The mitigation of the costs of the adjustment process depends on the improvement of this macroeconomic environment, as well as on the European institutional framework, with progress in terms of the construction of a banking union and an economic and monetary union that is stronger and able to generate confidence in economic agents.

The external environment is marked by the recession in the euro area, slowdown in world economic growth, an expansionary monetary policy and the synchronization of a restrictive fiscal policy stance in some advanced economies

The external environment of the Portuguese economy in 2012 was marked by the economic recession in the euro area, a slowdown in world economic growth, stemming in part from turmoil in the international financial markets and from the synchronization of restrictive fiscal policy stances in some advanced economies, against the background of a sovereign debt crisis in the euro area and the possible ending of fiscal stimulus in the United States (US). From the second half of the year, the measures announced by the monetary authorities helped to smooth the tensions in financial markets, though there still remained some uncertainty as to their implementation (see "Box 1.1 *Recent changes in the monetary policy strategy in the US, United Kingdom and Japan*", in this Report). In 2013, financial tensions reignited in the wake of negotiations of the adjustment programme for Cyprus.

In 2012 the monetary policy stance for the euro area remained largely accommodative with a historically low level of official interest rates, in a context of easing inflationary pressures on the time horizon relevant for monetary policy.

A gradual improvement in monetary and financial conditions in the Portuguese economy accompanied by a fall in the level of risk perceived by international investors, even though they were still restrictive

The monetary and financial conditions for the Portuguese economy improved gradually over the year, though they were still restrictive, against a background of disturbances in the transmission of monetary policy (see "Box 2.1 *Differences in monetary policy transmission between euro area countries*", in this Report). This development benefited from the unconventional monetary policy measures adopted by the European Central Bank (ECB) and the capital increases carried out by various banks, making it possible for them to improve solvency and liquidity indicators. In terms of sovereign debt, an easing of the turbulence in the international financial markets was helped by the ECB announcement of a programme of Outright Monetary Transactions, along with the process of budgetary consolidation that is under way. This, then, was the backdrop for an operation put in place by the government involving the exchange of public debt with maturity in 2013 for debt maturing in 2015, followed by the issuance of 5 and 10-year public bonds that took place already in early 2013. In tandem, some financial institutions returned, though on a limited scale, to funding on the international wholesale debt markets.

Within this framework, there was a fall in new business bank lending rate to non-financial corporations and to households mortgages and the decline in banking credit to the non-financial private sector began moderate towards the end of the year. In tandem, bank's credit standards applied to the approval of loans were altered, leading to the inversion of the tightening process initiated in 2007. Bank lending rates to non-financial corporations, however, remained higher than the euro area average. Various factors seem to have played a part in this, namely the high average cost of financing and the worsening of the financial situation in many companies, particularly on the non-tradable sector, more affected by the on-going adjustment process in the economy. This development came as there was a significant cut in rates on new deposits, though this went hand in hand with a far lower reduction in the new business bank lending rates. These dynamics led to widening margins on new business, in contrast to the move on implicit margins on outstanding amounts, which continued to narrow, reaching record lows (see "Box 2.2 *Banking interest rate margins: Portugal in the context of the Euro area*", in this Report).

Large firms were able to keep access to credit open or found alternative sources of financing at a more beneficial cost, whereas small and medium-sized firms continued to face financing problems. Be this as it may, there is in fact a close interrelationship between the evolution of credit by firm size and sector. While credit to construction, real estate development and retail – where the proportion of small and micro sized firms is larger – recorded negative annual rates of change, the aggregate of the remaining

sectors came in with a slightly increase for the year as a whole (see "Box 2.3 *Differentiation in credit to non-financial corporations, crossing firm dimension and sector*", in this Report).

Overall, the process of deleveraging in the Portuguese economy continued during the year. In the banking system, this took the form of a reduction in credit to non-residents and the resident private sector, while the financing for the public administrations grew. In this context, there was a considerable decline in total credit to households and a substantial rise in the savings rate of this sector. Households' indebtedness continued on a downward trend, a process that has been observed since 2009. In turn, deleveraging in the corporate sector is still considerably more modest, the essential focus being on buttressing company capital. In this context, the diversification of funding sources can also contribute to reduce the risk and costs of Portuguese firms.

Contractionary and pro-cyclical fiscal policy, leading to major structural adjustment

Fiscal policy continued to have a contractionary and pro-cyclical stance brought by a variation of the primary structural balance, excluding special factors, of 3.4 percentage points (p.p.) of Gross Domestic Product (GDP). In cumulative terms, the effort to comply with the objectives set out in the Economic and Financial Assistance Programme has led to a variation in this indicator that reflects a fiscal adjustment of 7.2 p.p. of GDP for the period between 2010 and 2012. In the National Accounts definition, the deficit in general government stood at 6.4 per cent of GDP in 2012, a 2.7 p.p. fall from 2010 when corrected for one-off measures and special factors. This figure is particularly significant in a period when the cyclical position of the Portuguese economy is worsening (see "Box 3.1 *Temporary measures and special factors with impact in the 2012 budgetary outturn*", in this Report).

The improvement in the structural primary balance stemmed fundamentally from a fall in public spending. The move hinged on measures than will not be repeated in 2013, given the decisions handed down by the Constitutional Court. Nevertheless, measures of comparable magnitude are expected to be adopted in the course of the year. In addition, structural revenues as a percentage of trend GDP practically stabilized during the year, coming in substantially below the amount initially forecasted (see "Box 3.2 *Composition of the structural fiscal adjustment in Portugal in the context of the Economic and Financial Adjustment Program*", in this Report). Having in mind the high level of marginal tax rates, it is necessary that the favourable effect of economic growth on public accounts is used to create a fiscal environment that is favourable to investment and employment creation, once the sustainable trajectory for public finances is assured.

The level of public debt continued to rise considerably during the year, coming in at year-end at 123.6 per cent of GDP, which compares with 94.0 per cent in 2010. This increase was associated with the downward path of the economy, but it also reflects the impact of very significant deficit-debt adjustments (see "Box 3.3 *The deficit-debt adjustments in the context of the Economic and Financial Adjustment Program*", in this Report). A contribution to the evolution in the debt ratio since 2010 came from general government deposits, whose stock stands at 11.6 per cent of GDP at year-end 2012.

Economic activity contracts across the board, though there is heterogeneity across firms

During the year, the economic contraction affected all sectors, especially those more dependent on internal demand, particularly construction. Even though there was a contraction in aggregate terms, a large number of firms should have increased its Gross Value Added (GVA). This heterogeneity in the evolution of GVA is also visible in other aspects, among them the cost structure (see "Box 4.1 *Cost structure and profit margins in Portuguese firms*", in this Report). The existence of structural conditions enabling more flexible and innovative firms to grow is a fundamental condition for reviving activity in the Portuguese economy and implies the continuation of the structural reforms agenda.

The steep decline in domestic demand is attenuated by exports growth, leading to a surplus in the current and capital account

The year of 2012 was marked by a GDP decline of 3.2 per cent, following a 1.6 per cent fall in 2011. Domestic demand contracted 6.8 per cent, with every component of contributing to this outcome.

Private consumption declined by 5.6 per cent, against the background of a decline in disposable income perceived to have a permanent nature; by the marked deterioration in labour market conditions; and by the high degree of uncertainty surrounding the fiscal measures to be adopted. As a result, there was a substantial increase in the savings rate during the year, reinforced by the increase in the share of liquidity constrained households and by composition effects related to the growth of some types of income being earned by families with higher propensity to save (see "Box 5.1 *The increase in households' savings rate in 2012: An explanation based on macro and microeconomic evidence*", in this Report).

Investment declined by 13.7 per cent over the year, after a similar fall in 2011. The drop in Gross Fixed Capital Formation (GFCF) was spread across every institutional sector. In particular, corporate GFCF was down steeply, in fact more so than in previous years. This development stemmed from the worsening prospects for demand in domestic markets and the increase in uncertainty, in combination with the low level of capacity utilization, the need for firms to reduce indebtedness and, though to a lesser degree, the still restrictive financing conditions. The residential GFCF recorded a strong decrease in line with the trend observed in the last decade. Public investment plunged again, reflecting mostly the behaviour of enterprises that were recently included in general government perimeter.

The combined moves in exports and imports provided a positive note for the evolution of economic activity. Exports of goods and services came in with a volume growth of 3.3 per cent, decelerating markedly year-on-year in spite of a considerable gain in the market share. Although exports of goods recorded a significant gain in market share among the country's main trading partners and in spite of its recent diversification across destinations, they were hindered by geographical orientation (see "Box 5.2 *Portuguese export market shares in 2012: An analysis based on a sample of export markets*", in this Report). In a context of continued contraction in global demand, imports recorded a new sizeable decline in 2012.

A rebalancing of the external accounts was recorded in 2012, with the joint balance of the current and capital accounts coming in with a surplus of 0.8 per cent of GDP, following deficits of 5.8 per cent in 2011 and 9.4 per cent in 2010. It should be noted that the trade balance on goods and services was virtually balanced, an unprecedented event in the last decades in the Portuguese economy. The fall in the economy's financing requirements reflected the considerable rise in the domestic savings rate and, to a lesser extent, the reduction of the investment rate and a larger surplus of the net capital transfers. The evolution of the financial balance was fundamentally the result of rebalancing external financing, with a substantial cut in net liabilities in portfolio investment across all the resident institutional sectors, accompanied by a considerable inflow of funds in general government associated with the disbursement of loans as part of the Economic and Financial Assistance Programme.

As conditions in the labour market worsened considerably, salaries were reined in and consumer prices slowed down

The labour market worsened considerably during the year, mirroring the path of economic activity in 2012. Employment in the Portuguese economy was 4.2 per cent down and the unemployment rate rose to 15.7 per cent, 3 p.p. up on a year earlier. The youth unemployment rate stood at 37.7 per cent, a 7.6 p.p. rise on 2011. The worsening of the labour market is one of the most serious effects of the adjustment process in the Portuguese economy, giving rise to a massive accumulated fall in employment, along with a continuing structural rise in the unemployment rate and a decline in the labour force. Additionally, the flows between states in the labour market point towards an increase of the segmentation. Such aspects have relevant implications in potential growth, namely through the depreciation of human capital associated with unemployment and the lower investment in training. The developments in the

labour market in 2012 originated a fall in real wages in the private sector in aggregate terms in 2012, along with a substantial composition effect as many jobs with lower wages were destroyed. A huge cut in general government's wage bill occurred in 2012, with the number of workers down and, above all, with suspension of the Christmas and holiday bonuses.

The inflation rate in Portugal, measured by the annual average growth rate of the HICP (Harmonized Index of Consumer Prices) stood at 2.8 per cent for the year, a 0.8 p.p. decline vis-à-vis 2011. It should be noted that this evolution was heavily conditioned by the measures concerning indirect taxation and administered prices, with mechanical impacts estimated at around 2 p.p. in price increases in both 2011 and 2012 (see "Box 6.1 *Mechanical impact of indirect taxation and administered prices in the inflation rate*", in this Report). Indeed, excluding these effects, the worsening of the cyclical position of the economy and of labour market conditions implied a slowdown in consumer prices, which is an important channel to restore competitiveness and to correct macro-economic imbalances in a monetary union.

The process of adjustment under way in the Portuguese economy is likely to be prolonged, especially in what concerns the unemployment rate

The adjustment process under way in the Portuguese economy is different in nature from those of the 1970s and 1980s. In fact, the absorption of unemployment will depend on the extension and speed of structural adjustment in the economy, which will be a function of the impact of on-going structural reforms on the reallocation of resources towards the tradable sector and, particularly, on foreign direct investment. The gradualism of this process is also due to the existence of higher levels of public and private indebtedness (see "Box *A comparison of the adjustment in the Portuguese economy with that of previous national and international experiences*", in this Report).

The correction of accumulated imbalances, in tandem with the restructuring of sectors and firms, is a challenge facing many European economies. If competitiveness problems are not solved, potential growth is hampered and larger asymmetries in income *per capita* across euro area countries arise. In fact, the dynamics in national economies within a monetary union can show similar traces to inter-regional divergences within a single country, but aggravated due to the lack of an integrated fiscal policy and due to the persistence of difficulties in the mobility of some factors of production. In this context, a strong deterioration of the Portuguese economic situation may have a long-lasting negative impact on potential growth, materializing in an on-going reduction of the stock of capital, in the depreciation of human capital among unemployed workers and in the emigration of qualified young people.

There is a need for social consensus regarding the guidelines of the adjustment process, against the backdrop of discipline imposed by globalization

The ability to mitigate this scenario depends, among other factors, on a social consensus regarding the guidelines of the adjustment process. This is a fundamental condition for maintaining credibility in the financial markets and among international authorities. One important assumption underlying this analysis is that any smoothing of the adjustment effort, specifically in fiscal terms, is constrained by the need to guarantee financing for the Portuguese economy and implies higher debt levels, which may aggravate its sustainability conditions. Therefore, it is important that fundamental macro-economic balances are preserved from an intertemporal point of view, thus contributing to normalize the financing of the Portuguese State in the international sovereign debt markets.

The Portuguese economy has undertaken a major macro-economic adjustment, shouldering significant costs through the fall in activity and the underutilization of factors of production. Renewed momentum geared to employment creation and investment (including foreign investment) will only be brought about by the maintenance of social stability and a continuing improvement of competitiveness. The costs of the adjustment under way can only be attenuated by the dynamism of tradable sectors, which requires the reallocation of resources to those sectors, driven by private sector decisions and benefiting from the

catalysing role of the public sector. In this context, the existence of a favourable external framework is also a crucial factor, not only in terms of external demand growth, but also in terms of building a stronger European institutional framework that generates confidence in economic agents.

The Portuguese economy is an integral part of an increasingly demanding global economy. From a structural point of view, firms will need to be flexible and innovate, given the increasing speed of innovative processes, the added competition to attract inward foreign investment, and the wider repercussions of economic crises and volatility in financial markets. The macro-economic difficulties facing the Portuguese economy at this point in time imply substantial social costs and bring risks, but these should not hinder the willingness to pursue a broad structural reform agenda, including the administration of the State and the design of social policies. These reforms should bring about structural reductions in public expenditure, and mainly ensure a framework of stability and the fostering of competitiveness to ready the economy for its current challenges. Structural reforms are defining moments for the regeneration of social capital, and should stimulate the stability and predictability in the incentive framework characterizing the economy. Constant changes in this framework are not conducive to investment or to the sustained creation of employment, and these are the essential pillars on which potential output can be built.

Table 1

PORTUGAL – MAIN ECONOMIC INDICATORS, 2008-2011

		Units	2009	2010	2011	2012
I.	**Prices, wages and unit labour costs**					
	Inflation (HICP)	arc %	-0.9	1.4	3.6	2.8
	Goods	arc %	-2.4	1.7	4.4	2.5
	Services	arc %	1.3	1	2.4	3.2
	Inflation (CPI)	arc %	-0.8	1.4	3.7	2.8
	GDP Deflator	arc %	0.9	0.6	0.5	-0.1
	Private consumption deflator	arc %	-2.2	1.3	3.8	2.1
	Goods and services export deflator	arc %	-5.0	3.9	5.5	1.4
	Goods and services import deflator	arc %	-9.2	4.6	8.1	1.6
	Nominal compensation per employee, total economy[a]	arc %	2.8	2.0	-0.7	-2.7
	Nominal compensation per employee, private sector[b]	arc %	1.5	2.9	1.1	-0.1
	Unit labour costs, total economy[a]	arc %	3.1	-1.4	-0.7	-3.8
	Unit labour costs, private sector[b]	arc %	1.6	-1.3	1.3	-1.2
II.	**Expenditure, income and savings**					
	Gross domestic product (GDP)	rrc %	-2.9	1.9	-1.6	-3.2
	Total domestic demand	rrc %	-3.3	1.8	-5.8	-6.8
	Private consumption	rrc %	-2.3	2.5	-3.8	-5.6
	Public consumption	rrc %	4.7	0.1	-4.3	-4.4
	Gross fixed capital formation	rrc %	-8.6	-3.1	-10.7	-14.5
	Exports of goods and services	rrc %	-10.9	10.2	7.2	3.3
	Imports of goods and services	rrc %	-10.0	8.0	-5.9	-6.9
	Household disposable income (DI)	rrc %	1.8	1.7	-4.9	-2.9
	Household disposable income, excluding external transfers	rrc %	2.3	1.5	-5.0	-3.4
	Domestic savings rate	% of GDP	9.4	9.8	10.6	14.1
	Private sector[c]	% of GDP	16.4	16.8	15.4	18.8
	Households	% of DI	10.9	10.1	9.1	11.6
	Households, excluding external transfers	% of DI	9.2	8.3	7.2	9.4
	Corporations	% of GDP	8.4	9.4	8.7	10.0
	General government	% of GDP	-6.9	-7.0	-4.9	-4.7
III.	**Employment and unemployment**					
	Total employment[d]	arc %	-2.7	-1.7	-1.5	-4.2
	Employees[d]	arc %	-2.6	-0.9	-0.9	-4.7
	Unemployment rate[e]	annual average; %	9.5	10.8	12.7	15.7
IV.	**Balance of payments**					
	Current account + Capital account	% of GDP	-10.1	-9.4	-5.8	0.8
	Current account	% of GDP	-10.9	-10.6	-7.0	-1.5
	Goods account	% of GDP	-10.6	-11.1	-8.3	-5.2
	Capital account	% of GDP	0.8	1.1	1.2	2.3
V.	**Exchange rates**					
	Nominal effective exchange rate index[f]	arc %	0.4	-1.5	-0.1	-1.3
	Real effective exchange rate index					
	Adjusted for the relative unit labour costs[g]	arc %	0.1	-2.2	-1.6	-5.8
	Adjusted for the relative consumer price index	arc %	-0.9	-1.9	0.6	-1.0
VI.	**Interest rates**					
	3-month Euribor	%, Dec.	0.7	1	1.4	0.2
	10-year fixed rate Treasury bond yields	%, Dec.	3.9	6.5	13.1	7.3
	Interest rates on outstanding amounts of credit granted by MFIs[h]					
	Loans to households for house purchase	%, Dec.	2	2.1	2.7	1.6
	Loans to non-financial corporations	%, Dec.	3.3	3.8	5.1	4.5
	Deposits and deposit-like instruments up to 2 years	%, Dec.	1.7	2.2	3.7	2.9
VII.	**Stock price index (PSI-Geral)**	y-o-yrc 31-Dec.	40	-6.2	-20.4	7.7
VIII.	**Bank deposits and loans to the resident sector[i]**					
	Deposits of non-financial private sector	y-o-yrc Dec.	2.1	5.4	5.5	-3.8
	Loans[j]					
	Non-monetary financial institutions	arc Dec.	4.5	2.5	-7.2	-12.9
	Non-financial corporations	arc Dec.	1.7	0.7	-1.8	-3.8
	Households	arc Dec.	2.3	2	-2.2	-4.4
IX.	**Public finances**					
	General government overall balance[k]	% of GDP	-10.2	-9.8	-4.4	-6.4
	General government primary balance	% of GDP	-7.3	-7.0	-0.4	-2.0
	Consolidated gross public debt	Dec., % of GDP	83.7	94.0	108.3	123.6

Notes: (a) Compensation per employee including: collective bargaining aggreements, additional benefits and employers' social contributions; Consistent series calculated using data and methodology from National Accounts base 2006. For more details see "Box 2 *Relative unit labour costs in Portugal: methodological issues and developments in the last decade*", Banco de Portugal, *Economic Bulletin* – Summer 2010. **(b)** Private sector – economy as a whole excluding general government and corporate hospitals. **(c)** Aggregate savings for all economic agents excluding the general government. **(d)** Data from INE National Accounts. **(e)** In 2011 the unemployment rate is influenced by a break in the Labour Force Survey series. **(f)** A positive change denotes an appreciation in effective terms; a negative change denotes a depreciation. **(g)** Relative unit labour costs in the total economy. A positive change denotes an increase in the relative costs of Portuguese producers. **(h)** Calculated as the average of interest rates on outstanding amounts of credit granted and deposits taken by MFIs, denominated in euro, to/from euro area residents, broken down by sector and/or purpose, in every maturity, weighted by the respective end-of-month amounts outstanding. **(i)** End-of-month balances. **(j)** Annual rates of change are calculated on the basis of the ratio of end-of-month outstanding amounts of bank loans adjusted for securitisation operations to monthly transactions derived from outstanding amounts adjusted for reclassifications, write-offs and exchange rate and price revaluations. Whenever relevant, the figures are additionally adjusted for credit portfolios sales, as well as for other operations with no impact in the sectors' effective financing. **(k)** According to the excessive deficit procedure rules. **arc**: Annual rate of change; **rrc**: Real rate of change; **y-o-yrc**: Year-on-year rate of change.

BOX | A COMPARISON BETWEEN THE ADJUSTMENT OF THE PORTUGUESE ECONOMY AND PREVIOUS DOMESTIC AND INTERNATIONAL EXPERIENCES

The cyclical position of the Portuguese economy has deteriorated substantially in recent times, in the context of the adjustment process of the macro-economic imbalances. The aim of this Box is to frame recent developments in the Portuguese economy relying on two comparisons. The first is a comparison between the recent recession in Portugal and similar events in advanced economies; the second confronts the ongoing adjustment process with those that occurred in the aftermath of the balance-of-payments crises and ensuing IMF-supported stabilization programs of 1977 and 1983.[1]

Comparison between the recent recession period in Portugal with historical recessions in advanced economies

To put the recent developments in the Portuguese economy in a historical perspective compared to other advanced economies, one has to start by identifying the main features of the economic cycles in those economies. In this analysis, the downturn and expansions phases are characterized on the basis of the turning points of economic activity – peaks and troughs – identified using quarterly changes in real GDP. Table 1 summarises the main stylized facts of downturns and upswings in a sample of advanced economies during the period between 1960 and 2008.[2]

Recessions are relatively frequent events in advanced economies. In a sample of 21 economies, 122 recession episodes were identified, which represents approximately 6 recessions on average per economy over the last fifty years. However, there are considerable differences in terms of the frequency with which recessions occur in the various countries. In the sample period, there was a reduction in the frequency and severity of recessions as from the mid-1980s, period which has come to be known as "the great moderation". With the onset of the 2009 economic and financial crisis, however, this perception has changed.

On average, a recession in an advanced economy is characterized by a 2.7 per cent reduction in GDP and lasts for 3.6 quarters (Table 1). A more detailed analysis shows that there are distinct patterns of behaviour, depending on the underlying shock that triggered the recession. Recessions associated with financial crises – defined as episodes where there is widespread turbulence in financial institutions and in the functioning of financial markets – tend to cause larger declines in economic activity and to last longer. The features of these recessions reflect the nature of the expansion period that preceded them, frequently associated with over-optimistic expectations regarding growth of income and wealth. These episodes are characterized by credit-booms, overheating in goods and services markets and the labour market, bubbles in asset prices (including property) and a loss of external competitiveness. When expectations are deceived, the rebalancing of economic agents' balance sheets and the downward correction of prices trigger sharp adjustments in consumption and investment. When recessions are synchronized – defined as episodes in which 10 or more of the 21 countries in the sample are in recession simultaneously – the downturns are also longer and deeper. The occurrence of synchronized recessions in many economies implies lower growth of the external demand directed to each economy, resulting in a worse export behaviour than in less synchronized recessions. Obviously, the occurrence of highly synchronized financial crises tends to worsen the pattern of adjustment detailed above.

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1 The first stand-by arrangement with the IMF took place in 1978, but the main stabilization measures were agreed in 1977. It is for this reason that 1977 is taken as the reference year in the analysis.

2 This section is based on Chapter 3 "From recession to recovery: How soon and how strong?", World Economic Outlook, IMF April 2009.

Table 1

MAIN STYLIZED FACTS OF RECESSIONS AND RECOVERIES IN ADVANCED ECONOMIES

	Duration (number of quarters)		Amplitude (percent change in real GDP)	
	Recessions	Recoveries[a]	Recessions	Recoveries[b]
All				
Mean	3.6	3.2	-2.7	4.1
Standard deviation	2.1	2.7	2.9	3.1
Number of events	122	109		
By driver of recession				
Financial crises				
Mean	5.7	5.6	-3.4	2.2
Standard deviation	3.2	3.3	3.3	1.2
Number of events	15	11		
By extent of synchronization				
Highly synchronized				
Mean	4.5	4.2	-3.5	3.7
Standard deviation	2.5	3.6	3.0	1.7
Number of events	37	32		
Memorandum:				
Recessions associated with financial crises that are highly synchronized				
Mean	7.3	6.8	-4.8	2.8

Sources: Eurostat, IMF (Chapter 3 "From recession to recovery: how soon and how strong?", World Economic Outlook, April 2009) and Banco de Portugal.
Notes: (a) Number of quarters before recovery to the level of previous peak. **(b)** Percent increase in real GDP after one year.

For comparative purposes, the same procedure used in the previous analysis for the identification of economic cycles was applied to the Portuguese economy. According to this procedure, Portugal experienced two recessions in the period from 2008 to 2012. Economic activity peaked in the first quarter of 2008, and was followed by a downturn that lasted until the first quarter of 2009. Afterwards, there was a recovery that ended in the third quarter of 2010. The second recession phase is still under way. It should be noted that the identification of the recession episodes (which reflects the selected procedure) does not preclude an integrated reading of their causes, both external – in particular, the major international financial crisis which was followed by the euro area sovereign debt crisis – and domestic.

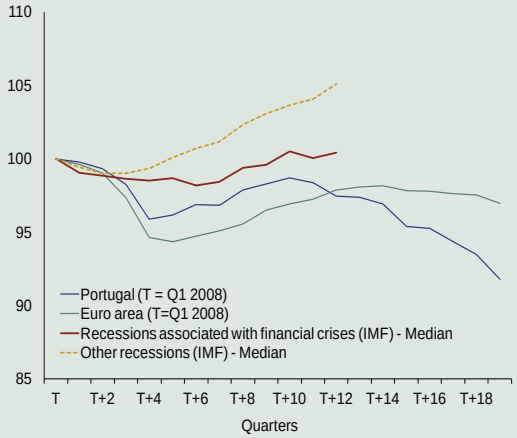
The first identified recession in the 2008-2012 period in Portugal was harsher and longer than the median recession in the historical sample in the advanced economies. This is explained to a large extent by the severity and the geographic extension of the financial crisis (Chart 1). The decline in economic activity in Portugal and in the euro area – 4.1 and 5.6 per cent, respectively, in accumulated terms – is broadly in line with downturns observed in past recessions associated with highly synchronized financial crises. In this recession episode, the downturn in GDP lasted for four quarters, somewhat less than the average duration in recessions associated with highly synchronized financial crises, which may be related to the impact of the counter-cyclical economic policies adopted both in Portugal and in many other countries. However this effect proved to be temporary, since the emergence of the sovereign debt crisis led thereafter to the adoption of contractionary fiscal policies.

As from the second quarter of 2009 real GDP recovered in Portugal. After four quarters, GDP had increased by an accumulated 2 per cent, a figure close to the average recovery in advanced economies following recessions associated with highly synchronized financial crises. This upturn proved to be short lived – it lasted only 6 quarters – and the pre-crisis levels of GDP were not even regained.

During 2010, the country found it more and more difficult to access international financial markets – reflecting the increasing turmoil in euro area sovereign debt markets and the large macro-economic imbalances evidenced by Portugal – which eventually led to the request for international assistance in

Chart 1

COMPARISON OF THE RECENT RECESSION PERIOD IN PORTUGAL WITH HISTORICAL RECESSION EPISODES IN ADVANCED ECONOMIES | T= QUARTER OF THE PEAK OF THE CYCLE (GDP=100 IN T)



Sources: Eurostat, IMF (Chapter 3 "*From recession to recovery: how soon and how strong?*", *World Economic Outlook*, April 2009) and Banco de Portugal.

April 2011.[3] Economic activity registered a contraction already in the final quarter of 2010 and continued to decline over the following two years. In the last quarter of 2012, GDP stood 7 per cent below the level observed in end 2010 (and more than 8 per cent below the level in 2008Q1). This accumulated decline in Portuguese GDP exceeds by far the average magnitude of recessions in advanced economies. This episode has now lasted for 9 quarters, which also exceeds the average duration of historical recessions in advanced economies, whatever its cause or level of synchronization. However, one must note that the level of heterogeneity around these averages is quite large.[4] The recession in Portugal is turning out to be particularly severe and protracted, due to the unusual combination of factors associated with it.

Comparison of the ongoing adjustment process with similar national episodes in the past

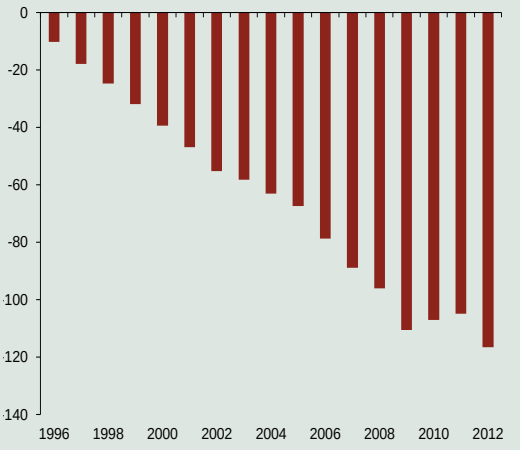
It is possible to look at the current adjustment process under way in the Portuguese economy and compare it with earlier financing crises in the country. However, some important qualifications apply to this comparison exercise. The first relates to the different macro-economic regimes in place in the periods under consideration, namely in terms of institutional arrangements, productive and financial structures and economic policy. The second has to do with differences in the programes. In the IMF-supported stabilization programs of 1977 and 1983, the main objective was the reduction of the external imbalance. The current financial assistance programme is much more comprehensive and complex in terms of the targets to be attained and the measures to be put in place. These measures cover not only budgetary consolidation targets, but also structural reforms needed to improve the economy's potential growth and competitiveness, along with policies geared to ensure an orderly deleveraging of the financial sector. The adjustment measures also reflect the restrictions arising from the current institutional framework, in particular, Portugal's participation in the euro area.

3 In late April 2010, Portuguese banks ceased to have access to international wholesale markets for medium- to long-term debt.

4 There have been recessions considerably more severe and longer than the historical average. In extreme cases, there were accumulated falls in GDP exceeding 10 per cent between the peak and the trough in the cycle and recessions that lasted more than three years.

Chart 2

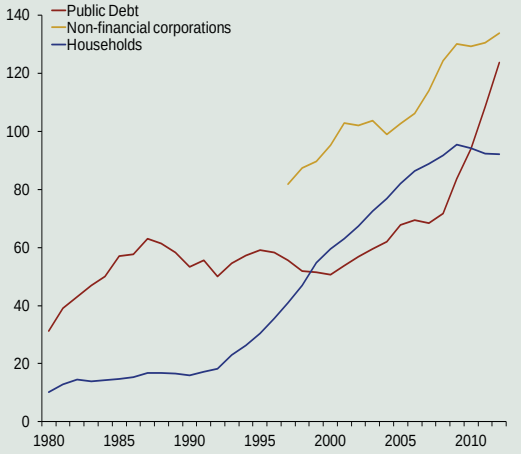
INTERNATIONAL INVESTMENT POSITION | AS A PERCENTAGE OF GDP



Source: Banco de Portugal.

Chart 3

INDEBTEDNESS LEVELS | AS A PERCENTAGE OF GDP



Source: Banco de Portugal.

However, the major difference between the adjustment episodes stems from the point of departure, which was much more unfavourable in the most recent case. The 2011 assistance programme reflects significantly larger accumulated macro-economic imbalances, especially unsustainable levels of external, public and private sector indebtedness (Charts 2 and 3). Furthermore, GDP growth in the Portuguese economy was extremely sluggish during the period before the current adjustment, which contrasts with developments in the previous adjustment periods.

Correction of the macro-economic imbalances in the Portuguese economy requires an expenditure rebalancing. The unsustainable levels of the international investment position of the economy and of public and private indebtedness entail a longer and more substantial rebalancing of economic agents' balance sheets, which in turn implies a more marked adjustment in domestic demand than in the past. With domestic demand on the downturn, exports will have to be the driving force of the economic recovery. However, under the current circumstances, exports are more constrained than in previous adjustment periods, mainly due to the more adverse international economic situation and the need to compete in a rapidly changing global market. Furthermore, relative prices changes associated with the expenditure rebalancing is expected to be slower in the current context. At the time of the 1977 and 1983 IMF-supported stabilization programs, these changes were made easier, in the short term, by devaluation, whereas in the current adjustment process, they are resulting from wage moderation and improvements in other factors of competitiveness. One must stress that devaluation is not a sustainable substitute for the structural reforms aimed at improving the functioning of the labour market and of the goods and services markets, which are essential for promoting competiveness and improving the potential growth of the economy.

The general government deficit decreased sharply over the past two years, as a result of the restrictive stance of the fiscal policy (Chart 4). A reduction in the structural primary balance of close to 7 p.p. of GDP was recorded between 2010 and 2012. This adjustment, which is likely to continue, is already larger than that observed in the 1983-85 period. In any case, the current level of public indebtedness points to the need for a more pronounced and protracted consolidation effort so as to ensure fiscal primary surpluses allowing a reduction of public debt to sustainable levels.

The fiscal consolidation process has a direct recessionary effect on domestic demand in the short term. The budgetary adjustment, which appears to be of a more permanent nature, is also contributing to a downward revision of private agents' expectations regarding permanent income. This revision of expec-

tations, along with the need to correct the high levels of indebtedness, has led to a severe contraction in domestic demand, which is much larger than those observed in previous adjustment periods.

The major difference is to be found in private consumption developments. Besides the factors just mentioned, the more significant contraction in households' expenditures in the current context also reflects a more pronounced worsening of labour market conditions than in the past. However, the savings rate has held firm, having even attained in 2012 its highest level since the start of the euro area – in contrast to what was seen in the 1977 and 1983 adjustment episodes, during which the savings rate declined.[5] Recent developments in savings reflect an assessment that the current adjustment is of a more permanent nature and the persistence of tight financing conditions. Uncertainty regarding the magnitude and duration of the adjustment is probably also contributing to increase savings due to precautionary motives.

In contrast, the reduction in investment is more in line with what was seen in the 1980s. However, one must mention that this item of expenditure had already recorded considerable falls in the years prior to the request for financial assistance, which did not occur in previous adjustment periods. In the current environment, the behaviour of this expenditure aggregate has been greatly affected by the deteriorating outlook for world demand and even more so for domestic demand. Furthermore, the high levels of indebtedness of non-financial corporations and of households and the tight credit conditions are also contributing to depress private investment in the current adjustment episode.

Recent export growth has been lower than the one observed during the two IMF-supported stabilization programs, which reflects, to a large extent, the much slower pace of expansion of external demand directed to Portuguese producers in the current episode. The recent evolution of exports has implied gains in market share, but these gains have been smaller than the ones seen in previous adjustments episodes. Developments in relative unit labour costs show gains in price competitiveness, though more limited than in previous episodes. Even so, the ongoing correction in relative unit labour costs has already led to a reversal of the accumulated real appreciation observed since the start of the euro area.

The downward adjustment in imports has been more substantial than in the past, reflecting developments in global demand and, in particular domestic demand. The adjustment of the current and capital account has been similar to what was seen in the 1970s and 80s. However, one must stress that progress in reducing the external imbalance will have to be more sustained than in the past so as to bring the international investment position back to a sustainable path.

In short, the present adjustment has led to much severe costs in terms of output and employment than previous adjustment episodes. The analysis of recent developments in unemployment must take into account the trend increase of the unemployment rate observed over the last decade, which is partly of a structural nature.

Final remarks

The ongoing process of adjustment of the Portuguese economy stems from a set of very specific factors, which are not comparable with the usual determinants of recessions in advanced economies or with the factors that were present at the time of the previous IMF-supported stabilization programs. At the date of request for financial assistance, the economy displayed a set of vulnerabilities, namely a structural imbalance in public finances, a high level of private sector indebtedness and low potential economic growth. Solving these problems necessarily implies an adjustment which will be more complex and will have a more significant and protracted impact that those seen in the past both at the national level and, on average, in other advanced economies.

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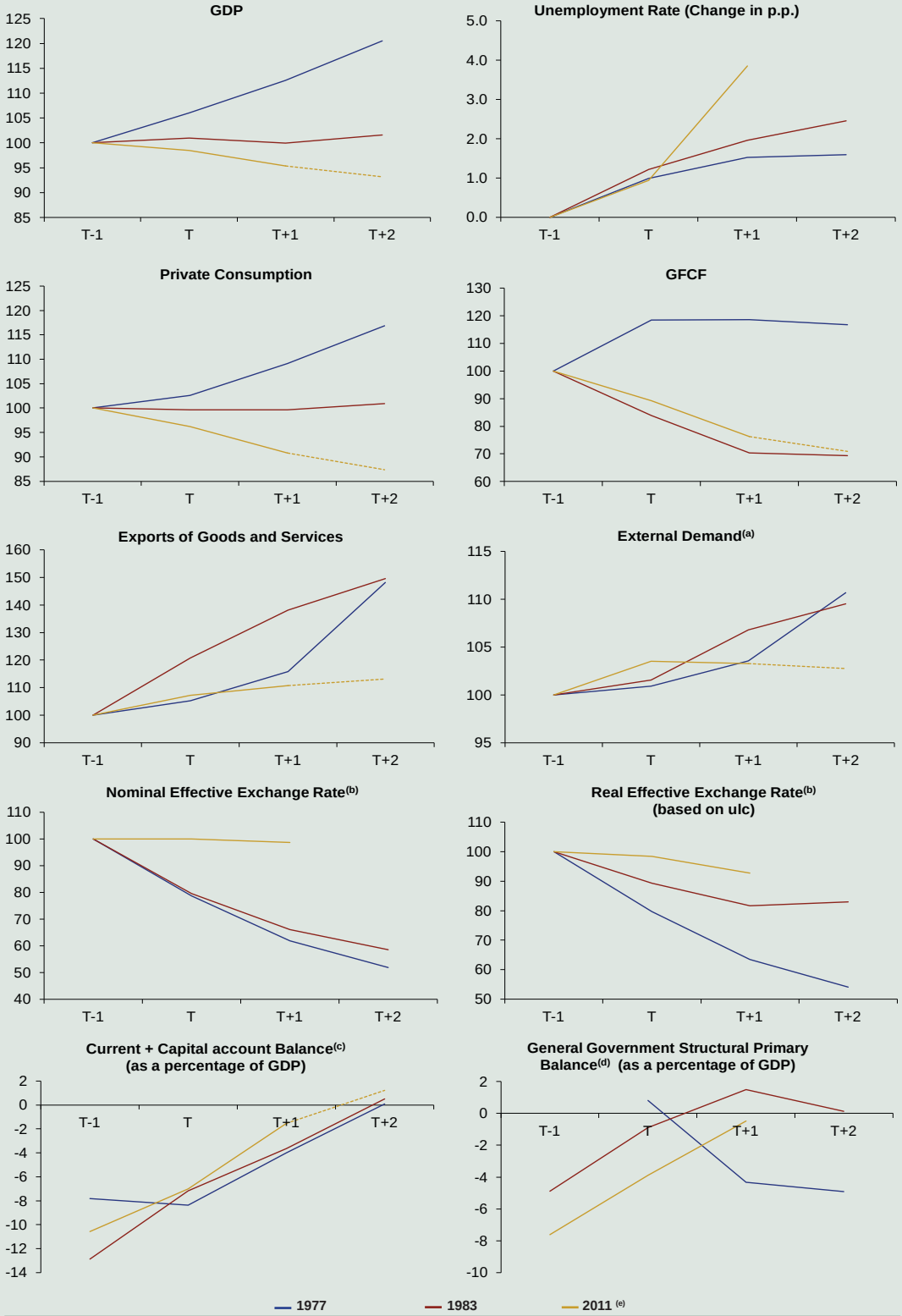
5 See "Box 5.1 *The rise in households' saving rate in 2012: an explanation based on macro and microeconomic evidence*", of this Report.

Chart 4

PORTUGAL - COMPARISON WITH PREVIOUS FINANCIAL ASSISTANCE PROGRAMS | T - 1ST YEAR OF THE PROGRAM (VARIABLE=100 IN T-1 AND DATA IN REAL TERMS, UNLESS OTHERWISE NOTED)



Sources: ECB, *INE*, OECD and Banco de Portugal.
Notes: (a) External demand for goods and services: source OECD in 1977, source ECB in 1983 and 2011. **(b)** There are differences in the computation methodology of the nominal and real effective exchange rates between the most recent period and the previous periods of IMF- supported stabilization programs, namely in terms of the currencies/countries coverage and respective weights. **(c)** Current account balance in 1977 and 1983.**(d)** The general government structural primary balance is corrected for cyclical effects. For the most recent period, it is also adjusted for temporary measures and special effects. There is a break in the series for the primary balance and in the methodology adopted for the computation of the cyclical component between the most recent period and the previous periods of IMF- supported stabilization programs. **(e)** Data for T+2 (=2013) correspond to projections by Banco de Portugal published in the Economic Bulletin - Spring 2013.

The international context adds further difficulties to the adjustment path, mainly reflecting the adverse economic developments abroad and the need to compete in a changing global environment. The difficulties and risks surrounding the adjustment process have been compounded by the high uncertainty regarding the outlook for the world economy and the resolution of the euro area sovereign debt crisis. This uncertainty has been reflected in the volatility of financial markets, in the erosion of economic agents' confidence and in the weak and fragile recovery in global economic activity. In particular, the euro area economy – a region that accounts for a significant share of the destination markets of Portuguese exports, notwithstanding the geographic diversification recorded in recent years – slided into recession in 2012. Furthermore, the ongoing adjustment has overlapped with a sectoral restructuring process over a longer horizon, associated with the integration of the Portuguese economy in global markets.

One must stress that the adjustment programme was not only inevitable but also essential for the gradual correction of the fundamental macro-economic imbalances from an inter-temporal perspective. Putting into place the structural reforms set out in the adjustment programme should create the conditions for the removal of the main structural obstacles to the potential growth of the economy, thus contributing to bring indebtedness down to sustainable levels.

1. THE INTERNATIONAL FRAMEWORK

World economic activity slows in 2012 across most advanced and emerging market economies

The external framework of the Portuguese economy in 2012 saw a slowdown in economic activity across both advanced and emerging economies, though to a different degree. According to data from the International Monetary Fund published in April, advanced economies' Gross Domestic Product (GDP) growth remained sluggish, coming in at 1.2 per cent, down by 0.4 percentage points (p.p.) than in 2011 (Table 1.1). Among the salient features in these economies were the stronger growth in the United States, economic recovery in Japan, a slowdown in the United Kingdom and a fall in the GDP of the euro area, Portugal's main export market. Against a backdrop of lower demand in advanced economies, those of emerging and developing markets also slowed. Even so, IMF data point to a growth of 5.1 per cent in these economies, compared with 6.4 per cent in 2011. The slackening of momentum seems to have been particularly marked in the countries of central and eastern Europe, exposed as they were to developments in the euro area through commercial and financial ties. However, the same picture emerged from China and Brazil, due to a large extent by faltering economic activity in their respective regions.

As a result of the world economic activity slowing, international trade decelerated. In the advanced economies, imports were up by around 0.2 per cent in annual terms (3.5 per cent in 2011), with growth being stronger in the first quarter. The import of goods in world terms rose 2.5 per cent during the year, compared with 5.7 per cent in 2011. Trade flow from emerging market economies was still more dynamic, though even so it slowed in year-on-year terms (Chart 1.1).

Table 1.1

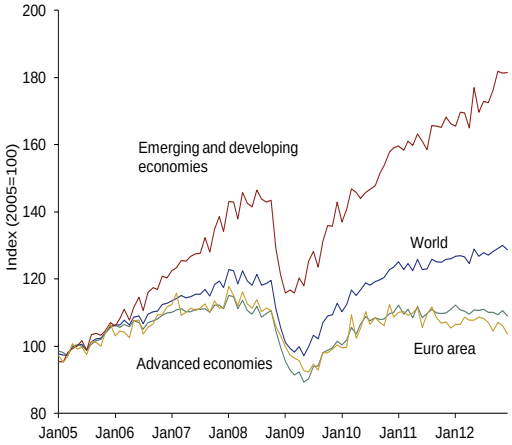
GDP | REAL RATE OF CHANGE, IN PERCENTAGE

	2009	2010	2011	2012
World economy	-0.6	5.2	4.0	3.2
Advanced economies	-3.5	3.0	1.6	1.2
USA	-3.1	2.4	1.8	2.2
Japan	-5.5	4.7	-0.5	2.0
Euro area	-4.4	2.0	1.4	-0.6
Germany	-5.1	4.2	3.0	0.7
France	-3.1	1.7	1.7	0.0
Italy	-5.5	1.7	0.4	-2.4
Spain	-3.7	-0.3	0.4	-1.4
United Kingdom	-4.0	1.8	1.0	0.3
Emerging markets and developing economies	2.7	7.6	6.4	5.1
Central and Eastern Europe	-3.6	4.6	5.2	1.6
Commonwealth of Independent States	-6.4	4.9	4.8	3.4
Russia	-7.8	4.3	4.3	3.4
Developing Asia	6.9	10.0	8.1	6.6
China	9.2	10.4	9.3	7.8
India	5.0	11.2	7.7	4.0
Latin America	-1.5	6.1	4.6	3.0
Brazil	-0.3	7.5	2.7	0.9
Middle East and North Africa	3.0	5.5	4.0	4.8
Sub-Saharan Africa	2.7	5.4	5.3	4.8

Sources: Eurostat, IMF and Thomson Reuters.
Note: IMF, World Economic Outlook April 2013.

Chart 1.1

VOLUME OF IMPORTS OF GOODS



Sources: CPB Netherlands Bureau for Economic Policy Analysis, Thomson Reuters and Banco de Portugal calculations.

Decisions taken by European authorities play a part in dampening volatility in financial markets

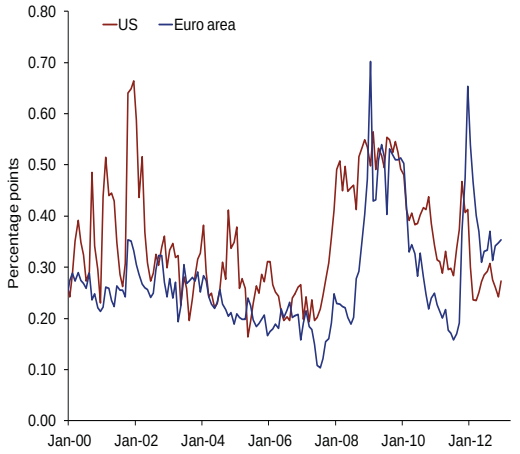
The level of uncertainty in the international economy eased during the second half of 2012, though it remained high (Chart 1.2). In the early part of the year, high level of uncertainty was associated with the redenomination risk in the euro area and the capacity of certain countries to reach their budgetary targets, in the back of weak economic growth. From the second quarter of the year, the measures announced by European authorities and by national governments played a part in curbing volatility in the financial markets and in the slight improvement in the prospects for growth (Chart 1.3).

Monetary policy decisions contributed to these moves (see "Section 2.1 *ECB monetary policy*", in this Report), in particular the Council of the ECB announcement, in early August, of a new programme to buy sovereign debt in the secondary market. Prior to this declaration, there was a statement from the President of the ECB, reinforcing the idea that a solution to the crisis in the euro area would come through greater European integration. He also stated the irreversibility of the euro area and the intention of the ECB, within its mandate, to safeguard the single monetary policy and to preserve the euro.

The maintenance of high risk levels in the financial markets is correlated with the continuation of the sovereign debt crisis in the euro area and the bidirectional interaction between sovereign risk and risk of the banking system. The curbing of such interaction mechanisms is essential to ensure financial stability in the euro area and to guarantee the normalisation of the economies' financing conditions. In this context, the European Council agreed in June 2012 to deepen and accelerate the process of European integration in the financial domain, in particular through the creation of a banking union. Accordingly, the European Commission put forward a proposal for a single body to oversee the euro area banks, with the ECB holding the remit for overall supervision which should be in place in mid-2014, unless it decided a delay for system operation reasons. On March 2013, an agreement was reached between the Council and the European Parliament to set out the regulations governing the role of the ECB in direct

Chart 1.2

UNCERTAINTY LEVEL ASSOCIATED TO ECONOMIC FORECAST

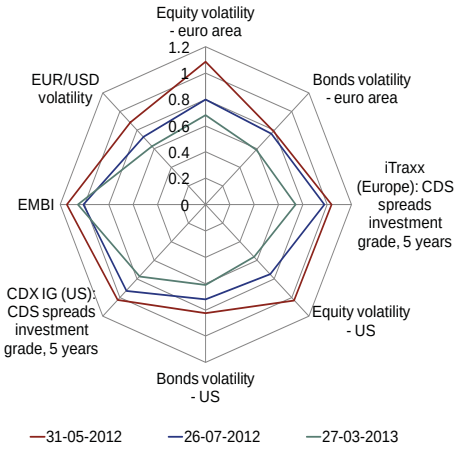


Sources: Consensus Forecast and Banco de Portugal calculations.

Notes: Estimated measure based on the standard deviation of individual forecasts of Consensus Forecast of GDP annual variation rate. A weighted and moving average was used so that the forecast reflects the following 12 months since the publication date.

Chart 1.3

FINANCIAL MARKET RISK INDICATORS



Sources: Bloomberg, Thomson Reuters and Banco de Portugal calculations.

Notes: Ratio of the values of the indicator on the mentioned date to 30 December 2011.

supervision of the most important credit institutions, with national supervisory bodies responsible for the direct supervision of the remaining institutions.[1]

Decline in sovereign debt yields, in the context of easing in the perception of sovereign risk

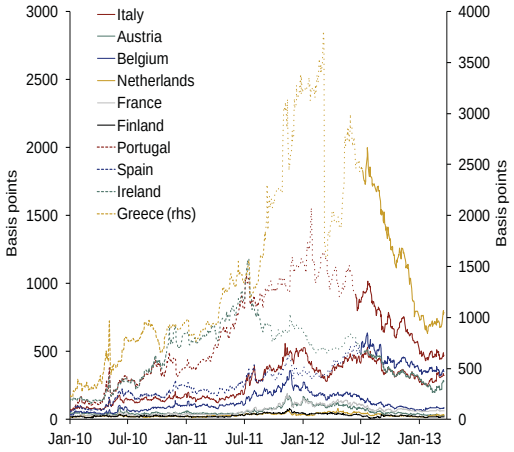
The international financial markets reacted favourably to the European authorities' decisions, and a fall in the sovereign debt yields for those euro area countries most affected by the sovereign debt crisis followed (Chart 1.4). The bond markets were therefore reflecting a fall in the risk perception for these countries, in a reaction to ECB decisions and suggesting greater confidence in these countries being able to reach their budgetary targets. The differential between these rates and those for Germany declined in most of euro area countries.

There is still, however, some uncertainty over the capacity to implement the measures required, both at a European and a national level, along with the smoothing out of instability in a number of European countries, which could trigger negative contagion effects over economic agents' confidence. In 2013, turmoil in the markets returned, following the election results in Italy and the negotiations around the adjustment programme set out for Cyprus. A credible response from European authorities on these issues would contribute to reduce the high level of uncertainty and to the improvement of the prospects for economic growth, even in the short term, easing the adjustment process in Portugal.

1 In order to ensure financial stability, a banking union should also include a European fund to provide a resolution for banks and a common deposit protection scheme. The European resolution mechanism should be proposed by the European Commission after June 2013. As for the deposit guarantee scheme, the guidelines set out by the European Council on 13 and 14 December 2012 point towards a European directive to be put in place at national level. For more details on the composition of a banking union, see "Box 2.1. *The Banking Union*" in the *Economic Bulletin- Autumn 2012*.

Chart 1.4

10-YEAR GOVERNMENT BOND YIELDS | SPREADS AGAINST GERMANY, BASIS POINTS



Source: Thomson Reuters.

Macro-economic adjustments varied across euro area countries

In the context of elevated heterogeneity in the economic performance among advanced economies, the macro-economic conditions in 2012 were particularly adverse for the Portuguese economy and some of its main trading partners. In particular, the slowdown in the euro area, where aggregate GDP and the GDP of several countries declined, inhibited growth in the Portuguese economy. In intra-annual terms, the euro area observed an increasingly higher GDP reduction. Notwithstanding, the easing of international financial markets volatility, after ECB's President speech, and the announcement of monetary policy non-conventional measures had a positive impact through risk reduction.

In spite of the positive moves of last year, confidence among economic agents in the euro area flowed back more slowly than in previous recessions (Charts 1.5 and 1.6). This is in line with the behaviour observed in previous financial and banking crises, where it was typical to see considerable contractions in output and a slower momentum in economic recovery.

In the main destinations for Portuguese exports, Spain, Germany and France, domestic demand faltered. In Spain, the economic contraction was affected by the consolidation process that was in progress and by the unfavourable financial conditions that still held sway. The result was a downswing in domestic demand across the board – public and private consumption and investment. Fiscal results were conditioned by the financial assistance programme for recapitalizing financial institutions, agreed with the Eurogroup on 20 July. In Germany, GDP growth in 2012 slipped somewhat in the wake of a decline in domestic demand, with a particularly negative performance from investment. Net exports had a positive contribution to GDP growth, higher than in the previous year. This result was helped by the decline in imports, reflecting the increase in uncertainty and a decline in confidence among economic agents. Besides more favourable financing conditions in Germany than in other euro area countries (Chart 1.4), Germany was also influenced by the fiscal adjustment, in line with most countries in the euro area (Chart 1.7). In France, GDP stagnated, as a result of a negative contribution from domestic demand.

Chart 1.5

ECONOMIC SENTIMENT INDICATORS

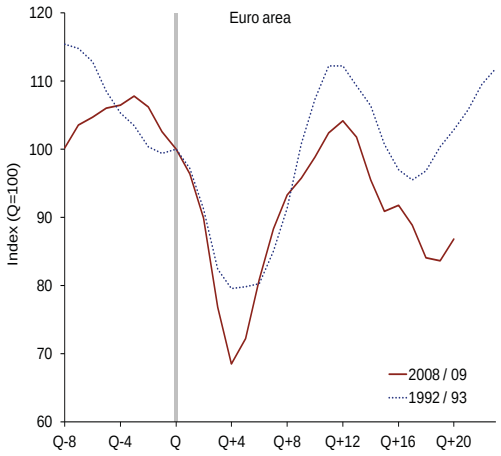
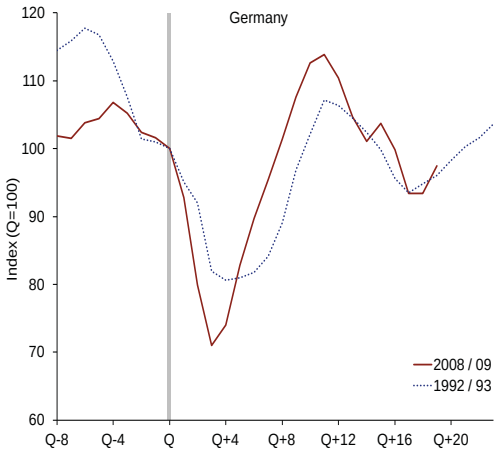


Chart 1.6

ECONOMIC SENTIMENT INDICATORS



Sources: European Commission and Economic Cycle Research Institute (ECRI).

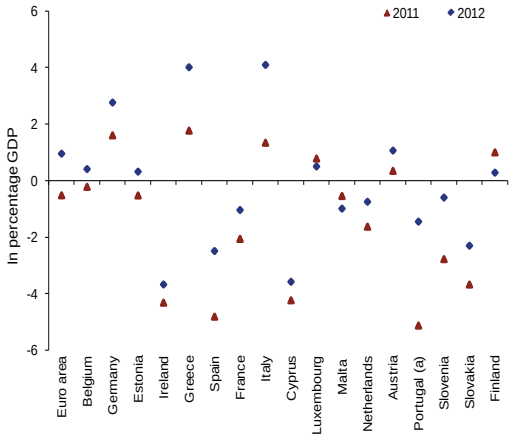
Notes: Q represents the quarter of the previous peak in the beginning of the recession, identified by GDP developments. The peak dates in the chart are 1992 Q1 and 2009 Q2, according to ECRI. The economic sentiment indicator corresponds to the weighted average of consumer, industry, services, construction, and retail confidence indicators.

In terms of fiscal policy, 2012 is marked by close synchronization resulting from the general move to correct accumulated imbalances

In 2012 the structural primary balance of public administrations across the euro area (Chart 1.7) stood at 1.0 per cent of GDP, according to estimates from the European Commission, which is a clear improvement on a year earlier (-0.5 per cent). The improvement in this aggregate stemmed from the highly restrictive budgetary policies put in place by the main euro area economies.

Chart 1.7

STRUCTURAL PRIMARY BALANCE IN THE EURO AREA



Sources: European Commission and Banco de Portugal

Note: (a) For Portugal, it is used the figure calculated by the Banco de Portugal using the Eurosystem methodology and corrected with special factors.

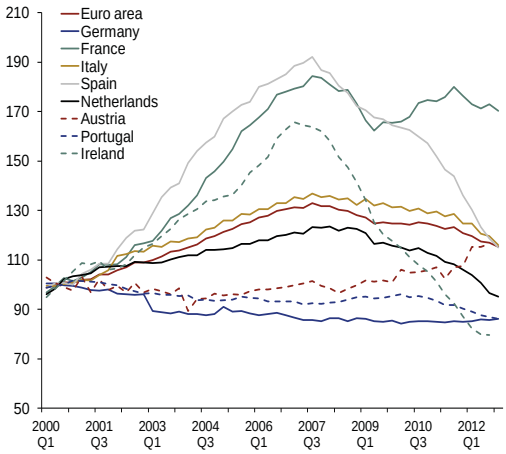
In addition, the first notification on excessive deficit procedures in 2012 indicate that only six countries in the euro area posted deficits below the reference figure of 3 per cent of GDP. The expectations are that restrictive budgetary policies will remain in place across a wide spectrum of euro area countries, bearing in mind that there are currently five member states with a correction deadline in 2013 (Austria, Netherlands, Slovenia, Slovakia and France) and other countries with longer deadlines, among them Spain, Portugal, Ireland and Greece.

This budgetary synchronization in the euro area countries contributed to the general decline of domestic demand across the area. In particular, investment in residential construction remained sluggish, given the on-going corrections in the housing market in a number of euro area countries. Austria was an exception, with house prices up in real terms, along with Germany, though here the move was not so pronounced (Chart 1.8). In the case of the French residential market, a small correction is observed following the strong increases in the last decade. In line with the contraction in economic activity, and in a more meaningful way in those economies conditioned by adjustment processes, there was a substantial rise in the jobless figures. This has become particularly worrying where long-term unemployment is concerned. The unemployment rate in the euro area stood at 11.8 per cent in December 2012 (compared with 10.7 per cent a year earlier), and this is a level that is particularly high in historical terms (Chart 1.9).

In the euro area, the current and capital account balance increased to 1.4 per cent of GDP in 2012, resulting from a differentiated evolution among the countries. The adjustment to correct external imbalances occurred in most countries with current and capital account deficits. In contrast, most of the countries with surpluses reinforced their position, with Germany salient among them. The adjustments needed to correct external imbalances in euro area countries became more urgent for those with an external deficit and where access to markets for financing sovereign debt was costly and difficult. During the year, there was a fall in the disparity between countries in terms of the current and capital account balance, even though the figure remained high (Charts 1.10 and 1.11).

Chart 1.8

REAL HOUSE PRICES | INDEX 2000=100

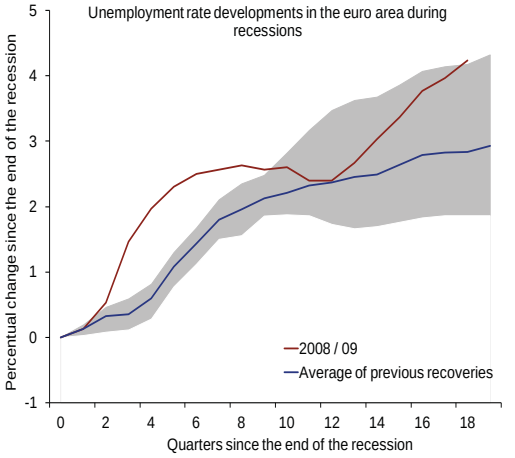


Sources: Eurostat and ECB.

Note: House prices deflated by the consumer price index. Prices in France and in the Netherlands refer to existing dwellings. In the remaining countrises it refers to all dwellings (new and existing). In Germany, data before 2003 is annual.

Chart 1.9

UNEMPLOYMENT RATE

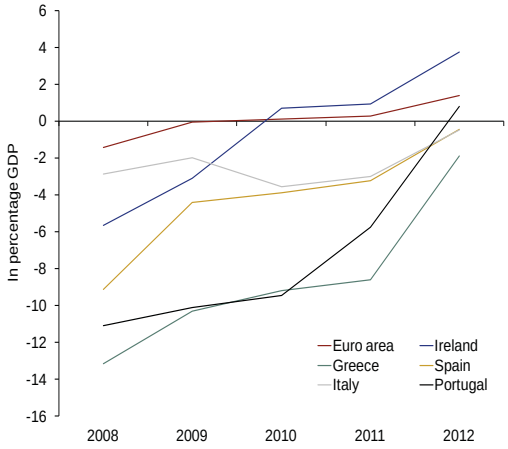


Sources: ECB, ECRI, and Eurostat.

Note: Average, maximum and minimum correspond to the cycles since 1973, excluding the current.

Chart 1.10

CURRENT AND CAPITAL ACCOUNT BALANCE |
EURO AREA COUNTRIES UNDER PRESSURE

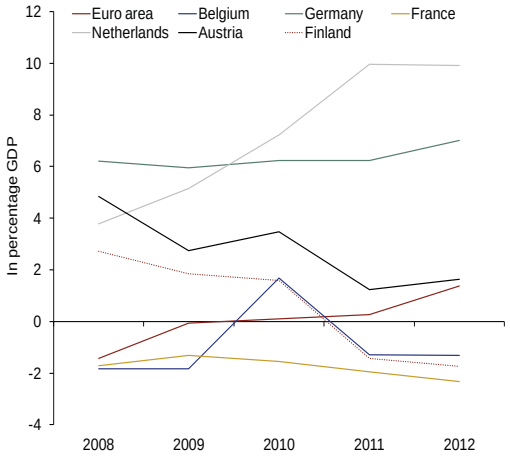


Sources: Eurostat and Banco de Portugal calculations.

Note: For the euro area data only include extra euro area transactions.

Chart 1.11

CURRENT AND CAPITAL ACCOUNT BALANCE |
EURO AREA COUNTRIES WITH HIGH CREDIT RATING



Sources: Eurostat and Banco de Portugal calculations.

Note: For the euro area data only include extra euro area transactions.

In contrast with the recession in the euro area and the slowdown in the United Kingdom, economic growth in the US intensified

In the United Kingdom, the economic slowdown in 2012 resulted, to a large extent, from the negative contribution of net exports, in a context of increased unit labour costs and a decrease in productivity. Domestic demand had a positive performance, in all its components, and an improvement in economic sentiment was observed.

In the United States, economic activity in 2012 recovered in year-on-year terms, bucking the forecast of a slowdown. The recovery resulted from a positive contribution from domestic demand, in particular from private consumption and investment. One of the salient features was the continuing recovery in the housing market, with residential investment pushing up the GDP growth rate. Over the year, in fact, house prices reached levels comparable with 2007. In contrast with these favourable developments were favourable, growth in employment was less than the average growth in recent recessions (Chart 1.12).

The prospects for economic growth in the United States were affected by uncertainty over budgetary policy, in particular in the last quarter of the year, as a number of budgetary stimuli enacted during the financial crisis reached their revocation date. On the last day of the year an agreement was reached allowing for an extension of part of the tax reduction. However, starting in 2013, the automatic triggering of restrictions on public spending and the absence of a medium-term commitment on budgetary consolidation may hamper economic growth. IMF figures point to a budgetary deficit of 8.7 per cent of GDP for 2012 and the gross public debt standing at 107.2 per cent of GDP.

Robust growth in economic activity in emerging market economies

Angola, China and Brazil are among the main countries for Portuguese exports outside of the European Union and the United States. Economic growth in these countries remained high, although with different dynamics. In Angola, according to the IMF, GDP was up by 8.4 per cent for the year (compared with 3.9 per cent in 2011), with the IMF programme for macro-economic adjustment coming to an end during the year. In China, GDP growth slowed from 9.3 per cent to 7.8 per cent year-on-year, but there was

still solid economic growth. In Brazil, in contrast, the economy drifted from 2.7 per cent to 0.9 per cent, at a pace that was greater than the overall picture for Latin America.

Commodity prices are down and world inflation slowed

With the world economy slowing, commodity prices were down in 2012 in annual average terms. This resulted from numerous factors, among them the steeper decline in the prices for non-energy products, visible above all in dollar prices, as a result of the fact that the euro depreciated by around 8 per cent against the US dollar during the year. Commodity prices were still high, however, in historical terms, and only a small correction occurred, following the rises of the previous two years. Prices for energy-related products remained high during the year, distressed by some turbulence on the supply side following the EU embargo on oil imports from Iran and the break in exports from Libya.

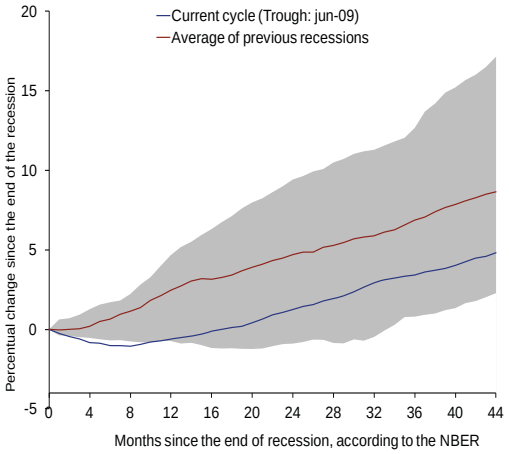
Average annual growth in consumer prices was more moderate than a year before (Chart 1.13). Although there was an overall downward trend in inflation, there is a significant difference in the levels across regions, with relatively higher rates in emerging market economies. In emerging market economies, inflation stood at 6 per cent in average annual terms, down 0.8 percentage points compared to 2011. In advanced economies inflation stood at 1.9 per cent, compared with 2.7 per cent a year earlier. This slowdown was common to most economies. The exceptions to this were some economies in the euro area and the slight rise in Japan, where there were no falls in prices in average terms. In the aggregated euro area, inflation stood at 2.3 per cent in annual average terms.

In the context of volatility reduction, stock market indexes were up on the year, and the euro depreciated in effective nominal terms

Stock market indexes in the main economies were up year-on-year, in particular in Japan and in 2013 in the United States, with monetary authorities announcing expansionist monetary policy measures and government bond purchasing programmes (see "Box 2.1. *Recent changes in monetary policy strategies in the United States, the United Kingdom and Japan*", in this Report). This panorama could suggest that

Chart 1.12

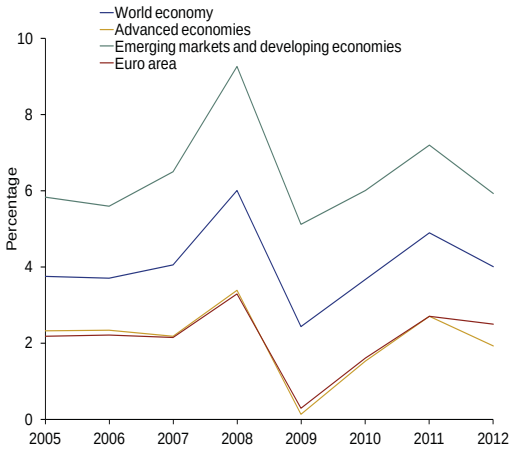
EMPLOYMENT DEVELOPMENTS IN THE UNITED STATES | COMPARISON TO PREVIOUS CYCLES



Sources: National Bureau of Economic Research, Thomson Reuters and Banco de Portugal calculations.
Note: The average, peak and trough correspond to the cycles since 1950, excluding the current cycle.

Chart 1.13

INFLATION



Source: Thomson Reuters.

there will be an increase in demand in those advanced economies where there is a higher return. According to the Morgan Stanley Capital International indexes, stock markets in emerging market economies were up, though to a lower extent than the global aggregate figure. In the euro area, the rise was more clearly visible in countries with a higher credit rating and, on the other side, the fall in the Cyprus index, with the Spanish index falling too, though to a lesser extent. The situation in the latter was exacerbated by the downward move in the banking sector, in spite of the recapitalization of financial institutions agreed under the financial assistance programme. In the foreign exchange market, the euro depreciated against its main trade partners in average annual terms. The result was a depreciation in effective nominal terms. In end-of-period data, between the end of 2011 and the end of 2012 the euro appreciated marginally against the dollar and the effective nominal depreciation was very slight.

BOX 1.1 | RECENT CHANGES IN MONETARY POLICY STRATEGY IN THE UNITED STATES, THE UNITED KINGDOM AND JAPAN

The international financial crisis, in particular after the bankruptcy of Lehman Brothers in September 2008, triggered cuts in the official interest rates of the main central banks to levels close to zero and led to an increasing deployment of unconventional monetary policy measures over the last five years. These measures, allied with the significant changes to the operational framework of some of the main central banks in 2012 and early 2013, represent a substantive change in the monetary policy strategy of the main advanced economies.

One first set of changes is related to the modification of the quantitative definition of price stability and to some increased flexibility in the relevant time horizon for monetary policy. In this context, it is worth mentioning the specification by the US Federal Reserve of a 2 per cent goal for inflation in the long-run and of an estimate in the range of 5.2 and 6 per cent for the long-run unemployment rate (Table1)[1]. In turn, the Bank of Japan introduced an explicit target of 2 per cent for inflation, replacing the previous goal of 1 per cent.[2] Where the Bank of England is concerned, the most recent remit for the Monetary Policy Committee confirmed the 2 per cent inflation target, reflecting the primacy of price stability over the government's goals for growth and employment.[3] However, regarding the relevant horizon for pursuing the main objective, it is explicitly recognized in the Bank of England's remit that inflation might depart temporarily from the target due to shocks with repercussions persisting over some time. In these cases, the reduction of the inflation deviation from the target should take into account the potential risks for macroeconomic and financial stability.

A second set of changes relates to monetary policy instruments, given the low level of official interest rates – traditionally deemed a sufficient instrument for the achievement of the monetary policy objective. Official rates near the lower bound do not necessarily mean that monetary policy becomes ineffective. Some central banks have sought to steer agents' expectations regarding the path of interest rates by using a longer-term perspective when communicating about the monetary policy stance (forward guidance). That is the case of the US Federal Reserve, which in December 2008 started by announcing that the low level of official interest rates would be held for an extended period of time, and subsequently, for a specific time horizon. In December 2012, the Federal Reserve went a little further and made future monetary policy conditional on the state of the economy. It announced that the low level of interest rate would remain adequate at least as long as the unemployment rate remained above 6.5 per cent, provided that projected inflation over 1 to 2 years did not exceed 2.5 per cent and that longer-term inflation expectations remained anchored.[4] This type of communication strategy is currently under study in the Bank of England, as required by the recent remit issued by the government, and the results of the assessment should be presented in August 2013.

The low level of interest rate also implied that unconventional liquidity provision measures gained increased relevance as instruments of monetary policy. In this context, 2012 was marked by the adoption of a series of new measures, such as the Bank of England's Funding for Lending Scheme, a new asset purchase programme by the Federal Reserve and the Bank of Japan's Stimulating Bank Lending Facility (Table 1).[5] More recently, in April 2013, the Bank of Japan announced a change in the operational

1 For more information, see the *FOMC statement of longer-run goals and policy strategy*, 25 January 2012.

2 For more information, see *Introduction of the Price Stability Target*, 22 January 2013.

3 The Bank of England Monetary Policy Committee's remit is restated annually by the United Kingdom's government. For more information, see *Remit for the Monetary Policy Committee*, 20 March 2013.

4 For more information, see *Federal Reserve Issues FOMC Statement*, 12 December 2012.

5 The ECB announced the outright monetary transactions programme for short-term public debt securities (OMT). For a more detailed description of these measures, see "Box 1.2 *Non-standard Monetary Policy in major advanced economies*", Banco de Portugal, *Economic Bulletin - Autumn 2012*.

target of monetary policy, with the official interest rate being replaced by the monetary base (currency in circulation and deposits held at the central bank), which will be doubled over the next two years. The Bank of Japan also announced a massive asset purchase programme, including long-term public debt[6], and that all the measures adopted will be maintained for as long as necessary to attain the 2 per cent inflation target.

Table 1

MONETARY POLICY STRATEGY IN THE UNITED STATES, THE UNITED KINGDOM AND JAPAN

Monetary authority	Federal Reserve	Bank of England	Bank of Japan
Legal mandate	To promote the goals of maximum employment, stable prices and moderate long-term interest rates	To maintain price stability, and subject to that, to support the government's objectives for growth and employment	To achieve price stability, thereby contributing to the sound development of the national economy
Quantified objective	Long-run inflation goal = 2% There is no fixed goal for maximum employment but the longer-run normal rate of unemployment is estimated to stand between 5.2% and 6%	Annual inflation rate = 2%, at all times	Inflation target = 2%, at the earliest possible time with a time horizon of about 2 years
Inflation measure	Annual change of the private consumption deflator	Annual change of the Consumer Price Index (CPI)	Year-on-year change of the CPI
Official interest rate	Federal funds rate	Bank rate	Uncollateralized overnight call rate
Current level	0% - 0.25%	0.5%	0% - 0.10%
Last change	-(75-100) b.p. (Dec-08)	-50 p.b. (Mar-09)	-(0-10) b.p. (Oct-10)
Recent peak	5.25% (Jun-06)	5.75% (Jul-07)	0.5% (Feb-07)
Main unconventional measures currently in place	Asset purchase programme, mainly agency mortgage-backed securities, at a pace of 40 billion USD per month, to be maintained until there is a substantial improvement in the labour market (from Sep-12).	Asset purchase programme, mostly government debt or gilts in a total amount of 325 billion GBP (from Mar-09).	Asset purchase programme (from May-10) replaced by Quantitative and Qualitative Monetary Easing which includes doubling the monetary base in the next two years at a annual pace of 60-70 trillion JPY and the purchase of long-term government bonds, exchange-traded funds and real estate investment trusts (from Apr-13)
	Use of communication to guide economic agents' expectations of the future policy rate (forward guidance).	Funding for Lending Scheme, launched with the UK Treasury, aimed at stimulating bank lending to the economy. The scheme provides funding for banks for an extended period at below market costs (Jul-12 to Jan-14).	Loan support programme: includes the Growth-Supporting Funding Facility, that provides 1 to 4 years loans to financial institutions for investment or lending with the aim of at strengthening the Japanese economy (May-10) and the Stimulating Bank Lending Facility that provides long-term funds at a low interest rate to financial institutions with aim of promoting credit to the real economy (Oct-12).
Central bank's balance sheet - total assets			
Jun-07	6% of GDP	6% of GDP	19% of GDP
Dec-12	18% of GDP	27% of GDP	34% of GDP
Change between Jun-07 and Dec-12	230%	400%	60%

Sources: Bank of England, Bank of Japan, US Federal Reserve and Banco de Portugal.

6 The average maturity of public debt securities on the balance sheet of the central bank is likely to increase from 3 years to nearly 7 years. For more information, see *Introduction of the Quantitative and Qualitative Monetary Easing*, 4 April 2013.

2. ECB monetary policy and monetary and financial conditions in the Portuguese economy

2.1. ECB monetary policy

In the context of low and anchored inflation expectations, economic slowdown and weak performance of monetary aggregates and credit in the euro area, the ECB maintained the accommodative monetary policy stance of the Eurosystem during the year, through its conventional instruments. In parallel, in order to ensure adequate transmission of monetary policy to euro area economy, in a context of instability and fragility of financial markets, the ECB adopted a wide variety of non-conventional monetary policy measures, of temporary nature.

In respect of conventional measures, the Governing Council of the ECB decided, in July 2012, to reduce by 25 basis points its monetary policy interest rates: the interest rate for main financing operations fell to 0.75 per cent and interest rates for marginal deposit facilities and for lending facilities were reduced to 0 per cent and 1.5 per cent, respectively. This decision consolidated the historically low level for the official interest rates and was justified in the context of lesser inflationary pressures on the relevant time horizon for monetary policy, and of risks for economic growth in the euro area. Within this framework, the expectations for inflation were firmly anchored throughout the year, and in line with the price stability aim, *i.e.* maintaining inflation rates, measured by the Harmonized Index of Consumer Prices (HICP), below, but close to, 2% over the medium term. During 2012, the year-on-year HICP change rate fell from 2.7 per cent in January to 2.2 per cent in December, and this trend extended into the first months of 2013. The persistence of annual inflation figures above 2 per cent derived from the dynamics of energy prices, the depreciation of the euro and by increases in administrative prices and indirect taxes in some euro area countries as part of their budgetary consolidation processes.

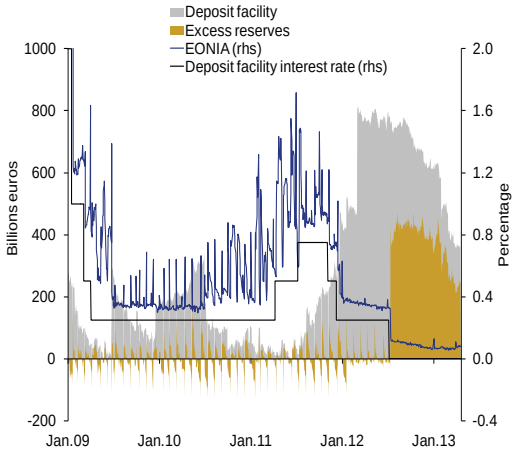
In 2012, there was a persistently high level of bank refinancing through the ECB

In respect of non-conventional measures, the ECB decided, in December 2012, that the main refinancing operations (MRO) would continue to work through fixed-rate auctions with total placement of demand as long as this was necessary and at least until the end of July 2013. In relation to longer-term refinancing operations (LTRO), the interest rate will be the average of the rates for MROs prevailing at the time. Still in what concerns non-conventional measures, on 29 February 2012 the second 3-year maturity liquidity providing operation took place. This was two months after the first and demand high. In the context of elevated recourse to the ECB refinancing of the financial system, liquidity condition were very accomodation and therefore contributed to the convergence of the EONIA interest rate to the marginal lending facility interest rate (Chart 2.1.1). This lending with 3-year maturity carried the option of early repayment after 12 months; for the December operation, this option was exercised since end of January 2013, while for the February operation, the reimbursement possibility started in the end of February 2013. As a result, there was a slight decrease on the outstanding amounts in these operations (Chart 2.1.3).

Eurosystem refinancing remained high, in particular for banks in those countries most impacted by the sovereign debt crisis, although some reduction is observed since mid 2013. On the other hand, interest rates in the money market fell substantially, leading to a narrower differential between non-collateralized (Euribor) and collateralized (Eurepo), rates, more clearly visible in longer-term operations (Chart 2.1.4). This situation suggests that money market conditions are returning to normal, since it reveals a lower perception of risk implicit in unsecured operations. However, the euro money market survey conducted by the ECB showed that the turnover in the unsecured market continued to fall in 2012 and a large

Chart 2.1.1

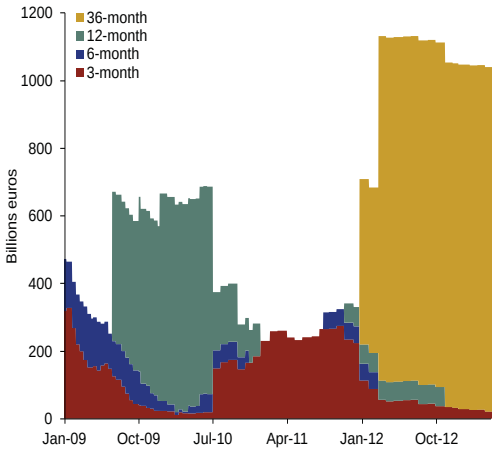
RECOURSE TO EUROSYSTEM OPERATIONS AND INTEREST RATES



Source: ECB.

Chart 2.1.2

RECOURSE TO LONG TERM REFINANCING OPERATIONS

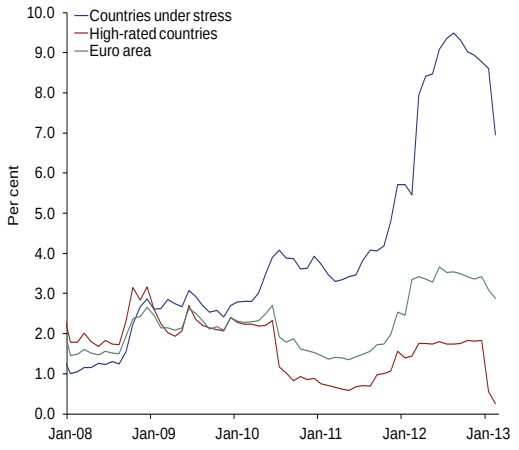


Source: ECB.

majority of the credit institutions surveyed consider that this market is not efficient or is only limitedly efficient. In relation to the secured market, those taking part in the ECB survey consider that the level of efficiency deteriorated, though most believe that this market is at least sufficiently efficient.

Chart 2.1.3

RECOURSE TO REGULAR EUROSYSTEM OPERATIONS | AS A PERCENTAGE OF BANKING SYSTEM ASSETS

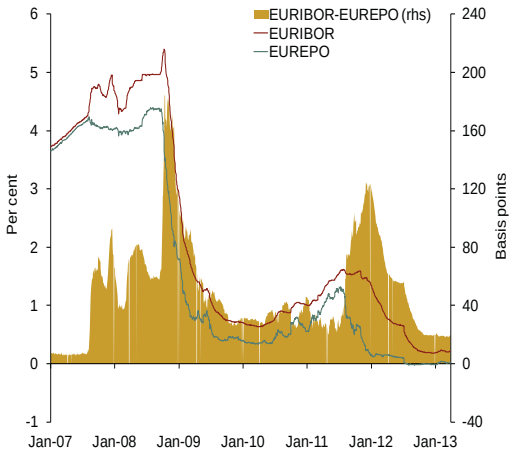


Sources: ECB, Euro Crisis Monitor – Osnabrück University and Banco de Portugal calculations.

Notes: High-rated countries: Austria, Belgium, Germany, France, Finland, the Netherlands. Countries under pressure: Spain, Portugal, Italy, Greece, Ireland.

Chart 2.1.4

3-MONTH MONEY MARKET INTEREST RATES | SPREAD BETWEEN UNCOLLATERALISED AND COLLATERALISED OPERATIONS



Source: ECB.

The ECB adopted additional non-conventional measures, salient among them being the Outright Monetary Transactions, with a view to improving financing conditions in the interbank market and in the real economy

To ensure an adequate transmission of monetary policy and its uniformity across the euro area, the ECB approved new non-conventional measures in 2012, in particular a programme of outright monetary transactions in the secondary market for public debt (Outright Monetary Transactions). It is condition for accessing OMT that governments fulfil their macro-economic commitments as part of an economic and financial assistance programme, within the scope of the European Financial Stability Facility (EFSF) or of the European Stability Mechanism (ESM). No limits were fixed for the amounts in the transactions, though these should focus primarily on sovereign debt with residual maturity of between 1 and 3 years. In addition, in the context of these transactions, the Eurosystem agreed to receive the same treatment as other creditors in the case of a credit event. As a final point, the liquidity generated by these operations would be totally sterilised, in line with the earlier debt purchase programme, the Securities Market Programme. The Outright Monetary Transaction's programme was not activated in 2012, but its announcement had a strong stabilizing effect in the financial markets, contributing essentially for the narrowing of yield spreads of sovereign debt of the countries under pressure against countries with high credit rating.

The Governing Council of the ECB took a number of actions during 2012 (in February, July and September) relating to the increase of the availability of assets as guarantee for refinancing operations, in line with decisions adopted in the previous year. In particular, it decided: (i) to accept a wider scope of banking loans with eligible criteria defined by National Central Banks; ii) to reduce the downward limit of credit rating acceptable for certain asset backed securities (ABS); iii) to suspend the downward limit of the credit rating for marketable debt instruments, eligible or guaranteed by governments of eligible countries to the OMT or that are under an assistance programme of the European Union (EU) and the IMF and that fulfil the associated conditionality, under the approvement of the ECB Governing Council;[1] iv) to accept as eligible assets marketable debt instruments denominated in foreign currency (USD, GBP and JPY), as long as issued and held in the euro area and that fulfil additional eligible criteria, in line with the decisions of October 2008 and December 2010.

In spite of the new measures announced, loans to the non-monetary private sector fell substantially in 2012

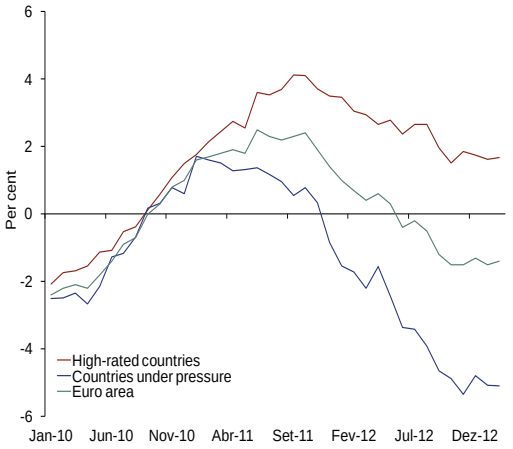
Loans to the non-monetary private sector in the euro area slowed in 2012, reflecting a fall in loans to non-financial corporations and an easing of loans to households. This pattern was common to most euro area countries, though there was heterogeneity regarding access to financing, resulting of different conditions in both the supply and the demand for credit. In fact, while in those countries with high credit rating there was an easing of the annual rate of growth of loans, in those countries under pressure there was a major contraction in loans, both to non-financial enterprises and to households (Chart 2.1.5 and Chart 2.1.6).

This heterogeneity is also visible in bank loans' interest rates. While interest rates for bank loans from banks were lower across the euro area in general terms, the fall was much steeper in countries with high credit rating. As a result, there was a rise during the year in the differential between the interest rates in countries under pressure and those with high credit rating. An analysis of this differential suggests that there are highly specific conditions in the countries under pressure, but also disturbances in the transmission mechanism of monetary policy (see "Box 2.1 *Differences in monetary policy transmission between euro area countries*", of this Report).

1 To be noted that debt instruments issued or guaranteed by the Portuguese government are already excused of the credit rating limit, by a specific decision of the ECB Council on July 2011.

Chart 2.1.5

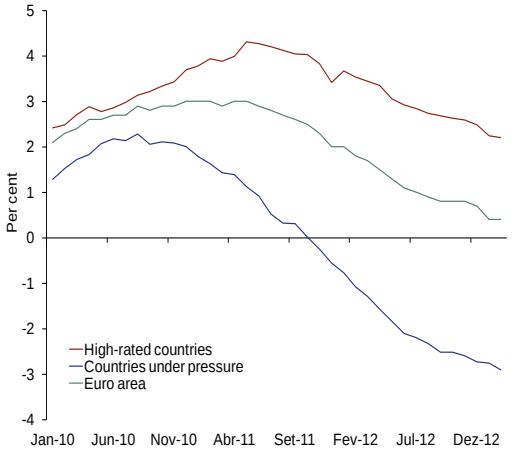
ANNUAL GROWTH OF LOANS TO NON-FINANCIAL CORPORATIONS



Sources: ECB and Banco de Portugal calculations.
Notes: High-rated countries: Austria, Belgium, Germany, France, Finland, the Netherlands. Countries under pressure: Spain, Portugal, Italy, Greece, Ireland.

Chart 2.1.6

ANNUAL GROWTH OF LOANS TO HOUSEHOLDS



Sources: ECB and Banco de Portugal calculations.
Notes: High-rated countries: Austria, Belgium, Germany, France, Finland, the Netherlands. Countries under pressure: Spain, Portugal, Italy, Greece, Ireland.

2.2 Monetary and financial conditions of the Portuguese economy

Significant fall in country risk premium throughout 2012

Risk premiums regarding Portuguese debt issuers dropped significantly in 2012 (Chart 2.2.1). A number of interrelated factors played a part in this improvement.

The ECB implementation of a set of non-conventional monetary policy measures translated into an improvement in Portuguese banks access to liquidity and a decrease in redenomination risk in the euro area. In particular, the announcement of an Outright Monetary Transaction programme had the immediate effect of easing conditions in the sovereign debt markets of the euro area (see "Section 2.1 *ECB monetary policy*", of this report).

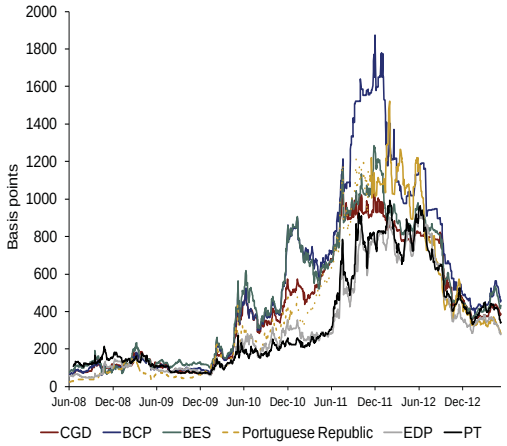
The capitalization of the banking system carried out in 2012 made it possible to improve banks' liquidity and, mostly, to strengthen the solvency of the sector (Charts 2.2.2 and 2.2.3). The capital increases that took place in the banking sector were very important to increase banks' resilience to negative shocks, especially in the current context of structural adjustments to the economy.

Additionally, the fiscal consolidation process in Portugal seems likely to be contributing to improve investors' risk perception over Portuguese issuers.

The combined effect of these factors enabled some banks to return to medium and long-term debt markets in the last quarter of 2012 and in the first quarter of 2013, a point that is particularly relevant given the current context of segmentation in euro area financial markets and the need to reduce potential restrictions on the supply of credit resulting from liquidity constraints. Simultaneously, the State has been also able to issue medium-long term debt for the first time since the beginning of the Economic and Financial Assistance Programme. In October 2012, the State carried out a swap operation to exchange public debt payable in 2013 for debt due in 2015 and, in January 2013, the State was able to issue five year bonds. Recently, the State was able to issue ten year bonds. The latter two operations were especially important given the high demand from international investors.

Chart 2.2.1

CREDIT DEFAULT SWAP SPREADS OF PORTUGUESE ISSUERS (5 YEARS SENIOR)



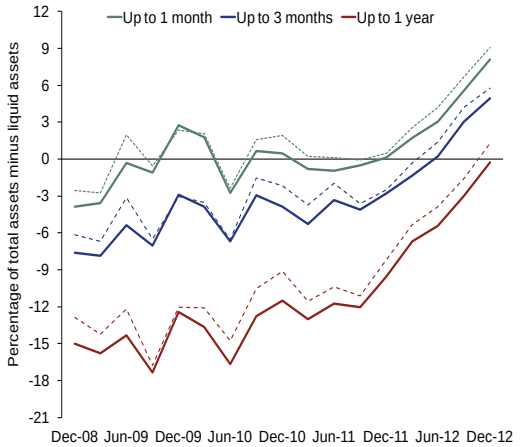
Source: *Thomson Reuters*.
Note: Last observation: 9 may 2013.

The banks continued to adjust their balance sheets through large capital increases and a cut in customer credit

Portuguese banks pursued in 2012 their balance sheets adjustment process, in order to reach a funding structure more resilient to adverse shocks and less sensitive to changes in international investors' risk perception. The year therefore saw a number of capital increase operations, which together with the underwriting of contingent capital by the State in a number of banks, enabled the banking system to increase its Core Tier 1 ratio from 9.6 per cent in December 2011 to 11.5 per cent at the end of 2012.

Chart 2.2.2

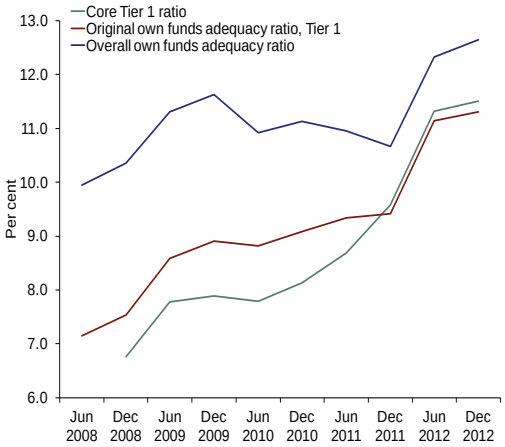
LIQUIDITY GAPS OF THE BANKING SYSTEM IN CUMULATIVE MATURITY LADDERS



Source: Banco de Portugal.
Notes: The liquidity gap is defined as (Liquid Assets – Volatile Liabilities)/(Assets – Liquid Assets) x 100 for each cumulative ladder of residual maturity. Information obtained under the report set by Instruction no. 13/2009 of Banco de Portugal, on a consolidated basis. The dashed lines show domestic institutions. Last observation: December 2012.

Chart 2.2.3

OWN FUNDS ADEQUACY OF THE PORTUGUESE BANKING SYSTEM



Source: Banco de Portugal.
Notes: The series presented exclude BPN and BPP. It should be noted that BPP was liquidated in April 2010, after which it ceased to be included in the universe of banking institutions.

Given the amounts involved, these operations had a considerable impact, both in terms of solvency and liquidity.

The average credit-to-deposits ratio in the eight main banking groups stood at around 120 per cent at the end of 2012, representing a fall of nearly 40 percentage points (p.p.) compared with the peak in June 2010, and approximately 10 p.p. compared with December 2011. The decrease in this ratio was accomplished, however, in a different manner than the one occurred in 2011. While in 2011, there was a major contribution from customer deposits, in 2012 the fall in the credit-to-deposits ratio occurred mostly through a significant cut in credit to customers, since households' deposits tended to stabilize over the year (Chart 2.2.4).[2] It is worth noting that in 2011, the big increase in households' deposits was associated with portfolio rebalancing, by which bank deposits replaced units held in investment funds, instruments issued by insurers and public debt. As expected, the effect of this move on the deposits growth rate tended to ebb as the year progressed. In addition, in 2012, some banks restarted bond issues for placement with customers, and a number of non-financial corporations issued considerable volumes of bonds for banks to place with their retail customers. Both these factors played a part in slowing the growth of households' deposits.

The reduction in bank credit, along with the relative resilience of customer funds, made it possible to offset the drop in financing from other credit institutions, either in the form of loans or securities, helping in this way to bring about a situation where there was no increase, taking the year as a whole, in domestic banks recourse to funding through central banks.

Financing conditions for the non-financial private sector improved slightly but steadily, with interest rates decreasing and credit standards becoming slightly less restrictive

Over the year, there was a downward move in loans interest rates on new operations and outstanding amounts, both for non-financial corporations (Chart 2.2.5) and households' mortgages, in line with euro area average. This decrease was particularly steep in the case of non-financial corporations (new loans) and households (new loans and outstanding amounts). Interest rates in these cases decreased approximately 1 p.p.. The biggest decline in mortgage rates (outstanding amounts), typically with longer maturities, as compared with the interest rates on loans to non-financial corporations (outstanding amounts), is mainly justified by the greater weight that loans granted before the current financial crisis, usually with lower spreads, have in this type of loans. This situation has been very important in monetary policy transmission by reducing households' mortgage payments.[3]

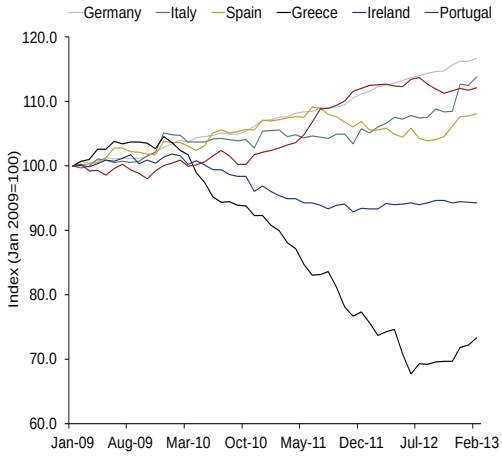
The downward trend for interest rates on loans over the year was due to two factors. On the one hand, there was a big fall in Euribor rates, which reached all-time lows, very close to zero. On the other hand, there was a stabilization of spreads for new loans, following three years of widening rates. This fact is particularly relevant given that the increase in spreads over the last years can be justified in part by changes in financial markets' risk perception, which contributed to a non-uniform transmission of monetary policy (see "Box 2.1 *Differences in monetary policy transmission between euro area countries*", of this Report). Improvements in markets risk perception regarding the State and the banks are thus starting

2 In contrast to households' deposits, deposits by non-financial corporations fell considerably in 2012. This decrease is however, in part, justified by the relocation of deposits from corporations previously located in Madeira offshore. Disregarding this effect, and after a decrease in the first semester, there was a stabilization of non-financial corporations deposits in the second half of the year. Moreover, there was a fall throughout the year in deposits at more than 2 years made by non-monetary financial institutions. This move was not, however, a sign that there had been an effective fall in deposits, since the item merely corresponds to the offsetting of credit securitization in accounting terms. With the change in the regime governing eligible assets for guarantee in Eurosystem monetary policy operations, the banks to a large extent unwound their credit securitization operations, leading to a reduction in the associated accounting offset figure.

3 See "Box 4.1 *The impact of money market interest rates on Portuguese households' disposable income*", Banco de Portugal, *Economic Bulletin – Autumn 2012*.

Chart 2.2.4

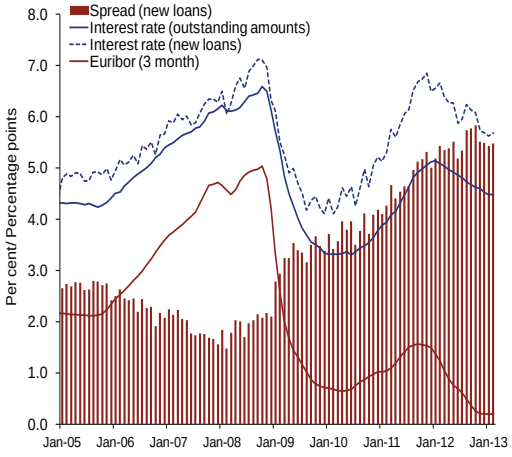
HOUSEHOLDS' DEPOSITS IN THE EURO AREA



Source: ECB.
Note: Last observation: February 2013.

Chart 2.2.5

INTEREST RATE ON BANK LOANS TO NON-FINANCIAL CORPORATIONS



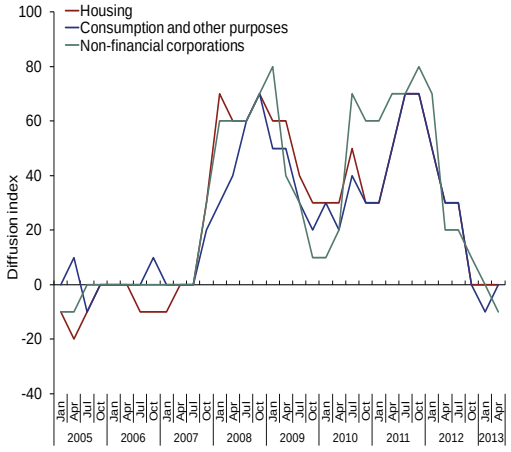
Source: Banco de Portugal.
Notes: The spread is calculated as the difference between the observed interest rate and the 3-month moving average of the 3-month Euribor. Last observation: February 2013.

to have impact on credit supply conditions relatively to the non-financial private sector, though this are still small. This conclusion is also supported by the most recent bank lending surveys, which pointed to a progressive stabilization in credit standards over the year. In this regard, it is worth noting that in the last quarter of 2012 (in the case of consumer loans) and in the first quarter of 2013 (in the case of loans to non-financial corporations) there was for the first time since 2007 a softening, albeit slight, of credit standards (Chart 2.2.6).

Banks continued to distinguish non-financial corporations through the price of credit according to

Chart 2.2.6

BANK LENDING SURVEY | CREDIT SUPPLY



Source: Banco de Portugal.
Notes: The diffusion index aggregates all answers from the banks inquired on the bank lending survey according with their intensity and direction. The diffusion index takes values between -100 and 100. As regards questions on credit supply, index values below 0 indicate less demanding credit standards, while values above 0 indicate tighter credit standards.

their level of risk. An analysis of the distribution of interest rates for new loans to private non-financial corporations shows that though the mode has not changed, the portion of credit granted with lower (higher) rates was up (down) in December 2012 when compared with December 2011 (Chart 2.2.7). In addition, and in contrast to what can be seen in other countries going through an adjustment process, there were no significant changes over the year in the interest rate differential between small and large loans to non-financial corporations (Chart 2.2.8). This evidence, together with the available information on moves in bank loans for non-financial corporations, points to the conclusion that any additional differentiation regarding firms with higher credit risk has been made through the amount of credit on offer.

Interest rates on loans to non-financial corporations remained, however, clearly above the euro area average

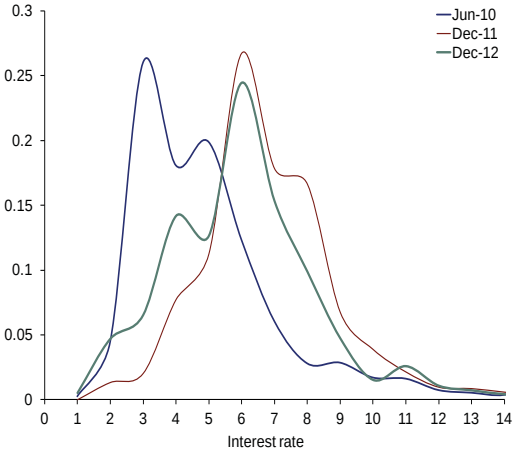
In spite of the downwards trend observed, interest rates on loans to non-financial corporations remained significantly above euro area average throughout 2012. This divergence is observed both on outstanding amounts (the interest rate differential against the euro area average is 1.4 p.p. above the value observed in year-end 2009 – a point when the effects of the sovereign debt crisis in the euro area were not in the spotlight) and on new loans (the interest rate differential against the euro area average increased 1.7 p.p. in the same period).

There appear to be three factors explaining the high level of interest rates on loans to non-financial corporations, as compared to the euro area average. These factors have been combined with distortions in the transmission of monetary policy in the euro area (see "Box 2.1 *Differences in monetary policy transmission between euro area countries*", of this Report).

In the first place, the adjustment under way in the Portuguese economy, with considerable consequences for economic activity and firms' financial position, is leading to a fall in credit quality and to a substantial increase in banks' risk perception, against the backdrop of persisting sovereign debt crises in the euro area (Chart 2.2.9).

Chart 2.2.7

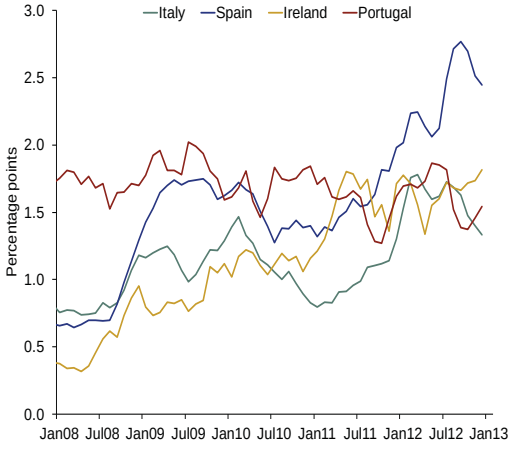
INTEREST RATE DISTRIBUTION ON NEW LOANS TO PRIVATE NON-FINANCIAL CORPORATIONS



Source: Banco de Portugal.
Note: Histogram of interest rates on new loans to private non-financial corporations using the amount of loans granted as weight.

Chart 2.2.8

INTEREST RATE DIFFERENTIAL BETWEEN SMALL AND LARGE EXPOSURES (NEW LOANS)



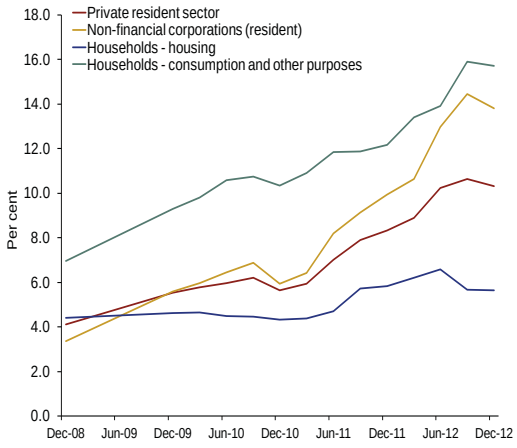
Source: ECB.
Notes: Small exposures correspond to loans with less than 1 million euros and large exposures correspond to loans with more than 1 million euros. Note that the interest rate level is strongly affected by several factors, notably, loans maturity.

In the second place, the balance sheet of Portuguese banks continued to be impacted by the effects of past operations, both on the asset and liability side of the balance sheet, which contributed to high funding costs as compared to the return on interest generating assets (see "Box 2.2 *Margins in bank interest rates: Portugal within the euro area*", of this Report). On the liability side, interest paid by banks on deposits remained high as result of the fierce competition for deposits that took place in 2011 and the greater weight of long term deposits. Interest rates for new deposits have, however, been converging to the euro area average, which should be due to ECB measures and Banco de Portugal imposition of a penalty, in terms of capital ratio, on deposits with excessive interest rates.[4] For some banks, the high cost of capitalization through the use of public funds is also weighing on their funding costs. Simultaneously, on the asset side, banks have had difficulties repricing their credit portfolios given the large weight of households' mortgages granted before the current financial crisis, whose interest rates are below current funding cost, and thus contribute negatively to banks' net interest margin. The high spread on new loans to non-financial corporations, typically with shorter maturities, should be thus contributing to mitigate the low return on other bank assets, in particular, mortgage loans.

Lastly, there are signs of changes in the way that the credit market for non-financial corporations works. In this regard, non-domestic banks have been cutting loans to non-financial corporations since the third quarter of 2011 at a significantly higher pace than domestic banks (Chart 2.2.10). In addition, and

Chart 2.2.9

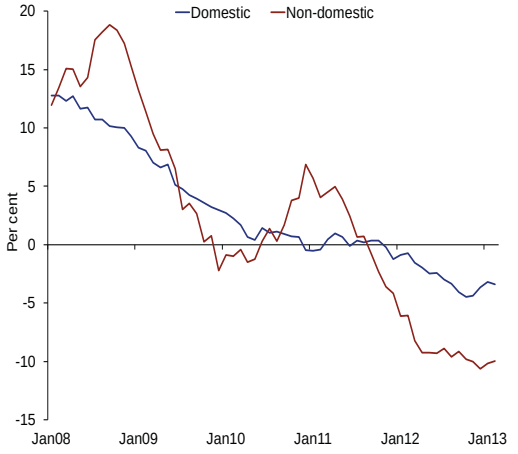
NON-PERFORMING LOANS RATIO



Source: Banco de Portugal.
Notes: The non-performing loans ratio encloses there elements, the amount owed on credit with instalments of capital or interest overdue for a period of 90 days or more, the overdue amount of restructured credit with certain characteristics not included in the preceding item and, lastly, the amount of credit with instalments of capital or interest overdue for a period of 90 days or more, but in relation to which there is evidence which justifies its classification as non-performing credit, namely a debtor's bankruptcy or liquidation.

Chart 2.2.10

LOANS TO NON-FINANCIAL CORPORATIONS GRANTED BY RESIDENT DOMESTIC AND NON-DOMESTIC BANKS | ANNUAL RATE OF CHANGE



Source: Banco de Portugal.
Notes: Annual growth rates are obtained from the relation between outstanding amounts of loans granted, adjusted for securitization operations and monthly transactions, which are calculated using the outstanding amounts corrected of reclassifications, write-offs/write-downs, exchange rate changes and price revaluations. Whenever relevant, the figures are additionally adjusted for credit portfolio sales. Last observation: February 2013.

4 In order to ensure stability in the Portuguese financial system, Banco de Portugal imposed a deduction on the Core Tier 1 ratio at the end of 2011, using as a base the amount of deposits contracted at interest rates of more than 300 base points above the Euribor rate relevant for the period of the operation (Banco de Portugal Instruction no 28/2011). This prudential measure had a considerable impact on the highest deposit rates on offer by banks and on the overall volume of deposits with rates above the thresholds set out. This regime was buttressed in the second quarter of 2012, including, among other things, the doubling of previous regulatory capital requirements and a bigger penalty on short-term and less stable deposits (Banco de Portugal Instruction no 15/2012).

following a substantial rise between 2009 and 2011, the average number of banking relations has been falling since the first quarter of 2011, but even so it is above the figure recorded in 2009. These changes could well have an impact on the cost of financing of a number of firms through a potential reduction in their bargaining power with banks.

In a context of a major contraction in economic activity, total credit to non-financial corporations was only slightly down, though showing a high level of heterogeneity depending on firm size and sector of activity

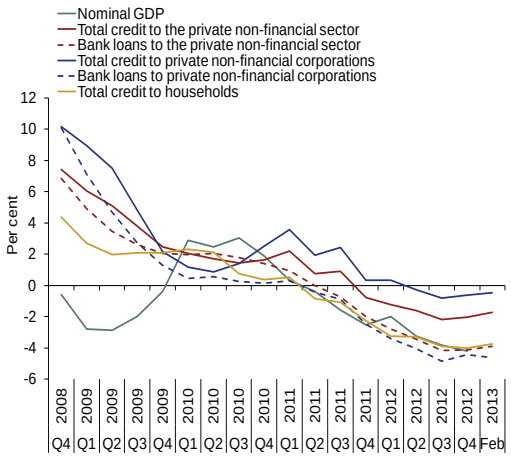
A thorough analysis of credit granted to the non-financial private sector requires a study of all sources of debt. This includes not only loans granted by resident financial institutions, but also loans from non--residents, debt issues (held by residents and non-residents), trade credit (from residents and non-residents), loans from households and, in the case of state owned corporations (not consolidating in the general government), loans from the State. By grouping all these sources, total credit becomes equivalent to total debt, with the advantage of allowing one to analyse changes in funding sources.

Total credit to the non-financial private sector (Chart 2.2.11) slid gradually down over 2012 (the annual variation being -2.0 per cent in December 2012). This slide was mainly due to a considerable drop in total credit to households (-4.0 per cent), with total credit to non-financial corporations down by a far smaller extent (-0.6 per cent). The fall in credit to non-financial corporations was seen as much in private corporations as in state owned corporations (not consolidating in the general government) (Chart 2.2.12), although the composition differed. In the case of private corporations there was a fall in bank financing, which was replaced to a certain degree by credit from non-residents, while the opposite was true in state owned corporations. In early 2013, it was observed a strong acceleration in total credit to state owned corporations, which was not observed in the case of private corporations.

Although total credit to non-financial corporations was only slightly down in 2012, there is a diversity of situations, depending on firm size and sector of activity (Table 2.2.1). Large private corporations operating internationally or making part of an international group were likely to find alternatives to domestic banking credit, such as credit from non-residents and the issue of securities to be placed by banks with their retail customers. Access to these sources meant that the adverse economic circumstances did not prevent total credit from posting a substantial rise during the year. On the other hand, micro and small

Chart 2.2.11

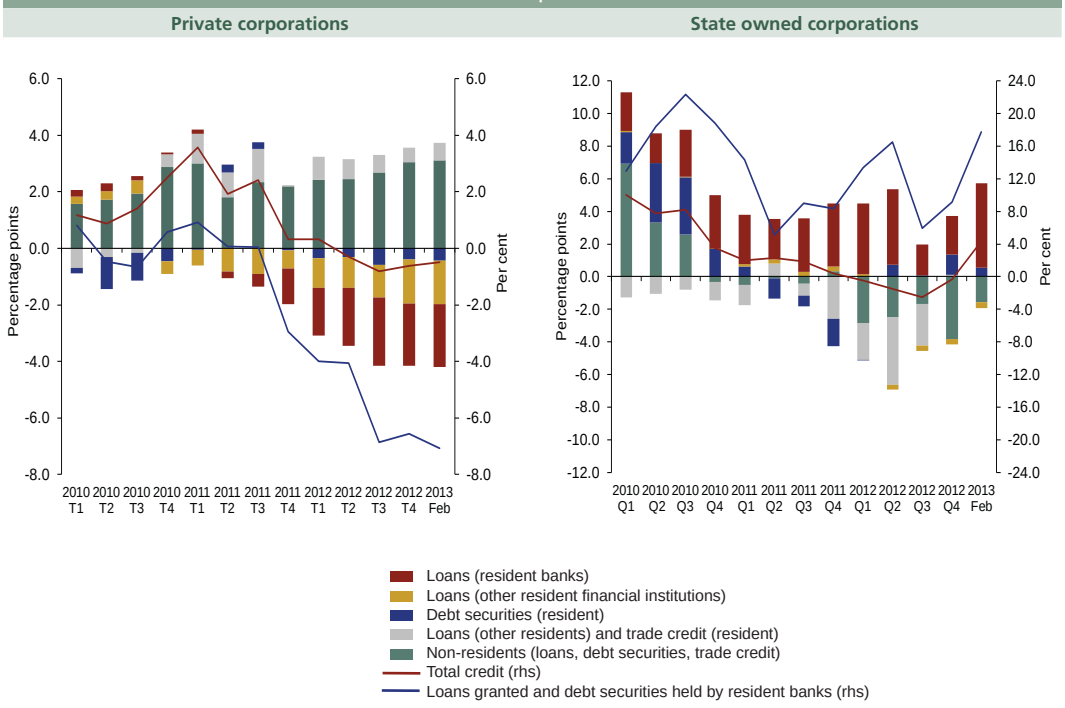
CREDIT TO THE NON-FINANCIAL PRIVATE SECTOR AND NOMINAL GDP | YEAR-ON-YEAR RATE OF CHANGE



Source: Banco de Portugal.
Note: See credit aggregates definitions in Monthly Economic Indicators.

Chart 2.2.12

TOTAL CREDIT TO NON-FINANCIAL CORPORATIONS | CONTRIBUTIONS TO THE ANNUAL RATE OF CHANGE



Source: Banco de Portugal.
Notes: Contributions to the annual rate of change of total credit to private and state owned (non-consolidating in the general government) corporations. See credit aggregates definitions in Monthly Economic Indicators. Last observation: February 2013.

firms, and to a lesser extent, medium-sized firms, typically more dependent on bank credit, saw a considerable cut back in total credit granted. As compared with other countries in the euro area, Portuguese small and medium-sized firms found a higher than average difficulty to access credit (Chart 2.2.13). Even so, they registered a lower level of difficulty in accessing credit than the one observed in other countries under market pressure, such as Greece, Spain and Italy.

An analysis of the evolution of total credit to non-financial corporations per firm size should not be dissociated from its composition in terms of sector of activity. Thus, the substantial fall in total credit for micro, small and medium-sized corporations is likely to be related to the high proportion of credit to sectors such as construction, real estate and trade. It is worth noting that these sectors saw the most negative annual variation in total credit. Excluding these sectors, the annual rate of change in total credit to micro, small and medium-sized corporations would be considerably less negative. In fact, in the light of the moves in quarterly flows, there would be an inversion in the downwards trend in the beginning of 2013 (see "Box 2.3 *Differentiation in credit to non-financial corporations with cross-referencing of size and sector of activity*", on this Report). In the same way, the bigger firm size and the lower proportion of bank credit in sectors such as electricity, gas and water, transport and warehousing and non-financial holdings look to have played a part in making the annual rate of change in total credit for these sectors bigger than for the remaining sectors.

Table 2.2.1

CREDIT TO NON-FINANCIAL CORPORATIONS BY SECTOR OF ACTIVITY AND FIRM SIZE | ANNUAL RATE OF CHANGE

	Bank credit			Total Credit			Sector/ size share (% total credit)	Bank credit share (% total credit)
	2011 Dec.	2012 Dec.	2013 Feb.	2011 Dec.	2012 Dec.	2013 Feb.	2012 Dec.	2012 Dec.
Total	**-2.4**	**-5.8**	**-5.8**	**0.3**	**-0.6**	**-0.2**	**100.0**	**50.5**
Sectors								
Manufacturing (incl. mining and quarrying)	-3.0	-7.8	-5.6	-2.2	-0.8	0.3	11.0	66.1
Electricity, gas and water	5.4	-4.5	-10.4	5.7	6.6	1.4	9.1	32.7
Construction	-3.1	-8.7	-8.9	-2.7	-7.1	-7.5	13.6	69.6
Wholesale and retail trade (incl. repair of motor vehicles and motorcycles)	-5.9	-10.6	-10.1	-1.1	-4.7	-4.1	11.0	56.9
Transportation and storage	4.4	7.6	15.5	8.7	3.2	10.9	9.0	47.6
Accommodation and food service activities	9.5	-4.0	-3.4	5.4	-4.1	-4.1	3.5	69.7
Information and communication	-23.5	-8.3	-9.8	-25.6	24.9	21.0	2.8	24.3
Non-financial holdings	-6.3	-6.6	-11.3	5.9	5.3	2.2	17.9	43.3
Real estate activities	-5.4	-3.9	-3.7	-2.4	-6.9	-6.6	10.8	61.2
Professional, scientific, technical and administrative activities	4.6	-15.1	-14.3	7.6	-4.8	-3.7	6.4	50.2
Education, human health, social work and other personal activities	-4.2	-4.7	-4.1	-6.6	-2.0	-1.8	3.0	65.4
Other activities	4.1	4.0	2.4	-27.2	0.4	-0.3	1.8	55.3
Size								
Micro	-3.3	-9.9	-9.2	-3.7	-4.5	-3.8	25.9	56.5
Small	-4.3	-9.8	-8.2	-1.0	-6.7	-5.2	14.8	71.6
Medium	-2.3	-5.1	-4.7	-5.2	-2.8	-2.3	17.1	66.9
Large	2.9	0.8	0.6	4.1	3.4	2.9	24.2	39.0
Non-financial holdings	-5.2	-6.6	-11.3	5.4	5.0	1.9	18.1	42.8

Source: Banco de Portugal.

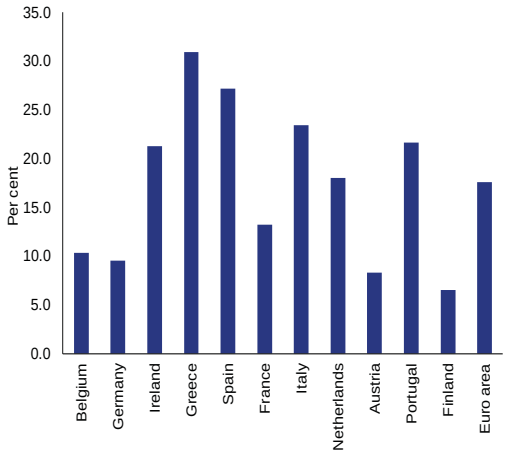
Notes: See credit aggregates definitions in Monthly Economic Indicators. Bank credit includes all credit granted by resident banks, which includes not only loans (adjusted for securitizations) but also debt securities held by banks. There is no data available regarding trade credit by sector of activity and firm dimension. Last observation: February 2013.

Decrease in bank loans throughout 2012, albeit less pronounced in the more recent period

Analysing only bank loans, there was a considerable fall in loans both to non-financial corporations (Chart 2.2.14) and to households, in line with what can be seen in other countries undergoing adjustment. In the case of non-financial corporations, though bank loans continue to fall, the fact that the annualized quarterly rate of variation, corrected for seasonality, being above the annual rate of change since the end of 2012 is an indication that the downward trend is slowing. According to the bank lending survey, the fall in bank loans should be related as much to factors on the supply side, such as a high level of risk perception and high cost of capital, as to factors on the demand side. In this regard, the banks surveyed indicated that firms are still showing little demand for credit for new investments. In fact, firms have looked above all for credit to provide working capital or restructuring of debt. As for households, demand has been hindered above all by lack of consumer confidence, in particular in terms of the housing market.

Chart 2.2.13

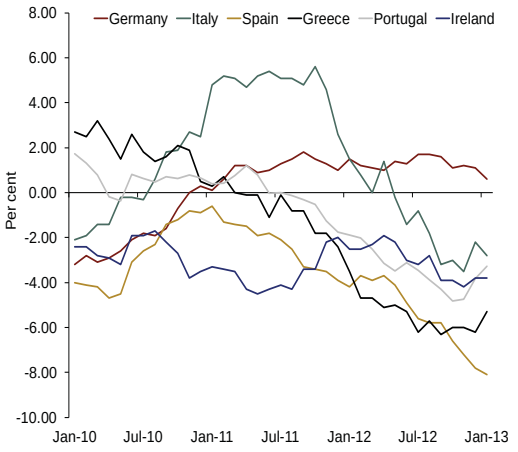
ACCESS TO FINANCE FOR SMALL AND MEDIUM ENTERPRISES | PERCENTAGE OF FIRMS INDICATING ACCESS TO FINANCE AS THEIR MAIN PROBLEM



Source: ECB.
Note: Information relating to the months from April to September 2012.

Chart 2.2.14

BANK LOANS TO NON-FINANCIAL CORPORATIONS IN THE EURO AREA | ANNUAL RATE OF CHANGE



Sources: ECB and Banco de Portugal.
Notes: The annual rate of change is adjusted for sales of credit portfolios and securitizations. Counterpart of loans corresponds to the euro area. In the case of Portugal, the data presented corresponds to the series published in Monthly Economic Indicators.

BOX 2.1 | DIFFERENCES IN MONETARY POLICY TRANSMISSION BETWEEN EURO AREA COUNTRIES

This box documents the differences between the interest rates on loans to firms from various countries of the euro area, and shows that these differences are not fully explained by factors related to the cost of bank funding or the expectations about the level of the countries' economic activity.

Since the beginning of the sovereign debt crisis in the euro area, in late 2009, the question has been raised of whether there is justification for the sudden increases in yields on government debt in some countries. In fact, the increase may be the result of the economic fundamentals of the countries affected, but it could also be generated by a general panic that needs to be rapidly halted. For example, all things being equal a country with high debt and low growth prospects has a higher probability of default, and this is reflected in the funding costs of banks and, thereby, the cost of corporate financing. The question that arises is whether the differences in interest rates of loans to firms observed in the euro area can be explained by differences in the fundamentals of economies or whether there are other factors affecting the observed interest rates, such as the volatility of the expectations of economic agents in relation to the sovereign. The dichotomy between countries where the sovereign debt is under pressure and the other economies raises problems for the smooth functioning of financial markets, and in particular to the seamless transmission of monetary policy across the euro area. This issue is important because the funding costs of the productive sector of the economy depend on this transmission.[1]

Chart 1 illustrates one of the manifestations of this segmentation of sovereign debt markets. It gives the interest rate for new loans to non-financial enterprises for two groups of countries: those under sovereign debt pressure (Greece, Ireland, Italy, Portugal and Spain) and a set of other euro area countries with high credit rating (Austria, Belgium, Finland, France, Germany and the Netherlands). Two features stand out. In the first place, the interest rates in those countries currently under pressure have been consistently higher than the remaining countries; for example, during the first two years of the sample (until the end of 2009), the average spread between the two groups of countries was 29 basis points. In the second place, there was an increase to a very wide spread between the middle of 2010 and the start of 2013.

Can this increase be explained by the worsening of the macroeconomic and financial conditions of these countries, or is there an important component relating to other factors, including the perception of the risk of those countries under pressure going into default and the problems in transmission of the monetary policy that derive from this?

It is not easy to identify the factors that determine these differences. One way of approaching the problem is to break down the interest rate into three factors: one is common to all the countries, but variable over time; one is a specific fixed component over time for each country, with the purpose of eliminating from the analysis the secular differences between countries; and a component that is idiosyncratic for each country, varying in time and with information relevant to the formation of interest rate in the credit market. In addition to these components, there is also, as usual in empirical models, a random component independent from country to country and temporally uncorrelated.

The common component captures movements in the interest rates that are common to all the countries. The component that is fixed per country captures those factors which did not change over the period of analysis and were specific to each country. The time-varying idiosyncratic component captures what is explained by the variables that are relevant for the formation of interest rates and not belonging to the two previous components. The random component is simply the difference between the interest rate one wants to explain and the observable components mentioned above; for this reason we will designate it as the residual.

1 On this issue, see "Special Issues *Transmission of monetary policy in the euro area*", Banco de Portugal, *Economic Bulletin - Autumn 2012*.

What idiosyncratic variables are to be included? In the formation of interest rates for loans there are at least two factors to consider for each country: (i) the cost of financing for the financial institutions that will be granting the loans; and (ii) the expectations on the economic activity of the country. For the first factor, two explanatory variables were included: the average spreads for credit default swaps (CDS) of the main banks in each country, a gauge frequently used to evaluate the risk associated with each bank (which will of necessity affect its cost of financing), and the amount for long-term refinancing operations (LTROs)[2] (expressed as a logarithm), which indicates a greater likelihood that the banks using this facility are finding difficulties in accessing finance. Note that these variables already incorporate at least some of the expectations of economic agents regarding the creditworthiness of sovereigns; for example, by measuring the risk of banks' insolvency the average CDS spreads also reflect sovereign risk to the extent that banks generally hold sovereign debt. In terms of expectations as to economic activity, the forecasts used were those relating to the rate of GDP growth for the country in the following year.[3] This set of variables aims at capturing the effect of the economic fundamentals on the formation of the interest rates in loans to firms.

The figures estimated through this model lead to the conclusion that an increase in the spreads of CDS is associated with an increase in the interest rates of loans. Additionally, less favourable forecasts for economic activity and higher ORPA amounts for the country's banks are associated with higher interest rates.

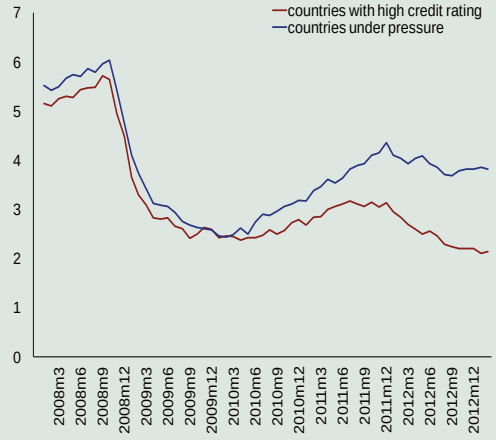
Chart 2 helps to interpret the findings obtained with this simple approach. It can be seen that the fixed temporal effects accompany the moves in the ECB monetary policy reference rates, also shown on the chart. This effect is as expected and the closeness of the two curves is clearly visible. The chart also illustrates the difference between the weighted average of the residuals in the countries under pressure and the weighted average of the residuals in the other countries. If the variables mentioned above (aiming at capturing the costs of bank financing and the level of economic activity in each country) were sufficient to explain the evolution of the interest rate of loans to firms, this difference should be approximately zero at all times. The fact that this difference progressively increases at the end of the sample means that the idiosyncratic factors (fixed or time-varying) considered and fixed time effects are not sufficient to explain the difference in interest rates observed during this period. The difference obtained at the end of the sample is 74 basis points. This can be a measure, albeit imperfect and bearing in mind the limitations of the model, of the problems of monetary policy transmission recently observed, and it may be due to expectations about the creditworthiness of countries under pressure that go beyond the effects already included in the cost of bank financing and the level of economic activity.

2 See the Banco de Portugal, *Economic Bulletin - Autumn 2012*; the results presented in this Box differ from those that will be found in the Bulletin for two reasons: (i) the data now relate to the period up to February 2013; and (ii) additional data on some countries has been included.

3 The inclusion of variables relating to public debt was also used in alternative formulations of the model, though they had no significant impact on the results. Furthermore, the regressors used have endogeneity problems. This means that the results must be treated with all due circumspection.

Chart 1

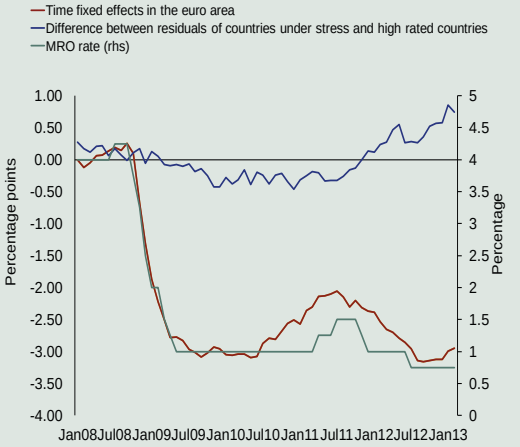
INTEREST RATES IN LOANS TO NON FINANCIAL FIRMS FOR COUNTRIES UNDER PRESSURE AND COUNTRIES WITH HIGH CREDIT RATING |
AVERAGES WEIGHTED BY COUNTRY GDP



Sources: Consensus Forecasts, ECB, Thomson Reuters and Banco de Portugal's calculations.
Note: Countries under pressure: Greece, Ireland, Italy, Portugal and Spain; countries with high credit rating: Germany, Austria, Belgium, Finland, France and the Netherlands.

Chart 2

RESULTS OF THE DECOMPOSITION OF THE INTEREST RATE IN TERMS OF THE DIFFERENT COMPONENTS. RESIDUALS FOR THE SET OF COUNTRIES UNDER PRESSURE AND THE SET OF COUNTRIES WITH HIGH CREDIT RATING WEIGHTED BY COUNTRY GDP



Sources: Consensus Forecasts, ECB, Thomson Reuters and Banco de Portugal's calculations.
Note: Countries under pressure: Greece, Ireland, Italy, Portugal and Spain; countries with high credit rating: Germany, Austria, Belgium, Finland, France and the Netherlands.

BOX 2.2 | MARGINS IN BANK INTEREST RATES: PORTUGAL WITHIN THE EURO AREA

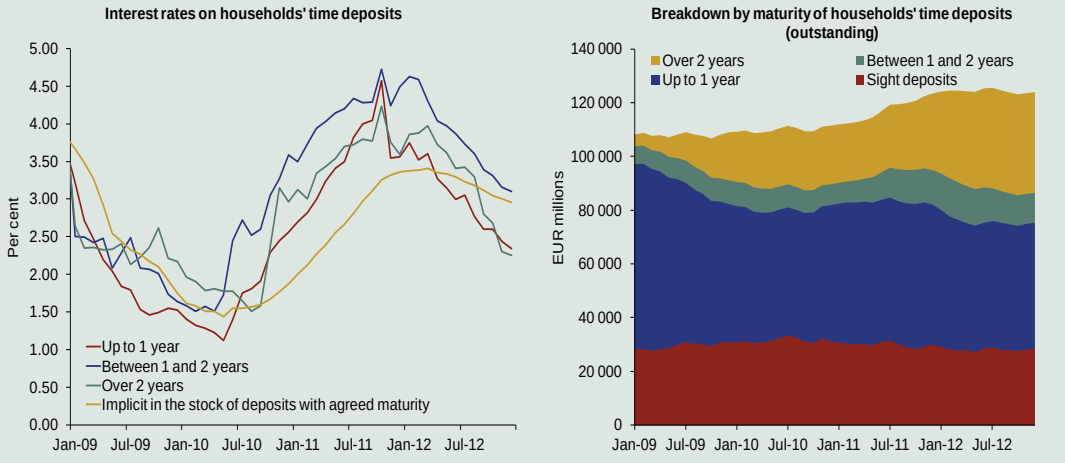
During 2012, there was a considerable fall in the interest rates paid out by Portuguese banks on new deposits (Chart 1). In tandem, there was a far less marked fall in the interest rates for new loans, especially for non-financial corporations. This meant that there was a widening of the margin on new operations with customers, measured as the difference between return on loans and the cost of deposits held. This widening of the margin on new operations contrasts with the move in the margin implicit in stocks, which continued to narrow and is now at a record low. The aim of this Box is to analyse the factors underlying this move, while looking at the main differences between the Portuguese situation and that of other countries in the euro area that have been particularly affected by the sovereign debt crisis.

As can be seen in Chart 2, the total margin on new operations in Portugal has been rising since the second half of 2011, and at year-end 2012 stood at 4.0 p.p., that is some 2 to 3 p.p. above the figures for the euro area countries in the Chart (Table 1). It should also be noted that unlike Portugal and Ireland, the margin on new operations has remained relatively stable in Spain. In Greece, the margin narrowed as a consequence of the steep rise in the cost of deposits held, possibly reflecting the need by Greek banks to counter the outflow of deposits. In turn, the total margin with customers in Portugal implicit in the stocks of assets and liabilities has been narrowing since the second half of 2011, standing at a record low of 1.4 p.p. in December 2012 and between 0.5 and 1.5 p.p. narrower than in the euro area countries selected for comparison. Breaking down the margin implicit in the stocks per operation, it is possible to detect the persistence of past operations in the stocks, and this explains the squeeze on banks' interest rate margins in Portugal when compared with other countries.

In the first place, Portuguese banks have limitations in their ability to manage the average differential of their mortgage loan portfolios given the current cost of financing, because most of such loans are characterized by long maturities, indexed to Euribor and with fixed low spread. In this context, the differential between the return on loans to households in Portugal and the other countries in the sample is very negative. Moreover, it has been widening since the end of 2011, standing at more than 1 p.p. in December 2012. On the other hand, however, the interest differential on outstanding amounts of non-financial corporations is higher than in the other countries in the sample, except for Greece. The figure stands at around 1 p.p., attenuating the effect on the banks' margins deriving from the low return on mortgage loans. The low level of interest rates on mortgages has a favourable effect on the profitability of banking via the impact on the level of default on these loans. However, this topic is not here discussed.

Chart 1

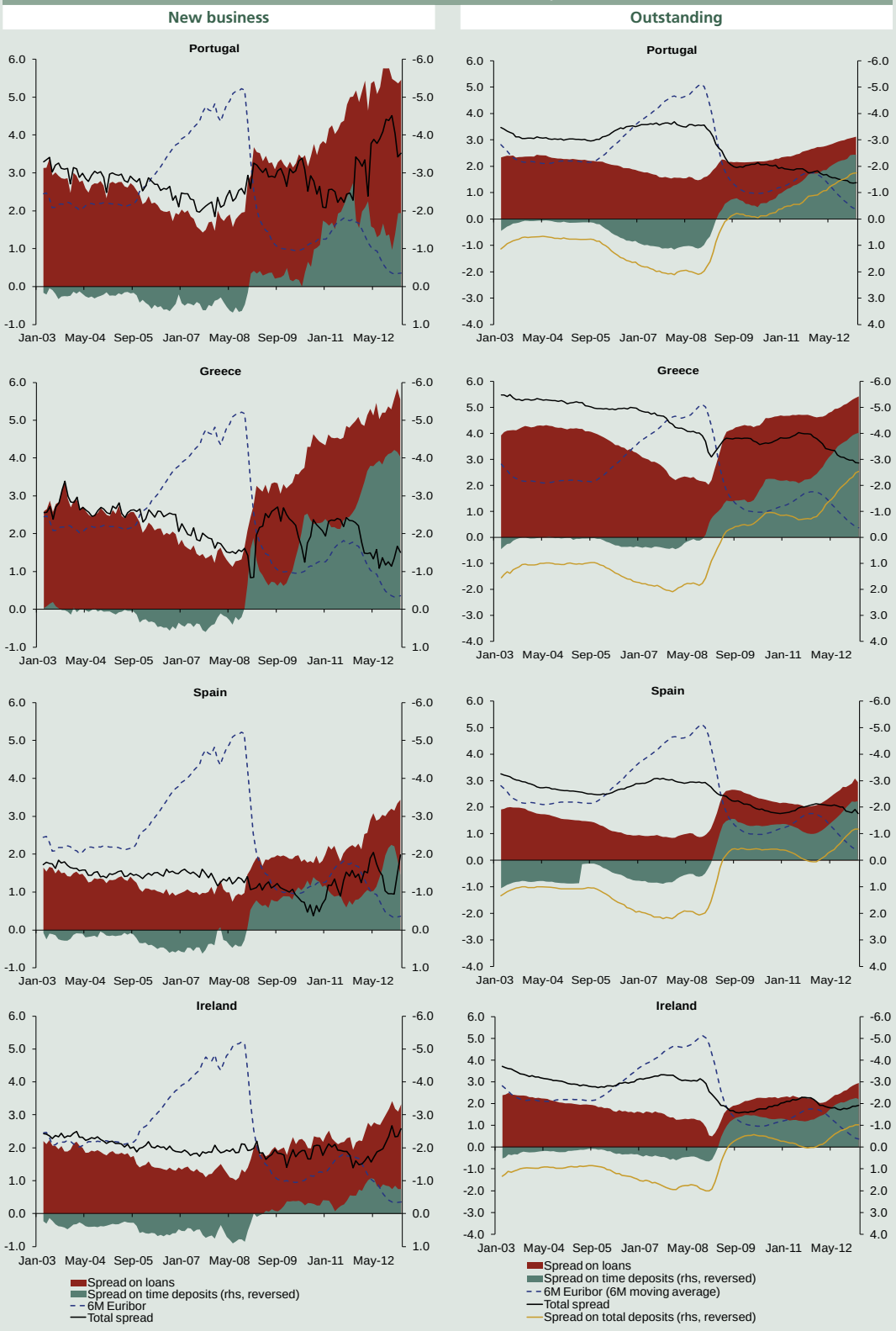
HOUSEHOLDS' DEPOSITS WITH AGREED MATURITY



Source: Banco de Portugal.

Chart 2

INTEREST RATES SPREADS ON OPERATIONS WITH CUSTOMERS | PER CENT, PERCENTAGE POINTS



Sources: ECB and Banco de Portugal calculations.
Notes: Spread on lending operations calculated as the difference between the interest rates on loans and the 6-month Euribor (6-month moving average in the case of outstanding amounts). Spread on borrowing operations is the difference between the 6-month Euribor (the 6-month moving average in the case of outstanding amounts) and interest rates on deposits.

Table 1

INTEREST RATES SPREADS ON OPERATIONS WITH CUSTOMERS | INTERNATIONAL COMPARISON, PERCENTAGE POINTS, PER CENT

	Portugal			Greece			Spain			Ireland		
	Dec.09	Dec.11	Dec.12	Dec.09	Dec.11	Dec.12	Dec.09	Dec.11	Dec.12	Dec.09	Dec.11	Dec.12
New business												
Total spread (1)+(2)	**2.6**	**3.3**	**4.0**	**2.5**	**2.2**	**1.3**	**1.0**	**1.5**	**0.9**	**1.4**	**1.5**	**2.3**
(1) Spread on loans	3.1	4.9	5.4	3.2	5.1	5.6	1.9	2.3	3.1	1.8	2.2	3.2
NFC	*3.1*	*4.8*	*5.4*	*2.7*	*5.1*	*5.8*	*1.7*	*2.1*	*3.0*	*1.7*	*2.3*	*2.8*
Households	*3.2*	*5.1*	*5.8*	*4.3*	*5.1*	*4.7*	*3.5*	*3.3*	*3.8*	*2.0*	*2.1*	*3.5*
House purchase	*1.3*	*2.6*	*3.1*	*2.4*	*2.4*	*2.7*	*1.5*	*1.9*	*2.5*	*1.8*	*1.4*	*3.3*
Cons. credit & other purp.	*5.4*	*6.4*	*7.1*	*7.9*	*7.3*	*6.8*	*5.6*	*5.2*	*6.3*	*2.7*	*4.0*	*5.6*
(2) Spread on time deposits	-0.5	-1.5	-1.4	-0.7	-2.9	-4.2	-0.9	-0.8	-2.2	-0.4	-0.7	-0.8
memo: 6M Euribor	*1.0*	*1.7*	*0.3*									
Outstanding												
Total spread (1)+(3)	**2.0**	**1.8**	**1.4**	**3.8**	**3.8**	**3.0**	**2.1**	**2.1**	**1.8**	**1.6**	**2.1**	**1.9**
(1) Spread on loans	2.1	2.7	3.1	4.3	4.6	5.3	2.6	2.1	2.9	2.1	2.1	2.8
NFC	*2.3*	*3.4*	*4.0*	*3.7*	*4.5*	*5.3*	*2.3*	*2.2*	*3.0*	*2.0*	*2.0*	*2.5*
Households	*2.0*	*2.1*	*2.3*	*4.8*	*4.7*	*5.3*	*2.9*	*2.0*	*2.8*	*2.2*	*2.2*	*3.1*
House purchase	*0.9*	*1.0*	*1.1*	*2.9*	*2.0*	*2.7*	*2.3*	*1.4*	*2.1*	*1.6*	*1.3*	*2.5*
Cons. credit & other purp.	*6.3*	*6.9*	*7.8*	*9.1*	*8.5*	*9.1*	*4.6*	*4.0*	*5.3*	*4.5*	*4.6*	*5.2*
(2) Spread on time deposits	-0.7	-1.7	-2.4	-1.5	-2.4	-3.9	-1.4	-1.0	-2.2	-1.5	-1.4	-2.2
(2) Spread on total deposits	-0.2	-0.9	-1.7	-0.5	-0.8	-2.3	-0.4	0.1	-1.1	-0.5	0.0	-1.0
memo: 6M Euribor (ma6)	*1.1*	*1.7*	*0.5*									

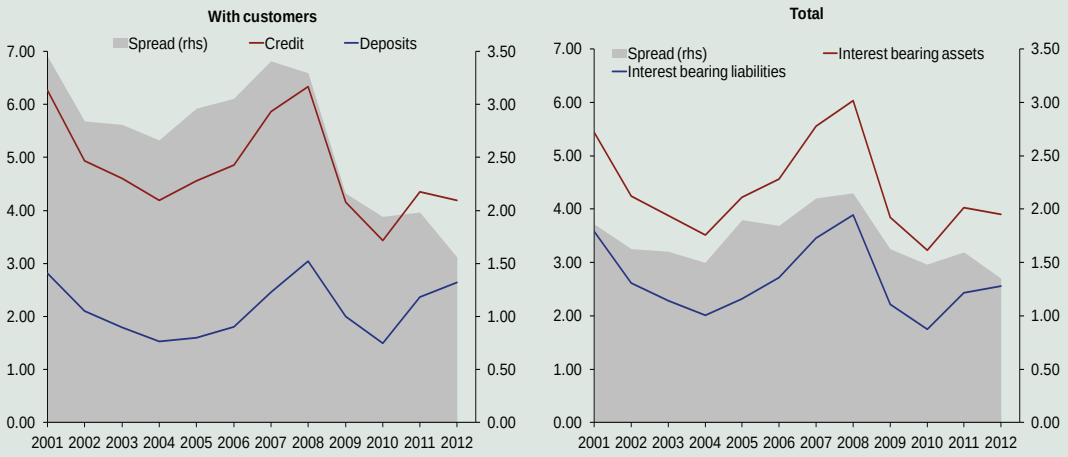
Sources: ECB and Banco de Portugal calculations.
Notes: Spread on lending operations calculated as the difference between the interest rates on loans and the 6-month Euribor (6-month moving average in the case of outstanding amounts). Spread on borrowing operations is the difference between the 6-month Euribor (the 6-month moving average in the case of outstanding amounts) and interest rates on deposits. Time deposits comprise deposits redeemable at notice and deposits with agreed maturity in the case of outstanding amounts and deposits with agreed maturity in the case of new business. Total deposits comprise overnight deposits, deposits redeemable at notice and deposits with agreed maturity in the case of outstanding amounts.

In the second place, even though there has been a marked fall in the rate on new deposits, the average cost of deposits for Portuguese banks is still affected by existing deposits captured when maturity terms were longer and rates were higher (Chart 1). This results to a large extent from increased competition in attracting customer funds during 2011, not only in terms of the interest rates offered, but also in the extension of maturities, to which can be added the fact that the proportion of sight deposits is low in comparison with other countries in the sample. The total cost of deposits held in Portugal is around 0.75 p.p. greater than in the other countries (except for Greece).

As a last point, and in spite of the steep fall in the margin on bank interest rates for customers, the reduction in the margin implicit in all interest bearing assets and liabilities has been much less pronounced (Chart 3). Some of the factors that have helped cushion the shift in the intermediation margin with customers are the considerable financing from the Eurosystem, and the increase in investments in public debt securities.

Chart 3

INTEREST RATES SPREADS | PER CENT



Source: Banco de Portugal.

BOX 2.3 | DIFFERENTIATION IN CREDIT TO NON-FINANCIAL CORPORATIONS WITH CROSS-REFERENCING OF SIZE AND SECTOR OF ACTIVITY

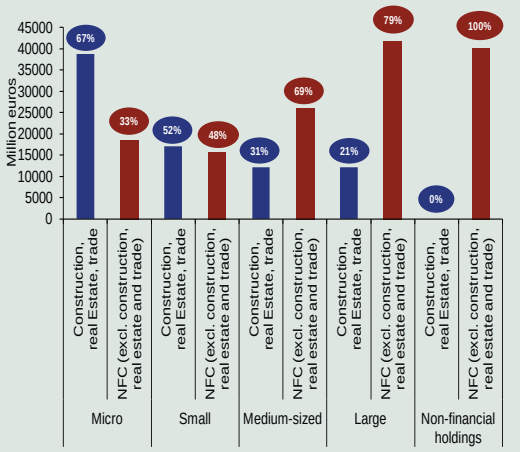
In the course of 2012, there was a slight fall in total credit to non-financial corporations.[1] This decrease hides, however, different dynamics in terms of firm size and sector of activity. The aim of this Box is to contrast the evolution of credit aggregates in the case of the construction, real estate and trade sectors, which have been particularly affected by the fall in domestic demand, with all the remaining sectors. Chart 1 provides a breakdown of total credit to non-financial corporations according to company size, along with a separation of the sectors of activity in these two groups. The chart shows that the importance of these two groups on total credit to non-financial corporations by firm size varies significantly, with construction, real estate and trade representing most of the credit to micro and small businesses, whether the remaining sectors account for the majority of credit to medium-sized and large corporations.

An analysis of credit to these two groups (Chart 2) shows two very distinct profiles. While, credit for construction, real estate and trade has posted annual negative rates of variation since the first quarter of 2010, the aggregate of all the other sectors is on a positive path, even though the curve has been straightening over 2012.

The factors playing a part in the reduction of financing for construction, real estate and trade can be found both on the demand side, with the big dependence of these sectors on the domestic market, and on the supply side, where there have been tighter restrictions on banking credit, in particular for construction (Chart 3). It should be noted in this regard that the fact that these companies are generally smaller, reduces the number of funding alternatives they have and makes them more dependent on domestic banking credit. There is thus a relationship between the evolution of credit to non-financial corporations by sector of activity and company size. It is especially relevant to recognise this relationship, given the different sectoral composition of credit by firm size. In the case of small and medium enterprises (including micro firms), for example, the big proportion of credit granted to construction, real estate and

Gráfico 1

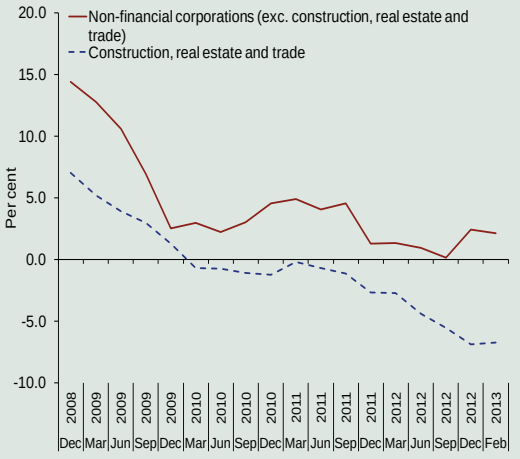
SECTOR DECOMPOSITION OF TOTAL CREDIT TO NON-FINANCIAL CORPORATIONS BY FIRM SIZE



Source: Banco de Portugal
Notes: The data presented excludes trade credit given that this is not available by sector of activity and firm size. Last observation: February 2013.

Gráfico 2

TOTAL CREDIT TO NON-FINANCIAL CORPORATIONS | ANNUAL RATE OF CHANGE

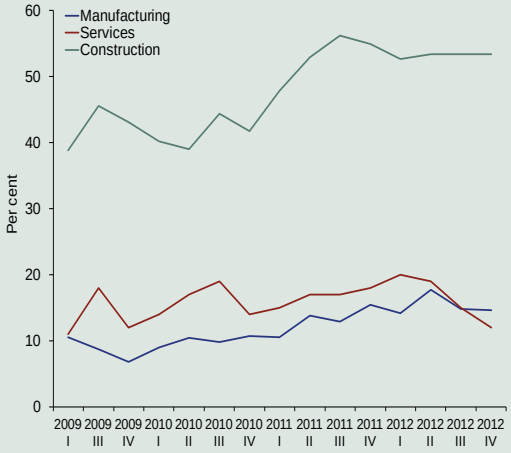


Source: Banco de Portugal
Notes: The annual rate of change is calculated as the rate of change of the outstanding amounts of total credit to non-financial corporations. The data presented excludes trade credit given that this is not available by sector of activity and firm size.

1 See the definition of total credit in "Section 2.2 *Monetary and financial conditions of the Portuguese economy*", of this Report.

Chart 3

SURVEY ON FIRM DIFFICULTY IN ACCESSING BANK CREDIT | PERCENTAGE OF FIRMS INDICATING DIFFICULTY IN ACCESSING BANK CREDIT



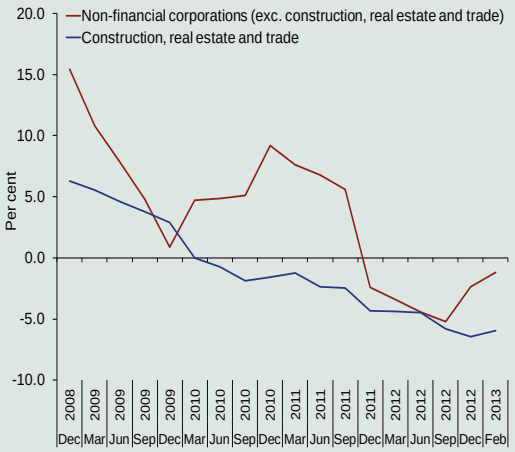
Source: INE
Note: Percentage of firms indicating access to finance as one of the main constraints to the development of their economic activity.

trade ends up determining the evolution of credit to these companies (Chart 4). Nevertheless, disaggregating total credit in those two groups previously referred, it is observed that total credit to non-financial corporations, excluding construction, real estate and trade, though showing a negative annual rate of change throughout 2012, registered a significant acceleration in the second semester. Additionally, the quarterly flow is positive since January 2013.[2]

Chart 4

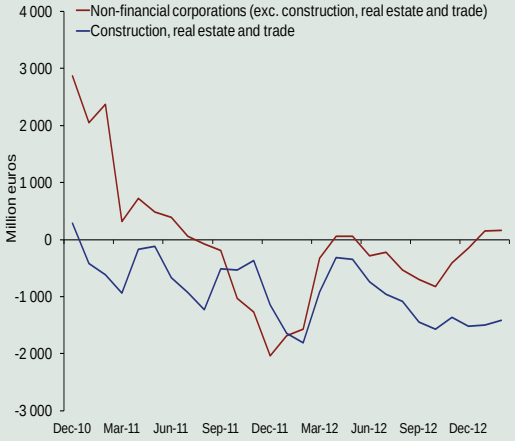
TOTAL CREDIT TO SMALL AND MEDIUM ENTERPRISES (INCLUDING MICRO FIRMS)

Annual rate of change



Source: Banco de Portugal
Notes: The annual rate of change is calculated as the rate of change of the outstanding amounts of total credit to non-financial corporations. The data presented excludes trade credit given that this is not available by sector of activity and firm size.

Quarterly flow



Source: Banco de Portugal
Note: The quarterly flow was not seasonally adjusted given that there are very few observations available. Last observation: February 2013.

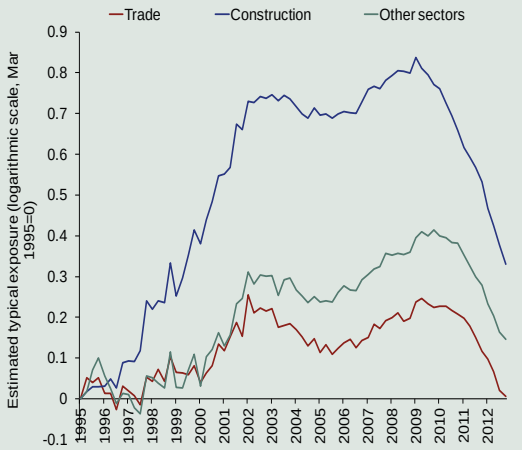
2 The quarterly flow is not adjusted for seasonality since there are only a very few observations available.

A broader and more extended in time analysis suggests that the tighter credit standards by resident banks on loans to the construction and real estate sectors should not be dissociated from the significant growth in credit to these sectors in the years prior to the current recession and from the adjustment process currently ongoing (Chart 5). Given that the accumulated exposure by the banking sector to the typical construction and real estate borrower remains substantially above the one recorded in other sectors and that the amount of credit to the typical company of other sectors also continues to decline, it is expected that the adjustment tends to continue for some more time.

The differentiation between these two groups as regards the amount of credit granted should be related to their different risk profile. In this sense, Chart 6 shows that the deterioration of firms' financial position and corresponding materialisation of credit risk, although cross to most sectors of activity, was especially pronounced in the construction, real estate and trade sectors. This increase is particularly relevant given that, together, these sectors account for about 70 percent of total bank loans to non-financial corporations in default, but only 45 percent of total bank loans to non-financial corporations.

Chart 5

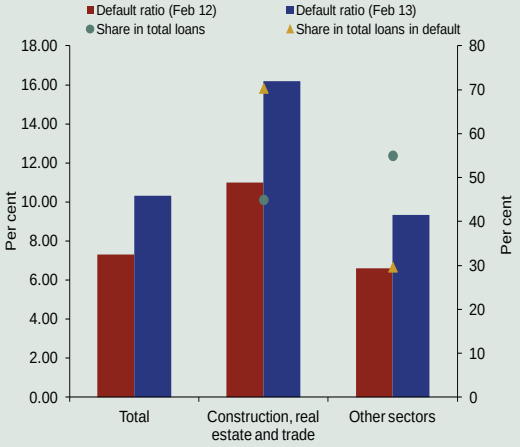
BANK EXPOSURE TO THE TYPICAL FIRM



Source: Banco de Portugal
Note: See definition of typical firm in Antunes, A. e Martinho, R. (2012), "*Access to credit by non-financial firms*", Banco de Portugal, *Financial Stability Report – May*.

Chart 6

OVERDUE AND OTHER DOUBTFUL BANK LOANS TO NON-FINANCIAL CORPORATIONS | DEFAULT RATIO



Source: Banco de Portugal
Note: The default ratio is defined as total loans overdue for more than 30 days and other doubtful loans expressed as a percentage of the loans balance adjusted for securitisation.

3. Fiscal Policy and situation[1]

Public finance developments are influenced by several factors related to the macroeconomic environment, demography, the legal and institutional context, fiscal policy decisions, among others. Thus, the fiscal adjustment undertaken within the scope of the Economic and Financial Assistance Programme should be framed by the specificities of the current period. In particular, the sharp contraction in economic activity in recent years amplifies the relevance of the analysis of the effects of the cyclical position of the economy on various budgetary items. Additionally, it is crucial to take into account other effects of a transitory nature, following the analytical framework used in the context of the Stability and Growth Pact. Finally, it is also important to analyse the structural developments of the different budgetary items in the context of the information on the expected impact of fiscal measures.

In 2012, fiscal policy continued to show a markedly restrictive nature, against a backdrop of a consolidation effort of unprecedented magnitude

In 2012, the general government deficit in national accounts amounted to 6.4 per cent of GDP (4.4 per cent in 2011) - Table 3.1. The 2012 fiscal deficit corrected for the impact of temporary measures and special factors stood at 6.0 per cent of GDP, which compares to 7.1 per cent in 2011 ("Box 3.1 *Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report). Banco de Portugal estimates, based on the cyclical adjustment methodology adopted in the Eurosystem, show that in 2012 the evolution of economic activity has given a strong negative contribution to fiscal developments. In particular, the estimate for the change in the cyclical component of the fiscal balance stands at -2.0 percentage points (p.p.) of GDP.[2] Therefore, the structural balance also adjusted for the impact of special factors recorded in 2012 a 3.1 p.p. of GDP improvement vis-à-vis 2011. As interest expenditure continued to record an increase as a percentage of GDP, the change in the structural primary balance amounted to 3.4 p.p. of GDP. Thus, the fiscal policy stance was clearly restrictive and pro-cyclical (Chart 3.1). It is noteworthy that, in cumulative terms, the change in this indicator, used to measure the fiscal effort, shows a very significant adjustment between 2010 and 2012, whose magnitude amounted to 7.2 p.p. of GDP.

To a large extent, the improvement in the structural primary balance stemmed from a decline in public expenditure

Chart 3.2 shows that the 2012 fiscal adjustment essentially stemmed from a decline in structural primary expenditure, while structural revenue remained at a level close to the observed in the previous year (for additional details, see "Box 3.2 *Composition of the structural fiscal adjustment in Portugal under the Economic and Financial Assistance Programme*", in this Report).

1 In the analysis carried out in this chapter references to structural values are corrected for the cyclical effects, as well as for the impact of temporary measures and special factors. The latter correspond to operations that do not fit the definition of temporary measures adopted in the Eurosystem, but that, in the specific cases considered, have a transitory negative impact on the general government balance. Note, however, that the structural figures include the impact in 2012 of the suspension of payment of Christmas and summer bonuses to part of the public sector workers and pensioners, a measure that will be reverted following decisions by the Constitutional Court.

2 It should be mentioned that this figure is more negative than the estimate obtained without taking into account the effects of the composition of economic growth (-1.3 per cent of GDP).

Table 3.1

MAIN FISCAL INDICATORS | PERCENTAGE OF GDP

	2010	2011	2012	2011-2012 change[(d)]	2010-2012 change[(d)]
Overall balance	**-9.8**	**-4.4**	**-6.4**	**-2.0**	**3.4**
Temporary measures[(a)]	1.7	3.9	0.6	-3.4	-1.2
Special factors[(b)]	-2.8	-1.2	-1.0	0.2	1.9
Overall balance excluding temporary measures and special factors	**-8.7**	**-7.1**	**-6.0**	**1.1**	**2.7**
Cyclical component	1.7	0.8	-1.1	-2.0	-2.8
Structural balance excluding special factors[(c)]	**-10.4**	**-8.0**	**-4.9**	**3.1**	**5.6**
Interest expenditure	2.8	4.1	4.4	0.3	1.6
Structural primary balance excluding special factors	**-7.6**	**-3.9**	**-0.5**	**3.4**	**7.2**
Public debt	**94.0**	**108.3**	**123.6**	**15.3**	**29.6**
Change in public debt (in p.p.)	10.3	14.3	15.3	-	-
Contribution of primary balance	7.0	0.4	2.0	-	-
Differential between the effects of interest and of GDP growth	0.7	5.0	8.1	-	-
Deficit-debt adjustments	2.6	8.9	5.2	-	-

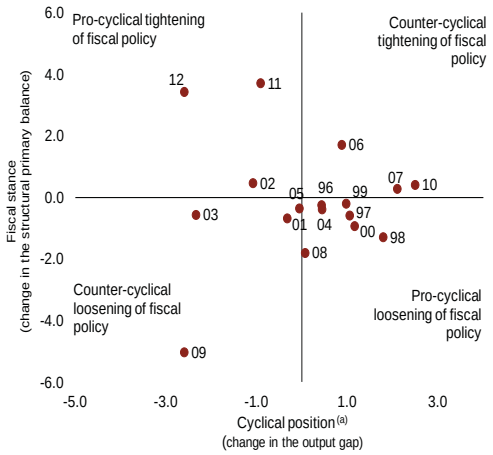
Sources: *INE* and Banco de Portugal.

Notes: (a) According to the definition adopted in the Eurosystem. See "Box 3.1 *Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report. **(b)** 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. See "Box 3.1 *Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report. **(c)** Structural figures are adjusted for the impacts of the cycle and temporary measures. The cyclical components and temporary measures are computed by Banco de Portugal according to the methodologies adopted in the Eurosystem. **(d)** Changes do not necessarily correspond to differences in values as a ratio to GDP due to rounding.

Structural primary expenditure decreased for the second consecutive year. This evolution was related to significant savings in key items, particularly as regards compensation of employees, intermediate consumption and investment. The decrease in compensation of employees was primarily due to a decline in the number of public sector employees and to the suspension of payment of summer and Christmas bonuses. In the case of pension expenditure, the impact of the suspension of the bonuses was offset by

Chart 3.1

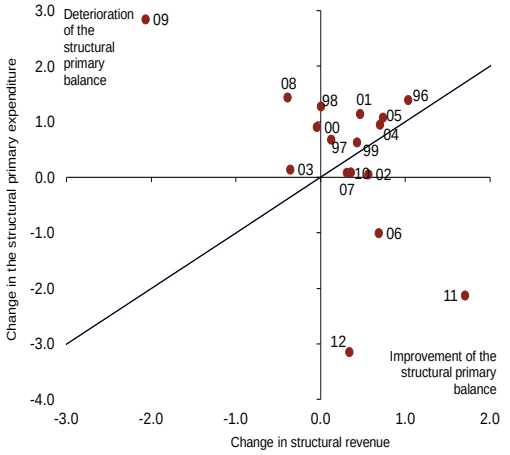
FISCAL POLICY AND CYCLICAL POSITION: 1996-2012 | PERCENTAGE POINTS OF GDP



Sources: *INE* and Banco de Portugal.
Nota: (a) The cyclical position of the economy is assessed by the change in the output gap, which represents the difference between GDP and trend GDP growth rates.

Chart 3.2

CHANGE IN STRUCTURAL REVENUE AND PRIMARY EXPENDITURE: 1996-2012 | PERCENTAGE POINTS OF TREND GDP



Sources: *INE* and Banco de Portugal.

this item's specific dynamic and by outlays referring to banking sector pension payments which are now a responsibility of Social Security. Overall, the suspension of summer and Christmas bonuses generated a 2.0 p.p. of GDP decline in expenditure, explaining, on net terms, a 1.3 p.p. of GDP reduction in the 2012 structural primary deficit.[3] Note that this measure will be reverted in 2013, following decisions by the Constitutional Court.[4]

In turn, after a very significant increase in 2011, structural revenue as a percentage of trend GDP recorded in 2012 a moderate growth. This outcome derived from a slight decline in the structural tax burden that occurred despite the fact that consolidation measures included in the State Budget for 2012 led to a rise in taxation, especially as regards the Value Added Tax (VAT) (Chart 3.3). In fact, there was a decrease in tax revenue that is not explained by the usual factors and that, to a certain extent, may arise from methodological difficulties in capturing nonlinear cyclical effects, as well as from an overestimation of the impact of changes in legislation.

The deficit in national accounts stood above the target, whilst the limits set for the public accounts deficit and the stock of public debt were respected

In the context of the fifth review of the Programme, which took place in August 2012, the fiscal performance criteria were revised. The target for the 2012 fiscal deficit on a national accounts basis was set at 5.0 per cent of GDP (4.5 per cent of GDP in the initial Memorandum of Understanding). The gap between the official target and the fiscal outturn (that amounts to 1.4 p.p. of GDP) is almost entirely explained by special factors of a transitory nature, whose impact in national accounts (1.0 per cent of GDP) had not been anticipated ("Box 3.1 *Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report). The 2012 fiscal outturn is underpinned by a growth of tax revenue considerably lower than implicit in the State Budget for 2012 and by a higher than anticipated increase in social transfers to households. However, these developments were largely offset by savings in most expenditure items that were very concentrated at the end of the year. It is worth mentioning that in the beginning of 2013 the official targets for the general government deficit in 2013-2015 were relaxed again and set at 5.5, 4.0 and 2.5 per cent of GDP, respectively (these figures compare to 4.5, 2.5 and 1.9 per cent of GDP, defined in August 2012) (Chart 3.4).

Regarding the 2012 ceilings for the public accounts deficit and for the stock of public debt, they were also revised and set at, respectively, 9,028 and 180,000 million euro. In both cases, the limits were respected.[5]

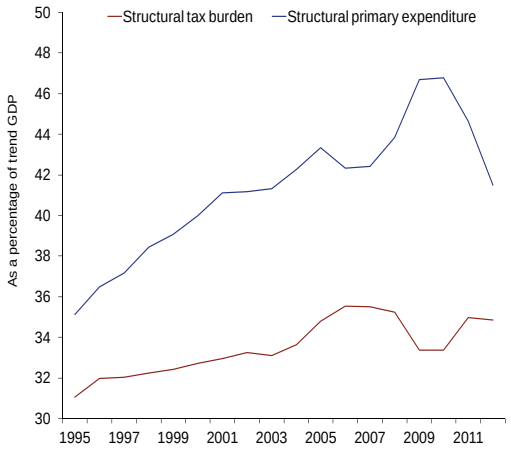
3 This figure corresponds to the Banco de Portugal estimate for the savings in primary expenditure net of the resulting decline in receipts of taxes on households' income and wealth and social contributions.

4 According to its Ruling 353/2012, of 20 July 2012, the Constitutional Court declared as unconstitutional the suspension of payment of Christmas and summer bonuses to part of public employees and pensioners (measures included in the State Budget of 2012), but stated that such decision would not take effect in 2012. In the 2013 State Budget, the government introduced the partial reversal of the suspension starting in January 2013. However, in Ruling 187/2013, of 5 April 2013, the Constitutional Court declared as unconstitutional the measure included in the Budget for 2013 and determined the total revoke of the suspension with back-date effects to January.

5 The provisional figure for the general government deficit on a public accounts basis and in accordance with the definition used for assessing the respective performance criterium stood at 8,329 million euro. With respect to the stock of public debt, the figure computed using the criteria set under the Programme is 177,181 million euro. Note that the definition of public debt that is relevant for assessing the criterium does not coincide with the one used within the scope of the Excessive Deficit Procedure, since the former excludes: (i) debt contracted for banking recapitalizations; (ii) IGCP (Portuguese Treasury and Debt Management Agency) deposits; (iii) the prepaid margin on European Financial Stability Facility loans; (iv) revisions to the stock of debt used to set up the ceiling; and (v) the impact of the revaluation of debt at the "Programme exchange rates" (applicable on May 5, 2011).

Chart 3.3

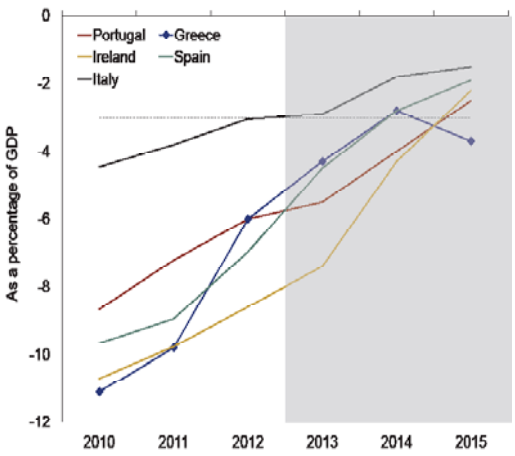
STRUCTURAL TAX BURDEN[a] AND PRIMARY EXPENDITURE[b] : 1995-2012



Source: Banco de Portugal.
Notes: (a) The tax burden includes taxes and social contributions, adjusted for the impact of the economic cycle and the effect of temporary measures. **(b)** Primary expenditure is adjusted for the impact of the economic cycle and the effect of temporary measures and special factors ("Box 3.1 *Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report).

Chart 3.4

FISCAL BALANCE PROJECTIONS



Sources: Greece – "Medium term fiscal strategy 2013-2016; Ireland – Update of the Stability Programme; Italy - Update of the Stability Programme; Portugal – Ministry of Finance; Spain – "Biannual Budget Plan 2013-2014".
Notes: In the case of Portugal, the outturn for the 2010-2012 period is corrected for the impact of temporary measures and other special factors, according to Banco de Portugal estimates. The values for Ireland and Spain exclude the impact of measures related to the assistance to the financial sector.

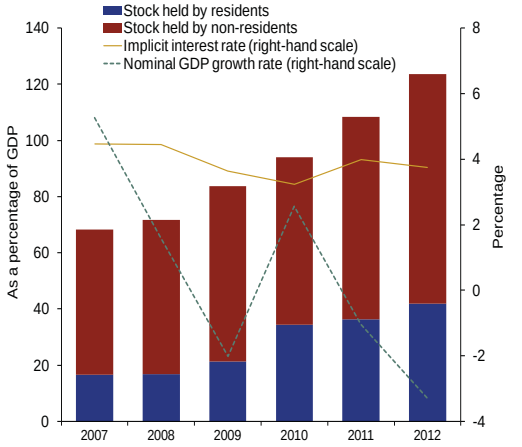
The increase in the stock of public debt resulted in a non-negligible growth of interest expenditure, despite the decline of the implicit interest rate

According to the definition adopted in the context of the Excessive Deficit Procedure, in 2012 expenditure on public debt interest payments increased by 4.7 per cent, which represents a marked slowdown vis-à-vis the previous year's growth (43.1 per cent). The stock of public debt continued to record a very significant increase, particularly as regards the stock held by non-residents, reflecting the funding obtained under the Programme. Thus, the deceleration in interest expenditure essentially stemmed from a decline in the implicit interest rate on public debt[6], from 4.0 per cent, in 2011, to 3.7 per cent, in 2012 (see Chart 3.5). This development benefited from the primary market issuance of Treasury Bills at progressively lower rates over the course of the year, as well as from the fact that the relatively low-rate loans obtained under the Programme were the main source of long run financing of the Portuguese Republic (Chart 3.6). In fact, in 2012, interest costs associated with the Programme loans accounted for about 20 per cent of the overall spending on public debt interest, with the equivalent annual interest rate standing at 2.6 per cent. This figure represents a decrease vis-à-vis the interest rate computed for the amounts received in the previous year, for which contributed the elimination, in mid-2011, of the financial margins on the loans granted by the European Financial Stability Facility and the European Financial Stabilization Mechanism.

6 The implicit interest rate on public debt is computed as the ratio between interest expenditure for the year and the simple average of the stock of debt at the end of the same and preceding years.

Chart 3.5

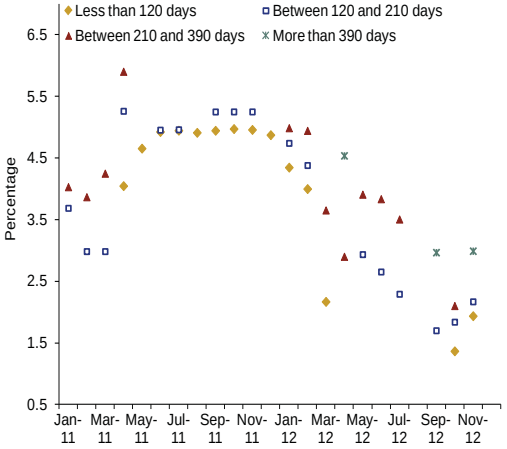
PUBLIC DEBT AS A PERCENTAGE OF GDP, IMPLICIT INTEREST RATE ON PUBLIC DEBT AND GROWTH RATE OF NOMINAL GDP



Source: Banco de Portugal.
Note: The implicit interest rate on public debt is computed as the ratio between interest expenditure for the year and the simple average of the stock of debt at the end of the same and preceding years.

Chart 3.6

INTEREST RATE ON TREASURY BILLS ISSUANCES



Source: *IGCP*.

The rise in the public debt ratio stemmed from the negative evolution of the Portuguese economy combined with the growth of interest expenditure, but it also reflects the impact of significant deficit-debt adjustments

At the end of 2012, the gross public debt ratio (compiled in accordance with the Excessive Deficit Procedure definition) reached 123.6 per cent of GDP. In comparison to 2011, this figure corresponds to a rise in public debt by 15.3 p.p. of GDP. In cumulative terms, in the first two years of the Programme, there was an increase by 29.6 p.p. of GDP (Table 3.1).

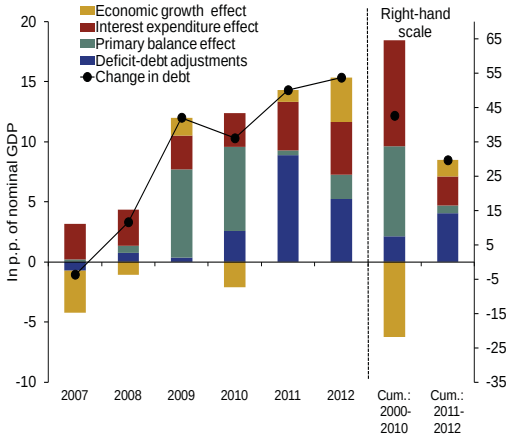
The downturn in economic activity gave a strong contribution for the increase in the public debt ratio in 2011 and 2012, with a cumulative impact of 4.7 p.p. of GDP in the two years (Chart 3.7). This effect was reinforced by the significant increase in expenditure on public debt interest payments (8.4 p.p. of GDP in the same period). To a smaller extent, the existence of primary deficits, particularly in 2012, also partially explains the change in the debt ratio (2.4 p.p. of GDP in the two years, in cumulative terms). It should also be mentioned the large magnitude of deficit-debt adjustments, both in 2011 (8.9 per cent of GDP) and 2012 (5.2 per cent of GDP), reflecting a significant accumulation of general government assets (especially as regards deposits and securities other than shares) ("Box 3.3 *Deficit-debt adjustments in the context of the Economic and Financial Assistance Programme*", in this Report).

In 2012, Portugal stood out among euro area countries for its particularly tight fiscal policy stance

In 12 out of the 17 euro area Member-states, the change in the 2012 budget balance was underpinned by the implementation of pro-cyclical and restrictive fiscal policy (Chart 3.8). However, the intensity of the consolidation effort substantially differs across euro area countries, among which it is worth highlighting the sharp (above 2 p.p.) increases in the structural primary balance recorded in Portugal, Italy, Spain, Greece and Slovenia. After Greece, Portugal also stands out for having recorded in 2012 the most significant negative change in the output gap.

Chart 3.7

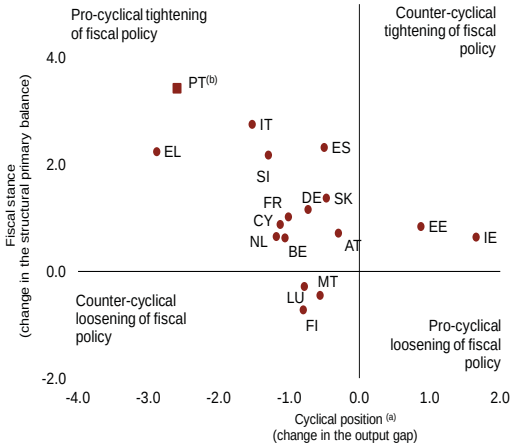
BREAKDOWN OF THE CHANGE IN THE PUBLIC DEBT RATIO



Sources: *INE* and Banco de Portugal.

Chart 3.8

FISCAL POLICY AND CYCLICAL POSITION IN THE EURO AREA IN 2012



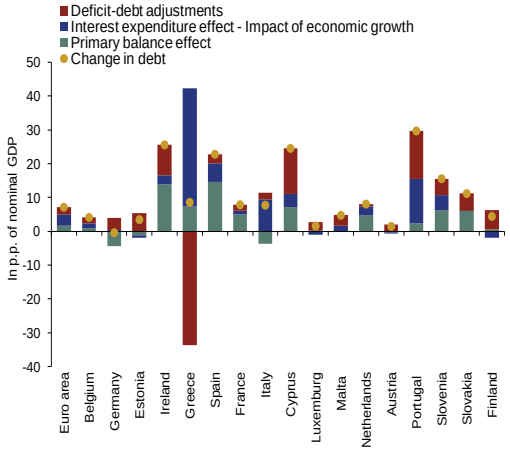
Sources: European Commission and Banco de Portugal.
Notes: (a) The output gap is measured according to calculations by the European Commission, except in the case of Portugal, for which the figure was computed by Banco de Portugal. **(b)** Taking into account the methodology adopted in the Eurosystem and correcting the change in the structural primary deficit for the impact of special factors.

However, similarly to what occurred in most euro area countries, public debt remained at very high levels

In 2012, the euro area public debt ratio continued in a rising path, reaching 92.7 per cent of GDP by the end of the year. Between the end of 2010 and the end of 2012, the public debt ratio to GDP increased by 7.1 p.p. in the euro area. The increase in this ratio is chiefly explained by the differential between the effects of interest and of economic growth (3.3 p.p.), but the impacts of deficit-debt adjustments (2.1 p.p.) and of the cumulative primary deficits in 2011 and 2012 (1.7 p.p.) are also significant. However, the relative contribution of these components differed greatly across the analysed countries (Chart 3.9). Regarding the effects of deficit-debt adjustments, these were significantly positive in Cyprus, Portugal and Ireland. In turn, deficit-debt adjustments gave a contribution for the decline in the public debt ratio to GDP in Greece, since they mirror the reduction of the public debt ratio resulting from the private sector involvement in the restructuring of public debt. As regards the effect of the differential between the impacts of interest and of GDP growth, it was very significant in Greece, Portugal and Italy. The magnitude of the cumulative primary deficits in these two years had a particularly considerable effect in the change of the public debt as a percentage of GDP in Ireland and Spain.

Chart 3.9

BREAKDOWN OF THE CUMULATIVE CHANGE IN THE PUBLIC DEBT RATIO IN THE EURO AREA: 2011 AND 2012



Source: European Commission.

Box 3.1 | Temporary measures and special factors with an impact on the 2012 fiscal outturn

Temporary measures and special factors have had a significant impact on the fiscal developments of the past few years. Table 1 presents a detailed list of the temporary measures and special factors for the period 2010-2012, quantifying their effects on the fiscal balance. The analysis developed in this box is focused on measures and factors with an impact on the general government national accounts data for 2012.[1]

According to the Eurosystem definition, four temporary measures were adopted in 2012, with a total impact on the fiscal balance of 0.6 per cent of GDP. One of these measures resulted from the remaining effects of the Personal Income Tax (PIT) surcharge of 50 per cent on the Christmas bonus in excess of the minimum wage[2] and had a non recurrent positive impact in current revenue (amounting to 0.1 per cent of GDP). Positively affecting the capital tax revenue was the one-off tax collection related to the third special taxation scheme for undeclared income from capital held abroad, with an impact of 0.2 per cent of GDP. Furthermore, the transfer of assets from the *Banco Português de Negócios* (BPN) pension fund to the general government, which affected capital revenue by 0.1 per cent of GDP, was also classified as a temporary measure. Lastly, the tender for the sale of fourth generation mobile phone licenses, which was recorded as negative capital expenditure in line with national accounts procedures, was also classified as a temporary measure (amounting to 0.2 per cent of GDP).

In addition to the temporary measures referred to above, there are several special factors which correspond to transactions with a one-off effect on the general government deficit but that cannot be treated as temporary measures in conformity with the Eurosystem definition. Three transactions were classified as special factors with an impact on the 2012 general government fiscal balance on a national accounts basis. These transactions, with a positive effect on capital expenditure, include the reclassification as general government capital transfers of the equity injections in *Sagestamo*, SGPS, S.A. and *Caixa Geral de Depósitos* (each one amounting to 0.5 per cent of GDP)[3] and the upward revision (0.1 per cent of GDP) of the value of impairments of BPN recorded in the balance sheets of the special purpose vehicles included in the general government consolidation perimeter.

1 For a complete description of temporary measures and special factors for 2010 and 2011, see Banco de Portugal Annual Reports of 2010 and 2011.

2 In the final Personal Income Tax assessment this surcharge was calculated as 3.5 per cent of annual taxable income, deducted by the minimum wage.

3 The Sagestamo, SGPS operation refers to subordinated loans given by PARPÚBLICA, SGPS in 2010. As the result of the reclassification of these transactions as equity injections in 2012 they were recorded as general government capital transfers and therefore had an impact on that year's fiscal balance.

Table 1

IMPACT OF TEMPORARY MEASURES AND SPECIAL FACTORS ON THE FISCAL OUTTURN | IN PERCENTAGE OF GDP

	2010	2011	2012
Temporary measures (A)	**1.7**	**3.9**	**0.6**
Transfer of pension funds' assets	1.6	3.5	0.1
Proceeds from concessions	0.1	-	-
Extraordinary Personal Income Tax surcharge on the Christmas bonus	-	0.5	0.1
Special taxation schemes for undeclared income from capital held abroad	0.1	-	0.2
Tender for the sale of 4G licenses	-	-	0.2
Special factors (B)	**2.8**	**1.2**	**1.0**
Delivery of two submarines	0.5	-	-
Reclassification of PPP contracts	0.5	0.1	-
BPN effect[a]	1.0	0.4	0.1
BPP effect[b]	0.3	-	-
Madeira effect	0.6	0.5	-
Via Madeira - reclassification	-	0.2	-
SESARAM - calling of guarantees	-	0.2	-
Settlement of Regional Government debt	0.6	0.1	-
Recapitalization of the fund for the support of the NHS payment system	-	0.3	-
Reclassified equity injections	-	-	0.9
CGD	-	-	0.5
Sagestamo	-	-	0.5
Impact on the fiscal balance: (C) =(A) - (B)	**-1.1**	**2.7**	**-0.4**

Sources: *INE* and Banco de Portugal.

Notes: (a) In 2010, the "BPN effect" reflects the assumption of *Banco Português de Negócios* impairments by special purpose vehicles classified within general government. In 2011, it refers to the recapitalisation of *Banco Português de Negócios*, under the scope of the respective reprivatisation process. In 2012, the impact reported relates to the upward revision of the impairments assumed in 2010. **(b)** The "BPP effect" reflects the calling of a guarantee granted by the State to a loan to *Banco Privado Português*.

BOX 3.2 | COMPOSITION OF THE STRUCTURAL FISCAL ADJUSTMENT IN PORTUGAL UNDER THE ECONOMIC AND FINANCIAL ASSISTANCE PROGRAMME

The purpose of this box is to examine the developments of the main items of revenue and expenditure, in light of the theoretical framework of the disaggregated approach, used in the context of the European System of Central Banks.[1] This methodology is useful as it allows a quantification of the impacts of different factors affecting the main budgetary items. Moreover, it enhances transparency in as much as it focuses the analysis of the budgetary developments on the structural evolution of the fiscal variables[2] by excluding the transitory impacts stemming from the economic cycle and temporary measures.

Regarding the cyclical adjustment, each revenue and expenditure item that is deemed to be influenced by the economic cycle is corrected on a case-by-case basis applying a constant elasticity to deviations of the respective macroeconomic base from its trend, measured in real terms.[3] This methodology can, therefore, take into account the composition effects of economic growth. On the expenditure side, only unemployment benefits are considered as being influenced by macroeconomic developments. Regarding temporary measures and special factors, it is assumed that they correspond to the figures used by Banco de Portugal for the analysis of public finances. Finally, it is important to note that the structural levels of the different categories of revenue and expenditure are expressed as a percentage of nominal trend GDP,[4] rather than nominal GDP, in order to ensure consistency with the cyclically adjusted figures in the numerator.

To sum up, the analysis in this box shows that the structural fiscal adjustment in 2011 and 2012 fundamentally arise from spending cuts, and, to a lesser extent, from revenue increases. In fact, during this period and despite the introduction of tax measures with a significant estimated impact on fiscal developments, mostly regarding indirect taxation, the tax measures for 2012 did not have the impact initially envisaged. Moreover, the main revenue items in 2011 and 2012 were heavily penalized by the evolution of their specific cyclical components, a fact which widened the discrepancy between actual and structural fiscal developments. As for the factors determining the structural reduction in primary expenditure, there was an across the board decline, affecting the major expenditure items, with the exception of pensions. Nonetheless, an important part of the measures that in 2012 contributed to this reduction in spending will be reverted in 2013, following decisions by the Constitutional Court.

Main components of revenue: structural developments in 2011 and 2012

The most recent developments in fiscal revenue have been influenced by the introduction of a series of structural tax policy measures whose impact on revenue was expected to be quite significant. According to official estimates, in the years 2011 and 2012 this impact (named legislation changes in Table 1) would amount to 3.6 percentage points (p.p.) of trend GDP, with the 2012 measures accounting for 2.0 p.p. (see Table 1). However, after a very substantial increase in the structural tax burden as a percentage of trend GDP in 2011 (1.6 p.p.), in 2012 this aggregate was nearly stable (-0.1 p.p.). Over the two years, the permanent tax legislation changes focused on indirect taxation, which accounted for around 2/3 of the

1 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", Banco de Portugal, *Economic Bulletin - Winter.*

2 The structural level of a given budgetary item is the observed figure, deducted by the cyclical component and corrected for temporary measures and special factors.

3 See Bouthevillain *et al.,* (2001), "Cyclically adjusted budget balances: an alternative approach", *ECB, Working paper series no 77*.

4 Defined as the product of GDP deflator for real trend GDP, estimated by applying the Hodrick-Prescott filter with a smoothening parameter (λ) equal to 30.

Table 1

CHANGES IN GENERAL GOVERNMENT REVENUE AND EXPENDITURE ADJUSTED FOR CYCLICAL EFFECTS, TEMPORARY MEASURES AND SPECIAL FACTORS | PERCENTAGE POINTS OF NOMINAL TREND GDP

	2011	2012	Cum.: 2011-2012
Total revenue	**1.7**	**0.3**	**2.0**
Taxes on households' income	**0.3**	**0.2**	**0.6**
Fiscal drag	-0.1	0.0	-0.1
Decoupling of the macroeconomic base from GDP	0.0	-0.1	-0.1
Legislation changes	0.3	0.4	0.8
Residual	0.1	-0.1	0.0
Taxes on firms' income	**0.5**	**-0.3**	**0.2**
Fiscal drag	0.0	0.0	0.0
Decoupling of the macroeconomic base from GDP	0.0	0.1	0.1
Legislation changes	0.1	0.2	0.3
Residual	0.3	-0.5	-0.2
VAT	**0.8**	**0.6**	**1.3**
Fiscal drag	0.0	0.0	0.0
Decoupling of the macroeconomic base from GDP	0.2	0.1	0.3
Legislation changes	1.0	1.2	2.2
Residual	-0.4	-0.8	-1.2
Other taxes on production and imports	**0.0**	**-0.1**	**0.0**
Fiscal drag	0.0	0.0	0.0
Decoupling of the macroeconomic base from GDP	0.0	0.0	0.0
Legislation changes	0.1	0.1	0.2
Residual	-0.1	-0.2	-0.3
Social contributions	**0.0**	**-0.6**	**-0.6**
Fiscal drag	0.0	0.0	0.0
Decoupling of the macroeconomic base from GDP	0.2	0.1	0.2
Legislation changes	0.1	0.0	0.1
Residual	-0.3	-0.7	-0.9
Memo item: included in expenditure[a]	-0.4	-0.5	-0.9
Overall taxes and social contributions	**1.6**	**-0.1**	**1.5**
Fiscal drag	-0.1	0.0	-0.1
Decoupling of the macroeconomic base from GDP	0.4	0.1	0.6
Legislation changes	1.6	2.0	3.6
Residual	-0.4	-2.3	-2.6
Memo item: included in expenditure[a]	-0.4	-0.5	-0.9
Other revenue[b]	**0.1**	**0.5**	**0.5**
of which: from the EU	-0.4	0.2	-0.2
Primary expenditure	**-2.1**	**-3.1**	**-5.3**
Primary current expenditure	**-1.3**	**-2.5**	**-3.8**
Social payments	**-0.1**	**-0.1**	**-0.2**
of which: Pension payments	0.5	0.0	0.5
Unemployment benefits	0.0	0.1	0.2
Social benefits in kind	-0.3	-0.1	-0.4
Compensation of employees	**-1.0**	**-1.8**	**-2.8**
Intermediate consumption	**0.0**	**-0.3**	**-0.3**
Subsidies	**-0.1**	**-0.1**	**-0.1**
Other current expenditure	**-0.1**	**-0.3**	**-0.4**
Capital expenditure	**-0.8**	**-0.7**	**-1.5**
Investment	**-0.7**	**-0.5**	**-1.2**
Other capital expenditure	**-0.5**	**0.0**	**-0.5**

Source: Banco de Portugal.

Notes: (a) Part of the residual of actual social contributions related with social contributions of the civil servants system and imputed social contributions, both recorded on the expenditure side under the item compensation of employees. **(b)** Includes other current revenue, sales and capital revenue.

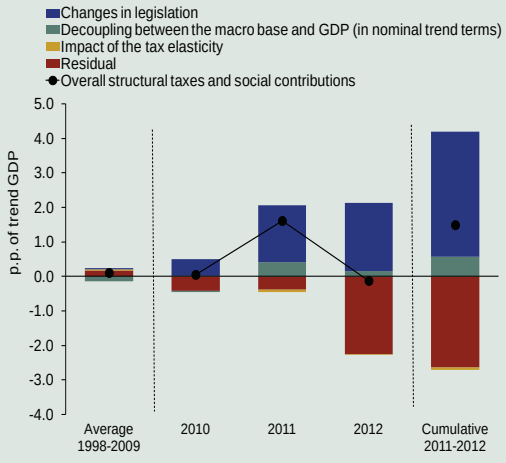
overall impact of tax measures. Over the same period, direct taxation on households' and firms' income increased, in structural terms, by 0.8 p.p. of trend GDP, while indirect taxation revenue rose by 1.3 p.p..

A breakdown of the change of the ratio of total tax and social security contributions to trend GDP is presented in Chart 1. In terms of the 2012 fiscal developments[5], there was a broad array of structural changes in legislation affecting this aggregate, the most important being the changes in Value Added Tax (VAT) lists which accounted for nearly half of this impact (1.0 p.p.). However, the effects of the implementation of these measures were partially offset by a revenue change which cannot be explained by the usual factors (-1.8 p.p).[6] This residual may arise in part from the combination of the limitations of the chosen approach in capturing non-linear cyclical effects, which might occur in specific contexts like the current one, with a possible over-estimation of the positive impact of legislation changes. The discrepancy between the nominal trend growth rates of macroeconomic bases and GDP had a relatively minor positive impact on the evolution of tax revenue in 2012. Chart 2 presents the impact of the different explanatory factors on the structural evolution of the main taxes and social security contributions as a ratio of trend GDP in 2012.

In 2012, actual revenue from **taxes on households' income** dropped by 6.6 per cent, partially due to the pro-cyclical and quite negative evolution of the private sector wage bill, used as macroeconomic base for this revenue item. In structural terms, revenue from these taxes went up by 3.2 per cent (corresponding to 0.2 p.p. of trend GDP), as it is corrected for temporary measures which had a more substantial impact in 2011 (0.5 p.p.) than in 2012 (0.1 p.p.) ("Box 3.*1 Temporary measures and special factors with an impact on the 2012 fiscal outturn*", of this Report.). As for structural changes in the Personal Income Tax legislation, an impact of 0.4 p.p. of trend GDP on tax revenue is estimated (after 0.3 p.p. in 2011), essentially stemming from the introduction of an overall ceiling on tax credits in the two highest income brackets, along with the complete convergence of the taxation of income from pensions to the rules in

Chart 1

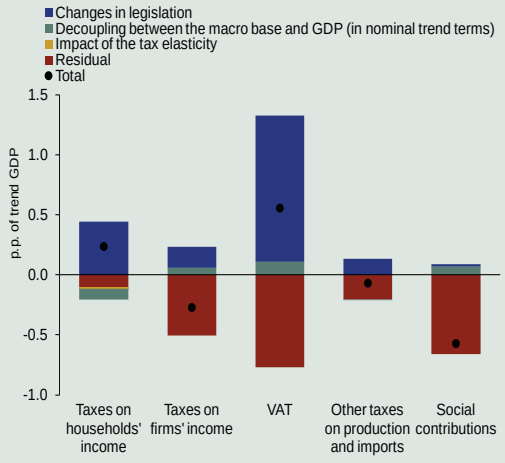
BREAKDOWN OF THE OVERALL CHANGE IN STRUCTURAL TAXES AND SOCIAL CONTRIBUTIONS[(a)]



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 2012[(a)]



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).

5 For a detailed analysis of fiscal developments in 2011, see "Chapter 3 *Fiscal Policy and Situation*", Banco de Portugal, *Annual Report - 2011*.

6 The residual from taxes and social contributions amounts to -2.3 p.p. of trend GDP but a fraction of it (-0.5 p.p.) is explained by the reduction of civil servants' social contributions, considered as not having a cyclical effect in the methodology adopted.

force for labour income. Finally, the residual component did not present a more negative figure, given the increase in receipts from final withholding taxation on capital revenue and the decline in refunds. The rise in structural households' income tax revenue in 2012, quantified above, should be seen in the context of developments which were already relevant in 2011. In fact, the structural evolution of this aggregate in 2011 and 2012 was similar, and resulted in a cumulative increase of 0.6 p.p. of trend GDP.

In the first two years of the Programme, the structural revenue from **taxes on firms' income** as a percentage of trend GDP went up just by 0.2 p.p., with the substantial rise in 2011 (0.5 p.p.) being partially reversed in 2012. In fact, the structural revenue from taxes on firms' income declined significantly (-8.8 per cent) though this was less important than its actual contraction (-16.0 per cent). The cyclical component of this tax, for which the considered macroeconomic base is private GDP, dropped by 0.3 p.p.. In spite of legislation changes with a positive estimated impact of 0.2 p.p. of trend GDP on Corporate Income Tax revenue (of which the most relevant were the introduction of a surcharge on profits, the elimination of tax exemptions and lower rates, and the setting of limits for deducting tax losses), the structural revenue of this tax dropped by 0.3 p.p. in 2012. The sizable value of the residual component outweighed the effects of legislative changes on this tax revenue. The magnitude of this residual may have come from the fact that the chosen macroeconomic base did not adequately capture the behaviour of taxable profits and additionally from the substantial increase in refunds.

Revenue from **VAT** in 2012 increased by 6.2 per cent in structural terms, while there was a drop of 1.3 per cent in actual revenue. The cyclical component of this tax declined by 0.6 p.p. of GDP in 2012, reflecting the shrinking of private consumption and leading to a significant discrepancy between the structural and the actual evolution of this aggregate. As in 2011, the positive outturn of this tax structural revenue took place due to a series of changes in legislation with a substantial initially estimated effect (1.2 p.p. of trend GDP). In fact, besides the above-mentioned restructuring of tax lists that led to an increase of the tax rate on goods and services which were previously subject to reduced or intermediate rates (with particular reference to the change in the VAT rate on restaurant services which increased from 13 to 23 per cent) taking effect from January 2012, the collection of this tax reflected the remaining impact from the increase in the VAT rate on electricity and natural gas from 6 to 23 per cent, which came into force in October 2011. Also note the very negative residual in the breakdown of the structural change in this tax revenue (-0.8 p.p.), which in part may be due to the combination of non-linear effects that hamper an accurate measurement of cyclical effects with the high uncertainty surrounding the forecast of the impact of legislation changes, which may have led to its overestimation.

The structural revenue from other taxes on production and imports dropped by 2.0 per cent in 2012, after a rise of 0.8 per cent in 2011. The structural evolution of this aggregate in 2012 resulted from a 7.2 per cent decline in actual revenue and a negative change of the cyclical component (-0.3 p.p. of GDP). The legislation effects regarding these taxes amounted to 0.1 p.p. of trend GDP. More specifically, the actual revenue from the Tax on Oil Products declined by 8.2 per cent given that the large fall in the consumption of fuel (as shown by the significant contraction of petrol and diesel sales: -9.4 and -9.2 per cent, respectively) was mitigated by the introduction of a special tax on energy. With respect to the Tax on Vehicles Sales, no major relevant legislative changes were introduced, and the level of this tax revenue dropped very significantly (-42.2 per cent), with fewer motor vehicles being sold (sales went down by 37.8 per cent for passenger vehicles, which account for around 80 per cent of this tax revenue). There was also a 6.5 per cent drop in the Tobacco Tax collection, despite the legislation changes introduced. Conversely, the changes introduced in real estate taxation, specifically a large cut in exemptions from the Municipal Tax on Real Estate, led to an 8.3 per cent rise in this tax collection. The revenue from the Stamp Duty and the Municipal Tax on Real Estate Transactions continued to show a downward trend, with growth rates of -8.4 and -18.0 per cent, respectively.

After a quasi-stabilisation of revenue from **social contributions** in 2011, a 5.4 per cent structural reduction took place in 2012 (-0.6 in p.p. of trend GDP), while its actual contraction reached 8.1 per cent. This

negative outcome was particularly noticeable in the case of imputed contributions, which went down by 14.4 per cent, in line with the drop in the public sector wage bill.[7] Actual contributions were also affected by the above-mentioned reduction in the public sector wage bill and by the contraction in the private sector wage bill, but recorded a smaller decline (-6.2 per cent). In terms of legislation changes, only the lagged effects of the implementation of the new Social Security contributory code had some impact on revenue from contributions. As for the residual component, it was essentially determined by the indirect effect of the suspension of bonuses for public sector employees, as explained in note 6.

Actual **capital revenue** had a very significant reduction in 2012 (-71.6 per cent) that was, however, fundamentally determined by the previous year's implementation of temporary measures, with a very substantial base effect. Correcting the actual capital revenue for these effects, there was a structural change of 7.4 per cent and a slight increase in the ratio of this item to trend GDP (0.1 p.p.). This comes essentially as a result of an increase of 16.1 per cent in capital transfers from the European Union that have general government entities as their final recipients. Compared with 2010, capital revenue has shrunk, in structural terms, by 10.2 per cent.

Main components of primary expenditure: structural developments in 2011 and 2012

In the first two years of the Programme, structural **primary current expenditure** declined by 3.8 p.p. of trend GDP, of which 2.5 p.p. were recorded in 2012 (Chart 3). This development essentially stemmed from a reduction in outlays on compensation of employees, intermediate consumption and social transfers in kind.

In fact, after a significant decrease in compensation of employees in 2011, largely resulting from an average wage cut of 5 per cent, this expenditure item recorded a new reduction in 2012 (Chart 4). This outcome has stemmed, to a large extent, from the suspension of the Christmas and summer bonuses applicable to public sector employees with monthly salaries of 1,100 euro and above (progressive cuts were applied to employees with salaries between 600 and 1,100 euro). Overall, in 2011 and 2012, expenditure on wages and salaries dropped by 2.0 p.p. of trend GDP, also reflecting a sharp reduction in the number of employees (approximately by 8 per cent).

The suspension of Christmas and summer bonuses to pensioners, similar to the one applicable to public sector employees, generated savings amounting to 0.8 per cent of GDP in pension expenditure. However, these savings were partially offset by an increase in outlays arising from the payment of pensions to banking sector pensioners covered by the respective substitute scheme. These payments result from the liabilities that Social Security assumed as a counterpart for the transfer in 2011 of assets from pension funds of several financial institutions. In addition, the growth in the number of pensioners and the rise in the average pension also contributed to an increase in this expenditure item. Thus, in 2012, pension expenditure recorded a slightly negative change, remaining virtually unchanged as a ratio to GDP (Chart 3). Nonetheless, overall expenditure on social transfers in cash mildly accelerated vis-à-vis 2011, mostly reflecting an increase in expenditure on unemployment benefits. In fact, while in 2011 these outlays recorded a decline, in 2012 there was a 23.3 per cent rise, resulting from developments regarding the respective cyclical component.[8]

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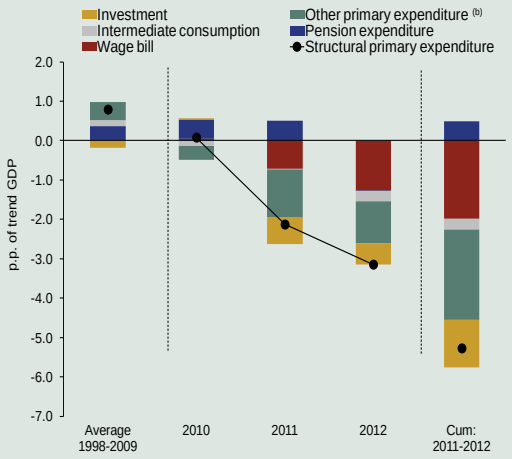
7 In national accounts, employer contributions regarding public employees who are subscribers to the *Caixa Geral de Aposentações* are recorded under imputed contributions at the rate of 28.43 per cent of the respective salaries.

8 Expenditure on unemployment benefits corrected for the impact of the economic cycle grew by 9.3 per cent in 2012, marginally increasing as a ratio to trend GDP. The differential vis-à-vis this item's actual growth stems from an increase in the respective cyclical component, which reflects the fact that the rise in the number of subsidised unemployed was sharper than the increase in its trend. In 2012, the average number of subsidised unemployed grew by 24.4 per cent on a year-on-year basis.

Chart 3

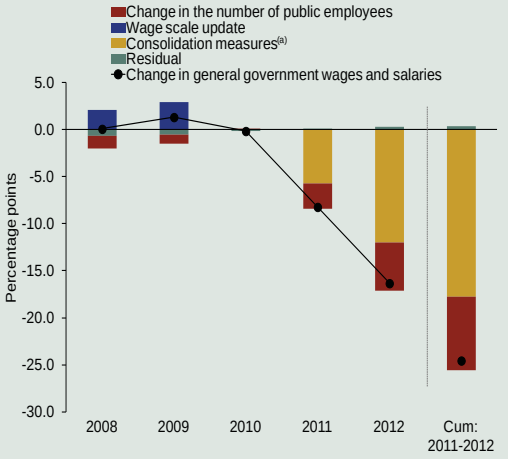
BREAKDOWN OF THE CHANGE IN STRUCTURAL PRIMARY EXPENDITURE[a]



Sources: *INE* and Banco de Portugal.
Notes: (a) The composition of primary expenditure is corrected for the effects of the transformation of public hospitals into corporations in the 2002-2010 period, according to estimates by Banco de Portugal. **(b)** Other primary expenditure includes social payments excluding pensions, general government social contributions, subsidies and other current and capital expenditure.

Chart 4

BREAKDOWN OF THE CHANGE IN GENERAL GOVERNMENT WAGES AND SALARIES



Sources: *INE* and Banco de Portugal.
Note: (a) This category includes the Banco de Portugal estimates for the impacts stemming from the cut in general government wages undertaken in 2011 (5 per cent, on average) and from the suspension of summer and Christmas bonuses of part of public sector employees in 2012.

In addition, the implementation of several measures affecting the health sector (specifically as regards medicines' co-payments and prices) contributed to the reduction in expenditure on social benefits in kind. This effect was reinforced by a cut in payments for services provided by corporate hospitals. Moreover, it is worth highlighting the decline in expenditure on intermediate consumption that, although partially explained by across-the-board rationalisation efforts, also reflects a sharp spending retrenchment in the last quarter of 2012. There was, furthermore, a reduction in current transfers to firms resulting from a drop in compensatory payments to State-owned enterprises classified outside the general government sector and from a decline in expenditure on interest relief subsidies related to mortgages.

In 2011 and 2012, general government **capital expenditure** recorded a substantial decrease in structural terms. In particular, after decreasing by 22.0 per cent in the previous year, this expenditure item declined by 23.5 per cent in 2012 which represents an overall fall of 1.5 p.p. of trend GDP in the two years. These developments are primarily explained by the decline in public investment and, to a lesser degree, by the reduction in capital transfers. Indeed, the general government gross fixed capital formation recorded a cumulative reduction of 1.2 p.p. of trend GDP in 2011 and 2012 (Chart 3). In 2012, public investment decreased by 23.2 per cent on a year-on-year basis, essentially reflecting the cuts undertaken by enterprises classified in the Autonomous Services and Funds subsector, particularly as regards *Parque Escolar*, EPE and *Rede Ferroviária Nacional* – REFER, EPE. Regarding capital transfers, there was also a significant decline, by 26.7 per cent, which may have been linked to a reduction in national co-financing for projects funded by the European Union.

BOX 3.3 | DEFICIT-DEBT ADJUSTMENTS IN THE CONTEXT OF THE ECONOMIC AND FINANCIAL ASSISTANCE PROGRAMME

In the initial Programme[1], the projection for public debt as a ratio to GDP assumed that it would reach a maximum of 106.8 per cent in 2013, after which it would follow a downward path (Chart 1). The more recent projection, made public within the scope of the seventh review of the Programme, takes into account the sharp rise in the stock of debt recorded in 2012 and assumes that the ratio to GDP peaks in 2014, falling below 120 per cent of GDP only after 2015. The upward revision of the projection for the public debt ratio is only partially explained by the assumption of an economic outlook more adverse than expected in mid-2011 and of a higher fiscal deficit. In fact, about ¾ of the revision is explained by the additional impact of deficit-debt adjustments.[2]

At the end of 2010, the public debt ratio stood at 94.0 per cent of GDP and reached 123.6 per cent by the end of 2012. About half of the cumulative change in the debt ratio in 2011 and 2012 can be explained by the large magnitude of deficit-debt adjustments with a positive sign, which implies that the public debt increased by more than what would have been expected given the fiscal and macroeconomic developments. In cumulative terms, these adjustments amount to 14.1 per cent of GDP, reflecting a series of financial operations with very distinctive characteristics in these two years (Chart 2).

In 2011, the deficit-debt adjustments (8.9 per cent of GDP) primarily stemmed from a sizeable asset accumulation, resulting from a rise in general government deposits (by 6.0 per cent of GDP). This outcome was much influenced by the amounts received in 2011 under the Programme that were not used in the same year, as well as by the transfer to the general government sector of about half of the assets of pension funds of several financial institutions. It should be highlighted that the remaining half of this transfer (amounting to 1.6 per cent of GDP) only took place in 2012. It is depicted in chart 2 under the heading that includes transactions in "other assets" and thus contributes to explain the change in debt observed in 2011.

In 2012, the size of deficit-debt adjustments (5.2 per cent of GDP) can also be explained by an accumulation of general government assets, but its composition differs from that of the previous year. In particular, during this year, the growth of assets mostly refers to an increase in securities (excluding shares) related to the impact of the issuance of contingent capital instruments (CoCo's) within the scope of the recapitalisation processes of several resident banks (3.1 per cent of GDP). Furthermore, it should be noted that, after the steep increase in general government deposits in 2011, in 2012 there was an additional accumulation of these assets, with the respective stock reaching 11.6 per cent of GDP by the year-end.[3]

On the opposite direction, there has been a drop in shares and other equity due to the sale of the airport service concession to ANA - *Aeroportos de Portugal*. Indeed, the revenue from this operation (corresponding to 0.7 per cent of GDP) was not recorded in the fiscal balance, as the transaction was statistically treated as a decrease of holdings in the general government's portfolio.

Lastly, it is important to highlight that the relatively small magnitude of the item referring to transactions

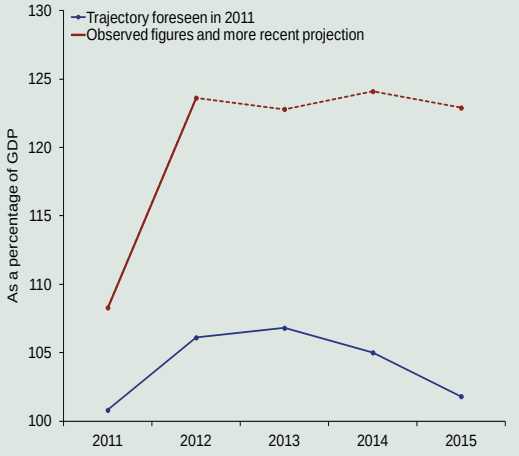
1 See the Fiscal Strategy Document of August 2011.

2 The deficit-debt adjustments explain the difference between the general government net borrowing or net lending (*i.e.* the fiscal balance) and the change in the stock of public debt. These adjustments are calculated as total transactions in financial assets net of the change in liabilities excluded from the Maastricht public debt definition. They further reflect other effects associated with changes in the volume and price of debt. Note that the liabilities not included in the Maastricht debt definition, which is the relevant definition in the context of the Excessive Deficit Procedure, are essentially derivatives and commercial debt.

3 It should be noted that this increase in the stock of general government deposits happened despite the fact that part of the fund for supporting the banking system capitalization has been used in 2012 through the issuance of CoCos. Therefore, the amounts already used are accounted for under the heading "securities other than shares". The rise of the stock of deposits should be linked to the fact that these amounts were more than offset by new funding instalments received under the Programme throughout the year.

Chart 1

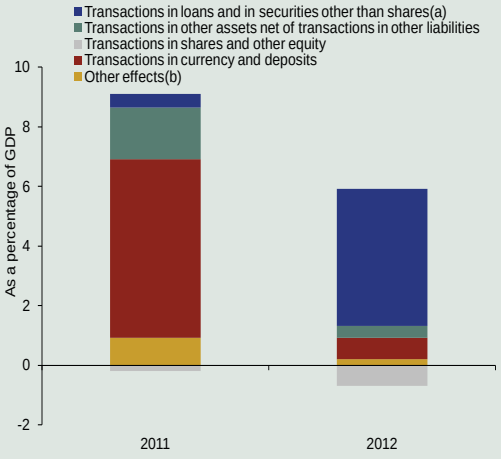
PROJECTIONS FOR THE PUBLIC DEBT RATIO



Sources: Banco de Portugal, *INE* and Ministry of Finance.

Chart 2

BREAKDOWN OF DEFICIT-DEBT ADJUSTMENTS



Source: Banco de Portugal.
Notes: (a) In 2012 the evolution of the general government portfolio does not reflect the important privatization operations that took place throughout the year. In fact, by the end of December 2012, the counterpart for the revenue obtained and delivered by PARPÚBLICA to the State had not yet been settled, thus the respective amounts are included in the Maastricht debt and, therefore, have no impact on deficit-debt adjustments. **(b)** This component mostly reflects asset valuation effects (in particular, the difference between interest paid and interest accrued, the effects of the issuance and redemption of debt not at par and the impact of exchange rate fluctuations on Maastricht debt denominated in foreign currency), as well as effects of changes in the volume of debt.

in "other assets" net of transactions in liabilities excluding Maastricht instruments is concealing the impact of financial operations involving very significant amounts, but that partially cancel each other. On the one hand, there was a reduction in "other assets" as the part of the banking sector pension funds that was not transferred in 2011 was actually received by general government in 2012. This operation more than offset the impact on "other assets" of the recording of the proceeds obtained with the concession of airport service to ANA – *Aeroportos de Portugal* that had not yet been received by the end of 2012, as a counterpart for the above mentioned decrease in the portfolio of shares. In the opposite direction, there was a very significant decrease in other general government liabilities that essentially refers to the settlement of National Health Service arrears (recorded in previous years' deficits) and to the payment of the capital injection undertaken in *Banco Português de Negócios* in 2011. In net terms, this set of operations led to an increase of public debt of approximately 0.4 per cent of GDP.

4. SUPPLY

Significant contraction of economic activity in most sectors

Gross value added (GVA) generated in the Portuguese economy in 2012 declined by 2.4 per cent, following a 1.3 per cent drop in the previous year (Table 4.1). The decline in economic activity in Portugal deepened after the first quarter, in line with the pattern observed across the euro area during the year. The contraction of GVA in Portugal was 1.8 per cent in the first quarter, in year-on-year terms, while in the following quarters it was up to an average of 2.6 per cent. The intra-annual profile of the economic sentiment indicator of the European Commission also portrays a worsening of activity in the last months of 2012 (Chart 4.1).

The downward move in GVA was recorded in all sectors, deteriorating the scenario observed in 2011. In particular, the industrial sector fell 2.6 per cent, after a 1.7 per cent rise a year earlier. In addition, the downward path in construction continued, with a 15.8 per cent fall recorded in 2012. This performance accentuated considerably the pattern observed over recent years, leading to an accumulated loss of around 44 per cent in the level of activity in this sector since 1999 (Chart 4.2). It should be noted that the contraction of activity in the construction sector reflects not only a cyclical component but, mostly, a structural adjustment. Although there are different situations in construction segments, the current number of dwellings *per capita* and the endowment of some types of public infrastructure suggests that activity in these segments should not recover to the levels observed at the end of the nineties. In the services sector, the negative move (-1.5 per cent) was across the board, with salient features being "wholesale and retail sales, repair of motor vehicles, accommodation, and food service industries" (-1.8 per cent) and "transportation and communications (-2.6 per cent).

Table 4.1

GROSS VALUE ADDED | REAL GROWTH RATE, PERCENTAGE

	Weights 2010[(b)]	2006	2007	2008	2009	2010	2011	2012
Agriculture, hunting, forestry and fishing	2.3	2.4	-4.6	3.1	-3.8	1.6	0.6	-1.0
Industry	13.8	0.9	3.0	-1.5	-9.8	7.0	1.7	-2.6
Electricity, gas and water	3.9	11.0	1.1	4.0	-5.6	9.2	-2.6	-0.8
Construction	6.3	-2.6	2.0	-4.9	-10.7	-5.4	-9.7	-15.8
Services	73.8	1.9	3.1	1.1	0.3	1.2	-1.2	-1.5
Trade repair, hotels and restaurants	18.7	1.9	1.3	-1.3	0.6	2.5	-1.2	-1.8
Transports and communication	8.5	4.8	6.8	2.7	-2.3	0.3	-1.6	-2.6
Financial and real estate activities	15.3	5.1	4.8	2.8	1.2	1.1	-0.3	-0.9
Other services	31.2	-0.3	2.3	1.2	0.3	0.8	-1.6	-1.3
GVA[(a)]	100.0	1.7	2.7	0.4	-2.2	1.9	-1.3	-2.4
Memo								
GDP at market prices	--	1.4	2.4	0.0	-2.9	1.9	-1.6	-3.2

Source: *INE*.
Notes: (a) GVA is registered at base prices and differs from GDP at market prices because the latter includes, besides GVA of the various sectors, taxes on production and imports net of subsidies. **(b)** As a percentage of total GVA at current prices.

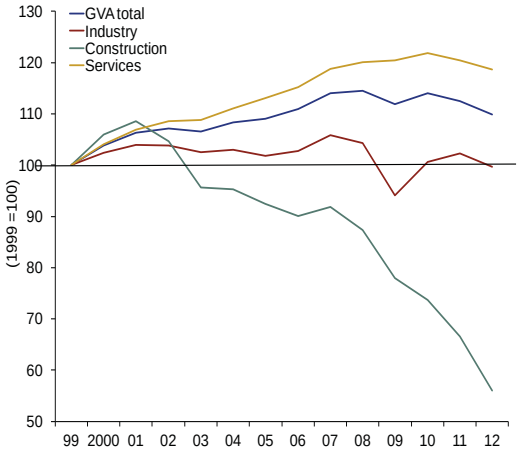
Chart 4.1

GVA AND ECONOMIC SENTIMENT INDICATOR

Sources: European Commission and *INE* (quarterly accounts).

Chart 4.2

GROSS VALUE ADDED PER SECTOR | ACCUMULATED SINCE 1999



Source: *INE* (quarterly accounts).

A number of factors played a part in the markedly adverse economic activity developments of 2012. Firstly, the on-going adjustment process in the Portuguese economy has seriously affected the dynamics of domestic demand, both through the fall in disposable income and in the worsening of levels of confidence. Secondly, the synchronization of adjustment efforts, specifically at the fiscal level, in a number of Portugal's main trade partners limited external demand, especially in the context of the euro area (see "Chapter 1 *International environment*", of this Report). It should be noted that GVA fell in the euro area by 0.4 per cent in 2012, against a 1.6 per cent growth a year before.

The change in activity at the firm level tends to be quite heterogeneous

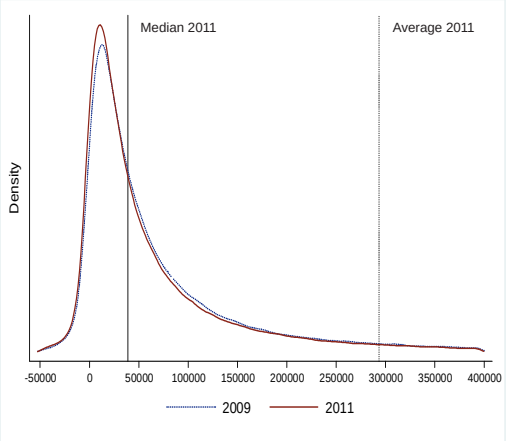
Although there is a contraction in activity in aggregate terms, there are considerable differences at the firm level. As in other countries, the distribution of GVA levels across Portuguese firms shows a significant dispersion, stemming from differences in size, sector, production technologies and other factors that are specific to each firm (Chart 4.3). Notwithstanding the high proportion of small firms, their share in terms of overall sales in the economy is relatively small. The skewness that is visible in the GVA distribution illustrates the difficulties in setting policies focused on the representative firm, since the average firm tends not to be representative of the distribution. In fact, in 2011 about 89 per cent of firms recorded a GVA that is lower than the average of the economy (290 thousand euros).

Despite not being available for 2012, firm level data, shows that an important group of firms recorded positive GVA developments in 2009 and 2011, years when there was a fall in aggregate activity (Chart 4.4). This fact is compatible with the restructuring of the Portuguese economy, which started before the international economic and financial crisis. The success of this adjustment process depends on the existence of creative destruction, where those firms that are more productive and innovative succeed in gaining market share.

Pursuing of a broad structural reform agenda, such as the one set out in the economic and financial assistance programme, is a necessary condition for a reduction in the distortions that hamper the reallocation of productive factors to more dynamic and competitive sectors, leading to a structural fall in unemployment and increased growth in potential output.

Chart 4.3

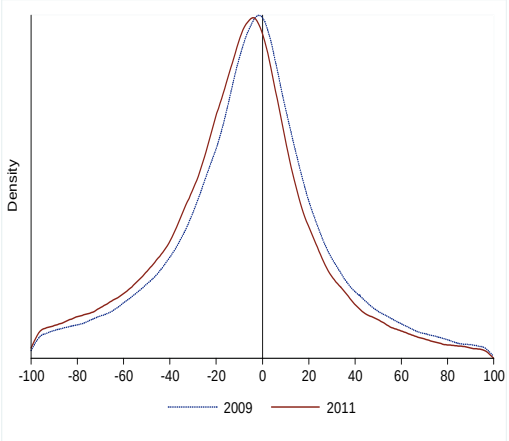
DISTRIBUTION OF GROSS VALUE ADDED, BY FIRM, IN 2009 AND 2011 | IN EUROS



Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).
Notes: Gross value added consists in output deducted from intermediate inputs. Output comprises sales of goods and services, supplementary income, operational subsidies, work by the firm and change in stocks. Intermediate inputs include external supplies, cost of raw materials and indirect taxes. Observations below the first percentile were excluded as well as firms reporting GVA above 400.000 euros, which corresponds to around 9 and 8.4 per cent of the firms in 2009 and 2011, respectively.

Chart 4.4

DISTRIBUTION OF GROSS VALUE ADDED GROWTH RATE, BY FIRM, FOR 2009 AND 2011 | PERCENTAGE



Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).
Note: The set of enterprises was truncated within the +/- 100 per cent range.

A steep fall in confidence is visible in a number of sectors

The move in confidence indicators of the productive sectors is consistent with the sectoral developments in the Portuguese economy during 2012 and with its intra-annual profile. Confidence indicators can be smoothed and standardized so as to reflect the cyclical situation of activity in each sector or, in other words, to assess the move in confidence over and beyond the trend line. An analysis of these indicators shows a general deterioration in confidence in cyclical terms during the year (Chart 4.5). In terms of construction, the cyclical move in confidence is somewhat attenuated but it coexists with a very pronounced trend deterioration.

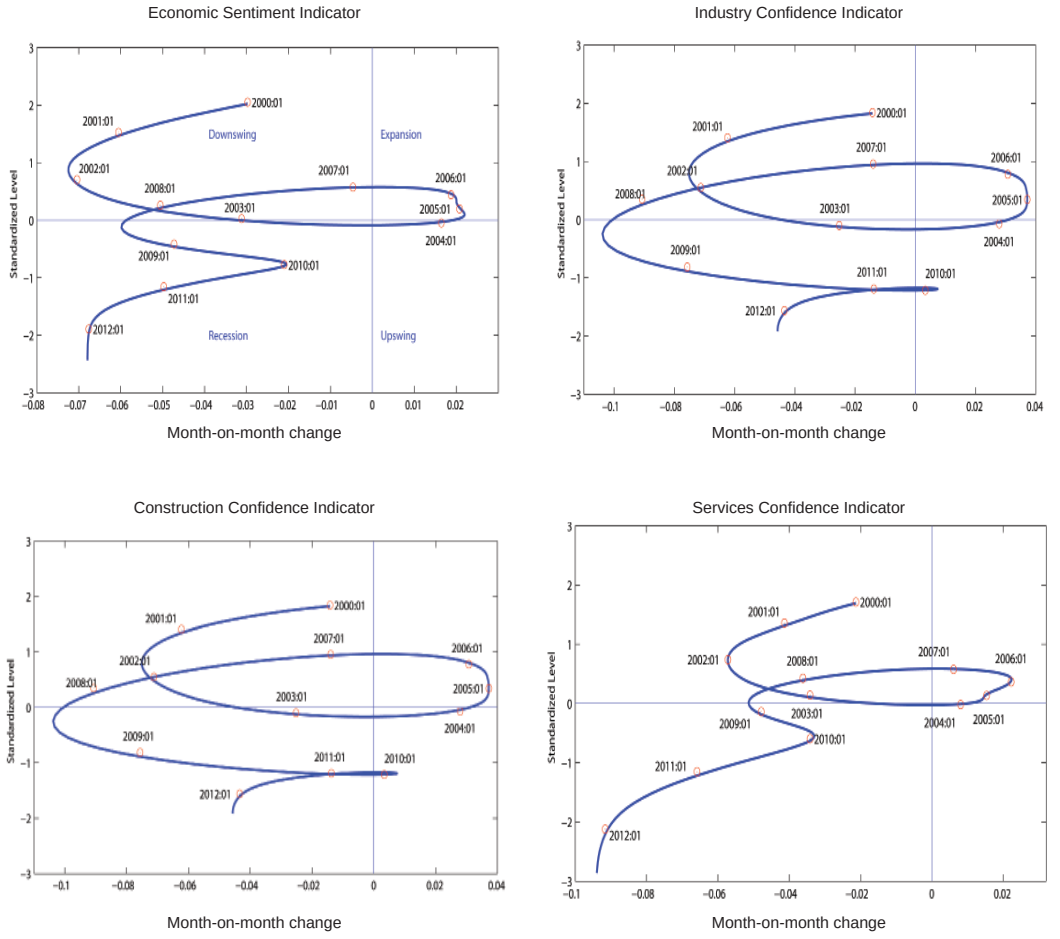
Strong fall in employment during the year, against a backdrop of decline in total population and active population

Employment in the Portuguese economy was down 4.2 per cent over the year. An analysis of the intra-annual profile of employment shows that there were year-on-year falls of over 4 per cent during 2012 (Chart 4.6). The strong net job destruction is one of the most conspicuous aspects of the adjustment process underway in the Portuguese economy. The destruction recorded in recent years has taken this variable at year-end to levels similar to those recorded towards the end of the 1980s.

The labour market participation rate in 2012 was 73.9 per cent for the 15 to 64 age group, slightly down on the figure for a year earlier. Among men, the rate fell 0.6 p.p., standing at 77.9 per cent, while among women there was a rise of 0.3 p.p., bringing the figure to 70.1 per cent. The rate for the population as a whole stood at 51.9 per cent.

Chart 4.5

INDICATORS OF THE EVOLUTION OF THE ECONOMIC CLIMATE IN PORTUGAL



Sources: European Commission and computations by Banco de Portugal.
Notes: The indicators of the evolution of the economic climate presented are computed basing on the information of the opinion surveys of the European Commission and resorting to a simple visualization tool (the Economic Climate Tracer) proposed by Gayer (2010), Report: The Economic Climate Tracer: A tool to visualise the cyclical stance of the economy using survey data. www.oecd.org/std/clits/39578745.pdf. This approach consists of the graphical representation of the standardized level of a smoothed indicator (using for instance the Hodrick-Prescott filter, in order to eliminate short-term fluctuations) on its month-on-month changes. The resulting diagrams can be divided into four quadrants, allowing in this way the association of the temporal evolution of the smoothed qualitative variables to the different phases of the business cycle: first quadrant – expansion – when the standardized series is above its mean and increasing; second quadrant – downswing – when the standardized series is above its mean but decreasing; third quadrant – recession – when the standardized series is below its mean and decreasing; and the fourth quadrant – upswing – when the standardized series is below its mean but increasing.

According to the INE employment survey, the country's total population was down 0.4 per cent in 2012, while the active population was down by 0.9 per cent (Chart 4.6). This fall is very significant in historical terms as it accentuates the trend towards deceleration visible over recent years. This is the result of the deterioration in the cyclical position of the economy, the dynamics of migratory flows and the aging process.

It is not easy to assess the recent dynamics of migratory flows since there are no accurate statistics in this field. There is a variety of reasons for this – the seasonal aspect of some emigration, the free movement of individuals in the EU and the difficulty in collating information on residence permits in extra-community countries. The rise in emigration has been spurred by the large increase in unemployment and by the growth of some emerging and developing market economies. In contrast, emigration to EU countries tends to be dampened by their worsening economic and labour market conditions. It should be noted

that emigration is typically self-sustained, since the costs of moving and settling in a foreign country go down as the emigrant community expands. There are also features related to imitation and family regrouping that accentuate the process.

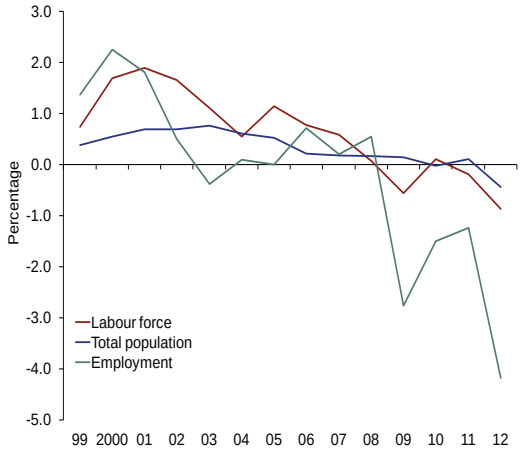
Job destruction is higher than the fall in economic activity

The comparison between the move in employment and private GDP suggests a structural change in the relationship between these two variables over recent years (Chart 4.7). The fact that levels of job destruction are clearly above the fall in economic activity indicates an adjustment that looks to be permanent, with a reduced incidence of labour hoarding. Moreover, job destruction has been pushed up by the slump in sectors that are relatively more labour intensive. The structural effects may also be occurring through job destruction in sectors that are relatively less productive. In sectoral terms, according to the INE employment survey, the reduction of jobs in construction during the year was very high (-18.9 per cent) and clearly higher than in manufacturing (-5.4 per cent).

In terms of employment by status and type of contract, there were fewer jobs for employees (4.9 per cent), particularly with fixed-term contracts (down 12.6 per cent). The number of self-employed was down 5.9 per cent for those acting as employers, whereas the fall was very slight for those working without employees (0.2 per cent). This move is associated to the economic cycle, which generates a destruction of temporary labour relations.

Chart 4.6

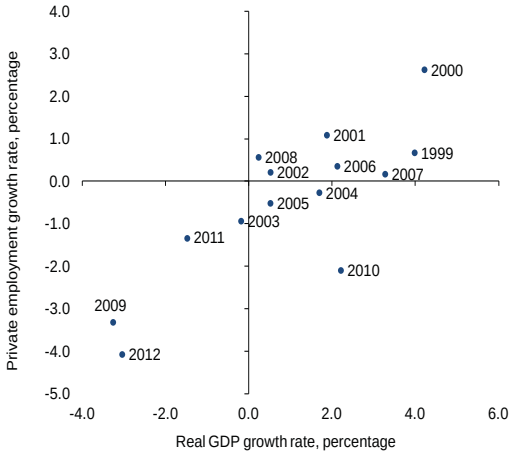
EMPLOYMENT, TOTAL POPULATION AND LABOUR FORCE | YEAR-ON-YEAR GROWTH RATE



Sources: *INE* (Employment survey) and calculations by Banco de Portugal.
Note: Employment and labour force corrected for the series break of 2011.

Chart 4.7

GROWTH OF PRIVATE GDP AND PRIVATE EMPLOYMENT (FULL-TIME EQUIVALENT[a])



Sources: *INE* (Employment survey) and calculations by Banco de Portugal.
Notes: Private sector employment is defined as total employment excluding estimates by Banco de Portugal for employment in the general government and public hospitals converted into public corporate entities. Private GDP is calculated as total GDP less compensation and fixed capital consumption of the general government and public hospitals converted into public corporate entities, adjusted for the number of hours worked. Therefore, the number of hours worked equivalent to full time corresponds to one job. From 2007 to 2012, the private employment series is based on the assumption that the average number of hours worked per worker remained unchanged.

A very high unemployment rate, especially for younger age groups

In 2012 the unemployment rate reached a very high level (15.7 per cent), with a 3 p.p. rise year-on-year, in a context where the output gap became clearly negative (Chart 4.8). The unemployment rate among the young was 37.7 per cent, a 7.6 p.p. increase over 2011. The rise in the structural rate of unemployment has been clear since 2000 and it is one of the most salient and serious developments in the Portuguese economy, bringing to the surface dysfunctionalities in the adjustment capacity of the labour market (Chart 4.9).

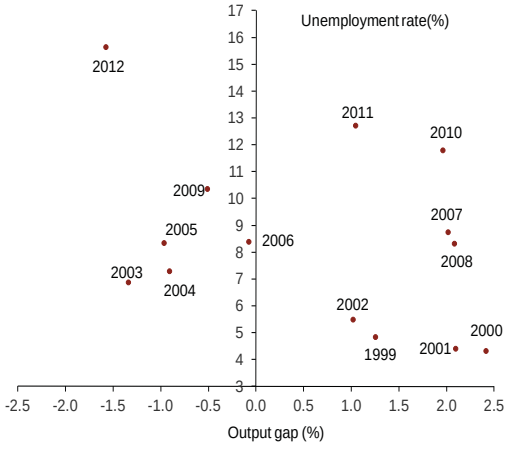
The number of unemployed was up by around 22 per cent in the year. In addition, the increase in the number of unemployed augmented as the year went by, a situation that was only turned around in the last quarter. The strong inflow of newly unemployed led to a stabilization of the average unemployment duration (Chart 4.10). However, there was an increase in unemployment duration among the younger age groups, though staying below the average duration in the entire set of unemployed. Long-term unemployment (more than 12 months) stood at 54.1 of total unemployment (Chart 4.11), a figure that is clearly higher than the average over the last decade. Unemployment duration has important repercussions on productivity and on future labour market developments, to the extent that absence from work for a long time tends to cause a big drain on human capital and the loss of personal skills.

Real wages down again in the private sector

The change in private sector real wages, deflated on the basis of prices for private consumption, was negative in 2012, with a 2.2 per cent drop recorded, against a backdrop of a further increase in the unemployment rate (Chart 4.12). The distribution of wages in worker-company relationships provides a way to identify the structure effects not visible in this variable for the economy as a whole. According to information on employer-employee wages, the big fall in employment in 2012, again justified by a large reduction in new contracts, was associated to an increase in the share of workers with lower wages and a reduction in average wages in various sectors of the Portuguese economy. Also clear in this context is the high rotation of workers with low wages, contributing to reduce the average wage in the economy

Chart 4.8

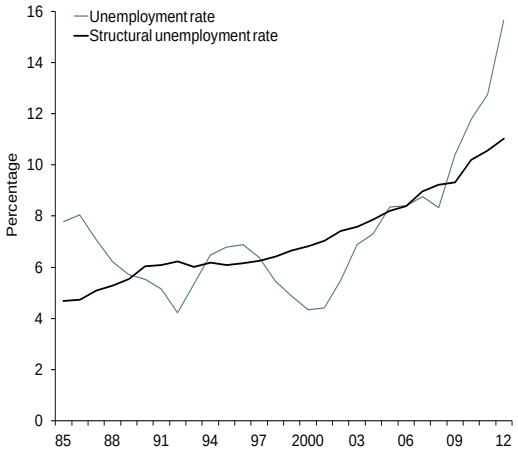
OUTPUT GAP[(a)] AND UNEMPLOYMENT RATE



Sources: *INE* and Banco de Portugal.
Notes: Unemployment rate corrected for the series break of 2011. **(a)** Hodrick-Prescott, filter with smoothing parameter λ=30.

Chart 4.9

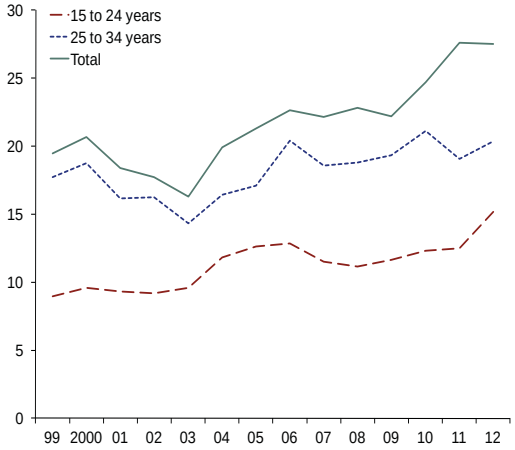
OBSERVED AND STRUCTURAL UNEMPLOYMENT RATE



Sources: *INE* and Banco de Portugal.
Notes: The methodology associated with the computations of the structural unemployment rate is described in "Unemployment: Supply, Demand, and Institutions", The Portuguese Economy in the Context of Economic, Financial and Monetary Integration, Chapter 4, Economics and Research Department, Banco de Portugal.

Chart 4.10

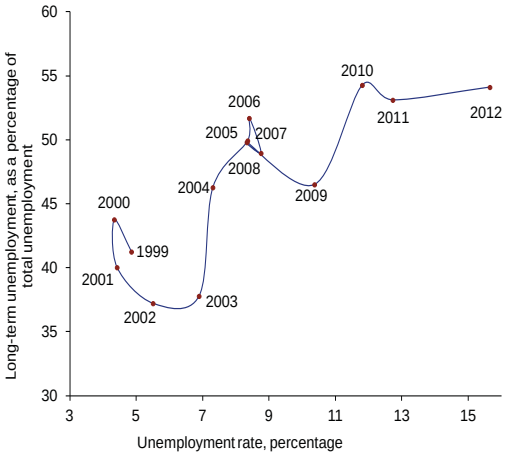
UNEMPLOYMENT DURATION | MONTHS



Source: *INE* (Employment survey).

Chart 4.11

TOTAL UNEMPLOYMENT AND LONG-TERM UNEMPLOYMENT[(a)]



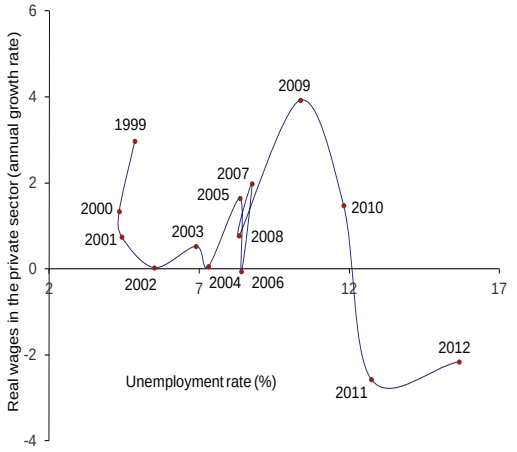
Sources: *INE* and Banco de Portugal.
Note: Unemployment rate corrected for the series break of 2011.

in 2012 (Chart 4.13). According to data from Social Security, 26.7 per cent of new jobs in October 2012 were offering wages of less than 500 euros. In addition, 24.1 per cent of the jobs that existed in October 2011 but no longer so twelve months later were paying less than this amount.

The comparison between the move in real wages and productivity in the private sector shows a negative differential for the last three years taken as a whole (Chart 4.14). This is in line with the developments seen in economic activity and the labour market, and is part of the process of correction of macro-economic imbalances in the Portuguese economy. However, as in 2011, the private consumption deflator was higher than the private GDP deflator (2.1 and 1.4 per cent respectively), implying that the real cut in

Chart 4.12

UNEMPLOYMENT RATE AND WAGES IN THE PRIVATE SECTOR | REAL

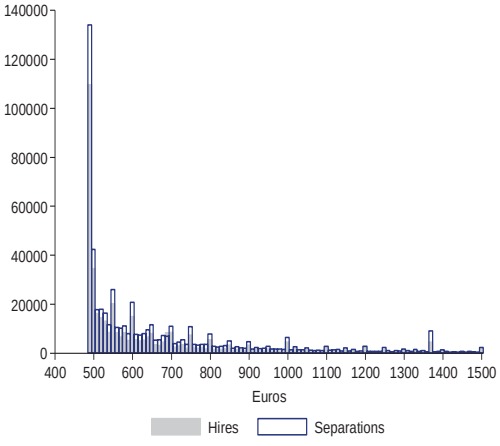


Sources: *INE* and calculations by Banco de Portugal.

Note: Unemployment rate corrected for the series break of 2011.

Chart 4.13

WAGE DISTRIBUTION OF WORKER FLOWS BETWEEN 2011 AND 2012 | REGULAR WAGE, NUMBER OF WORKERS' FLOWS



Sources: Social Security (data of October 2011 and 2012) and calculations by Banco de Portugal.
Notes: Hires – Number of workers in a firm at 2012 that did not work in that firm in the previous year. Separations - Number of workers in a firm at 2011 that do not stay working in that firm in the following year.

wages was lower for companies than for workers. In nominal terms, wages per worker in the private sector were down (-0.1 per cent), in tandem with a rise in productivity of 1.1 per cent, leading to a fall of 1.2 per cent in the unit labour cost (see "Chapter 6 *Prices*", of this Report). In the whole economy, the unit labour cost was down 3.8 per cent in nominal terms, as a result of the pronounced shift in salaries in general government (see "Chapter 3 *Fiscal Policy and Situation*", of this Report).

Nevertheless, payroll costs tend to be non-dominant in firm's total costs. Payroll costs make up on average almost a third of the operating costs for Portuguese companies, but in around a quarter of all companies this proportion is above 40 per cent. The proportions of different types of costs vary according to the sector and are subject to different degrees of short-term rigidity (see "Box 4.1 *Cost structure and profit margins of Portuguese firms*", of this Report).

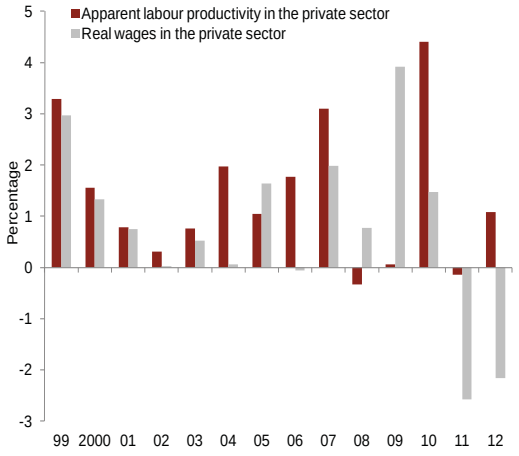
A decline in per capita output and contraction in the stock of capital, which is tied in with the falls seen in investment

In 2012 per capita output was down 2.8 per cent, following the 1.7 per cent decline in the previous year. As in 2011, this move stemmed in great part from the negative contribution of labour (2.5 per cent), associated with a fall in employment and, to a lesser extent, in the activity rate (Chart 4.15).

As for capital, its contribution for per capita output growth was virtually nil for 2012, as it was in 2011. This stemmed from a contraction estimated as 0.5 per cent of the capital stock, connected with the markedly negative move in gross fixed capital formation in 2012 (Chart 4.16) (see "Chapter 5 *Demand*", of this Report). Notwithstanding the fact that the measurement of the capital stock is particularly difficult and depends on assumptions for the rate of depreciation, the existence of a negative rate of variation in this variable means that the economy will tend to have more problems in adopting new production technologies, which potentially allow for increases in total factor productivity. This analysis is especially significant when the contraction of capital stock is visible in machinery and equipment. In the case of Portugal this situation goes hand in hand with a low level of capital per worker when compared with advanced economies, in line with the relatively low level of human capital in the active population (Chart 4.17).

Chart 4.14

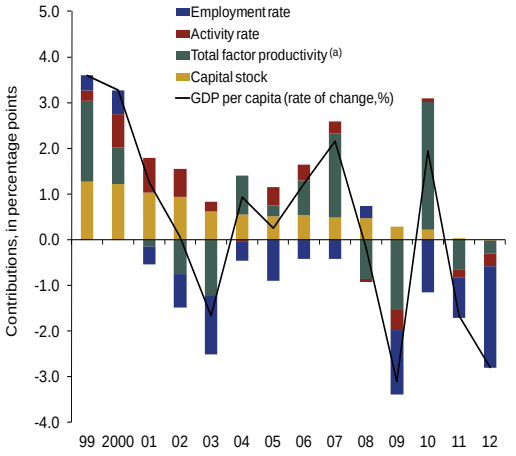
CHANGE IN REAL WAGES AND APPARENT LABOUR PRODUCTIVITY - PRIVATE SECTOR | RATE OF CHANGE



Sources: *INE* and Banco de Portugal.
Note: Nominal wages in the private sector are deflated basing on the evolution of prices in private consumption.

Chart 4.15

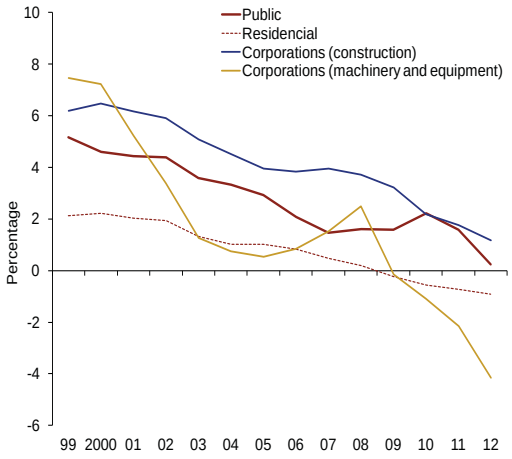
BREAK-DOWN OF GDP *PER CAPITA*



Sources: *INE* and Banco de Portugal.
Note: Total factor productivity is the residual of a growth accounting equation, which is strongly reliant on hypotheses over the functional form of the production function considered for the economy and on the value of its parameters.

Chart 4.16

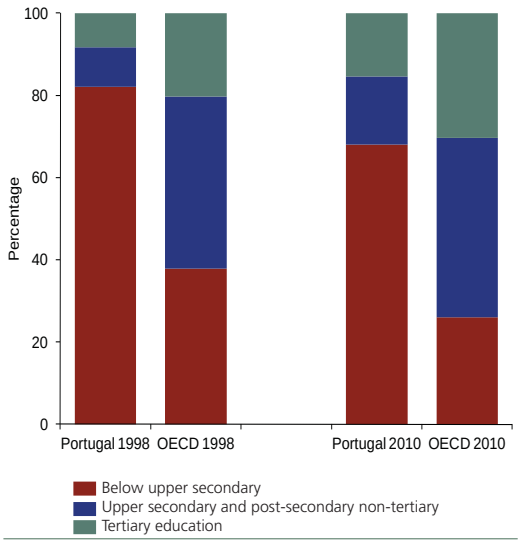
CAPITAL STOCK | ANNUAL GROWTH RATE



Source: Banco de Portugal.

Chart 4.17

BREAK-DOWN OF THE POPULATION (25-64 YEARS) BY SCHOOL ATTAINMENT LEVEL



Sources: OECD, Education at a Glance 2012.

The contribution of total factor productivity to per capita output growth was -0.3 p.p. in 2012, following 2.8 p.p. in 2010 and -0.6 p.p. in 2011. This development is related, inter alia, with the typically pro-cyclical move in the utilization rate of productive capacity, which saw a strong fall in 2012 (see "Chapter 5 *Demand*", of this Report).

The unfavourable pattern of potential output over a prolonged period and the need for structural reforms

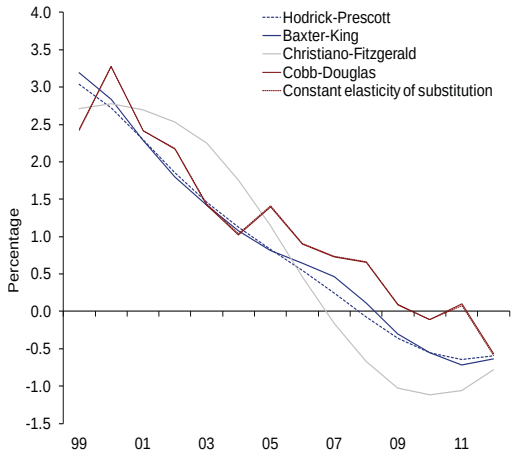
The analysis of the cyclical position of the economy and its trend growth is traditionally made on the basis of changes in the output gap and potential output growth. These indicators are calculated using statistical or structural methods, with the first requiring the choice of smoothing parameters and the second requiring a choice of formulations for the production function. However, various methodologies point to a negative value for the output gap in the Portuguese economy, along with an increase of the gap compared with 2011. In its turn, the figure for potential GDP growth in 2012 shows a different behaviour relatively to 2011, depending on the methodology used. However, all the options converge towards slightly negative figures (Chart 4.18).

The existence of slightly negative potential output growth rates fits into the framework of trend slowdown visible since 1998, reflecting above all structural features in the economy, but also the cyclical developments themselves. In fact, in a scenario of prolonged economic adjustment and structural transformation, which in the case of Portugal started before the international economic and financial crisis, the statistical and structural methods mentioned above tend to carry over mechanically into the future the reality of the past few years, and as such, they do not allow for conclusions to be drawn on the future path of the economy.

However, it is also true that the continuing deterioration of the cyclical position of the economy can have a real negative impact on potential growth. This risk materialises, for example, in the on-going reduction in the stock of capital, in the depreciation of the human capital of unemployed workers and in the emigration of qualified young men and women. In this context, what is essential is to implement a wide array of reforms in the labour and product markets, translating into the creation of attractive conditions for an increase in productive investment. Growth in private investment, specifically by attrac-

Chart 4.18

POTENTIAL GDP GROWTH



Sources: *INE* and Banco de Portugal.
Notes: For more details on output gap computation methods see, Almeida, V. and R. Félix (2006), "Computing Potential Output and the Output Gap for the Portuguese Economy", Banco de Portugal, *Economic Bulletin Autumn* and Valle e Azevedo (2007), "A Multivariate Band-Pass Filter", Banco de Portugal, *Working Paper 17*.

ting foreign direct investment targeting the creation of new productive capacity, and the continuation of efforts to raise the level of human capital will facilitate the recovery in the potential growth of the Portuguese economy.

A broad set of structural reforms continued to be put in place

During 2012 a significant set of structural reforms continued to be implemented, within the scope of the economic and financial assistance programme. Intervention is taking place in a wide range of areas, affecting most economic sectors and it has, in many cases, important budgetary implications.

A number of important developments occurred in the labour market. During the year, there were changes in the Labour Code which were approved and came into force, specifically in terms of an increase in working hours, reductions in the pay for overtime and an increase in flexibility regarding the management of working hours. These measures were discussed in Banco de Portugal's 2011 Annual Report. In addition, new regulations governing the unemployment subsidy came into force in April 2012. In 2013, there was agreement over the rules governing the amount of severance payments. For new permanent contracts, this was defined as 12 days per year of service. For existing fixed-term and permanent contracts, the figures are 18 days per year of service in the first three years and 12 days beyond this period, with current rights maintained and a maximum of 12 days of compensation.

There were also changes during the year regarding the goods and services markets. Work continued on incorporating the Services Directive into Portuguese law, although there has been a delay involving some aspects of it. In addition, the Framework Law for regulators is going through the approval stage. In January 2013 the Framework Law for professional associations was published, leading to a revision of various statutes and aiming at the flexibility of those markets. Legislation aiming at the reduction of licensing requirements in a number of areas is also slated for 2013.

In the energy sector, there is a plan under way to bring electricity production costs down, leading to the elimination of the tariff deficit by 2020. In spite of the changes introduced in the rates of return applied to some forms of production, the international authorities have signalled the need to adopt new

measures with a view to limiting increases in costs for consumers. In this context, the granting of CO_2 emission licences, whose revenues constitute a very important part of the plan to eliminate the tariff deficit, corresponds to a tax with economic incidence on producers and consumers but with potentially positive effects on the environment. There are also on-going efforts to create an Iberian gas market.

As for the transport sector, there was a rise in fares in 2012, introduced with a view to balancing operating results in the companies concerned, which was accompanied by a fall in demand. Nevertheless, there are concerns over the levels of debt in these companies as concession contracts are being prepared. A new law covering port facilities was approved and came into force in February 2013, setting out a 20 per cent reduction in the fees charged by the port authorities. Still in the pipeline is a review of current concessions. In the air transport sector, 95 per cent of the capital of ANA – Aeroportos de Portugal was sold by the end of 2012.

In terms of housing, there was a revaluation of real-estate property, which will have an impact on tax revenue from 2013 onwards. Additionally, in accordance with the new rental law, there was the start of an update to rents on contracts dating from before 1990, which is likely to be a prolonged process.

The judicial system is vital for markets to run smoothly, ensuring the capacity to resolve conflicts quickly and efficiently. Progress was made on this front during 2012, specifically in terms of cutting the number of cases pending and reorganising the geographical structure of court jurisdictions. A new civil code was approved in early 2013 and one of its aims is to reduce the delays in trials by making sure that those involved are duly made accountable.

The assessment of international authorities regarding the structural reform process in Portugal has been broadly positive. Nevertheless, the challenges facing reforms of this kind lie crucially in effective implementation and the need for stability over time.

Box 4.1 | Cost structure and profit margins of Portuguese firms

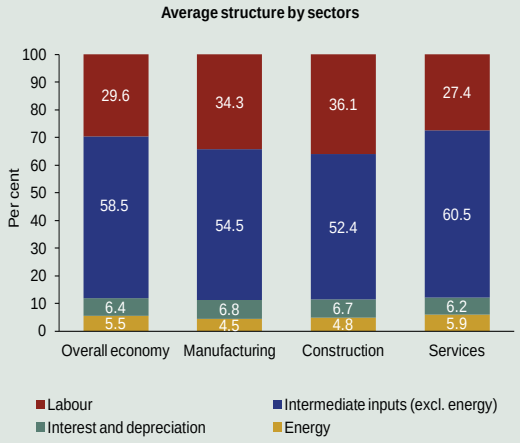
The cost structure of a firm is to a large extent endogenous to the business sector in which it operates and its distribution across firms translates the diversity of production technologies, firm specific factors and the share of each sector. Chart 1 reports the distribution of the share of each item in operating cost, for the overall economy and specific sectors.[1] The calculations are based on annual balance sheet and income statements of firms collected under *Informação Empresarial Simplificada* (IES). This is an extremely rich dataset since it virtually covers the universe of non-financial firms.[2]

Costs with intermediate inputs account for the large majority of operating costs, representing nearly 60 per cent, on average, for Portuguese firms, followed by labour costs (around 30 per cent). Energy costs and interest and depreciation account, on average, for the remaining amount, in roughly equal measure. In sectoral terms, the proportion of intermediate inputs costs is greater in services, which is related with the nature of trade and restaurants.

The dispersion in the distribution of cost shares per firm is also relevant (Chart 2). Costs imputed to energy and interest and depreciation account for under 20 per cent in almost all firms. In contrast, the distributions of labour costs and intermediate inputs weight present a very large dispersion across firms. The distributions associated with cost structures tend to be more stable over time but may provide some indications on the degree of flexibility of each input. It is clear that if there is a part of the costs that are rigid in the short term, this can hinder the ability of firms to adjust in periods when sales are down, and consequently reduce their profit margins.

Chart 1

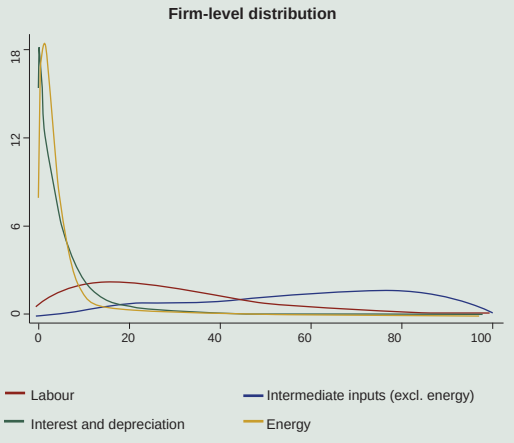
FIRM-LEVEL OPERATIONAL COST STRUCTURE IN 2011



Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).

Chart 2

FIRM-LEVEL OPERATIONAL COST STRUCTURE IN 2011 | PER CENT



Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).

1 Operating costs are approximated by the sum of labor costs, intermediate inputs (excluding energy), interest and depreciation and energy. Labour costs include wages and other contributions including social security. The costs of intermediate inputs include the cost of raw materials and external supplies. Energy costs include electricity, gas and water supply costs. In 2010, with the move from the official Portuguese plan of accounts (*Plano Oficial de Contas – POC*) to the system of accounting norms (*Sistema de Normalização Contabilística – SNC*), there were changes to firm accounts with effects on items as interest. For this reason, no comparisons between 2009 and 2010 were made.

2 Inactive firms, associated to nil figures for turnover, labour costs, interest and depreciation, energy costs or intermediate inputs (excluding energy), were excluded from the analysis.

The year-on-year change in the share of energy costs and interest and depreciation on total operating costs was approximately nil, on average, in 2009 and 2011 for Portuguese firms (Table 1). This means that these costs were down in tandem with operating costs. As for the share of intermediate inputs in costs, there was a fall in 2009 and 2011, whereas the share of labour costs was up. This can be interpreted as evidence of flexibility in the use of intermediate inputs, as against the greater rigidity in the adjustment of labour. In sectoral terms, the increase in labour cost share is, on average, relatively higher in construction. In this sector, a quarter of the firms registered increases of more than 7 p.p. in 2009 and 2011. However, aggregate information for the economy as a whole points to a significant adjustment in labour in 2012.

Part of operating costs exhibits short-term rigidity, and this plays a part in a pro-cyclical behaviour of profit margins. The developments in operating profit margins for Portuguese firms' are relevant in the context of an ongoing adjustment process. In fact, the difficulty in adjusting costs and the squeezing of profit margins has likely contributed to the exit of firms from the market and job destruction.

As a result of the dynamics recorded in sales and operating costs, the average profit margin, for firms in the Portuguese economy, stood at -15.4 per cent in 2011, even though, more than half of the firms came in with positive profit margins.[3] The profit margin distribution moved to the left between 2009 and 2011, with an average change of -5.2 p.p. (Table 2). Even so, more than a quarter of firms came in with variations in profit margins of more than 3 p.p.. In sectoral terms, the reduction in profit margins is clearly more relevant in construction (-12.3 in 2009 on average and -17.4 p.p. 2011). It should be mentioned, however, that in 2009, the median firm in the construction sector registered a profit margin higher than the economy as a whole.

If the Portuguese economy's adjustment process is to succeed, more productive and innovative firms need to be set up and expand. In addition, increases in their profit margins need to be based on efficiency gains, an increase in product quality or innovation and not the reflection of market structures that are not truly competitive. Various factors must come together for this transformation to occur, potentially in a context of foreign investment. The ability of firms to adjust their cost structure is one of these factors.

Table 1

CHANGE OF THE SHARE IN OPERATING COSTS | PERCENTAGE POINTS

		Overall economy				Manufacturing				Construction				Services			
	Year	Average	Median	Q1	Q3	Average	Median	Q1	Q3	Average	Median	Q1	Q3	Average	Median	Q1	Q3
Labour	2009	1.61	1.18	-1.59	4.86	1.92	1.71	-1.38	5.34	2.36	2.00	-3.18	7.98	1.39	1.02	-1.43	4.26
	2011	0.82	0.56	-2.38	4.08	0.38	0.19	-2.78	3.64	1.21	1.08	-4.44	7.07	0.85	0.59	-2.03	3.78
Intermediate inputs (excl. energy)	2009	-1.03	-0.70	-4.87	3.00	-1.70	-1.40	-5.69	2.39	-2.13	-1.62	-9.19	5.19	-0.67	-0.50	-4.07	2.85
	2011	-1.38	-1.00	-5.20	2.53	-0.77	-0.54	-4.61	3.12	-2.08	-1.77	-8.96	4.94	-1.39	-1.02	-4.82	2.11
Interest and depreciation	2009	-0.14	-0.04	-1.33	0.98	-0.11	-0.04	-1.40	1.12	0.31	0.00	-1.59	1.75	-0.23	-0.05	-1.27	0.81
	2011	0.07	0.00	-0.94	1.04	-0.01	0.00	-1.07	1.04	0.32	0.00	-1.24	1.52	0.04	0.00	-0.86	0.96
Energy	2009	-0.14	-0.04	-1.33	0.98	-0.12	-0.08	-0.65	0.39	-0.54	-0.30	-1.26	0.37	-0.49	-0.07	-0.74	0.34
	2011	0.07	0.00	-0.94	1.04	0.40	0.23	-0.22	0.89	0.54	0.35	-0.39	1.34	0.50	0.19	-0.20	0.91

Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).
Note: Q1 and Q3 correspond to the 25th and 75th percentile, respectively.

3 The profit margin was computed as the ratio between turnover deducted from operational costs to turnover.

Table 2

FIRM-LEVEL DISTRIBUTION OF PROFIT-MARGINS | LEVEL AND CHANGE

		Profit margin (per cent)				Change in profit margin (percentual points)			
	Year	Average	Median	Q1	Q3	Average	Median	Q1	Q3
Overall economy	2009	-12.8	0.9	-11.9	6.2	-1.9	-0.1	-7.7	6.0
	2011	-15.4	0.2	-15.2	4.9	-5.2	-1.4	-10.3	3.8
Manufacturing	2009	-10.3	0.9	-11.0	6.1	-6.3	-0.7	-9.1	5.1
	2011	-11.3	0.3	-12.5	5.2	-7.7	-2.1	-10.5	3.3
Construction	2009	-12.8	2.2	-12.1	10.3	-12.3	-1.3	-15.1	7.7
	2011	-16.9	0.8	-17.4	7.0	-17.4	-3.8	-20.3	4.2
Services	2009	-13.3	0.8	-12.1	5.6	-6.6	-0.2	-7.3	4.5
	2011	-16.0	0.0	-15.5	4.6	-9.2	-1.4	-9.9	2.9

Sources: *INE*, Ministry of Justice, Ministry of Finance and Public Administration and Banco de Portugal calculations (IES).
Notes: Q1 and Q3 correspond to the 25th and 75th percentile, respectively.

5. DEMAND

The year saw a 3.2 per cent decline in economic activity, following a 1.6 per cent fall in 2011 (Table 5.1). Contraction for the second consecutive year reflected, among other things, an immediate impact on aggregate demand of a number of adjustment measures, in an economic framework marked by a depressed international climate, high levels of indebtedness and tight conditions for financing. Adjustment measures connected with the Economic and Financial Assistance Program, in spite of their recessive impact in the short term, are essential for restoring macro-economic equilibriums, including sustainable conditions for external indebtedness, and thus conditions for market funding, since this is crucial for sustained growth in output, income and demand.

Continuing adjustment of macro-economic imbalances

During the year, domestic demand stalled across the board, leaving no component immune. Just as in 2011, exports remained the only component of aggregate demand that saw an increase, although at a pace that steadily lost momentum over the year, in tandem with the country's main trading partners, most emphatically in the euro area. The contraction of domestic demand was more intense than in the previous year, and with exports slowing, there was a steeper decline in imports than in the year before.

The decline in economic activity was clearly more pronounced in Portugal than in the euro area, causing a widening to more than 8 per cent of the negative differential that had accumulated since the beginning of the economic and monetary union in 1999 (Chart 5.1). This decade-long divergence of the Portuguese economy seems to have brought to the surface an array of structural weaknesses that took its toll on potential output growth and, in the existing financial and institutional framework, materialized in the long drawn-out accumulation of macro-economic imbalances

A massive contraction in private consumption and an increase of the savings rate, in a context characterized by a lowering of permanent income prospects and increased uncertainty.

Private consumption saw a 5.6 per cent contraction over the year (after a decline of 3.8 per cent in 2011), as households adjusted their levels of expenditure and indebtedness (Table 5.2). Contraction of

Table 5.1

GDP AND MAIN EXPENDITURE COMPONENTS | REAL GROWTH RATE, IN PERCENTAGE

	share of GDP in 2012 (%)	2008	2009	2010	2011	2012
GDP	100	0.0	-2.9	1.9	-1.6	-3.2
Domestic demand	101	0.8	-3.3	1.8	-5.8	-6.8
Private consumption	66	1.3	-2.3	2.5	-3.8	-5.6
Government consumption	18	0.3	4.7	0.1	-4.3	-4.4
Investment	16	-0.1	-13.3	1.4	-13.8	-13.7
GFCF	16	-0.3	-8.6	-3.1	-10.7	-14.5
Stockbuilding[a]		0.0	-1.1	0.9	-0.7	0.2
Exports	39	-0.1	-10.9	10.2	7.2	3.3
Imports	39	2.3	-10.0	8.0	-5.9	-6.9
Domestic demand contribution[a]		0.9	-3.6	2.0	-6.3	-7.0
Net exports contribution[a]		-1.0	0.6	-0.1	4.7	3.9

Source: *INE*.
Note: (a) Contribute to real GDP growth, in percentage points.

Table 5.2

PRIVATE CONSUMPTION AND ITS MAIN COMPONENTS | REAL GROWTH RATE, IN PERCENTAGE

	share in 2012 (%)	2008	2009	2010	2011	2012
Private consumption	100	1.3	-2.3	2.5	-3.8	-5.6
Current consumption	93	1.4	-0.6	1.3	-2.1	-4.0
Foodstuff	20	1.1	0.8	1.2	0.0	-0.4
Non-food	73	1.5	-0.9	1.3	-2.7	-4.9
Consumer durables	7	0.7	-16.9	14.5	-18.5	-23.0
Vehicles	3	-1.0	-26.5	28.1	-24.9	-35.2
Other consumer durables	4	2.4	-7.7	4.1	-12.4	-13.2
Memo items:						
Real disposable income		1.4	1.8	1.7	-4.9	-2.9
Households' saving rate		7.1	10.9	10.1	9.1	11.6

Sources: *INE* and Banco de Portugal calculations.
Note: (a) Deflated by the private consumption deflator.

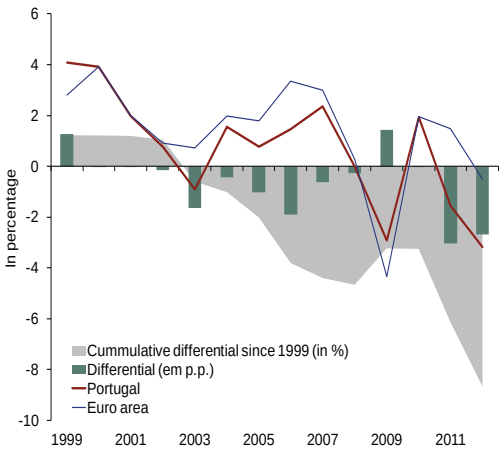
private consumption was associated with a big fall in households' disposable income, with a marked deterioration of labour market conditions, with the prevalence of tight conditions for financing, and to a high level of uncertainty over the nature of additional measures to be undertaken and the degree of budgetary imbalance adjustment.

As mentioned above, the reduction in Portuguese households' level of consumption in 2011 and 2012 is one aspect of the adjustment of domestic demand to levels that are compatible with output and with the income of resident operators. Portugal had in fact seen an accumulation of a positive growth differential in private consumption against the euro area from 1999, reaching more than 10 per cent in 2010 (Chart 5.2), contrasting with a negative differential of close to 3 per cent of the accumulated GDP over the same period (Chart 5.1). But in 2011 and in 2012, the economy stalled and the momentum was lost.

The fall in private consumption in 2012 was across the board, with the durable goods component particularly hard hit (Table 5.2 and Chart 5.3). The adjustment of expenditure on durable consumer goods in the recent past was higher than usual in previous recessionary periods. This came about to a large extent because households needed to adapt their stock of this type of goods to their permanent income prospects and to reassess their levels of indebtedness as the Portuguese economy adjusted. Current

Chart 5.1

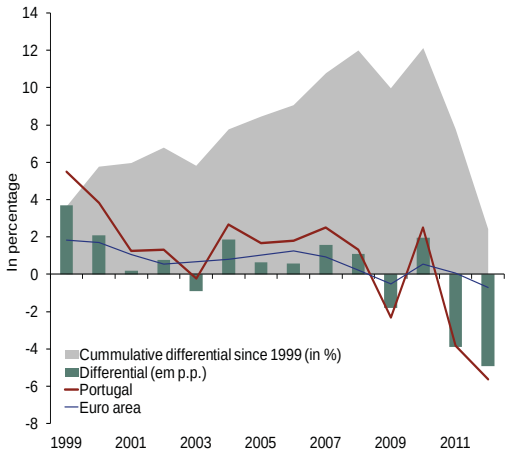
GDP GROWTH IN PORTUGAL AND IN THE EURO AREA | REAL GROWTH RATE



Sources: Eurostat and *INE*.

Chart 5.2

PRIVATE CONSUMPTION GROWTH IN PORTUGAL AND IN THE EURO AREA | REAL GROWTH RATE



Sources: Eurostat and *INE*.

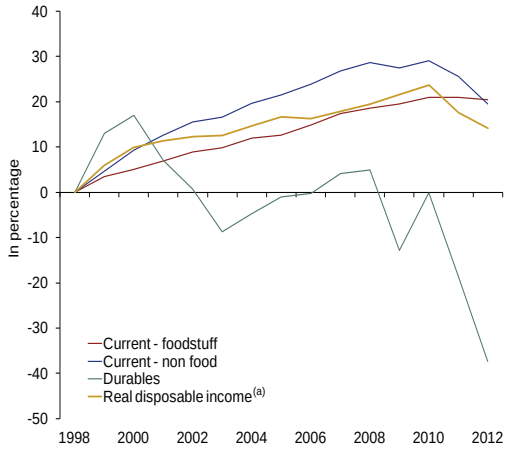
consumer expenditure recorded a moderate decline after a growth that was higher than that of the disposable income in the period prior to the outbreak of the financial crisis. This move was also associated with a reassessment of permanent income prospects, with the increase of liquidity constraints and with a steep decline in consumer confidence (Chart 5.4). The decline in current consumption involves mostly the non-food component, with the food component having remained virtually static since 2010. This stemmed from the fact expenditure on essential goods has a lower income elasticity.

The household savings rate was up for the second consecutive year, as real disposable income declined sharply. This pattern shows that the current recessive period has a distinctive nature in terms of consumer behaviour. The perception that the adjustment of the level of income was permanent, as well as the increase in liquidity constraints and in risk aversion, led to changes in consumer behaviour that materialized in a big increase in the savings rate. In addition, this increase in the savings rate seem also to have come about because of a sizeable decline in income components that are subject to a lower propensity to consume, in contrast to the rise in disposable income components subject to a lower propensity to consume (see "Box 5.1 *The increase in the savings rate in 2012: an explanation based on micro and macro-economic evidence*", in this Report).

A crucial point here concerns the nature of the decline in total disposable income during the year, largely determined by the decline in labour income (Table 5.3). This reflects the decision to suspend payment of holiday and Christmas bonuses and the shedding of personnel in the public sector. In tandem, the private sector saw a decline in employment combined with wage moderation. In the public sector, a significant part of the decrease in employment translates directly into an increase in the number of pensioners. Despite this increase, and greater expenditure on unemployment benefits, domestic transfers were well down, as the payment of holiday and Christmas bonuses to pensioners was also suspended. In the opposite direction, the year saw a significant increase in corporate and property income and in external transfers. The increase in corporate and property income benefited from the increase in net interest income earned by households, which was positively affected by bank deposits created in the past with long maturities and high interest rates.

Chart 5.3

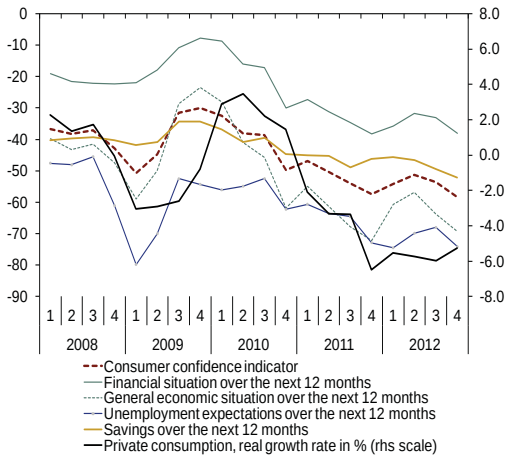
PRIVATE CONSUMPTION EVOLUTION BY TYPE OF GOOD | CUMULATIVE GROWTH SINCE 2008



Sources: *INE* and Banco de Portugal calculations.
Note: (a) Deflated by the private consumption deflator.

Chart 5.4

CONSUMER CONFIDENCE | BALANCE OF RESPONDENTS, 3 - MONTHS AVERAGE



Sources: European Commission and *INE*.

Table 5.3

PERSONAL DISPOSABLE INCOME | NOMINAL GROWTH RATE, IN PERCENTAGE						
	share in 2012 (%)	2008	2009	2010	2011	2012
Disposable income[a]	100	4.0	-0.4	3.0	-1.3	-0.9
Compensation of employees	68	3.4	0.1	1.1	-1.6	-7.2
Domestic transfers	30	7.5	7.0	3.3	-1.9	-3.0
External transfers	2	2.1	-20.6	8.6	3.8	20.6
Corporate and property income	30	4.7	-6.3	3.9	3.4	7.5
Direct taxes (-)	9	3.6	0.7	-0.6	10.0	-6.6
Social security contributions (-)	21	5.8	0.1	0.5	-0.7	-7.7

Source: *INE*.

The decline in public consumption within the budgetary consolidation process

Public sector consumption was down by 4.4 per cent (following a 4.3 per cent fall in 2011). This stems from the reduction in the number of employees and less expenditure on goods and services of general government within the budgetary consolidation process.

The reduction in staff in general government has a direct negative impact on payroll costs and, consequently, on household labour income. However, the net impact on public expenditure, as well as on households' disposable income, must take into consideration that a considerable part of the decline in payroll numbers was a result of retirement, thus contributing to the increase in the number of pensioners.

The reduction in expenditure on goods and services reflects the fall in the amount of intermediate consumption of general government and in social benefits in kind for households. The decrease in intermediate consumption led to a decline in the demand of general government for goods and services produced in the private sector, thereby affecting production and employment. For its part, the decline in the amount of social benefits in kind does not directly affect disposable income since this only involves cash benefits. However, the decline implies that the families that continue to use the goods and services that are no longer provided by the public sector are using their own resources to meet expenditure.

Investment fell in a climate clouded by uncertainty and darkened by a worsening outlook for demand

Investment was down 13.7 per cent over the year, after a decline of 13.8 the year before. This involved a contraction in gross fixed capital formation (GFCF) of 14.5 per cent in 2012, accompanied by a contribution of 1.1 percentage points (pp.) from the stockbuilding to the annual rate of change in investment. The volume of inventories in fact recorded only a marginal decline in 2012, compared with the substantial destocking in the previous year..

The reduction in GFCF affected all institutional sectors (Table 5.4). Residential investment continued to decline, recording a volume similar to what was recorded in the beginning of the 90s, after a decade of consecutive falls. This move in residential investment in property has seen a notable increase in the 90s, but there was now a gradual stabilization of the housing stock at a new level, after the increase in the period following financial liberalization and nominal convergence. The reassessment of households' prospects of permanent income was a major force conditioning this form of investment as was the worsening of conditions in the labour market, the increase of uncertainties regarding the levels of future income and the tight conditions for financing.

Corporate GFCF also recorded a sharp decline during the year, falling more than in the years before. This reduction was marked by a major contraction in demand on the domestic market and by stagnation of external demand with repercussions on the export prospects of Portuguese firms. The prospects for demand worsened in the domestic and external market, meshing with the need to reduce the levels of

Table 5.4

INVESTMENT | REAL GROWTH RATE, IN PERCENTAGE

	share in 2012 (%)	2008	2009	2010	2011	2012
Investment	100	-0.1	-13.3	1.4	-13.8	-13.7
Gross fixed capital formation	99	-0.3	-8.6	-3.1	-10.7	-14.5
by institutional sector						
Public	12	6.0	1.7	25.3	-32.0	-30.8
Private	87	-1.2	-10.1	-7.9	-5.9	-11.9
Residential	19	-11.7	-15.4	-11.0	-6.8	-10.9
Corporate	68	2.3	-8.6	-7.0	-5.6	-12.1
by type of good						
Machinery and equipment	25	11.2	-9.9	-1.0	-7.5	-6.7
Tranport equipment	5	-3.8	-21.8	-7.9	-24.5	-24.9
Construction	59	-4.6	-6.6	-4.2	-11.4	-18.1
Other	9	2.9	-2.6	2.9	-2.6	-7.8
Stockbuilding[(a)]		0.2	-4.7	4.5	-3.3	1.1

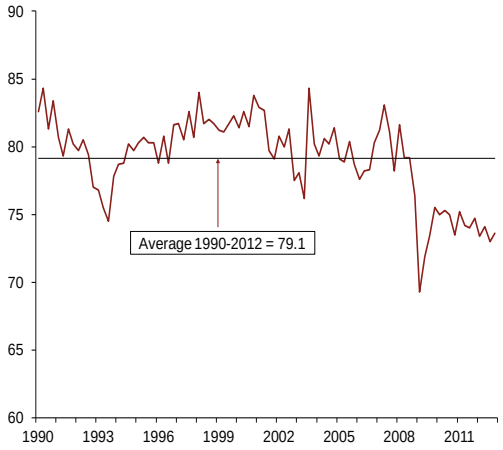
Sources: *INE* and Banco de Portugal calculations.
Note: (a) Contribute to real investment growth, in percentage points.

Portuguese companies' indebtedness and the increased uncertainty. These factors led to the corporate sector postponing investment decisions, particularly taking into account the low levels in the use of productive capacity (Chart 5.5). In addition, restrictive financing conditions were still the order of the day, both at the level of financing costs and of the criteria used by banks for credit approval and have, albeit to a much lesser degree, continued to hamper companies' investment decisions (see Chart 5.6 and "Section 2.2 *Monetary and financial conditions of the Portuguese economy*", in this Report).

In 2012, public investment again recorded a very pronounced fall, fenced in by the need to reduce public expenditure. Contraction of public investment essentially reflects the decline in the GFCF of a number of firms included in the consolidation perimeter of the public administration. It should be mentioned that it is essential for the reduction of investment expenses by the public administration to be in line with the rationalization plan for the public sector, and thus ensuring that a number of infrastructures essential to the development of economic activity continue to operate in an efficient manner.

Chart 5.5

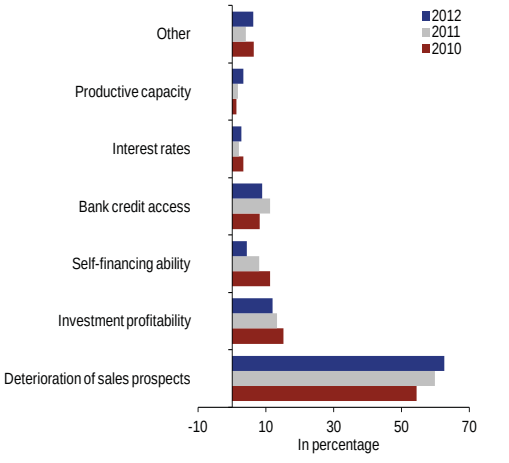
CAPACITY UTILIZATION RATE IN MANUFACTURING SECTOR | AS A PERCENTAGE OF INSTALLED CAPACITY



Source: European Commission.

Chart 5.6

MAIN FACTOR LIMITING INVESTMENT | AS A PERCENTAGE OF THE TOTAL NUMBER OF ENTERPRISES WITH INVESTMENT RESTRICTIONS



Source: *INE* (Investment Survey).
Note: The results shown for each year are based on the Investment Survey published in July.

The reduction of GFCF in 2012 is shaped by a very marked fall in investment in construction, which reflects the steep downward path of both residential and public investment and of the corporate component as well, since the low level of use of the companies' productive capacity has not functioned as a catalyst to the construction of new production units. In addition, the reduction of corporate GFCF has had a knock-on effect in the form of a marked reduction of investment in transport equipment and, to a lesser degree, to a decline in investment in machinery and other equipment. This implies that the cut-back in this component of corporate capital stock will continue (see "Chapter 4 *Supply*", in this Report).

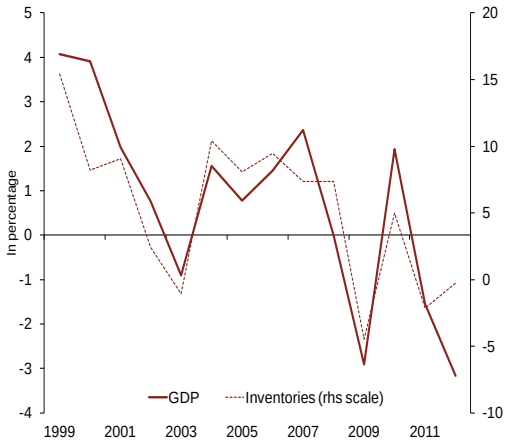
The contribution of the stockbuiding in the way that investment moved in 2012 was 1.1 pp. (contrasting with the negative contribution of 3.3 pp. in 2011). This contribution indicates a marginal destocking in 2012, after the decline in stocks in the previous year, against a background in which the level of economic activity declined much more than in 2011 (Chart 5.7). The intra-annual profile of stockbuilding during the year points to a considerable destocking in the first half of the year, which was almost entirely offset by an accumulation of stocks, particularly in the fourth quarter. This move in the last quarter of the year seems to have reflected, among other factors, a big reduction in demand, the extent of which may not have been anticipated by economic agents. Additionally, the possible impact of specific factors may have contributed to this pattern, among them the dockworkers' strike.

Exports show a remarkable dynamism as the external environment deteriorates

With global economic activity worsening, namely in the main Portuguese trade partners (see "Chapter 1 *International Context*", of this Report), the exports of goods and services decelerated sharply. In particular, after a 7.2 growth in 2011, exports came in with a 3.3 per cent growth, once again above the growth for the euro area. Despite the marked slowdown, the performance of the Portuguese exports is based on a significant gain in market share of close to 3.5 per cent, similar to the previous year (Chart 5.8). It should be noted that the accumulated market share that Portugal has gained in the last two years is one of the highest among the euro area countries (Chart 5.9). This remarkable performance shows that

Chart 5.7

INVENTORIES AND ECONOMIC ACTIVITY | ANNUAL GROWTH RATE

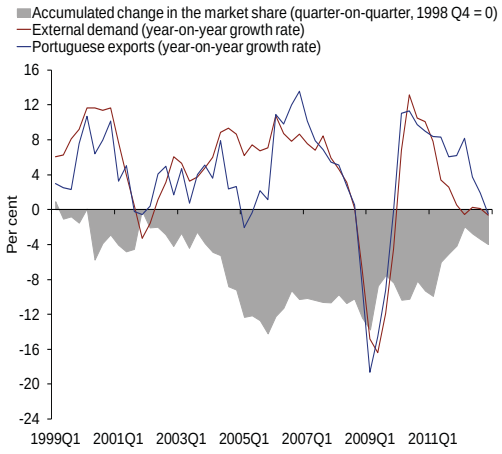


Sources: *INE* and Banco de Portugal calculations.

Note: The time-series "Inventories" was estimated using permanent inventory approach. It was assumed that inventories were at around 60 per cent of GDP in 1953 (a level of inventories equivalent to 7 month of output). Using this initial level, inventories were estimated by accumulating stockbuilding data based on the Banco de Portugal Historical Series for the period 1953-1995 and on National Account figures from 1995 onwards.

Chart 5.8

MARKET SHARE EVOLUTION OF THE PORTUGUESE EXPORTS OF GOODS AND SERVICES | REAL RATE OF CHANGE



Sources: ECB, *INE*, UK Office for National Statistics and Banco de Portugal calculations.

Note: The external demand was corrected for the impact of the tax fraud in the United Kingdom.

Portuguese companies have the capacity to adjust their market strategies, through an increased effort to refocus their operations on external markets, given the substantial contraction in domestic demand perceived by economic agents as long-lasting. The on-going decrease of relative unit labour costs has helped to bolster the competitive price of the country's exports. This shift has already reversed the real accumulated appreciation of unit labour costs visible since the country joined the euro area (Chart 5.10).

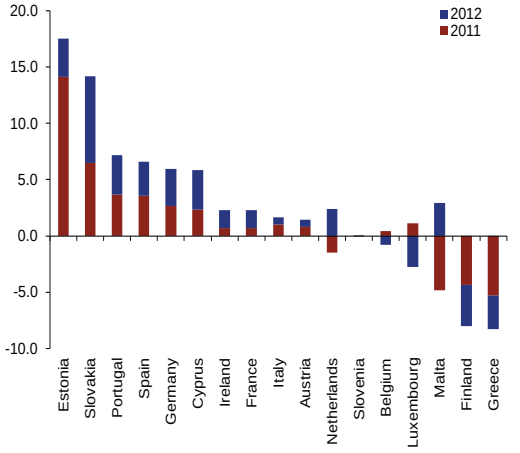
Despite the deceleration of exports, affecting both goods and services (Chart 5.11), the export of goods shows a greater resilience in a less favourable international economic context. In particular the exports of goods recorded a growth in volume of 4.3 per cent, as compared with an average growth of 3.7 per cent since joining the euro area. The rise in export of services stands at 0.8 per cent, a substantially smaller variation than what has been noted on average since 1999 (4.6 per cent). The pattern for export of services has reflected the decline in exports of other services, since tourism, despite losing some momentum, still show a relatively high increase.

In intra-annual terms, the acceleration at the beginning of the year, gave a real year-on-year growth of the export of goods and services above 8 per cent in the first quarter, but this then slackened, with a decline of 0.5 per cent in the last quarter of the year (Chart 5.8). The occurrence of several periods of dockworkers' strikes in some of the main national ports between September and the end of the year affected the evolution of exports, above all to extra-community countries, since these are, to a large extent, carried by sea (around 80 per cent).

The nominal growth in the export of goods during 2012 was 5.8 per cent, after an increase of 15.0 per cent in the year before. Excluding fuels, the figures are 4.8 and 14.3 per cent, respectively (Table 5.5). This slowdown was influenced by the considerable deceleration of the Portuguese export deflator, after a strong growth in 2011, which was more pronounced than in the majority of euro area countries. Underlying the momentum of exports is the process of geographical diversification seen in recent years (Chart 5.12). Intra-community exports, on the one hand, saw a sharp slowdown (from 13.5 to 1.0 per cent) with economic activity in the euro area worsening (Chart 5.13). The pattern was particularly noticeable in exports to Spain across almost all types of goods, and to Germany, mainly reflecting the evolution of exports of vehicles and other transport material.[1] It should be highlighted that despite Spain continuing

Chart 5.9

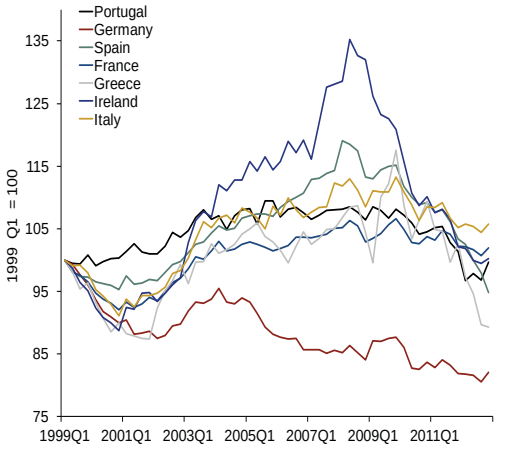
CHANGE IN THE EXPORTS MARKET SHARE FOR THE EURO AREA COUNTRIES | IN REAL TERMS



Sources: ECB, *INE*, UK Office for National Statistics, Eurostat and Banco de Portugal calculations.

Chart 5.10

RELATIVE UNIT LABOUR COSTS | WHOLE ECONOMY

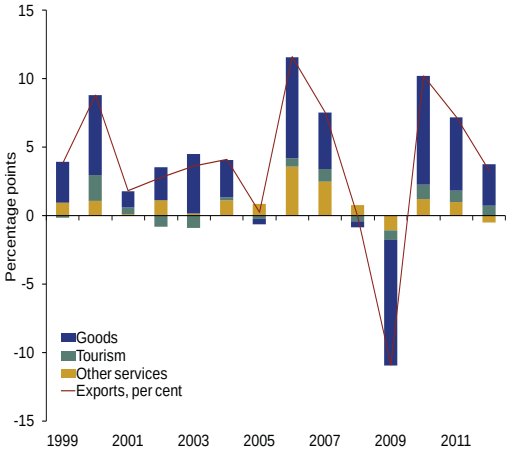


Sources: ECB and Banco de Portugal calculations.

1 In the period before October 2011, the export of passenger cars to China occurred indirectly via Germany.

Chart 5.11

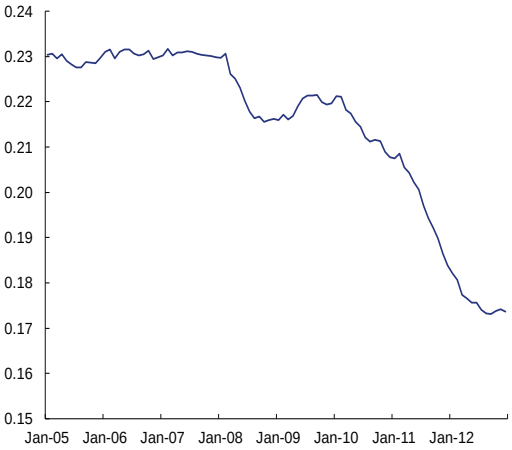
BREAKDOWN OF THE RATE OF CHANGE OF EXPORTS OF GOODS AND SERVICES | CONTRIBUTION TO THE REAL RATE OF CHANGE



Source: *INE*.

Chart 5.12

GEOGRAPHICAL DIVERSIFICATION OF GOODS EXPORTS | HERFINDAL-HIRSCHMAN INDEX



Sources: *INE* and Banco de Portugal calculations.

Note: The Herfindal-Hirschman index is a concentration index where a reduction corresponds to a lower concentration. The index is normalized to the interval [0,1]. For more details see "Box 1.1 *The geographical diversification of merchandise exports*", Banco de Portugal, *Economic Bulletin – Summer 2012*.

to be the main destination of Portuguese exports, this country's importance has decreased drastically in recent times (from 27 per cent in 2010 to 22.5 per cent in 2012). Export of goods to extra-community markets, on the contrary, maintained the high rate of growth that it has shown in recent years, with a variation of 19.8 per cent in 2012. This has been translated into a significant increase of its weight in Portuguese exports (reaching close to 29 per cent in 2012 compared to less than 25 per cent in 2010). Exports to the Portuguese-speaking African countries deserve particular mention, with special reference to Angola, involving medium-to-high technology. Exports to the United States have accelerated, reflecting to a large extent fuel exports. The growth of fuel exports can only partially be explained by the changes of prices in international markets (see "Chapter 6 *Prices*", of this Report). Furthermore, exports to China are recording substantial increases since the end of 2011, in particular for vehicles and other transport material. It should be mentioned that the growth in nominal exports of goods has at its basis significant gains in market share, both in 2011 and in 2012, when taking into consideration the geographical specialization of Portuguese exports. However, the effect of relative specialization in terms of the geographical distribution of exports has been unfavourable more recently. This fact has been compounded by a product composition effect which is also negative, the result being a loss of share for Portuguese exports in world trade in 2012 (see "Box 5.2 *Market share of Portuguese exports in 2012: an analysis based on a sample of export markets*", in this Report).

In terms of technology, the slowdown in the export of goods during the year was fairly general, although it was particularly marked in the case of high and medium-high technology. As far as high technology is concerned, it reflects the big loss in momentum in exports of pharmaceutical products and an adverse move in exports of machines and mechanical appliances, specifically audiovisual. The pronounced deceleration in medium-high technology was to a large extent associated with the downward shift in the export of vehicles. In exports of medium-low technology, despite some slowdown, this component showed the greatest dynamism, supported to a large degree by fuels. As far as low technology is concerned, the lack of thrust was particularly visible in the so called traditional sectors, such as textiles, clothing, footwear, and paper and pulp.

Table 5.5

NOMINAL EXPORTS OF GOODS BY GROUPS OF PRODUCTS, BY TECHNOLOGY INTENSITY AND DESTINATION COUNTRY | RATE OF CHANGE

	Weights 2011	Weights 2012	Year-on-year growth rate (per cent)						
			2010	2011	2012	2012			
						1st quarter	2nd quarter	3rd quarter	4th quarter
Total	100.0	100.0	17.6	15.0	5.8	11.5	6.5	4.4	1.1
Total excluding fuels	93.3	91.9	15.1	14.3	4.8	8.1	5.5	3.1	2.4
By group of products									
Agriculture	5.4	5.4	18.4	13.0	6.0	9.1	5.2	9.6	1.3
Food	5.2	5.2	3.8	13.1	6.8	9.8	3.6	3.8	9.9
Mineral fuels	7.2	8.5	54.7	29.4	24.9	86.0	20.8	27.0	-9.0
Chemicals	5.7	5.7	21.7	27.1	5.7	-7.1	12.9	11.1	6.8
Plastics, rubber products	6.8	6.8	27.0	15.9	6.3	9.7	2.2	8.0	5.6
Leather, leather products	0.4	0.4	38.8	24.1	11.6	24.9	11.0	-2.4	14.3
Wood, cork	3.3	3.2	10.2	10.0	2.3	5.3	0.7	-0.6	3.8
Pulp, paper	5.1	4.9	36.9	6.4	2.0	-1.0	3.5	-0.5	6.2
Textile products	4.0	3.7	14.7	10.5	-2.7	-2.4	-6.4	-4.4	2.6
Clothing	5.7	5.4	6.7	6.4	0.9	3.9	-1.8	-0.8	2.3
Footwear	3.7	3.6	9.9	12.9	4.1	0.8	2.7	-0.7	17.9
Minerals, ores	5.1	4.9	14.7	5.5	1.8	5.0	10.3	1.2	-9.0
Basic metals	8.0	8.2	21.3	13.8	8.5	6.2	7.0	10.1	11.2
Machinery, equipment	14.6	15.1	8.7	11.4	9.5	14.6	10.2	7.4	6.0
Motor vehicles, other transport equipment	13.0	11.7	22.0	22.4	-4.8	8.5	1.4	-14.6	-15.4
Optical and precision instruments	1.1	1.2	14.8	13.2	16.7	17.6	23.3	22.6	5.8
Other products	5.9	6.1	8.9	20.6	9.1	23.4	11.1	6.7	-2.3
By technology intensity[(a)]									
High technology	7.3	6.8	12.2	15.8	-2.2	4.3	5.4	-6.8	-10.0
Medium-high technology	29.3	29.0	20.8	18.2	4.6	8.2	6.6	3.4	0.1
Medium-low technology	23.8	26.2	21.7	20.3	16.4	34.7	17.0	15.0	2.0
Low technology	33.2	32.6	14.1	14.1	3.8	5.3	2.7	1.1	6.0
Residual	6.3	5.5	15.6	-8.3	-8.6	-9.2	-13.1	-1.0	-10.4
By destination country									
Intra-community	74.4	71.1	17.6	13.5	1.0	5.0	2.2	-0.9	-2.4
of which:									
Spain	24.9	22.5	16.7	6.1	-4.5	-3.2	-5.7	-4.8	-4.3
Germany	13.6	12.3	18.1	19.8	-4.1	4.2	-1.9	-10.7	-8.2
France	12.2	11.8	13.8	16.5	2.8	8.6	0.4	2.3	-0.2
United Kingdom	5.2	5.3	14.0	9.6	7.0	11.8	9.8	-1.5	7.9
Italy	3.7	3.7	16.1	13.7	7.4	4.0	-0.8	2.1	27.2
Extra-community	25.6	28.9	17.4	19.6	19.8	33.6	19.7	19.0	10.0
of which:									
PALOP	6.8	8.0	-9.4	21.2	24.3	30.1	31.5	25.4	14.6
United States of America	3.5	4.1	30.7	13.1	24.7	50.9	12.0	45.5	-0.7
Brazil	1.4	1.5	49.2	32.7	16.5	9.2	10.3	40.9	6.7
China	0.9	1.7	5.1	70.3	96.2	186.6	185.6	100.9	1.4

Sources: *INE* and Banco de Portugal calculations.

Notes: (a) Obtained from the international trade data released by the INE and the classification of manufacturing industries by technology intensity, based on R&D intensities, released by the OECD. For more details, see http://www.oecd.org/dataoecd/43/41/48350231.pdf. The residual category refers to products that cannot be included in the technology intensity classification, namely agriculture and mining and quarrying products, as well as product for which INE does not release fully detailed data, for confidentiality reasons, preventing the use of the classification by technnology intensity.

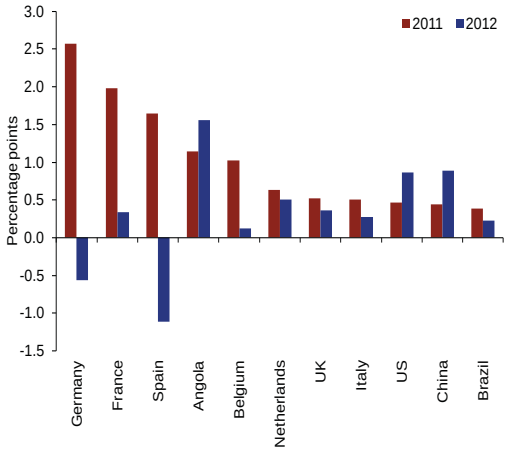
Although the external context was very adverse, tourism exports recorded only a moderate slowdown in 2012, and this meant another increase in Portugal's share of world tourism in real terms (Chart 5.14). Tourism exports increased 5.9 per cent in volume (after 6.8 per cent in 2011), with non-residents' overnight stays in Portugal recording a growth of 5.0 per cent (following 10.1 per cent the year before). To a large extent, the slowdown reflects tourist flows from the United Kingdom, which is Portugal's main market for tourism exports, and from Spain, where the fall was more than 10 per cent (Chart 5.15). Over and against this, there was a significant increase in tourists from Germany, where the economic situation is comparatively more benign. It should further be mentioned that income from tourism in nominal terms showed a variation close to what was noted in real terms, given the relative stability of prices. As regards export of other services, it was registered a decline of 2.7 per cent, in real terms, after an increase of 5.7 the year before. According to information on the balance of payments released by Banco de Portugal, this deceleration should, to a considerable degree, reflect the unfavourable evolution of transport services, in a context of deceleration of the export of goods and other services supplied by companies, namely the triangular trade and other trade intermediation services as well as various technical-professional services.[2]

Substantial fall in imports in line with global demand

With domestic demand contracting, imports fell again in 2012. Goods and services were both affected, with a decline in real terms of 6.9 per cent, after a decline of 5.9 per cent the year before. The slump was visible in goods (-6.8 per cent) and in services (-7.5 per cent). The result was another fall in the proportion of imports in overall demand (Chart 5.16). This is in fact the second consecutive year of decline in the penetration of imports, but there still exists considerable positive accumulated variation, visible since the euro area was formed. In general terms, the penetration of imports is related with the degree of

Chart 5.13

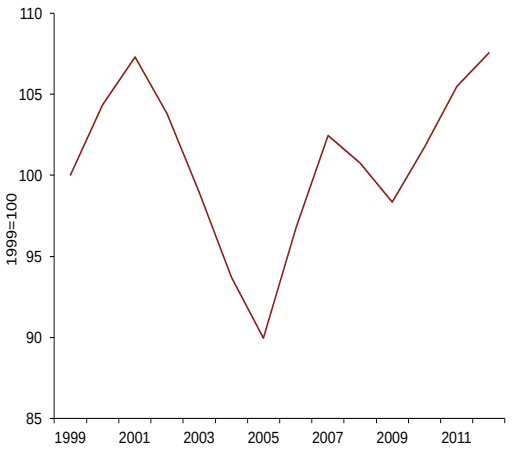
CONTRIBUTION OF THE MAIN TRADE PARTNERS TO THE EVOLUTION OF NOMINAL EXPORTS OF GOODS



Source: *INE*.

Chart 5.14

EVOLUTION OF THE PORTUGUESE MARKET SHARE IN THE WORLD TOURISM



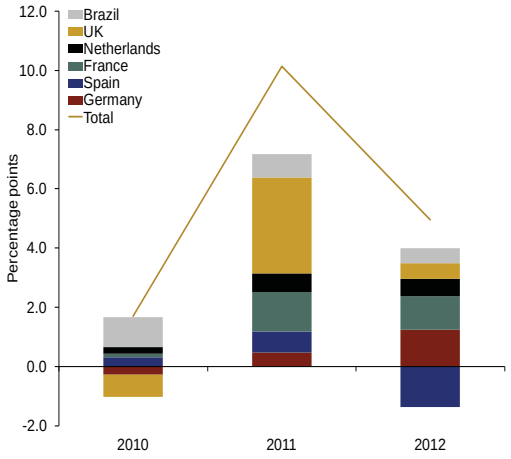
Source: World Travel & Tourism Council

Note: Index calculated based on tourism exports at 2011 prices.

2 With regard to the triangular trade, it should be mentioned that it has been strongly influenced by the overseas relocation of companies that were previously located in the free zone of Madeira, as a consequence of the changes to the tax system at the beginning of 2012. In terms of the balance of payments statistics, this resulted in a substantial fall in both exports and imports associated with this type of service. However, and as far as the National Accounts are concerned, this type of operation is only considered in net terms, the respective value being recorded under the export of services.

Chart 5.15

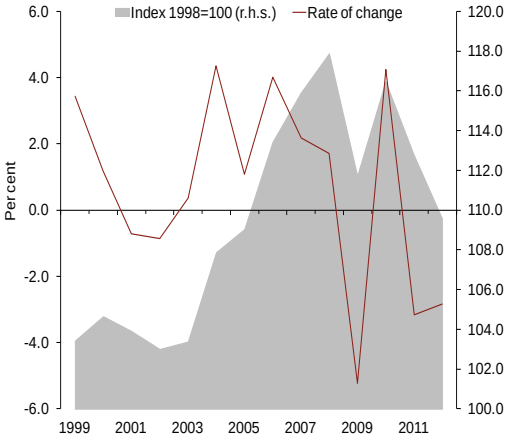
OVERNIGHT STAYS OF NON-RESIDENTS BY ORIGIN COUNTRY



Source: *INE*.

Chart 5.16

IMPORT PENETRATION IN GLOBAL DEMAND | IN REAL TERMS



Sources: *INE* and Banco de Portugal calculations.

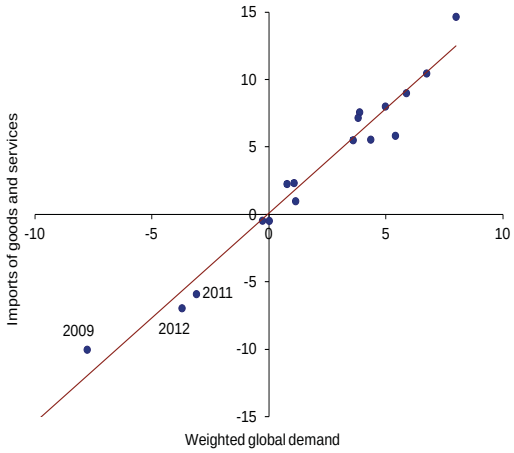
Note: The penetration of imports assesses the growth of imports of goods and services against the growth of global demand. An increase indicates a gain in the market share of foreign producers.

economic integration, presenting a negative behaviour in contraction periods, as the components with higher import content are more cyclical.

The change in imports was broadly in line with the decline in the overall demand weighted by import content (Chart 5.17). It should be mentioned that the evolution of imports in real terms reflects the decline noted in the non- energy component, in view of the fact that there was an increase in the energy component, which to a large extent is associated to the dynamism of fuel exports. As for the import of goods excluding fuels, emphasis should be given to the particularly marked fall in some of the components of demand with a higher import content, as is the case with the consumption of durable goods and GFCF in machinery and transport equipment. In nominal terms, import of vehicles and other

Chart 5.17

IMPORTS OF GOODS AND SERVICES AND THE WEIGHTED GLOBAL DEMAND | REAL RATE OF CHANGE



Sources: *INE* and Banco de Portugal calculations.

transport material fell by 25.1 per cent, while the import of machines and appliances showed a decline of 9.0 per cent. The slowdown in the import of goods was relatively broad-based in terms of geographical areas, with a nominal drop of 7.6 per cent from intra-community markets and a modest increase of 1.4 per cent in the extra-community component (-2.6 and 12.8 per cent in the previous year, respectively).

Tourism imports, in turn, came in with another drop, reaching 3.5 per cent in 2012 in real terms (-2.1 per cent in 2011). This comes against a backdrop marked by a sharp decline in real disposable income and uncertainty concerning future income, by the continuing deterioration in the labour market and by stringent conditions governing access to new credit. The decrease reflects to a large extent the lacklustre performance of tourism imports from Spain, which is roughly one third of this component (the figure was down 7.8 per cent in nominal terms after a -1.1 per cent variation for the year before). In addition, there was another fall in overnight stays in Portugal by residents, with numbers down by 7.2 per cent, following a 2.5 per cent drop a year earlier.

Imports of other services were down by 8.4 per cent in real terms, reflecting a negative evolution in the majority of their components.

BOX 5.1 | THE RISE IN HOUSEHOLDS' SAVING RATE IN 2012: AN EXPLANATION BASED ON MACRO AND MICROECONOMIC EVIDENCE

In 2012, the savings of Portuguese households reached maximum values since the beginning of the euro area, assessed both in terms of level and as a percentage of disposable income (Chart 1). This box seeks to understand this evolution, in the light of macro and microeconomic evidence. On the one hand, the regression model presented in Alves and Cardoso (2010) was updated and reestimated.[1] On the other hand, microeconomic evidence is presented, based on the data from the Household Expenditure Survey (IDEF) 2010/2011 carried out by Statistics Portugal (*INE*).[2]

The pattern of savings over time can be explored through the estimation of a model relating the households saving rate and a set of macroeconomic determinants. In the regression model with an error correction mechanism estimated in Alves and Cardoso (2010), a stable long-term relation was found between the households' saving rate and the following variables: (i) a representative interest rate for deposits (with a positive sign, as it represents the opportunity cost of current consumption over future consumption); (ii) the fiscal balance excluding temporary measures (with a negative relation to the saving rate, suggesting some substitution effect between public and private expenditure); and (iii) the rate of change of real GDP (with a positive sign). The estimated short-term equation, in turn, relates the change in the saving rate with the long-term equation and with the following macroeconomic variables (in first differences): (i) the fiscal balance of general government (as a percentage of GDP); (ii) the growth rate of real GDP; and (iii) the wealth of households (net of indebtedness and as a percentage of disposable income). The rate of growth of real GDP represents a proxy for disposable income. The estimated positive relation is in line with the life cycle theory, in which household consumption is generally smoothed according to permanent income, and thus temporary fluctuations in disposable income tend to be reflected in savings fluctuations in the same direction. The households' total net worth presents a negative relation to the saving rate, indicating that fluctuations in the levels of wealth, resulting in particular from asset price fluctuations, tend to affect consumption in the same direction.

The specification which has now been reestimated includes, besides these variables, the change in the unemployment rate in the short-term equation.[3] This variable aims to capture the effect of uncertainty as regards future household income, as well as the increase in risk perception of a permanent reduction in real income. As a matter of fact, a significant increase in unemployment, as seen lately, should spur an increase in precautionary savings by most households. This effect should be more obvious among households that are not experiencing liquidity constraints.

The model has been re-estimated for the period 1986 to 2012. Chart 2 provides information for the most recent period, relating the observed values of the change in the saving rate and the values estimated according to the dynamics of the short-term equation. The model presents a good performance, both in terms of the sign and the magnitude of the change in the household saving rate. As regards 2012, the change in the unemployment rate - as an additional proxy to the degree of uncertainty and to the permanent nature of the current adjustment - provides a fundamental contribution to the estimated increase of the saving rate.

The equation however underestimates the strong increase that was observed in 2012, albeit within the usual estimated confidence intervals. Within this context, two issues should be emphasized. One is

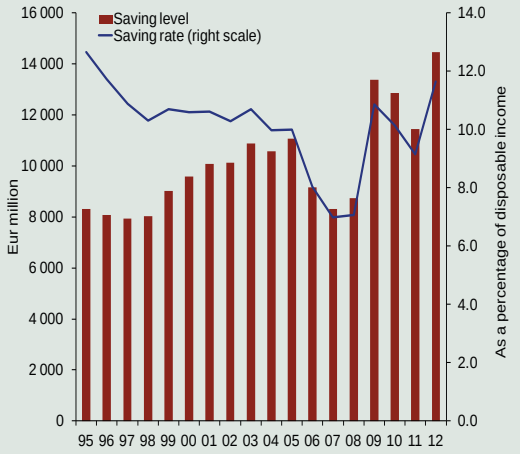
1 See Alves, N. and F. Cardoso, (2010), "Household saving in Portugal: micro and macroeconomic evidence"", Banco de Portugal, *Economic Bulletin - Winter.*

2 For further details regarding this survey see Statistics Portugal (2012), *Inquérito às Despesas das Famílias 2010/2011, INE.*

3 This inclusion does not substantially change the coefficients and the statistical significance of the other variables in the model.

Chart 1

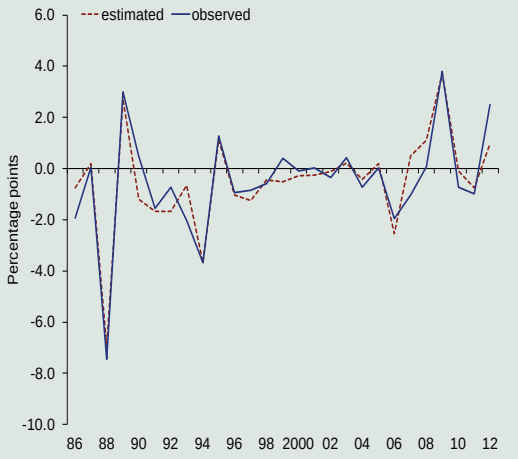
HOUSEHOLD SAVING IN PORTUGAL - LEVELS AND RATES



Source: *INE* (National Accounts).

Chart 2

CHANGES IN THE SAVING RATE - OBSERVED AND ESTIMATED



Source: Update and reestimation of Alves and Cardoso (2010).

the increase in liquidity constraints – in a context of a high degree of restrictiveness of credit supply to households – which should have significantly influenced consumption in some households, contributing to the increase in the overall household saving rate. The other is that the evolution in savings in 2012 may have been influenced by a composition effect regarding disposable income developments. In fact, in 2012 there was a major dichotomy between the evolution of compensation of employees (which fell 7.2 percent) and property income (which increased 7.5 percent). In case these two types of income display a different propensity to save, one should expect a non-negligible composition effect on the saving rate. This effect should be particularly relevant if the evolution of property income is fundamentally temporary, given that this would increase the propensity to save that income.

It is possible to make a tentative assessment of this issue based on the Household Expenditure Survey 2010/2011 carried out by Statistics Portugal between March 2010 and February 2011. This survey includes detailed information about the expenditure and income of close on 17000 households. It is important to stress that the comparison between the saving rate based on the survey and the rate obtained from the national accounts has limitations, due to the fact that there are significant methodological differences between these statistical sources. Nonetheless, the INE survey is a unique database for analysing the savings profiles of Portuguese households. The survey also provides weights for each household, allowing for extrapolation of the findings to the population as a whole. These weights were applied in all the calculations carried out.

Chart 3 characterises the distribution of household savings in Portugal according to the deciles of monetary income[4]. The savings were calculated simply as the difference between the monetary income and the monetary expenditure of each household. The chart shows the high inequality in the distribution of savings in Portugal, with about 87 per cent of the total generated by the two top deciles of the income distribution.

This last observation is relevant, given that the big increase in property income mentioned above was, for the most part, associated with the interest received by households and with the increase in other property income (including, in particular, dividends and rents received). In the 2010/2011 survey of households,

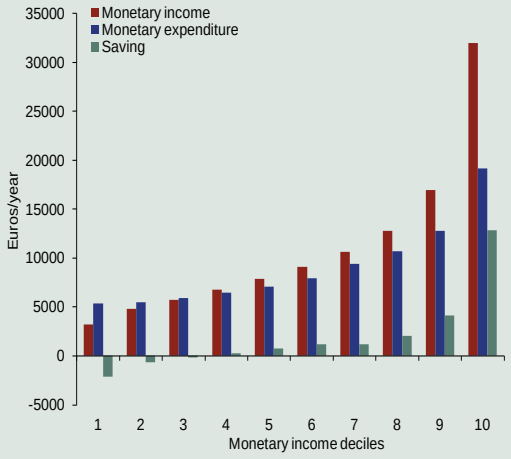
4 Monetary income, monetary expenditure and savings for each household were re-scaled using the OECD modified equivalence scale, so as to capture differences in the size and composition of the households. This equivalence scale attributes a weight of 1.0 to the first adult in the household, 0.5 to the remaining adults and 0.3 to each child.

this income can be roughly proxied by the information on "Income from property and capital". According to the survey, about 82 percent of this income is earned by the two higher deciles of the income distribution, *i.e.*, by those with the higher saving rate.

With the aim of illustrating the average propensity to save according to the type of income, monetary income was broken down into (i) self-employment income, (ii) employee income, (iii) income from property and capital, (iv) pensions and (v) social benefits. The calculation of average savings by type of income resulted from the aggregation of the savings of each household, weighted with the respective share of each type of income in total monetary income. Chart 4 presents the results obtained. The chart suggests that income from property and capital shows an average propensity to save that is clearly higher than employee income (as well as a higher level of savings, which is consistent with the fact this income is concentrated in the higher income deciles).[5] This suggests that the strong growth in property income should have also contributed to the increase of the saving rate in 2012.

Chart 3

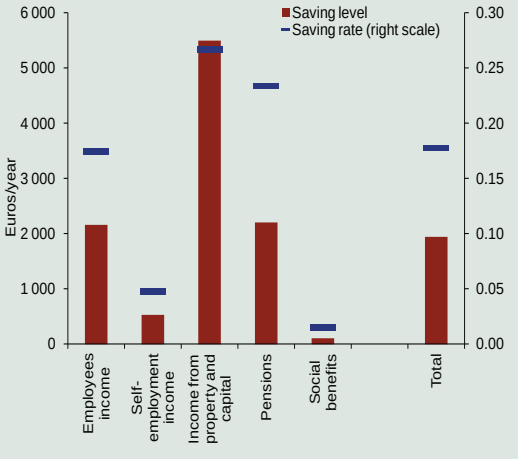
HOUSEHOLD INCOME, EXPENDITURE AND SAVING, BY MONETARY INCOME DECILE



Source: *INE* (IDEF 2010/11).
Note: Values re-scaled with the OECD modified equivalence scale.

Chart 4

SAVING LEVELS AND SAVING RATES, BY INCOME SEGMENTS



Source: *INE* (IDEF 2010/11).
Note: Values re-scaled with the OECD modified equivalence scale.

5 It can be added here that the saving rate of the income associated to social benefits is relatively low and that the saving rate of income from pensions is relatively high (in line with the results reported in Alves and Cardoso, 2010).

BOX 5.2 | PORTUGUESE EXPORT MARKET SHARES IN 2012: AN ANALYSIS BASED ON A SAMPLE OF EXPORT MARKETS

This box analyses the nominal change of the share of Portuguese exports of goods in a sample of export markets, explicitly considering the influence of the sectoral and geographical specialization. The database used in this analysis is the Global Trade Atlas.

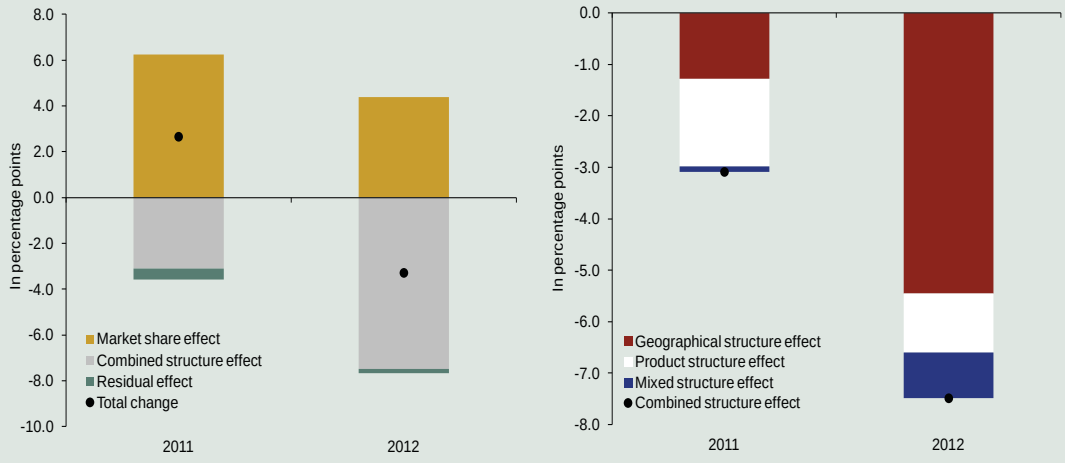
Using a methodology of constant market share of analysis, it is possible to evaluate the effects of the specialization of the economy in the total change of market share, as a country benefits if it is relatively more specialized in more dynamic sectoral/geographical markets. After discounting this structure effect, the evolution of the market share will reflect the revealed competitiveness in each individual export market.

The breakdown of the total change of market share used includes three main components: a market share effect, taking into account the effective changes of share in each individual country/product market and two additional items that measure the impact of the relative specialization of Portuguese exports by product and geographical destination.[1] The analysis of the evolution of market shares is often based on a notion of external demand in which each country is weighted by its relevance as a destination of Portuguese exports, regardless of its sectoral composition, as described in "Chapter 5 *Demand*", of this Report. In this case, the influence of the product specialization is implicitly included in the effective change of market share.

Chart 1 presents the results of the breakdown of the total change of share based on a sample of nominal exports to ten important destination countries with a sectoral breakdown into 12 groups of products defined from the chapters of the Combined Nomenclature (CN), corresponding to around 70 per cent of Portuguese exports of goods.[2] In 2012, the total share of Portuguese exports to these 120 individual markets as a whole declined by 3.3 per cent in nominal terms, after a 2.7 per cent increase in 2011. This result was influenced by a very negative structure effect, as there were still effective gains of share in these markets as a whole, though lower than those observed in 2011. In particular, the geographical

Chart 1

ARITHMETIC BREAKDOWN OF THE NOMINAL CHANGE OF THE SHARE OF PORTUGUESE EXPORTS OF GOODS IN A SAMPLE OF 120 INDIVIDUAL MARKETS



Sources: Global Trade Atlas and calculations of Banco de Portugal.

1 For more details on this methodology of constant market share analysis, see Cabral, S. and Esteves, P. S. (2006) "Portuguese export market shares: an analysis by selected geographical and product markets", Banco de Portugal, *Economic Bulletin – Summer.*

2 The sample includes the ten main geographical destinations of Portuguese exports of goods (Spain, Germany, France, United Kingdom, Netherlands, United States, Italy, Belgium, China and Brazil). Angola is excluded because there is no detailed information available for calculating the export share in this market.

structure effect gave an especially negative contribution in 2012, reflecting, to a large extent, the fact that imports of Spain - the geographical market that accounts for the largest proportion of Portuguese exports - recorded a reduction of more than 3 per cent after a growth of more than 9 per cent in 2011. In this context, it is also worth noting the negative contributions arising from the strong decelerations of nominal imports of Germany, from about 13 per cent in 2011 to less than 1 per cent in 2012, and of France, from more than 12 per cent in 2011 to around 1 per cent in 2012.

It is important to analyse the effective change of share of Portuguese exports in each of the 120 individual markets considered, excluding the effect of the relative specialization of the country in terms of geographical distribution and product composition. Table 1 presents the contribution of each individual market to the market share effect in 2012, highlighting the three most important negative and positive contributions.

The effective losses of share in the German market of transport equipment represented the most substantial negative contribution to the market share effect in 2012. However, these losses are closely related to the fact that Portuguese sales of passenger cars to China were carried out indirectly via Germany until October 2011. Thus, symmetrically, there were high effective gains of share of Portuguese exports of transport equipment to China, which contributed positively to the evolution of the aggregate market share. By contrast, sales of transport equipment to the United Kingdom gave a negative contribution to the effective change of market share of Portuguese exports.

Table 1

BREAKDOWN OF THE MARKET SHARE EFFECT IN 2012 | CONTRIBUTION OF EACH INDIVIDUAL COUNTRY/PRODUCT MARKET IN PERCENTAGE POINTS

Code CN	Description	Spain	Germany	France	United Kingdom	Netherlands	United States	Italy	Belgium	China	Brazil	Total
01-24	Agri-food, beverages and tobacco	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
27	Mineral fuels	-0.2	0.0	0.1	0.2	0.3	0.9	0.1	-0.1	0.0	0.0	1.3
28-40	Chemicals, plastics and rubbers	0.2	0.2	0.1	0.1	0.1	-0.1	0.1	-0.1	0.0	0.0	0.5
44-49	Wood, cork, pulp and paper	0.3	0.1	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.8
41-43; 50-59	Hides, leather, and textiles	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
60-63	Apparel and clothing accessories	0.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
64-67	Footwear and headgear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68-71	Stones, plasters, ceramics and glass	-0.1	-0.1	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.3
25-26; 72-83	Minerals and base metals	-0.1	0.1	0.3	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.8
84-85	Machinery and electrical appliances	0.2	0.5	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
86-89	Transport equipment	-0.1	-1.3	-0.1	-0.3	0.1	-0.1	0.2	0.1	0.9	0.0	-0.6
90-99	Miscellaneous products	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Total	0.7	-0.4	0.6	0.1	0.4	0.8	0.9	0.2	1.0	0.2	**4.4**

Sources: Global Trade Atlas and calculations of Banco de Portugal.

Note: CN refers to the Combined Nomenclature.

Exports of mineral fuels to the United States stand out for the large positive contribution to the effective gain of market share 2012. In contrast, Portuguese exports of fuels to Spain contributed negatively to the evolution of the market share. Finally, the gains of share of exports of machinery and electrical appliances to Germany gave a positive contribution to the effective change of market share in this sample.

The methodology of constant market share analysis allows us to obtain a market share effect that isolates the effective changes of share in each of individual country/product market from the effects related to the product and geographical structure of exports. This market share effect, which shows the ability of Portuguese firms to compete effectively with suppliers from other countries in each individual destination market, was again positive in 2012. Additionally, the total change of market share of exports also depends on their geographical and sectoral specialization. As observed in recent years, the influence of the relative specialization of Portuguese exports on the aggregate behaviour of market shares continued to be negative in 2012. Despite the growing diversification of Portuguese exports to extra-community markets seen in recent years, the geographical structure effect gave a particularly negative contribution in 2012. Moreover, the product specialization of Portuguese exports also continued to contribute negatively to the total change of market share.

The entry of Portuguese goods and services in sectoral and geographical markets with a more dynamic demand and a higher growth potential is essential to ensure a favourable evolution of exports in the world market, a decisive factor in the current process of adjustment of the Portuguese economy. Entering new markets is a complex decision, but it must be assumed on corporate strategies. The success of these internationalization strategies is based on factors that far exceed the costs of production, including geographical aspects, scale of the productive activity, capacity of innovation and incorporation of technological advances.

6. PRICES

Consumer prices were conditioned by a number of measures associated with the fiscal consolidation process

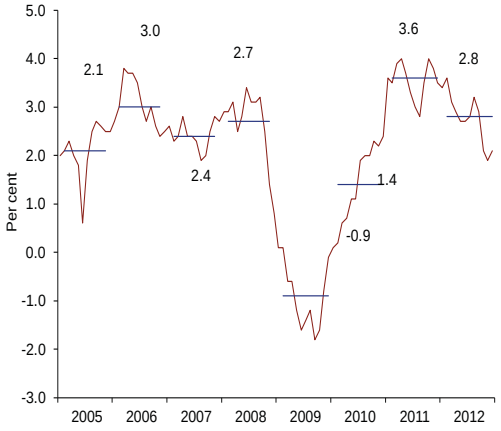
In 2012, the inflation rate in Portugal was 2.8 per cent, as measured by the Harmonized Index of Consumer Prices (HICP), a 0.8 p.p. fall vis-à-vis 2011 (Chart 6.1). The behaviour of the inflation rate was largely conditioned by the impact of a number of measures associated with the fiscal consolidation process, coming on stream in 2011 or 2012. Salient among them was the increase in value added tax (VAT) applied to some products, a higher tax on tobacco and an increase in prices on a number of goods and services subject to regulation. The estimates presented in this Report point to a mechanical impact on the inflation rate in 2012 of around 2.2 p.p. This stemmed from the changes in indirect tax and the increases in the prices of administered goods and services (See Box 6.1: "*The mechanical impact from indirect taxation and administered prices on the inflation rate*", of this Report).

From the structural point of view, price moves in the Portuguese economy are anchored to the monetary policy of the ECB, guided by the principle of price stability over the medium-term. This situation is in marked contrast to the one observed in previous adjustments to external imbalances, specifically in the 1970s and 1980s, when exchange rate devaluations were used as an instrument to obtain gains in external competitiveness, which in turn resulted in high inflation rates. In those circumstances, the adjustment cost was felt above all in a reduction in real wages and a loss of value for assets denominated in the domestic currency.

As things stand now, the deterioration in the cyclical position of the Portuguese economy (Chart 6.2) can be seen in the under utilization of the factors of production. This has led to downward pressure on the prices of goods and services and on labour costs. This process is one of the channels through which will bring come an improvement in price competitiveness for the Portuguese economy in the short term, in tandem with the continuing rebalancing over the long term, a process based more on other aspects of competitiveness.

Chart 6.1

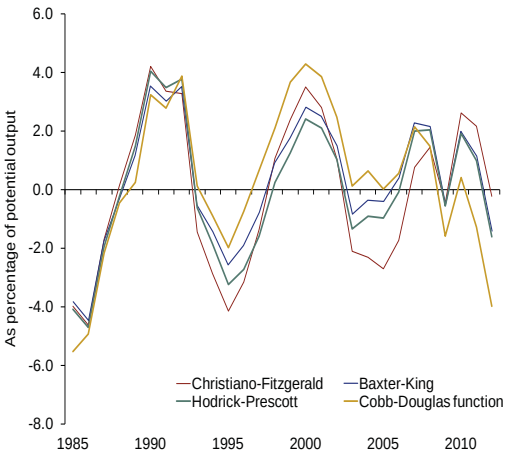
HARMONIZED INDEX OF CONSUMER PRICES | YEAR-ON-YEAR CHANGE AND ANNUAL AVERAGE, PER CENT



Source: Eurostat.

Chart 6.2

CYCLICAL POSITION OF THE PORTUGUESE ECONOMY | OUTPUT GAP AS PERCENTAGE OF POTENTIAL GDP



Sources: *INE* and Banco de Portugal calculations.

Prices slow down over 2012 in line with the moves in the usual determinants

The inflation rate came down over the year, in particular in the last quarter, stemming to a large extent from the gradual dissipation of the above-mentioned effects. This development was common to both the non-energy and the energy consumer prices: the variation in the first over the year as a whole was 1.7 per cent, following 2.8 per cent in 2011; and the second slowed from 12.8 per cent in 2011 to 9.5 per cent, in line with moves in the price of oil in international markets (Table 6.1). It is therefore not surprising that the inflation rate at year-end 2012, against the backdrop of a significant contraction in economic activity in the country, came in with figures close to what would be expected given the moves in its usual determining factors. Indeed, there was a marked slowdown in the prices of non-energy based imported goods, a smaller increase in the prices of oil in international markets (see Chapter 1 – International Framework) and a steep fall in unit labour costs of across the economy.

In 2012, inflation in the euro area stood at 2.5 per cent. So, for the second year running, the differential between the inflation rate in Portugal and the euro area average is marginally positive (0.3 p.p.), after the negative figure for 2010 (-0.2 p.p.) and the record low of -1.2 p.p. in 2009.

There are diverging moves in the main aggregates in the downward path of prices

An analysis of consumer prices based on the main HICP aggregates shows that one of the biggest contributions to the downward path was the price of non-energy industrial goods throughout the year, in particular the prices of pharmaceutical products and vehicles (Table 6.2). Prices for services and processed foods moved in the opposite direction, with a higher increase than in 2011.

The change in food prices during the year came fundamentally on the back of the price of commodities, above all cereals, where the increase was considerable in the second half of the year. The behaviour of food prices, especially the processed food component, also reflected the maintenance of the steep rise in the price of tobacco.

Prices for services, which normally display a smoother profile, increased during the year more than in 2011.[1] This move followed to a large extent the rise in the prices of some regulated services, along with the impact of the increase in VAT applied to some services. Among the salient points in the first case were

Table 6.1

PORTUGAL - MAIN INTERNATIONAL PRICE INDICATORS | ANNUAL CHANGE, PER CENT

	2010	2011	2012	2012			
				1º trim.	2º trim.	3º trim.	4º trim.
Import prices of price goods							
Total	5.3	8.9	1.7	2.5	1.6	1.9	0.8
Total excluding fuel	1.5	5.3	0.1	-0.4	0.4	0.2	0.1
Consumer goods	-1.8	5.4	0.9	-1.0	1.4	2.2	1.2
Food	-0.2	12.7	1.3	-1.7	0.2	4.3	2.4
Non-food	-2.5	0.3	0.6	-0.4	2.7	0.3	0.0
International commodity prices							
Oil prices (Brent Blend), EUR	35.4	31.7	9.1	17.1	5.1	9.9	5.0
Non-energy commodity prices, EUR	34.0	13.8	-2.9	-9.0	-5.3	0.3	3.3
Food commodity prices, EUR	15.0	20.9	5.6	-9.5	0.5	19.4	13.8
Nominal effective exchange rate for Portugal	-1.5	-0.1	-1.3	-0.8	-1.7	-1.9	-1.0

Sources: Eurostat, HWWI, *INE*, Thomson Reuters and Banco de Portugal.

1 Recent evidence based on micro-economic data shows that the sectors where the relative proportion of payroll costs are typically higher comes in with greater price rigidity. In particular, firms in these sectors tend to adjust prices more slowly following shocks in demand or costs. The services sector is often cited as an example where the dynamism of prices is closely circumscribed by payroll rigidity and this plays a part in smoothing out the profile of prices (see, for example: Martins, Fernando, 2011, "Price stickiness in Portugal: evidence from survey data", Managerial and Decision Economics, Vol.31, 2-3, January).

Table 6.2

HICP - MAIN AGGREGATES AND CLASSES | PER CENT

	Weights 2011	Rate of change 2010 Dec	Rate of change 2011 Dec	Rate of change 2012 Dec	Year-on-year change 2011 Dec	Year-on-year change 2012 Mar	Year-on-year change 2012 Jun	Year-on-year change 2012 Sep	Year-on-year change 2012 Dec
Total	100.0	1.4	3.6	2.8	3.5	3.1	2.7	2.9	2.1
Total excluding energy	87.3	0.3	2.3	1.7	2.2	1.9	1.7	1.4	1.7
Total excluding unprocessed food and energy	77.7	0.3	2.2	1.6	2.2	1.9	1.6	1.2	1.5
Goods	58.9	1.7	4.4	2.5	4.3	3.1	2.3	2.5	1.2
Food	20.9	0.4	3.0	3.4	2.7	3.2	3.6	3.3	3.5
Unprocessed	9.6	0.7	2.9	2.8	2.4	1.8	2.8	3.0	3.0
Processed	11.4	0.2	3.1	4.0	3.0	4.3	4.2	3.5	3.8
Industrial	38.0	2.4	5.2	2.0	5.2	3.1	1.7	2.1	0.0
Non-energy	25.2	-0.7	1.4	-2.1	1.5	-1.2	-2.4	-3.5	-2.6
Energy	12.7	9.5	12.8	9.5	12.5	11.1	9.2	12.7	4.6
Services	41.1	1.0	2.4	3.2	2.3	3.2	3.3	3.5	3.4
Memo:									
CPI	-	1.4	3.7	2.8	3.6	3.1	2.7	2.9	1.9
GDP Deflator	-	0.6	0.5	-0.1	-	-	-	-	-
Euro Area HICP	-	1.6	2.7	2.5	2.7	2.7	2.4	2.6	2.2
Differential vis-à-vis the Euro Area (in p.p.)	-	-0.2	0.9	0.3	0.8	0.4	0.3	0.3	-0.1

Sources: Eurostat and Banco de Portugal.

the substantial rise in the cost of public transport and the prices of some services in the health sector, with increases in initial payments on using the service (the so-called *taxas moderadoras*) following the cut in the state's co-payment in both areas; in the second case, there was the application of a higher rate of VAT (now at 23 per cent) on prices for coffee shops and restaurants and for cultural services.

A substantial decline in unit labour costs, against a backdrop of a steep fall in wages per worker across the economy as a whole

In 2012, unit labour costs declined very substantially (3.8 per cent), after a 0.7 per cent fall in 2011 (Chart 6.3). This move reflects the marked fall in compensation per employee across the economy, in particular in the public sector, with the overall move in salaries in the economy as a whole affected by the measures taken with regard to public sector salaries, specifically the wage freeze and the partial suspension of holiday and Christmas bonuses (known as the 13th and 14th months' pay). And against a backdrop of deteriorating conditions in the labour market, with the unemployment rate reaching record highs, salaries in the private sector stood virtually at zero.[2] However, something of a positive skew is expected in aggregate wages, associated with an employment composition structure that typically occurs in the downturn of a cycle, stemming from a decline in the proportion of workers who are more lowly paid and possibly less skilled.

The euro area in fact provided a contrast with Portugal, posting an increase in unit labour costs during the year. In the light of this, the differential between the growth of unit labour costs in Portugal and the euro area not only stayed negative, as in the previous four years, but in fact reached a record low during the year.

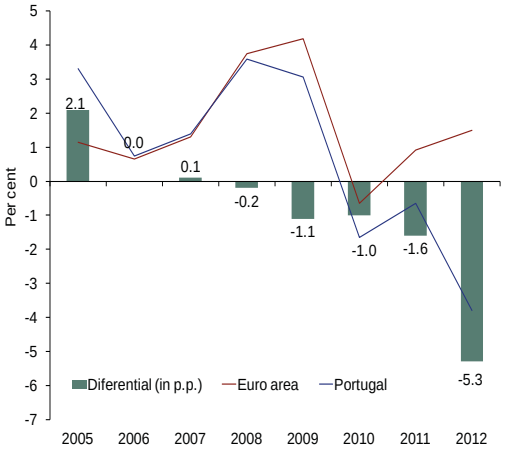
With the increase of domestic private production prices fundamentally maintaining the momentum of a year earlier, and with the substantial fall in unit labour costs in the private sector, profit margins looked

2 It is important to mention that some large public enterprises are taken to be part of the private sector for statistical purposes. These enterprises were also affected by the measures taken on public sector salaries. As a result, wages per worker in the private sector in 2012 should also directly reflect cuts in wages in the public sector.

to have risen significantly in 2012 (Chart 6.4). These aggregate profit margins may well have come in the wake of the impact on wages in the private sector stemming from the measures taken on salaries in the public sector with a direct effect on some of the state's business sector, but they may well also have been influenced in the current stage of the adjustment process in the economy by a composition effect, associated with the closure of companies that performed worse and had lower profit margins.

Chart 6.3

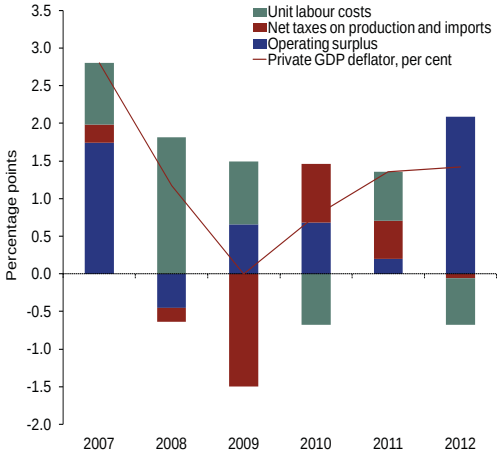
UNIT LABOUR COSTS IN PORTUGAL AND IN THE EURO AREA | ANNUAL CHANGE, PER CENT



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

Chart 6.4

CONTRIBUTIONS TO THE ANNUAL RATE OF CHANGE OF PRIVATE SECTOR GDP DEFLATOR



Sources: *INE* and Banco de Portugal calculations
Note: Private sector GDP corresponds to total GDP excluding compensation for civil servants and the consumption of fixed capital by the general government. The contributions are calculated as in ECB (2003) "Inflation differentials in the euro area".

BOX 6.1 | THE MECHANICAL IMPACT FROM INDIRECT TAXATION AND ADMINISTERED PRICES ON THE INFLATION RATE

The Economic and Financial Assistance Programme for the Portuguese economy aims, among other objectives, at restoring the intertemporal financial balance of the public sector and ensuring the financial sustainability of State Owned Enterprises. Within this framework, several fiscal policy measures have been put in place. Some of them have a direct impact on consumer prices, as they imply a rise in indirect taxation or in administered prices.

This box provides an estimate of the impact of changes in indirect taxation and administered prices on the inflation rate's recent evolution.

Methodology

The analysis uses the Harmonized Index of Consumer Prices (HICP) and the Harmonized Index of Consumer Prices at Constant Tax rates (HICP-CT). The former measures the changes in the prices of consumer goods and services acquired by households in the various countries of the European Union. The latter has the same purpose, but withdraws the tax effect. In other words, it measures price changes assuming that tax rates are kept constant. The difference between the growth rate of the HICP and of the HICP-CT measures how shifts in indirect taxation impact price changes. In addition, the growth rate of the HICP-CT can be further decomposed into the contribution of administered prices and the contribution of the remaining items, both net of indirect taxation effects.

Notice that this methodology assesses only the mechanical impact of changes in indirect taxation and of administered prices on the inflation rate. In other words, it assumes that the effects stemming from these measures are immediately and entirely transmitted to the prices of final goods and services. This approach does not consider therefore potential changes in profit margins that may result from these measures, or general equilibrium effects on agents' expectations as well as on wage and price formation.

The effects of indirect taxation and administered prices

Chart 1 decomposes the HICP's annual average rate of change in the mechanical impact of indirect taxation and the impact excluding the effects of that same taxation, for the last three years. In 2012, the inflation rate stood at 2.8 per cent (1.4 per cent in 2010 and 3.6 per cent in 2011), of which 1.9 percentage points (p.p.) result from the mechanical impact of increases in indirect taxation (0.4 p.p. in 2010 and 1.3 p.p. in 2011).

Chart 1 presents also a breakdown, by components, of the mechanical impact of changes indirect taxation on inflation. The increase in indirect taxation that took place in 2012 affected, to a large extent, services and energy goods, with the mechanical impacts standing at 1 and 0.6 p.p., respectively. For services, this is explained by the increase in the VAT faced by restaurants and cafés, from 13 to 23 per cent. Concerning energy goods, the impact is explained by the increase in the VAT for electricity and gas that took place in October 2011. In 2011, the effects of indirect taxation are spread across several sectors. This is explained by the rise in VAT, in January 2011, for a wide range of products. For energy goods, the effect in 2011 results from the aforementioned change in the VAT for electricity and gas.

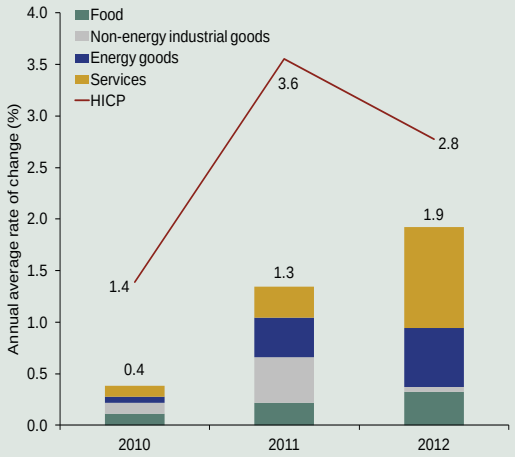
Administered prices, net of the effects of indirect taxation, contributed approximately 0.3 p.p. to the inflation rate in 2012 (0.2 p.p. in 2010 e 0.7 p.p. in 2011). This value is explained by electricity and transport, which have contributed also 0.3 p.p. to the inflation rate. Though the price of pharmaceutical products has declined (contribution of -0.2 p.p.), it was not sufficient to offset the positive impact of other administered items (which presented a joint contribution of 0.2 p.p. to the inflation rate). In

2011, the increase in administered prices is to a large extent explained by the pre-tax price increase in electricity, transport, and pharmaceutical products (joint contribution of 0.5 p.p. to the inflation rate).

To wrap up, changes in indirect taxation and administered prices had an important effect on the inflation rate in recent years, with their mechanical effects standing at 2 p.p. in 2011 and 2.2 p.p. in 2012 (Chart 2). These impacts compare with an inflation rate of 3.6 and 2.8 per cent, respectively. While the contribution of administered prices to the inflation rate went down from 0.7 p.p. in 2011 to 0.3 p.p. in 2012, the contribution of changes in indirect taxation went up from 1.3 to 1.9 p.p..

Chart 1

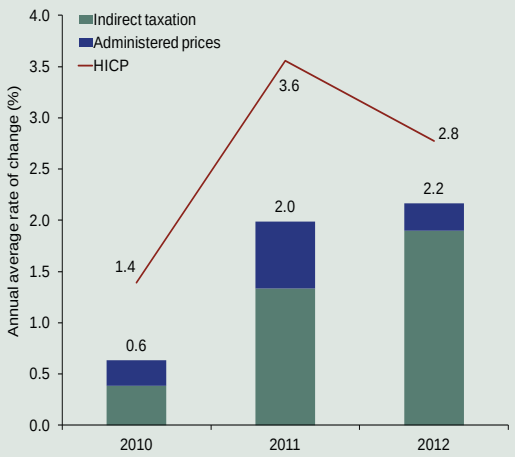
EFFECTS OF INDIRECT TAXATION ON THE ANNUAL AVERAGE RATE OF CHANGE OF HICP AND CORRESPONDING COMPONENTS' CONTRIBUTIONS (IN P.P.)



Sources: Eurostat and Banco de Portugal.

Chart 2

CONTRIBUTIONS OF INDIRECT TAXATION AND ADMINISTERED PRICES TO THE INFLATION RATE (IN P.P.)



Sources: *INE* and Banco de Portugal.

7. BALANCE OF PAYMENTS

The economy's external borrowing requirements fell substantially during the year, with a slight external lending requirement observed in the year as a whole.

In 2012, there was a substantial adjustment in the external accounts, with the joint balance of the current and capital accounts moving from a deficit of 5.8 per cent of GDP in 2011 to a surplus of 0.8 per cent. The decline in the economy's external borrowing requirements in 2012 reflected the significant increase in domestic savings and, to a lesser degree, the reduction in the rate of investment made by the economy and the increase in the surplus of net capital transfers (Chart 7.1).

Compared with the 2010 figures, the joint balance of the current and capital accounts improved by 10.2 p.p. (Table 7.1). In this period, domestic savings as a percentage of GDP increased by 4.3 p.p., whereas investment fell by 4.2 p.p. of GDP. In particular, it should be singled out the significant correction in the general government savings as a percentage of GDP which, still negative, increased by 2.3 p.p..

If we look at the figures corrected for pension fund transfer operations to the general government undertaken in the last quarters of 2010 and 2011, it can be seen that a large contribution to this adjustment came from an increase in the joint overall net lending requirements of households and non--financial corporations, together with a decline in the borrowing requirements of general government (Chart 7.2). Between 2010 and 2012, the lending requirements of households as a percentage of GDP went up by 1.9 p.p., while the borrowing requirements of non-financial enterprises came down by an accumulated 3.4 p.p. (Charts 7.3 and 7.4). In the same period, the borrowing requirements of general government fell by 5.0 p.p..

The substantial fall in the external deficit is one of the most striking features of the adjustment process under way in the Portuguese economy, and it reflects the combination of the cyclical position of the economy and a structural change in the relation between savings and investment. A high debt level in international investment means that this adjustment process of the external accounts must go on for many years.

Table 7.1

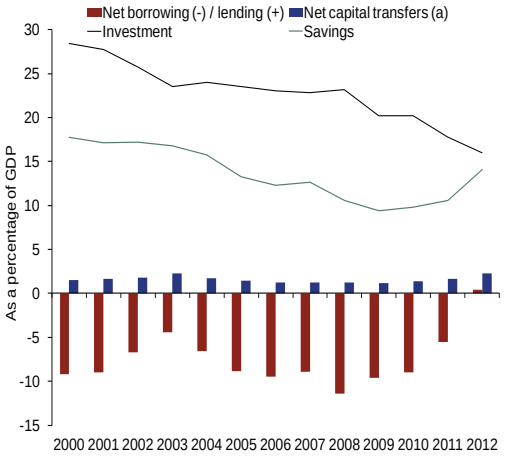
CURRENT AND CAPITAL ACCOUNTS | BALANCES AS PERCENTAGES OF GDP

	2008	2009	2010	2011	2012	2012 H1	2012 H2	Variation 2010-2012 (p.p.)
Current and capital account	-11.1	-10.1	-9.4	-5.8	0.8	-1.8	3.5	10.2
Current account	-12.6	-10.9	-10.6	-7.0	-1.5	-3.5	0.5	9.0
Goods and services	-9.5	-7.0	-7.2	-3.8	0.1	-1.0	1.2	7.3
Goods	-13.4	-10.6	-11.1	-8.3	-5.2	-5.1	-5.3	5.9
Services	3.8	3.6	3.9	4.5	5.3	4.1	6.5	1.4
of which:								
Travel and tourism	2.6	2.5	2.7	3.0	3.4	2.3	4.5	0.7
Income	-4.5	-5.2	-4.6	-4.9	-3.9	-4.3	-3.4	0.7
Current transfers	1.4	1.3	1.3	1.7	2.3	1.9	2.7	1.0
of which:								
Emmigrant/immigrant remittances	1.1	1.0	1.1	1.1	1.3	1.2	1.5	0.3
Capital account	1.1	0.8	1.1	1.2	2.3	1.7	3.0	1.2

Sources: *INE* and Banco de Portugal.

Chart 7.1

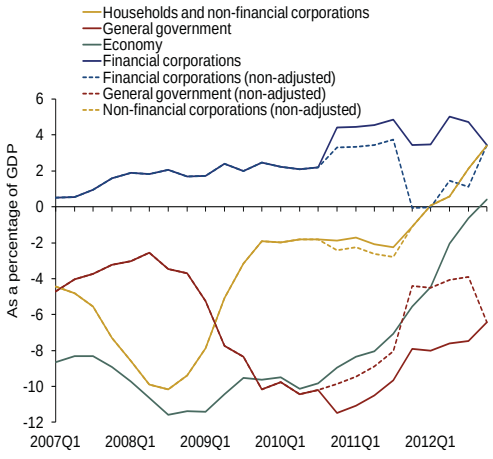
NET BORROWING/LENDING



Sources: *INE* and Banco de Portugal.
Notes: (a) Includes the aquisitions less disposals of non-financial non-produced assets.

Chart 7.2

NET BORROWING/LENDING BY INSTITUTIONAL SECTOR | YEAR CONCLUDED IN EACH QUARTER



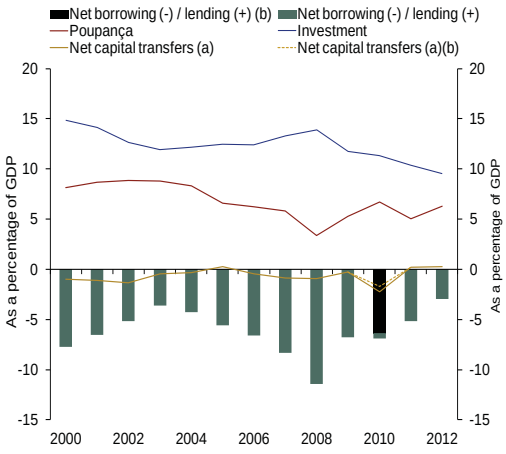
Sources: *INE* and Banco de Portugal.
Note: (a) Net values, including the aquisitions less disposals of non-financial non-produced assets. **(b)** These fi gures are adjusted for the direct effect of the transfer of reserves from Portugal Telecom (4th quarter of 2010) and from financial institutions (4th quarter 2011) to the general government.

Reduction of the joint deficit of the current and capital accounts reflects to a large extent the behaviour of the goods and services account

The improvement in the external balance in 2012 was due to a great extent to the behaviour of the goods and services account and, in particular, to the contraction of the goods account deficit. A close to balance trade account (surplus of 0.1 per cen of GDP) is a new phenomenon in the Portuguese economy in the last decades.

Chart 7.3

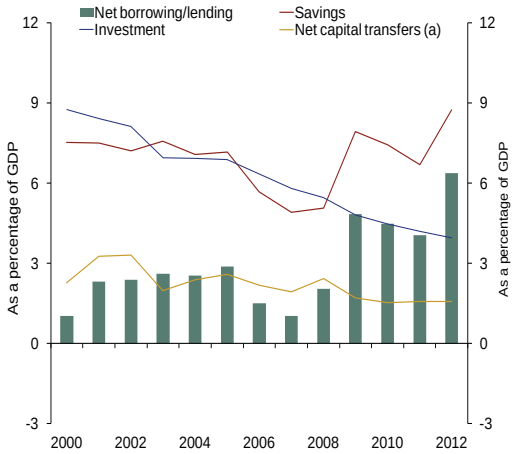
NET BORROWING OF NON-FINANCIAL CORPORATIONS



Sources: *INE* and Banco de Portugal.
Notes: (a) Net values, including the aquisitions less disposals of non-financial non-produced assets. **(b)** These figures are adjusted for the direct effect of the transfer of reserves from Portugal Telecom (in 2010) and from financial institutions (in 2011) to the general government.

Chart 7.4

NET LENDING OF HOUSEHOLDS



Sources: *INE* and Banco de Portugal.
Notes: (a) Net values, including the aquisitions less disposals of non-financial non-produced assets. **(b)** These fi gures are adjusted for the direct effect of the transfer of reserves from Portugal Telecom (in 2010) and from financial institutions (in 2011) to the general government.

The sharp reduction in the goods account deficit reflected to a large extent a positive and significant volume effect, in particular for the non-energy component, associated with the growth in exports, though lower than what was recorded for 2011, along with the plunge in imports in real terms, in line with the decline in domestic demand (Charts 7.5 and 7.6).[1] There was a significant growth in fuel exports which resulted in a positive volume effect, but the energy component was still a weight on the downside of the balance for goods and services, reflecting a negative price effect associated with the increase in price for energy products in international markets.

Reduction and shift in the composition of the income balance, reflecting the change in the economy's financing structure

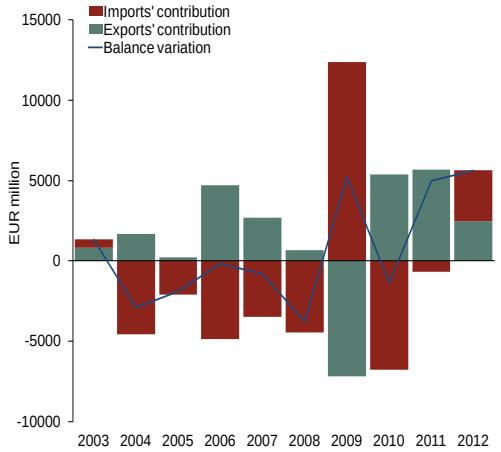
The improvement in the current account balance was due to the widening of the surpluses in the current transfers and in capital account as well as to the narrowing of the income deficit.

The behaviour in the current transfers balance in 2012 reflected essentially the maintenance of the large current transfers from the European Union and the substantial growth in net emigrant remittances. Additionally, the improvement in the capital account balance, especially in the second half of the year, was explained to a great extent by the particularly high level of net capital transfers from the European Union.

As to the income account, the fall observed in the deficit in 2012 reflects the change in the structure of financing in the Portuguese economy, with an increase in the sources of official financing as opposed to financing through the international financial markets. In 2012, all the main components of the income balance (incomes from direct and portfolio investment and compensation of employees) had their deficits cut, with the exception of income from other investment. During this period, it was particularly significant the decline in the deficit from direct investment income as a percentage of GDP, motivated by the large fall in incomes paid to external institutions, namely dividends paid to corporations from their participation in the capital of domestic corporations in the form of direct investment.

Chart 7.5

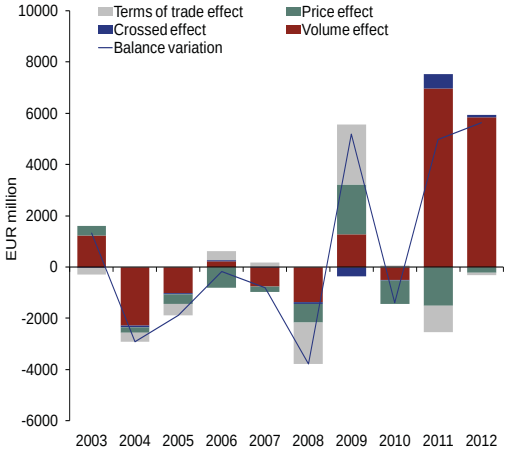
CHANGE IN THE BALANCE OF GOODS ACCOUNT | IMPORTS AND EXPORTS CONTRIBUTION



Sources: *INE* and Banco de Portugal.
Note: The contribution of imports corresponds to the symmetrical of its variation.

Chart 7.6

CHANGE IN THE BALANCE OF THE GOODS AND SERVICES ACCOUNT | BREAKDOWN IN VOLUME, PRICE, TERMS OF TRADE AND CROSSED



Sources: *INE* and Banco de Portugal.

1 For a more detailed explanation about the way the variation in the goods balance is broken down into the volume, price, terms of trade and the crossed (residual) effects, see "Box *Change in goods account balance in the first semester of 2012*", Banco de Portugal, *Economic Bulletin - Autumn*.

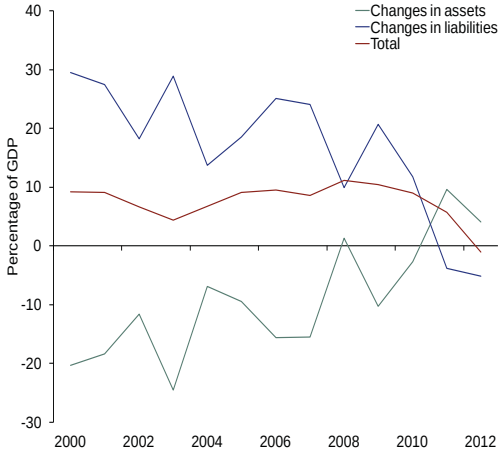
The flows on the financial account for 2012 reflected the surplus on the current and capital account balance and the recomposition of external financing for the Portuguese economy

In 2012, there was a small net outflow of funds abroad, reflecting the surplus on the combined current and capital account (Charts 7.7 and 7.8). This situation is a striking feature in the process of correcting the external imbalance, following very high deficits recorded over a prolonged period. There was a fall (in line with 2011) in both liabilities and assets to the exterior, though in the last case to a lesser degree than the previous year.

In this context, the evolution in the financial account stemmed from the recomposition of external financing, given the difficulties of resident economic agents in accessing finance in the international wholesale debt markets. This occurred in spite of the progressive improvement in the perception of risk among international investors over the year. As a result, for the year as a whole, there was a substantial fall in net portfolio investment liabilities, across the various resident institutional sectors. In the last quarter of 2012, however, some of the main Portuguese banking groups once more began to issue senior unsecured debt securities on the international markets.[2] External financing was ensured above all by a considerable inward flow into general government, associated with disbursement payments of loans obtained under the economic and financial assistance programme. In addition, financing was ensured through greater use of ECB monetary policy operations – from the standpoint of recording this on the financial account, there has been a rise in liabilities for other investment by monetary authorities associated with the position on Target[3] –, and by the net inflow of funds associated with non-residents' capital holdings in major Portuguese corporations (found under the heading of direct foreign investment).

Chart 7.7

FINANCIAL ACCOUNT | BALANCE AND CHANGES IN ASSETS AND LIABILITIES



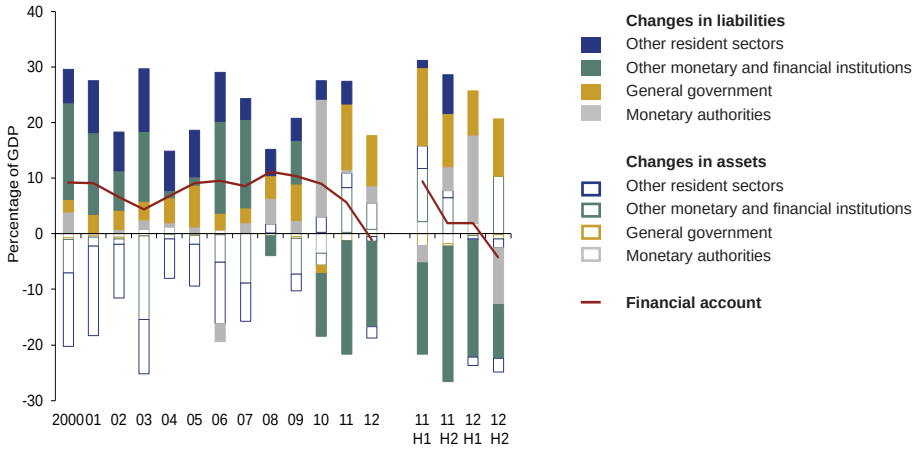
Sources: *INE* and Banco de Portugal.
Notes: A (+) sign means an increase in foreign liabilities or a decrease in foreign assets, *i.e.* a financial inflow. A (-) sign means decrease in foreign liabilities or an increase in foreign assets, *i.e.* a financial outflow. Figures for "Other investment" of monetary authorities and other monetary and financial institutions are adjusted for temporary end-of-year operations between these two sectors, which were reversed in the first days of the following year. The change in assets includes financial derivatives net of liabilities.

2 It should be noted that by January 2013, general government resumed emissions of 5-years Government bonds totalling 2500 million euros at an annual interest rate of 4.35 per cent. More recently, in May 2013, general government resumed emissions of 10-years Government bonds totalling 3000 million euros at an annual interest rate of 5.65 per cent.

3 Trans-European Automated Real-time Gross Settlement Express Transfer System for the euro, *i.e.* a system for payments and receipts by Banco de Portugal to/from central banks belonging to ESCB.

Chart 7.8

FINANCIAL ACCOUNT | BALANCE AND CHANGES IN ASSETS AND LIABILITIES BY INSTITUTIONAL SECTOR



Sources: *INE* and Banco de Portugal.

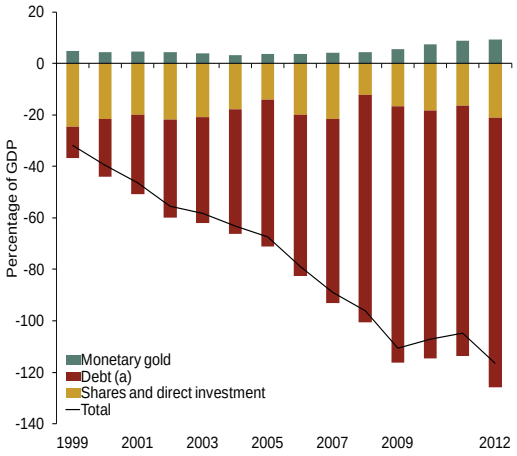
Notes: A (+) sign means an increase in foreign liabilities or a decrease in foreign assets, *i.e.* a financial inflow. A (-) sign means decrease in foreign liabilities or an increase in foreign assets, *i.e.* a financial outflow. Figures for "Other investment" of monetary authorities and other monetary and financial institutions are adjusted for temporary end-of-year operations between these two sectors, which were reversed in the first days of the following year. The change in assets includes financial derivatives net of liabilities.

The international investment position of the Portuguese economy was significantly affected by the increase in the market value of the Portuguese public debt securities observed during 2012

In 2012, despite the surplus on the current and capital account, there was a considerable worsening of the debt position of the Portuguese economy vis-à-vis the rest of the world, standing at 116.5 per cent of GDP at year-end, representing an increase of 11.7 p.p. (Chart 7.9). This increase stemmed almost entirely from the appreciation in portfolio investment liabilities, especially regarding Portuguese public debt securities, in line with the fall in medium- and long-term yields on Portuguese issuers. It should be remembered that debt securities are recorded on the basis of mark-to-market under the heading of international investment.

Chart 7.9

INTERNATIONAL INVESTMENT POSITION



Sources: *INE* and Banco de Portugal.
Note: (a) Includes debt securities, other investment, financial derivatives, participation units in investment funds, securitisation units and other. This debt concept is different from the one published in Table A.3.2. of the *Statistical Bulletin* of Banco de Portugal, since participation units in investment funds, securitisation units and other participation securities are recorded as debt. Additionally, the debt concept used here does not include the difference between direct investment assets and liabilities, presented as other capital, regarding available funds and liabilities over subsidiaries and direct investors. In this chart these elements are included in "Shares and direct investment". This way, this different treatment does not change the total value of the International Investment Position.