Financial Stability Report

May 2016

BANCO DE PORTUGAL
EUROSYSTEM

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Lisbon, 2016 • www.bportugal.pt

FINANCIAL STABILITY REPORT | May 2016 • Banco de Portugal Av. Almirante Reis, 71 | 1150-012 Lisboa • www.bportugal.pt • Edition Financial Stability Department • Design, printing and distribution Communication Directorate | Image and Graphic Design Unit • Print Run 90 issues • ISSN 1646-2246 (print) • ISSN 2182-0392 (online) • Legal Deposit no. 227536/05

Content

Overview

The nature of risks to financial stability has not changed since the publication of the latest *Financial Stability Report* in November 2015. At the end of the year, however, some factors contributing to the materialisation of those risks have stepped up and, in particular, prospects on the maintenance of low or even negative interest rates became more prominent and market volatility increased.

Expectations of low economic growth and inflation in the euro area have increased, justifying the strengthening of accommodative monetary policy by the European Central Bank. In the short-term, the context of low interest rates may be favourable for the Portuguese economy, taking into account the high indebtedness of resident sectors. Nevertheless, the maintenance of low interest rates over a protracted period threatens income generation by the financial system, jeopardising its capacity to increase capital. It may also raise difficulties in the adjustment process of the domestic productive structure, in case it promotes investment in sectors with higher risk and inappropriate asset valuation.

As regards the insurance sector, in particular life insurance, the extension of the low market interest rate environment aggravates the portfolio reinvestment risk, making it more difficult to meet financial guarantees provided in the past. This may constrain the supply of new products, and, in the long run, contribute to a decline in assets under management.

Less favourable prospects on global growth, associated with an increase in geopolitical tensions in Europe, were reflected in a decline in investors' confidence and an increase in global financial market volatility in early 2016. In particular, there was a deterioration in the market perception of the European banking system. This deterioration was related to greater concerns about potential capital remuneration, in a context of a better perception of the requirements of the current prudential regulatory framework regarding the recovery and resolution of institutions that are failing or likely to fail.

The purpose of this new regulatory framework is to strengthen financial stability and promote confidence in the banking sector. Until its full implementation, however, the European banking system continues to face challenges, especially acute to those Member States where State aid granted during the most critical period of the crisis was significant, given the European Commission's rules on this subject. The potential benefits deriving from the non-contagion of risk between the banking sector and the sovereign will only be totally perceived by the economic agents and the financial system in the medium term, with the full implementation of the Banking Union.

In spite of its broadly based nature, the increase in financial market volatility in early 2016 was stronger in Portugal. Investors' evaluation of the Portuguese banking system strength and of the continuation of the fiscal consolidation path may have been behind this change in their perception.

Investors' fears regarding the European banking system have been amplified by some fragilities of national credit institutions, especially profitability, the quality of the balance sheet assets and capital ratios, as well as the resolution measures recently applied. As regards the sovereign, market developments have reflected higher investor uncertainty regarding the ongoing fiscal consolidation and structural reforms in Portugal. This uncertainty was signalled by a number of international organisations, but eased after the approval of the State Budget for 2016. In order to maintain investor confidence, the fiscal consolidation path must proceed and the public debt ratio must consistently continue on a downward trend.

A significant change in market perception regarding national issuers, reflecting an abrupt reversal of the search-for-yield behaviour, and the ensuing increase in risk premia, would have a widespread effect across the whole financial system through a rise in funding costs of the sovereign and financial institutions and, therefore, other sectors in the economy. This is especially relevant given the high indebtedness of the resident sectors, both public and private.

The leverage of the non-financial private sector continues to be high, when compared to most euro area countries, in spite of a decline in the respective debt to GDP ratio since 2011. Moreover, the saving rate of that sector is below the euro area average. Therefore, it is crucial that the downward trend of the non-financial private sector indebtedness continues in a framework of maintaining or increasing private sector's net lending, especially households', making room for an acceleration of economic growth without threatening the economy's external balance. The re-orientation of credit flows to activity sectors with better profitability indicators, as recently observed, is also expected to continue, contributing to a decline in the credit risk of banks' balance sheets.

The aggregate financing structure and liquidity position of the Portuguese banking system continued to improve in 2015, dampening, in the short term, the potential negative effects on bank liabilities associated with increasing risk premia. The sharp reduction in the loan-to-deposit ratio of the banking sector has made it possible to reduce vulnerability to rising risk premium and/or sharply declining liquidity in the wholesale financing market, given that the dependence of the sector on this type of financing has been declining. However, the very low interest rates on deposits may challenge the importance that this funding source has achieved in the context of the structural adjustment that took place over recent years.

The institutions also face a challenge related to the need to access debt markets, either to issue subordinated instruments eligible for regulatory capital, or, for the medium term, to ensure compliance with new regulatory requirements, including the minimum eligible liabilities to absorb losses and the minimum stable funding.

Rising risk premia also affect the financial system through losses in securities portfolios, with negative effects on financial institutions' capital. In the specific case of the banking sector, the increase in exposure to Portuguese public debt securities during the economic and financial crisis, although to levels close to the European Union average, occurred in a context of strong restrictions to government access to the market and favourable prudential treatment of these assets. This situation has not yet been reversed.

The need to mitigate the risks associated with sovereign exposure by national financial systems triggered a number of initiatives after the sovereign crisis in Europe, including the debate currently under way on the revision of the prudential treatment of these assets. The mitigation of the risks associated with rising risk premia and the response to regulatory changes regarding the prudential treatment of the sovereign are expected to aim at prudent diversification levels of the debt portfolio, with a view to minimising the impact of changes in the value of these assets, especially domestic public debt, on capital and liquidity buffers. The consistency of the regulatory framework must also be ensured, as well as gradual and consistent convergence at international level.

In 2015, the profitability of the Portuguese banking system resumed positive levels, although still far from those recorded in the past and benefitting from non-recurrent factors. Furthermore, the low interest rate level, on the one hand, and the high levels of credit at risk and other non-income-generating assets in banks' balance sheets, on the other hand, will tend to further penalise profitability through the need to recognise significant impairments and the decreasing income margin. Against this background, it is crucial to strengthen, where possible, the incentives to reduce the stock of credit at risk in the institutions' balance sheets. Also, credit risk should continue to be appropriately evaluated and incorporated into the interest rates used in retail operations. Possible search-for-yield strategies adopted in credit operations may, in the medium term, be reflected in increased costs arising from impairments.

Given the constraints to income generated by financial institutions, the reassessment of the business models and the cost structure is indispensable to re-establish profitability levels in a sustainable manner. Although the Portuguese banking sector has made some efforts to reduce its branch network, cut other operational and administrative costs and sell non-strategic assets, this adjustment must be continued. Greater operational efficiency cannot, however, jeopardise the necessary investments to maintain appropriate levels of risk and governance control, thus avoiding a surge in risk and operational losses in the future. The reformulation of the business models must also take into account the challenges associated with demographic developments, as well as the opportunities and challenges associated with digital banking.

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1. Recent developments, vulnerabilities and challenges

1.1. Macroeconomic and financial environment of the Portuguese economy

In 2015 the world economy grew at a more moderate pace

According to the International Monetary Fund (IMF), world Gross Domestic Product (GDP) grew 3.1 per cent in 2015, decelerating from the previous year (in 2014 growth stood at 3.4 per cent).[1] Developments in the world economy were particularly moderate in the last quarter of 2015, amid financial market turbulence and decreasing commodity prices.

Overall activity in 2015 showed differentiated developments. Activity in the advanced economies continued to recover, with GDP rising by 1.9 per cent in 2015 (1.8 per cent in 2014) (Table 1). In turn, activity in emerging market and developing economies, which continued to be the main driver of world economic growth, decelerated in line with the trend seen since 2010. These developments were significantly influenced by the deceleration of the Chinese economy and by the recession in Brazil and Russia. Economic activity in Angola,[2] one of Portugal's main trading and financial partners, also slowed down sharply, considerably affected by the fall in oil prices (Chart 1). Overall, there was a redistribution of income, with commodity-exporting countries recording falls in income and commodity-importing countries recording net gains from these developments.

The IMF foresees an acceleration in world economic activity in 2016 and 2017, with increases of 3.2 per cent and 3.5 per cent respectively. This acceleration will be underpinned by the advanced economies and mainly by the emerging market and developing economies, although individual developments are diverse. Overall, there are substantial risks to recovery in the next few years, which is expected to be more gradual than previously projected. Some of the global risk factors are related to the uncertainty associated with China's transition towards a more balanced growth model, as well as to developments in other emerging market and developing economies strongly dependent on commodity prices.

Table 1 • GDP – Real rate of change

	Percentage				Difference from Oct 2015 (p.p.)	
	2014	2015	2016F	2017F	2016	2017
World economy	**3.4**	**3.1**	**3.2**	**3.5**	**-0.4**	**-0.3**
Advanced economies	**1.8**	**1.9**	**1.9**	**2.0**	**-0.3**	**-0.2**
USA	2.4	2.4	2.4	2.5	-0.4	-0.3
Euro area	0.9	1.6	1.5	1.6	-0.1	-0.1
Germany	1.6	1.5	1.5	1.6	-0.1	0.1
France	0.2	1.1	1.1	1.3	-0.4	-0.3
Italy	-0.3	0.8	1.0	1.1	-0.3	-0.1
Spain	1.4	3.2	2.6	2.3	0.1	0.1
Japan	0.0	0.5	0.5	-0.1	-0.5	-0.5
United Kingdom	2.9	2.2	1.9	2.2	-0.3	0.0
Emerging market and developing economies	**4.6**	**4.0**	**4.1**	**4.6**	**-0.4**	**-0.3**
China	7.3	6.9	6.5	6.2	0.2	0.2
Brazil	0.1	-3.8	-3.8	0.0	-2.8	-2.3
Russia	0.7	-3.7	-1.8	0.8	-1.2	-0.2
Angola	4.8	3.0	2.5	2.7	-1.0	-

Source: IMF (*World Economic Outlook – WEO*, April 2016).
Note: F – forecast | p.p. – percentage points.

Recovery in the euro area continues at a slow pace, despite being more widespread

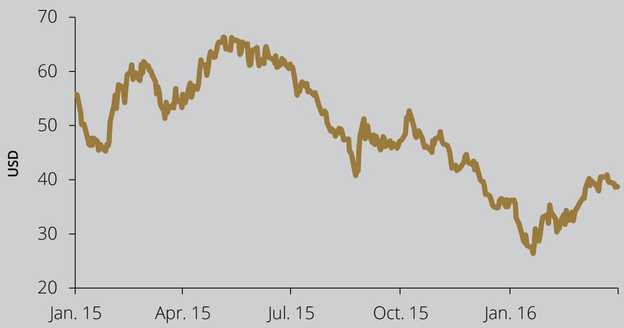
According to the European Commission,[3] the euro area economy grew 1.7 per cent in 2015, accelerating from 0.9 per cent growth in 2014, with all the countries, with the exception of Greece, recording an increase in GDP. Private consumption continued to be the key driver of growth, fuelled by an increase in disposable income, aided by a rise in public spending. Investment made a small contribution and net exports made a negative contribution to the change in GDP, amid declining external demand for euro area goods and services.

The European Commission and IMF projections point to a slow recovery until 2017, although there are downside risks. Uncertainty about the evolution of the world economy is compounded by euro area vulnerabilities, such as high levels of private indebtedness and long-term unemployment, and low productivity growth. Additionally, the euro area faces challenges resulting from persistently low or even negative interest rates and very low inflation expectations, as well as high public indebtedness in a number of countries. This creates apprehension about the lack of space to implement some economic policies. Existing tensions and geopolitical risks may also condition developments in economic activity, in particular the uncertainty surrounding the evolution of the Greek economy and the United Kingdom's membership of the European Union (EU), as well as the capacity to manage the refugee crisis and fight terrorism.

The second half of 2015 was characterised by financial market instability, which intensified in January and February 2016, despite easing back towards the end of the first quarter of 2016

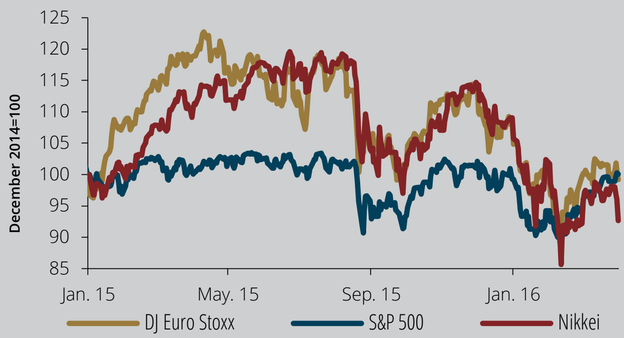
After reaching new peaks at the beginning of 2015, stock market indices recorded significant falls around the middle of the year, triggering high volatility (Charts 2 and 3). This downward movement in stock market indices intensified further in the first two months of 2016, with the energy and financial sectors being the hardest hit. Pressure on the markets resulted from increased fears about developments in the world economy, in particular in China. The downward adjustment of economic growth prospects was reflected in a fall in the aggregate

Chart 1 • Oil prices



Source: Bloomberg.

Chart 2 • Stock market indices



Source: Bloomberg.

index of commodity prices, in which oil represents a high share. At the end of January 2016 oil prices dropped to the minimum levels since 2003, nearing USD 25 per barrel. This decline started in 2014 and intensified from May 2015.

Given the slow pace of economic growth, low inflation and the European Central Bank's (ECB) more accommodative monetary policy stance, bond yields remained very low throughout 2015 and in the first months of 2016, particularly in the euro area. In the euro area sovereign debt market, and despite the broadly based decline in yields in this period, in particular yields of higher risk-rated sovereign bonds, spreads between countries, such as Spain and Italy, and Germany remained relatively stable (Chart 4). The Greek bond market fared worse, penalised by uncertainty surrounding the assessment of compliance with the financial assistance programme.

In early 2016, a number of mutually reinforcing factors coexisted in Europe jeopardising the profitability of the banking activity, in an environment of very low or even negative interest rates and a stricter regulatory framework. In March 2016 Credit Default Swaps (CDSs) increased abruptly, in particular for European financial sector debt securities, followed by higher stock market volatility.

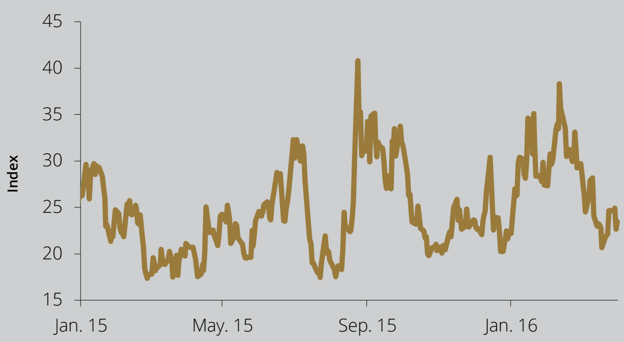
Financial market tension was also felt in foreign exchange markets from mid-2015, with the depreciation of the currencies of emerging market economies and commodity-producing countries. The euro effective exchange rate recovered from September onwards, reaching in 2016 the peaks attained in 2015. The effective exchange rate of the US dollar reached the peaks attained in 2003 at the end of 2015, falling back in the first months of 2016 to the minimum levels seen in January 2015.

In March 2016, there was an overall improvement in financial markets, due to the recovery and stabilisation of oil prices, more favourable prospects for some of the major economies, in particular the US economy, and the measures adopted by the ECB.

The ECB intensified the accommodative stance of its monetary policy

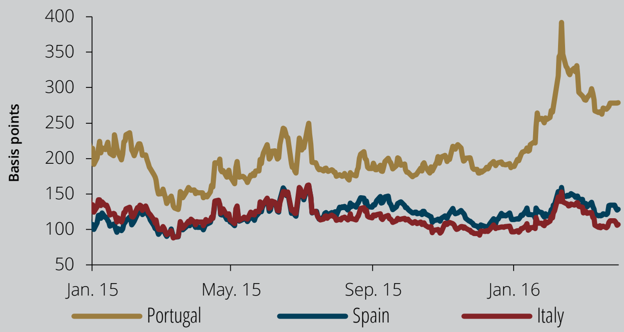
In 2015 expectations prevailed of further divergence between the monetary policies of the major economies, namely across the euro area and in the United States. These expectations materialised in December, when the ECB further intensified the accommodative stance of its monetary policy and the US Federal Reserve System raised the official federal fund rate.

Chart 3 • Volatility index VSTOXX



Source: Bloomberg.
Note: The volatility index (VSTOXX) measures the volatility implied by the prices of eight S&P500 index put and call options.

Chart 4 • 10-year sovereign bond yields | Spreads vis-à-vis Germany



Source: Bloomberg.

At its December 2015 and March 2016 meetings, the ECB decided to increase its monetary policy stimulus, adopting a number of measures aimed at promoting the return of inflation to levels below, but close to 2 per cent (Chart 5). Following these decisions, the interest rates of a larger set of euro-denominated assets entered negative territory, amid a strong increase in excess liquidity (Chart 6). This environment of negative interest rates extends to Sweden, Denmark, Switzerland and Japan.

In the United States, the Federal Reserve System increased the official federal fund rate in December. However, in early 2016, global instability led to a slight revision of expectations about the timing of the next increase in interest rates. Expectations were also revised in the United Kingdom, possibly associated with the 23 June referendum on UK membership of the EU.

Portugal's economic growth is expected to be moderate, in line with the euro area, amid structural constraints

The Portuguese economy grew 1.5 per cent in 2015, continuing the recovery process started in 2013, although GDP is still lower than at the outset of the international financial crisis.

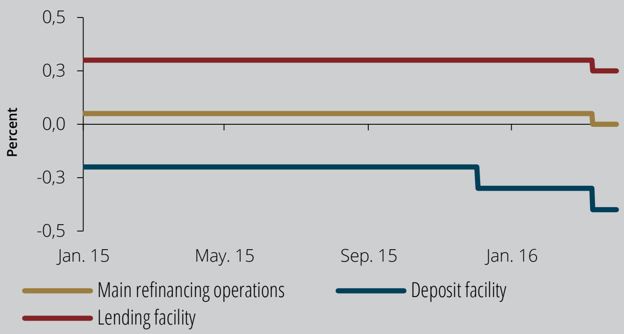
The increase in economic activity was mainly driven by higher domestic demand and, in particular, by private consumption. The latter aggregate grew 2.6 per cent in 2015, up from 2.2 per cent in 2014. These developments were associated with improved labour market conditions, high household confidence and favourable household expectations about the evolution of permanent income.

Likewise, gross fixed capital formation (GFCF) continued to make a positive contribution to the acceleration of activity, increasing 3.7 per cent in 2015, i.e. 0.9 percentage points above the figure for 2014. This increase resulted from differentiated developments in the various components, with construction reversing the decrease in GFCF that has been recorded for more than ten years, and the transport material segment accelerating, while GFCF in machinery and equipment decelerated.

Public spending was also one of the factors behind the acceleration in activity, rising by 0.8 per cent in 2015 (after a 0.5 per cent fall in 2014).

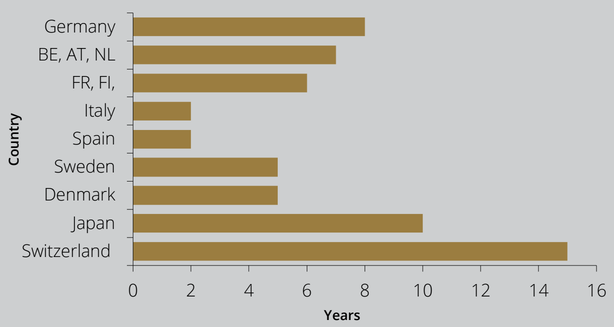
Exports accelerated in 2015, with energy exports increasing significantly. Excluding this segment, intra-EU exports remained robust, with nominal growth of 6 per cent, while exports to the rest of the world were adversely influenced by developments in Brazil and Angola. In 2015, the Portuguese economy's net

Chart 5 • Official Eurosystem interest rates



Source: Bloomberg.

Chart 6 • Sovereign yield curve with negative yields



Source: Bloomberg.
Note: Data refers to 31 March 2016.

lending capacity stood at 1.7 per cent of GDP, measured by the combined current and capital account. The maintenance of the Portuguese economy's net lending capacity is one of the most remarkable features of the ongoing economic adjustment process.

Banco de Portugal's projections for the Portuguese economy, for 2016 and 2017, were revised downwards by 0.1 percentage points in both years, to 1.5 per cent in 2016 and 1.7 per cent in 2017. GDP is projected to grow 1.6 per cent in 2018. During 2016-2018, the contribution of net exports to GDP growth is expected to increase its relative weight compared with domestic demand.

Prospects for economic activity are subject to a number of downside risks. On the one hand, more sluggish developments in world economic activity condition the external demand for Portuguese goods and services, in particular from key trading partners such as Angola or Brazil. On the other hand, developments in domestic demand may also be conditioned by the potential need for additional fiscal measures, in a context where high private indebtedness levels may be a constraint to productive investment growth, notwithstanding the potentially positive effects of the ECB's accommodative monetary policy.

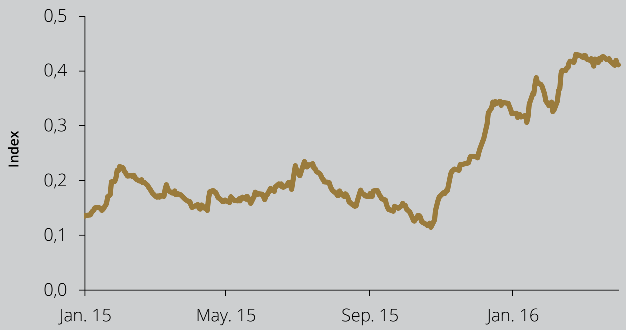
The Portuguese financial market registered unfavourable developments, despite some recovery at the end of the first quarter of 2016

In mid-2015, Portuguese financial markets were influenced by international financial pressure. This intensified particularly in January and February 2016. In addition, national markets were conditioned by a number of idiosyncratic factors, namely the application of resolution measures at the end of 2015 to ensure the stability of the Portuguese financial system and the uncertainty surrounding the presentation and approval of the State Budget for 2016. Reflecting this more turbulent period in the Portuguese capital market, the composite indicator of financial stress for Portugal increased sharply, having peaked since April 2013 (Chart 7).

Turning to the equity segment, at the start of 2016, the PSI-20 index continued the declining trend started in May 2015 (Chart 8). This fall was particularly marked in financial sector share prices, chiefly in the first two months of 2016, contributing to a fall of around 10 per cent in the PSI-20 index during this period, in line with the other euro area countries.

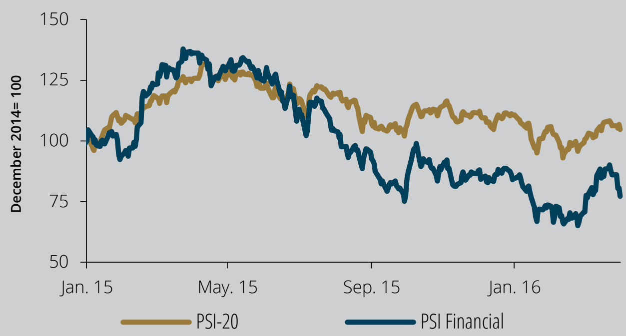
In 2016 yields in the Portuguese public debt market increased, in parallel with the widening

Chart 7 • Composite indicator of financial stress for Portugal



Source: Banco de Portugal.

Chart 8 • Portuguese equity indices



Source: Bloomberg.

of the spread between these rates and those of Germany, Spain and Italy. Perceived higher risk of Portugal can be seen not only in the widening sovereign debt yield spreads, but also in CDS premia, against an international background of higher risk aversion, strong deterioration of market liquidity conditions and at a time when the process of presenting and approving the State Budget for 2016 gave rise to reservations on the part of the European Commission and the credit rating agencies (Chart 9).

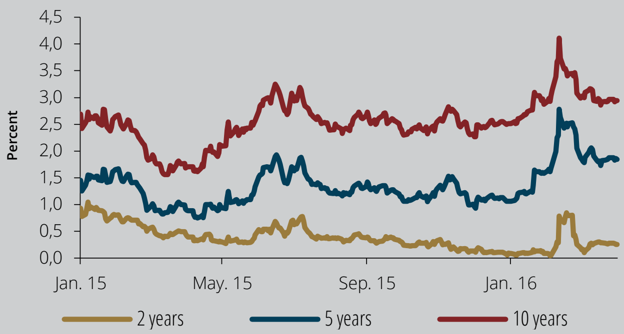
On 4 March 2016, Fitch's credit rating for Portugal remained stable at "BB+", but the outlook was downgraded from positive to stable. On 15 and 18 March, Moody's and Standard & Poor's confirmed their previous ratings, maintaining a stable outlook. On 29 April, DBRS kept the Portuguese government debt credit rating unchanged. The eligibility of the Portuguese government debt for the ECB's expanded asset purchase programme continues to be conditional on this credit rating.

Participants in the secondary public debt market perceived a reduction in liquidity in early 2016, which could be seen in the declining amounts traded through the MTS platform and in the widening of the bid-ask spreads.

Issuance of government debt on the primary market was made through auctions and syndicated issuance with a general increase in financing costs compared with equivalent more recent issuance. In February 2016, the Portuguese Treasury and Debt Management Agency (*Agência de Gestão da Tesouraria e da Dívida Pública – IGCP*) held one buyback auction of Portuguese government bonds maturing in 2017, 2018 and 2019 and, unlike in 2015, no government debt was issued in this month.

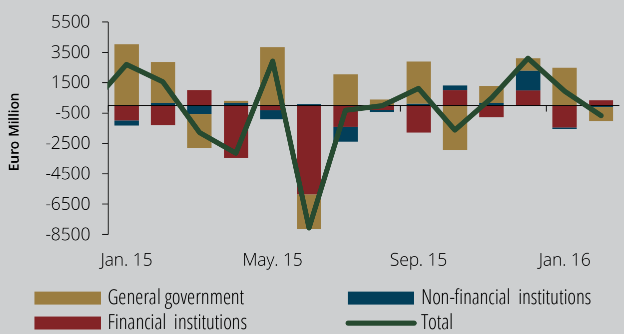
As to issuance of debt securities by other resident entities, net issuance increased in December with the contribution of all sectors (Chart 10).

Chart 9 • Portuguese sovereign debt yields



Source: Bloomberg.

Chart 10 • Debt securities issued | Net issuance



Source: Banco de Portugal.

1.2. Financial position of non-financial sectors

Net repayments of household debt continued in 2015, following the trend seen since 2011

At the end of 2015, total household debt reached 82 per cent of GDP (86 per cent at the end of the previous year), a decrease of 13 percentage points (p.p.) of GDP since 2009, when it peaked, and of 11 p.p. since 2011, when the Economic and Financial Assistance Programme (EFAP) began (Chart 11). These developments occurred amid a significant decline in household disposable income (from 2010 to 2015, nominal disposable income dropped by 5.2 per cent). The decline in household indebtedness – given its size and the fact that it took place in an unfavourable macroeconomic environment – is one of the most significant elements of the Portuguese economy's recent adjustment process.

At the end of 2015, the annual rate of change in outstanding amounts of total credit to households stood at -1.9 per cent (-2.9 per cent in December 2014).[4] Outstanding amounts continued to decrease in loans for house purchase (annual rate of change of -3.1 per cent), while growing by close to 1 per cent in loans for consumption and other purposes (accelerating in particular in consumer loans).

Gross flows of new bank loans increased considerably in 2015: the amount of new loans for house purchase was close to 2011 figures[5] and the amount for new consumer loans moved closer to levels seen at the end of 2009. The increase in car loans was particularly important, associated with a rise in the consumption of durable goods.

According to the *Bank Lending Survey*,[6] demand increased throughout 2015, both for loans for house purchase and loans for consumption and other purposes, reflecting improved consumer confidence, lower interest rates and better housing market prospects, specifically as regards expected developments in house prices. In the last quarter of 2015 and the first quarter of 2016, households' demand for loans is projected to have stabilised for most banks participating in the survey. However, most institutions expect a slight increase in demand in these segments in the second quarter of 2016. In turn, credit standards on bank loans to households eased slightly throughout 2015 and in the first quarter of 2016.

Particularly noteworthy in 2015 were the developments seen in the non-performing loan ratios for loans to households for house purchase and loans for consumption and other purposes, standing at 3.0 and 14.1 per cent

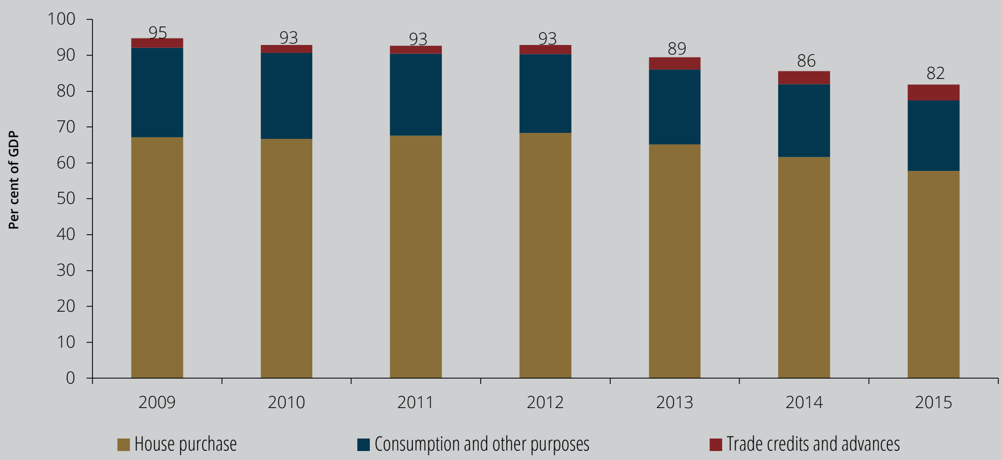


Chart 11 • Household debt | End-of-period outstanding amounts

Sources: Statistics Portugal and Banco de Portugal.
Note: Consolidated values.

respectively (2.8 and 14.4 per cent in 2014). The share of households with non-performing loans declined to around 14 per cent (14.8 per cent at the end of 2014).

Household net lending decreased in 2015, in tandem with a decrease in savings

In 2015 household net lending decreased to 0.8 per cent of GDP (1.2 per cent of disposable income), a drop of 3.6 p.p. of GDP since 2009 (Chart 12), when it peaked. This decline in net lending was mostly the result of a decrease in savings as a percentage of GDP, which, at the end of 2015, and according to preliminary data from the National Accounts, reached a new historical low of 2.9 per cent of GDP, after 4.0 per cent in 2014 (4.2 and 5.7 per cent of disposable income, in 2015 and 2014 respectively).

In effect, following a period of relative stabilisation during the EFAP in the context of a considerable drop in disposable income and private consumption, in 2013 the saving rate seems to have resumed the downward trend seen up to 2011, mainly reflecting growth in private consumption, amid improved consumer confidence.[7]

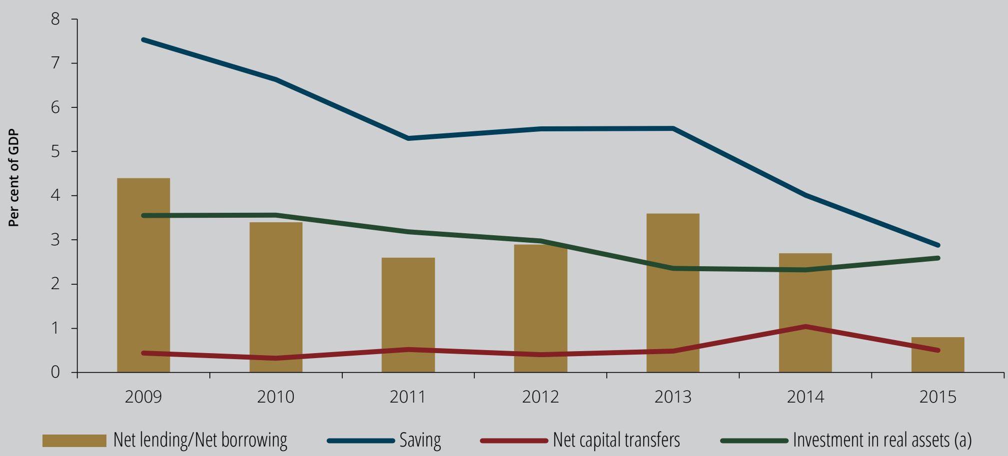
According to preliminary data from the National Accounts, in 2015 the household saving rate in Portugal was very low compared with the euro area average. For example, using the savings generated, it would take an average of 18 years for Portugal to repay total household debt accumulated from 2011 to the third quarter of 2015, compared with 7 years for the euro area average (Chart 13). However, taking into account the ratio of total debt to financial assets in the household portfolio, Portugal's position in the euro area as a whole improved during this period, mainly reflecting a decrease in debt[8] (Chart 14).

Despite the process of deleveraging seen in the household sector in the past few years, indebtedness remains high in European terms, which may be a considerable vulnerability for financial stability, particularly in a scenario of increased interest rates or unfavourable labour market developments. It is therefore crucial that the downward trend of indebtedness continues and is strengthened in the next few years, possibly benefiting from more positive developments in disposable income in nominal terms.

Household net lending continued to reflect a shift in the financial assets portfolio

In 2015 the value of net transactions of financial assets was virtually nil (0.1 per cent of GDP)

Chart 12 • Saving, investment and net lending of households



Source: Statistics Portugal. Notes: (a) Corresponding to the sum of gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables and acquisitions less disposals of non-produced non-financial assets.

(Chart 15). Following the losses seen in recent years in several financial investments, the household financial assets portfolio continued to shift, from riskier assets towards capital-guaranteed assets, recording net purchases of savings and Treasury certificates (2 per cent of GDP) and the net collection of deposits (2.6 per cent of GDP). Simultaneously, disinvestment in debt securities issued by financial corporations (1.8 per cent of GDP), from abroad (0.7 per cent of GDP), and by non-financial corporations (0.4 per cent of GDP) continued, and a decrease was recorded in investment in insurance and pension products (0.7 per cent of GDP). In addition, loans from households to non-financial corporations declined by 0.8 per cent of GDP.

The decline in non-financial corporation debt as a percentage of GDP continued in 2015, chiefly reflecting the increase in GDP

Total debt of non-financial corporations decreased by around 5 p.p. of GDP in 2015, totalling 111 per cent of GDP at the end of the year (Chart 16). This chiefly reflected growth in GDP (by around 3.8 p.p.) and price and volume changes (which reduced the debt stock by 1.5 p.p. of GDP), mainly associated with loan write-offs and the devaluation of assets transferred from BANIF – Banco Internacional do Funchal, S.A. to Oitante. The contribution of net flows of

Chart 13 • Ratio of financial debt to savings

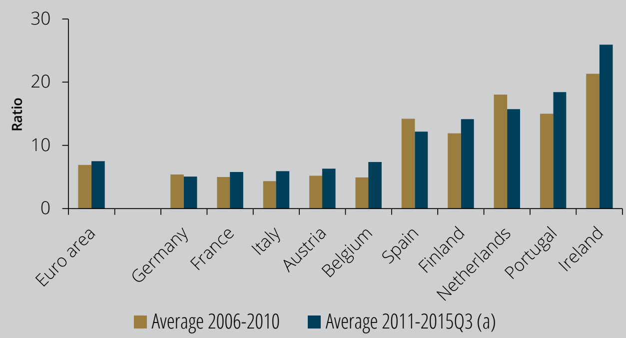
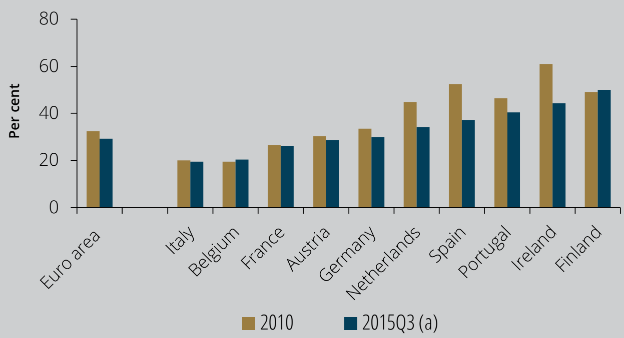


Chart 14 • Ratio of total debt to financial assets



Source: Eurostat.
Notes: Consolidated values, except Q3 2015. (a) Provisional data.

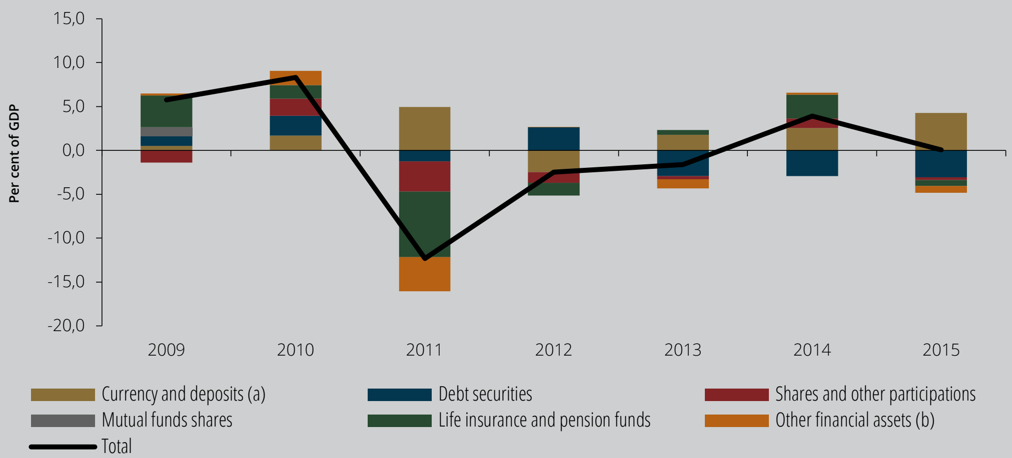


Chart 15 • Household financial assets | Transactions

Sources: Statistics Portugal and Banco de Portugal.
Notes: Consolidated values. (a) Includes savings and Treasury certificates. (b) Includes other insurance technical reserves, loans, trade credits and advances, and other accounts receivable/payable.

total credit to the decrease in the debt ratio was virtually nil, in contrast with developments since 2012. Net repayments of loans both by resident financial institutions (although considerably lower than in previous years) and households were almost offset by an increase in loans from abroad (intra-group financing and, to a lesser extent, trade credits).

Regarding financial debt, net repayments continued (corresponding to 0.8 per cent of GDP), although to a lesser extent than in 2014 (3.2 per cent of GDP). Since 2012, when it reached a peak, the ratio of financial debt of non-financial corporations to GDP decreased by around 17 p.p. Since 2013, this ratio has benefited to a large extent from growth in GDP (of around 7.4 p.p.), with the contribution of net flows to changes in the total ratio standing at 2.4 p.p. of GDP[9] (Chart 17).

In order to ensure financial stability, it is crucial that the process of deleveraging of non-financial corporations continues and that a greater capacity to generate resources by corporations results in a strengthening of their capital ratio. The success of the deleveraging process is expected to result in decreased risk for non-financial corporations and consequently, lower liquidity constraints. Despite the progress of the past few years, debt of non-financial corporations as a percentage of GDP remains one of the highest of the euro area.

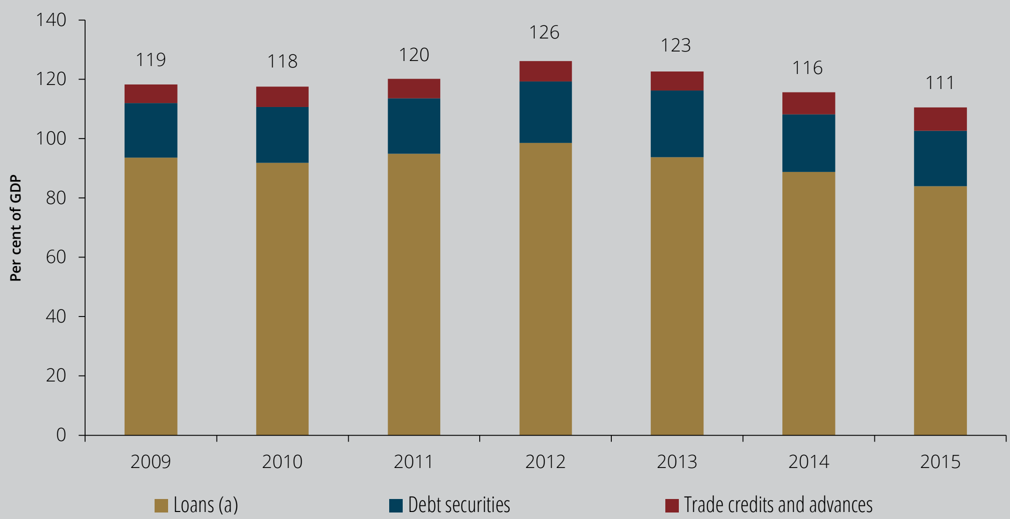
Loans continued to be granted to sectors with higher profitability indicators

At the end of 2015, the annual rate of change in loans granted by resident financial institutions to non-financial corporations stood at -1.9 per cent (-4.6 per cent in December 2014). This negative change in loans granted by the resident financial sector was offset by an increase in loans from non-residents, with the annual rate of change in total credit standing close to zero.

Credit granted by the financial sector continued to be channelled to the sectors with the highest economic and financial indicators. From the end of 2011 to the end of 2015, against a background of reduced exposure of the financial sector to the non-financial corporation sector, the relative share of manufacturing and trade increased (by 1.9 p.p. and 1.3 p.p. respectively) and the relative share of construction and real estate decreased (by 5.8 p.p. and 1.1 p.p. respectively).

By enterprise size, the decline in credit granted continued to affect mostly smaller-sized enterprises in 2015. In line with previous years, loans to exporting enterprises increased (by 1.8 per cent), growing at a pace close to the annual rate of change for 2014.

Chart 16 • Non-financial corporations debt | End-of-period outstanding amounts



Source: Banco de Portugal. Notes: Consolidated values. (a) Includes loans granted by private individuals, general government, other monetary financial institutions, other financial intermediaries, and rest of the world.

In 2015 gross flows of new bank loans to non--financial corporations declined by around 18 per cent from 2014. These developments result from a decrease in the number of loans of over €1 million to a low, given that the number of loans of up to €1 million recorded a relative stabilisation from the previous year. By maturity, loans of over one year increased and those of up to one year decreased.

According to the Bank Lending Survey, credit standards improved slightly over the course of 2015. Banks reported increased competition among institutions, a more favourable perception of the general economic situation and a decrease in cost of funds and balance sheet constraints. These factors influenced all segments and especially short-term loans.

Increased competition among institutions in enterprises with greater credit quality has led to a narrowing of spreads applied to loans, both for small and medium-sized enterprises and large enterprises (Box 1). As a result, in addition to the effects of monetary policy, the interest rate on new bank loans and outstanding amounts of loans has decreased. In December 2015, the average spread stood at levels similar to 2009. These developments have narrowed the gap between the average interest rate on loans to Portuguese enterprises and the average rate applied in the euro area.

The low interest rate environment is frequently referred to in the literature as encouraging excessive risk-taking by financial institutions. Given the easing of constraints on credit supply, financial institutions may be led to apply interest rates that are not adequate to the risks taken, which may have negative effects on financial stability. It is therefore essential to ensure that new loans granted to non-financial corporations continue to be based on rigorous criteria on the profitability and efficiency of projects and not exclusively on search for yield or the value of the collateral used to back the loan.

The non-performing loan ratio of non-financial corporations remained high, reflecting the considerable amount of non-income-generating assets in credit institutions' balance sheets

The share of non-financial corporations with non-performing loans decreased in 2015 (29.4 per cent at the end of 2015, down from 30.8 per cent in the same period a year earlier), interrupting the cycle of increases that began in 2005. By contrast, the non-performing loan

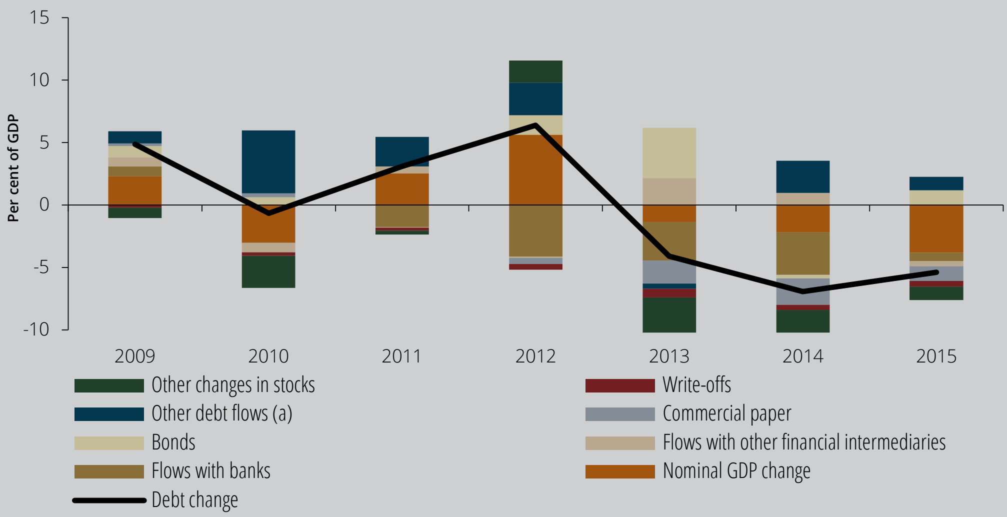


Chart 17 • Contributions to changes in debt-to-GDP ratio | Non-financial corporations

Sources: Statistics Portugal and Banco de Portugal.
Notes: Consolidated values. (a) Includes loans granted by the resident non-financial sector and non-residents and trade credits and advances.

ratio continued to increase (15.8 per cent in 2015, an increase of 0.7 p.p. from 2014), albeit at a slower pace than in previous years. Although this indicator remains high, there is some heterogeneity across economic activity sectors. Construction, real estate and trade continued to record an increase in the non-performing loan ratio, while this ratio remained unchanged in manufacturing and declined considerably in hotels and restaurants. By enterprise size, the non-performing loan ratio stabilised somewhat in small enterprises and increased in medium-sized and large enterprises.

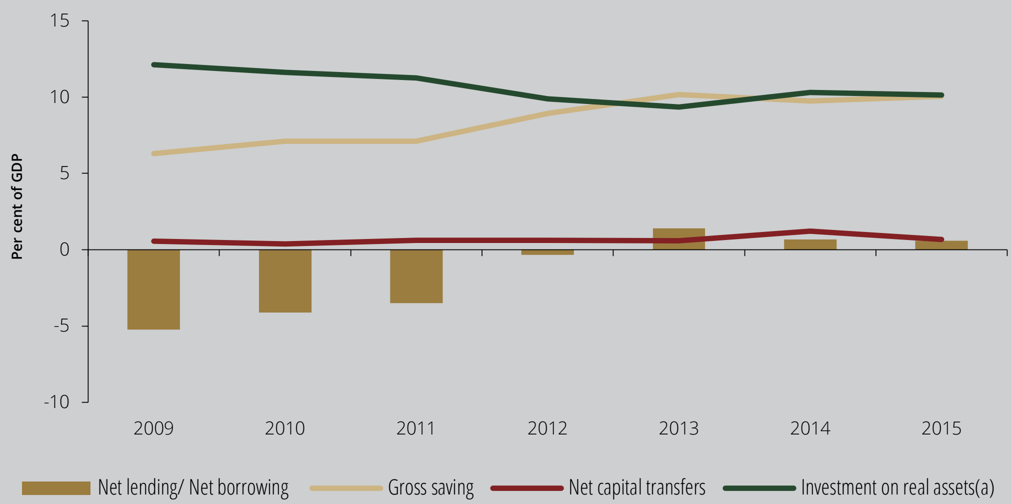
Persistently high levels of non-performing loans, particularly in the less dynamic and profitable sectors of the economy, and the high share of exposures overdue for more than two years in total non-performing loans may impair the ability of financial institutions to grant loans to more profitable enterprises and sectors and, consequently, jeopardise the efficient reallocation of financial resources available in banks' balance sheets. Although high levels of non-performing loans may be partly related to somewhat lengthy judicial procedures, their resolution is essential for financial stability, either through the taking over of losses and subsequent write-off or through other solutions allowing for a swifter improvement in the quality of financial institutions' balance sheets (Section 1.3.1).

Non-financial corporations recorded a net lending position for the third year in a row, reflecting accumulated savings and weak investment

According to preliminary data from the National Accounts, in 2015 non-financial corporations continued to record a net lending position (of 0.6 per cent of GDP), practically unchanged from 2014 (0.7 per cent of GDP) (Chart 18). This sector has recorded a net lending position since 2013, reflecting both an increase in the saving rate of enterprises and a decrease in investment.

The saving rate of non-financial corporations reached 10.1 per cent of GDP in 2015, 0.3 p.p. above the level in 2014 and very close to the peak of 10.2 per cent of GDP in 2013. The increase in the saving rate of non-financial corporations in 2015 reflected an increase in the operating surplus, as a result of an improvement in the profitability of private non-financial corporations and a decrease in the share of distributed income in GDP. In aggregate terms, the net effect of the decrease in interest rates was virtually nil in 2015 (interest paid and received by non-financial corporations decreased by the same amount).

Chart 18 • Saving, investment and net lending / borrowing of non-financial corporations



Source: Statistics Portugal. Note: (a) Corresponding to the sum of gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables and acquisitions less disposals of non-produced non-financial assets.

The profitability ratio of non-financial corporations[10] increased to 9.2 per cent in 2015 (7.8 per cent in 2014), benefiting from a recovery in economic activity, in particular positive developments in exports and increased private consumption. Although broadly based, this rise is rather heterogeneous by economic activity sector and enterprise size. The profitability ratio recorded a sharper increase in trade and manufacturing and large enterprises. In construction and small and medium-sized enterprises, the increase was relatively more modest.

Greater capacity of enterprises to generate funds internally has not resulted in increased investment in the current stage of the business cycle, as it remains at levels very close to the historical low reached in 2013 (Chart 19).

In 2015 and in line with the trend observed since 2009, in aggregate terms, increased current savings of non-financial corporations was reflected in an increase in the share of equity in the funding structure and a considerable decrease in the share of funding through financial debt.

The joint effect of an improvement in profitability and a decrease in interest rates resulted in an increase in the ability of non-financial corporations to pay their debt. In 2015, the differential between return on assets and the implied interest rate continued the upward trend observed since 2012. This increase is broadly based across all economic activity sectors, irrespective of enterprise size (Chart 20). Similarly, the coverage ratio (defined as EBITDA

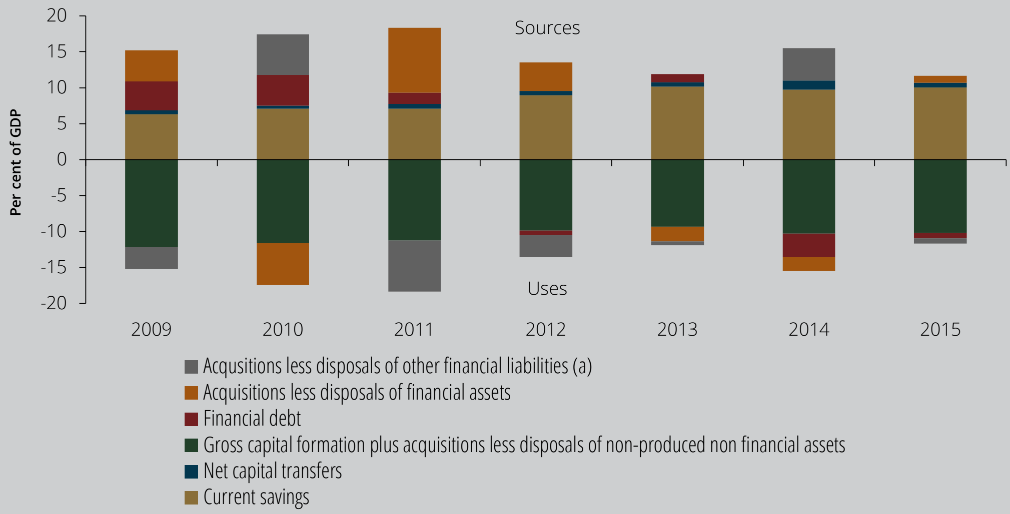


Chart 19 • Sources and uses of funds by non-financial corporations

Sources: Statistics Portugal and Banco de Portugal.
Notes: (a) Adjusted for the statistical discrepancy between net lending/borrowing in National financial and non-financial accounts.

Chart 20 • Non financial corporations' differential between return on assets and implicit interest rate

Source: Banco de Portugal.
Notes: The differential shown corresponds to the difference between return on assets (EBITDA / (equity + obtained funding)) and the implicit interest rate (interest expenses / obtained funding). End-of-year figures.

/ interest expenses) increased from 3.6 in 2014 to 4.7 in 2015. These developments were more apparent in trade and manufacturing and less in construction. By enterprise size, the impact is expected to have stood at around 1.2 p.p. both for large and small and medium-sized enterprises.

The increase in the saving rate of non-financial corporations has not resulted in an increase in financial assets

Although the saving rate of non-financial corporations stabilised at a high level, there has not been a considerable change in the sector's more liquid financial assets. In fact, the share in GDP of these assets in the non-financial corporation portfolio remains virtually unchanged since 2011.[11]

As total financial assets recorded net sales in 2015, the increase in the saving rate of Portuguese non-financial corporations was mainly reflected in a repayment of financial debt, which has reduced the sector's leveraging.

In order to maintain investor confidence, fiscal consolidation must proceed and the public debt ratio must continue on a downward trend

In 2015 the general government deficit stood at 4.4 per cent of GDP, below the level of the previous year (7.2 per cent of GDP). This was influenced by a set of extraordinary operations with a negative impact on the fiscal balance in both years. In 2015, these operations were the result of resolution measures applied to BANIF, with an impact on the deficit equivalent to 1.4 per cent of GDP.

Excluding one-off operations, the fiscal deficit stood at 3.0 per cent of GDP in 2015, above the level forecast in the State Budget for 2015 (2.7 per cent), but below that of 2014 (3.6 per cent). The structural primary deficit increased by 0.5 p.p. from the previous year, reflecting the interruption of the fiscal consolidation path.

The State Budget for 2016 foresees a general government deficit of 2.2 per cent of GDP. This goal is reiterated in the Stability Plan for 2016-20, which anticipates a gradual decrease in the deficit throughout the projection period until a surplus is reached in 2020. In order to reach the goal established in the State Budget for 2016, public accounts must follow a path compatible with the closing of the excessive deficit procedure applied to Portugal since 2009. However, budget execution for 2016 entails risks, especially regarding the underlying macroeconomic scenario. Forecasts for GDP growth prepared by Banco de Portugal and most international organisations are lower than those used to prepare the State Budget.

At the end of 2015, general government debt (Maastricht debt) reached 129.0 per cent of GDP, 1.2 p.p. less than in 2014 (Chart 21). This was partly associated with a reduction in central government deposits. In effect, the ratio of public debt net of deposits to GDP stood at 121.6 per cent of GDP, 1.5 p.p. above the level of 2014.

Throughout 2015, the Portuguese Treasury and Government Debt Agency continued its maturity managing operations, extending the maturity profile of public debt, which is highly concentrated in the forthcoming years. In parallel, it has taken advantage of the current market conditions to issue new debt at lower interest rates, repaying debt early or repurchasing debt issued at higher interest rates. The early repayment in 2015 of part of the IMF loan (€7.8 billion) obtained under the EFAP (scheduled to mature in 2017 and 2018) was therefore particularly relevant.[12] Another early repayment to the IMF (around €2 billion) was made in February 2016, raising the share already repaid to 36 per cent of the total loan amount.

In 2015 general government interest expenditure declined by 0.3 per cent of GDP from

2014, to 4.6 per cent of GDP, but remained one of the highest in the euro area.

At the end of 2015, the issuing and placement of new debt instruments for retail investors – Obrigações do Tesouro de Rendimento Variável (variable-yield treasury bonds) – was approved in the context of a diversification of funding sources.

Continuing to refinance public debt at lower interest rates is crucial to reducing the average cost of public debt and thereby strengthen its sustainability. However, refinancing remains very vulnerable to possible changes in market conditions. This vulnerability was visible in developments in financing costs and liquidity in the primary market of Portuguese public debt at the start of 2016, partly related to greater instability in international financial markets, within the context of the presentation and discussion of the State Budget for 2016 (Section 1.1 and Chapter 2).

Maintaining the confidence of international investors in the sustainability of public debt requires the fiscal consolidation process to proceed and continue to be accompanied by the implementation of structural reforms. This stance is also key to creating the conditions for an increase in potential growth and a strengthening of the Portuguese economy's external competitiveness.

1.3. Financial position of financial sectors

1.3.1. Banking sector[13]

The banking system's assets remained on a path of gradual contraction during 2015

The banking system's total assets continued to decline up to December 2015 (3.8 per cent year on-year and 2.4 per cent compared with June 2015), although less markedly than in the previous two years. The cumulative reduction since the end of 2010, when the deleveraging process started, stood at 22 per cent. Developments in assets at the end of 2015 are also partly explained by the transfer of rights and obligations corresponding to assets of BANIF to Oitante, under the resolution measure applied to BANIF, as deliberated by the Board of Directors of Banco de Portugal on 20 December 2015 (Box 2).

As in previous years, the substantial fall in credit to customers (adjusted for securitisations) made the highest contribution to the decrease in the banking system's assets (Chart 22).[14] The reduction in the credit portfolio was relatively widespread across the various segments of the resident private sector (Chart 23). Nonetheless, loans to households for consumption and other purposes recovered in

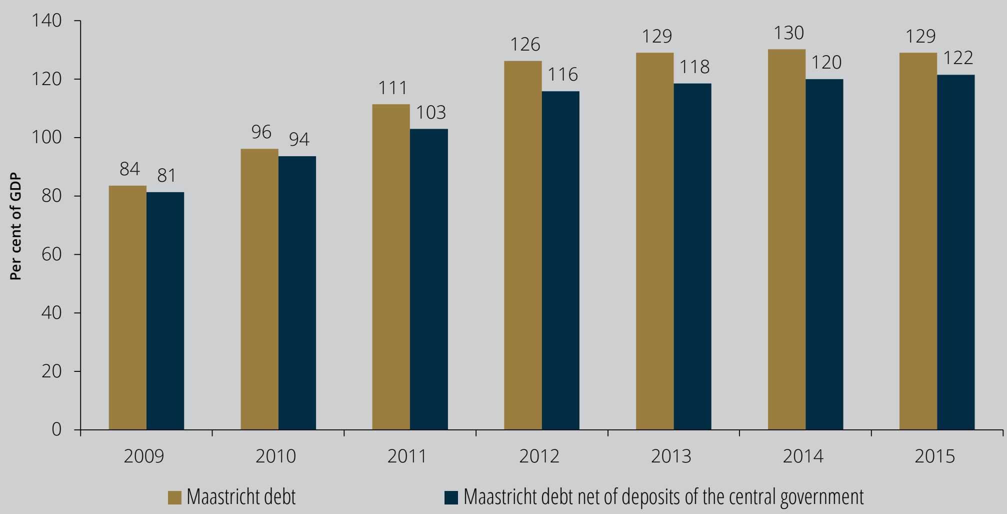


Chart 21 • General government debt

Sources: Statistics Portugal and Banco de Portugal.

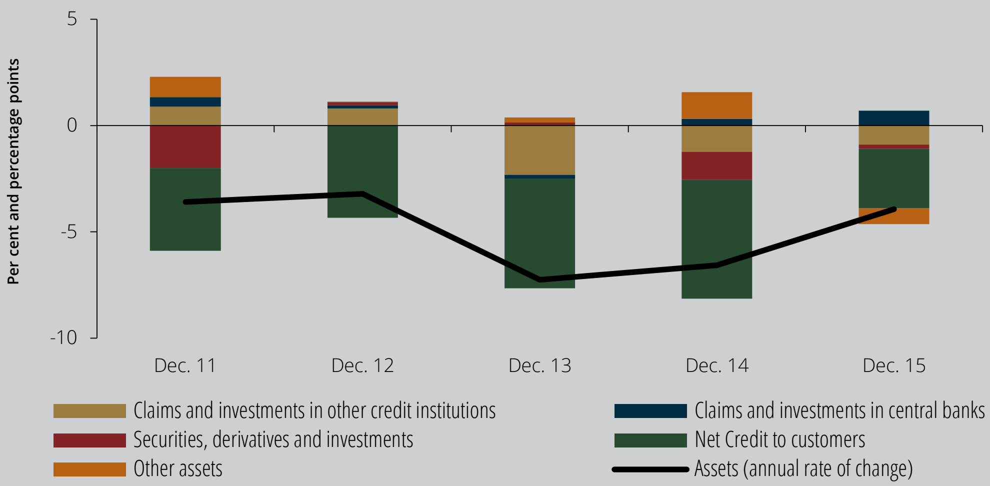
the second half of the year, increasing by 2.6 per cent (change for the year as a whole was close to zero).

Amid a decline in total assets, while securities, derivatives and investments posted slightly negative developments overall in 2015 (-0.9 per cent year-on-year), exposure to public debt securities increased (8.8 per cent change from the end of 2014) (Chart 24). This was chiefly due to the greater exposure to debt securities of non-resident public issuers, particularly Spain and Italy. A number of major banks preferred to hold these securities to the detriment of Portuguese public debt, whose exposure fell by 10.6 per cent, accounting for 6.2 per cent of assets.

The share of customer deposits in banking sector funding increased further, while Eurosystem funding declined

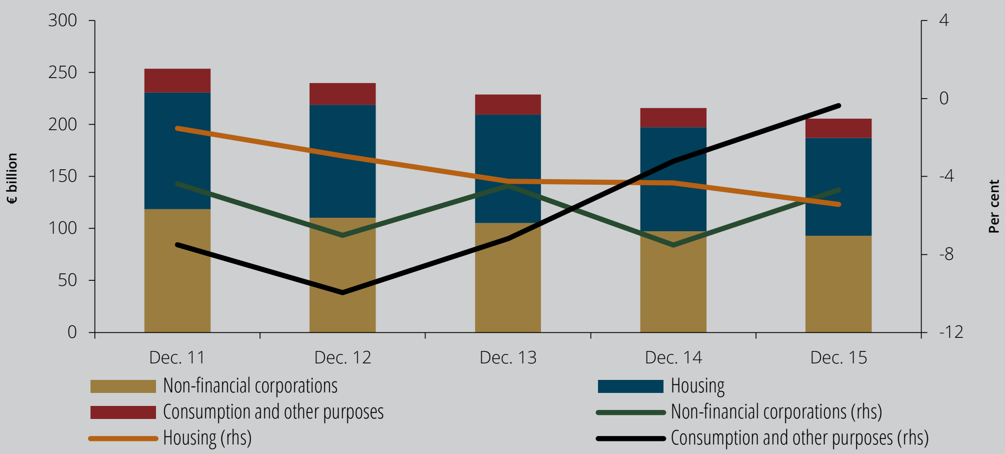
In 2015 the banking system's funding structure continued to be adjusted, with customer resources accounting for 61 per cent of total assets in December, compared with 58.6 per cent at the end of 2014 (and 41.4 per cent in June 2010). Developments in 2015 were exclusively due to the decrease in the banking system's total assets, given that total customer resources were virtually unchanged from December 2014. At the same time, the weight

Chart 22 • Contributions to asset developments



Source: Banco de Portugal. Notes: Securities, derivatives and investments include financial assets at fair value through profit or loss, available-for-sale financial assets, investments held to maturity, investments in subsidiaries and hedge derivatives. Credit to customers is adjusted by securitisation operations.

Chart 23 • Credit portfolio developments | Private resident sector



Source: Banco de Portugal. Note: Information from Instruction No 22/2011 of Banco de Portugal.

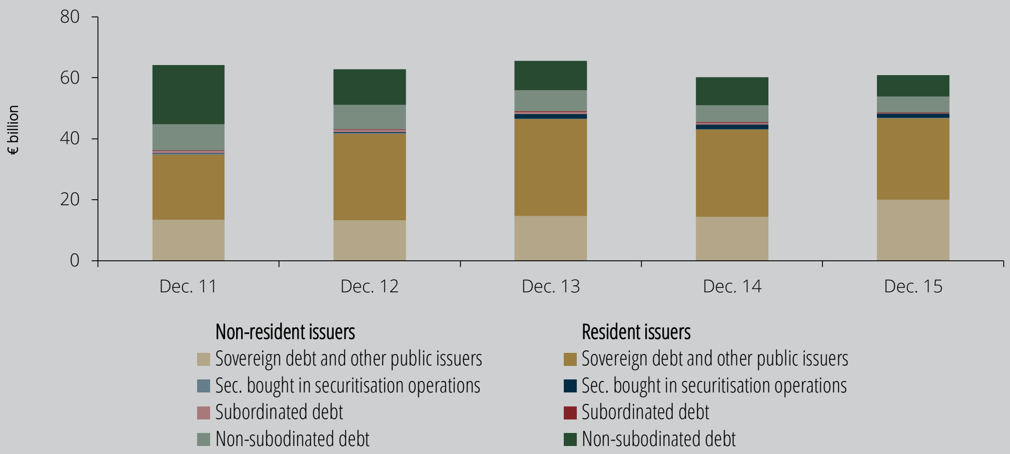
of central bank funding, securities liabilities and interbank market funding decreased.

As regards domestic activity, deposits grew by €3.6 billion in 2015, sustained by an increase of €7.5 billion in household deposits (including residents, non-residents and emigrants), which more than offset a fall in deposits from the other sectors (Chart 25). The positive dynamic of household deposits has been one of the most noticeable aspects of the ongoing adjustment in the Portuguese economy and, in particular, the financial system (for more details on developments in household investments in financial assets, see Section 1.2).

The Portuguese banking system's loan-to-deposits ratio narrowed further, reaching 103 per cent at the end of December 2015, 5 percentage points lower than at the end of 2014 (and 64 p.p. below the historical peak in June 2010) (Chart 26). This was exclusively due to the above-mentioned decrease in credit, given that customer resources remained stable in 2015. In line with this, the commercial gap (defined by the difference between credit and deposits) decreased further, moving from €18 billion in 2014 to €6.5 billion in 2015 (€140 billion less than in the peak observed in 2010).

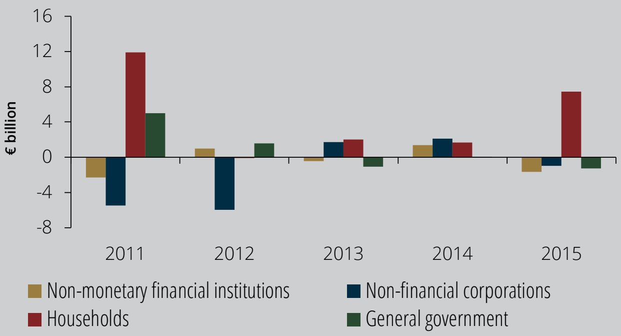
The Portuguese banking system's recourse to Eurosystem funding declined in 2015, similarly to the previous year, although less markedly, to stand at €28.3 billion (€5.5 billion less than in 2014). This figure, the lowest since the onset of the euro area sovereign debt crisis, reflects a €35.9 billion fall from the peak observed in the second quarter of 2012.

Chart 24 • Breakdown of the debt securities portfolio



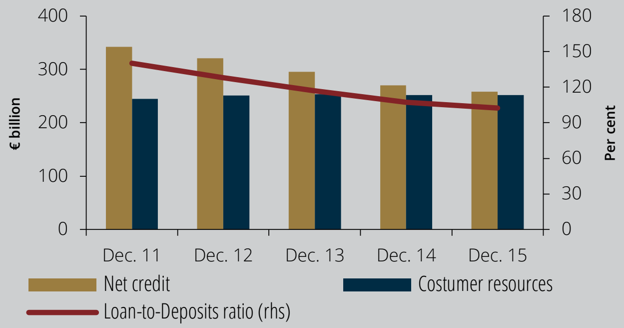
Source: Banco de Portugal.
Note: The debt securities portfolio includes financial assets at fair value through profit or loss including derivatives for trading (net of financial liabilities held for trading), available-for-sale financial assets and investments held to maturity, net of hedge derivatives.

Chart 25 • Developments in customer deposits | Domestic activity



Source: Banco de Portugal.

Chart 26 • Loan-to-deposits ratio



Source: Banco de Portugal.

In the interbank market, Portuguese banking system funding (net of investments) rose by approximately €786 million from the end of 2014, due to a decline in claims and investments in other credit institutions that exceeded resources obtained from them. Changes in this funding component chiefly reflected developments in resources obtained from non-resident credit institutions.

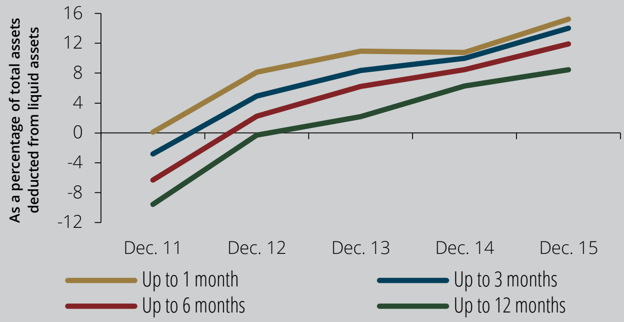
Debt securities funding declined in 2015, accounting for 8.8 per cent of total assets (compared with 10.3 per cent in 2014). This was largely due to a reduction in non-subordinated debt securities liabilities. The re-transfer of senior bonds from Novo Banco's balance sheet to BES in December, amounting to €1.985 billion, accounted for approximately one third of that decrease. Factors such as the ongoing deleveraging in the banking system, the still relative fragmentation of financial markets (which hampers the banking system's access to external funding), and the existence of other funding sources more stable and with lower costs are likely to have contributed to a decrease in debt securities funding. In the same vein, subordinated liabilities decreased by around €900 million (-15.2 per cent) in 2015.

In this context, the banking system's liquidity position improved further in 2015, as shown by the increase in liquidity gaps[15] across all maturities of up to one year (Chart 27), reflecting a narrower maturity lag between assets and liabilities.

Positive developments in the banking system's liquidity position over the past few years have been in line with the sector's adjustment to the growing demands established by the European regulatory framework for liquidity, particularly as regards compliance with the liquidity coverage ratio (LCR), which has been in force since the fourth quarter of 2015. According to this ratio, banks must hold an asset buffer of high or extremely high liquidity and credit quality,[16] equal to at least 70 per cent of net liquidity outflows for a 30-day day stress period.[17] As from 1 January 2018, following a transition period, banks will be required to maintain an LCR of at least 100 per cent. According to the results of the Quantitative Impact Study (QIS) with the reference date of June 2015, promoted by the European Banking Authority and the Basel Committee on Banking Supervision, jointly with national supervisory authorities, the largest domestic banks complied with that requirement. However, the banks' liquidity position may be negatively affected by a reassessment of the Portuguese public debt rating, given that these securities account for a substantial share of this liquidity buffer, as mentioned in Chapter 2.

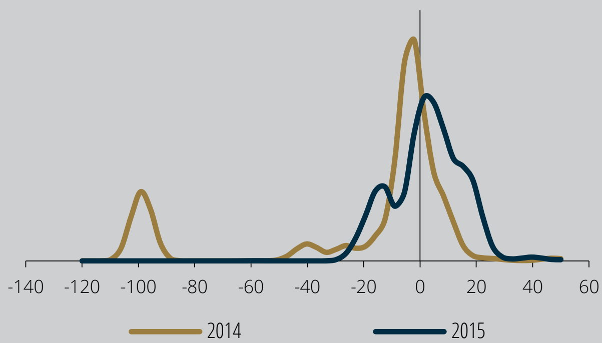
More recently, the results of the Bank Lending Survey, released in April 2016, indicate (in

Chart 27 • Liquidity gaps in cumulative maturity ladders



Source: Banco de Portugal.
Note: Information from Instruction No 13/2009 of Banco de Portugal.

Chart 28 • ROE distribution



Source: Banco de Portugal.
Note: Empirical distribution using a Gaussian kernel in which institutions are weighted by total assets.

comparison with the previous survey) that the overall liquidity position of Portuguese institutions has relied less on the ECB's expanded asset purchase programme (as part of the non-standard monetary policy measures).

Portuguese banking system's profitability returned to positive territory, still far behind past levels and benefiting from non-recurring factors

In aggregate terms, the banking system posted positive net profits in 2015, which had not been the case since 2010, thus confirming the path followed in the first half of the year. Compared with December 2014, the distribution of Portuguese banks' return on equity ratios improved (Chart 28).

The main contribution to a pick-up in the banking system's profits was made by the substantial decrease in the flow of impairments and provisions, compared with the very high levels recorded in 2014 (Chart 29). Although less markedly, developments in income from financial operations and net interest income also contributed to a recovery in profits.

Positive developments in net interest income were due to a decrease in interest expenses, which more than offset a decline in interest received. This was chiefly due to operations with customers (loans and deposits). The overall price effect (differential between the headline credit rate and the headline remuneration rate paid by banks on deposits) rose in 2015 (Box 3).

The reduction in interest rates offered on new operations and on the renewal, at lower rates, of existing deposits (subscribed at relatively high rates) contributed to a decrease in the implied interest rate on deposits. This development should continue in the current low interest rate environment, although limited by the underlying capital guarantee of this financial instrument, rendering impossible an implementation of negative interest rates.

Income from credit to customers was conditioned by the ongoing deleveraging of the banking system, as well as by the importance of loans with indexed interest rates and low spreads in the banks' credit portfolios (more specifically, loans for house purchase), whose weight in total credit remains relatively stable. The current macroeconomic environment, characterised by low interest rates and muted economic growth, is likely to continue to contribute to this behaviour, negatively affecting banks' profitability.

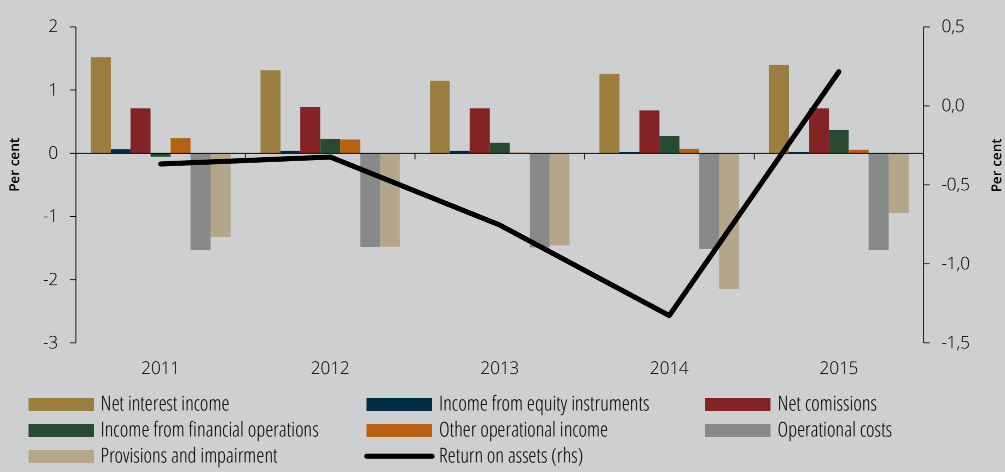


Chart 29 • Contribution to ROA

Source: Banco de Portugal.
Note: Return on assets is computed considering income before taxes and minority interests.

The decrease of the securities' portfolio yields has contributed to a decrease in interest received from other financial assets, compared with the end of 2014. This partly stemmed from a decline in the implied profitability of Portuguese public debt, due to the maturing and sale of those securities followed by purchases of (resident and non-resident) debt securities at lower yields. The widespread reduction in yields on euro area government debt bonds reflected a wide set of the ECB's non-standard policy measures, most notably the recently established sovereign debt purchase programme.

The reduction in interest expenses was due to a decline in the implied cost of market funding sources, more specifically central bank resources and interbank market funding. The decrease in non-subordinated debt securities and subordinated liabilities also contributed to a decline in interest paid on these instruments, due to their higher costs.

Income from financial operations increased in 2015 (27 per cent year-on-year), reaching approximately 14 per cent of gross income, which corresponds to a peak for the 2011-15 period. This was partly due to gains in the available-for-sale financial asset portfolio related to the sale of public debt securities, most notably Portuguese debt. Despite a decrease, compared with end-2014, such gains remained high. However, the maintenance of yields at low levels will necessarily limit such gains in the future.

Net commissions have accounted for a stable source of revenue for the Portuguese banking system, as shown by their contribution to the generation of gross income since 2011.

In 2015, the banking system proceeded with its cost-containment process, albeit decelerating compared with previous years, most notably regarding staff costs. Indeed, this component accounted for around 55 per cent of operational costs in 2015, a peak since 2011. The cost-to-income ratio stood at 59.9 per cent, with a 6 p.p. decrease from 2014, which was mainly due to developments in gross income. Excluding non-core items from income (e.g. more volatile items, such as income from financial operations), the ratio amounted to 70 per cent, 5 p.p. less than in 2014.

Income generation in international activity faces challenges

The international activity of a number of major Portuguese banking groups continued to make positive contributions to gross income in 2015 (more specifically in the generation of net interest income and commissions). However, the downside of this exposure lies in the presence of risks associated with economic activity, as well as political and legal risks associated with such geographies. The cases of BPI and BCP are a clear illustration of this (as analysed in previous issues of the *Financial Stability Report*). In fact, some uncertainty persists about whether the BPI group will maintain its activity in the Angolan market. In the case of BCP, and as regards activities in Poland, a decision has not yet been reached as to the allocation of the effects of exchanging Swiss franc-denominated loans into the local currency, after the Swiss National Bank discontinued the Swiss franc's minimum exchange rate against the euro. Both situations may hinder activity and income generation in those markets.

Despite a reduction in the flow of impairments, high credit at risk volumes continue to hamper the quality of assets and the system's profitability

In 2015 impairment losses declined significantly, even excluding the impact of BES/Novo Banco (Chart 30). These developments were largely driven by a reduction in impairments recognised for credit; the loan loss charge fell by around 1 p.p. year-on-year, standing at 1.2 per cent (excluding the impact of BES/Novo Banco, there was a 0.4 p.p. decrease, to approximately 1 per cent). This may point to a normalisation in activity, followed by the effort of impairment recognition and provisioning process carried out in previous years. Nevertheless, the flow of impairments remains high.

Despite the improvement in economic activity, the significant indebtedness of the resident non-financial private sector and the typical lag of default levels vis-à-vis economic activity continued to contribute to high credit risk materialisation (Chart 31). The non financial corporations segment posted the highest credit at risk ratio, which is still growing despite signs of a slowdown. The credit at risk ratio of loans for house purchase has been stable, at around 6 per cent, since mid-2011. In the case of the loans for consumption and other purposes, which represent a lower share in the credit portfolio, the credit at risk ratio decreased from the end of 2014 to 14.2 per cent. The credit at risk ratio became more dispersed across all resident private sector segments (Section 1.2.).

The coverage ratio remains at a high level, even amid a considerable reduction in the flow of impairments for credit.

The high levels of credit at risk in the banking sector pose risks to financial stability given that, among other factors, they point to some financial weakness with impact on the sector's profitability, which could eventually affect its capacity and incentives to lend to the economy. This is currently the case of several European banking systems, which explains why this issue has been addressed not only in Portugal, in a joint effort of national authorities under the IMF Post Program Monitoring (PPS/PPM) mission, but also at international level, most notably in the scope of the Single Supervisory Mechanism.

In this context, measures to reduce the stock of credit at risk ought to continue to be pursued alongside with other preventive measures, in the scope of prudential supervision and targeted towards new credit at risk flows.

As stated in the previous issue of the *Financial Stability Report*, a multifaceted approach, targeting a number of existing limitations, is necessary. On the one hand, the effectiveness and efficiency of prudential supervision measures to encourage a more pro-active management of credit at risk or initiatives to boost the market for these assets are conditioned by its structural environment, most notably legal, judicial and tax constraints. On the other hand, the adoption of more aggressive strategies, which entail significant costs, would hamper the income generation capacity of the banking sector. Therefore, in the present macroeconomic context and given the current European regulatory requirements, the latter option is limited.

The possibility of a vehicle to facilitate the sale of problematic credits held by credit institutions may be further assessed. This vehicle should primarily aim to attract investments from specialised private entities and maximise the benefits from the management of such

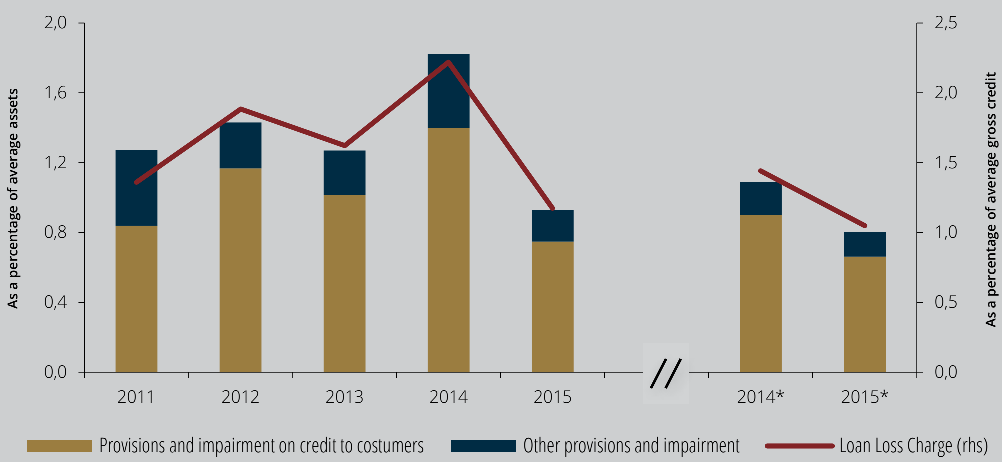


Chart 30 • Impairment flow and credit risk

Source: Banco de Portugal. Note: The loan loss charge corresponds to credit impairments divided by average gross credit. (*) Excluding BES/Novo Banco.

assets by specialised entities, which are able to conduct a thorough assessment of firms' economic and financial situation and, depending on the results, offer the most suitable solution.

However, considering a European framework that currently imposes strong constraints on the type of measure adopted in Spain and Ireland in the course of the crisis, this vehicle must be designed taking the following factors into account:

i) Funding must primarily come from the private sector, which may be easier to obtain by breaking down securities issued by this vehicle into tranches with different subordination levels.

ii) Prior to the transfer of assets to this vehicle, they must be pre-assessed, thus mitigating information asymmetry between creditor banks and potential investors. The transfer price typically includes a balance sheet haircut, even taking into account any associated guarantees.

iii) The way in which public support may materialise must take into account the current European framework, with consequent implications e.g. on the price of any guarantees.

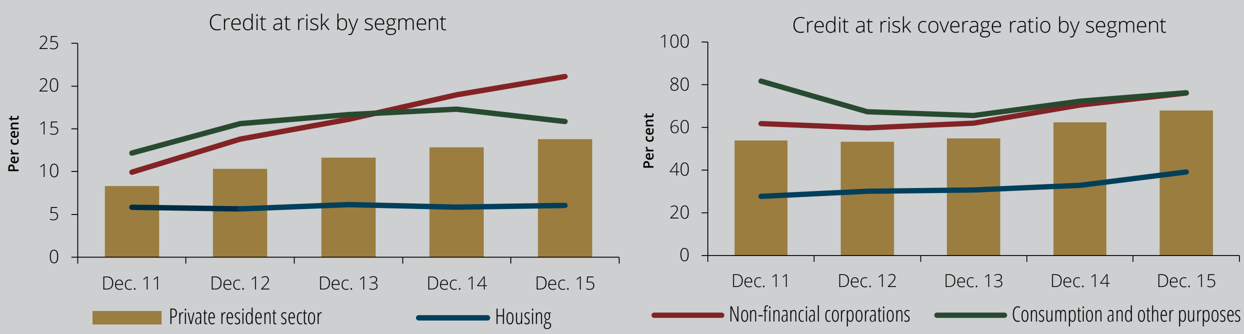
Lastly, amendments should be implemented in *Processo Especial de Revitalização* (the special revitalisation process), the *Sistema de Recuperação de Empresas por Via Extrajudicial* (out-of-court corporate recovery system) and the Insolvency and Corporate Recovery Code, so as to: i) reduce costs associated with the sale of collateral, debt restructuring and insolvency of non financial corporations (most notably measures that shorten the period of time associated with these proceedings), and ii) encourage firms and/or creditors to adopt these proceedings on a preventive basis, thus making it possible to recover the firm in a sustainable manner.

The banking system's solvency levels increased, thus making the sector more resilient

At the end of 2015 the banking system's Common Equity Tier 1 (CET1) ratio stood at 12.4 per cent, 1.1 p.p. above the level seen at the end of 2014 (Chart 32). This was partly due to extraordinary events with an impact on own funds and risk-weighted assets (RWA).

On 1 January 2015 the special regime applicable to deferred tax assets (DTAs) entered into force, approved by Law No 61/2014, which was adopted by the larger domestic banks. This Law eliminated uncertainty regarding the recovery of certain DTA classes arising from temporary differences, with these assets ceasing to depend on the future profitability of participating institutions. Hence, they are no longer deductible from Common Equity Tier 1 under prudential European regulations. The positive impact of the non-deduction of DTAs accumulated until

Chart 31 • Credit at risk



Source: Banco de Portugal.
Note: According to Instruction of Banco de Portugal No 22/2011.

December 2014 on the CET1 ratio is estimated to have been approximately 1 p.p. in 2015.

Developments in own funds were also positively affected by the re-transfer, from Novo Banco to BES, of five issues of non-subordinated debt instruments, which had been transferred to Novo Banco following the Deliberation of Banco de Portugal of 3 August 2014. These instruments had been originally issued by BES and were specifically placed with qualified investors, with a minimum denomination of €100,000. The selection of the above-mentioned bonds was based on public interest and aimed to safeguard financial stability and ensure compliance with the purposes of the resolution measure applied to BES. The re-transfer had a net positive impact of around €1.985 billion on the capital of Novo Banco, with an effect of 0.85 p.p. on the banking system's own funds ratios.

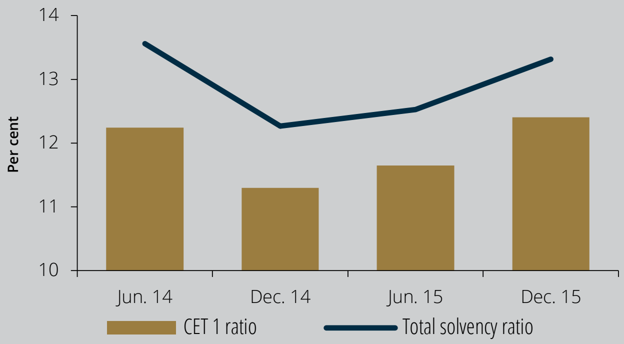
The strengthening of own funds by two major institutions and the pick-up in profitability across most of the sector led to an increase in the banking system's solvency levels. However, low profitability still limits the institutions' ability to generate capital internally. At the end of 2015 most institutions had a CET1 ratio above 8 per cent, although its distribution is somewhat heterogeneous (Chart 33).

The aforementioned exclusion of Angola from the list of third countries with supervisory and regulatory arrangements equivalent to those of the European Union in early 2015 was also an extraordinary event, which led to an increase in RWA. However, compared with the end of 2014, RWA decreased overall, particularly those associated with credit risk, resulting in a positive impact on solvency levels. This stemmed from the sector's ongoing deleveraging process.

Currently, a series of transitional provisions laid down by the CRD IV/CRR package allows banks to gradually adjust to the new CET1 ratio requirements. The gradual elimination of these provisions by 2018 will exert some pressure on credit institutions' solvency ratios, although it will increase the quality of its own funds. This pressure may be intensified if the sector does not return to higher profitability levels. In this context, Banco de Portugal has promoted a series of prudent management practices among supervised institutions, with a view to reinforcing capital ratios and preserving their financial soundness (Box 4, in the November 2015 issue of the *Financial Stability Report*).

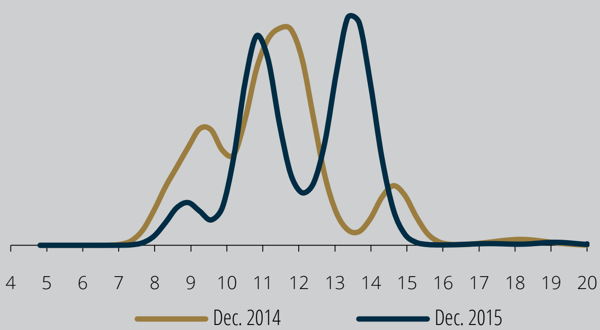
Evidence collected within the scope of QIS, with data available up to June 2015, indicates that the largest Portuguese banking groups operating at the end of 2015 fully complied with the minimum requirements for the CET1 ratio set out by the Basel III framework, integrated into CRD IV and CRR, after the end of the transitional period (fully implemented requirement). Nonetheless, as regards the other prudential ratios, significant challenges remain, given that not all groups fully

Chart 32 • CET1 and total solvency ratios



Source: Banco de Portugal.
Note: Ratios computed in accordance with transitional provisions foreseen in CRD IV/CRR.

Chart 33 • CET1 ratio distribution



Source: Banco de Portugal.
Note: Empirical distribution using a Gaussian kernel in which institutions are weighted by total assets.

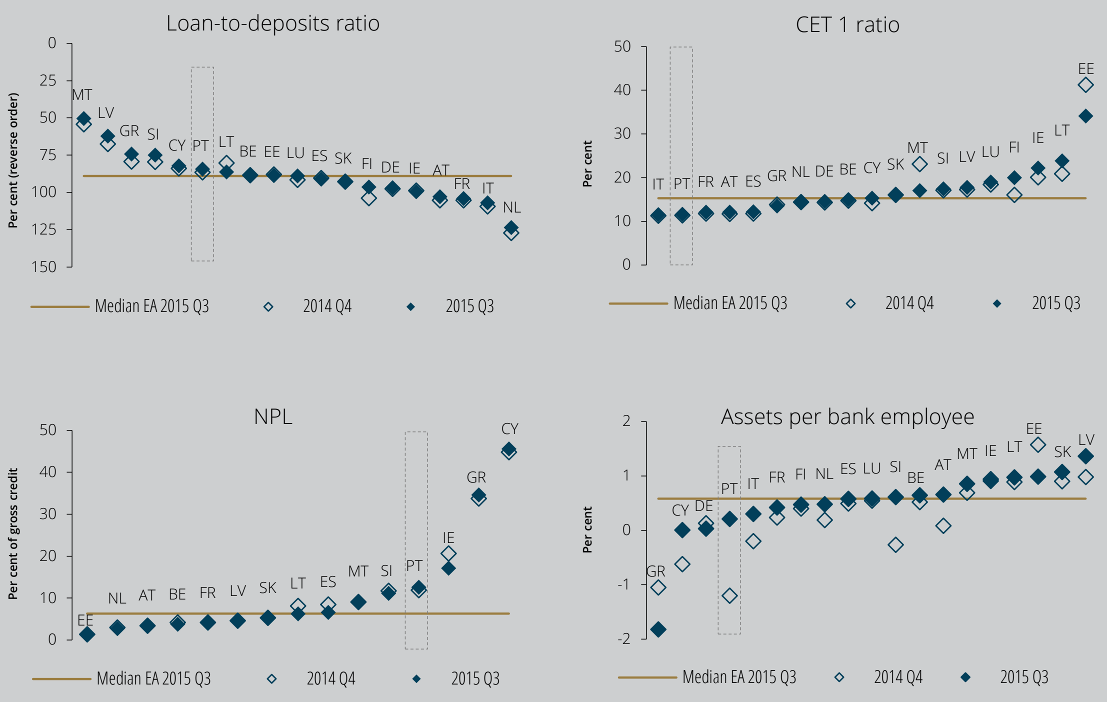
comply with the minimum requirements for the Tier 1 and total solvency ratios (fully implemented requirement). Hence, becomes particularly important to credit institutions the issuance of subordinated instruments eligible as regulatory own funds that could allow to overcome this situation.

The Banking Union's regulatory framework also includes a leverage ratio that has been subject to compulsory disclosure by institutions under prudential supervision as of 1 January 2015. This ratio complements RWA-based solvency measures, having as a main characteristic the fact that assets are not risk-weighted. The final calibration is envisaged for 2017 and may become a compulsory regulatory requirement in 2018. Data obtained through QIS, referring to June 2015, show that participating Portuguese institutions have a leverage ratio of more than 3 per cent, which is the value currently accepted as the minimum reference level and in line with the European average. The banking system's relatively favourable position as regards this indicator (vis-à-vis prudential capital ratios) reflects the fact that capital requirements per asset unit in Portugal are among the highest in Europe.

Despite progress over the past few years, the Portuguese banking system remains fragile compared with its euro area counterparts

In 2014 the Portuguese banking system showed signs of structural weakness compared to other euro area countries (Chart 34). These fragilities were most noticeable in terms of solvency, asset quality and profitability. The structural liquidity position, as measured by the loan-to-deposits ratio, was relatively comfortable. The adjustment in this ratio resulted from a reduction in credit and favourable developments in deposits. As regards profitability, Portuguese banks have been prominent for negative reasons within the euro area, chiefly due to constraints placed by the international financial crisis and the necessary adjustment associated with the EFAP on banking activity over the past few years. As to asset quality, the banking system was in the lower bound of the reference range as a result, on the one hand, of the implementation

Chart 34 • International comparisons (2014 Q4-2015 Q3)



Sources: European Central Bank (Consolidated Banking Data) and International Monetary Fund (Financial Soundness Indicators).
Notes: Return figures of the third quarter of 2015 were annualised for ROA calculation. NPL analysis excludes Germany, Finland, Italy and Luxembourg due to data unavailability for the selected periods. France's third quarter of 2015 NPL figure corresponds to the simple average of the second and fourth quarter figures, due to the unavailability of data for this particular period. Loan-to-deposit figures presented are not comparable with those presented in Chart 26 due to methodological differences.

of a somewhat loose lending policy in the past and, on the other hand, of the adverse macroeconomic conditions over the past few years.[18] Regarding to the CET1 ratio, the Portuguese banking system posted a figure below the euro area average at the end of 2014, due to its low regulatory capital levels and its inability to generate capital internally, given its weak profitability.

With regard to the sector's structural features, in 2014 the Portuguese banking system compared unfavourably with most euro area countries, despite positive developments in a number of indicators analysed compared to 2011 (Chart 35). Portugal continued to present one of the lowest ratios of population to the number of branches, only above Spain and Cyprus. The number of bank employees has decreased across most euro area countries, including Portugal, as a result of the ongoing consolidation in the European banking sector, which has led to a widespread improvement in the ratio of population to the number of bank employees, with Portugal standing at the distribution median. Nevertheless, the substantial reduction in assets due to the deleveraging process in the Portuguese banking sector contributed to negative developments in the ratio of assets to the number of employees recorded in the 2011-14 period.

As regards the banking system's efficiency, Portugal also compared unfavourably with most euro area countries in 2014, with a cost-to-income ratio only below that of Germany and France. Moreover, this indicator has deteriorated comparing to 2011. In this context, and taking into account the banks' limited capacity to generate gross income in the current macroeconomic environment, the recovery in the Portuguese banking system's profitability is likely to rely on increased efficiency, through a reduction in operational costs, while safeguarding the integrity of the risk assessment and internal control processes among banks. In this vein, digital banking, although challenging in the short run given the necessary high initial investment in infrastructure, could be a way towards a sustainable cost reduction in the sector.

Chart 35 • International comparisons (2011-2014)

Source: European Central Bank (Consolidated Banking Data and *Report on Financial Structures* – October 2015).

1.3.2. Insurance sector

The amount of assets covering technical provisions declined in 2015, reflecting life business performance

In 2015 the overall amount of assets covering technical provisions[19] decreased by 2.6 per cent, to €49.9 billion, accounting for 28 per cent of GDP.[20] This ratio, which has been growing since 2012, declined by 1.7 p.p. in 2015, due to both nominal GDP growth and developments in the asset portfolio covering technical provisions of the life business, which fell by 3.1 per cent in 2015. In the non-life business, the overall amount of the asset portfolio covering technical provisions increased by 1 per cent in the same year.

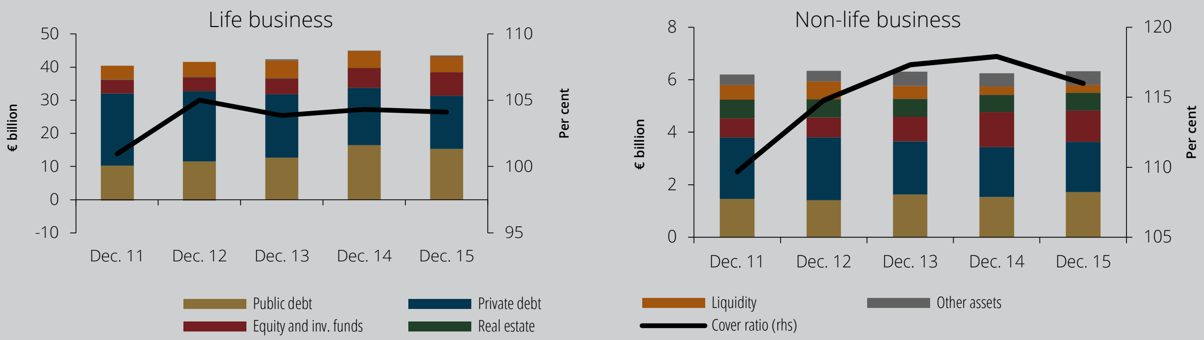
The composition of investment portfolios was relatively stable compared with December 2014. In the life business, the weight of (public and private) debt instruments decreased while the portfolio's allocation to equity increased. In the non-life business, the weight of sovereign debt rose, offset by a reduction in equity and investment funds (Chart 36). Therefore, for the sector as a whole, investments in equity increased, which combined with the historically high level of the average maturity of the debt securities in the portfolio, translates into greater risk for the investment portfolio. However, in an Asset/Liability Management (ALM) context, longer asset maturities (increased sensitivity to interest rate risk) may reflect a mitigation of interest rate risk, to the extent that it may reduce the maturity mismatch between assets and liabilities.

Technical provisions in the life business fell by 2.9 per cent in 2015. This, together with the above-mentioned reduction in the value of investment portfolios allocated to this business, explains the maintenance of the cover ratio at around 104 per cent. In the non-life business, despite the positive effect of the asset portfolio growth, the increase of 2.7 per cent in the value of technical provisions led to a decline in the cover ratio in 2015, to 116 per cent (117.9 per cent in December 2014).

Total production of the sector declined, despite an increase in the non-life business

The amount of gross written premiums (direct business)[21] fell by 11.6 per cent in 2015, to stand at €11.9 billion (Chart 37).[22] This was exclusively due to the life business, whose production decreased by approximately 18 per cent, while increasing in the non-life business by 7.7 per cent, thus reversing the trend seen in previous years.[23]

Chart 36 • Asset portfolio allocation and cover ratio



Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.

The cost of claims rose substantially, both in the life and non-life businesses, with growth rates of 10.3 and 6.6 per cent respectively.[24]

The concerns already expressed by the insurance and pension funds supervisory authority *(Autoridade de Supervisão de Seguros e Fundos de Pensões – ASF)* about the technical equilibrium of the occupational and motor insurance segments persisted in 2015. Nevertheless, in the case of occupational insurance, operational indicators improved (the claims ratio declined from 113.6 per cent in 2014, to 107.8 per cent in 2015).[25] In the motor insurance segment, the cost of claims increased substantially, leading to a claims ratio of 72.5 per cent, 4.8 percentage points more than in 2014.

Although determined by a small number of operators, surrenders in the life business increased by 25 per cent, accounting for more than half of the total cost of claims in this segment in 2015. In fact, the surrender rate, which had followed a downward path over the past few years, increased in 2015.

Net income for the sector benefited from the realisation of capital gains, which had been previously recognised in other comprehensive income

In 2015 net income for insurance companies under ASF's supervision is estimated to have been positive, at €378 million, which corresponds to a substantial increase from €77 million in 2014. The solvency ratio is estimated to have stood at 238 per cent, which would correspond to a 32 percentage point increase from December 2014 and a relatively comfortable margin over the minimum requirement (100 per cent).

However, a very significant share of this net income resulted from the realisation of capital gains previously recognised in other comprehensive income, as a result of a positive financial market performance in the most recent periods. In this context, and in an environment of historically low interest rates, the long-term sustainability of insurance companies raises some challenges, particularly when assets covering insurance liabilities with financial guarantees are sold. In fact, given the current outlook for continued low interest rates, it will not be possible to reinvest in assets with yields similar to the past without incurring in greater risk. Therefore, it is essential to adopt prudent behaviours that foster the preservation of capital levels, making it possible to tackle the sector's main challenges, such as the macroeconomic environment and market and credit risks, as well as the entry into force of the Solvency II regime. It should be mentioned that risks associated with the macroeconomic

Chart 37 • Gross written premiums and cost of claims

Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.

environment and market and credit risks are typically identified by the industry as the most relevant risk classes.

Also, as discussed in the previous issues of the Financial Stability Report, reinsurance operations that made it possible to bring forward the financial flows that would be received during the lifetime of the reinsurance contracts will tend to hamper future income in the life business.

In this context, and given the economic and financial prospects in the short to medium term, the various international initiatives aimed at reinforcing the sector's resilience become more important, most notably research on the potential definition and implementation of macroprudential instruments or the realisation of regular stress tests.

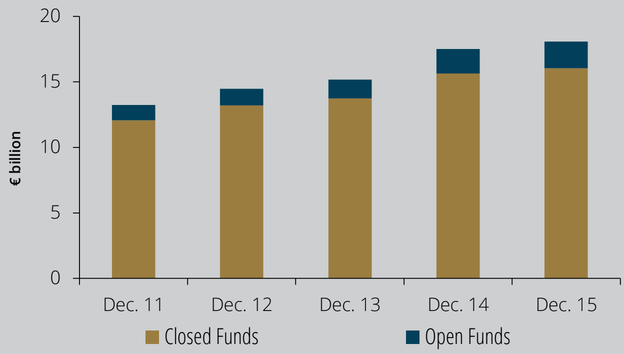
1.3.3. Pension funds

The value of assets managed by pension funds increased in 2015

In 2015 the value of assets managed by pension funds increased by 3.2 per cent (Chart 38). This increase was observed in both open-ended and closed-ended pension funds (with changes of 10.3 and 2.4 per cent respectively). The weight of the sector in the economy, measured by the ratio of total assets managed by pension funds to GDP, remained relatively stable at around 10 per cent.

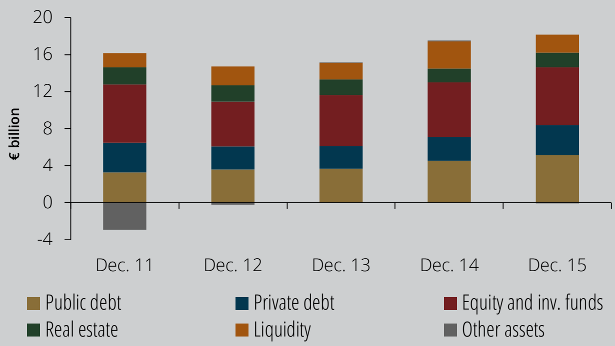
During the year, there were a number of adjustments in the composition of the investment

Chart 38 • Assets under management



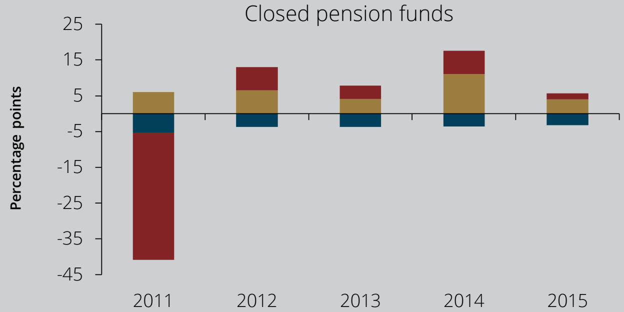
Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.

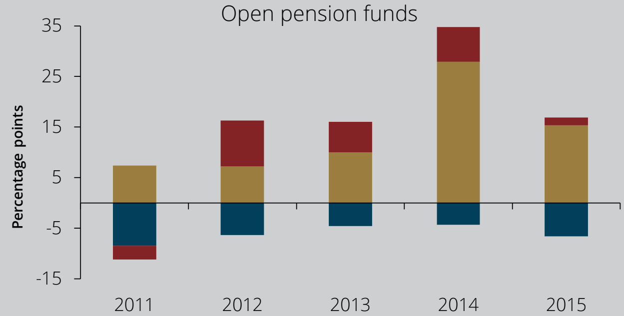
Chart 39 • Portfolio allocation



Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.

Chart 40 • Contributions to value change





Contributions Benefits Return and other

Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.

portfolio. More specifically, there was a 6 p.p. reduction in the allocation to more liquid assets (deposits), mainly offset by investments in public and private debt securities, as well as in participation units of investment funds (Chart 39).

Contributions continued to be the main factor behind the increase in the overall value of assets managed by pension funds (Chart 40). However, the amount of these contributions dropped by 52.9 per cent. This reduction is largely explained by the performance of closed-ended pension funds and by the extraordinary contributions that took place in 2014, to address changes in the actuarial assumptions used to estimate the liabilities' value.

Benefits paid increased strongly in 2015 (13.3 per cent), chiefly due to the new members joining open-ended pension funds. In the case of closed-ended pension funds the rise was of only 2.6 per cent.

The historically low interest rate environment remains a challenge to the sector

In Portugal, closed-ended pension funds account for the largest share of the sector. Among them, the defined benefit pension funds stand out, due to their number and amount of assets managed. In the current environment of historically low interest rates, pressure continues to be exerted on defined benefit pension funds as they must guarantee that the return from their assets is sufficient to cover the liabilities assumed. Considering that the main defined benefit pension funds are promoted by the larger banking groups, this may impact the banking system's profitability and solvency, as the sponsors of the defined benefit pension funds must cover this differential through extraordinary contributions.

The results of the first EU-wide stress test exercise of institutions for occupational retirement provision (IORPs) were published in January 2016. The exercise was conducted by the European Insurance and Occupational Pensions Authority (EIOPA)[26] in 17 EU countries (including Portugal). The reference date was 31 December 2014 and two modules were tested: a core module and a satellite module.

The core module tested the resilience of defined benefit and hybrid schemes against two adverse financial market scenarios and one scenario of increased life expectancy. The first scenario assumed a severe drop in assets' prices in developed economies, triggered by equity markets in the EU and affecting the main asset classes. The second scenario, in addition to a shock on the prices of the main asset classes (although generally lower than in the first scenario), also assumed a materialisation of geopolitical risks that could lead to higher oil and other commodity prices. Table 2 shows the results of this exercise, measured by the assets to liabilities ratio.[27]

Table 2 • Stress test results – funding level

	National funds	All funds
Reference date: 31 December 2014	103	95
Adverse market scenario 1	77	75
Adverse market scenario 2	79	78
Longevity scenario	96	89

Source: Autoridade de Supervisão de Seguros e Fundos de Pensões.
Notes: Funding level corresponds to the assets to liabilities ratio

The main effects of the two adverse financial market scenarios are a reduction in the value of investment portfolios, mainly equity and real estate, and a rise in the value of liabilities due to the reduction of the respective discount rate. The longevity scenario is reflected in the increase of liabilities, as a result of decreasing mortality rates.

Although the second adverse financial market scenario assumes a sharper reduction in risk-free interest rates and consequently, a higher increase in the estimated value of liabilities, the impact of the first scenario is slightly higher, due to the size of the shocks applied to assets.

The satellite module, applicable to pure defined contribution schemes, assessed the impact on future benefits to be received by the beneficiaries of two adverse market scenarios and one longevity scenario (based on the core module), as well as of two long-term scenarios that imply the reduction of the expected return on assets. It should be noted that in defined contribution schemes, benefits receivable depend on the amount of the corresponding contributions paid and the respective cumulative return, implying that risks are borne by the beneficiaries. Thus, negative developments in profitability or in the value of assets will have an adverse impact on the value of pensions to which the beneficiaries are entitled.

Overall, it can be concluded that the impact is not very significant, given its reduced effect on the replacement rate (defined as the value of the pension as a proportion of the salary at the expected retirement age). Additionally, defined contribution schemes account for a negligible share of the sector in Portugal, given the key role played by the public Social Security system in the formation of retirement income. However, in view of the challenges ahead, which may imply lower replacement rates, this type of savings' instruments may play an important role in supplementing retirement income.

1.3.4. Investment funds and other financial entities

The total value of investment funds' assets declined further in 2015

At the end of 2015, the total value of investment funds' assets[28] was €26.1 billion (15 per cent of GDP)[29] (Chart 41). Contrary to developments at global and European level,[30] assets under management have not shown an upward trend in Portugal. In effect, these values declined further in 2015, either due to portfolio devaluations or net redemptions.

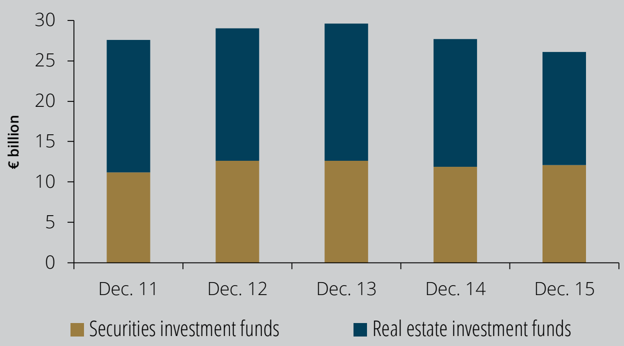
Subscription of money market funds was the main reason behind the rise in the value of securities investment funds

As regards securities investment funds, in 2015 there was an increase of net assets under management to around €12 billion (year-on-year growth of 3 per cent), strongly influenced by money market funds (Chart 42).

The net value of money market funds' assets under management increased by 22 per cent, representing 26 per cent of total securities investment funds at the end of 2015. This was the result of inflows in a small number of funds, because given the nature of this instrument and the low interest rate environment, their valuation is actually very small.

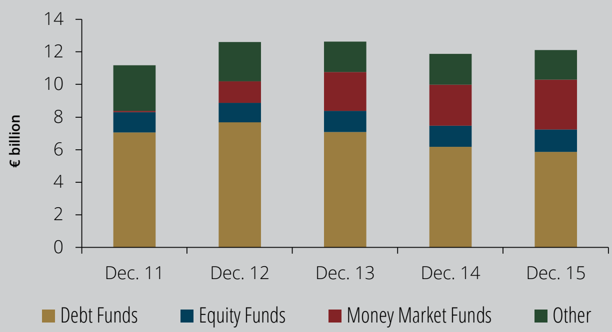
Bond funds,[31] representing around 48 per cent of real estate investment funds, saw a significant decline in net assets under management in 2015,

Chart 41 • Investment funds | total asset value



Source: Banco de Portugal.
Note: Securities investment funds include money market funds and exclude venture capital funds.

Chart 42 • Securities investment funds | Total asset value by type of fund



Source: Banco de Portugal.
Note: Other includes mixed funds, hedge funds and other funds.

chiefly due to redemptions (4 per cent of the assets under management at the end of 2014).

Turning to equity funds, which represented 10 per cent of securities investment funds in December 2015, the increase in assets under management was due to a combination of a positive valuation effect and net inflows.

As regards units held by type of investor, households stand out both in bond funds and equity funds, holding approximately 80 per cent of the units and carrying out net inflows in 2015. Units held by monetary and financial institutions (MFI) in bond funds are virtually residual.

> The growing exposure of securities investment funds to non-resident issuers' securities raises the diversification of the aggregate portfolio, but as a result the sector becomes more sensitive to external shocks

In terms of composition, at the end of 2015 the overall portfolio of MFIs by financial instrument reached a relatively balanced allocation among the three asset items: shares and other equity, debt securities and deposits. This is the result of a decline in the value of debt securities and an increase in other items – a trend observed in recent years. It is necessary to take into account, however, that the item shares and other equity includes direct investment in shares (which has been declining) and investment in investment fund units, which may correspond to indirect investment in debt securities.

Furthermore, in recent years, the composition of investment funds portfolios has shown an increase in the allocation to securities of non-resident issuers (from 68 per cent at the end of 2010 to 85 per cent in December 2015). This was particularly evident until 2014 in the debt securities portfolio, especially the increased concentration in some countries more affected by the crisis. In 2015, developments were essentially marked by an increase in the weight of other EU countries' debt securities (Chart 43).

Geographical diversification may be particularly favourable in a financial stress situation, in particular if associated with securities with higher market liquidity. Due to this diversification, however, the sector becomes more sensitive to the external environment. An external shock with an impact on asset valuation may trigger significant subscription and redemption flows of Portuguese funds. In the case of large-value redemptions, it may lead to possible liquidity problems in the fund.

Therefore, in spite of the reduced representativeness of the investment fund sector in the domestic financial system, but considering its growing exposure to global financial markets, it is relevant to monitor the concerns that have been raised on this sector's risks at global level, namely those related to fund liquidity and leverage. Due to liquidity mismatches between units (demandable equity) and the investment portfolio composition (particularly when invested in less liquid assets), funds may face difficulties when addressing abrupt redemptions in times of market stress, and risks may materialise that are associated with the interconnectedness with the financial system. In effect, as a result of the significant affiliation of asset managers with banking groups, stress situations in investment funds may materialise into step-in risk.[32] In addition, the use of leverage (which in the case of resident investment funds is not significant) may amplify the effects of market movements. It is therefore important to make sure that existing microprudential instruments can be used, where necessary, for macroprudential purposes, namely those related to liquidity management tools and leverage limits, thus promoting financial stability.

The value of assets under management of real estate investment funds continued to decline, with MFIs strengthening their participation in these funds

In December 2015, the value of assets under management of real estate investment funds corresponded to €14 billion. The significant leverage of these funds, essentially through loans from resident banks (around €1.8 billion in December 2015), justifies the differential of total assets versus approximately €11 billion of the value of units.

The decline in assets under management observed in 2014 was more marked in 2015, with a decline of 8 per cent in net assets under management, justified either by negative valuation or net redemptions (Chart 44).

In 2015 transactions in real estate investment funds contributed to strengthening the importance of resident banks in this type of fund, since they held around 44 per cent of the units in December 2015 (39 per cent in December 2014) (Chart 45). In addition to this exposure through units (of around €4.9 billion), the exposure of resident banks also includes exposure through loans, which, albeit declining, represented around 13 per cent of the value of assets under management.

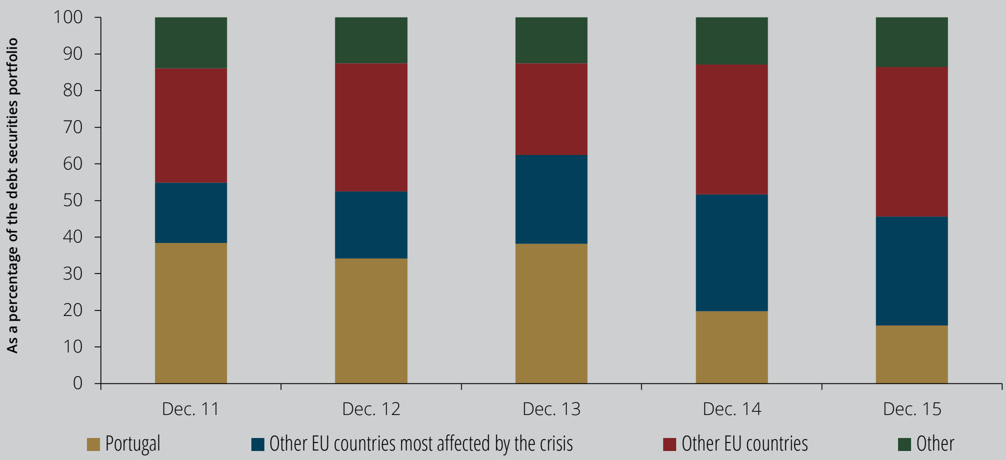
Shadow banking in Portugal is small and does not show an upward trend, contrary to developments at European and global level

According to Eurosystem's statistics (European System of Accounts 2010) there is another category of entities integrating the financial system, in addition to those previously mentioned (banks, insurance corporations, pension funds and investment funds). In December 2015, they held €173 billion[33] of assets in Portugal (98 per cent of GDP).

These entities, together with investment funds (including money market funds), constitute the shadow banking sector (Chart 46). Consistent with the international definition of the Financial Stability Board (FSB) and adopted by the European Systemic Risk Board (ESRB), shadow banking is broadly described as "credit intermediation involving entities and activities (totally or partially) outside the regular banking system",[34] i.e. non-bank financial intermediation.

Financial stability concerns about shadow banking are related to the fact that it involves entities and activities that perform credit intermediation functions, which pose risks related to liquidity and maturity transformation and leverage, but which are not subject to banking sector prudential regulation. In addition, there is interconnectedness with the remaining financial system, either through direct and off-balance-sheet exposures, or through contingent liabilities.

Chart 43 • Allocation of the securities investment funds' portfolio of debt securities by geographical location (excluding MMFs)



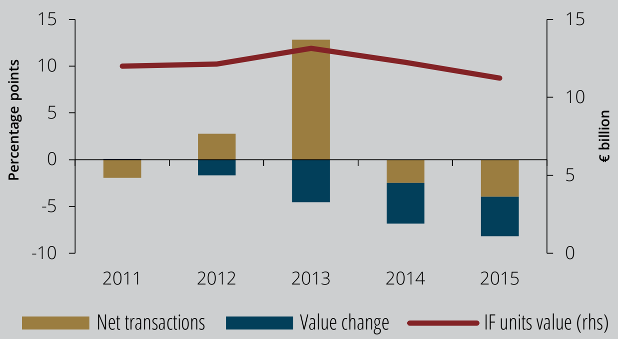
Source: Banco de Portugal.
Note: Other EU countries more affected by the crisis include Spain, Italy, Ireland, Greece and Cyprus.

Currently, there is no consensual definition of shadow banking. Therefore, from an international comparison perspective, we use the comprehensive definition of shadow banking suggested by the FSB. Nevertheless, taking into account the assessment of risks to financial stability, the FSB also gives a narrower definition, which excludes some entities: equity funds, part of funds and financial vehicle corporations, corresponding to retained and/or derecognised assets from banks' balance sheets, non-financial holding corporations (which, in the Portuguese case, are the largest part of resident captive financial institutions and money lenders) and financial holdings supervised by the banking supervisory authority. Considering this narrow measure, shadow banking in Portugal has a relatively small share (approximately 32 per cent of GDP, significantly lower than the weight of total assets of the banking sector, insurance corporations and pension funds, of approximately 270 per cent of GDP).

At European and global level, shadow banking has been growing significantly, both in absolute terms and in terms of its share in the financial sector. In Portugal, shadow banking has not followed these dynamics, and its relevance has been decreasing since 2011 (Chart 47). This is largely due to a decline in securitisation activity.

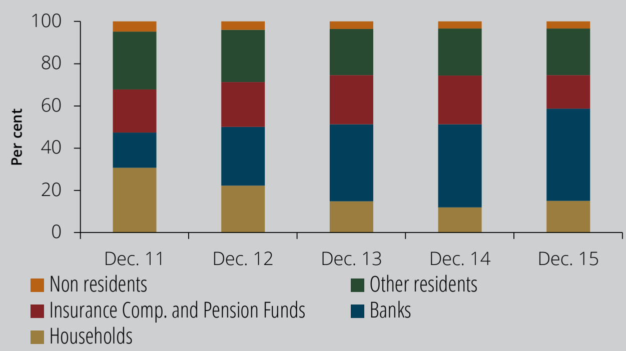
Considering the negligible weight of the narrow measure of shadow banking in the Portuguese financial system, as well as the downward trend of the absolute value of these entities, its relevance for financial stability is currently still contained. However, as it considers entities and activities involving potentially relevant risks to financial stability, it must continue to be monitored.

Chart 44 • Real estate investment funds | contributions to annual changes in net assets under management



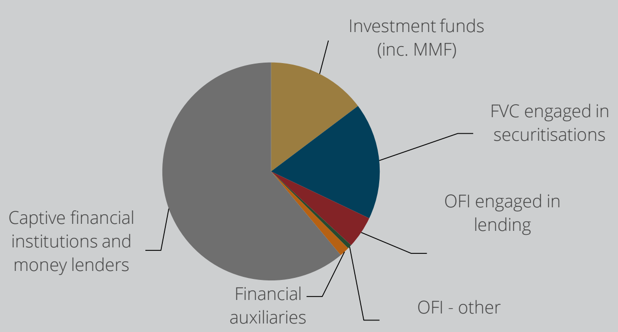
Source: Banco de Portugal.

Chart 45 • Real estate investment funds | units held by the institutional sector



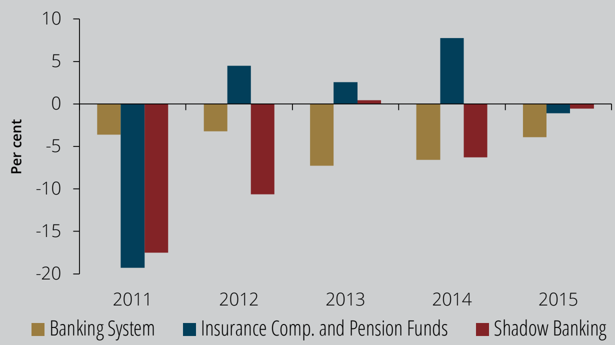
Source: Banco de Portugal.

Chart 46 • Shadow banking in Portugal | total assets in December 2015



Source: Banco de Portugal.
Note: Shadow banking according to the FSB's broad measure.

Chart 47 • Annual growth rate | total assets



Sources: Autoridade de Supervisão de Seguros e Fundos de Pensões e Banco de Portugal.
Notes: Total assets in the banking sector and the insurance corporations and pension funds sector, according to the prudential perspective; total assets in shadow banking according to the FSB's broad concept.

Box 1 • Risk and interest rates on new loans to non-financial corporations

The low interest rate environment and increased competition between credit institutions may impair the accuracy of new loan premia to the risk of non-financial corporations

Since 2012, the cost of loans to non-financial corporations (NFCs) has been gradually decreasing (Chart 48). In December 2015, interest rates on new loans to NFCs were the lowest since the start of the data collection. In turn, spreads implied in these rates, using the six-month Euribor as the reference rate, stood at levels close to those of the period immediately before the sovereign debt crisis, but above those prevailing until 2008.

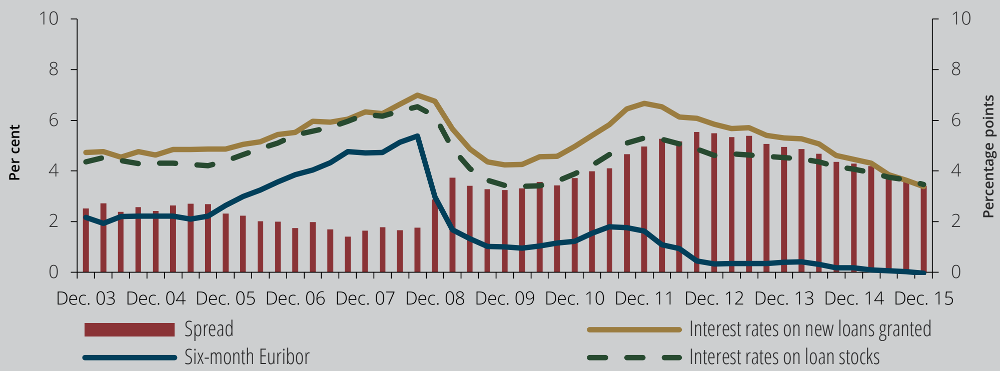
The decline in interest rates on new loans mainly reflects the monetary policy pursued by the ECB. In addition, the spread between average interest rates on new loans to NFCs in Portugal and the euro area has narrowed, although it remains considerably above the levels seen before 2008 (Chart 49). This convergence reflects, at least partly, decreased constraints on corporate financing – which had been the result of tighter policies on the supply of bank loans during the crisis period – and a gradual improvement in economic activity, contributing to a higher credit quality for firms.

Constraints on the profitability of financial institutions brought about by the recent crisis, together with fragile economic recovery both in Portugal and abroad, favour greater competition among financial institutions for a limited set of NFCs, in particular those with higher credit quality. This increase in competition has been confirmed by the five largest financial institutions participating in the Bank Lending Survey and has resulted in an expansion of credit granted and a narrowing of spreads applied to low and medium-risk firms, in contrast with a stabilisation at higher levels of spreads applied to high-risk firms.

The low interest rate environment may imply greater risk-taking by banks, in search of higher yields. Increased competition in riskier segments, resulting from this search for yield, may lead banks to apply interest rates that are not adequate to the risk taken, which would necessarily affect institutions' profitability.

It is therefore particularly important to assess the distribution of interest rates on new loans to NFCs. This exercise evaluates the existence of possible inconsistencies between risk premia and risk taken by financial institutions.

Chart 48 • Interest rates on new bank loans to NFCs | Quarterly



Source: Banco de Portugal.
Notes: Interest rates and spread on new loans in the quarter. The spread is calculated as the difference between the rate on new loans granted and the three-month moving average of the six-month Euribor.

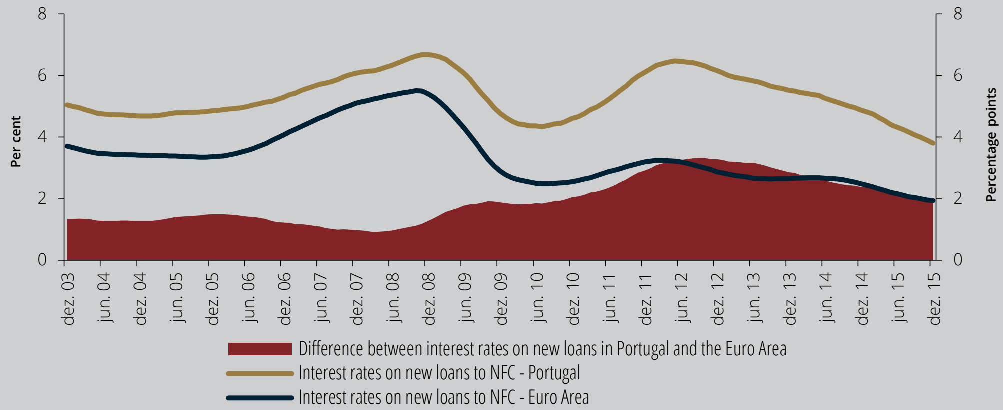
In 2015 interest rates on new loans were overall higher for riskier firms

In order to assess the relationship between the level of risk of NFCs and the spreads on new loans, NFCs were divided into four classes according to their risk of default. From this breakdown, by comparing the distribution of spreads on new loans by risk class for the 2013-15 period, it was possible to assess the differentiation of rates between levels of risk. The analysis concludes that in 2015, the highest rates were generally associated with higher-risk firms (Chart 50). The degree of differentiation seems smaller for longer maturities.

As mentioned before, spreads on new loans have been decreasing since 2012, with an impact on all risk classes, which resulted in a shift of spread distributions to the left.

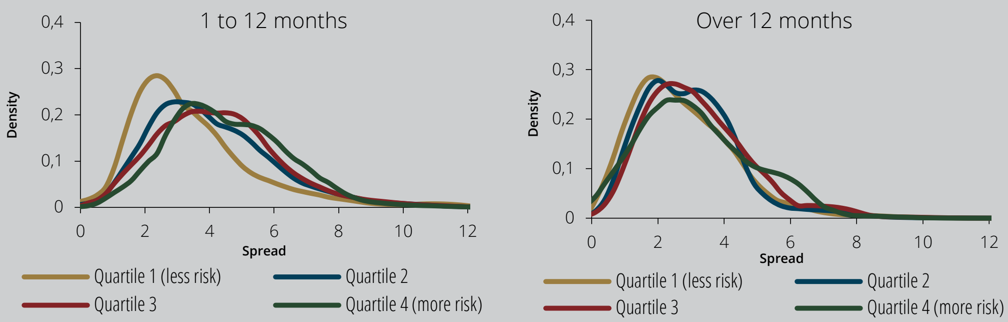
Although there is a differentiation between rates applied to firms with different levels of risk of default, a decrease in the difference between premia applied to the various risk classes over time is a possible indicator that there is less difference between the risk profiles applied by financial institutions. This behaviour would lead to a gradual overlap of distributions on the left, where the decrease in interest rates would coincide with a smaller difference between risk premia.

Chart 49 • Interest rates on new bank loans to NFCs – Portugal, euro area and difference between both series



Source: ECB and Banco de Portugal.

Chart 50 • Average spreads on new bank loans to NFCs – Loans by maturity and risk quartile in 2015



Source: Banco de Portugal.
Note: Kernel: epanechnikov; Bandwidth = 0.5.

However, taking into account the distributions of lower and higher-risk NFCs in 2013 and 2015, the distance between distributions seems to be increasing both for shorter and longer maturities (Chart 51). This widening has even reversed the absence of risk differentiation observed in 2013 for loans with a maturity of over one year, which resulted in the two distributions overlapping in 2013 (Chart 51 – right-hand panel).

An analysis only taking into account firms included in higher and lower-risk classes in 2013 and 2015 that have remained in the same risk class shows that spreads have narrowed for lower-risk firms and interest rates have remained stable for higher-risk firms. This effect suggests that, where there is a differentiation between higher and lower-risk firms, those that maintained a higher degree of risk were penalised in relative terms in their risk premia.

There is a greater differentiation in the risk premia in 2015 than in 2013, namely for loans of over €1 million

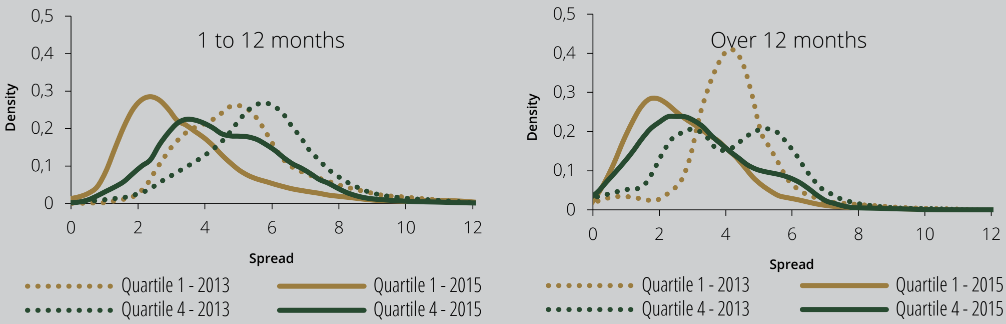
In order to analyse this difference in greater detail, loan amounts were considered as an additional factor of risk differentiation. For new loans of over €1 million, the differentiation between risk classes in 2015 was greater than in 2013 (Chart 52). This effect is particularly relevant in loans with longer maturities, where the apparent absence of differentiation in 2013 is in contrast with the risk differentiation observed in 2015. Given that underlying the definition of quartiles is a credit risk assessment that already takes into account enterprise size, large enterprises alone do not justify the pattern observed.

An analysis of loans of up to €1 million shows an apparent risk differentiation in 2013 and 2015, but also a gradual blurring of the distinction between quartiles with lower risk, which corroborates the indicators that have more recently pointed to greater competition by medium-risk firms.

Although there seems to be a differentiation in returns on new loans, persistent incentives to excessive risk-taking will continue to put pressure on risk premia accuracy

To sum up, evidence points to the existence of a differentiation in risk premia on new loans to

Chart 51 • Average spreads on new bank loans to NFCs – Loans by maturity for the first risk quartile (lower risk) and the fourth risk quartile (higher risk) in 2013 and 2015



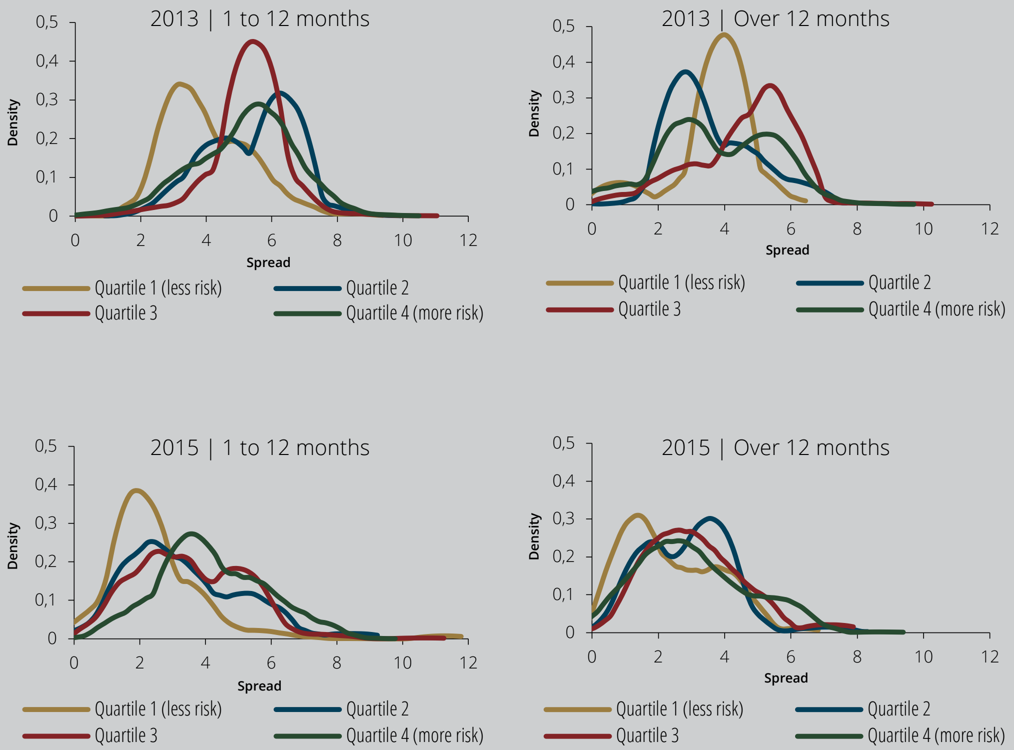
Source: Banco de Portugal.
Note: Kernel: epanechnikov; Bandwidth = 0.5.

NFCs. Risk differentiation is more noticeable in loans with a maturity of up to one year, particularly those of over €1 million.

The decline in risk premia had an impact on NFCs of all levels of risk, particularly in lower-risk firms. In the set of firms that remained in the same risk quartile from 2013 to 2015, the narrowing of spreads had a less significant impact on higher-risk firms.

Nevertheless, these conclusions should be interpreted with caution: incentives to excessive risk-taking by financial institutions in their returns on loans are still present in financial markets. Consequently, Banco de Portugal will continue to monitor developments in the adequacy of interest rates to firms' risk, assessing their impact on the balance sheets of financial institutions and financial stability.

Chart 52 • Average spreads on new bank loans to NFCs – Loans of over €1 million by maturity and quartile in 2013 and 2015



Source: Banco de Portugal.
Note: Kernel: epanechnikov; Bandwidth = 0.5.

Box 2 • Resolution measures applied to BANIF – Banco Internacional do Funchal, S.A.

As at September 2015, BANIF – Banco Internacional do Funchal, S.A. ("BANIF") was the seventh largest Portuguese banking group, with a market share of approximately 3.2 per cent of total assets in the Portuguese banking market.

Its low market share was in stark contrast to the strong relative importance of this institution in the Autonomous Regions of the Azores and Madeira, where market shares, in terms of the taking of deposits and lending, were close to 45 and 28 per cent respectively.

In fact, given BANIF's systemic importance in the Portuguese financial universe and the provision of critical functions to the economy, it was classified as an O-SII (other systemically important institution), in line with the methodology established by the European Banking Authority.

In January 2013 BANIF benefited from a mandatory recapitalisation operation using public investment, without which it would have proven unable to meet its legal and regulatory capital requirements. The State aid then granted, which consisted in the subscription by the Portuguese State of €700 million in special shares and €400 million in Contingent Convertible securities ('CoCos') was, at that time, temporarily approved by the European Commission.

The European Commission's final approval was dependent on the submission by the Portuguese State of a restructuring plan ensuring the reestablishment of the long-term viability of BANIF and the repayment of the State aid received. It also had to contain appropriate burden-sharing measures as well as measures to limit distortions of competition.

In the wake of the in-depth investigation procedure opened by the European Commission on 24 July 2015 into the State aid received by BANIF, and considering the possibility of this aid being considered illegal, therefore requiring its recovery, BANIF started to draft a new version of the restructuring plan, which provided for the institution's voluntary sale process following the sale of a set of assets. On 18 September 2015 the new restructuring plan was submitted to the European Commission which had doubts on whether forecasts were sound, on BANIF's long-term viability and, above all, on the possibility of the plan entailing further State aid.

At the same time, BANIF's liquidity position deteriorated significantly and very rapidly, particularly in the wake of media reports in December of potential solvency problems within the institution. This deterioration was largely due to an abrupt decrease in household deposits with BANIF. Between 1 and 18 December 2015, total volume of deposits declined by around €1.042 billion (17.3 per cent, approximately). This put BANIF at serious and grave risk of failing to comply with its obligations. The significant pressure on BANIF's liquidity led it to request emergency liquidity assistance to cover withdrawals of deposits.

On 19 December 2015, the Ministry of Finance informed Banco de Portugal that it had not been possible to sell BANIF's assets and liabilities through a voluntary sale process.

Therefore, given: (i) BANIF's capital position, which would deteriorate significantly with the likely declaration that the State aid was illegal and should consequently be recovered, leading to a very serious capital shortage which BANIF would not be able to recover, and (ii) the extreme pressure on BANIF's liquidity, Banco de Portugal determined that BANIF had become unable to comply with the requirements regarding the maintenance of the authorisation to undertake its business activity.

Consequently, on 19 December 2015, Banco de Portugal declared that BANIF was "failing or likely to fail".

On the same day, Banco de Portugal deemed that the application of a resolution measure to BANIF was the only solution capable of protecting depositors and ensuring continuity of the essential financial services provided by the bank to the economy (in particular in the Autonomous Regions of the Azores and Madeira), thus safeguarding the stability of the financial system with fewer costs to the public purse.

In addition to the application of a resolution measure, the only instrument available to Banco de Portugal to address a credit institution under financial distress is the withdrawal of its authorisation to carry on its business activity, with its consequent winding up under normal insolvency proceedings. However, given BANIF's size and systemic importance, particularly in the Autonomous Regions, the effects of withdrawing BANIF's authorisation and its ensuing judicial winding up would create an unprecedented situation for the Portuguese financial system, which could seriously undermine confidence in the system and result in a run on deposits and other resources held in other financial institutions established in Portugal.

As such, given that a solution was urgent and in the absence of viable alternatives, taking into account the legal framework in force, Banco de Portugal applied resolution measures to BANIF on 20 December 2015.

Most of BANIF's assets and liabilities were sold to Banco Santander Totta, S.A., in the wake of a proposal submitted by the latter as part of a sale process that, insofar as the urgency of the situation permitted, made maximum use of the voluntary sale process and ensured the transparency of the process and equal treatment of prospective purchasers.

Banco Santander Totta, S.A. had already shown interest in participating in the voluntary sale process conducted by BANIF, by submitting a proposal prior to Banco de Portugal's deliberation. Banco Santander Totta, S.A. met the requirements regarding the size and nature of the purchasing institution, being one of the largest credit institutions with greater financial capacity out of all those that had shown interest under the voluntary sale process.

At the same time, an asset management vehicle was set up (currently named Oitante, S.A.) to receive and manage a set of BANIF's assets that had not been sold to Banco Santander Totta, S.A., with a view to their subsequent sale or winding up, as this was necessary to maximise the value of the sale of such assets.

Of all the resolution measures applicable by Banco de Portugal, the partial sale of BANIF's assets and liabilities, together with the separation and transfer of a set of assets to an asset management vehicle, was deemed by Banco de Portugal as being a proportional and adequate measure, given that it presented a definitive solution with the best possible guarantees as to the resolution measures' objectives, most notably to preserve financial stability.

The application of resolution measures to BANIF followed the guiding principles for this type of measure. According to these principles, shareholders primarily bear the institution's losses, followed by creditors, in accordance with the respective priority ranking and in equal conditions, no shareholder or creditor incurring greater losses than they would have incurred if the institution had entered into liquidation at the time the resolution measures were applied.

The financial assistance needed for the application of resolution measures to BANIF was provided by the Resolution Fund through: (i) the full subscription and underwriting of Oitante, S.A.'s share capital (to the amount of €50,000), (ii) the provision of a guarantee to bonds issued by Oitante, S.A. (to the amount of €746 million), and (iii) the bearing of BANIF's losses (to the amount of €489 million). The Portuguese State participated in the financing of the application of resolution measures to BANIF indirectly, via a loan granted to the Resolution Fund (to the amount of €489 million), and directly by providing a counter-guarantee to the guarantee provided by the Resolution Fund to bonds issued by Oitante, S.A. (to the amount of €746 million) and by underwriting an increase in BANIF's share capital with the aim of bearing BANIF's losses (to the amount of €1.766 billion) in compliance with EU principles, regulations and guidelines on State aid.

The application of resolution measures to BANIF was a solution that the European Commission, after being notified in pursuance of the EU principles, regulations and guidelines on State aid, deemed to be compatible with the internal market.

Box 3 • Net interest income – Recent developments and future prospects

Over the past few years, the resident banking system's profitability has deteriorated significantly, with net interest income being one of the major factors behind these developments. In the period between 2008 and 2015, net interest income decreased from annual figures of over €8 billion to under €6 billion (in the past three years). In this context, the weight of net interest income in total operating income fell markedly, moving from approximately 60 per cent until 2011, to around 50 per cent in 2012 and standing close to 55 per cent in the following years.

Given that net interest income chiefly results from the flow of interest received and paid, its developments may be explained by both changes in the balance sheet components that generate receipts and payments (volume and composition effect) and in the interest rates associated with such components (interest rate or price effect).

Net interest income developments should be assessed with reference to: (i) the low and decreasing interest rates levels observed over the past few years, as a result of the fragile macroeconomic environment and the monetary policy pursued by the ECB; and (ii) the adjustment process of the banking system (and the Portuguese economy in general), in the wake of the sovereign debt crisis and taking into account the goals underlying the Economic and Financial Assistance Programme, with noticeable effects on the balance sheet's size and structure.

Interest rate effect

Net interest income developments since the onset of the economic and financial crisis have been chiefly due to interest rate changes in assets and liabilities (Chart 53).

Interest rates on credit and customer resources explain many of these changes. These items have a substantial weight in the resident banking system's balance sheet and, as such, small changes in interest rates on these aggregates have a marked effect on net interest income (Chart 54).

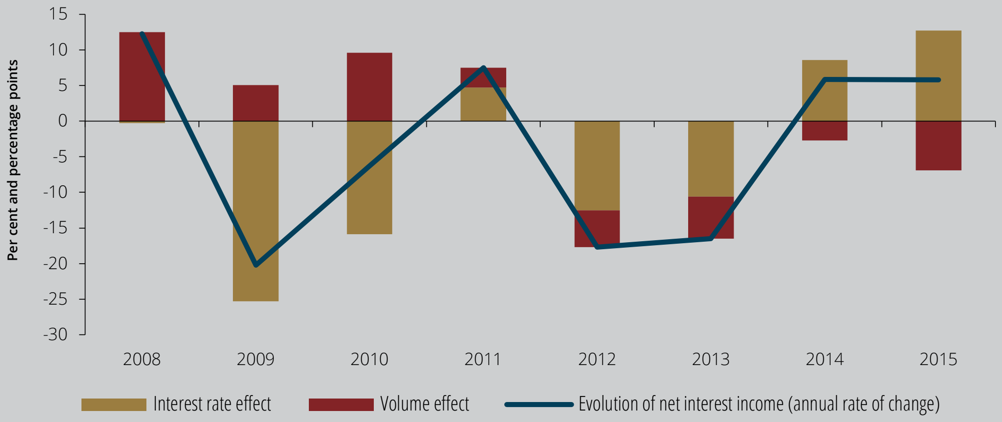
Developments in implied interest rates[35] on credit to customers severely hampered interest generation, except for 2008 and 2011. This mirrors reductions in reference interest rates, which reflect more directly on interest received (Chart 55). Against this background, housing loans are particularly important, as these operations have long maturities and a substantial share of their contracts are indexed to Euribor rates (reference rates in interbank markets), with a fixed spread.

The significant decrease in the implicit cost of deposits, following strong competition in 2011 and 2012, has made it possible to mitigate the negative impact of the reduction in assets' interest rates since then. This effect was amplified by the growth in this source of financing. Nevertheless, the decrease in interbank interest rates was not fully reflected in the cost of deposits, which remained above these benchmark rates, in contrast to what was observed until the financial crisis. In fact, the spread between the implied interest rates on credit and deposits decreased by roughly 1.3 percentage points between 2008 and 2015, which corresponds to approximately 40 per cent of its initial value.

Volume effect

Despite having a lower impact on net interest income developments, the volume effect has been consistently negative since 2012. This is due to the deleveraging process of the resident banking system, stemming from the need to correct financial imbalances accumulated before the crisis and reflected in banks' balance sheets. This was processed chiefly by reducing credit to customers (and increasing the share of credit at risk) and interbank claims, while the weight of the debt securities portfolio increased. In turn, the decline in liabilities resulted in a more deposit-based funding structure, with a substantial decrease in market funding sources (both through bonds

Chart 53 • Breakdown of net interest income developments

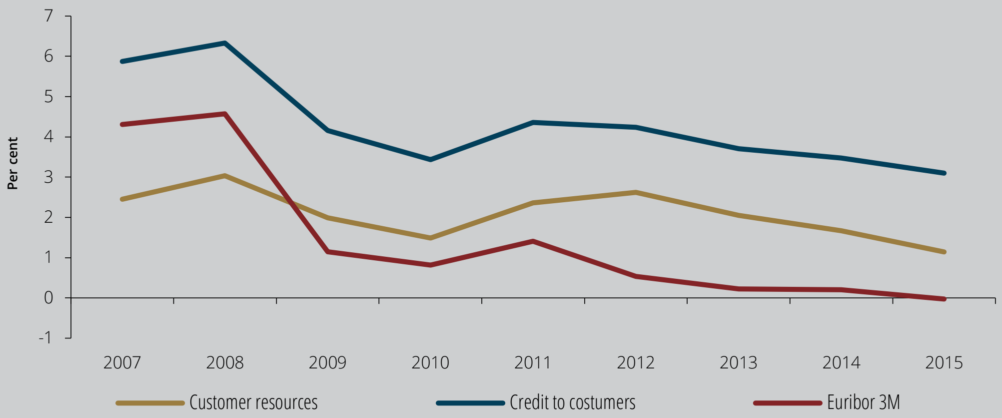


Source: Banco de Portugal.

Chart 54 • Breakdown of the interest rate effect on net interest income

Source: Banco de Portugal.

Chart 55 • Developments in implied interest rates



Source: Banco de Portugal.

and interbank funding) and an increase in the weight of Eurosystem's funding.

As such, the negative impact of the volume reduction in credit to customers was partly offset by the positive effect of lower market funding, associated with relatively higher implicit costs, which led to substantial interest savings (Chart 56). This was also due to the repayment of public capitalisation instruments (commonly known as 'CoCos').

Future prospects: simulation of the impact of further reductions in interest rates on net interest income from operations with customers

It is possible to foresee a number of factors that, over the next few years, should continue to constrain net interest income.

In line with economic growth projected for the next few years, particularly as regards investment, and given the need for resident economic agents to proceed with their develeraging process (as they continue to be highly indebted), credit volumes, most notably to non-financial corporations, are not expected to recover significantly. If this forecast materialises, it will continue to foster competition over customers with the best risk profiles, thus contributing to a reduction in the credit portfolio's profitability by cutting the price of credit.

Likewise, as regards the price effect, the overall environment of very low, or even negative, interest rates is likely to continue putting pressure on net interest income, while further decreases in interest rates, particularly Euribor rates, cannot be ruled out. These reductions will mostly tend to hamper banks that, similarly to resident banks, have a greater share of floating-rate credits (most notably, housing loans) and a funding structure where deposits play a major role.

A simulation exercise[36] was conducted to assess the potential impact of further reductions in interest rates on net interest income from operations with customers (more specifically, credit to residents and time deposits of residents). This exercise was based on the banking system's balance sheet structure as of December 2015 (i.e. it did not assess volume and composition effects) and broke down the price effects into two phases. The first corresponds to the impact of the pass through of rates applicable to new operations on implied rates on outstanding amounts of loans and time deposits, assuming that interbank market rates will stand at their current levels. The second phase corresponds to the impact of further declines in Euribor rates on interest rates applicable to operations with customers, given the starting points following the pass-through observed in the first phase.

Chart 56 • Breakdown of the volume effect on net interest income

Source: Banco de Portugal.

This simulation was based on the following assumptions:

(i) In the first phase of the exercise, with Euribor rates at their current levels, it was assumed that interest rates on new time deposits (which are low, but above zero) would fully pass through to the average interest rate on the outstanding amounts of time deposits (i.e. at the implicit cost of this funding source). An assumption was also made that this decline in deposit rates would be reflected, to the same extent, on rates applicable to the entire portfolio of credit to residents, except housing loans.[37] Underlying this assumption is the fact that, given the competitive environment, banks will tend to pass their savings in the cost of deposits through to interest rates on credit to these segments. In the case of housing loans, the effect of the pass-through of the rate on new operations to the implied rate on the outstanding amount of loans is negligible, given the high maturity of these contracts and the low weight of new operations.

(ii) In the second phase of the exercise, the effects of further reductions in Euribor were simulated on net interest income from operations with customers, with a 0.25 per cent minimum level for the interest rate on time deposits. This limit is in accordance with the regulatory framework that establishes a minimum return of zero on deposits and reflects the assumption that not all banks will be able to reduce the cost on time deposits down to this threshold, given that the competitive environment may entail a premium, particularly in the case of banks with a less comfortable liquidity position. As in the first phase, the reduction in the cost of deposits was reflected, to the same extent, across the entire portfolio of credit to residents, except for housing loans. In the case of housing loans, given the existing contractual terms, it is assumed that the impact of reductions in Euribor rates would be fully passed through.

The effect of the first phase, which is characterised by an adjustment in interest rates on time deposits with constant Euribor rates, would produce a positive impact on net interest income of around €200 million (Chart 57). This impact arises from the possibility of a reduction in interest rates on deposits compared with the levels seen in late 2015. However, following the first phase, and given that this possibility will be almost exhausted, a 100 basis point fall in Euribor rates would have a negative cumulative impact on the resident banking system's net interest income of approximately €700 million.

It should be noted that this simulation was based on aggregate data for the banking system. An analysis based on individual data would introduce particularities in the exercise's results, although not qualitatively changing its findings. This analysis highlights the non-linearity of impacts, due to the fact that institutions have dissimilar positions as regards interest rates as well as different funding structures. In fact, the more the return on deposits approaches the minimum return of zero, the more the room for further decreases in the cost of deposits diminishes, thus exposing banks further to the negative consequences of future reductions in interest rates on loans. Similarly, although, on average, housing loan rates are still positive, should Euribor rates decrease further, a growing share of these contracts would yield negative interest rates, given the heterogeneity in spreads across institutions.

Furthermore, these mechanical simulation exercises do not take into account other endogenous effects that are more complex to quantify, both in terms of volume and price on new operations. Should Euribor rates continue to decrease, it would be expected that the banking system would react so as to minimise negative effects on net interest income.

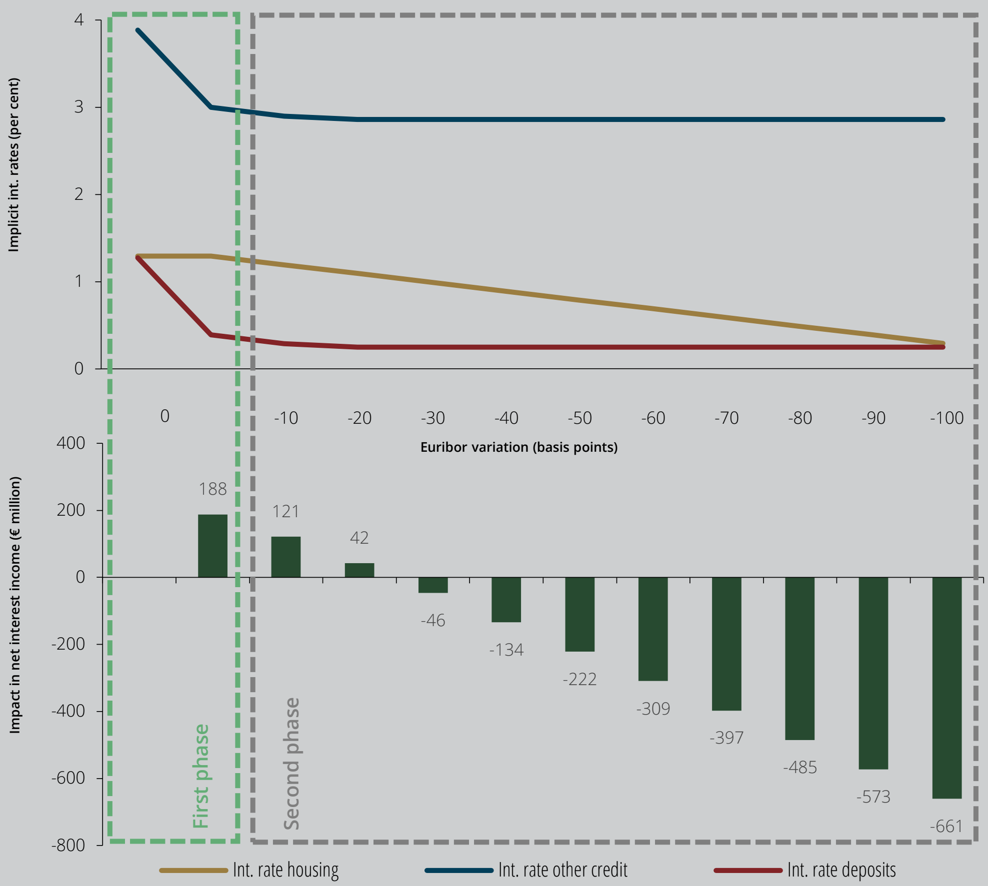
There are also other channels that may amplify the negative effects of interest rates on net interest income. In addition to putting pressure on net interest income from customers, the maintenance of low interest rates also impacts on returns from debt securities, particularly public debt, and should continue to contribute to the fall in gains from carry trade strategies supported by Eurosystem's funding, as observed in previous years.

Although the low interest rate environment has helped contain market funding costs, this effect is limited in the case of the resident banking system: first, accessing the interbank market is still challenging and, second, yields demanded by investors to purchase securities issued by resident banks are still high. This is particularly relevant given the phasing-in of a number of regulatory requirements over the next few years, with an impact on the composition of liabilities (to meet solvency and liquidity requirements), which will tend to result in greater market funding requirements, exerting pressure on funding costs.

Without prejudice to the above-mentioned effects, recent interest rate developments have also had a positive impact on the resident banking system's profitability, given that they benefited the valuation of the securities' portfolio and constrained funding costs and default levels and, consequently, the need for impairments recognition.

Furthermore, to the extent that low interest rate levels remain temporary and, together with other economic policies, ensure that economic activity and inflation return to levels consistent with the Eurosystem's goal for price stability, they will contribute, in the long term, to generate positive volume and price effects on the banking system's profitability.

Chart 57 • Changes in implied interest rates and effect on the banking system's net interest income



Source: Banco de Portugal.

2. Risks to financial stability

> The nature of risks to financial stability has remained broadly unchanged, but the factors that may lead to the materialisation of those risks have stepped up

The risks to financial stability in Portugal, which were identified in the latest Financial Stability Report, have remained unchanged, as well as the vulnerabilities that may amplify their effects, namely the high indebtedness level of the public and private sectors, the low profitability of the financial system and the high concentration of the system's assets in certain sectors, asset classes and geographies. Since late 2015, however, some factors, contributing to the materialisation of risks, have intensified. Among these are the perspective of maintenance of low or even negative interest rates and the increase in market volatility, which is related, in particular, to the higher perception of the challenges faced by the European banking system and to the ongoing fiscal consolidation processes.

One of the structural vulnerabilities of the Portuguese economy is the indebtedness of the public and private sectors that subsists at high levels, in spite of the deleveraging observed in recent years. As a result, the position of the economy and, in particular, of the financial system, is more vulnerable to adverse economic developments and to investors' risk perception. The effects of such developments may translate into higher default levels by non-financial corporations and households, higher financing costs and/or increased difficulties in access by national issuers to market funding, with a negative impact on economic activity and financial system profitability.

The profitability levels registered in the banking sector since the onset of the financial crisis continue to constrain the capacity to generate capital internally as well as the remuneration of invested capital, despite the slight recovery in the most recent period. This represents a heightened concern, as the regulatory capital requirements are on the upside and the capital ratios of Portuguese banks – measured by the CET1 ratio – continue to be among the lowest in Europe.

The profitability of the Portuguese banking sector may be particularly affected by the maintenance of very low interest rates for a protracted period (Box 3) and the high level of non-income-generating assets, including credit at risk. These factors hinder the recovery of profitability sustained by the increase in gross income, thus strengthening the need for a significant cut in operational costs, given that the operational efficiency indicators of the Portuguese banking system compare unfavourably to those of other euro area countries.

Another fragility of the financial system is related to high concentration levels, especially exposures to sovereign debt, particularly Portuguese, and real-estate assets. As regards geographical concentration, direct and indirect exposure to Angola should be highlighted. The Angolan economy faces economic and financial challenges that may spill over to an increase in credit at risk and impairments of the Portuguese banks' balance sheets.

> In the most recent period, expectations of low economic growth and inflation have increased, justifying the strengthening of accommodative monetary policy by the ECB

In line with the most recent data on global economic activity, expectations of low economic growth and low inflation increased in the last months of 2015 and early 2016, with a downward revision of projections prepared by different international organisations for these variables (Section

1.1). Measures taken by the ECB in March of this year confirmed the expectations regarding the maintenance of very low or even negative interest rates for a longer than expected period. In the short term, this may be favourable to the Portuguese economy, taking into account its debtor position, but, as mentioned throughout this Report, it puts pressure on the banking system's financial margin.

Low interest rates may fail to translate into a surge in domestic demand, due to the high indebtedness of the economic agents and the effects of very low or even negative inflation on spending decisions. The extension of this scenario may hamper the necessary adjustment of the productive structure, acting as an incentive to investment in higher risk sectors, inappropriate asset valuation and the maintenance in the balance sheet of lower quality assets. In addition, maintaining inflation at low levels will hinder the erosion of the nominal debt value, in particular that of households and non-financial corporations.

In early 2016, global financial market volatility increased

The increase in financial market volatility reflected heightened concerns about global growth prospects, exacerbated by an intensification in geopolitical tensions in Europe (Section 1.1).

The market sentiment regarding European banks deteriorated as a result of concerns about capital remuneration capacity, in a context of (i) low nominal economic growth and very low and/or negative interest rates, (ii) difficulty in reducing the high level of credit at risk and other non-income-generating assets in banks' balance sheets and (iii) a more demanding regulatory framework. The announcement of losses by large European banks and the regulatory uncertainty associated with the implementation of the Bank Recovery and Resolution Directive (BRRD),[38] amplified by the resolution measures adopted in some European countries at the end of 2015 – which warned investors to the potential consequences of the implementation of this Directive – has also contributed to selling trends in the European bank debt and equity markets.

The new regulatory framework established by the BRRD aims for the recovery and resolution of institutions that are failing or likely to fail. This framework, in the context of the Single Resolution Mechanism, will strengthen financial stability and promote confidence in the banking sector. Until its full implementation, however, there is still a number of challenges associated with the transition process that will tend to be more significant for the banking systems of those countries that benefited more from State aid granted during the most crucial period of the crisis. This transition is all the more complex due to its interception with other European regulation, which has in the meantime become more demanding, particularly the rules regarding State aid and competition (Box 4). The potential benefits deriving from the non-transmission of risk from the banking sector to the State, underlying the implementation of the BRRD, will only be totally perceived by the economic agents and the financial system in the medium term, with the full implementation of banking union.

The rise in risk premia of Portuguese issuers in early 2016 has only been partly reversed, which may show a more lasting revision of the perceived risk

In spite of its broadly based nature, the increase in volatility in early 2016 was stronger in the case of Portuguese issuers. This deterioration in investors' risk perception may have been associated with their evaluation of the Portuguese banking system's strength and the ongoing fiscal consolidation.

The concerns mentioned for the European banking system were amplified, in the Portuguese case, by some of the national institutions' fragilities pointed out earlier, and the resolution measures recently implemented. These made more visible the effects of the new European regime for the resolution of credit institutions, as previously indicated.

As a result of the downward revision of projections for economic growth and the persisting high indebtedness of the public sector, market perception shows higher uncertainty as regards the continued fiscal consolidation effort and structural reforms in Portugal. The risks indicated by different international organisations and main credit rating agencies were mainly due to a negative assessment of the macroeconomic scenario and the fiscal target initially projected for 2016, which eased after the approval of the State Budget. If the budget execution deviates from forecasts, it may have an impact on the evaluation of the Portuguese economy, with possible repercussions on external financing conditions.

Given the institutional, prudential and monetary policy implementation framework in the European Union/Economic and Monetary Union, external risk evaluations play a significant role in determining the financing conditions of resident economic agents. Thus, the actions of the national authorities must be consistent with the maintenance or improvement of the ratings assigned to resident entities (with focus on the sovereign, as it generates externalities to the other sectors). This is essential to ensure the refinancing needs of the economy in international markets. At the end of April, DBRS reconfirmed the credit rating assigned to the Portuguese Republic - fact that became relevant after the end of the EFAP - thereby ensuring the eligibility of Portuguese sovereign debt securities as collateral in credit operations with the Eurosystem and in the ECB's public sector purchase programme (Table 3).

Table 3 • Portuguese Republic credit rating

Agency	Credit rating	Outlook	Latest action
DBRS	BBBL	Stable	29 April 2016: affirmation of the rating and of the outlook
Fitch	BB+	Stable	4 March 2016: revision of the outlook from "positive" to "stable"
Moody's	Ba1	Stable	25 July 2014: upgrade from Ba2 to Ba1
S&P	BB+	Stable	18 September 2015: upgrade from BB to BB+ and revision of the outlook from "positive" to "stable"

Note: This is the issuer foreign currency long-term credit rating relevant for determining eligible collateral for monetary policy operations. If the collateral is denominated in euros the local currency credit rating may be used, alternatively.

Abrupt reversal of risk premia spills over into the assets and liabilities of financial institutions, constraining financing costs ...

An abrupt reversal in the search-for-yield behaviour, implying an increase in risk premia, has a widespread effect across the whole financial system through a rise in funding costs of the sovereign and financial institutions and, therefore, of the other sectors in the economy. This is especially relevant given the high indebtedness of the Portuguese economy.

However, in aggregate terms, the funding structure and the liquidity position of the Portuguese banking system continued to improve in 2015, reducing, in the short term, the potential negative effects on bank liabilities associated with increasing risk premia. The significant reduction in the loan-to-deposit ratio of the banking sector over the last five years has made it possible to reduce the sector's vulnerability to rising risk premia and/or sharply declining liquidity in the wholesale financing market. This has allowed the sector's dependence on this type of financing to decline considerably. In the recent past, the rise in deposits as a funding source reflected, inter alia, the maintenance of confidence in the Portuguese banking sector. The reduction in the remuneration rates of these instruments, although beneficial for profitability, requires that confidence in the sector be preserved and the stability of these resources be safeguarded. In addition, the promotion of financial literacy and the fight against mis-selling continue to be important in the marketing of saving and investment products (Box 5).

In general, in the coming years, conduct supervision of institutions will also be strengthened with the publication of new directives and regulations defining more intrusive rules for the evaluation of procedures and practices of the supervised institutions, especially: i) the introduction of rules regarding the technical expertise and compensation of employees, ii) the regulation of financial intermediation activities, involving the public register of those professionals and the mandatory compliance with conduct obligations, iii) the definition by the supervisor of the mandatory evaluation of the customer solvency, in order to prevent unsustainable indebtedness. Also worth noting are the amendments to the regulatory frameworks of indexed deposits and payment accounts, the latter including the creation of a website to compare fees charged by the different supervised institutions.[39]

The improvement in banks' liquidity position also reflects a rise in liquid assets available to meet unanticipated liquidity needs (liquidity buffer) and a reduction in maturity mismatches in the balance-sheet. This liquidity buffer, however, is partly dependent on non-standard monetary policy measures in force, as well as on the aforementioned developments in credit ratings assigned to sovereign debt.

In addition, institutions are faced with a challenge associated with the need to have access to debt markets: in the short term, in order to issue subordinated instruments eligible for regulatory capital, necessary to ensure compliance with all prudential ratios; in the medium term, to ensure compliance with the new regulatory requirements, including the minimum requirements for own funds and eligible liabilities (MREL) and minimum stable funding requirements.

A strategy to mitigate the risk of a surge in financing costs, which includes the frontloaded coverage of these borrowing requirements, may, however, be constrained by the banking sector's profitability.

… and asset valuation

Simultaneously, the increase in risk premia affects the financial system through the devaluation of securities portfolios, with negative effects on financial institutions' capital levels. Price fluctuation is potentially amplified by low liquidity observed in some market segments, as described in the latest issue of this Report.

The nature of financial institutions' activity justifies their exposure to debt securities. The relationship between risk and profitability largely explains changes in portfolio composition. In the case of the banking sector, the rise in exposure to Portuguese public debt securities during the economic and financial crisis, although to levels close to the EU average, occurred in the context of strong restrictions to State access to the market and favourable prudential treatment of these assets.

The monitoring of risks associated with the concentration of the banking system in public debt included a sensitivity exercise to assess the impact on the sector's own fund ratios of an increase in public debt risk premia in those euro area countries deemed to be more vulnerable. This sensitivity analysis shows that, for the aggregate of the seven largest Portuguese banking groups, as at December 2015, a parallel increase of 100 basis points in yields would bring about a 0.4 p.p. reduction in the CET1 ratio, under full implementation of the CRD IV/CRR. In the insurance sector, the concentration and contagion risks continue to be high in the asset portfolio assigned to the coverage of technical provisions, given the continued high exposure to Portuguese public debt securities and national banks' debt securities. This increases the potential loss spiral associated with a high volatility episode, as observed in early 2016. These risks have been regularly monitored by the insurance and pension funds supervisory authority (Autoridade de Supervisão de Seguros e Fundos de Pensões – ASF), given their importance in Solvency II, a more risk-sensitive regulatory framework.[40]

The current risk premia associated with Portugal reflect, to some extent, a positive external perception of progress achieved in terms of fiscal consolidation, external account balance and introduction of a wide range of other structural reforms. However, they also reflect the significant effect of the Eurosystem's conventional and unconventional monetary policy. Given the necessarily temporary nature of this policy, the adjustment process of the economy must be appropriately pursued, benefitting, in particular, from the window of opportunity provided by the current financial framework.

The need to mitigate the risks associated with the financial system's exposure to the sovereign triggered a number of initiatives after the sovereign crisis in Europe, including the revision of the prudential treatment of these assets. Different alternatives for this revision are under analysis,[41] with a view to introducing incentives to appropriate risk management and, simultaneously, safeguarding public debt's role in the financial markets and the financing of the economy. It is important to ensure that the regulatory treatment of sovereign debt – under discussion in several international bodies with the participation of national authorities – undergoes a prudent and gradual revision, taking into account all the possible implications. Also, the consistency of the regulatory framework should be safeguarded among the different jurisdictions and financial system sectors.

In financial institutions, mitigating the risks associated with a rise in risk premia and responding to regulatory changes regarding the prudential treatment of the sovereign may imply the prudent diversification of the debt portfolio, with a view to minimising the impact of changes in the value of these assets, especially domestic public debt, on capital and liquidity buffers.

> The financial system's profitability will continue to be penalised by the extended environment of low interest rates and weak economic growth

Low or negative interest rates and moderate economic growth put pressure on the banking sector's financial margin, namely on operations with customers. In the same vein, the carry trade strategies in which sovereign debt is financed through recourse to the Eurosystem will not achieve – in the current context of low interest rates along the yield curve – results similar to those registered in recent years, and may even have adverse effects in case of an increase in risk premia.

In addition, the balance sheet adjustment due to the transition to compliance with the new capital and liquidity regulatory requirements may contribute to put pressure on income generation by the European banking system and, in particular, by the Portuguese banking system. The benefits expected from financing costs (capital and debt) may not materialise immediately due to diverse factors: (i) the entry into force of the BRRD, which is leading to a re-pricing[42] of responsibilities with loss-absorbing capacity; (ii) the maintenance of some distrust regarding the quality of assets in the balance sheet and the appropriate recognition of underlying losses; and (iii) the uncertainty with respect to losses that may have to be recognised in the wake of the resolution measures applied. These factors stress the need to raise transparency regarding the financial and prudential position of financial institutions and, in particular, the quality of the assets, as well as to promote adjusted solutions to a decline in credit at risk.

A clearly more challenging framework in Portuguese banks' international activity should be added to the above factors. Either due to unfavourable developments or to legislative changes, some of the main Portuguese banks expect that income generation outside national territory may not be as important as it has been in recent years, when it allowed for positive contributions to results, in view of an extremely adverse domestic situation.

As regards the insurance sector, in particular life insurance, the extension of the low interest rate environment in the market makes it more difficult to meet financial guarantees provided in the past, as it aggravates the portfolio reinvestment risk. This may constrain the supply of new products with attractive profitability, and may even contribute, in the long run, to a decline in assets under management.

Given the constraints to income generation, the reassessment of the business models and cost structure of financial institutions is indispensable. Although the Portuguese banking sector has made some efforts – to reduce its branch network, cut other operational and administrative costs and sell non-strategic assets – this adjustment must be continued and expanded, in order to bring Portuguese banks' operational efficiency closer to that of their European peers, against which they compare adversely. This depends considerably on management decisions, and is crucial to re-establish profitability levels in a sustainable manner, as mentioned in previous issues of this Report.

Greater operational efficiency cannot, however, jeopardise the necessary investments to maintain appropriate levels of risk control and governance, thus avoiding a surge in risks and operational losses in the near future. The reformulation of the business models must also take into account the challenges related to demographic developments, as well as the opportunities and challenges associated with digital banking.

Box 4 • Banking Union architecture: challenges and constraints in the transition process

The sovereign debt crisis that started in 2010 and affected the euro area has led European decision-makers to look for a common solution for the vulnerabilities then faced by the Economic and Monetary Union, and to prevent similar situations in the future.

The strong link between the national financial systems and their sovereigns was identified as one of the factors originating and amplifying the financial instability that existed at the time. On the one hand, vulnerabilities in the banking systems of some Member States spread to the sovereign, which was forced to mobilise significant amounts in order to support banks in difficulty and prevent contagion to other institutions. The complexity and size of banking groups, the correlation between their balance sheets and the existence of cross-border exposures amplified this effect. On the other hand, funding difficulties faced by the sovereigns themselves have affected the financial sector and the financing of the economy, making the need for a considerable adjustment in all economic sectors of several euro area Member States more obvious.

This crisis threatened the existence of the single currency, and some Member States, unable to maintain the stability of their financial systems and sovereign financing, were forced to seek financial assistance.

The creation of the Banking Union was a political response to the risk of a euro area break-up, aimed at separating the risk of financial institutions from sovereign risk through supranational banking supervision, a common resolution mechanism and mutualisation of risk. The Banking Union rests on three pillars:

- Single Supervisory Mechanism (SSM): Entered into force in November 2014. The SSM is composed of the national supervisory authorities and the ECB. The ECB is responsible for the integrated functioning of banking system supervision and directly supervises significant institutions. Direct supervision of less significant credit institutions is delegated to the national supervisory authorities, but may be called back by the ECB. The responsibility of conducting macroprudential policy lies primarily with national authorities, but the ECB may apply more stringent measures;
- Single Resolution Mechanism (SRM): Became fully operational in January 2016 and aims to apply uniform rules for the orderly resolution of credit institutions in Member States participating in the Banking Union. The SRM is composed of the Single Resolution Board (SRB), the Single Resolution Fund (SRF, a common fund to finance resolution measures, funded by contributions from the banking sector and to be fully mutualised by 2024) and national resolution authorities. It also involves the European Commission and the Council of the European Union. The SRB, in addition to ensuring the effective and consistent functioning of the SRM as a whole, is directly responsible for the planning and application of resolution decisions to significant institutions, institutions operating in different countries in the Banking Union and any other institution where the use of SRF financial resources is needed. National authorities remain responsible for the remaining institutions. Faced with a bank that is likely to fail (assessed by the SSM or the SRB itself), where it considers the conditions for applying a resolution measure have been met, the SRB decides, with the involvement of the national resolution authorities of the Member States where the bank is established, which resolution tool(s) to apply (a decision which may be objected to by the European Commission and the Council of the European Union). National resolution authorities are then responsible for carrying out the process, monitored by the SRB;
- European Deposit Insurance Scheme (EDIS): Proposed by the European Commission in November 2015, to be fully financed by 2024, thus reaching the risk-sharing objective enshrined in the Banking Union. It is currently under discussion in the European Parliament and the Council of the European Union.

Implementing the Banking Union poses, however, several practical challenges, which should be discussed and solved in the short term. These challenges arise from the size and complexity of this process. Specifically, recent experience suggests that a number of issues should be reflected upon:

- Difficulties associated with the transition to a context with new common rules, where banking systems are still faced with difficulties from the past. In effect, Banking Union rules were conceived for banking systems with a relatively stable business and an adequate liabilities structure. At a time when access by a number of countries to markets is limited, Banking Union requirements will be met with difficulty and existing needs for capital increases can only be met using public funds in very limited circumstances. This may increase the application of resolution measures to banks that are viable but unable to attract private investment to meet their capital needs. The nature of resolution measures, created to deal with idiosyncratic problems in institutions, may have very negative consequences in the event of a generalised situation in a national banking system, creating additional uncertainty for investors and exacerbating institutions' funding difficulties. Therefore, recapitalisation solutions with public participation must be guaranteed at a European level, to safeguard both compliance with Banking Union objectives and a solution for the remaining systemic problems.
- Under the framework of the SRM, the SRF will only reach its target capitalisation level

by 2024, assuming that in the meantime the Fund is not used to support the application of any resolution measures. In addition, a mutualised deposit insurance scheme, under the terms proposed by the European Commission, would only be assured from this time frame onwards. Therefore, risk-sharing within the Banking Union will certainly remain incomplete until 2024. Furthermore, common supranational mechanisms still need to be defined, in order to ensure the financing of the SRF, in the event of immediate need, and a future EDIS.

- Another challenge to overcome is the considerable number of entities participating in the supervision and resolution of the banking system. The alignment of objectives is not guaranteed and priorities were not established when these responsibilities were allocated. In fact, it is unclear whether financial stability prevails over other objectives which may be pursued by these entities, such as competition in the Single Market. This potential misalignment of objectives increases the complexity of resolution processes and may lead to suboptimal, or even clearly undesired results, against a background where responsibility for preserving financial stability in each country mainly remains with national authorities, but the tools have been transferred to supranational authorities or have even become unavailable. As this potential misalignment also limits coordination between entities and jeopardises the effectiveness of processes, the current construction may not be adequate to the demands imposed on it.

To sum up, the operational model and the transition process towards a Banking Union should be rethought and readjusted, especially in the current macro-financial environment, in order to prevent asymmetries in their implementation and uneven effects across Member States, which may be particularly negative in more fragile countries. Recent experience also shows the need to clarify policy priorities at a European level and strengthen coordination between authorities to prevent constraints on compliance with Banking Union objectives in the future.

Box 5 • Guidelines to mitigate conduct risk associated with mis-selling of saving and investment products

Promoting customers' interests is a fundamental value in financial intermediation, thus is essential to ensure the best practice in the relationships between institutions and their customers.

On the one hand, the "misconduct" of institutions, including their employees and the distribution channels employed by them in the development of their activities, has an important impact on customer confidence in the financial system, with significant costs for society. In extreme situations, it may even discourage economic agents from using financial intermediation services. On the other hand, the materialisation of the conduct risks may imply significant costs for the institution involved, either in terms of its reputation, or as regards its financial soundness. These events could, under ultimate circumstances, become systemic, with negative consequences for the financial system as a whole.

Conduct risks may take various forms, especially the mis-selling of financial products and services, due to their important implications for the institution-customer relationship. Acknowledging the need to expand and strengthen the procedures adopted by institutions to prevent the occurrence of such episodes, the National Council of Financial Supervisors has established a working group to identify and evaluate conduct risks, namely those associated with the mis-selling of saving and investment products.

The incentives linked with conduct risks resulting from mis-selling were identified and categorised in the following areas: strategic objectives defined at institution or financial group level; regulatory/supervisory environment; competition and macroeconomic and financial context. These incentives may either have a widespread nature across the financial sector, or only be observed in certain financial subsectors.

This work also presents the current legislative framework and the ongoing initiatives (at national and international level) which are relevant for conduct risks associated with mis-selling. In addition, it outlines the stock-taking of supervision and enforcement instruments and procedures, with a view to identifying the most relevant best practice for the supervision and audit of mis-selling.

In the wake of the analysis and reflection by the working group, guidelines were published[43] to mitigate the main conduct risks identified. The purpose of these guidelines is to have an impact (or strengthen the impact) on the procedures to prevent and/or mitigate the main focus of mis selling of saving and investment products, covering the areas deemed to be more sensitive and/or more vulnerable to the accumulation and materialisation of this type of risk. The following guidelines are highlighted:

Governance of the supervised entities

- Strengthening the evaluation and adequacy mechanisms of the management boards and other essential functions, promoting a culture to prevent and signal conduct risks, and monitoring compliance with risk management policy.
- Implementing processes to ensure the independence and efficiency of the entities' key or essential functions, and strengthening the performance of the management boards and the compliance function in the treatment of customers' complaints.
- Creating or strengthening mechanisms of whistleblowing, ensuring the appropriate protection of the parties involved.
- Adopting or strengthening the entities' internal control models, taking into account the impact of the conduct risks on their financial soundness. Strengthening the role of compliance and internal audit functions when defining internal control mechanisms associated with sales of higher risk products and monitoring customer treatment and the quality of the information provided.
- Defining mechanisms to signal placement of abnormal volumes of certain types of products with customers, and implementing or strengthening the mechanisms for the prior checking and validation of compliance of the transactions. Promoting/increasing independent audits to the quality of the services provided and the risk management mechanisms.

Remuneration policy

- Defining formal responsibilities at the compliance and human resources level, when validating and auditing the definition and allocation of remuneration incentives, as well as the role of the compliance function in strengthening the mechanisms to check and scrutinise possible situations of irregular practice.
- Carrying out regular evaluations of remuneration schemes, especially as regards their impact on the provision of products and services by the supervised entities.
- The payment of guaranteed bonuses and/or commissions must be constrained by the entities and, if existing, must be subject to a review, elimination and annulment process, according to the evaluation of their adequacy.

Products' advising and sale processes

- Implementing guidelines regarding the type of agreement signed by the customer when agreeing/subscribing to products (formal and in writing) and the designation of the products. In particular, the use of expressions and/or terms inducing an incorrect perception of their risk should be excluded and, in the case of products other than deposits, the descriptions must include a warning, indicating that they are not covered by the deposit guarantee fund. Information provided to the customer must be guided by principles of clarity, simplicity, completeness, timeliness and objectivity.

- There should be a clear separation and differentiation between advice and the sale of a product. The provision of investment advice and discretionary management must be guided by criteria to meet the customers' interests and needs.
- The training of employees (including intermediaries) who provide information to customers must include strict criteria, at both technical and banking conduct levels. The qualification requirements and training plans must be monitored and revised, with the involvement of top management and the compliance function.

Product governance and monitoring

- Creating and developing products and/or services must take into account, inter alia, the target market, disclosure procedures, criteria for product testing and revising conditions/requirements to be implemented in the creation of new products or, in certain situations, in the revision of products already created (considering the best interests of customers and pending their prior consent).
- Promoting independent intervention of the compliance function in the product approval process and ensuring that those responsible for implementing and carrying out the products' governance and monitoring process are given sufficient independence, despite the entity's business goals.
- Defining rules for the validation and regular update of customers' risk profiles and procedures to evaluate the adequacy of the transaction, based on active collection of information on the customer profile, instead of processes that are too standardised or based on the customer self-assessment.
- Creating or strengthening internal restrictions to deter the sale of products to those other than the pre-defined target market. Products' sales with higher risk/complexity/sophistication must comply with stricter procedures preventing the occurrence of mis-selling.

Most guidelines do not require legislative changes, chiefly intended to clarify/achieve the regulatory framework in force or under preparation, corresponding to the minimum conditions to prevent mis-selling. Therefore, the supervised entities must comply with these guidelines, and must adjust their practices and behaviour accordingly.

Finally, reference should be made to the role played by financial illiteracy as a catalyst to mis-selling, in the sense that it reflects the inability of customers to correctly assess the risk associated with a specific financial product and/or service or the appropriateness of the product and/or service to their needs. The fight against mis-selling of saving and investment products will continue to be pursued by promoting the financial literacy of the Portuguese population, focusing on the awareness of the risks associated with these practices. In this field, the activity developed in Portugal within the scope of the National Plan for Financial Education, promoted by the National Council of Financial Supervisors, stands out. The most important initiatives carried out were the implementation of the *Todos Contam* website, the development of training courses for SMEs and entities related to the social economy, in the context of the implementation of Core Competencies for Financial Education, and the launch of an e-learning platform making it possible to widen these initiatives to different audiences.

Notes

1. *World Economic Outlook*, International Monetary Fund, April 2016.

2. On 6 April, Angola sent a formal request to the International Monetary Fund (IMF) to start discussions on an economic programme that may be supported by financial assistance from the IMF.

3. *European Economic Forecast, Spring 2016*, European Commission, May 2016.

4. Annual rates of change refer to consolidated end-of-period figures. Including loans and trade credits. The series is adjusted for securitisation operations, reclassifications, write-offs and exchange rate and price revaluations.

5. Housing prices increased by 3.1 per cent in 2015 and the number of transactions grew by around 27.4 per cent.

6. For more details, see https://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/IBMC/Pages/InqueritoaosBancossobreoMercadodeCredito.aspx

7. On this subject, see Special Issue 'An interpretation of household savings rate developments in Portugal' in the May 2016 issue of Banco de Portugal's *Economic Bulletin*.

8. A net decumulation of financial assets was observed during the same period, amounting to almost 13 per cent of GDP.

9. During the same period, value and price changes in debt outstanding (mainly reclassifications between institutional sectors) (7.6 p.p. of GDP) also contributed to the change in the total ratio.

10. The profitability ratio was calculated as the ratio of EBITDA to equity and obtained funding.

11. More liquid financial assets are the sum of currency, deposits and debt securities in the portfolio.

12. In total, €8.4 million of the IMF's loan was repaid in 2015, including repayments due in that period.

13. Banking system data is subject to series breaks due to the resolution measures applied to Banco Espírito Santo (BES) and BANIF – Banco Internacional do Funchal. Regarding BES resolution, the break arises from the fact that the assets/liabilities not transferred to the balance sheet of Novo Banco (NB) are not considered in the aggregate of the banking system from August 2014 onwards. In the absence of accounting information for BES on a consolidated basis for the period from 30 June 2014 to the day of implementation of the resolution measure (closing balance sheet and statement of profit and loss), the reporting of BES on individual basis, with reference to 31 July 2014, was considered when determining the aggregate results of the banking system for the third quarter of 2014. However, it must be stressed that the adjustments stemming from the resolution measure applied to BES were not considered. Concerning BANIF resolution, the break arises from the fact that the assets/liabilities transferred to the financial vehicle – Oitante, S.A. – are not considered in the aggregate of the banking system from 20 December 2015 onwards. In the absence of accounting information for BANIF on a consolidated basis for the period from 30 September 2015 to the day of implementation of the resolution measure (statement of profit and loss), the reporting of BANIF on individual basis, with reference to 30 November 2015, was considered when determining the aggregate results of the banking system for the fourth quarter of 2015. However, it must be stressed that the adjustments resulting from the resolution measure applied to BANIF were not considered.

14. Developments in 'credit to customers' were affected by the reclassification of a number of assets as 'non-current assets held for sale and discontinued operations', associated with the sale of Barclays' business in Portugal in the third quarter of 2015. Therefore, this reclassification had no impact on assets.

15. Liquidity gaps are defined as the difference between net assets and volatile liabilities as a percentage of the difference between total assets and net assets, for each residual maturity ladder. Indicators were calculated based on data and concepts set out in Instruction of Banco de Portugal No 13/2009. This indicator allows for an encompassing characterisation of the banks' liquidity position, by considering a wide group of assets and liabilities and their residual maturities.

16. In accordance with Article 3 of Commission Delegated Regulation (EU) 2015/61, of 10 October 2014, to supplement Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to liquidity coverage requirement for credit institutions. For more details, see the European Commission's website.

17. The European Commission's Delegated Act on the liquidity coverage ratio establishes that stress shall mean "a sudden or severe deterioration in the solvency or liquidity position of a credit institution due to changes in market conditions or idiosyncratic factors as a result of which there may be a significant risk that the credit institution becomes unable to meet its commitments as they fall due within the next 30 calendar days".

18. However, this comparison should be interpreted with caution, given that, unlike countries like Spain or Ireland, no vehicles were created in Portugal to absorb the banking system's non-performing assets. As such, these assets are still held by the banking system, which decreases the quality of total assets.

19. Technical provisions are an estimate of the value needed at any particular time to cover the commitments arising from insurance contracts, so far as can reasonably be foreseen.

20. In the first half of 2015 one non-life insurance company was incorporated in the universe of insurance companies supervised by ASF. Before this change, this company carried out its activity in Portugal as a branch. As such, the figures presented in this report take into account this change in the universe under review.

21. Direct business refers to the overall revenue of insurance companies from their commercial activity (the term direct business is used in contrast with the term reinsurance, also known as indirect business).

22. Considering the overall activity in Portugal of insurance companies supervised by ASF. Excluding the effect of the non-life operator that carried out its activity as a branch, the overall rate of change in production would be negative by 12.6 per cent.

23. Excluding the effect of the non-life operator that carried out its activity as a branch, the growth rate of non-life production would be 3.8 per cent.

24. Excluding the effect of the non-life operator that carried out its activity as a branch, the increase in the cost of claims would be 2.1 per cent.

25. The claims ratio is defined as the ratio of the cost of claims to gross written premiums.

26. The results are available at EIOPA's website: https://eiopa.europa.eu/Pages/News/Results-of-the-first-EU-stress-test-for-occupational-pensions.aspx

27. The results were computed according to the calculation assumptions applicable in each individual country (at national level, according to the assumptions of the funding scenario).

28. For sector analysis purposes, according to the *Financial Stability Report*, investment funds include money market funds (comprising securities investment funds) and exclude venture capital funds. In Eurosystem statistics, money market funds are considered other monetary financial institutions, and venture capital funds are included in investment funds. In December 2015, venture capital funds reached approximately €3.8 billion.

29. From the perspective of the values invested by investors, i.e. in terms of the value of investment fund shares/units, net assets under management reach €23 billion, 56 per cent of which corresponds to real estate investment funds. The non-synthetic leverage, resulting from the difference between total assets and the value of investment units, is chiefly due to real estate investment funds.

30. See, by way of example, ECB, *Financial Stability Review*, November 2015.

31. The funds are classified in terms of investment policy, taking into account the types of assets in which the investment funds primarily invest, usually on the basis of a strategy indicated in the management rules and regulations.

32. Step-in risk refers to the risk that a bank will provide financial support to an entity beyond its contractual obligations, should the entity experience financial stress. In this respect, see http://www.bis.org/bcbs/publ/d349.htm

33. The FSB *Global Shadow Banking Monitoring Report 2014* (http://www.fsb.org/wp-content/uploads/r_141030.pdf) considers a category of entities known as *MUNFI (Monitoring Universe of Non-Bank Financial Intermediation)* which corresponds, at Eurosystem statistics level, to investment funds as a whole, including money market funds and other financial institutions. Therefore, the FSB excludes financial intermediation carried out by insurance corporations, pension funds and public financial institutions. More recently, in the 2015 Report (http://www.fsb.org/wp-content/uploads/global-shadow--banking-monitoring-report-2015.pdf), the FSB adjusted this measure. However, taking into account that this latter approach is still at an exploratory stage, restricted to a few jurisdictions, the ESRB's work, in which Banco de Portugal has participated, continues to use the broad and narrow measures advanced by the FSB until the 2014 Report.

34. See, by way of example, ECB, *Financial Stability Review*, November 2015.

35. Implied interest rates are calculated as the ratio of interest flows in the P&L statement to the average values of the corresponding account balance.

36. A preliminary version of this analysis was used by Banco de Portugal before the Parliamentary Committee on Budget, Finance and Administrative Modernisation, on 27 April 2016, regarding the draft legislative changes on the use of negative interest rates.

37. The internal credit portfolio as a whole, excluding housing loans, includes credit to firms and general government, as well as credit for consumption and other purposes in the households segment.

38. *EU Bank Recovery and Resolution Directive.*

39. For further details on these issues, see Banco de Portugal, *Relatório de Supervisão Comportamental*, 2015 (in Portuguese only).

40. See *Análise de Riscos do Setor Segurador e Fundos de Pensões*, December 2016, ASF (in Portuguese only).

41. As described in Box 5 of the latest issue of the *Financial Stability Report.*

42. See Box "Implications of amendments to the European bank resolution framework on monetary and financial conditions", in Section 2 Monetary and financial conditions – Portugal, of the *Economic Bulletin*, May 2016.

43. Available on Banco de Portugal's website, at https://www.bportugal.pt/pt-PT/OBancoeoEurosistema/Cooperacaoinstitucional/ConselhoNacionalSupervisoresFinanceiros/Lists/FolderDeListaComLinks/Attachments/174/CNSF_20160303.pdf (in Portuguese only).