2013: I

Macro-Financial Review

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

MACRO-FINANCIAL REVIEW

Notes

1. Unless otherwise stated, this document refers to data available on Monday 20 May, 2013.

2. Unless otherwise stated, the aggregate banking data refer to all credit institutions operating in the Republic of Ireland.

   - *Domestic banks* refer to Allied Irish Banks (including EBS), Bank of Ireland and Permanent TSB. The term *domestic banks*, unless stated otherwise, excludes the Irish Bank Resolution Corporation (IBRC), the liquidation of which was announced on 6 February, 2013.

   - *Foreign-owned resident banks* are foreign banking groups that have a presence (either bank or branch) in the Republic of Ireland.

3. Country abbreviations follow ISO standards with the exception of the United Kingdom, which is referred to as 'UK'. In addition, the following symbols are used:

e	estimate	H	half-year
f	forecast	rhs	right-hand side
Q	quarter	lhs	left-hand side

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Preface

The Macro-Financial Review offers an overview of the current state of the macro-financial environment and an assessment of key risks to financial stability in Ireland.

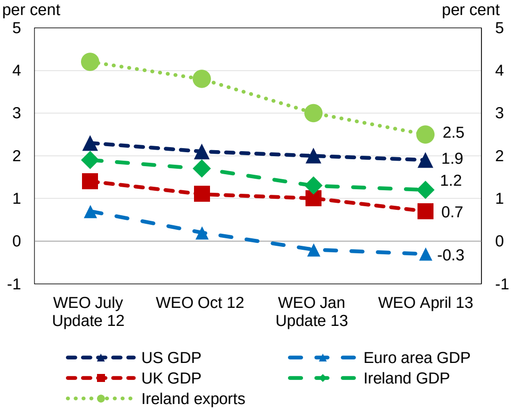
Its aims are twofold: (i) to help the public, financial-market participants and international and national authorities better evaluate financial risks; and (ii) to promote informed dialogue on the financial system's strengths and weaknesses and efforts to strengthen its resilience.

The Review assembles some of the material kept under surveillance by the Financial Stability Committee of the Central Bank of Ireland. The Review focuses on downside risks but better-than-expected outcomes are also possible.

The Macro-Financial Review evaluates developments since the previous Review, published in November 2012, and assesses risks to financial stability over the next two years.

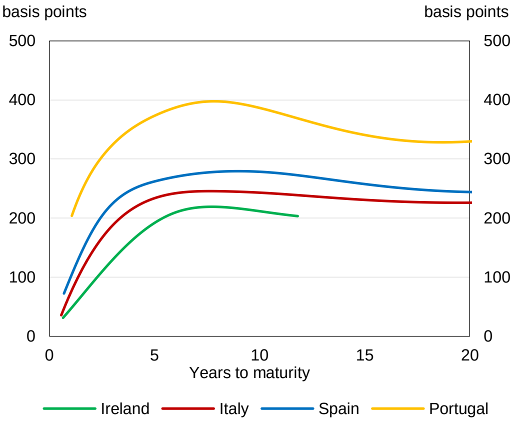
1. Overview

Chart A1: Forecasts for US, euro area, UK and Ireland GDP growth in 2013



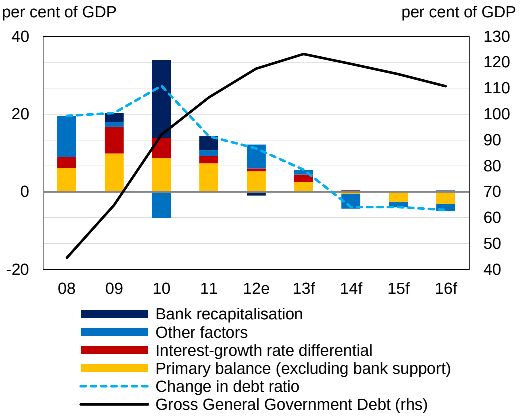
Source: Central Bank of Ireland, International Monetary Fund.
Notes: GDP forecasts for 2013 are IMF World Economic Outlook forecasts; Irish GDP and exports forecasts are Central Bank of Ireland forecasts.

Chart A2: Sovereign bond yield curves for Ireland, Italy, Portugal and Spain



Source: Central Bank of Ireland, Barclays Capital.
Notes: Chart shows sovereign bond spreads for Ireland, Italy, Portugal and Spain over German bonds of matching maturities. Data as at 20 May 2013.

Chart A3: Irish general government debt and contributions to change



Source: Department of Finance and Eurostat.
Notes: Projections calculated using Department of Finance April 2013 Stability Programme Update details for 2012-2015. Outturn data based on April 2013 Maastricht Returns (Eurostat).

Overview

Macro-financial conditions remain challenging. In the period since the publication of the last Review, the external macroeconomic outlook has worsened. Economic growth forecasts for Ireland's main trading partners have continued to be revised down. Given Ireland's significant dependence on exports, which amount to more than 100 per cent of GDP, this development is one of the key external macro-financial vulnerabilities at present (Chart A1). Nevertheless, exports continue to contribute to overall economic growth. Ireland recorded positive growth in 2012, although this was somewhat lower than in 2011. The Irish Purchasing Managers' Index (PMI), a survey of manufacturing activity, despite some recent weakness, still remains stronger than global and euro area PMIs.

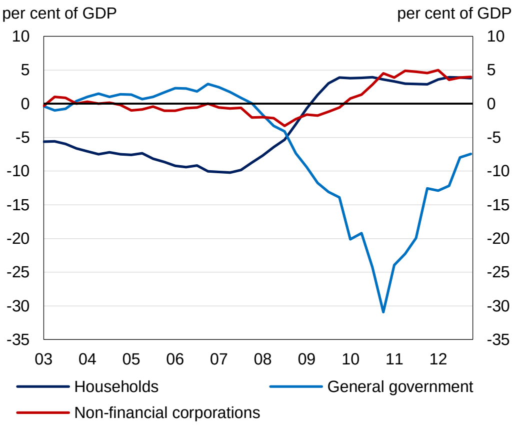
Investor confidence in the Irish sovereign and domestic banks has continued to improve since the last Review. Ireland's long-term government bond yields have fallen to their lowest levels since 2006, pushing the yield curve below those of other stressed sovereigns in the euro area (Chart A2). This improvement is due to both adherence to the programme of external assistance and last year's announcement by the European Central Bank (ECB) of a programme of Outright Monetary Transactions (OMT). As a consequence of this improvement in sentiment, both the sovereign and Irish banks have recently issued long-term debt.

A significant portion of the required fiscal adjustment in Ireland has been achieved and funding pressures have been relieved by both a replacement of government-issued Promissory Notes (see Box 3) and the agreement in principle to a maturity extension of some of Ireland's European Financial Stability Facility loans (Box 4). However, the underlying deficit and debt burden remain elevated and there is little room for complacency if deficit targets are to be adhered to and a reduction in the debt-to-GDP ratio is to occur in the coming years (Chart A3). A rapid reappraisal of sovereign risk by financial markets could reverse these positive developments and hinder continued market access and debt sustainability in the medium term.

Households and small and medium enterprises (SMEs) continue to reduce their debt. While this rebalancing is necessary, it constrains domestic demand at a time when the public sector is undertaking an even larger correction (Chart A4). Nevertheless, there was a small increase in numbers employed in the final quarter of 2012 and domestic demand is forecast to recover slowly.

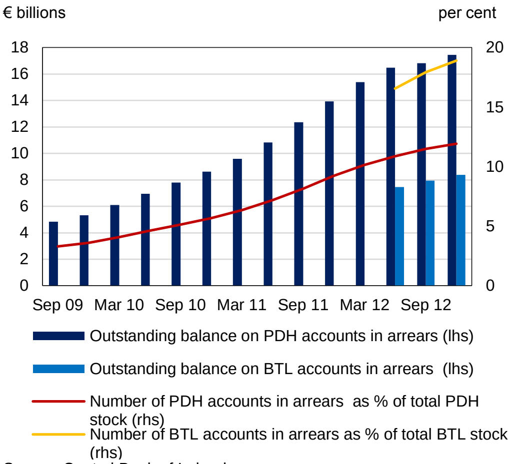
The largest uncertainty facing the domestic economy is the

Chart A4: Irish sector net saving and borrowing



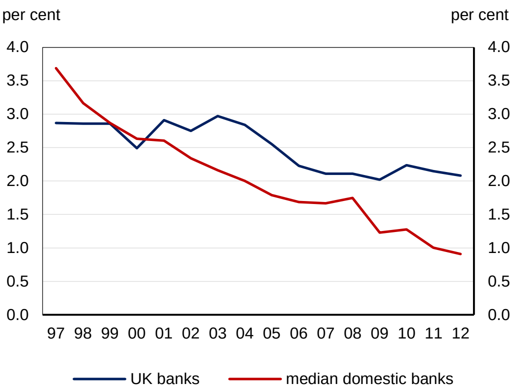
Source: Central Statistics Office.
Notes: Financial flows measure net saving and net borrowing and are derived from Institutional Sector Accounts compiled by the Central Statistics Office. They summarise the financial flows associated with each sector's income and expenditure. Positive flows indicate net saving. Negative flows indicate net borrowing.

Chart A5: Mortgage loans in arrears



Source: Central Bank of Ireland.
Notes: Data for buy-to-let mortgages are available only from June 2012. Abbreviations: Primary dwelling home (PDH); buy to let (BTL). Last observation is December 2012.

Chart A6: Irish and UK banks, net interest margins



Source: Domestic banks' annual reports, Bank of England.
Notes: Net interest margin is defined as the ratio of net interest income to interest earning assets. Time varying sample of domestic banks. The net interest margin is inclusive of costs incurred in 2010-12 as a result of the Eligible Liabilities Guarantee.

health of the banking sector and its ability to support the real economy with credit at sustainable rates. The stock of impaired mortgages (Box 1) and SME loans has continued to rise and is the main short-term risk. Mortgage arrears have been driven by the fall in property prices, the elevated unemployment rate, and the extensive output loss associated with the crisis since 2008. Just under 95,000 loans or approximately 11.9 per cent of the total stock of primary dwelling loans were in arrears for more than 90 days in December 2012 (Chart A5), compared with 11.5 per cent in September 2012.

Effective arrears management is necessary to eliminate the uncertainty about individual households' and banks' balance sheets. Recent mortgage arrears targets announced by the Central Bank of Ireland are intended to form the basis for a systematic work-out of arrears.[1] These targets are applicable to both banks subject to the Financial Measures Programme and foreign subsidiaries of European banks operating in the domestic retail market.[2] Related to this, the recent reform of the bankruptcy process must be followed by efficient implementation to ensure problem debt is systematically reduced over time.

A second challenge involves the domestic banking sector reconfiguring its business models to focus on the core business of lending to the real economy. Domestic deposits have remained stable, which has facilitated the removal of the Eligible Liabilities Guarantee scheme. The May 2013 ECB policy rate reduction may have a mixed effect on profitability depending on the pricing and composition of Irish banks' assets and liabilities (Box 5), as tracker loan interest rates are reduced as well as interest rates on liabilities such as deposits. After nearly a decade of decline, Irish bank margins remain very narrow (Chart A6) and banks are still reliant on central-bank funding.

Longer-term bank viability, and hence credit-supply conditions in Ireland, depend on the banks returning to profitability and their successful transition back to market-based funding, building on recent improvements in funding conditions. Both arrears and sustainable funding will remain challenges in the coming years and will need to be overcome to ensure banks' resilience. Irish banks are currently capitalised in excess of the regulatory requirements stemming from the Financial Measures Programme. Future capital needs will depend on both requirements related to the programme and evolving regulatory requirements related to implementation of Basel III. The success in meeting these challenges will also be influenced by euro area-wide developments, implementation of the euro area's proposed Single Supervisory Mechanism, and broader euro area institutional reforms.[3]

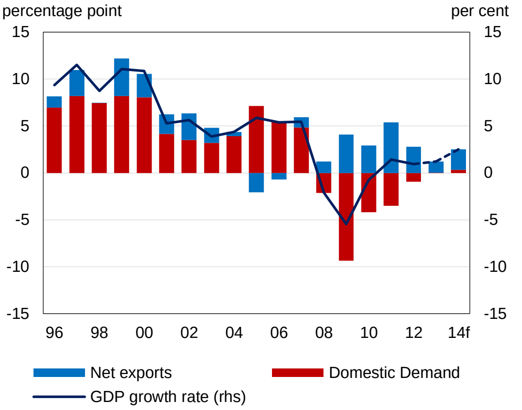
[1] For more details see Central of Ireland (2013) 'New Mortgage Arrears Targets and Consultation on Review of the CCMA'. *Central Bank of Ireland Press Release*, 13 March.
[2] The Financial Measures Programme (FMP) outlines the package of banking-sector measures Ireland adopted as part of the 2010 agreement with the EU, ECB and IMF, aimed at putting the finances of the domestic banks on a secure basis through recapitalisation, downsizing and reorganisation. As part of this Programme the Central Bank of Ireland completed, in 2011, an independent assessment of loan losses, a stress test of the capital resources of the domestic banks (Prudential Capital Adequacy Review) and the establishment of funding targets aimed at reducing leverage, reducing reliance on central-bank funding and ensuring convergence to Basel III liquidity standards (Prudential Liquidity Assessment Review). For more see Central Bank of Ireland (2011) *Financial Measures Programme Report*. Dublin.
[3] In the proposed Single Supervisory Mechanism ultimate responsibility for specific supervisory tasks related to the financial stability of all euro area banks will lie with the ECB. See European Commission (2012) "Commission proposes new ECB powers for banking supervision", Press Release, Reference: IP/12/953, 12 September 2012.

2. Macroeconomic environment

2.1 Macroeconomic overview

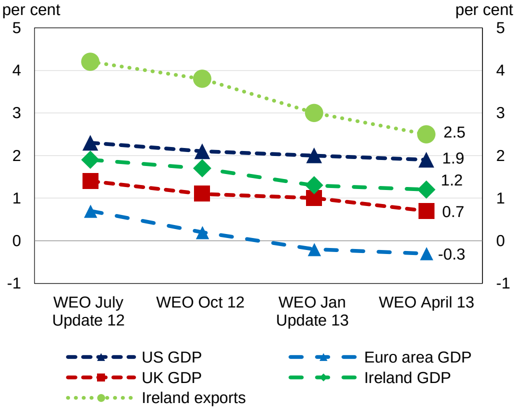
Irish GDP increased for the second successive year in 2012 and most official and private-sector forecasters predict moderate growth in 2013. However, risks to the economic outlook remain elevated. Key risks are weak external demand and the uncertainty surrounding euro area economic and financial developments. Additionally, high levels of debt and mortgage arrears remain a concern, while persistent unemployment and constrained credit supply continue to weigh on the domestic recovery.

Chart 1: Sources of real GDP growth



Source: Central Statistics Office, Central Bank of Ireland.
Notes: Series are year-on-year percentage changes. 2013 and 2014 are forecasts from the Bank's Quarterly Bulletin, April 2013.

Chart 2: Forecasts for US, euro area, UK and Ireland GDP growth in 2013



Source: International Monetary Fund, Central Bank of Ireland.
Notes: GDP forecasts for 2013 are IMF World Economic Outlook forecasts; Irish GDP and exports forecasts are Central Bank of Ireland Quarterly Bulletin forecasts.

External environment

Irish GDP grew 0.9 per cent in real terms in 2012, the second year of growth, albeit at a slower rate than in 2011, when GDP grew by 1.4 per cent. Weaker GDP growth was due mainly to a slowdown in external demand, which slowed growth in Irish exports, and a continued drag from negative domestic demand. Exports are a key driver of Irish economic growth (Chart 1) and as such the recovery remains vulnerable to weak external demand, forecasts of which have been recently revised downwards (Chart 2).[4] The outlook for the euro area, the UK and the US is for modest or stagnant growth in 2013. The Central Bank of Ireland forecasts real GDP growth of 1.2 per cent for Ireland in 2013.

Irish competitiveness has improved but the economy would benefit from continued progress in reducing labour costs. Some of the improvements in competitiveness in recent years have been eroded since mid-2012 by unfavourable exchange rate movements, particularly against sterling, which is reflected in the effective exchange rate indicators for Ireland (Chart 3).

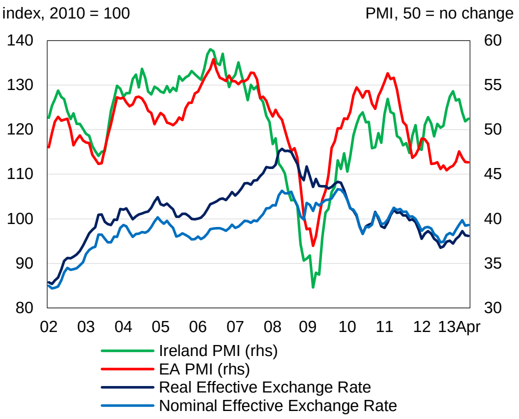
While market confidence in the Irish sovereign has improved dramatically since last summer, assisted by the ECB's announced programme of Outright Monetary Transactions (see Section 2.4), Ireland remains vulnerable to continued uncertainty surrounding the euro area sovereign debt crisis.

Domestic environment

Risks arising from the domestic environment remain elevated but are largely unchanged since the last Review. While there has been a moderation in the drag from consumption and investment, the high level of public and private sector debt and related arrears remain of concern (Chart 4) (see Section 2.3, 3.2 and Box 1). Continued fiscal adjustment is necessary to address the high budget deficit, but will weigh on domestic demand in the

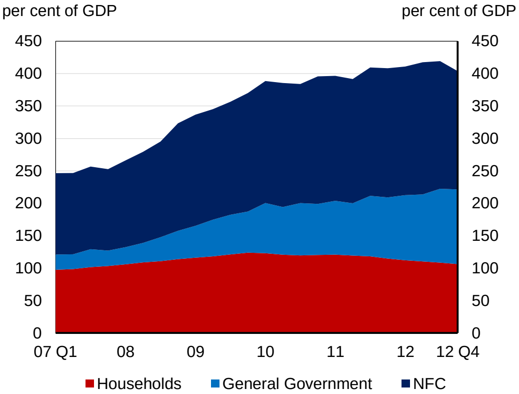
[4] For a discussion on the effect of external GDP forecast revisions on Irish GDP forecasts, see Conefrey, T. (2013) 'Box A: Understanding Revisions to Short-Term Economic Forecasts'. *Central Bank of Ireland Quarterly Bulletin*, January 2013.

Chart 3: Irish competitiveness



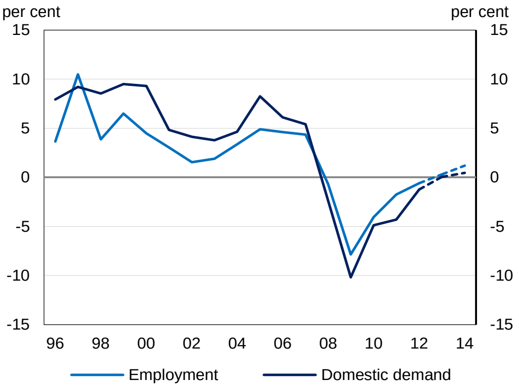
Source: Central Bank of Ireland, Bank for International Settlements.
Notes: A rise in the nominal and real effective exchange rate indicators implies a deterioration in competitiveness while a fall represents an improvement. In relation to the Purchasing Managers' Index (PMI), a value above 50 implies an improvement in sentiment while below 50 implies a deterioration.

Chart 4: Outstanding Irish debt



Source: Central Bank of Ireland.
Notes: Data are from the Quarterly Financial Accounts. NFC is non-financial corporates. NFC and General Government debt refer to loans and securities. Household debt refers to short- and long-term loans. See MFR 2012:II for a discussion on how NFC debt is calculated.

Chart 5: Employment and domestic demand growth



Source: Central Statistics Office, Central Bank of Ireland.
Notes: Series are year-on-year percentage changes. 2013 to 2014 are forecasts from the Bank's Quarterly Bulletin, April 2013.

near term. High funding costs for banks impact on the cost and availability of credit to the real economy and, along with ongoing household debt reduction, act as a drag on consumption and investment.[5] A failure to improve the supply of credit to Irish small- and medium-sized firms would pose an additional risk to the domestic recovery.

High and persistent levels of unemployment also remain a concern. The Irish unemployment rate stood at 14.2 per cent (seasonally adjusted) in 2012 Q4, compared with a euro area average of 11.8 per cent. In the final quarter of 2012, there was a fall in the unemployment rate, in both year-on-year terms and on a quarterly basis. However, this was due partly to emigration and lower participation rates.[6] More significantly, employment trends, while remaining subdued, have stabilised further since the last Review.[7] The final quarter of 2012 saw the first increase in employment since 2008, since which time there has been a loss of over 300,000 jobs. The Central Bank of Ireland forecasts a modest employment increase of 1.2 per cent by 2014 (Chart 5). Business sentiment indicators such as the Irish Purchasing Managers' Index, despite weakening since early 2013, also appear robust and remain above the euro area average (Chart 3).

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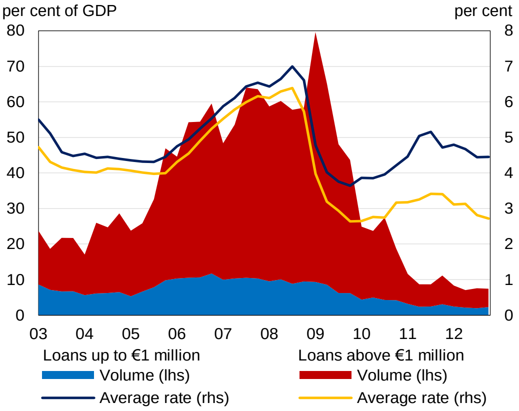
[5] There is also evidence that a fall-off in housing equity withdrawal negatively affects certain types of consumer spending. See Lydon, R. and O'Hanlon, N. (2012) 'Housing equity withdrawal in Ireland: 2000 – 2011'. *Central Bank of Ireland Economic Letter Series*, Vol. 2012 No.6.
[6] Conefrey, T. (2013) 'Box C: Migration in Ireland: Recent trends in historical context'. *Central Bank of Ireland Quarterly Bulletin*, January 2013.
[7] The CSO has indicated that caveats exist around the 2012 Q4 employment figures. See CSO (2013) 'Quarterly National Household Survey Quarter 4 2012'.

2.2 Non-financial corporations

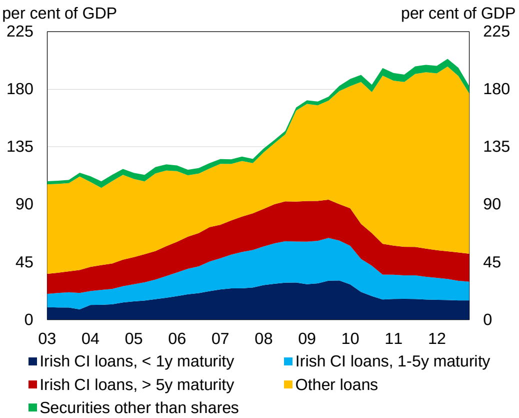
Ireland's non-financial corporate sector remains highly indebted. While much of this indebtedness is attributable to multinational companies, with limited links to the domestic financial sector, the debts of Irish-owned firms are also high and pose a risk to financial stability. Financing conditions for non-financial corporations have weakened slightly since the last Review, especially for Irish-owned, small- and medium-sized enterprises. Bank lending is lower, and interest costs remain high, despite recent ECB policy rate reductions. The credit risk of lending to non-financial firms remains high; the rate of liquidations of potentially-insolvent companies is over twice the average of the past 20 years.

Chart 6: New lending by banks to NFCs



Source: Central Bank of Ireland, Central Statistics Office.
Notes: This chart depicts lending by credit institutions resident in Ireland to euro area NFCs. Irish NFCs represent approximately 87 per cent of the sample, based on December 2008 figures. "Average rate" refers to average interest rates agreed by borrowers and lenders. Quarterly frequency to 2012 Q4.

Chart 7: Sources of Irish NFC debt



Source: Central Bank of Ireland, Central Statistics Office.
Notes: "Irish CI loans" are loans owed to credit institutions resident within the State. "Other loans" are owed to non-residents (e.g. overseas affiliates and corporate treasuries of multinational corporations) and Irish non-bank entities (e.g. other NFCs and NAMA). In Q2 2012, non-residents accounted for almost two-thirds of NFC debt owed to creditors other than Irish credit institutions, while Other Financial Intermediaries (OFIs, including NAMA) accounted for approximately one-sixth. A large transfer of loans from banks to NAMA in 2010 reduced Irish bank lending and increased OFI lending to NFCs.

Financing conditions

Overall financing conditions for non-financial corporations (NFCs) have weakened since the last Review. The volume of new lending by Irish banks to NFCs has remained below 12 per cent of GDP since 2011, below the pre-bubble level of around 20 per cent in 2003-05 (Chart 6). The low value of available collateral, such as property, has constrained recent lending volumes.

Nominal interest rates remain low on large loans to businesses and continued to fall during 2012. Nominal interest rates on NFC loans up to €1 million are higher. This suggests higher real interest rates for small and medium enterprises (SMEs), which are particularly sensitive to bank lending conditions because they have few other sources of finance.

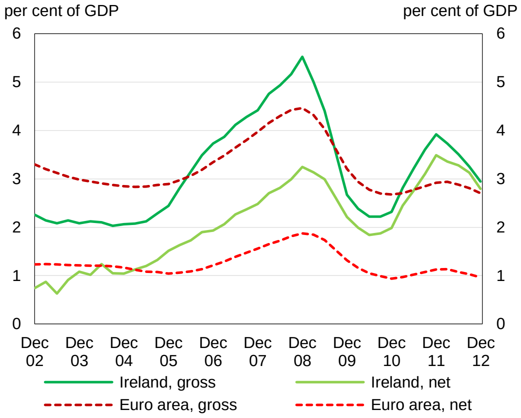
NFC debt levels are high, but debt owed to Irish banks is falling (Chart 7). This is due to net loan repayments, write-downs of bad debts and transfers of loans to the state-run National Asset Management Agency (NAMA). NAMA was created in 2009 to acquire non-performing, property-related loans from the domestic banking sector.[8] Other sources of debt include the financial activities of multinational corporations, such as intercompany lending from non-resident affiliates and corporate treasuries. These debts grew rapidly from 2008 to 2012, due primarily to lending from non-resident creditors,[9] but the NFC sector's net debt remained stable because of corresponding acquisitions of debt instrument assets. Given that bonds and other debt securities are not a significant component of Irish corporate finance, a wider range of financing sources than Irish banks could potentially mitigate the effects of domestic financial sector risks on firms.[10]

Debt service capacity

The key risks to corporations' ability to service debts include changes in interest rates, profits and revenue. Insolvencies and reduced revenue can also transmit credit risk to households

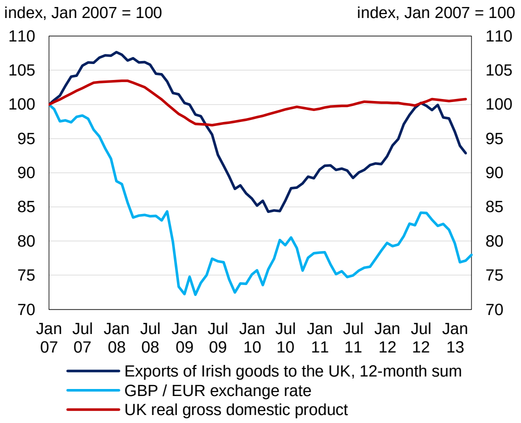
[8] NAMA has acquired loans (land and development and associated loans) with a nominal value of €74 billion from participating financial institutions. Its objective is to obtain the best achievable financial return for the State on this portfolio over an expected lifetime of up to 10 years.
[9] Cussen, M. and O'Leary, B. (2013), 'Why are Irish Non-Financial Corporations so Indebted?'. Central Bank of Ireland Quarterly Bulletin, January 2013.
[10] Box 2 in European Central Bank (2012), *Financial Stability Review*, December 2012 describes developments in the external financing of euro area NFCs since 2000.

Chart 8: Ireland non-financial corporations' debt interest payments



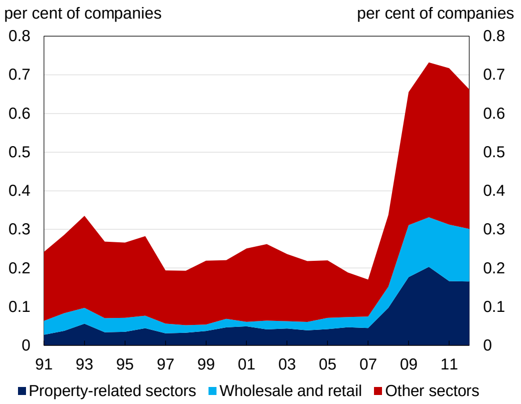
Source: Central Statistics Office, Eurostat.
Notes: Gross interest equals interest paid. Net interest equals interest paid less interest received. In the ESA95 system of national accounts, interest is measured before the deduction of tax, and excludes the implicit charge for financial intermediation services included in interest payments (i.e. Financial Intermediation Services Indirectly Measured).

Chart 9: UK economic indices



Source: Central Statistics Office, European Central Bank.
Notes: Exports are presented as the sum of goods exports to Great Britain and Northern Ireland in the twelve months to date. Final date of exports series is March 2013. Exchange rates are measured at end-of-month levels. Final date of exchange rate series is April 2013. GDP data are presented on a quarterly basis. GDP in Q1 2013 is based on a preliminary estimate.

Chart 10: Potentially-insolvent liquidations



Source: Department of Jobs, Enterprise and Innovation, Central Bank of Ireland calculations.
Notes: Sum of creditors' voluntary liquidations and court liquidations notified to the Companies Registration Office. Property-related sectors comprise construction and real estate. Chart shows contributions of each group to the total annual rate of liquidations. 2012 estimates based on data from first six months of the year.

through changes in employment and workers' incomes.

Aggregate NFC debt service costs, relative to GDP, are higher in Ireland than in other euro area countries (Chart 8), due in part to the interest paid on the intra-group debt of Ireland's multinational corporate sector. High indebtedness raises the sensitivity of bank-dependent Irish firms to retail interest rate levels, which have eased since the last Review. Interest rate changes are transmitted rapidly to NFCs because of the prevalence of floating-rate loans and short-term lending (Chart 7).

The overall trend in profitability of Irish NFCs is difficult to summarise. Multinational corporate profits are large and volatile, and do not reflect indigenous NFC profits or the rest of the Irish economy. In contrast, the earnings of Irish firms depend more on local factors such as domestic and external demand.

Among Irish-owned enterprises, non-exporters account for 82 per cent of employment and 67 per cent of economic activity as measured by gross value added.[11] This illustrates the importance of domestic demand, which has contracted since the last Review (Section 2.1) and is expected to increase only marginally until 2014. A fall in domestic demand would put more pressure on the earnings of non-exporting firms.

Irish export growth during the crisis has been led by multinational corporations, which do not depend on Irish institutions for finance. Export forecasts have declined since the last Review due to low GDP growth among European trading partners, such as the United Kingdom, which is the destination of almost half of Irish-owned firms' exports.[12] The fall in the value of sterling in 2007-08 (Chart 9) reduced euro area NFCs' competitiveness in the UK. Exchange rate movements in early 2013 may have similar consequences.

Credit risk remains high as a result of weak profitability and revenue. Since 2009, approximately 0.7 per cent of companies per year have been liquidated while potentially insolvent, which is higher than in earlier periods of low growth (Chart 10). Liquidations are expected to have remained at these levels in 2012, based on interim data.

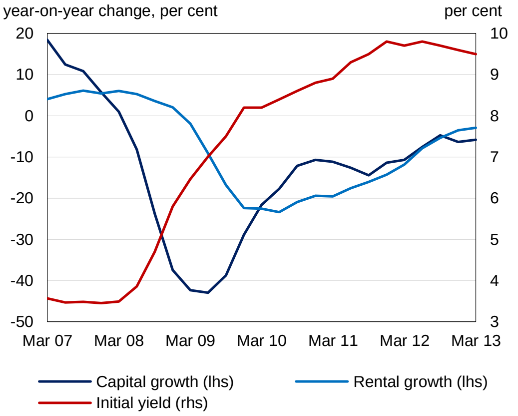
Commercial property

Developments in the commercial property market are relevant to NFCs as real estate provides an important asset and source of collateral for them. Commercial property is of additional relevance from a financial stability perspective at present, given, for instance, the exposure of NAMA to the market.

Commercial property prices continue to decline, falling at a year-on-year rate of 5.8 per cent as of March 2013. Prices also continue to decline on a quarterly basis, though there appears to be a trend towards stabilisation as the pace of decline has been

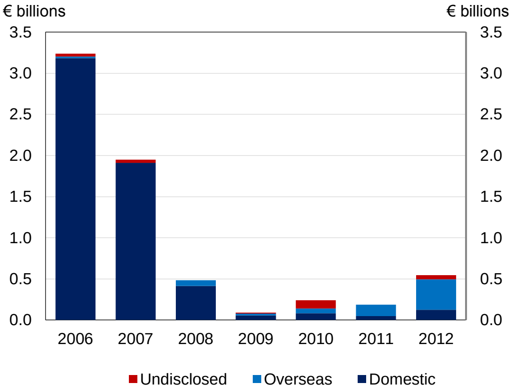
[11] Lawless, M., McCann, F. and McIndoe-Calder, T. (2012), 'SMEs in Ireland: Stylised facts from the real economy and credit market'. Central Bank of Ireland Quarterly Bulletin, April 2012. These figures exclude the construction and financial services sectors.
[12] O'Brien, D. and Scally, J. (2012), 'Cost Competitiveness and Export Performance of the Irish Economy'. Central Bank of Ireland Quarterly Bulletin, July 2012.

Chart 11: Commercial property capital value growth, rental growth, and initial yield



Source: Investment Property Databank.

Chart 12: Irish commercial property investment spending



Source: CBRE Research.
Notes: Investment spending relates to transactions greater than €1 million.

slowing. There has been a further easing in the year-on-year rate of decline in commercial rents since the last Review. Initial yields declined marginally but remain just under 10 per cent (Chart 11).

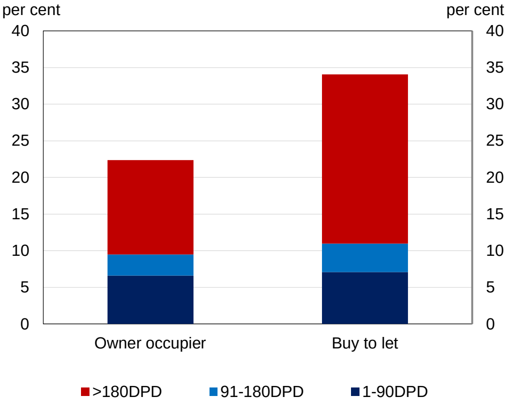
The second half of 2012 saw a significant increase in the volume of investment transactions, following three years of particularly subdued activity (Chart 12). A notable feature of recent transactions is the prevalence of foreign investors, who accounted for the majority of investment in 2012. This contrasts with the mid-2000s when practically all investment activity was undertaken by domestic investors, much of which was financed by debt and which contributed significantly to the Irish banking sector's exposure to commercial property. Early indications suggest the momentum in investment activity has continued, with investment spending of almost €340 million in the first quarter of 2013.

Notwithstanding the recent increase in transactions and indications that supply is tightening in some pockets of the market, a substantial overhang of property remains. NAMA, which currently has a portfolio of Irish assets worth approximately €1.5 billion for sale, is expected to bring a continued supply of properties onto the market. The liquidation of the Irish Bank Resolution Corporation (IBRC), which was announced in February, may also result in property coming onto the market in the coming months. At end-2012, IBRC held €10.8 billion of Irish commercial real estate assets. This supply may continue to exert general downward pressure on prices.

2.3 Household sector

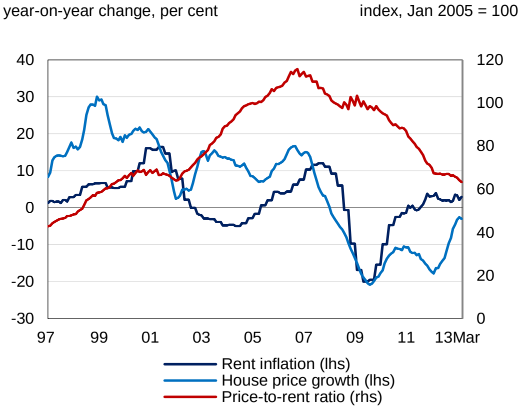
Mortgage arrears and weak domestic demand are the key risks to financial stability arising from the household sector. The weak macroeconomic environment faced by households and fragility in the property market are contributing to the persistence of these risks. Since the last Review, there has been a slight improvement in the balance-sheet position of the household sector with net worth rising for the first time since 2008. However, the process of balance-sheet repair is gradual, and households remain highly indebted and vulnerable to any decrease in income or increase in interest rates.

Chart 13: Value of mortgage accounts in arrears as percentage of total outstanding mortgages



Source: Central Bank of Ireland.
Notes: Data show the value of mortgage accounts in arrears as a percentage of total outstanding mortgage account balances. DPD stands for days past due. Data as at 2012 Q4.

Chart 14: House price growth, rent inflation and house price to rent index



Source: Central Statistics Office, Permanent TSB/ESRI, Central Bank of Ireland calculations.
Notes: Rent inflation and house price growth are shown as year-on-year changes.

Mortgage arrears

Mortgage arrears remain a key risk to financial stability (see Box 1 and Section 3.2). Since the last Review, the rate at which Irish households are entering into early-stage arrears[13] on their mortgages has slowed. However, the overall level of mortgage arrears on both owner occupier and buy-to-let mortgages (Chart 13) is a cause for concern and is high relative to other developed-country banking crises.[14]

Unemployment is a significant driver of mortgage arrears. The last quarter of 2012 saw an improvement in employment conditions with both a fall in unemployment and a rise in employment (see Section 2.1). While a continuation of these trends is forecast for 2013, changes to employment conditions are likely to be modest and may relieve arrears only marginally.

An important part of the solution for dealing with household indebtedness and the repair of the banking system will be resolving individual cases of arrears. In this regard, earlier this year the Central Bank of Ireland announced measures, including the publication of performance targets for the main mortgage banks, to address the mortgage arrears problem.[15] Additionally, new legislation alters the personal insolvency arrangements in Ireland substantially.[16] Changes include a reduced bankruptcy term, from twelve years to three, and the introduction of non-judicial insolvency procedures for dealing with both secured and unsecured debt. Preliminary estimates suggest 15,000 people could avail of the main non-judicial settlement arrangements within 12 months, with a further 3,000 applying for bankruptcy.[17]

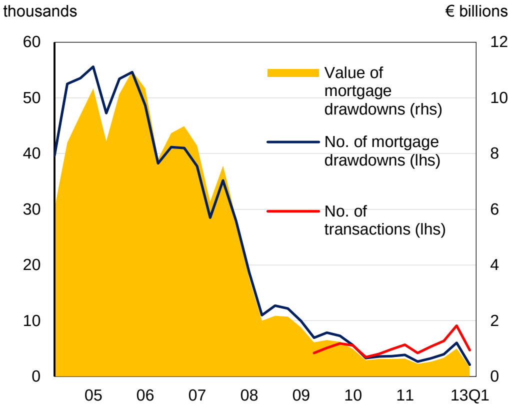
Residential property market

In combination with the level of mortgage arrears, negative equity is a major determinant of banks' loss rates on residential property portfolios. Falling house prices can also influence the behaviour of households through wealth effects or confidence.

Prior to March of this year, the year-on-year pace of price

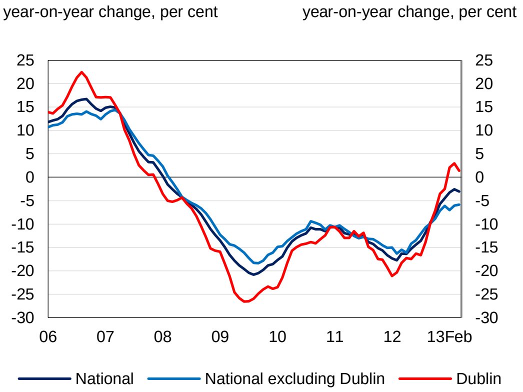
[13] Early-stage arrears are defined as accounts which are 0-90 days past due.
[14] See Laeven, L. and Valencia, F. (2012) 'Systemic Banking Crises: An Update'. *IMF Working Paper Series*, No. WP/12/163.
[15] Central Bank press release March 13 2012.
[16] See Personal Insolvency Act 2012.
[17] Shatter, A. (2012) 'Personal Insolvency Bill', Speech at Second Stage Seanad Eireann, Nov 21, 2012.

Chart 15: Housing market activity: transactions and mortgage drawdowns



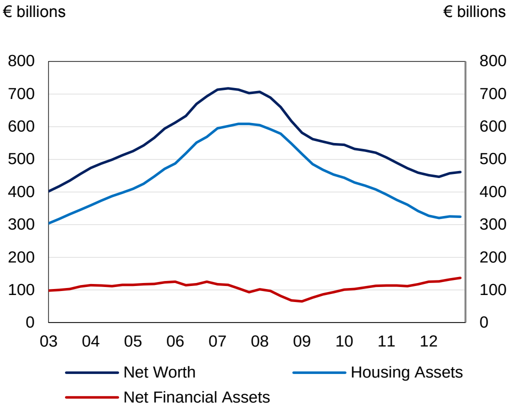
Source: Irish Banking Federation, Property Services Regulatory Authority, residential property price register. Number of transactions available from start-2010.

Chart 16: House prices, yearly change: National, Dublin, non-Dublin



Source: Central Statistics Office.

Chart 17: Households' balance sheet



Source: Central Bank of Ireland, Central Statistics Office.
Notes: Household net worth is calculated as the sum of household housing assets and household net financial assets (net financial assets being financial assets minus financial liabilities). The Central Bank of Ireland's estimate of housing assets is based on the size and value of housing stock. Data on the value of housing stock is obtained from the Central Statistics Office's Residential Property Price Index.

decline had been consistently slowing. However, following successive monthly price decreases at the start of 2013, the year-on-year decline picked up slightly again in March (Chart 14). Rents continue to see modest growth. These developments have resulted in a further modest decline in the price-to-rent ratio.

Both the number of transactions[18] and number of mortgage drawdowns fell in the first quarter of 2013 from the previous quarter (Chart 15), driven partly by a combination of seasonal effects (the first quarter of the year is generally the weakest in terms of housing-market activity while the fourth quarter tends to be the strongest) and one-off factors, such as the ending of mortgage interest relief.

Overall, conditions in the residential property market remain fragile. On a year-on-year basis, house prices continue to fall, mortgage lending remains at low levels and residential property construction remains at long-term lows. Furthermore, the national figures hide the fact that a two-tier property market has emerged. The market in the metropolitan area of Dublin, where supply is reported to be at its lowest level since early 2007,[19] appears to be stabilising. Prices in Dublin returned to year-on-year growth in 2013 for the first time since late 2007 (Chart 16) and rents are increasing at a greater pace than in other areas. However, prices outside of Dublin continue to decline (Chart 16). Evidence from a recent Central Bank survey suggests a majority of property professionals still expect prices to fall further in 2013, though expectations about the rate of decline vary widely (see Box 2).

Households' balance sheets

Irish households' balance sheets remain vulnerable due to high levels of debt and the challenges in servicing it. The ECB's cut in its policy rate in May should help to ease the debt service burden of those with tracker mortgages somewhat. However, households with standard variable rate mortgages or those with fixed-rate mortgages due for reset are having to deal with higher rates as banks, faced with profitability pressures, have continued to increase rates on these products.

Financial accounts data show an increase in household net worth[20] during the second half of 2012. This ended a period of decline in net worth, which had been falling consistently since the beginning of 2008. Underlying the increase in net worth was an end to the consistent reduction in the value of housing assets which began in late 2007, and the continuation of an upward trend in the household sector's net financial asset position,

[18] As recorded on Ireland's residential property price register. The residential property price register is produced by the Property Services Regulatory Authority. It includes the date of sale, price and address of all residential properties purchased in Ireland since 1 January 2010, as declared to the Revenue Commissioners for stamp duty purposes.
[19] Daft.ie (2012) 'House Price Report', 2012 Q4.
[20] Household net worth is calculated as the sum of household housing assets and net financial assets (net financial assets being financial assets minus financial liabilities). The Central Bank of Ireland's estimate of housing assets is based on the size and value of housing stock. Data on the value of housing is obtained from the CSO's 'Residential Property Price Index'.

which started in 2009 (Chart 17).

Despite this slight upturn in net worth, the household sector remains highly indebted. In absolute terms, household debt[21] is in the region of €175 billion, which equates to over 200 per cent of disposable income (Chart 18) and over 100 per cent of GDP. This makes the household sector in Ireland among the most indebted in Europe (Chart 19).

Household income and the real economy

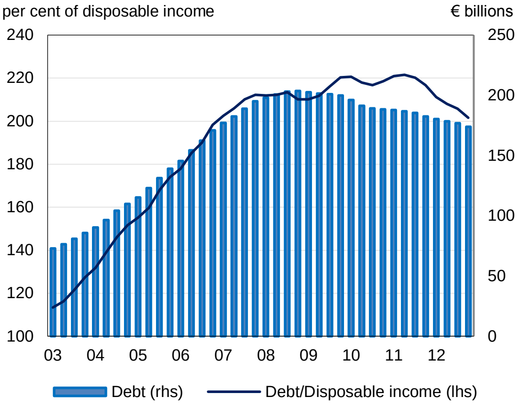
A negative feedback loop among the necessary fiscal adjustment, employment and domestic demand is weighing on the domestic economic recovery. A further negative shock to the economy that weakens the growth outlook and intensifies this feedback effect poses a key risk to financial stability.

Personal consumer expenditure has declined in recent years, contributing to the drag on domestic economic activity. While 2012 as a whole saw a decline in consumption, there was a modest increase during the second half of the year. A marginal decline is forecast for 2013. Overall, this should help reduce the drag on domestic activity, although consumption is unlikely to make a positive contribution to growth at this stage. Continuing subdued economic activity has consequences for both the fiscal position and employment.

Falling disposable incomes and households paying down their debt have both contributed to weak consumer demand. Incomes have fallen as employment has declined and taxes and charges payable by households have increased. Recent data are more positive, with modest improvements seen in both income and employment (Chart 20).

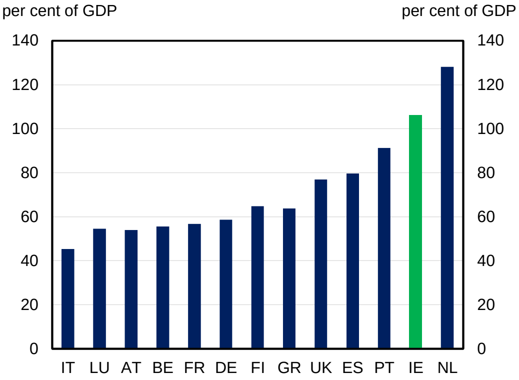
Households have been reducing their aggregate level of indebtedness since 2009 and as of end-2012 continued to do so. Reducing the level of household debt is necessary to repair household balance sheets. However, the fact that households are reducing debt rather than spending is a drag on domestic economic activity at a time when the public sector is also consolidating. Given the high levels of household debt and the subdued macroeconomic environment, it is likely that the deleveraging process will continue.

Chart 18: Household debt



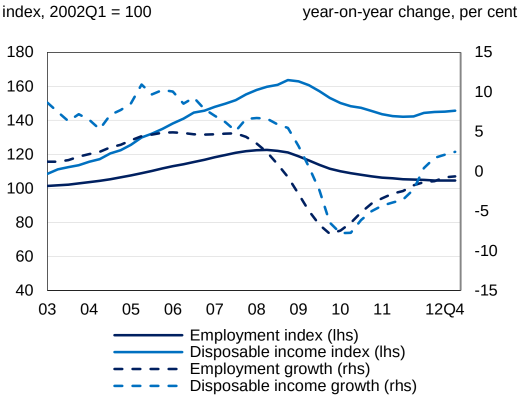
Source: Central Bank of Ireland, Central Statistics Office.
Notes: Household debt is defined as total loans. Disposable income is gross disposable income of households including non-profit institutions serving households.

Chart 19: Household debt-to-GDP ratio: International comparison



Source: ECB, Eurostat, Central Statistics Office, Central Bank of Ireland.
Notes: Data as at end-2012. Selected European countries.

Chart 20: Labour market and household income



Source: Central Statistics Office.
Notes: Employment refers to persons aged 15 and over in employment. Disposable income refers to gross household disposable income. Growth rates are on a year-on-year basis. Data shown based on a 4-quarter moving average.

[21] Household debt is defined as total loans.

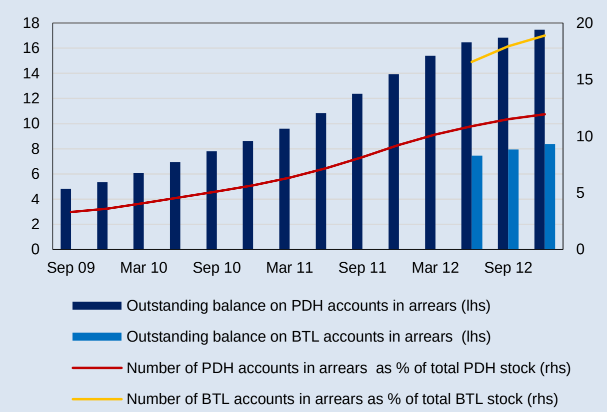
Box 1: Recent trends in mortgage arrears

This Box presents details of the recently expanded mortgage arrears statistics published by the Central Bank, and discusses the implications of the increase in longer-term arrears for financial stability. Mortgage arrears have increased significantly since 2009. The total outstanding balance on all mortgage loans in arrears of more than 90 days was €25.8 billion at end-December 2012. The acceleration in longer-term arrears is of particular concern from a financial stability perspective. The availability of timely, detailed information is important for developing strategies to resolve the problem. The new data distinguish between loans in arrears for up to 90 days (*early-stage arrears*) and loans in arrears for 90 days or more. Overall, the data show that while there has been a decline in the formation of new arrears in recent months, the number of longer-term arrears cases has increased significantly.

At end-December 2012,11.9 per cent of accounts of principal dwelling houses (PDH) were 90 days or more in arrears, an increase of 8.6 percentage points since the data were first collected at end-September 2009 (Chart A). While the figures for early-arrears cases show a decline in the formation of new arrears in recent months, the number of longer-term arrears cases has increased significantly. At end-December 2012, 6.5 per cent of the total stock of PDH accounts was more than 360 days in arrears, and just under half of these were more than 720 days in arrears. In relation to buy-to-let (BTL) accounts, the 90-days arrears rate was 18.9 per cent at end-December, while more than 11 per cent of all BTL accounts were 360 days or more in arrears.

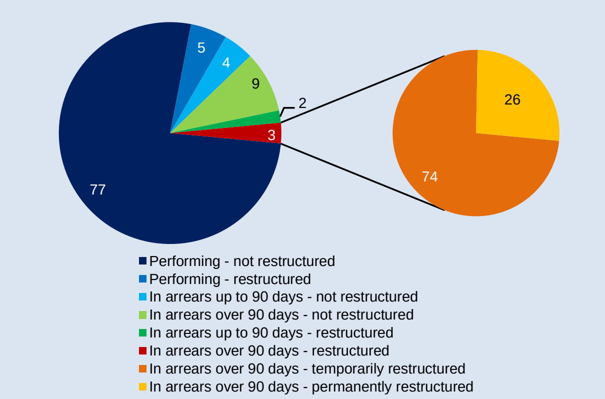
Banks thus far have concentrated on altering the repayment terms of a mortgage loan on either a temporary or permanent basis.[1] At end-December 2012 there were almost 80,000 PDH accounts classified as restructured, of which 53 per cent were not in arrears. The large number of restructured accounts not in arrears suggests that mortgage lenders have been proactive in managing 'pre-arrears' cases, in an effort to slow early arrears formation.[2] Of the total stock of PDH accounts 90 days or more in arrears at end-December, only one quarter were classified as restructured. Progress in tackling longer-term arrears cases has been relatively limited and the restructuring activity undertaken to date has for the most part been short-term in nature (Chart B). This has also been the case for BTL loans, where less than one fifth of the stock of accounts in arrears for 90 days or more was classified as restructured at end-December, and 63 per cent of those restructures were of a temporary nature.

Chart A: 90 days arrears rate and outstanding balance on accounts in arrears over 90 days



Source: Central Bank of Ireland.
Notes: Data relating to buy-to-let mortgages are only available from June 2012. Last observation is December 2012.

Chart B: Breakdown of total stock of PDH mortgage accounts, end-December 2012



Source: Central Bank of Ireland.

[1] Temporary forbearance includes payment moratoria, interest-only arrangements and other forms of temporary reduced repayments. Permanent forbearance includes term extensions, capitalisation of arrears, permanent interest rate reduction, split mortgages and trade down mortgages.
[2] The data indicate that only a small proportion of the current stock of restructured accounts has had their arrears capitalised as part of their restructure arrangement. Therefore the number of restructured accounts that are not in arrears are predominantly 'pre-arrears' cases. These are cases in which the account has not fallen into arrears but the borrower anticipates future difficulty and agrees a forbearance arrangement with the lender.

Box 2: Residential property price expectations survey

This Box presents findings from a new Central Bank of Ireland quarterly survey for the Irish residential property market. It is a survey of estate agents and surveyors, as well as those with a more indirect involvement in the industry such as economists, market analysts and academics. The survey is concerned mainly with market participants' price expectations; however questions are also included on activity levels and factors most likely to impact demand. The main findings are that respondents anticipate a further deterioration in residential house prices in 2013, while some growth in prices is expected over a longer horizon of 3 years. The survey is a snapshot of respondents' expectations, so can provide only limited information about possible future property price changes. However, it also provides a measure of uncertainty regarding these expectations which is a useful complement to the available information on the domestic property market.

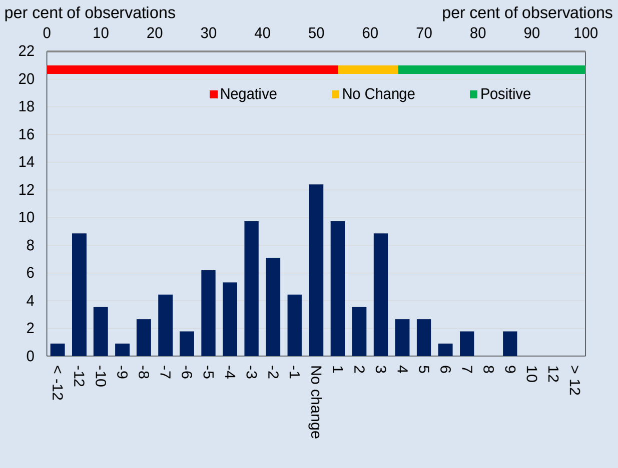
The prevailing view, held by more than 50 per cent of respondents in both surveys for 2012 Q3 and Q4, is that residential property prices will continue to fall throughout 2013 (Chart A).[1] However, the share of participants with a positive outlook for prices in the coming year increased significantly, to 35 per cent in Q4, from 17 per cent in the initial survey.

Although the majority expect higher prices in 3 years (approximately 60 per cent in both surveys), one in six believe prices will show no change (Chart B). The difficulty in making predictions over such a horizon due to current uncertainty surrounding key issues was also raised by some participants. Therefore, it is useful to analyse the range of expected price changes. The most common expectation from the survey is that prices at the end of 2015 will be unchanged from those of 2012 Q4. Thirteen per cent of respondents envisage a price increase of between 8.1 and 10 per cent, while a fall of the same magnitude is the most common expectation (5 per cent of participants) among those expecting prices to decline.

Improved affordability was given by some respondents as a reason for their expectations of price rises. Others pointed to the progress being made in rectifying Ireland's banking, sovereign and economic problems, which they expected would boost employment and earnings, and have a positive impact on the market. Investor interest from abroad, due to rising yields and developments in the rental market, was also cited.

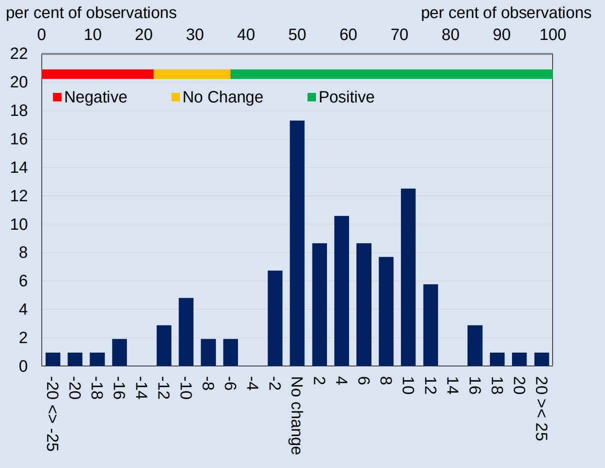
Factors listed by those forecasting further price falls include: Difficulties obtaining credit; the impact of a potential increase in repossessions; the withdrawal of mortgage interest relief; the introduction of the local property tax in last December's Budget; the high rate of unemployment; and the weak outlook for the economy in general.

Chart A: Expectations of change in residential property prices over 2013 (2012 Q4 Survey)



Source: Central Bank of Ireland, Society of Chartered Surveyors Ireland.

Chart B: Expectations of change in residential property prices 2013-15 (2012 Q4 Survey)



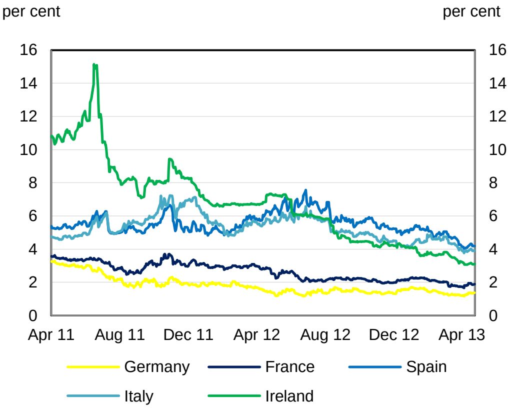
Source: Central Bank of Ireland, Society of Chartered Surveyors Ireland.

[1] The response rate to the price expectations questions increased markedly between the 2012 Q3 and 2012 Q4 surveys, from 41 to 121 individuals.

2.4 Sovereign debt

A number of institutional developments at European Union (EU) level over the past year have helped reduce turbulence in euro area sovereign bond markets. With high government deficit and debt ratios, the Irish sovereign position remains fragile. Among the domestic factors that could heighten sovereign risk are low economic growth and the possibility of additional loan losses in the banking sector. Market perceptions of domestic sovereign risk could also be adversely affected by any dilution in political commitments to fiscal reform, greater-than-expected bank loan losses or fiscal shocks in other Member States, and any reversal or suspension of EU policy initiatives.

Chart 21: Sovereign bond yields for selected euro area countries, 10-year maturity



Source: Bloomberg.
Notes: Chart shows yields on sovereign bonds, ten-year maturity. For Ireland, a generic eight-year maturity bond yield is used. Last observation is 20 May 2013.

Chart 22: Market-implied probability of sovereign debt distress in at least one other euro area country given distress in five countries

Source: Central Bank of Ireland.
Notes: Chart shows the estimated market-implied probability of sovereign debt distress in at least one other euro area country given distress in all of the following five countries: Spain, Italy, Ireland, Portugal and Greece. Market-implied probabilities and distress dependence are estimated using a non-parametric copula model with sovereign credit default swap spreads as primary inputs. Distress is defined where estimated probabilities of default breach empirically estimated distress thresholds. For an explanation of the method, see Box 7 in Macro-Financial Review 2012:II. Last observation is 20 May 2013.

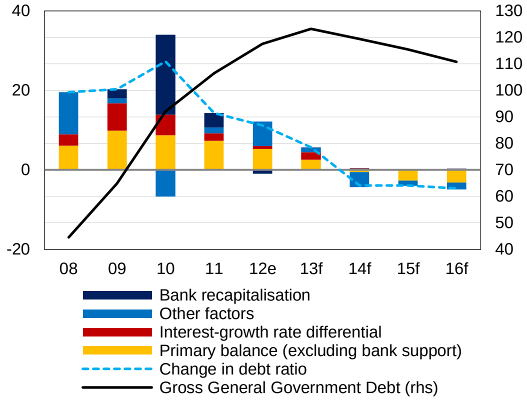
External and domestic environment

Volatility in the euro area sovereign bond market has receded since mid-2012, reflected in lower bond yields (Chart 21). The market-implied probability of sovereign distress has declined over the past year (Chart 22). Policy initiatives, including the OMT, have helped calm markets. The programme of fiscal adjustment in Ireland has been adhered to. These developments have improved market conditions for Irish sovereign debt. Long-term debt, in the form of a ten-year Treasury Bond, was issued and sold by the National Treasury Management Agency in March 2013. It represented the first new ten-year bond issuance since January 2010. The government deficit and debt, however, remain at high levels and must be reduced.

A risk is that Ireland's efforts to stabilise and improve its sovereign bond market could be jeopardised by external events, such as greater-than-expected bank loan losses or political or economic events in other Member States, causing Irish bond yields, and the debt ratio, to rise. There is also the possibility that some sovereign bond yields in the euro area have fallen too low relative to economic fundamentals as a result of central bank intervention and renewed investor activity, and that bond yields may rise in due course.

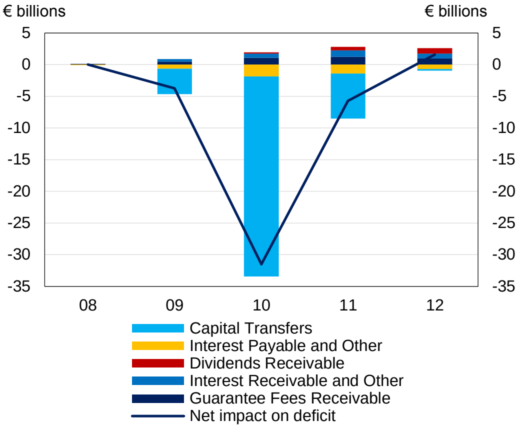
The Department of Finance projects the government deficit to narrow from 7.6 per cent of GDP in 2012 to 2.2 per cent in 2015 (meeting the 3 per cent deficit target required under the external assistance programme and EU fiscal framework). The recent liquidation of IBRC and replacement of government-issued Promissory Notes with a portfolio of longer-term non-amortising Irish government bonds should help return the public finances to a sustainable position (Box 3). The Department of Finance forecasts average nominal GDP growth of 3.5 per cent per annum over the years 2013 to 2015. The path of output growth falling below forecast constitutes a risk of not meeting the 3 per cent deficit target set for 2015. Lower growth would worsen the state of the public finances given the size of the debt ratio (Chart 23). It is important that a commitment to consolidation continues with confidence in the overall fiscal position improving but remaining fragile.

Chart 23: Irish general Government debt and contributions to change in debt



Source: Department of Finance, Eurostat.
Notes: Projections are calculated using Department of Finance April 2013 Stability Programme Update details for 2012-2015. Outturn data based on April 2013 Maastricht Returns (Eurostat).

Chart 24: Government support to the banking sector: impact on the budget deficit



Source: Eurostat.

Institutional issues

While the removal of the Eligible Liabilities Guarantee scheme has reduced the Irish sovereign's contingent liabilities, substantial actual liabilities relating to the banking sector have been incurred. Institutional initiatives at EU level, including the European Stability Mechanism (ESM) and European Banking Union, are supportive of the sovereign sector, acting as a backstop to the financial sector should the need arise. In June 2012, it was indicated that the Eurogroup would examine the position of Ireland's financial sector with a view to improving further the sustainability of the country's adjustment programme. This probably contributed to the decline in Irish bond yields observed since then. On 12 April 2013, the Eurogroup agreed in principle to lengthen the maturities of the EFSM and EFSF loans to Ireland, provided its programme implementation continued to be successful. Financial markets are expected to monitor and respond to how these initiatives develop over time.

Domestic banking sector

Government support to the banking sector has had a considerable impact on the budget deficit in recent years (Chart 24). While the ending of the bank guarantee for all new liabilities on 28 March 2013 reduces the contingent liabilities of the State substantially, the sovereign position could be adversely affected by any further recapitalisation or restructuring of the domestic banking sector. While the ESM was planned to be an external source of recapitalisation, its operation remains dependent on European Banking Union which faces implementation risks in the short term. The sovereign position in Ireland, as in other euro area Member States, remains vulnerable to any further bank loan losses.

Box 3: Liquidation of Irish Bank Resolution Corporation: Some financial stability implications

This Box provides a description of the recent liquidation of Irish Bank Resolution Corporation (IBRC) and subsequent transaction between the Irish Government and the Central Bank of Ireland resulting in the replacement of government-issued Promissory Notes with long-term, floating-rate government bonds. Possible implications for financial stability are discussed.

IBRC was formed in 2011 through the merger of Anglo Irish Bank and Irish Nationwide Building Society, both of which had been taken fully into public ownership. Promissory Notes were issued by the Irish State to Anglo Irish Bank and Irish Nationwide Building Society in 2010 to ensure compliance with regulatory capital requirements. The Promissory Notes were obligations with a non-standard amortising structure and represented Irish sovereign debt. IBRC subsequently used the Promissory Notes (combined with other assets) to access exceptional liquidity assistance (ELA) lending from the Central Bank of Ireland.

On February 7th 2013, the Irish Bank Resolution Corporation Act 2013 was passed by the Parliament of Ireland, the Oireachtas, and signed into law by the President, providing for the winding up of IBRC under a special liquidation regime. As a result, the Central Bank of Ireland took ownership of the collateral held against exceptional liquidity assistance lending to IBRC of €39.45 billion, consisting of Promissory Notes, National Asset Management Agency (NAMA) bonds and other assets. As additional security for the ELA provided by the Bank, IBRC had created a floating charge over its assets in favour of the Bank and some of the ELA also benefited from a guarantee from the Minister for Finance. The Government then offered to exchange the non-tradable Promissory Notes for a portfolio of marketable Irish Government bonds, an exchange the Central Bank of Ireland accepted. The bonds are floating-rate, with maturity dates from 2038 to 2053.[1] NAMA, through a newly established special purpose vehicle, acquired the floating charge over IBRC's assets from the Central Bank of Ireland, and issued government guaranteed NAMA bonds to the Central Bank of Ireland in exchange. In addition, a consequence of the liquidation was the termination of IBRC's market repo of the 5.4 per cent Irish 2025 bond, which was also acquired by the Central Bank of Ireland. The liquidation resulted in the Central Bank of Ireland acquiring, on behalf of the Eurosystem, the assets it held as collateral against standard Eurosystem borrowing by IBRC of €333 million. The excess value of this collateral over the amount of lending extended to IBRC was returned to the special liquidator. The Central Bank did not suffer any loss on its lending to IBRC under exceptional assistance lending.[2]

The Central Bank of Ireland will sell the bonds as soon as possible providing that conditions of financial stability permit. The disposal strategy will maintain full compliance with the prohibition on monetary financing enshrined in the EU's *Treaty on the Functioning of the European Union*. The transaction contributes to financial stability by allowing IBRC to be resolved in a definitive manner, ending its reliance on exceptional liquidity arrangements, and replacing the related non-standard Promissory Notes with standard government bonds.

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[1] Three tranches of €2 billion each maturing after 25, 28 and 30 years, three tranches of €3 billion each maturing after 32, 34 and 36 years, two tranches of €5 billion each maturing after 38 and 40 years. The Central Bank of Ireland has undertaken that a minimum of bonds will be sold in accordance with the following schedule: to end-2014 (€0.5 billion), 2015-2018 (€0.5 billion per annum), 2019-2023 (€1 billion per annum), 2024 and after (€2 billion per annum). The bonds carry a variable interest rate that tracks six-month Euribor rates with an average additional margin of 263 basis points.

[2] See Department of Finance (2013) 'Pro-Forma Transaction Impact Analysis – State Finances (Based on No Policy Change)'.

Box 4: Recent changes to the maturity profile of Irish Government debt

This Box examines the evolution of the maturity profile of Irish Government debt and, in particular, focuses on the recent actions taken by the Exchequer and the National Treasury Management Agency (NTMA) to reduce the State's short-term funding requirements.[1] The residual maturity profile of debt is a consideration when assessing sovereign debt sustainability, as a significant proportion of debt maturing within a short interval heightens refinancing or rollover risks.

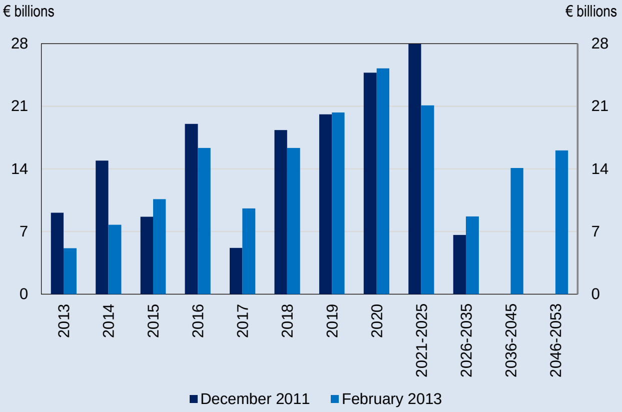
Recent steps taken by the Department of Finance and NTMA to extend the maturity profile of debt include:

- Replacing the Promissory Note with long-term bonds which mature between 2038 and 2053.
- Reducing the 2013 and 2014 funding requirement through a series of swap offers which exchanged short-term debt for bonds maturing in 2017 and 2020;
- Issuing new medium- and long-term bonds:
    - July 2012: Issue of €4.2 billion in 2017 and 2020 bonds
    - August 2012: Issue of €1 billion in new amortizing bonds with final maturities dated from 2027-2047
    - January 2013: Issue of €2.5 billion 2017 bond
    - March 2013: Issue of €5 billion 2023 bond

These actions have extended the average maturity of Government debt from 6.7 years in December 2011 to 11.1 years in February 2013. Most importantly, the measures have significantly reduced the large funding requirement which was scheduled to fall due shortly after Ireland is to exit the current EU-IMF programme of external financial assistance. The total refinancing requirements have decreased by €3.9 billion and €7.2 billion in 2013 and 2014, respectively (Chart A). The total refinancing requirements up to 2015 are now reduced by 38 per cent and this is primarily attributed to the Promissory Note restructuring (Chart B).

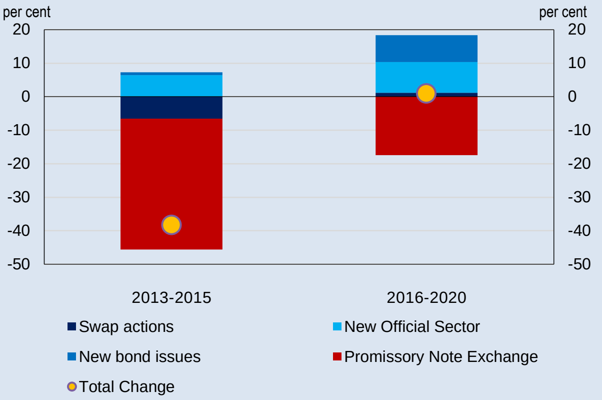
Furthermore, in April, the EU agreed in principle to extend by seven years the weighted average maturity limit on loans to Ireland granted by the European Financial Stability Facility and the EU-backed European Financial Stability Mechanism. This agreement will further improve the maturity profile of Irish debt. In addition, the State continues to hold large cash balances of some €25 billion, which covers refinancing requirements up to early 2016.

Chart A: Difference in maturity profile as at December 2011 and February 2013



Source: National Treasury Management Agency and Central Bank of Ireland calculations.

Chart B: Decomposition of reduction in refinancing requirements (per cent of total refinancing required in period)



Source: National Treasury Management Agency and Central Bank of Ireland calculations.
Notes: Data refer to the percentage decrease in refinancing requirements in the reference period due to actions undertaken since January 2012.

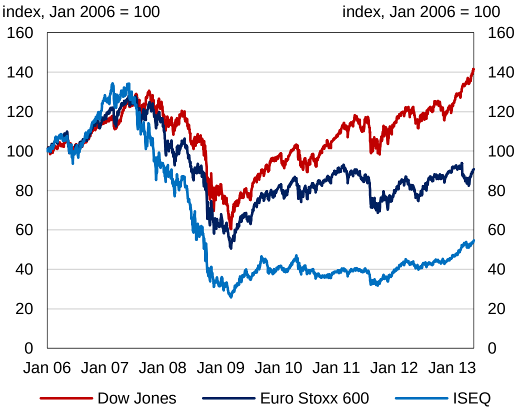
[1] This Box refers to Irish Government debt securities and official sector loans. Other funding such as small savings deposits are not considered.

3. Financial System

3.1 Financial system overview

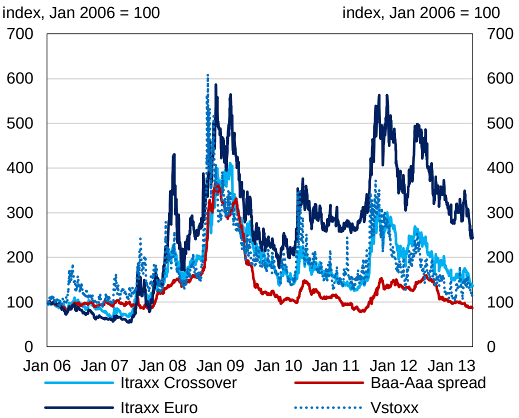
Short-term risks stemming from the international financial system have lessened since the last Review as corporate bond markets have opened up to new issuance and accommodative central-bank policy has strengthened sentiment in financial markets. This has lowered sovereign bond spreads across the euro area and reduced concerns over the financing needs of high-debt countries. Rising appetite for risky assets may impair financial stability where correlated or un-hedged financial positions lead to credit losses.

Chart 25: US, euro area and Irish equity prices



Source: Bloomberg, Datastream.
Notes: Chart shows stock indices (Jan 2006 = 100): Dow Jones Industrial Average; Dow Jones Euro Stoxx 600; Irish Stock Exchange Overall Index. Last observation is 20 May 2013.

Chart 26: Financial market risk aversion indicators



Source: Bloomberg, US Federal Reserve Economic Data.
Notes: *Baa-Aaa spread* refers to the spread between Aaa-rated US corporate bonds and Baa-rated US corporate bonds as calculated by the credit-rating agency Moody's. The *iTraxx Crossover* index measures the cost of protection against sub-investment-grade-rated companies defaulting on their debts using credit default swaps. The *iTraxx Europe* index measures the cost of protection against 125 European companies. The *Vstoxx* index gauges the cost of hedging against moves in the Euro Stoxx 50 Index (measuring the square root of options implied variance). Last observation is 20 May 2013.

Global and euro area financial market conditions have improved since the last Review in spite of weakening global economic growth, high levels of public debt among advanced economies and a crisis-induced legacy of international banking-sector vulnerabilities. Accommodative monetary policy and targeted central-bank action have done much to reduce downside risks. Last year the ECB committed to purchasing short-term government bonds in order to correct market distortions that risk impairing the transmission of monetary policy.[22] This has eased fears over the ability of euro area countries to secure bond-market financing over the medium term. For Ireland, it has further raised investor confidence in a successful exit this year from its IMF-EU programme of external financial assistance.

Accommodative international monetary policy has also supported asset prices (Chart 25). Since the last Review, sovereign spreads in euro area countries have continued to fall (see Section 2.4) and yields on corporate and emerging-market bonds have dropped to their lowest levels since 2008. US and German sovereign yields remain close to historically low levels.

Low yields are encouraging investors to hold riskier assets (Chart 26). High-yield bond funds have experienced increased inflows and leveraged loan markets have seen a sharp rise in activity in the US. Collateralised loan obligations, the market for which dried up in the wake of the collapse of Lehman Brothers in 2008, have witnessed levels of issuance not seen since 2007.

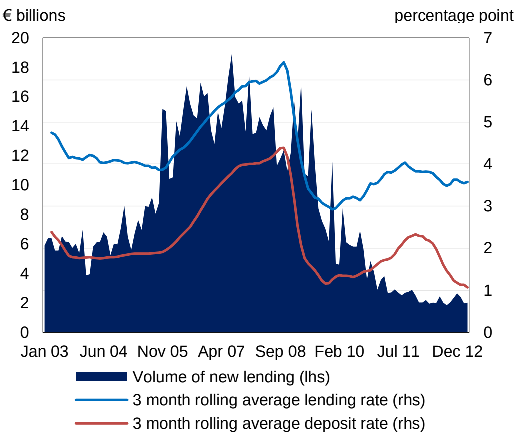
This low-yield environment presents risks. Un-hedged investors are vulnerable to any abrupt rise in market interest rates, particularly if leverage is high. Increased correlation among asset classes makes it more difficult for investors to achieve a diversified portfolio. The low-yield environment may make it more difficult for long term investors such as pension funds to generate sufficient returns, in addition to existing challenges relating to funding and structural demographic trends.

[22] ECB (2012) 'Technical Features Of Outright Monetary Transactions', *ECB Press Release, 6 September.*

3.2 Banking

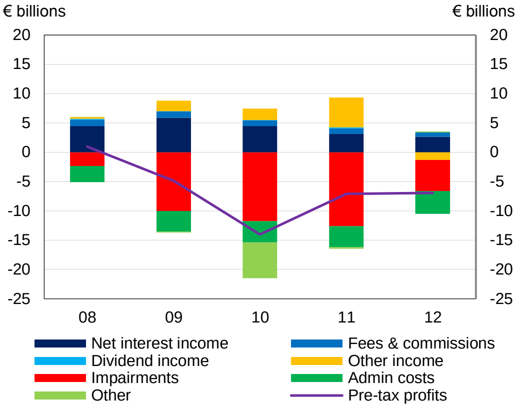
International investor sentiment has become more positive towards domestic banks since the last Review, balance sheets have become less leveraged and capital ratios remain in considerable excess of regulatory requirements.[23] Domestic banks have issued some secured debt and reduced central-bank borrowings. The Eligible Liabilities Guarantee (ELG) scheme has been discontinued and deposit rates continue to fall, which should help increase profit margins. However, since the last Review, there has been insufficient progress on addressing the central issues of loan arrears and the large proportion of low-yielding tracker mortgages. This undermines bank profitability which is necessary to support the economic recovery.

Chart 27: New business activity



Source: Central Bank of Ireland.
Notes: Data are resident statistics for all credit institutions in Ireland and relate to new lending. Last observation is March 2013.

Chart 28: Domestic banks' profitability



Source: Central Bank of Ireland.
Notes: Data collected in accordance with European Banking Authority's (EBA) FINREP reporting requirements. Impairments include provisions.

Profit and Loss

The profitability of domestic banks represents a key component in the overall recovery of the Irish economy. However, several factors are hampering banks' abilities to return to profitability. The income-generating ability of domestic banks continues to be undermined by a combination of the weak economic environment and bank-specific factors. In particular, low levels of new lending, high levels of impairments, low-yielding tracker mortgages and elevated funding costs are placing ongoing pressure on margins and income.

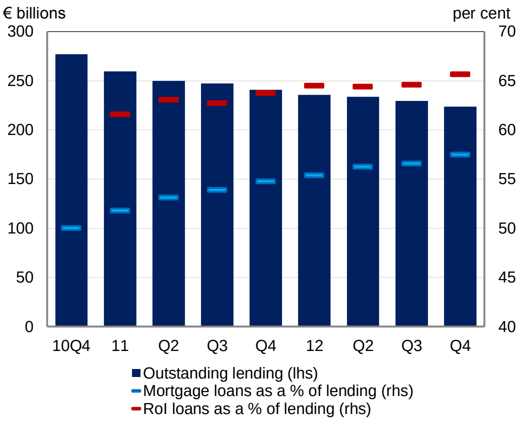
Prior to the financial crisis, domestic lending practices were characterised by high volume growth (Chart 27). Since the crisis, the fall in both volumes and interest income has persisted. The high share of impaired loans and tracker mortgages in domestic banks' loan books are limiting the scope to increase lending rates, notwithstanding some increases in variable mortgage rates and a recent increase in a small number of UK tracker mortgage rates by one bank. At the end of 2012 there were €68 billion of Irish and UK tracker mortgages, or close to a quarter of total assets, on domestic banks' balance sheets. The balance is unchanged from 2011.

Historically low interest rates are negatively affecting income on financial-asset holdings, such as NAMA bonds and government bonds. As a result, the gap between low-cost, short-term deposits (such as current accounts) and loan interest rates is smaller than in a higher-interest-rate environment, thus providing less of a contribution to domestic banks' interest income. The overall impact on domestic bank profits of the ECB's policy rate cut in May could be negative depending on the structure of the banks' assets and liabilities (Box 5), as tracker loan interest rates are reduced as well as interest rates on liabilities such as deposits.

Domestic banks have continued their efforts to reduce interest expenses. The reduction in new deposit rates and the

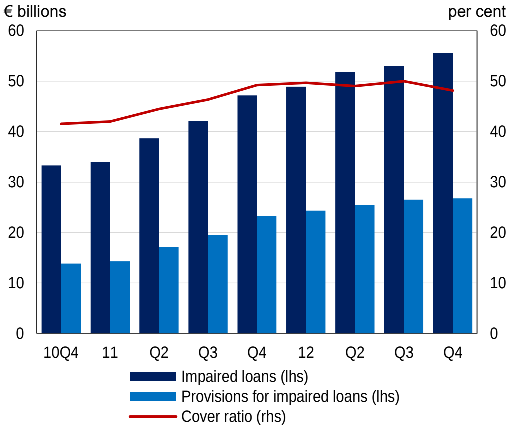
[23] Domestic banks refer to Allied Irish Banks (including EBS), Bank of Ireland and Permanent TSB. The term domestic banks, unless stated otherwise, excludes the Irish Bank Resolution Corporation (IBRC).

Chart 29: Domestic banks' credit exposures



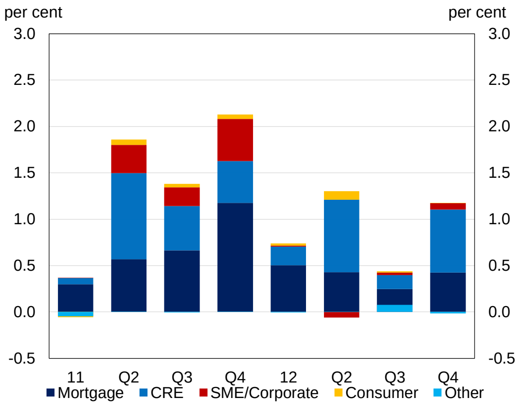
Source: Central Bank of Ireland.
Notes: Data are consolidated. Total lending is represented by drawn exposures. Data for 2010Q4 are not broken down by geography. RoI refers to the Republic of Ireland.

Chart 30: Domestic banks' impaired loans, provisions for impaired loans and cover ratio



Source: Central Bank of Ireland.
Notes: Data are consolidated. The cover ratio is calculated by dividing the value of provisions for impaired loans by the value of impaired loans. Impaired loans are defined in accordance with the EU's Capital Requirements Directive, and refer to loans which are impaired as defined under IFRS accounting regulations (IAS 39) and/or classified as greater than 90 days in arrears (see Footnote 27).

Chart 31: Domestics banks' flow of impaired loans as a percentage of outstanding lending



Source: Central Bank of Ireland.
Notes: Data represent quarterly flows in the value of impairments as a percentage of total loans and are consolidated. CRE stands for commercial real estate.

withdrawal of the Eligible Liabilities Guarantee (ELG) scheme and associated fees are helpful developments.[24] The requirement for more stable and sustainable funding may entail additional costs, however, such as the replacement of monetary authority borrowing with more costly market-based funds (Box 5) and the additional costs of meeting the new Basel III liquidity requirements.

Cost-to-income ratios continue to deteriorate primarily due to the sharp fall in operating income. At the same time, the cost base of the banks has increased. Costs associated with restructuring and the establishment of loan workout units have been considerable. In an environment of balance sheet consolidation and a lower income base, domestic banks need to rationalise operations further in order to return to a stable, profitable business model.

Recent supervisory data point to a stabilisation in pre-tax losses during 2012 (Chart 28). Domestic banks benefited from a decline in the flow of impaired loans, which, however, remain the single biggest determinant of overall losses. The gains from debt buybacks and revaluations on NAMA transfers realised in 2011 were not as significant in 2012. Anaemic income prospects and the unresolved mortgage arrears problem mean that the short-term outlook for bank profitability remains weak.

Credit risk and asset quality

Domestic banks have reduced their credit exposures and there are signs of a slowing in early-stage arrears formation. However, the stock of impaired loans continues to grow and longer-term arrears have not been effectively addressed (Box 1). The Central Bank of Ireland outlined new measures to address mortgage arrears on 13 March 2013, as discussed below.

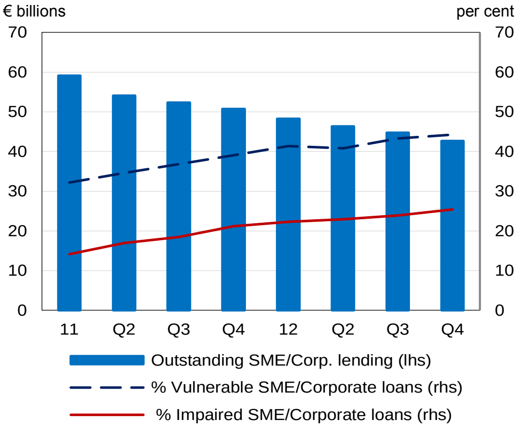
Outstanding lending by domestic banks fell by 7 per cent during 2012, and by 19 per cent since the end of 2010, to €224 billion (Chart 29), due to a combination of asset disposals, loan amortisation, the non-renewal of existing, lending commitments and additional provisions.[25]

The deleveraging of banks' balance sheets under the Financial Measures Programme (FMP) remains on track and at a lower cost than initially foreseen.[26] The focus on the sale of overseas assets, together with previous transfers of commercial property type assets to NAMA, has resulted in smaller and more concentrated loan books. Irish loans now account for two thirds of the total, while the relative share of mortgage lending has increased to almost 58 per cent.

The annual growth rate in arrears formation has slowed from 42 per cent in 2011 to 18 per cent in 2012. Early intervention by the

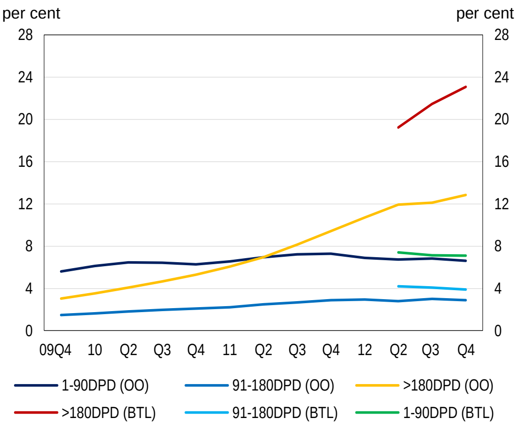
[24] For more information on the withdrawal of the ELG scheme see Department of Finance (2013) 'Important Notice from the Minister for Finance'. The cost of the ELG scheme to the domestic banks is estimated to have amounted to over €1 billion in 2012 see Department of Finance (2012) 'Estimate of Receipts & Expenditure for year ending 31st Dec 2013'. Dublin, p.5
[25] Recent examples of asset sales include the disposal of a portfolio of Spanish property by AIB and earlier disposals of commercial real estate and consumer loans by EBS and Permanent TSB, respectively.
[26] The Financial Measures Programme (FMP) outlines the package of banking-sector measures Ireland adopted as part of the 2010 agreement with the EU, ECB and IMF, aimed at putting the finances of the domestic banks on a more secure basis. For details of deleveraging targets see Central Bank of Ireland (2011) *Financial Measures Programme Report*. Dublin, p.13. For an update of the banks' deleveraging activities see European Commission (2012) *Economic Adjustment Programme for Ireland. Autumn 2012 Review*. Brussels: Directorate-General for Economic and Financial Affairs, p.10.

Chart 32: Domestic banks' SME/corporate lending, impaired and vulnerable loans



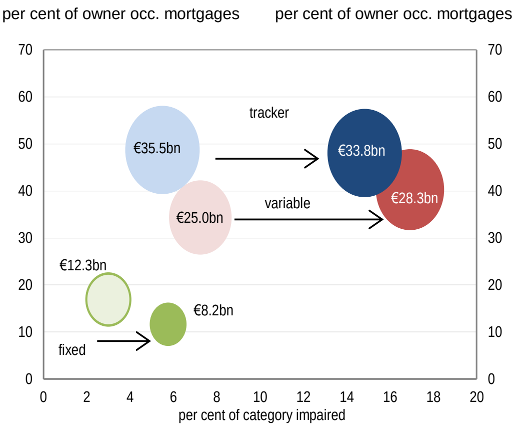
Source: Central Bank of Ireland.
Notes: Data are consolidated. Vulnerable loans (dotted line) are loans defined by banks as falling into one of the following three loan-quality categories: "watch upper", "watch lower", and "impaired".

Chart 33: Value of mortgage accounts in arrears



Source: Central Bank of Ireland.
Notes: These figures represent the percentage of total outstanding owner occupier (OO) and buy-to-let (BTL) mortgage account balances in arrears. DPD denotes days past due.

Chart 34: Impaired owner occupier mortgage lending (2010Q4-12Q4)



Source: Central Bank of Ireland.
Notes: RoI mortgage data only. Lighter colours represent 2010Q4 data, darker colours represent 2012 Q4 data. "Tracker", "variable" and "fixed" refer to interest rate types. Size of bubble is relative to portfolio size. The value of each mortgage portfolio is included with its respective bubble.

banks and a stabilisation of the labour market may be contributing to the slower rate of increase. Nevertheless the stock of distressed loans continues to grow (Chart 30). In the final quarter of 2012 impaired balances reached €55.6 billion; a quarter of the stock of outstanding lending.[27] This figure is high by international standards and poses a significant risk for financial stability.[28]

The ratio of provisions held to meet non-performing loans remained reasonably stable in the latter part of 2012. Differences persist between individual institutions reflecting varying sectoral and geographic exposures. High cover ratios are necessary given the scale of the Irish non-performing loan problem in order to meet potential losses.[29]

The average quarterly flow of impaired loans for 2012 was lower than for 2011 despite a seasonal increase in the final quarter (Chart 31).[30] Commercial real estate and residential mortgage lending continue to account for the vast majority of non-performing loans.

Irish SMEs and non-financial firms are operating under considerable macro-financial headwinds (see Section 2.2). Overall, the sector accounts for 19 per cent of the domestic banks' aggregate loan book. The value of impaired loans stood at €10.8 billion in December 2012, representing 25 per cent of the SME/corporate loan book, up from 21 per cent of the book at the end of 2011 (Chart 32).[31] Since the last Review, efforts have been made to improve the banks' SME arrears management.

The level of Irish mortgage arrears remains a central concern (see Box 1). In 2012 Q4, the value of owner-occupier mortgages more than 90 days past due reached €17.5 billion, or 16 per cent of outstanding mortgage balances. Similarly, 27 per cent of buy-to-let loans worth €8.4 billion were over 90 days past due. Of these, domestic banks account for €9 billion (or 12.8 per cent of their outstanding owner-occupier mortgage balances), and €5.5 billion (or 26 per cent of their outstanding buy-to-let mortgage balances), respectively. While the reduction in early arrears in recent quarters is welcome, long-term arrears continue to grow, particularly amongst buy-to-let borrowers (Chart 33).

The extent of the difficulties across mortgage types is clear from Chart 34 and Chart 35. There has been a significant increase in the level of distressed tracker mortgages since 2010 despite the cut in rates on these mortgages to all-time lows of around 2 per cent during the period.[32] The drop in the share of fixed-rate mortgages is also noticeable, as some borrowers make final

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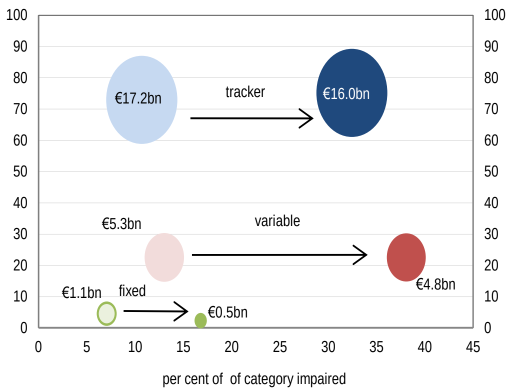
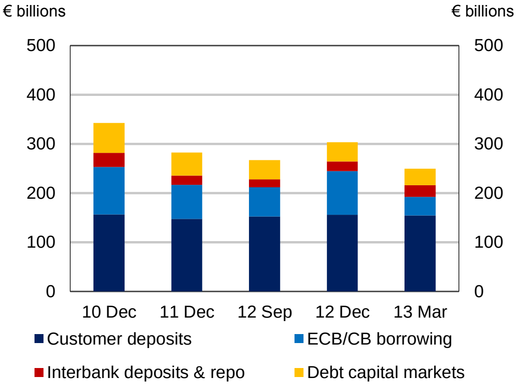
[27] Impaired loans are defined in accordance with the EU's Capital Requirements Directive, and refer to loans that are impaired as defined under IFRS accounting regulations (IAS 39) and/or classified as greater than 90 days in arrears. For details see the Central Bank's Impairments, Provisioning and Disclosure Guidelines (December 2011).
[28] For details see European Commission (2012) *Economic Adjustment Programme for Ireland. Summer 2012 Review*. Brussels: Directorate-General for Economic and Financial Affairs, p.13.
[29] The cover ratio calculates provisions for impaired loans as a share of impaired loans.
[30] The average quarterly flow in 2012 was 0.9 per cent compared to 1.4 per cent in 2011.
[31] If loans, classified as "watch upper" and "watch lower" by financial institutions are included with impaired loans, the percentage of "vulnerable" SME/Corporate loans in 2012 Q4 rises to 44 per cent.
[32] A tracker mortgage is a variable-rate mortgage where the amount of interest paid on the loan is linked to the ECB base rate by a fixed differential. For a discussion see Goggin et al. (2012) 'Variable Rate Mortgage Pricing in Ireland'. *Central Bank of Ireland Economic Letter Series*, Vol. 2012 No.2.

Chart 35: Impaired buy-to-let mortgage lending (2010Q4-12Q4)



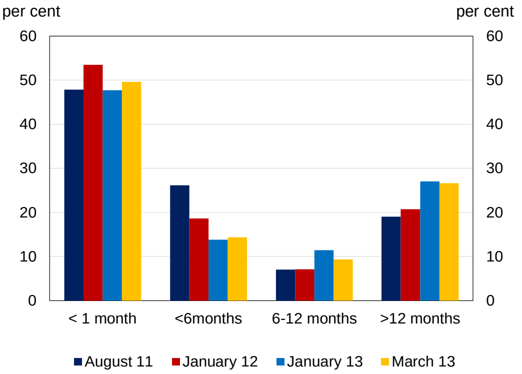
Source: Central Bank of Ireland.
Notes: RoI mortgage data only. Lighter colours represent 2010Q4 data, darker colours represent 2012 Q4 data. "Tracker", "variable" and "fixed" refer to interest rate types. Size of bubble is relative to portfolio size and the value of each mortgage portfolio is included with its respective bubble.

Chart 36: Domestic banks' funding profile



Source: Central Bank of Ireland.
Notes: Data are consolidated. Last observation is 28 March 2013.

Chart 37: Maturity profile of domestic banks



Source: Central Bank of Ireland.
Notes: Data are consolidated and include central-bank funding. Last observation is 28 March 2013.

repayments, or migrate to variable-rate loans once their initial fixed term has matured.[33] The scale of the arrears amongst buy-to-let borrowers is greatest for those with variable-rate loans, at 38 per cent.

Progress in tackling mortgage arrears has been slow. The focus of lending institutions has often been on forbearance measures.[34] The number of accounts over two years in arrears increased by 14 per cent between the third and fourth quarters of 2012 to 3 per cent of outstanding mortgage accounts. This is a further sign that the response to the most severe cases of long-term arrears has not been effective.[35] A greater emphasis is needed on sustainable solutions. (See Box 1 for recent trends in mortgage arrears.)

In this regard, the Central Bank of Ireland outlined new measures to address mortgage arrears on 13 March 2013, including the publication of performance targets for the main mortgage lenders. Banks will be required to meet specific targets for proposing and concluding sustainable solutions for borrowers in arrears over 90 days.[36]

A review of the Code of Conduct on Mortgage Arrears is also underway. Among the issues for discussion are the restrictions placed on contacting borrowers, the definition of a non-cooperative borrower and the procedures for setting interest rates in certain circumstances. Other initiatives intended to facilitate resolutions include the introduction of legislation to address the Dunne judgement and the establishment of the Insolvency Service of Ireland to administer the new debt settlement arrangements outlined in the Personal Insolvency Act.[37,38]

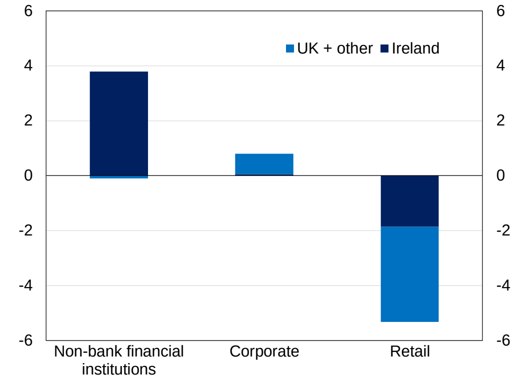
Funding risks

Since the last Review, the funding environment for domestic banks has continued to show signs of improvement. The return to secured debt markets by domestic banks and stabilisation in funding conditions, allowing for the withdrawal of the ELG scheme, are encouraging. Still, pressure remains to restructure balance sheets to regain substantive access to debt markets at a sustainable cost and to substitute central-bank borrowing with market funding.

Reliance on central-bank borrowing has declined by more than €20 billion since September and now accounts for 15 per cent of total funding, down from 28 per cent in 2010 (Chart 36). Total customer deposits have risen from 46 per cent to 62 per cent of total funding over the same period. Refinancing risk has decreased slightly as banks have lengthened their maturity profiles (Chart 37). In March 2013, 27 per cent of funds had a

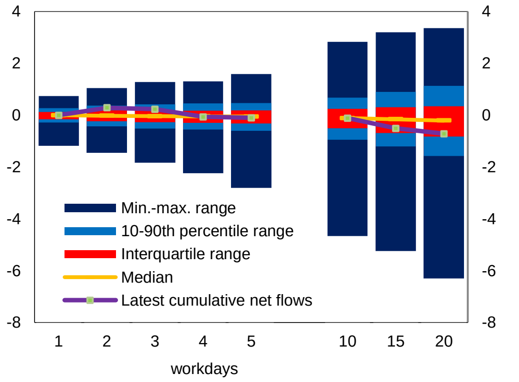
[33] The overall share of fixed mortgages amongst overall mortgage lending for the domestic banks, fell from 14 per cent in 2010 Q4 to 9 per cent in 2012 Q4.
[34] Common forms of short-term or temporary forbearance include payment moratoria and periods of interest-only repayments.
[35] Term extensions, arrears capitalisations, permanent interest rate reduction, split mortgages and trade down mortgages are viewed as more permanent methods of loan restructuring.
[36] For more details see Central of Ireland (2013) 'New Mortgage Arrears Targets and Consultation on Review of the CCMA'. *Central Bank of Ireland Press Release*, 13 March.
[37] The "Dunne judgement" refers to a decision made by Justice Elizabeth Dunne in July 2011, in which a gap in the Land and Conveyancing Law Reform Act 2009 was identified. As a result of the decision, a lending institution cannot apply for an order of possession on a registered property where a mortgage was created before the 1st December 2009, but a demand for full payment was not made by the lender until after that date.
[38] More information on the Insolvency Service of Ireland, including its "Guidelines on a reasonable standard of living and living expenses" is available from the agency's website.

Chart 38: Change in customer deposits (October 12 – April 13)



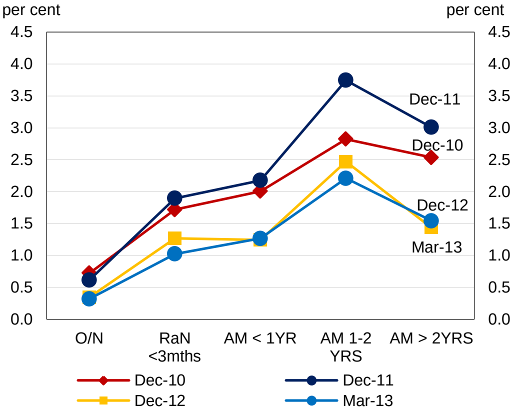
Source: Central Bank of Ireland.
Notes: Data refer to domestic institutions. Represents euro amount as at regulatory reporting date. Last observation is 26 April 2013.

Chart 39: Retail deposits net flows



Source: Central Bank of Ireland.
Notes: Data are consolidated and refer to the period 01 April 2010 to 01 May 2013. Includes IBRC. On Y axis, positive (negative) numbers are inflows (outflows). Min, max, interquartile range and median are for the entire period – for example the maximum outflow in a 1 day or 20 day period since 2010. Latest net flows are cumulative and refer to a period of up to 20 days before 16 May 2013.

Chart 40: Evolution of deposit rates



Source: Central Bank of Ireland.
Notes: Data relate to new business rates offered to households and NFCs conducted through resident offices of domestic banks. Data are a simple average. O/N denotes Overnight, RaN Redeemable at Notice and AM Agreed Maturity.

maturity of greater than 1 year. This compares with 21 per cent in January 2012.

Aggregate customer deposits have decreased over the seven month period to April. The reduction in retail deposit balances (Chart 38) is due mainly to lower UK balances as a result of movements in the euro-sterling exchange rate, as well as a reduction in bank deposit rates. This outflow has been largely offset by inflows from the non-bank financial institutions category.

In February 2013, the Minister for Finance announced that the ELG scheme would be discontinued on 28 March 2013. The intention to remove the scheme had previously been communicated and deposit flows were not significantly affected in the immediate aftermath of the decision (Chart 39). Deposit rates continue to decline across all maturities for both households and non-financial corporates but spreads over European interbank rates remain significant, particularly for term maturities, placing upward pressure on domestic banks' cost of funds (Chart 40).

Banks' vulnerability to both sovereign and bank credit-rating downgrades persist, resulting in higher levels of collateral being required by lenders. Standard & Poor's upgraded its outlook for Ireland's sovereign credit rating from 'negative' to 'stable' in February 2013 following the agreement to replace the IBRC Promissory Note with long-term bonds (see Box 3).

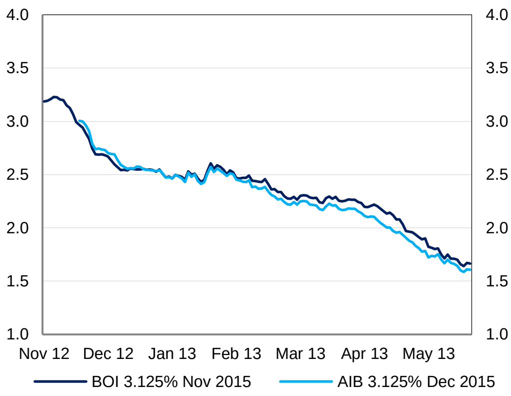
Bond yields indicate broadly positive investor sentiment for Irish banks. There has been a sustained decline in AIB and Bank of Ireland unguaranteed bonds yields (Chart 41). However, the risk of a sudden reversal of sentiment, arising for example from delays in addressing wider euro-area banking and sovereign issues, remains.

While recent secured issuances by the domestic banks are a positive step towards re-entering debt markets, the issues have largely been based on existing collateral, rather than on the basis of net new lending. Further secured issuance will be dependent upon the continued availability of unencumbered assets and any further deterioration in asset quality could pose a risk in this regard.[39] There has been only minor short-term unsecured issuance (not backed by collateral) since 2010. Issuance of term unsecured debt is viewed by financial-market participants as a more accurate indicator of a healthy banking sector than issuance of secured debt. In general, unsecured issuances are likely to become more difficult for lower-rated banks given uncertainty regarding their own viability and policy initiatives regarding the bail-in of senior creditors, in the absence of credible national or supra-national backstops.

In terms of future regulatory requirements, banks continue to report progress under the *Advanced Monitoring Framework*

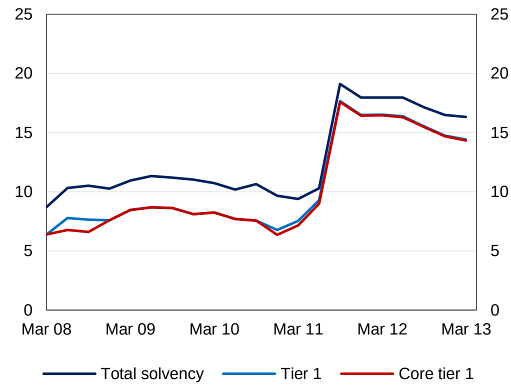
[39] Unencumbered assets are balance sheet assets that are free and clear of any claims such as creditor claims and are marketable as collateral in secondary markets.

Chart 41: Domestic banks' covered bond yields



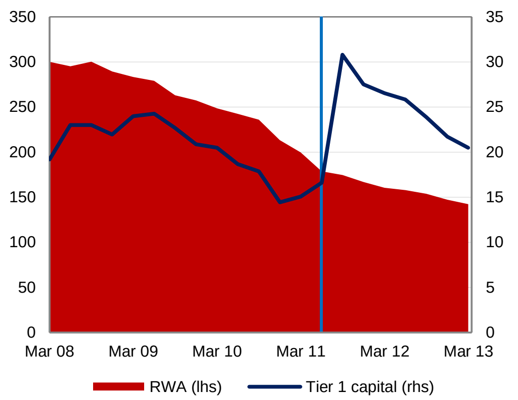
Source: Bloomberg.
Note: Last observation is 20 May 2013.

Chart 42: Domestic banks' solvency ratios



Source: Central Bank of Ireland.
Notes: Data are consolidated. Last observation is March 2013.

Chart 43: Evolution in level of tier 1 capital and risk weighted assets (RWA)



Source: Source: Central Bank of Ireland.
Notes: Data are consolidated. Light blue line corresponds to July 2011 Government capital injections. Last observation is March 2013.

towards meeting new liquidity requirements under Basel III/CRD IV. These requirements are designed to strengthen bank balance sheets and improve their ability to withstand stressed liquidity conditions. In January, revisions to the Liquidity Coverage Ratio were announced by the Basel Committee of Banking Supervision. Banks are now obliged to meet a minimum ratio of 60 per cent by January 2015 rather than the 100 per cent previously specified, with a graduated increase of 10 percentage points a year until 100-per-cent compliant in 2019. In addition, there has been a widening of the eligibility criteria for those assets defined as liquid.[40] The *Net Stable Funding Ratio* is due to come into effect in January 2018.

Bank capital and resilience

Capital ratios, a measure of banking-sector solvency, remain stable and well in excess of requirements despite the fragile condition of the domestic banking sector (Chart 42). The on-going reduction in risk-weighted assets (RWAs), due largely to asset sales and loan repayments, adds positively to the headline core tier 1 ratio, which stands currently at 15 per cent and partially offsets the erosion of capital arising from income losses (Chart 43).

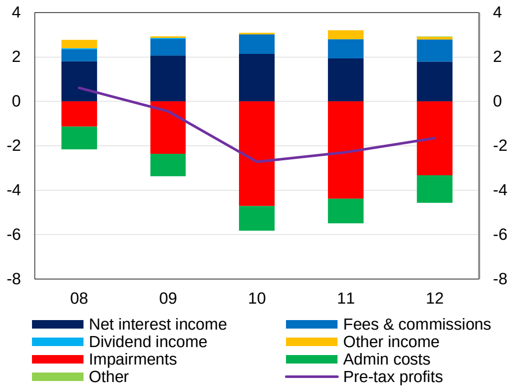
The domestic banks had €9.2 billion capital in excess of the 10.5 per cent core tier 1 requirement available to absorb additional losses at end June-2012. Losses on deleveraging were well below those assumed in the *base* and *adverse* scenarios assumed as part of the March 2011 stress-test exercise.[41] RWAs were higher than expected due to changes in deleveraging plans and higher than forecast credit risk RWAs.

At end-June 2012, the capital position of the domestic banks as a group was better than the *adverse* scenario but worse than the *base* scenario outlined in the March 2011 stress-test exercise. In the short term, capital needs will be influenced by the requirements of the current Financial Measures Programme and in the longer term by Basel III requirements.

Basel III will be phased in on a gradual basis in the EU until 2019 and is expected to reduce the banks' headline capital ratios. The regulatory changes that contribute most to the reduction are the treatment of deferred tax assets, pension-fund deficits, and shortfalls on provisions for expected losses.[42] Banks' published pro-forma ratios show an average common equity tier 1 ratio of around 9 per cent for the domestic banks. This ratio includes €5.3 billion in Government preference shares which remain eligible until December 2017.

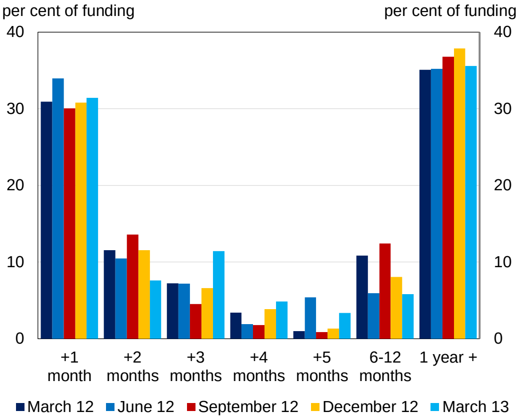
[40] For more information see Basel Committee on Banking Supervision (2013) 'Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools'. Bank of International Settlements, January 2013.
[41] For details see Central Bank of Ireland (2013) 'PCAR 2011 Review', 1 March. PCAR is Prudential Capital Assessment Review. The report outlines the findings of a review into the financial performance and capital out-turn of Allied Irish Banks plc (AIB), Bank of Ireland (BOI) and Permanent TSB (PTSB) over the period end-December 2010 to end-June 2012 compared to financial projections used as part of the March 2011 stress test which was the basis for the 2011 government capital injections.
[42] Deferred tax assets are effectively a tax credit against future income and for domestic banks arise largely due to losses carried forward assuming future profitability. These will be deducted in full under Basel III. The shortfall between provisions and expected losses will be deducted in full from equity tier 1 rather than 50 / 50 from tier 1 and tier 2 under Basel II.

Chart 44: Foreign-owned banks' profitability



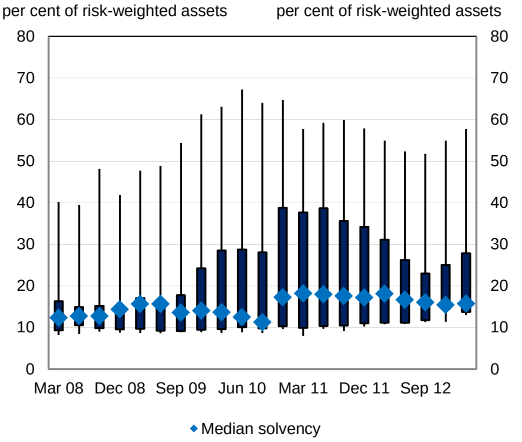
Source: Central Bank of Ireland.
Notes: Data collected in accordance with EBA's FINREP reporting requirements. Impairments include provisions.

Chart 45: Foreign-owned banks' funding maturity



Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 46: Distribution of tier 1 capital ratios



Source: Central Bank of Ireland.
Notes: The box at each point shows the interquartile range of tier 1 solvency position for a sample of foreign-owned banks operating in Ireland. Last observation is March 2013.

Foreign-owned resident banks[43]

Foreign-owned banks operating in Ireland can be differentiated between those with a retail presence in the Irish market which face broadly similar macro-financial, profitability and balance-sheet risks as the domestic banks; and those domiciled in Ireland but operating on an international basis which generally perform better.

Reflecting a broader range of business models, net interest income for the latter group represented only 48 per cent of total revenue compared with 80 per cent for the retail type banks in 2012. Net interest income has continued to decline, reflecting lower lending volumes and declining interest margins (Chart 44).

Profitability remains subdued amongst those institutions with a significant portfolio of Irish assets. This is largely driven by the high level of impairments, despite a reduction relative to 2011. For this group the level of impairments stood at 30.5 per cent in December 2012. This compares with a negligible 0.4 per cent of impaired exposures for the more internationally focused institutions. These banks have kept producing profits since 2008 with the return on equity declining from 9.0 per cent in 2008 to 7.6 per cent in 2012.

The funding patterns of foreign-owned banks are broadly stable. The overall level of funding declined by 9 per cent in the 12 months to March 2013. This reflects the downsizing of the balance sheet that has occurred over the last year. There has been little change in the maturity distribution of funding sources during 2012 (Chart 45). In terms of the composition of funding a significant share of funding remains intra-group — 40 per cent at March 2013. This has declined from 48 per cent in March of 2012. The reduction in group funding has been due primarily to an increase in customer deposits and longer-term market funding which account for 25 per cent and 14 per cent of funding, respectively.

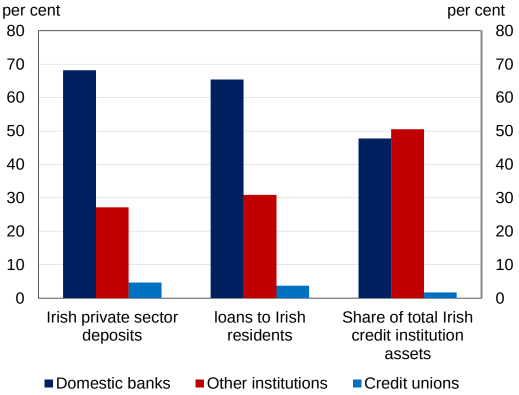
Capital ratios of foreign-owned banks remain well above regulatory minima. The median tier 1 ratio, while declining marginally over the previous two years, stood at 16 per cent in March (Chart 46). Foreign-owned banks' access to group funding and capital has proved useful during periods of market turbulence.

Credit unions[44]

While the 396 credit unions currently operating in Ireland constitute a small part of the domestic credit institution sector in terms of assets and member savings (Chart 47), they continue to face adverse macro-financial conditions, contracting loan books, higher levels of arrears and increasing reliance on investment income for profitability. As the investment assets of

[43] *Foreign-owned resident banks* refers here to banks whose ultimate parent are located outside the State and are rated as medium high or above under the Central Bank's risk-based framework for the supervision of regulated firms (The Probability Risk and Impact System (PRISM)).
[44] Credit unions are community-based savings and lending mutual institutions, i.e., owned by their members, where membership is generally based on a common background such as shared community, occupation or association.

Chart 47: Credit unions, share of total Irish deposits, loans and assets



Source: Central Bank of Ireland.
Note: Data are resident statistics for all credit institutions in Ireland. Domestic banks include IBRC. Data as at 28 March 2013.

the sector are predominantly weighted towards deposits in credit institutions, the current low-interest-rate environment is expected to adversely impact credit union profitability. The new personal insolvency legislation and loss-sharing proposals among creditors are designed to improve the position of lenders and borrowers by comparison to bankruptcy. This may have some impact on future earnings and capital given the unsecured nature of credit-union lending. However, at an aggregate level overall sector reserves are viewed as relatively strong.

Recommendations of the *Report of the Commission on Credit Unions* informed the *Credit Union and Cooperation with Overseas Regulators Act, 2012*, establishing a more robust legal and regulatory framework and providing for the restructuring of the credit union sector. A statutory body, the *Restructuring Board,* came into effect on 1 January 2013 to analyse and recommend restructuring proposals made by credit unions. Restructuring may be initiated either to address identified weaknesses or as a strategic decision taken by a credit union or group of credit unions to undertake a reorganisation. The Central Bank of Ireland has published its approach in supporting the Restructuring Board in this work.

The Central Bank of Ireland has identified a number of credit unions as being either in a weak capital position requiring pre-emptive action (or resolution) or involved currently in a transfer-of-engagements process.[45] Credit unions found to be below the minimum regulatory capital level of 10 per cent are required to either recapitalise or seek a restructuring solution. Where neither option is feasible the Central Bank of Ireland can utilise its powers under the *Resolution Act*, where intervention conditions are met. Overall, the Central Bank, along with the Restructuring Board, remains focused on stabilisation of the sector.

[45] Transfers of engagement do not necessarily imply capital concerns. Issues may arise due to lack of business viability, as a function of small size and contracting loan book or ability to comply with the requirements of new legislation due to size and resource capacity.

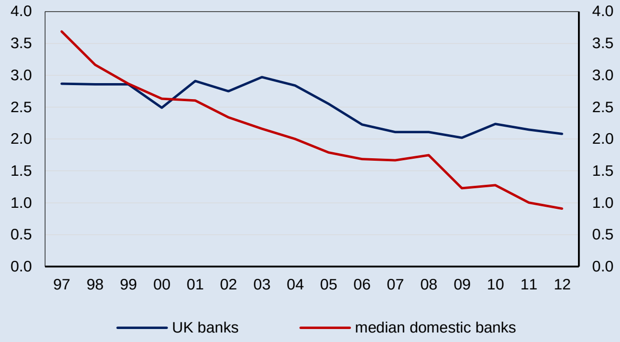
Box 5: Irish banks' cost of funding

This Box discusses the cost of funding challenges facing banks subject to the Financial Measures Programme.[1] The current aggregate balance sheet of the domestic banks contains a relatively large amount of low-yielding loans on the assets side and central-bank borrowing on the liabilities side. The low overall interest margin will make it difficult to eliminate central-bank funding and replace it with market-based funding.[2]

Chart A shows the median net interest margin (NIM) for the domestic banks (Allied Irish Bank, Bank of Ireland and Permanent TSB) since 1997, along with the median for UK banks as a comparison. The NIM is defined as the ratio of net interest income to interest-earning assets. Net interest income is the difference between interest earned on loans and other assets and interest paid on funding and other liabilities.

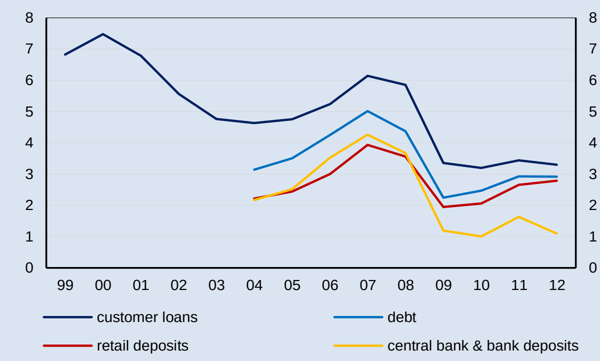
Pre-crisis, Irish banks' margins were on a downward trend and fell by around 1 percentage point between 1999 and 2008. This was due largely to management choices on product lines, including low margin activities and an overconcentration in property-related exposure. Banks reduced margins to increase lending volumes and build market share. At the same time, Irish banks were able to access increasing amounts of wholesale bank and debt funding, enabling them to expand their lending rapidly. The share of interest expense paid servicing longer-term debt more than doubled between 1999 and 2008. This type of funding came at a higher cost than traditional customer deposits (see Chart B below).

Chart A: Net interest margins



Source: Domestic banks' annual reports, Bank of England.
Notes: Net interest margin is defined as the ratio of net interest income to interest earning assets. Time varying sample of domestic banks. The net interest margin is inclusive of costs incurred in 2010-12 as a result of the Eligible Liabilities Guarantee.

Chart B: Average interest rates on customer loans and funding costs



Source: Domestic banks' annual reports.
Notes: Average rates are weighted using interest earning assets. PTSB is included from 2002. It was not possible to distinguish the rates payable on PTSB bank & customer deposits until 2006. Interest paid on PTSB bank deposits was included with the customer deposit expense until then. Debt includes sub-debt for PTSB in 2008-09.

Post-crisis, the median net interest margin for domestic banks fell further to around 0.9 per cent. By contrast, while UK margins also declined pre-crisis, they have remained relatively stable (Chart A). The reduction in balance sheet size, agreed with the EU, ECB and IMF as part of the Financial Measures Programme, has reduced interest income and increased the concentration of lower margin retail activities, in part due to tracker products.

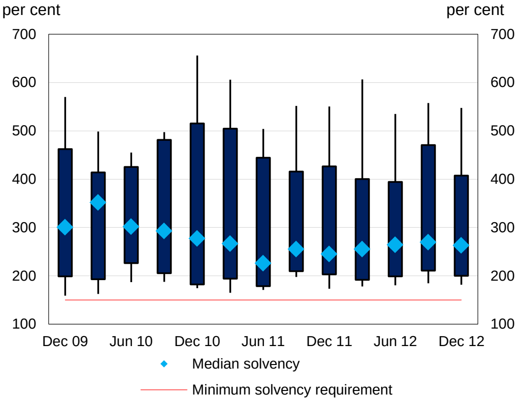
A recent reduction in the ECB's key policy rate (in May) will reduce the cost of servicing central-bank borrowings and may feed through to deposit rates but will also affect profitability through its' automatic impact on tracker mortgages and NAMA bonds. Although it is often assumed that the overall effect of a policy rate cut on bank profits is positive, it may reduce them depending on the structure of a bank's balance sheet. Looking forward, there are significant challenges in moving to a more sustainable business model and re-pricing assets and liabilities to rebuild net interest margins, with likely trade-offs between short-term gains and longer-term sustainability. Raising loan rates may aggravate arrears, while replacing central-bank borrowings with more expensive deposits and long-term debt entails a short-term cost but represents a more sustainable model, which may enhance credit ratings and create longer-term savings.

[1] The Financial Measures Programme (FMP) outlines the package of banking-sector measures Ireland adopted as part of the 2010 agreement with the EU, ECB and IMF, aimed at putting the finances of the domestic banks on a more secure basis. For more see Central Bank of Ireland (2011) *Financial Measures Programme Report*. Dublin.
[2] See Holton et al (2013) 'The Impact of the Financial Crisis on Banks' Net Interest Margins', *Central Bank of Ireland Economic Letter Series*, Vol. 2013, No. 1.

3.3 Insurance sector

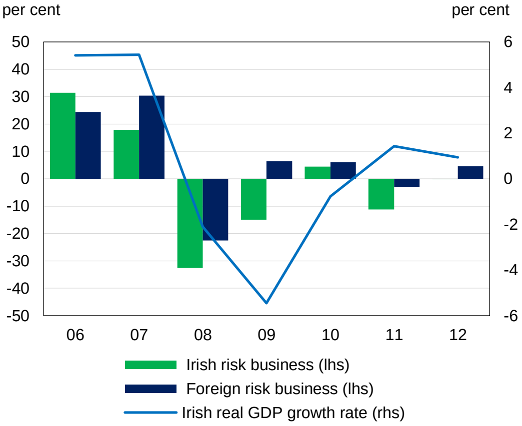
Although risks to financial stability stemming from the domestically focused Irish insurance sector remain low, overall the sector continues to face a difficult operating environment as continued weakness in economic activity hampers growth and profitability domestically and for the international sector. Historically-low interest rates are compressing investment returns and present a challenge in the short and medium term.

Chart 48: Solvency position of life companies



Source: Central Bank of Ireland.
Notes: Time-varying sample of life insurers. The box at each point shows the interquartile range of solvency positions for a sample of the largest life insurers by gross written premium.

Chart 49: Life sector premium growth (gross)



Source: Central Bank of Ireland.
Notes: Annual percentage changes.

Life sector operating environment

The solvency positions of the majority of life insurers in Ireland remain well in excess of the minimum required solvency ratio of 150 per cent (Chart 48). However, life insurance companies writing business in Ireland and in other European markets are vulnerable to the weak growth outlook for the EU and historically-low interest rates.[46]

New business volumes in the life sector fell by 4 per cent in 2012. However, there was only a marginal decline in premium income in the Irish business (Chart 49). Despite this stabilisation in premium income the proportion of policyholders that have discontinued paying premiums remains elevated (Chart 50) as policyholders continue to contend with falling income levels. Insurers have also faced increased competition for investor funds from higher rates on deposit accounts offered by banks. These developments create challenges for life insurers' business models in the medium term. Insurers may have to adjust their product offerings to those that are more attractive to investors in terms of return and price.

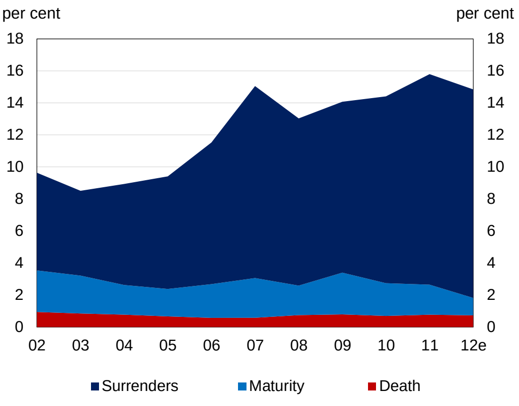
While the decline in new business revenues impacts profitability the fall in the share of existing policies that are renewed is a larger concern over the medium term. There are significant set-up costs on a new life assurance policy which the company must recoup over the life of the policy through various fees. Given the reduction in policy persistency, the relatively fixed expense base and pricing pressures, life insurance companies face significant challenges to profitability.

Non-life sector operating environment

The economic climate in Ireland and the euro area continues to present a demanding operating environment for non-life insurers also. Premium growth remains weak as households and corporates continue to contend with high unemployment, profitability pressures and reduced disposable income (Chart 51). Despite some non-life insurance business classes being mandatory, for example motor insurance, high levels of competition are exerting downward pressure on premia. While some insurers are addressing their cost base it is important that underwriting discipline is maintained. However, the solvency

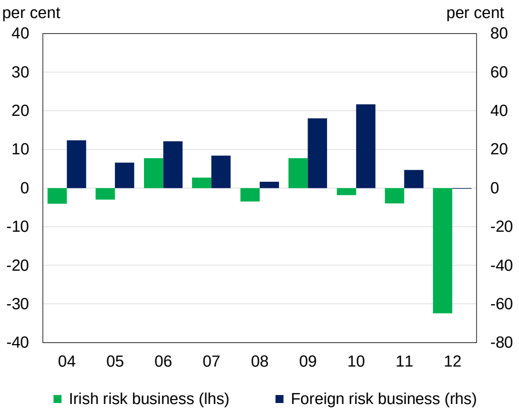
[46] See EIOPA (2012) Risk Dashboard. December 2012.

Chart 50: Life sector claims



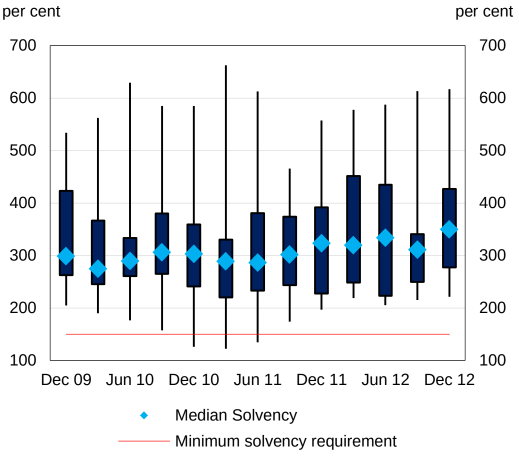
Source: Central Bank of Ireland.
Notes: Types of life insurance claims are as a percentage of life insurance funds. A surrender is when a policy is relinquished for some cash value. A maturity is when the policy commences paying out an endowment. Death benefit is the payment made when the policyholder dies. The peak in surrenders in 2006-2007 is due to the withdrawal of funds from Government Special Savings Incentive Accounts (SSIAs).

Chart 51: Non-life sector premium growth (gross)



Source: Central Bank of Ireland.
Notes: Annual percentage changes. Foreign risk business includes business written outside of Ireland by branches of Irish authorised companies. Large increases in foreign risk business in 2009 and 2010 are due to European insurers transferring their Head Office to Ireland. The decline in the Irish risk business class in 2012 is largely explained by a general insurer becoming a branch of its UK parent. The data do not include the activities of EEA companies operating in Ireland.

Chart 52: Non-life sector solvency position



Source: Central Bank of Ireland.
Notes: The box at each point shows the interquartile range of solvency positions for a sample of life insurers. All breaches in minimum solvency requirements relate solely to Quinn Insurance Limited.

position of non-life insurance companies remains stable, with those firms displaying a relatively weaker solvency position in 2011 strengthening their position in 2012 (Chart 52).

Low-interest-rate environment

The persistence of low interest rates and bond yields has increased the risk to insurance-sector profitability.

In the life sector, insurers offering products with guaranteed returns, such as in the variable and traditional annuity sectors, are the most exposed to a prolonged period of low interest rates. Life insurers writing Irish risk business predominantly offer unit linked products — 94 per cent of new business in 2012 — where the risks are primarily borne by the policy holder.

Pressure on profitability in the non-life sector from weak business growth and the difficulty in increasing premia in current economic conditions means that insurers must generate sufficient investment returns to bolster profitability. However, as the low-yield environment compresses returns (Chart 53), insurers may be prompted to alter the risk profile of their investment portfolios. Internationally there is some evidence that insurers are engaging in non-core activities in an attempt to improve returns, such as property lending and collateral transformations.[47,48] Irish insurers have generally taken a conservative approach to portfolio asset holdings; euro area sovereign bonds have traditionally comprised a significant proportion of assets. However, holdings of corporate bonds have increased over the past two years and that may be an attempt to achieve higher investment returns and diversify away from peripheral euro area sovereign bonds.

Insurers worldwide have engaged in reserve releasing to maintain profitability (Box 6). There is evidence to suggest that the capacity to continue bolstering profits in this way is diminishing which will negatively impact the profitability of the sector.

Reinsurance sector

Risks in the reinsurance sector mirror those in the life and non-life sectors with the addition of the reinsurance industry's exposure to global natural catastrophe events.

Irish reinsurers' market share of the reinsurance sector is approximately 3.6 per cent.[49] In 2012 the global reinsurance market was characterized by new reinsurance capacity due to record levels of capital and lower than average catastrophe losses in the first nine months of the year.[50] Natural catastrophe losses for 2012 are estimated to be about half the €86 billion total in 2011. This has contributed to the financial performance of the sector remaining stable (Chart 54).

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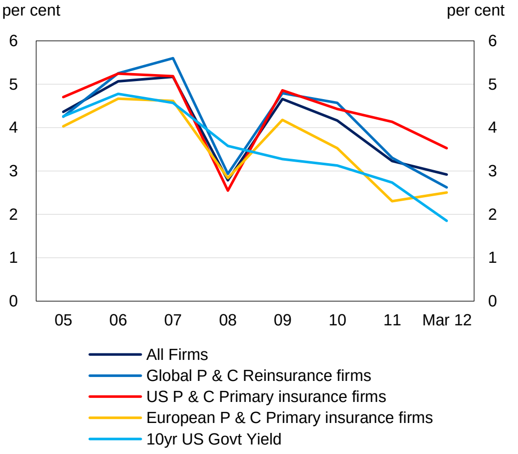
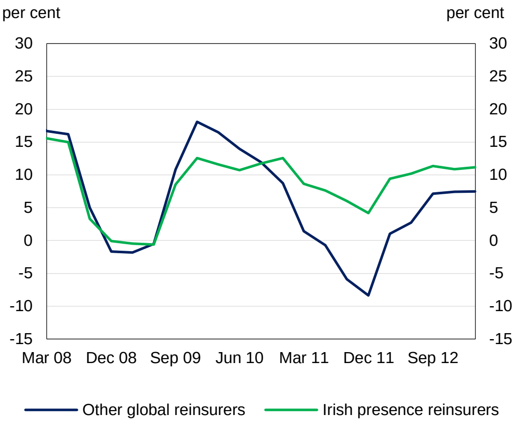
[47] See Alloway, T (2013) 'Wall Street's Latest Idea'. *Financial Times*, 4 March and Guevarra, V. (2013) 'UK Insurers Turn to Loans to Boost Returns'. *Wall Street Journal*, February 21.
[48] Collateral transformations are where lower-rated securities are swapped for a loan of higher-rated securities which can be used as collateral to back derivatives trades.
[49] Estimate of Irish reinsurers' market share is based on reinsurance listings in Standard and Poor's (2012) 'Global Reinsurance Highlights 2012'.
[50] See, Guy Carpenter (2013) 'January 2013 Renewal Report: The Route to Profitable Growth'. *GC Briefing*, January 2013.

Chart 53: Average total return on insurance firms investment portfolios



Source: Bloomberg, Central Bank of Ireland calculations.
Notes: Data are sourced from a survey of the annual accounts of 60 US and European reinsurance and general insurance firms. The total return on investment assets is calculated using investment income, gain/loss on trading account and unrealised gains/losses. Abbreviations: Property and casualty (P&C).

Chart 54: Reinsurer return on equity



Source: Bloomberg.
Notes: Data are quarterly averages. Last observation is Q1 2013.

Globally, reinsurer capital increased to record high levels in 2012 (€390 billion) contributing to an oversupply of reinsurance capacity.[51] Additionally, new issuances in the catastrophe bond market were at the highest level since 2007 and the total bonds outstanding at year-end reached a record of €13 billion, with investors drawn to the non-correlation of the returns with the macro-financial environment. This high level of activity is expected to continue.

Despite the oversupply of capacity in the reinsurance market, renewals pricing in 2013 has been stable. But for the reinsurance losses resulting from Hurricane Sandy reinsurers would have continued to face downward pressure on rates.[52]

[51] See, AON Benfield (2013) 'Reinsurance Capacity Growth Continues to Outpace Demand'. *Reinsurance Market Outlook*, January 2013.
[52] See, Willis Re (2013) 'Reinsurers Clear the Sandy Hurdle'.*1st View Report*, January 2013.

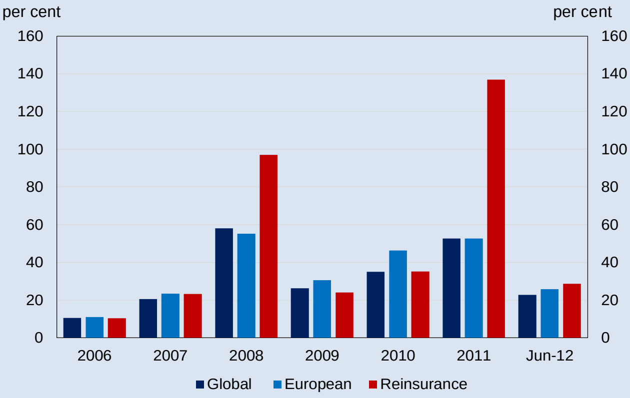
Box 6: Reserve releases among non-life insurers

This Box reviews how reserve releases have contributed to the profitability of the non-life insurance industry in Europe and North America (hereafter "the industry") and raises some possible implications for financial stability. Insurance companies build reserves to cover projected claims pay-outs on insurance policies. Reserves can prove to be more (or less) sufficient than required leading to the possibility of releases (or need for strengthening). Since 2006 the industry has become increasingly reliant on releases from insurance reserves as a source of profitability. This contrasts with the strengthening cycle of 2001-2005. Reserve behaviour in the industry tends to be cyclical in nature and is somewhat determined by the rate of inflation among other factors. This Box assesses just how much reserve releases have contributed to industry profitability and finds that reserve releasing has become an important component of overall profitability. If the industry moves to a reserve strengthening cycle profitability is likely to be negatively impacted.

The proportion of pre-tax profitability contributed by reserve releases/strengthening is calculated for 30 global non-life insurers (including re-insurers), based on published financial reports. This is referred to as reserve dependency. A comparison of reserve dependency against the underlying cost base of the insurance company can illustrate if certain firms had a significant profit uplift from reserve releases versus the average firm and considers what firms would be most vulnerable to a change in the reserving cycle. All other things being equal, firms with a lower cost base would be able to weather reduced profit contribution stemming from reserve strengthening relative to more inefficient firms.

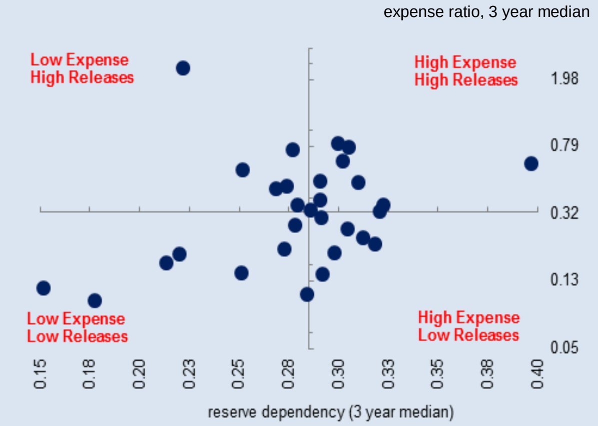
In 2006 reserve releases accounted for 10 per cent of pre-tax profitability for the industry. By 2011 dependence on reserve releases as a source of profitability had grown to 53 per cent. Most firms analysed have seen an increasing dependence on reserve releases as a source of profitability. By 2011, industry underwriting profitability would have been 4.1 percentage points lower if not for the reserve releases. To put this into context, 53 per cent of the companies surveyed would have been regularly loss making in the three years to 2011 in the absence of reserve releases. Given an increasing reliance on reserve releases as a source of profitability, the amounts of reserves available for release have declined. A key implication here is that other sources of profitability (namely investment returns) have been declining. The issue of how long the industry can continue to rely on this source of reported profit is an open question.

Chart A: Reserve releases as a per cent of pre-tax profits



Source: Insurance companies' audited Annual Reports.
Notes: Data are derived from sample of 30 global non-life insurers.

Chart B: Reserve dependency and expense ratios



Source: Insurance companies' audited Annual Reports.
Notes: Data are derived from sample of 30 global non-life insurers. Reserve dependence is defined as reserve releasing as a share of profits. Expense ratio is defined as acquisition plus underwriting expense as a percentage of net written premiums. A three-year median (2009 to 2011) is used to smooth out the underlying volatility of insurance profitability.

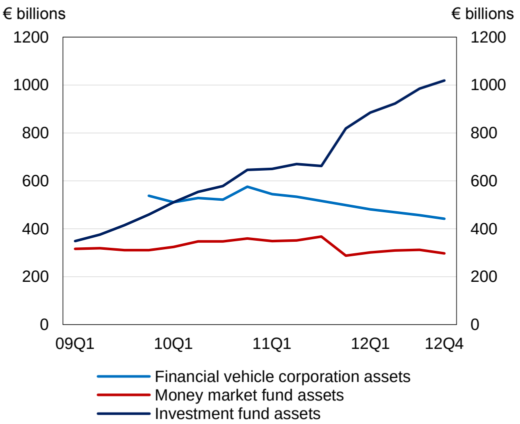
The analysis suggests that for much of the global non-life insurance industry, the present reserving cycle is mature. In many cases profits generated from underwriting are only achieved by making reserve releases. If the industry enters a reserve strengthening cycle, then profitability is likely to be negatively impacted unless the price of insurance increases and/or expenses are reduced. Higher-than-forecast inflation is likely to be a necessary condition for a general need to strengthen insurance reserves across the industry as it is a key input into actuarial reserving models for possible future claims.[1] The consistently poor profitability of current year underwriting may indicate that insurance companies are more focused on maintaining market share as opposed to pricing insurance to generate profitability. If firms become solely reliant on core underwriting as a source of profit, in future they may be tempted, when this source dries up, to either invest in riskier asset classes in the investment portfolio in a search for yield, or to release reserves, exposing themselves to further future reserve inadequacy. The Irish supervisory approach to this matter has been to devote additional supervisory scrutiny to the assessment of adequacy of both reserving and pricing.

[1] For example, in considering the effect of inflation on possible future claims in the case of home insurance, the replacement/rebuild cost is assumed and then adjusted for forecast inflation. If realised inflation proves to be greater than forecast inflation this can lead to an under-reserving of a particular line of insurance. This in turn can necessitate a strengthening of reserves.

3.4 Money market funds and other financial intermediaries

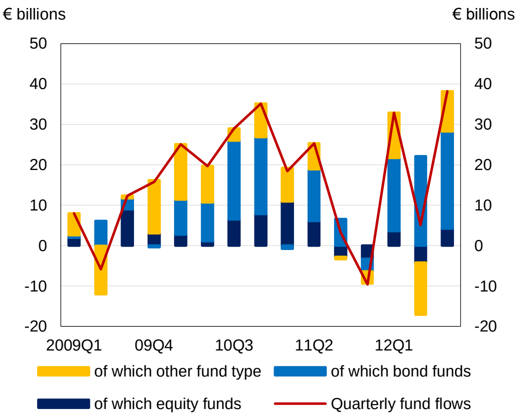
Short-term risks to Irish financial stability from domestic money market funds (MMFs) and other financial intermediaries (OFIs) remain low. Although MMFs and OFIs account for a large proportion of the financial system measured in terms of assets, direct linkages to the domestic financial system and economy are not significant. The assets and liabilities of these entities are located predominantly outside Ireland and outside the euro area. The industry is susceptible to external developments and to the current international environment of rising risk appetite and faces uncertainty relating to divergences between European and global approaches to the regulation of MMFs.

Chart 55: Assets of Irish resident funds and financial vehicle corporations



Source: Central Bank of Ireland.
Notes: There was a statistical reclassification in Q4 2011 resulting in €114 billion of money market funds being reclassified as investment funds. Data for financial vehicle corporations are available since end-2009 only.

Chart 56: Quarterly change in investment fund transactions



Source: Central Bank of Ireland.
Notes: Last observation is 2012 Q4. "Other" fund type refers to, for example, resident hedge funds.

Money market funds and other financial intermediaries

Since the last Review, MMFs have experienced fund outflows (Chart 55).[53] Just over half of MMF total assets are invested in debt securities issued by non-euro area residents, while the proportion invested in assets issued by Irish residents is much smaller (1 per cent). Half of all total assets are sterling denominated, with 31 per cent denominated in US dollars and 18 per cent in euros.

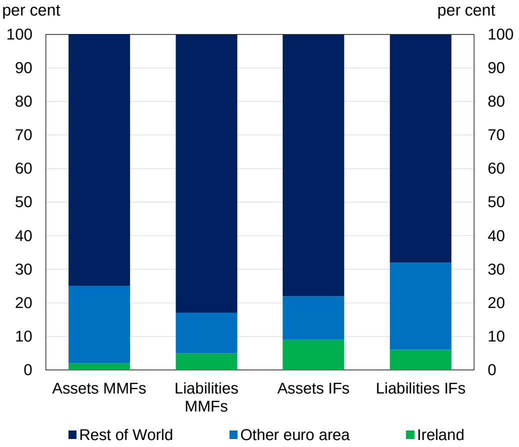
OFIs consist primarily of investment funds and financial vehicle corporations.[54] The investment-fund industry has experienced significant growth over the last number of years, having more than doubled since 2008 on a total-assets basis.[55] Bond funds, in particular, have experienced substantial inflows since 2010 as investors have altered their risk appetite and subsequently shifted portfolio allocations (Chart 56). This has happened at the expense of equity funds which had accounted previously for a larger component of resident investment funds.

The value of financial-vehicle-corporation assets continued to fall in 2012 Q4 such that there has been a decline of 23 per cent since 2010.[56] The predominant driver of the recent fall in value was related to a net outflow of securitised loans; in particular, the withdrawal of a number of loan tranches of Irish real estate mortgage backed securities due to their inability to attain an investment-grade credit rating.

While MMFs and OFIs account for a large proportion of the financial system by assets the links between these sectors and the domestic financial system and economy are not as significant as for the banking or insurance sectors. This is because the assets and liabilities of resident OFIs and MMFs are predominantly located outside of Ireland, with the majority outside of the euro area.[57] In the case of investment funds and MMFs, over 70 per cent of their assets are located outside of

[53] MMF's refer to funds that invest in highly liquid money-market instruments and typically adopt a short-term investment horizon.
[54] Investment funds are defined as "a collective investment undertaking that invests in financial and non-financial assets, to the extent that its objective is investing capital raised from the public".
[55] For a detailed discussion on the investment funds industry in Ireland and how the data are reported see Godfrey et al (2010) 'The Investment Funds Industry in Ireland – A Statistical Overview', Central Bank of Ireland Quarterly Bulletin, January 2010.
[56] Latest available data relate to 2012 Q4.
[57] FVCs account for approximately 13 per cent of the assets of the financial sector in Ireland.

Chart 57: Investment funds and money market funds – assets and liabilities by residency



Source: Central Bank of Ireland.
Notes: Data as at 2012 Q4.

Ireland (Chart 57).

At present, global and domestic MMFs and OFIs face a period of uncertainty owing to possible regulatory changes as the work of the Financial Stability Board in relation to *shadow banking* nears its conclusion in 2013. Both US and European regulators have detailed plans under consideration for the reform of MMFs, which may progress in the coming months. The planned introduction of a financial transactions tax in some euro area countries may change how these and other parts of the financial sector operate and may alter the flow of capital globally.

The recent financial crisis has shown that shadow banking could be a source of systemic risk in some countries' financial systems.[58] Oversight continues to improve, with parts of the non-bank financial institution sector being subject to regulatory intervention through statistical data collection, disclosure rules (Prospectus Directive and Transparency Directive), market integrity rules (Market Abuse Directive) and funds regulations (UCITS Directive and Alternative Investment Fund Managers Directive).

Overall, while the industry is susceptible to external developments and changing investor preferences, it does not pose a significant risk to the domestic macro-financial environment given the limited direct links to both the economy and the financial sector.

[58] Shadow banking typically has the following characteristics: maturity or liquidity transformation across the balance sheet - where the sources of funding are of shorter maturity or the assets are inherently illiquid; and credit creation funded by leverage.

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