2014: II

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 30 November, 2014.

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 plc (including EBS), Bank of Ireland and Permanent TSB. The term *domestic banks*, unless stated otherwise, excludes the Irish Bank Resolution Corporation (IBRC) which has been in Special Liquidation since 7 February, 2013.
   - *Covered banks* refer to those banks covered by the Eligible Liabilities Guarantee Scheme.
   - *Foreign-owned resident banks* are foreign banking groups that have a presence (either subsidiary 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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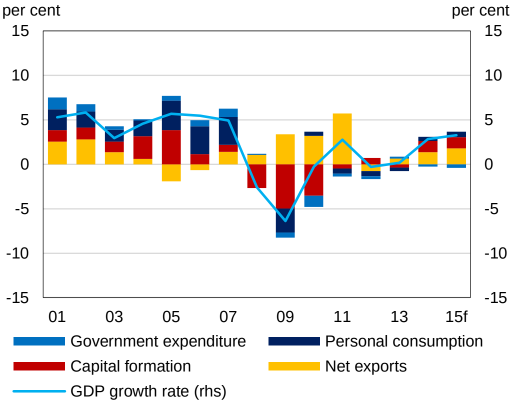
Preface

The Macro-Financial Review offers an overview of the current state of the macro-financial environment 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. It evaluates developments since the previous Review, published in June 2014.

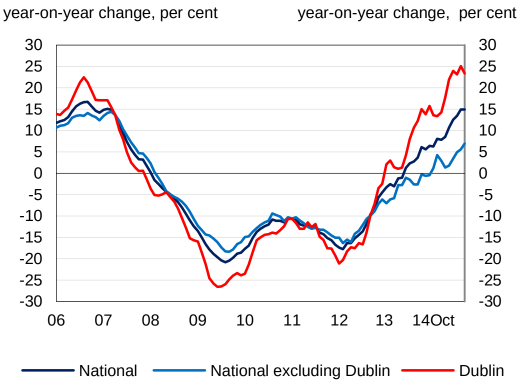
1. Overview

Chart A1: Contributions to GDP Growth



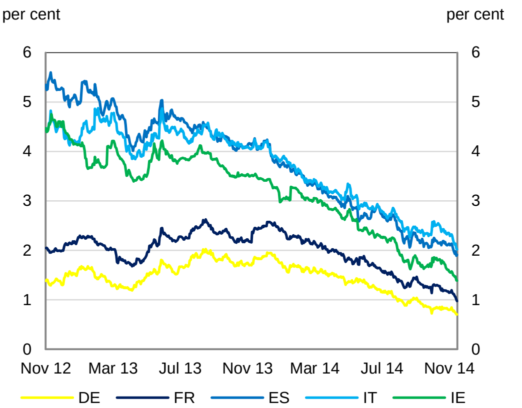
Source: Central Statistics Office (CSO) and Central Bank of Ireland.
Notes: 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 4 2014.

Chart A2: House price growth: National, Dublin & non-Dublin



Source: CSO.

Chart A3: Sovereign bond yields for selected euro area Member States, 10-year maturity



Source: Thomson Reuters Datastream.
Notes: Chart shows yields on sovereign bonds, ten-year maturity. Last observations: 28 November 2014.

Overview

The international economic environment has been less favourable since the publication of the last Review (June 2014). There is a slowdown in economic activity in the euro area while growth in other advanced economies remains uneven. Heightened geopolitical tensions, the challenges associated with monetary policy normalisation in some countries, and protracted below-target inflation rates in others are issues that create uncertainty in the macro-financial environment. A search for yield is a general feature of recent financial market activity. It is evident in strong investor demand for riskier assets and compressed yields across a range of asset classes. That demand, however, is vulnerable to a change in investor sentiment (such as an increase in risk aversion) or adverse economic shocks.

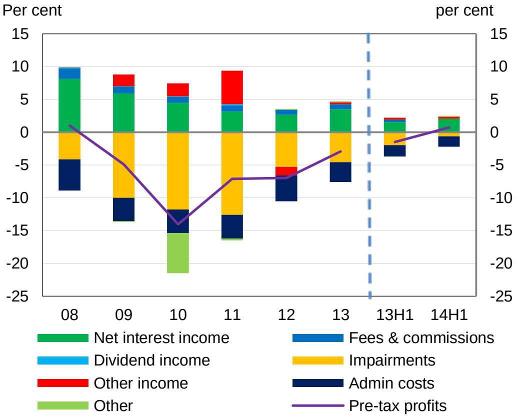
Against this background, the performance of the Irish economy has been improving with output projections for 2014 and 2015 revised upwards since the last Review. The economic recovery is also becoming more broadly based with domestic demand estimated to be now making a positive contribution to Gross Domestic Product (GDP) growth, for the first time since 2007, alongside net exports (Chart A1).

As well as the uncertainties surrounding the international macroeconomic environment, the Irish economy faces difficulties of its own. These include a high unemployment rate; elevated levels of indebtedness in the sovereign, household and non-financial corporate (NFC) sectors; a banking system with a large stock of non-performing loans; and imbalances between supply and demand in the property market. While there have been improvements in these areas, they leave the Irish economy and its financial system vulnerable to shocks.

There have been pick-ups in activity in both residential and commercial property markets. The pace of house price and residential rent rises has increased in 2014, particularly in Dublin, and they are now increasing at values close to mid-2000s peak rates (Chart A2). Low levels of housing supply are an important factor in the house price rises. Supply constraints alongside increased demand are also a feature of the commercial property market.

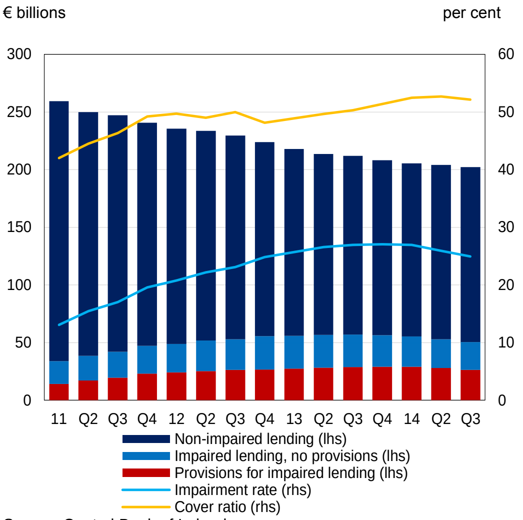
These developments raise a number of concerns from a financial stability perspective. The first is the rapid pace of house price increases over the past year or so. This could give rise to expectations of further increases and could lead to a misalignment of house prices. Secondly, rising house prices may prompt an increased demand for mortgage loans. It is important that appropriate credit standards apply to new loans. The Central Bank has recently proposed limits on the amount of new

Chart A4: Domestic banks' profitability



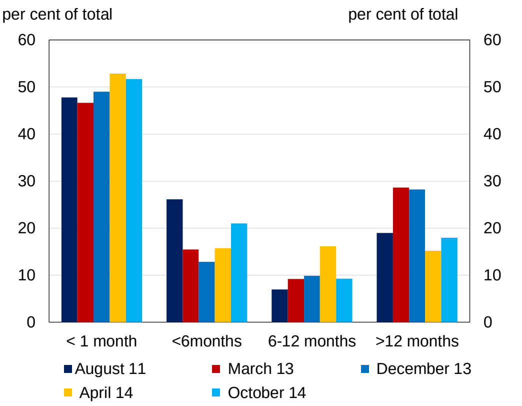
Source: Central Bank of Ireland.
Notes: Data collected in accordance with European Banking Authority's FINREP reporting requirements. Impairments include provisions.

Chart A5: Domestic banks' credit exposures and asset quality



Source: Central Bank of Ireland.
Notes: Data are consolidated. Total lending is represented by drawn exposures. Impairments are represented by CRD default loans.
The cover ratio is calculated by dividing the value of provisions for impaired loans by the value of impaired loans.

Chart A6: Maturity profile of domestic banks' funding



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

mortgage lending that can take place at higher loan-to-value and loan-to-income ratios.[1] Their purpose is to ensure prudent lending standards are maintained throughout the credit cycle. Thirdly, activity in the commercial property market appears to reflect, to some extent, the search for yield by international investors. This leaves the market vulnerable to a change in investor sentiment and the availability of investment opportunities elsewhere.

Sovereign bond yields have declined in the euro area in recent years (Chart A3). This likely reflects the global search for yield in financial markets and confidence in the commitment of euro area authorities to the euro. A reversal in this positive sentiment, or of the global search for yield, would have an adverse impact on funding costs for sovereigns, particularly for highly-indebted sovereigns such as Ireland, and market conditions more generally.

The domestic banking sector returned to profitability in the first half of 2014, for the first time since 2008, reflecting growth in operating income and reductions in impairment charges (Chart A4). Low levels of new lending and limited scope to raise lending margins, however, can be expected to constrain the ability of domestic banks to increase income. Constrained credit availability, in turn, could hinder economic recovery, with small-and-medium enterprises in particular reliant on bank financing.

The banking sector continues to face many challenges. The resolution of non-performing loans remains a critical issue. They constitute over one-quarter of the value of outstanding loans (Chart A5). The lack of progress on impaired buy-to-let mortgage loans and the continuing growth in very long-term mortgage arrears (of 720 days and over) are of particular concern. The maturity profile of funding remains weighted heavily to the short term (Chart A6). Customer deposits are among those short-term funds and are a stable funding source. Nevertheless, the general funding profile leaves domestic banks susceptible to reappraisals of risks and changes in sentiment by the market, including in relation to the sovereign. A large proportion of bank debt is due to mature in the first quarter of 2015. A rise in the cost of funding could impact negatively on net-interest margins and on bank profitability.

The results of the 2014 Comprehensive Assessment of European Banks were published by the European Central Bank (ECB) on 26 October. Its Asset Quality Review component confirmed that the accounting standards applied by Irish banks were generally conservative and in line with international accounting standards. Stress tests indicated that under a baseline scenario all Irish-based banks met ECB requirements of at least 8 per cent common equity tier one capital.[2] The results of the adverse scenario indicated Permanent TSB alone

[1] The Central Bank has issued a consultation paper on this matter. See Central Bank of Ireland (2014) 'Macro-prudential policy for residential mortgage lending'. Consultation Paper CP87. The consultation ran until 8 December. All responses are being considered before a final policy is issued in early-2015.
[2] Core equity tier 1 capital comprises the highest quality capital in terms of both permanence and loss absorption capacity.

among the Irish-based banks having a capital shortfall, of €855 million. It has submitted capital plans to address the shortfall to the Central Bank and the ECB. Looking forward, the extent and timing of any writing back of provisions must be carefully assessed and should reflect a conservative view of developments.

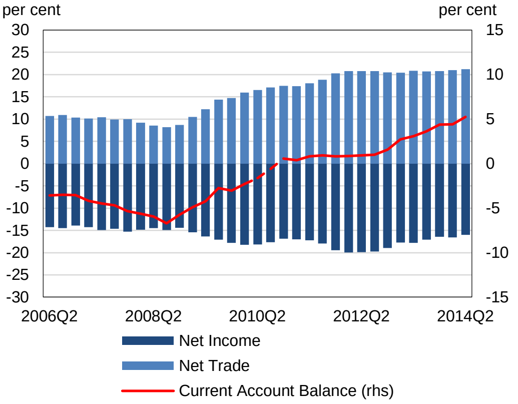
In summary, the domestic economic outlook has improved since the last Review, while there have also been some positive developments in the banking sector. There are, however, issues weighing on the macro-financial environment. These include high debt burdens in the private and public sectors and a large stock of non-performing bank loans. Beyond Ireland, there are geopolitical issues that could affect world output, deflationary pressures in some economies and the possibility of a reversal of the search for yield. Any of these could have negative consequences for the Irish financial system and macro-financial environment.

2. Macroeconomic Environment

2.1 Macroeconomic overview

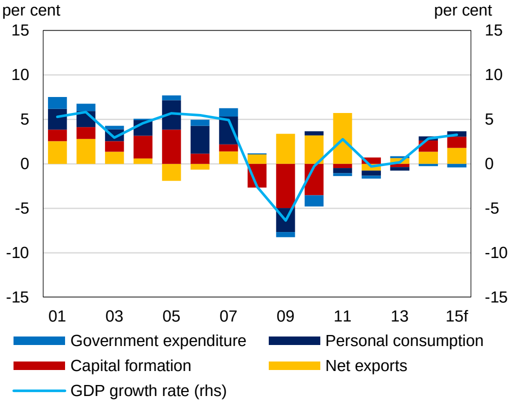
A slowdown in the euro area alongside uneven growth in other advanced economies poses a risk to global growth, with geopolitical issues in a number of regions also potentially affecting external demand. Low aggregate demand growth in the euro area would be a drag on Irish export growth. The large upward revisions to Irish Gross Domestic Product (GDP) growth forecasts for 2014 and 2015 reflect a positive contribution from both external and domestic factors for the first time since 2007. A high saving rate and subdued activity in the housing market may weigh on consumption.

Chart 1: Balance of payments, per cent of GDP



Source: CSO and Central Bank of Ireland.
Notes: Data are expressed in four-quarter moving averages.

Chart 2: Contributions to GDP Growth



Source: CSO and Central Bank of Ireland.
Notes: 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 4 2014.

External environment

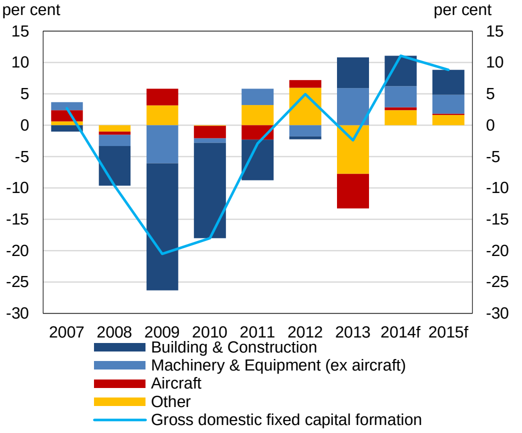
Conditions in the external environment have been less favourable over recent months, with a slowdown in the euro area resulting in downward revisions to the outlook for Ireland's main trading partners. Recent softening in manufacturing and construction indicators in the US add to uncertainties surrounding overall global growth prospects. Geopolitical issues, such as the on-going conflicts in Ukraine and the Middle East, an escalation of civil unrest in Hong Kong and the impact of a possible Ebola pandemic, also pose risks to the global economic environment.

These developments notwithstanding, export growth has been strong, in part due to a rebound in the exports of pharmaceutical products and an apparent change in the structure of production by certain multi-national enterprises.[3] The most recent data show year-on-year export growth of 13 per cent (2014 Q2). Exports by indigenous firms are typically more employment intensive and reliant on the UK market than those of the foreign-owned multinational sector. Consequently, the more positive outlook for the UK economy in comparison to the euro area may prove of benefit to Ireland. A weaker euro since the last Review is also favourable to exporters to the UK and US. Policy measures on both sides of the Atlantic mean that this trend is likely to continue over the coming months. In the euro area, low aggregate demand growth would provide a drag on Irish export growth.

The overall external position of Ireland, as expressed in the current account of the balance of payments, continues to improve (Chart 1). This development over recent years has been driven by less negative factor income flows. The activities of re-

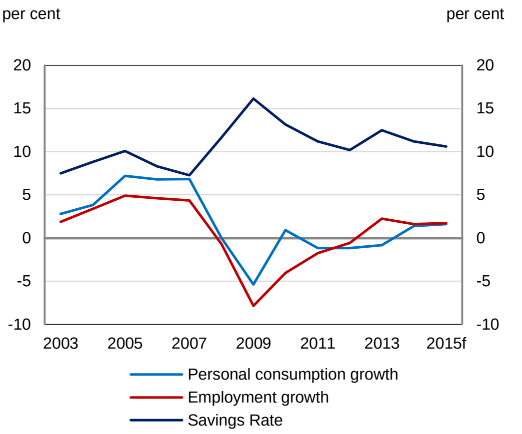
[3] Export growth rates have also been affected by methodological changes in the National Accounts. See Conefrey, T. and O'Brien, M. (2014) 'Box A: The Implications of Recent Changes to Macroeconomic Statistics'. Central Bank of Ireland, Quarterly Bulletin 3.

Chart 3: Contributions to investment growth



Source: CSO and Central Bank of Ireland.
Notes: 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 4 2014.

Chart 4: Employment, savings and personal consumption



Source: CSO and Central Bank of Ireland.
Notes: 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 4 2014.

domiciled corporations and the impact of patent expiration and royalty import growth on profits in the multinational sector have contributed to this.[4] Multinational corporation (MNC) profits are still subdued but to a lesser extent than in the first half of 2013. The improvement in the current account balance reported so far for 2014 appears to reflect an improvement in the external position of the indigenous real economy.

Domestic environment

The recovery in the Irish economy is broadening and is gathering more pace than was expected at the time of the last Review, with GDP now projected to grow by 4.5 per cent in 2014 and by 3.4 per cent in 2015.[5]

Domestic demand is providing a positive contribution to GDP growth for the first time since 2007 (Chart 2). This is largely driven by strong growth in investment, albeit from a low base. Machinery and equipment outlays have been performing strongly as firms reach a stage in the investment cycle where replenishing capital stock is necessary (Chart 3). Aircraft purchases and investment by multinational enterprises are important components of overall investment growth. Indicators point to a further pick-up in construction activity. Constraints in terms of planning regulations and financing conditions are acting as a drag on the rebound in building activity. This is impacting supply in the housing market (see Section 2.3).

Growth in consumer spending is strengthening and is expected to be reinforced by improving prospects in the labour market. Despite lower increases in employment and labour force participation in 2014 than in 2013, unemployment continues to fall.[6] Having averaged 13.1 per cent for 2013, the unemployment rate is expected to be 11.1 per cent for 2014 as a whole. More individuals are moving into full time employment, whereas employment growth in the earlier stages of the recovery had a higher part-time component. Consequently, compensation levels are increasing. Policy measures announced in Budget 2015 imply that there will be no fiscal drag on domestic demand next year. Impaired household balance sheets as well as continuing high, albeit decreasing, unemployment levels point to the high saving rate persisting over the near term. This contributes to an improvement in household balance sheets, although it also acts as a drag on personal consumption growth (Chart 4). Subdued activity in the housing market may weigh on consumption of durables, as well as on other housing related services.[7]

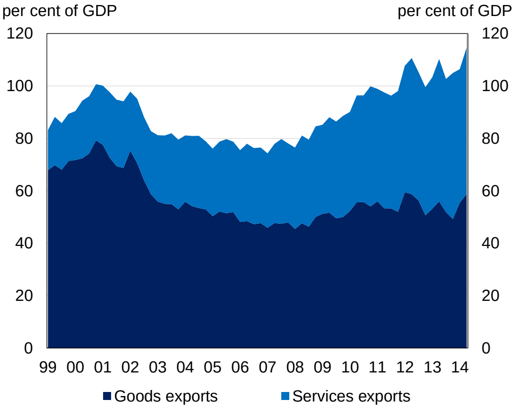
In general, the improving macroeconomic environment can help reduce private and public debt burdens and improve bank profitability. Economic performance remains reliant on labour market developments, financing conditions for indigenous firms, and external demand.

[4] For more on the impact of re-domiciled corporates see Everett, M. (2012) 'Box 3: The Statistical Implications of Multinational Companies' Corporate Structures'. Central Bank of Ireland, Quarterly Bulletin 2.
[5] See Central Bank of Ireland, Quarterly Bulletin 4 for forecast details.
[6] See McIndoe-Calder, T. and O'Brien, M. (2014) 'Box A: Employment Growth Dynamics in 2013-2014'. Central Bank of Ireland, Quarterly Bulletin 4.
[7] See Clancy, C., Cussen, M. and Reamonn, L. (2014) 'Housing Market developments and household consumption'. Central Bank of Ireland, Economic Letter,Vol. 2014, No. 9.

2.2 Non-financial corporate sector

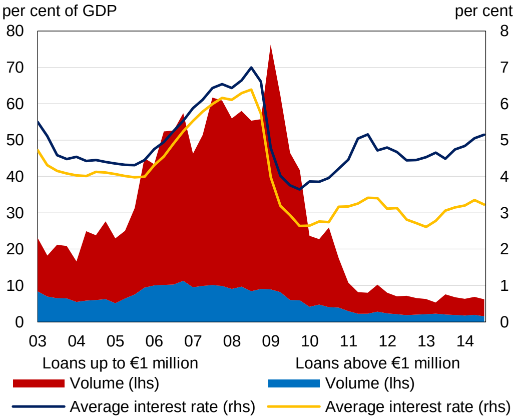
The non-financial corporate (NFC) sector continues to face the challenges of high levels of indebtedness and difficulties accessing credit, in particular for small and medium enterprises (SMEs) reliant on bank-lending. Within the SME sub-sector, high levels of indebtedness are concentrated in a small proportion of firms and loan default rates are substantially higher for firms with property exposures. New lending by banks to NFCs remains low and interest rates have increased of late. The pick-up in the Irish commercial property market continues. It remains vulnerable to a change in investor sentiment and the availability of investment opportunities in other countries. Supply constraints can be expected to exercise further upward pressure on rental and capital values.

Chart 5: Irish exports



Source: CSO.
Notes: Quarterly frequency until 2014 Q2.

Chart 6: New lending by banks to NFCs



Source: CSO and Central Bank of Ireland.
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. The data are reported on a quarterly frequency to 2014 Q3 (latest GDP figure available is 2014 Q2).

Demand conditions

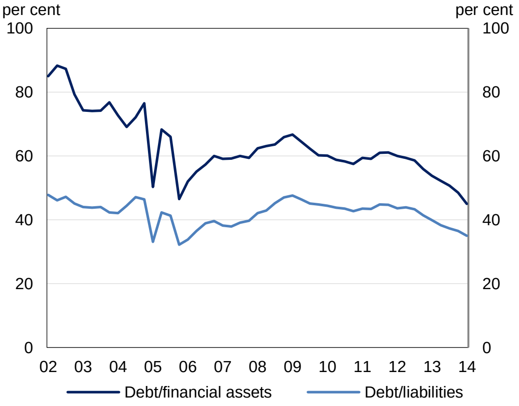
Exports by multi-national corporations (MNCs) have been an important contributor to national output in recent years and estimates for 2014 have been revised upwards substantially since the last Review, following a strong performance in the first half of the year (Chart 5).[8] For 2015, exports are expected to grow strongly but at a slower rate than in the current year. Domestic demand is expected to make a positive contribution to overall economic growth in 2014 for the first time since 2007. This will benefit non-exporting firms, which account for the bulk of the employment and activity of Irish-owned enterprises.[9] Forecasts for the UK economy have recently been revised upwards which should benefit Irish-owned exporters.[10]

Financing

Credit conditions remain challenging for the domestic NFC sector. Chart 6 shows new lending by Irish banks to NFCs remaining weak. Countries with a higher prevalence of SMEs have tended to recover more slowly from the effects of the recent financial crisis, suggesting that the interaction of economic structure and access to bank financing plays a critical role in economic recovery.[11] There has been an increase in gross new lending to SMEs in the first half of 2014 compared with 2013 but repayments exceed new lending.[12] Interest rates on loans both above and below €1 million have increased since the last Review. The latter is generally regarded as a proxy for the SME lending rate and thus indicates more expensive financing conditions for this group which has few alternative sources of credit. There are indications that some diversification in SME funding is now underway, with the use of internal funding, trade credit and equity. However, these credit sources

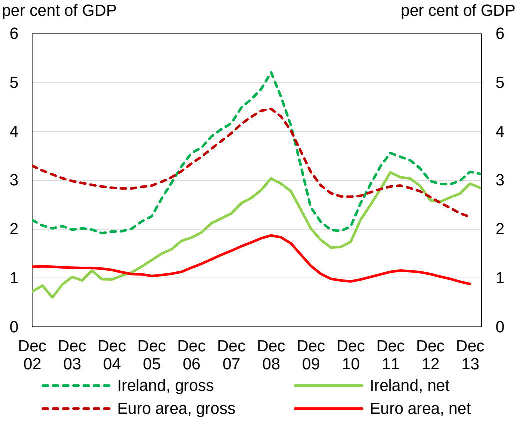
[8] This reflects external demand developments and the easing of patent expiry issues, as well as the effect of methodological changes in the National Accounts.
[9] Non-exporting firms account for over 80 per cent of employment and around two-thirds of economic activity, as measured by gross value added, of Irish owned enterprises. 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 2.
[10] The UK accounts for almost half the exports of Irish-owned firms. O'Brien, D. and Scally, J. (2012) 'Cost Competitiveness and Export Performance of the Irish Economy'. Central Bank of Ireland, Quarterly Bulletin 3.
[11] See Klein, N. (2014) 'Small and Medium Size Enterprises, Credit Supply Shocks, and Economic Recovery in Europe', IMF Working Paper WP/14/98.
[12] See Sherman, M. (2014) 'Box A: Trends in Bank Credit, Deposits and Real Economy Indicators for the SME Sector'. Central Bank of Ireland, Quarterly Bulletin 4.

Chart 7: NFC debt



Source: Quarterly Financial Accounts, Central Bank of Ireland.
Notes: In addition to debt, total liabilities for the NFC sector include shares and other equity, insurance technical reserves and other accounts payable. Quarterly frequency to 2014 Q1.

Chart 8: NFC debt interest payments



Source: CSO and Eurostat.
Notes: Gross interest equals interest paid. Net interest equals interest paid less interest received. In the European System of National and Regional Accounts, ESA95, 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). Quarterly frequency to 2014 Q1 for Ireland, 2013 Q4 for the euro area.

may be more expensive and less-developed than bank-financing.[13] The recently launched Strategic Banking Corporation of Ireland will lend to SMEs on longer and more favourable terms than currently available.[14] The National Pension Reserve Fund is being re-oriented from a long-term pension fund to a domestically-focused investment fund, the Ireland Strategic Investment Fund (ISIF), to support economic activity and employment. The fund is currently valued at €6.8 billion.[15]

Figures from the Red C SME Credit Demand Survey for the period April-September 2014 show a slightly reduced demand for credit, compared with the previous six month period.[16] New credit demand for investment is being driven by the need to renew equipment and infrastructure which may not have been updated in recent years. Improved trading conditions reported by survey participants mean that fewer SMEs need to seek finance for working capital purposes, leading to a fall in overall credit demand. Data from the Companies Registration Office show a 13 per cent increase in the number of new company registrations in the first nine months of 2014 compared with the same period in 2013. Furthermore, the annual rate of liquidations of potentially insolvent companies, although still elevated, has declined substantially since its peak in 2011/2012.[17]

Indebtedness

Irish NFC debt has been declining in recent years, when measured relative to balance sheet size, and has fallen further since the last Review (Chart 7).[18] However, the sector continues to be highly indebted and debt-interest costs remain above the euro-area average (see Chart 8). Data indicate that nearly 84 per cent of SMEs have a debt-to-turnover ratio of less than one third, while one third of SMEs have no debt at all. A small proportion of firms have high debt-to-turnover ratios, however, and are consequently vulnerable to adverse movements in interest rates, profits and revenue which would affect their ability to service debt.[19]

Survey data show that at least one-fifth of Irish SMEs whose primary business activity does not relate to property investment have direct exposure to property debt while loan-level data show that at least 10 per cent of firms with bank debt have exposure to property investment at the same bank.[20] Default rates are

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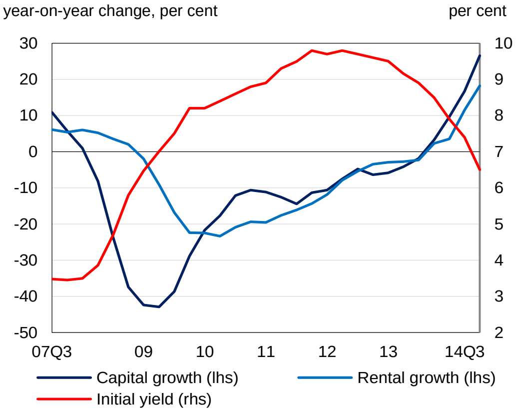
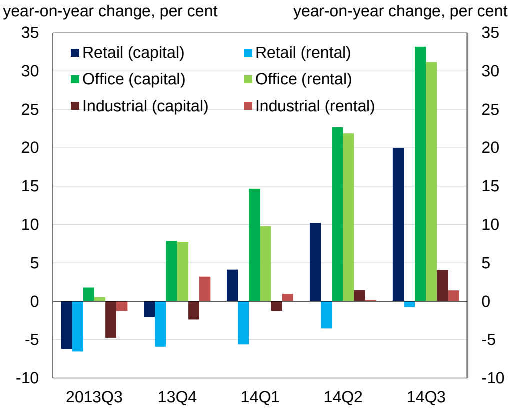
[13] Lawless, M., McCann, F. and O'Toole, C. (2013) 'The importance of banks in SME financing: Ireland in a European context'. Central Bank of Ireland, Economic Letter, Vol. 2013, No. 5. For an overview of current SME funding and an analysis of policy options for SME financing in recovery, see Lawless, M., O'Toole, C.M. and Lambert, D. (2014) 'Financing SMEs in Recovery: Evidence for Irish Policy Options'. Department of Finance and Economic and Social Research Institute.
[14] The Strategic Banking Corporation of Ireland will have €800 million to lend and will be initially financed by the German Promotional Bank (KfW), the European Investment Bank (EIB) and the Ireland Strategic Investment Fund (ISIF).
[15] See http://www.nprf.ie/ISIFIrelandInvestments/IrishStrategicInvestmentFundIrelandInvestments.htm. The ISIF provides debt funding products, equity funding support and venture capital funding.
[16] This is a survey of 1,500 SMEs prepared for the Department of Finance. See Red C SME Credit Demand Survey, April-September 2014.
[17] A recent study shows that the increase in liquidations has not been distributed evenly across sectors of the economy. Although the construction sector has experienced a large number of liquidations during the crisis, when the size of the sector is taken into account the rate of liquidations has been higher in the hospitality, manufacturing and retail sectors. Similarly, although Dublin continues to account for the largest portion of liquidations, large relative increases in liquidation rates occurred in Western regions. See O'Brien, E. and Stuart, R. (2014) 'Corporate Liquidations in Ireland'. Central Bank of Ireland, Economic Letter, Vol. 2014, No. 6.
[18] NFC debt as a percentage of GDP remains the second highest in the euro area after Luxembourg and around twice the euro area average, although it has declined since the last Review. This measure is, however, affected by the large size of the MNC sector in both these countries. Firms in these sectors would be less reliant on domestic bank funding than indigenous companies and would have access to international capital markets. The underlying measure of indebtedness is, therefore, much lower.
[19] See McCann, F. (2014) 'Profiling the indebtedness of Irish SMEs'. Central Bank of Ireland, Economic Letter, Vol. 2014, No. 3.
[20] This figure rises to 16 per cent when including the buy-to-let mortgage book for a sub-sample of the data. See McCann, F. and McIndoe-Calder, T. (2014) 'Irish SME property exposure: what do we know?'. Central Bank of Ireland, Economic Letter, Vol. 2014, No. 8.

Chart 9: Commercial property – capital value growth, rental growth and initial yield



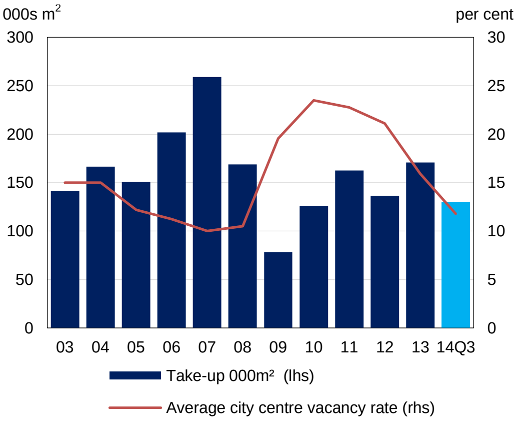
Source: Investment Property Databank.
Notes: For definition of initial yield, see footnote 21.

Chart 10: Breakdown of commercial property capital and rental value growth by sector



Source: Investment Property Databank.

Chart 11: Dublin office market activity



Source: CBRE Research and Central Bank of Ireland calculations.
Notes: All 'take-up' observations are for a 12 month period, apart from 14Q3, which summarises activity for the first 9 months of 2014. Vacancy rate refers to the average of the available end-quarter data from the year to which they relate.

substantially higher for SMEs with property exposures, in some sectors at twice the default rate among SMEs without property linkages.

Commercial property

The pick-up in the Irish commercial property market continued, and indeed strengthened, during the first nine months of 2014. According to Investment Property Databank (IPD), year-on-year capital values were 26.6 per cent higher at the end of 2014 Q3, up from 16.7 per cent at the end of the second quarter (Chart 9). The current year-on-year growth rate is the highest since 1999. The pattern in the rental market is similar, with commercial rents posting year-on-year growth of 18.2 per cent at end-September 2014 compared to a year-on-year increase of 11.5 per cent in 2014 Q2. The strength of the recovery in capital values has seen initial yields for the sector fall to 6.5 per cent, from almost 10 per cent in early 2012.[21]

The office market has been to the fore in these developments with annual capital and rental value growth of 33.2 and 31.2 per cent, respectively, in 2014 Q3 (Chart 10). Take-up (letting and sales activity) in the Dublin office market has been brisk throughout 2014, reflecting improving economic conditions and a strong demand for space from IT and financial firms in particular. According to CBRE data, almost 130,000m^2 of office space were let in the first nine months of 2014, an increase of 20,000m^2 on the equivalent period in 2013 (Chart 11). Irish companies accounted for 24 of the 49 individual lettings which occurred in the capital in 2014 Q3.

Dublin's office vacancy rate has fallen steadily in recent years, given the demand from firms for good quality, well-situated accommodation. By the end of the third quarter, the average Dublin city centre vacancy rate for 2014 had fallen to 11.8 per cent from a peak of approximately 24 per cent in 2010 (Chart 11).[22] While there are indications of a supply response, it will take some time for new stock to be ready for occupation. In the meantime, further upward pressure on rents is expected.

Retail capital values have now recorded three successive quarters of year-on-year growth (Chart 10). These developments have yet to feed through to increases in retail rents, although the year-on-year rate of decline in rental values has steadily moderated and as of 2014 Q3 stood at -0.8 per cent. Capital value growth for industrial premises turned positive in the second quarter of the year and remained so in the third quarter. After a relatively muted start to the year, take-up in the Dublin industrial sector has improved considerably in recent months.

Investment in commercial real estate (CRE) this year is likely to be close to the highest level seen during the mid-2000s, the €3.2

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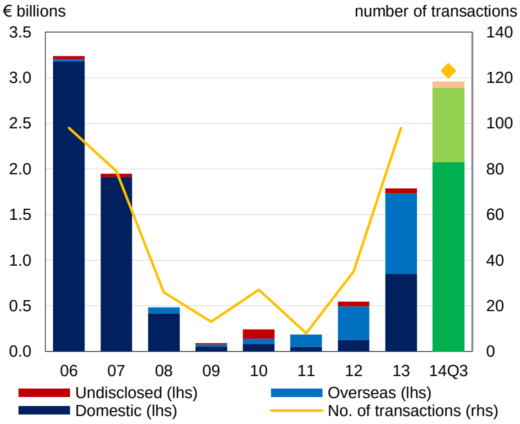
[21] Initial yield is calculated as the annualised rents generated by a portfolio, after the deduction of an estimate of annual recurring irrecoverable property outgoings, expressed as a percentage of the portfolio valuation (European Public Real Estate Association).
[22] Data from Lisney suggest a slightly higher average city centre vacancy rate of 14.3 per cent. However, they do agree that this number has been declining in recent quarters and they also highlight the sizeable portion of vacant stock which could be considered obsolete.

Chart 12: Irish commercial property investment expenditure



Source: CBRE Research.
Notes: Investment spending relates to individual transactions worth at least €1 million. All observations are for a 12 month period, apart from 2014 Q3, which summarises transaction activity for the first 9 months of 2014. Dark green represents domestic buyers while overseas purchasers are categorised by the light green.

billion invested in 2006. By end-September 2014, a total of 123 transactions, worth almost €3 billion, had taken place (Chart 12). This level of activity represents a substantial increase on the 98 transactions undertaken in the whole of 2013 and is underpinned by the improving economic picture and expectations of further rental growth. A busy final quarter of the year is expected as efforts are made to complete purchases before the expiry of the capital gains tax waiver at the end of the year.[23] Whether this tax change impacts activity levels in early-2015 remains to be seen. The office sector has accounted for a substantial share of investment activity, but there have also been sales of mixed-use and retail portfolios in recent months in a sign that the commercial property market recovery is extending beyond prime assets.

As the level of CRE investment activity has increased, so too has the diversity of investors. Almost 30 per cent of investment in the first three quarters of 2014 has come from overseas. Furthermore, a significant portion of domestic investment now relates to Real Estate Investment Trusts (REITS) which do not necessarily rely on domestic funding.[25] High yields in the sector in recent years have proved attractive to investors. However, as yields decline, it is likely that buyer preferences will also evolve, as those with a preference for longer-term asset management opportunities and the prospect of future rental growth come to the fore. While attracting capital from abroad aids the commercial property market's recovery, it also leaves the market vulnerable to a change in investor sentiment and the availability of investment opportunities in other countries.[24]

The introduction of REITs has enhanced liquidity in the Irish property market and added to investment in the sector. Shares in a REIT can be traded at any time, making them an attractive vehicle for investors. By September 2014, approximately €1.5 billion had been raised by three newly established REITs, mainly from non-Irish investors. These funds have already been used to acquire assets such as offices and apartment blocks. In addition, the provision of debt facilities to REITs from a selection of Irish and UK banks is being reported.[25] Although they are still relatively new to this country, REITs have brought an additional pool of investment funds to the market. This may aid the deleveraging plans of the National Asset Management Agency (NAMA) and other financial institutions.

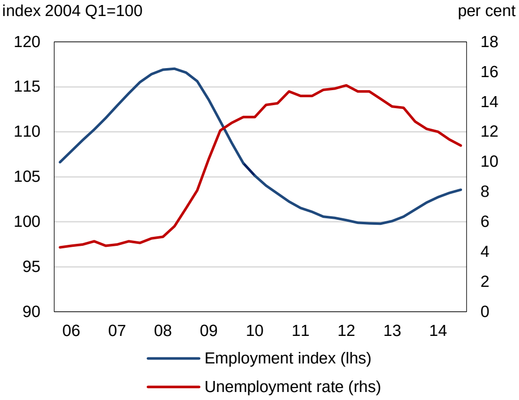
The recovery in the commercial (and residential) property markets has seen NAMA increase the flow of Irish assets to market. In excess of €3 billion worth of NAMA properties are currently for sale on the Irish market, with a number of large-scale portfolios now being offered in response to strong investor interest.[26]

[23] The Capital Gains Tax waiver on real estate, which was introduced in the 2012 Budget, is set to be phased out by the end of 2014. Under this measure, purchasers who buy-and-hold residential or commercial property for at least 7 years will be exempt from capital gains tax on gains attributable to the property during this initial period.
[24] See CBRE (2014) 'Comparative Pricing – Are some European Commercial Property Markets Overpriced'.
[25] See 'Green REIT to secure debt facility' Irish Examiner September 10 2014.
[26] See 'NAMA Asset Sales', for further details.

2.3 Household sector

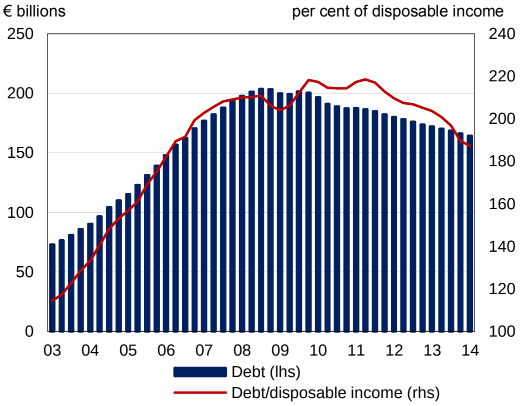
While there have been improvements in the labour market, the household sector remains highly indebted and vulnerable to economic shocks, falls in income and increases in interest rates. The number and value of mortgages in very long-term arrears (of 720 days and over) continues to rise and now accounts for a large share of total arrears. The low inflation rate environment is not conducive to reducing debt burdens. The pace of residential property prices rises has increased. It could give rise to expectations of further rises and could lead to a misalignment of prices. The identification and removal of barriers to the provision of new housing is needed to prevent house prices rising on an unsustainable path.

Chart 13: Labour market developments



Source: CSO.
Notes: All data based on the Quarterly National Household Survey (QNHS). Employment refers to persons aged 15 and over in employment. The employment index is based on a 4-quarter moving average. All data are seasonally adjusted. Last observations: 2014 Q3.

Chart 14: Household debt



Source: CSO and Central Bank of Ireland.
Notes: Household debt is defined as total loans of households. Disposable income is gross disposable income of households including non-profit institutions serving households. Last observations: 2014 Q1.

Income, employment and indebtedness

The unemployment rate remains high at over 11 per cent (Chart 13) but is forecast to continue to decline slowly this year and next. The long-term unemployment rate now stands at 6.4 per cent, down from 9.5 per cent in early 2012.[27] The outlook for employment is for slower growth than anticipated earlier in the year. However, forecasts for average earnings growth have been adjusted upwards, reflecting the greater proportion of new jobs which are full-time rather than part-time, compared to last year.

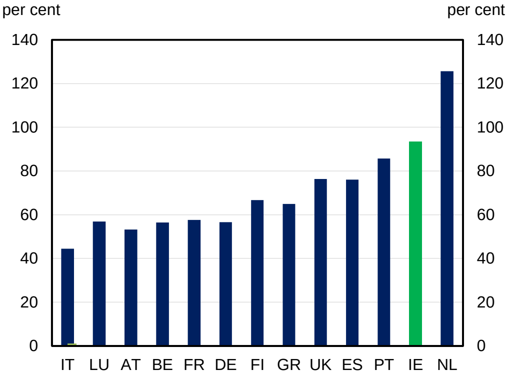
Personal consumption expenditure is expected to make a positive contribution to growth for the first time since 2010, despite the headwinds caused by on-going deleveraging.[28] The recovery in house prices has reduced the numbers of mortgage holders in negative equity in both the buy-to-let (BTL) and principal dwelling house (PDH) sectors. This may boost consumer confidence and spending.[29] However, the consumption levels of households in negative equity may only respond to an increase in housing wealth if the increase is viewed as permanent.[28]

Although nominal household indebtedness has fallen in recent years, debt levels remain high (Chart 14). The ratio of household debt to disposable income also remains elevated as disposable income has been falling. There has been a small decline in both the ratio of debt-to-disposable income and the level of household debt since the last Review. However the sector remains highly indebted in a European context, with the household debt-to-GDP ratio second only to the Netherlands (Chart 15).

The low inflation rate environment of recent years has implications for household debt. If inflation is consistently below the expectations of borrowers when they took on debt, the resultant lower than expected price level will cause the real value of the debt and associated debt servicing to be higher than

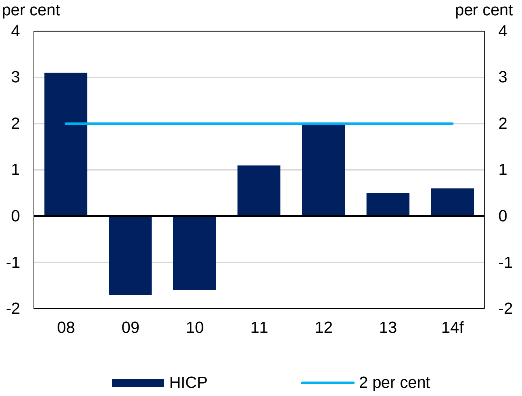
[27] The long-term unemployment rate refers to the number of people who have been unemployed for a period of one year or more.
[28] For example see McCarthy, Y. and McQuinn, K. (2014) 'Deleveraging in a highly indebted property market: Who does it and are there implications for household consumption?'. Central Bank of Ireland, Research Technical Paper, 05/RT/14.
[29] Recent estimates suggest that the recovery in house prices led to a 15 per cent decline in the numbers of negative equity in 2013, compared to the peak at end 2012. See Duffy, D. (2014) 'Updated Estimates on the Extent of Negative Equity in the Irish Housing Market'. Economic and Social Research Institute, Quarterly Economic Commentary, Summer 2014.

Chart 15: Household debt-to-GDP ratio: European comparison



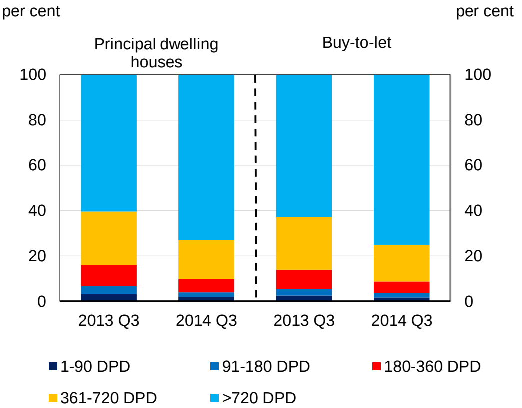
Source: ECB, Eurostat, CSO and Central Bank of Ireland calculations.
Notes: Data as at 2014 Q1 except for the Netherlands which refers to 2013 Q4.

Chart 16: HICP inflation rates (Ireland) compared to ECB's 'near 2 per cent' price stability definition



Source: CSO.
Notes: 2014 figure is forecast from Central Bank of Ireland Quarterly Bulletin 4 2014.

Chart 17: Mortgage arrears balances by duration as a percentage of total arrears balances



Source: Central Bank of Ireland.
Notes: DPD stands for days past due.

originally expected. Chart 16 shows how HICP inflation rates in Ireland in recent years have generally been less than the ECB definition of price stability of inflation of below but close to 2 per cent, which could be considered a proxy for households' long-term inflation expectations. High levels of indebtedness leave households vulnerable to economic shocks, falls in income and increases in interest rates.

Mortgage arrears

The overall number of PDH mortgage accounts in arrears has been falling since mid-2013. The total number of BTL mortgage accounts in arrears declined in 2014 Q3 following two quarters of marginal increases.[30] The number of cases of very long-term arrears (over 720 days past due) has increased to stand at around 32 per cent of all arrears cases in the PDH sector and around 40 per cent in the BTL sector. In value terms, this category is quite large and accounts for 73 per cent of the total value of PDH arrears and almost 75 per cent of total BTL arrears (Chart 17).

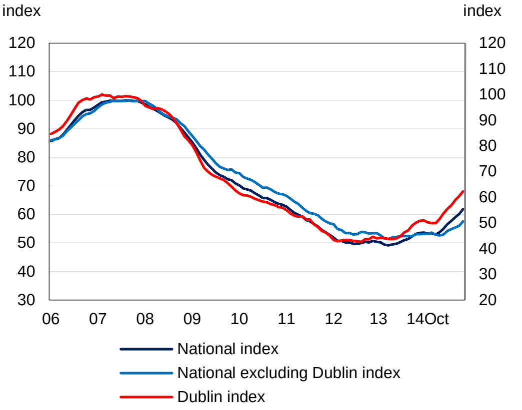
Resolving the mortgage arrears problem would benefit households and lenders and assist economic growth and a sustainable recovery. The Central Bank continues to require lenders to accelerate their work to conclude sustainable long-term arrangements, in accordance with the mortgage arrears resolution targets.[31] The latest mortgage arrears figures indicate that at end-September 2014, 29.3 per cent of PDH accounts and 22 per cent of BTL accounts in arrears over 90 days were classified as restructured, an increase on the end-2013 figures.

A recent study analyses the performance of permanently modified PDH mortgages and finds that the number of permanent modifications increased following the introduction of the Mortgage Arrears Resolution Targets (MART) in 2013 Q1.[32] By end-2013, 55 per cent of all permanently modified previously-in-default loans were making full repayments, up from 28 per cent in 2011 Q1, but indicating scope for improvement. Around 10 per cent of permanently modified loans were making no repayment at 12 months after modification.

Another study considers mortgages originated on interest-only (IO) terms and finds that, while accounting for a relatively small proportion of the market, these have higher levels of arrears than standard principal-and-interest mortgages.[33] IO mortgages were mainly issued to BTL investors on tracker mortgages, in the period 2005-2008, at high loan-to-value (LTV) ratios. As a substantial number are due to revert to higher principal-and-interest repayments in the next few years, this could pose difficulties for borrowers in making repayments.

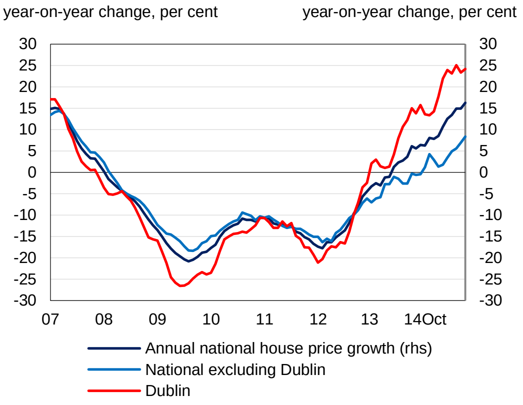
[30] At end-September 2014, 117,889 PDH mortgages and 38,463 BTL mortgages were in arrears with total outstanding balances amounting to €21.5 billion and €10.4 billion, respectively.
[31] Central Bank of Ireland statement on Mortgage Arrears Resolution Targets 4 June 2014.
[32] See McGuinness, A. (2014) 'Mortgage Repayments after Permanent Modification'. Central Bank of Ireland, Economic Letter, Vol. 2014, No. 7.This analysis cannot be compared to the Mortgage Arrears Resolution Target (MART) figures as temporary modifications and BTL mortgages are excluded. It also extends the sample of defaulted loans to any PDH mortgage that experienced default since 2010 rather than the current stock of defaults (90 days past due).
[33] See Kelly, J., Kennedy, G. and McIndoe-Calder, T. (2014) 'Interest-only mortgages in Ireland'. Central Bank of Ireland, Economic Letter Vol. 2014, No. 5.

Chart 18: House price indices: National, Dublin and non-Dublin



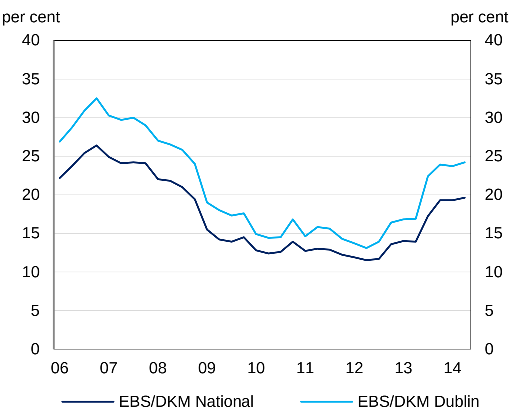
Source: CSO.
Note: Index values are 100 at market peak. The 'national' and 'national excluding Dublin' indices reached their peaks in September 2007. The Dublin index recorded its peak in February 2007.

Chart 19: House price growth: National, Dublin & non-Dublin



Source: CSO.

Chart 20: EBS-DKM affordability index



Source: EBS and DKM.
Notes: Chart shows the proportion of net income required by a first-time buyer (FTB) working couple to fund mortgage repayments on the 'average' FTB property. Last observation is a forecast for June 2014. For more information see EBS/DKM Irish Housing Affordability Index.

Residential property

Irish residential property prices have rebounded strongly since early 2013, although they remain well below peak values (Chart 18). The latest Central Statistics Office (CSO) data show that national prices were 16.3 per cent higher in October 2014 than a year earlier (Chart 19). Developments in the Dublin market have been driving these increases, where the year-on-year growth rates observed since June (over 23 per cent) have surpassed the previous highest rate of growth, 22.5 per cent recorded in August 2006. Large rises in prices can give rise to expectations of further increases and could lead to a misalignment in prices. (Box 1 considers market participants' views on expected price rises over the coming 12 months.)

Outside of Dublin, overall prices have grown steadily, if less spectacularly, in 2014. Non-Dublin house prices were 8.3 per cent higher in the past 12 months, according to the CSO. However, this still masks regional variations. Excess supply and a relatively weaker regional economic environment are behind prices in some areas of the country, continuing to fall or remaining stagnant.

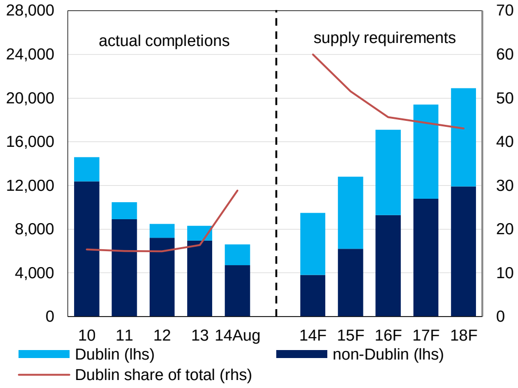
Rents have also increased in the past year. CSO data indicate a year-on-year increase of 8.9 per cent in national private rents in October 2014. As with the sales market, residential rents are also rising at a faster rate in the major population centres, particularly Dublin and surrounding counties. According to rental data compiled by Daft.ie, rents in Dublin were rising at over 14 per cent per annum in the third quarter of 2014, with sharp increases also recorded in neighbouring counties Meath, Kildare and Wicklow.

While debt service ratios for the average first-time buyer (FTB) couple remain below their peak levels of December 2006, there has been a notable rise since late-2012 (Chart 20). Reduced affordability leaves households (both new buyers and those who rent) more vulnerable to adverse shocks.

Housing availability plays a central role in determining prices and rents in the property market. The lack of new house completions has given rise to localised supply shortages and would appear to be a factor in the large house price rises witnessed of late. Further increases in housing demand are projected in the years ahead, owing to natural population growth and inter-regional migration. A recent study by the Housing Agency forecasts an average requirement of 16,000 new units per annum nationally between 2014 and 2018, approximately half of which it estimates will be required in the Dublin area (Chart 21).[34] While there have been signs of an increase in construction activity in recent months, a substantial expansion in output levels is required to meet these projections and to address the current shortage.[35]

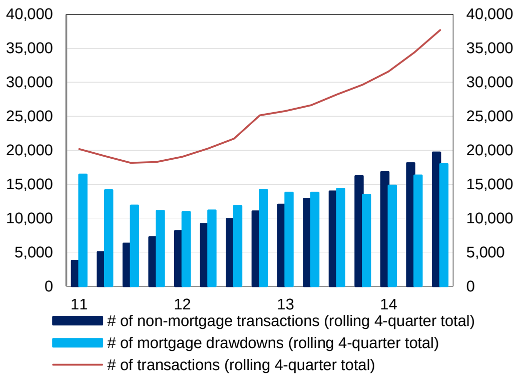
[34] See Housing Agency's Report on Housing Supply Requirements in Ireland's Urban Settlements 2014-18.
[35] For instance the Ulster Bank Construction PMI Report reported the fastest rise in housing activity in the survey's history for September 2014 and registered a further substantial rise in October. Also Link2Plans and Department of Environment, Housing and Local Communities data on housing commencements and completions are also showing increases in the most recent months for which figures are available.

Chart 21: Residential property completions (actual and 2014-18 forecasts of required supply)



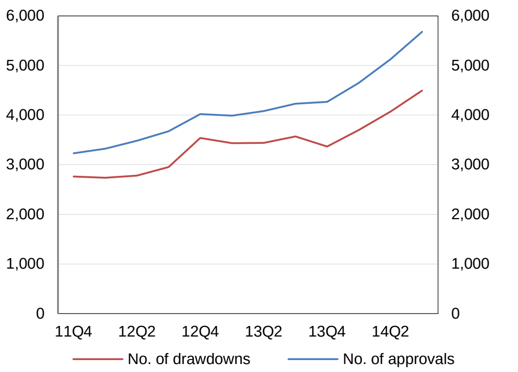
Source: Department of Environment Community and Local Government, The Housing Agency and Central Bank of Ireland calculations.
Notes: Data to the left of dotted line are actual completions and to the right are forecasts of required supply from a recent Housing Agency report.

Chart 22: Housing market activity: transactions and financing (rolling 4-quarter total)



Source: Banking & Payments Federation Ireland (BPFI), Property Services Regulatory Authority (PSRA) and Central Bank of Ireland calculations.
Note: The non-mortgage financed series is calculated as the difference between transactions registered with the PSRA and BPFI mortgage drawdowns for transactional activity, (i.e. 'first time buyers', 'mover' and 'residential investment letting', purchasers).` Latest observations: 2014 Q3.

Chart 23: Mortgage market activity: drawdowns and approvals (4 quarter moving average)



Source: Banking and Payment Federation of Ireland and Central Bank of Ireland calculations.
Notes: Data refer to 4-quarter moving averages and are based on mortgages for house purchase i.e. Data exclude re-mortgages and top-ups. Latest observations: 2014 Q3.

The identification and removal of barriers to the provision of new housing supply, such as the difficulties obtaining finance for viable projects or inefficiencies in the planning system, are required to meet demand and prevent house prices rising on an unsustainable path.

The scarcity of second-hand houses for sale or rent is adding to current supply shortages and generating uncertainty about future price developments. Daft.ie research shows that just 30,000 properties were available for sale nationally at the end of September 2014, the lowest figure since March 2007, and less than half the mid-2009 peak. Similarly, according to Lisney, while there has been a gradual increase in the number of Dublin properties for sale since the start of 2014, the 3,950 units available for sale at the end of 2014 Q3 was still about 60 per cent lower than what it was in the same quarter in 2011.

Despite these supply constraints, the gradual recovery in property market transactions continued over the summer months and into the autumn. Data for the 12 months to end-September 2014 indicate an increase of one-third in the number of properties sold when compared to similar data for the same period last year (Chart 22). However, as Goodbody points out, the annual turnover in the Irish market at present (1.8 per cent of the total stock) is still quite low in an international context.[36,37] Dublin accounts for approximately one-third of the 37,700 transactions over the past 12 months, equating to a turnover of 2.3 per cent of the stock of houses in the capital.

Signs of a recovery in activity in the mortgage market are also emerging. Banking & Payments Federation Ireland (BPFI) data point to a year-on-year increase of 26 per cent in the volume of mortgage drawdowns for house purchase, as of 2014 Q3, to 4,500 (Chart 23).[38] Mortgage approvals are up 34 per cent year-on-year to 5,700. BPFI statistics also show that just over €3.2 billion worth of mortgages for house purchase were drawn down in the 4 quarters to 2014 Q3. This is approximately 30 per cent higher than the figure at 2013 Q3, but still only one tenth of the amount drawn down in 2006. In spite of the increasing availability of mortgage finance, about half of transactions are financed through non-mortgage sources, predominantly cash (Chart 22). In comparison, a UK study from earlier in the year found that approximately one in three homes there is purchased by cash buyers.[39]

[36] See Goodbody Report, Irish Property From Stabilisation to Recovery.
[37] According to the Goodbody Report, the current turnover rate in the UK is approximately 4.3 per cent of housing stock.
[38] Based on 4-quarter moving average.
[39] See 'One in three UK homes purchased by cash buyers'. Financial Times March 26 2014.

Box 1: Residential property price expectations survey

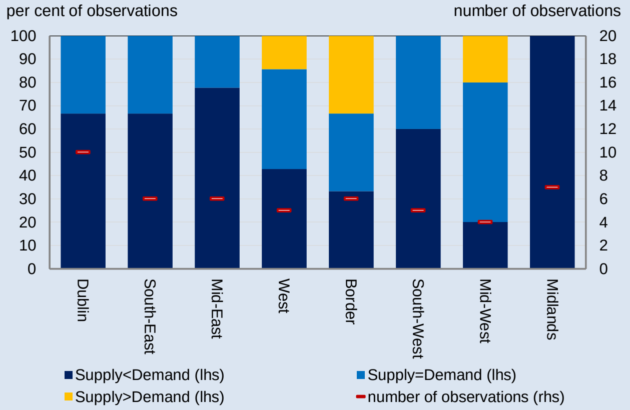
This Box presents results from the most recent 'Central Bank of Ireland/Society of Chartered Surveyors of Ireland (SCSI) Quarterly Property Survey'.[1] It was carried out in late September/early October 2014, prior to the publication of the Central Bank of Ireland's Consultation Paper on macro-prudential policy for residential mortgage lending. The survey seeks market participants' views on demand and supply dynamics in the residential property market as well as expectations on current and future house price developments.

Among the information contained in the latest survey is that respondents have seen an increase in residential market sales activity in 2014 Q3 compared to the previous quarter and that they see access to credit as less of an obstacle to property sales. Recent surveys show an increase in the proportion of respondents anticipating national residential house prices to rise in the next 12 months. There has also been a shift towards the expectation that demand will be greater than supply in the market, although there remains some regional variation in these perceptions.

Chart A summarises participants' expectations concerning the relationship between the supply of and demand for residential property in their locality over the coming 12 months. For four of the eight regions (Dublin, South-East, Mid-East and South-West), the expectation among respondents is that demand will either outstrip supply or that supply will equate with demand, with the former the more common view. All seven respondents in the Midlands feel that there will be a shortage of residential property units in that area in the coming 12 months. Only in the Border, Mid-West and West regions are there participants who believe supply will outweigh demand in those areas in the next 12 months. Most respondents in those areas, however, believe demand will be greater than or equal to supply. These findings contrast with those of previous surveys where supply shortages were expected only in urban areas such as Dublin.[2]

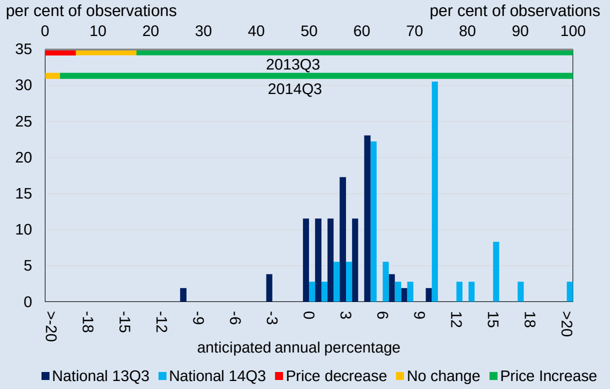
Respondents' house price change expectations at the end of 2014 Q3 at the national level over the next 12 months are presented in Chart B, alongside those from the 2013 Q3 survey. In the more recent survey, no respondents expect national house prices to decline in the next 12 months, with 97 per cent anticipating an increase and the remaining 3 per cent taking the view that prices will remain at their current level. In the 2013 Q3 survey, 83 per cent expected price increases, 11 per cent anticipated no change and 6 per cent were of the view that a decline in house prices would occur in the subsequent 12 months. In the first survey, conducted in 2012 Q3, over 50 per cent of respondents expected prices to decrease in the following 12 months. The scale of expected price increases is now generally higher than that reported in earlier surveys. One half of respondents in 2014 Q3 expect price increases of 10 per cent or higher in the coming 12 months. The view that demand will exceed supply over that timeframe (as shown in Chart A) is cited by many respondents as a reason for expecting prices to rise.

Chart A: Expectations of regional demand and supply dynamics over the coming 12 months



Source: Central Bank of Ireland and SCSI data.
Notes: Chart is based on the responses of 63 individuals.

Chart B: Expectations of national residential property price change over the coming 12 months



Source: Central Bank of Ireland and SCSI data.
Notes: Chart is based on 52 responses to the question on house price expectations 1 year from now, in 2013 Q3, and 36 responses to the same question in 2014 Q3.

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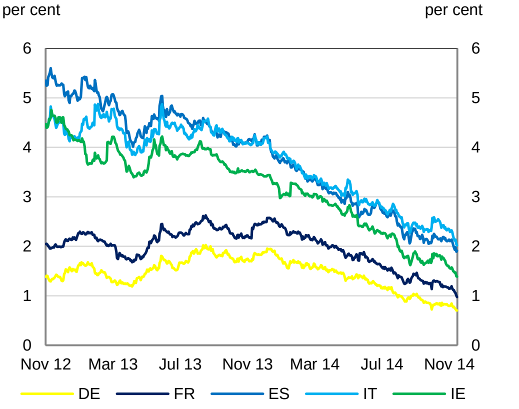
[1] The Central Bank/Society of Chartered Surveyors of Ireland (SCSI) Quarterly Property Survey began in the second quarter of 2012. Its respondents include estate agents, auctioneers and surveyors, as well as those with a more indirect interest in the industry such as economists, market analysts and academics. While the main focus of the survey is on participants' price expectations, questions are also included on activity levels and other market issues. The survey is a snapshot of respondents' expectations at a particular point in time and so can provide only limited information about possible future property price developments. It also provides a measure of uncertainty regarding those expectations, which is a useful complement to the available information on the domestic property market.

[2] While data on regional supply conditions are particularly useful, and will be developed in future surveys, the relatively uneven nature of replies across regions should be noted.

2.4 Sovereign sector

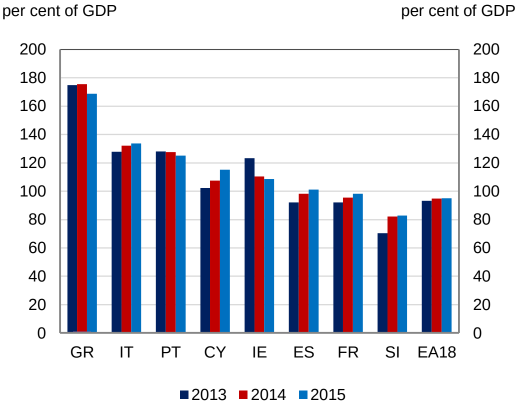
The Irish sovereign has benefitted from a further decline in its funding costs in 2014. While there has been an improvement in fiscal performance, the General Government debt ratio remains above 100 per cent of GDP. A reversal of the investor search for yield or in positive market sentiment towards Ireland and other euro area Member States could have an adverse impact on funding costs and market conditions more generally. Continued adherence to fiscal rules is important for maintaining fiscal sustainability and confidence in the sovereign.

Chart 24: Sovereign bond yields for selected euro area Member States, 10-year maturity



Source: Thomson Reuters Datastream.
Notes: Chart shows yields on sovereign bonds, ten-year maturity. Last observations: 28 November 2014.

Chart 25: General Government debt ratios for selected euro area Member States and euro area



Source: 2015 Budget and EU AMECO database.

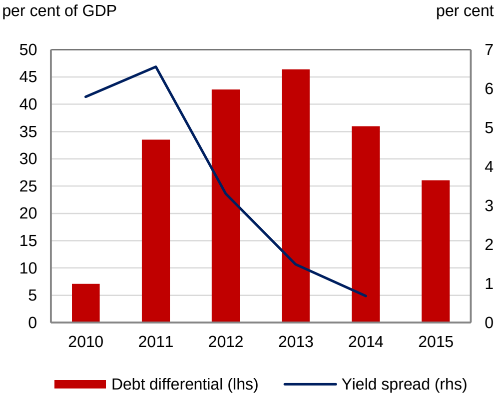
External and domestic environment

Ireland's sovereign bond yields and those of other euro area Member States have fallen since the publication of the last Review (Chart 24). A compression of yield spreads within the euro area has been occurring since 2012. The general decline in bond spreads vis-à-vis Germany has occurred during a period when there have been reductions in ECB monetary policy interest rates, policy initiatives such as the announcement of the Outright Monetary Transactions (OMT) programme, and a global search for yield among investors. These have occurred against a backdrop of high General Government debt ratios in the euro area (Chart 25). (Box 2 considers recent developments in sovereign and bank debt lending.)

There have been particular developments recently in relation to the market for Ireland's sovereign debt. These include Ireland's exit from the EU-IMF programme in December 2013 without a pre-arranged precautionary credit facility and the improvement in ratings on Irish sovereign debt to investment grade by all three major ratings agencies. On 6 June 2014 and 15 August 2014, respectively, rating agencies Standard and Poor's (S&P) and Fitch both upgraded Ireland's sovereign credit rating from BBB+ to A-. A further upgrade by S&P to an A credit rating occurred on 5 December. There have been a number of bond issuances by the State in 2014 and by early-November the National Treasury Management Agency (NTMA) had raised €11.75 billion in bond markets. The NTMA has also engaged in buy-back and switch operations, which have served to reduce the amount of outstanding short-to-medium term debt.

While both General Government deficit and debt ratios remain high, the baseline outlook for Ireland for 2014 and over the medium term is better than at the time of the last Review. The 2015 Budget indicates that the underlying deficit ratio (which adjusts for the effect of certain financial sector supports) is now expected to be 3.7 per cent of GDP in 2014, compared to 4.8 per cent in April's Stability Programme Update. The projection for 2015 is for a deficit of 2.7 per cent of GDP, which would be within the 3 per cent Excessive Deficit Procedure limit. The debt ratio is now expected to be 110.5 per cent at end-2014 compared to 121.4 per cent in the Update. The revision to the

Chart 26: General Government debt ratio differentials and yield spreads between Ireland and Germany, 2010-2015



Source: 2015 Budget, Thomson Reuters Datastream and EU AMECO database.
Note: The yield spreads are end-year values except for the 2014 value, which is that prevailing at close of business on 28 November 2014.

debt-to-GDP ratio reflects an upward revision in GDP owing to the new European System of National and Regional Accounts, ESA 2010, accounting framework and higher output growth than previously expected.[40] The debt ratio is projected to continue to fall in the years ahead.

Issues in the sovereign sector

While the baseline outlook for the public finances has improved, there are issues that could affect fiscal sustainability and the sovereign's participation in financial markets.

First, a reversal of the global search for yield could cause euro area sovereign bond yields to rise. Such an effect could be stronger for Member States with high government debt ratios such as Ireland. A general rise in interest rates could have similar effects. Secondly, Ireland's yield spread vis-à-vis Germany has declined since 2011 while the debt differential between both Member States has increased (Chart 26). There is evidence that recent decreases in sovereign bond spreads owe to positive market sentiment relating to the OMT programme and not to underlying fundamentals.[41] A reversal of such sentiment would likely lead to a rise in yield values, which would, all other things being equal, raise deficit and debt values. If substantial, it could also lead to market disruption, including an adverse impact on liquidity.

Thirdly, continued adherence to EU and domestic fiscal rules are important to the well-being of the public finances of euro area Member States and to market perceptions of sovereigns. Poor fiscal performance and prospects in one Member State can have consequences for its sovereign bond market performance and can spill over to that of other Member States as well.[42] Growth prospects are a determinant of fiscal sustainability. A particular threat to nominal output growth and to the path of the General Government debt ratio is the possibility of unexpectedly low inflation.

Debt financing and other developments

In September 2014, the Eurogroup reached political agreement on the early repayment of portions of Ireland's IMF loans. Following approval procedures in Sweden, Denmark and UK (providers of bilateral loans) and agreement from EU Member States to complete the early repayment of €18 billion of IMF loans, agreement to proceed with the repayment of €9 billion of these loans was secured from the European Financial Stability Mechanism (EFSM) and European Financial Stability Facility (EFSF) in late November. The Minister for Finance announced on 28 November that Ireland will make the first tranche repayment of approximately €9 billion, split across two separate dates, in December 2014. The December repayment will discharge all scheduled IMF principal repayment obligations that

[40] For more on the impact of the introduction of ESA10, see Hickey, R. (2014) 'Box B: Recent revisions to government finance statistics'. Central Bank of Ireland, Quarterly Bulletin 4.
[41] See De Grauwe, P., and Ji, Y. (2014) 'Disappearing government bond spreads in the euro zone – back to normal?'. CEPS Working Document No. 396.
[42] For a discussion of how developments in euro area sovereign bond markets have impacted each other in recent years see Conefrey, T., and Cronin, D. 'Spillover in euro area sovereign bond markets'. *The Economic and Social Review*, forthcoming, and Cronin D. 'Interaction in euro area sovereign bond markets during the financial crisis'. *Intereconomics – Review of European Economic Policy*, July/August 2014, 49, 4, pp. 212-220.

were originally falling due from July 2015 to July 2018. Further repayments are planned for 2015.

The contingent liabilities of the State continue to decline following the withdrawal of the Eligible Liabilities Guarantee (ELG) Scheme for all new liabilities of participating credit institutions in March 2013. They stood at €14 billion at end-September 2014 compared to a value of €102 billion at end-2011.

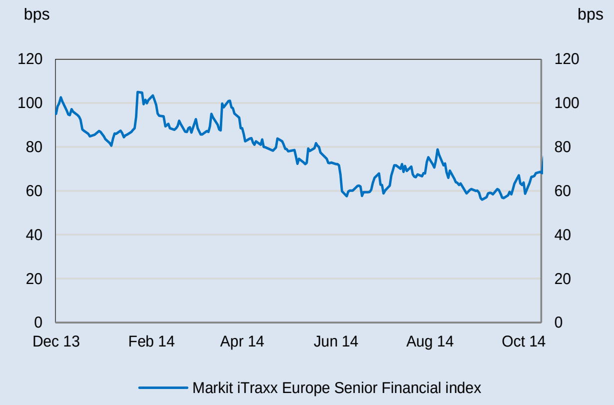
Box 2: Developments in sovereign and bank debt funding

Sovereign bond yields across the euro area reached record lows in the second half of 2014, with yields on bank debt also declining. There are a number of factors behind these developments. First, ECB actions have provided additional monetary policy accommodation both in terms of standard policy (rate reductions in both June and September) and non-standard policy (on-going forward guidance; the targeted long-term refinancing operation (TLTRO) announced in June; the asset-backed securities (ABS) and covered bond purchase programmes – both of which were announced in September). ECB President Draghi has also reiterated on numerous occasions that the ECB stands ready to provide further monetary accommodation should it be deemed necessary. Secondly, decreased risk aversion, high levels of global liquidity and a search for yield by investors have also put downward pressure on the yields of previously stressed sovereigns, as well as the banking sector, as investors try to avoid extremely low (and even negative) yields on offer in the highest credit-rated euro area sovereigns.

Irish sovereign bonds have benefitted from the above factors and there have also been a number of Ireland-specific factors that have helped reduce sovereign funding costs e.g., improved growth, falling unemployment, and credit rating upgrades. There has been a marked increase in the volume of trading in Irish sovereign bonds. For example, the average weekly turnover in Irish sovereign bonds to date in 2014 is €2.1 billion, up from just under €900 million in 2013. Also, many investors have turned their attention to the banking sector to gain exposure to the Irish recovery and have picked up a spread over Irish sovereign debt by investing in bank debt.

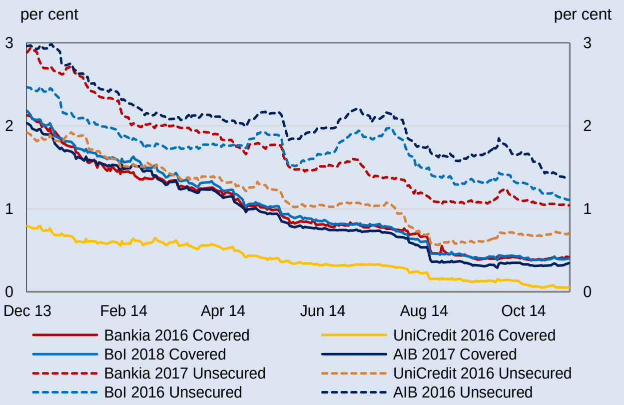
Chart A shows that there has been a decline in perceived credit risk for European financial firms, expressed here via lower credit default swap (CDS) spreads.[1] However, the decline in the first quarter of 2014 was not quite as strong as the yield compression of bank debt. This suggests that the decrease in funding costs in 2014 Q1 could have been driven to some extent by the general search for yield and investors' willingness to gain exposure to peripheral Europe and Ireland in particular, rather than bank fundamentals on their own. The more rapid decline in bank bond yields earlier in the year could also have been reflective of market anticipation of further monetary policy actions to be taken. Chart B shows that yields on debt issued by AIB and Bank of Ireland (along with Spain's Bankia and Italy's UniCredit, for comparative purposes) have decreased since the last Review, reflecting a euro area wide trend of improved sentiment and declining yields on fixed income bonds. During 2014, both Irish pillar banks issued unsecured debt and covered bonds, with strong bid-to-cover ratios and a geographical spread of demand, which was seen as a positive step towards regaining normal market access. However, unlike the sovereign, Irish banks have not seen rating upgrades.

Chart A: CDS spreads for European financial firms



Source: Bloomberg
Notes: Frequency is daily. Last observation: 28 November 2014

Chart B: Euro area bank unsecured & covered bond yields



Source: Bloomberg
Notes: Frequency is daily. Last observations: 28 November 2014

The current low yield environment and decreased levels of risk aversion have improved market access and lowered funding costs for sovereigns and banks in both Ireland and the wider euro area. There have been benefits in terms of debt sustainability and conditions have allowed for the terming out of funding. However, if levels of risk aversion were to increase again, for example in response to monetary policy decisions, there is the possibility that yields, and hence funding costs, may be negatively impacted. Moreover, a deterioration in global real economic growth could trigger an increase in euro area sovereign spreads as its negative impact on public finances might trigger renewed concern as to whether current bond prices reflect the fundamental fiscal position. This may lead to valuation losses for holders of such bonds (including banks, pension funds and insurance companies) and a knock-on increase in banks' own funding costs, especially in banks with large sovereign bond portfolios.

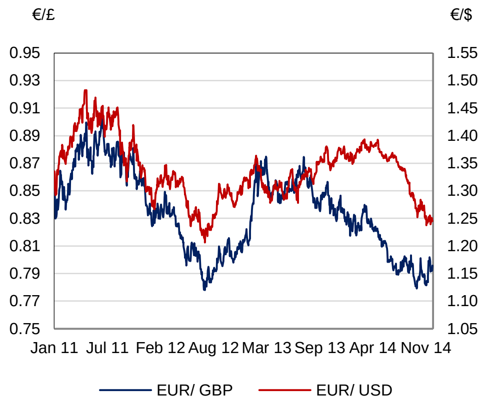
[1] The Markit iTraxx Europe Senior Financial index comprises 25 equally weighted credit default swaps on investment grade European entities – including both banks and insurers.

3. Financial system

3.1 International financial environment

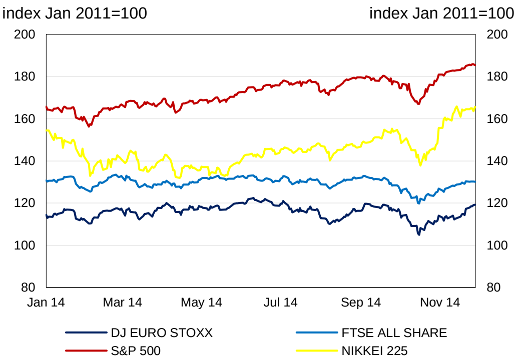
The global recovery continues but remains moderate and uneven. It could be impacted by the effects of geopolitical tensions, monetary policy normalisation in some advanced economies and protracted below-target inflation rates in others. Risks to the stability of the international financial system include the potential for low economic growth to hinder the process of balance sheet repair in the banking sector and for debt-sustainability challenges for indebted sectors of the economy to arise from an extended period of low-inflation rates. The global search for yield that has been observed in asset markets of late poses the possibility of asset price misalignments arising and the risk of a reversal of capital flows.

Chart 27: Euro exchange rates



Source: Thomson Reuters Datastream.
Last observations: 28 November 2014.

Chart 28: International share price indices



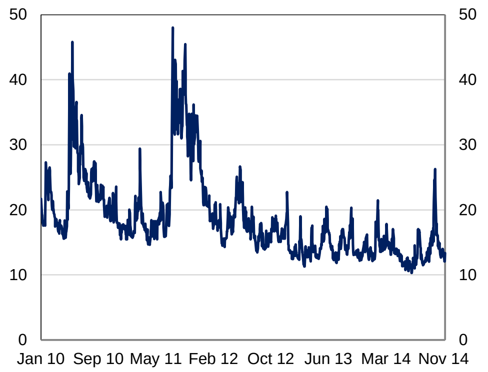
Source: Thomson Reuters Datastream.
Last observations: 28 November 2014.

International macro-financial conditions continue to show signs of improvement with the global economic recovery continuing, albeit in an uneven and weaker than expected manner. Nevertheless, there are downside risks to the global growth outlook, namely, the challenges associated with monetary policy normalisation in some advanced economies, protracted below-target inflation rates in others, increased risk-taking in financial markets, and heightened geopolitical tensions. A shift in the growth dynamic away from emerging economies sees advanced economies, led by the US, contributing their highest share to global growth since 2010. Survey measures of activity point to continuing robust growth in the US and UK. Within the euro area, however, economic growth remains unbalanced and reflects continued financial fragmentation, impaired private and public balance sheets, and high unemployment in some economies. Risks to the euro area growth outlook remain tilted to the downside and financial markets could become unsettled.

The confluence of the current economic backdrop with existing vulnerabilities across a number of economic sectors poses risks to financial stability. Low economic growth could hinder the process of balance sheet repair across the European banking sector, for example, by weighing on borrowers' debt service capability. This is a sector where profitability is already weak, limiting banks' ability to increase resilience through retained profits, and where asset quality concerns remain as a legacy of the financial crisis. Additionally, a prolonged period of low-inflation rates could pose debt-sustainability challenges for highly indebted private and public sectors.

Despite the weakness of the euro area economy, financial market conditions have remained relatively benign, aided by ECB monetary policy decisions. Sovereign bond yields for a number of Member States, including Ireland, reached historical lows during 2014. In money markets, the euro interbank offered rate of interest (EONIA) breached zero for the first time following

Chart 29: Financial market volatility - Chicago Board Options Exchange Volatility Index (VIX)



Source: Thomson Reuters Datastream.
Last observation: 28 November 2014.

Chart 30: High-yield corporate bonds – effective yield

Source: Federal Reserve Economic Data.
Notes: Chart shows the Bank of America Merrill Lynch Euro high yield index effective yield and Bank of America Merrill Lynch US high yield Master II effective yield. These data represent respectively the effective yield of Euro denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets and the effective yield of US dollar denominated below investment grade rated corporate debt publically issued in the US domestic market. Last observation: 27 November 2014.

the ECB's decision in June to introduce a negative overnight deposit facility rate. Euro money market rates have also fallen across 3, 6 and 12 month maturities. The euro has depreciated against its main trading partner currencies (Chart 27), with the nominal effective exchange rate decreasing by 3.2 per cent since the start of June.

Of the major equity indices, the Nikkei 225 has performed best of late, with a 19.3 per cent increase between end-May and end-November, owing to continued easing by the Bank of Japan. The S&P 500 recorded a considerably smaller gain (7.5 per cent) during this period while the DJ Euro Stoxx and the FTSE 100 experienced falls of 0.7 per cent and 1.7 per cent, respectively (Chart 28).

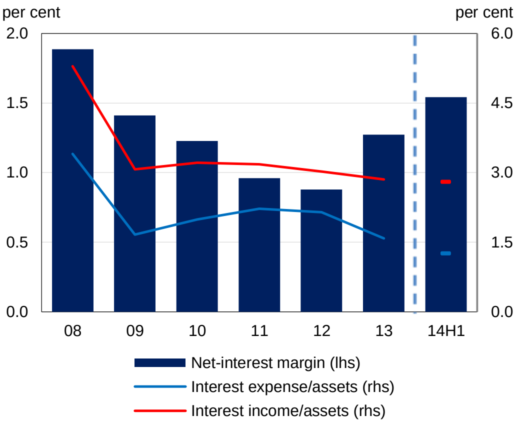
International financial markets have been hit by brief episodes of heightened volatility in recent months (Chart 29) linked to geopolitical tensions and weak economic data. These came against a more general background of relatively benign market conditions. Volatility has been low for some time with a search for yield ensuring strong investor appetite, even for relatively risky assets (Chart 30). It could lead to asset price misalignments. The recent instances of turbulence point to the potential for market disruption resulting from a sudden reversal of investor sentiment. An increase in US term premia or a global re-appraisal of risk could trigger such effects. Investor confidence in Europe will be tied, at least in part, to prospects for economic recovery.

The search for yield is now also showing signs of broadening into duration extension on higher-rated bonds, often through leveraged positions. This could pose a risk to financial stability as an excessive build-up of leverage or maturity mismatches can be a source of financial system fragility.

3.2 Banking sector

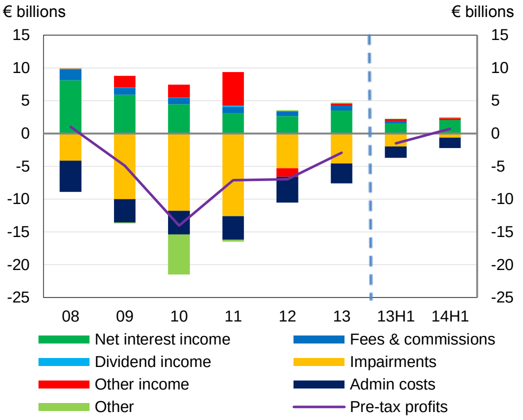
The domestic banking sector returned to profitability in the first half of 2014, reflecting growth in operating income and reductions in impairment charges. Inflows of customer deposits have helped reduce ECB funding further. The sector, however, continues to face a number of challenges. Low levels of new lending and limited scope to increase lending margins will impact the ability of domestic banks to increase income over the medium term. The maturity profile of funding remains weighted heavily to the short term with a large amount of debt due to mature in the first quarter of 2015. Both lending margins and market funding are susceptible to reappraisals of risks and to changes in sentiment towards both the domestic banks and the sovereign. The resolution of non-performing loans, which constitute 25 per cent of the value of outstanding loans, remains a critical issue for domestic banks. The lack of progress on impaired buy-to-let (BTL) mortgage loans and the continuing growth in very long-term mortgage arrears (of 720 days and over) are two challenges facing the sector in relation to this issue. In advance of the introduction of the Single Supervisory Mechanism (SSM), on 4 November 2014, the domestic banks' capital position has been assessed as part of the ECB's Comprehensive Assessment of the wider European banking system. Allied Irish Bank (AIB) and Bank of Ireland (BOI) have been deemed to hold sufficient capital; however, Permanent TSB (PTSB) did not meet the required threshold. PTSB has outlined its capital plan to the ECB and Central Bank. This includes a set of actions that it intends to undertake to address the shortfall arising in the hypothetical adverse scenario.

Chart 31: Domestic banks' net-interest income



Source: Central Bank of Ireland.
Notes: Data collected in accordance with European Banking Authority's FINREP reporting requirements. H1 data have been annualised.

Chart 32: Domestic banks' profitability



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

Income and profitability

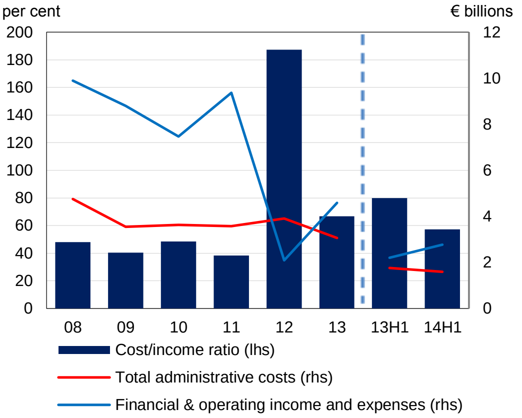
Domestic banks' income position continues to improve. Based on data available for the first half of the year, net-interest income has grown by one third compared with the corresponding period in 2013.[43] The increase in net-interest income has been primarily driven by a reduction in interest expenses (Chart 31). In the first six months of 2014, interest expenses declined by approximately 20 per cent compared with the first half of 2013. While interest income also declined, it did so at a slower pace than interest expenses. The combined 20 basis point reduction in the ECB's main refinancing rate that has occurred since the last Review has negatively impacted domestic banks' interest income through a number of channels, including their tracker mortgage portfolios.

Reducing interest expenses further as a means of supporting margins is likely to be constrained with official interest rates at historically low levels and close to zero. General market conditions and investors' search for yield may have contributed in part to the reduction in domestic banks' funding costs. As such, the sustainability of recent margin growth is susceptible to reappraisals of risks and changes in sentiment towards both domestic banks and the sovereign.

While increasing, levels of new lending are still insufficient to offset the reduction in assets associated with continued deleveraging and loan redemptions.[44] A sustained recovery in the domestic economy may help volume growth. However, with

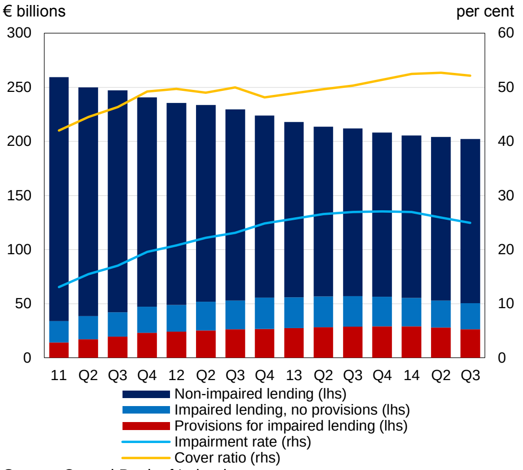
[43] Net-interest income is defined as the difference between the revenue that is generated from banks' interest-bearing assets less the expenses associated with interest-bearing liabilities. It accounts for almost 74 per cent of domestic banks' total income.
[44] Deleveraging relates to the process by which banks reduce their overall balance sheet size primarily through the disposal of assets.

Chart 33: Domestic banks' cost-to-income ratios



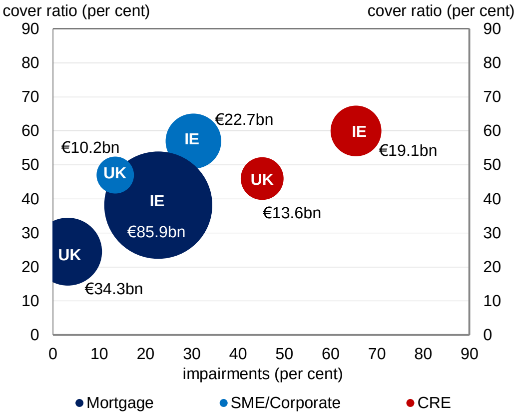
Source: Central Bank of Ireland.
Note: Data are collected in accordance with European Banking Authority's FINREP reporting requirements. The large cost-income ratio in 2012 is due to a significant drop in operating income as domestic banks implemented the deleveraging requirements outlined in the Financial Measures Programme (FMP).

Chart 34: Domestic banks' credit exposures and asset quality



Source: Central Bank of Ireland.
Notes: Data are consolidated. Total lending is represented by drawn exposures. Impairments are represented by CRD default loans.
The cover ratio is calculated by dividing the value of provisions for impaired loans by the value of impaired loans.

Chart 35: Domestic banks' asset quality by sector and geography (2014 Q3)



Source: Central Bank of Ireland.
Notes: Data are consolidated. Impaired loans are expressed as a percentage of lending to that particular sector. Size of circle represents the share of overall lending to that particular sector.

high levels of both private-sector indebtedness and unemployment, the scope to increase new lending while maintaining appropriate credit standards may prove challenging.

Non-interest income sources have contributed to an increase in total operating income (Chart 32). Fees and commissions increased in the first six months of the year and now account for 15 per cent of total income. Dividend income, which accounts for a smaller share of total income, increased substantially. This was as a result of early redemptions of NAMA-related bonds.[45] Other income, which primarily reflects gains associated with financial assets, declined marginally compared with the same period of last year.

In aggregate, the domestic banking sector returned to profitability in the first half of 2014. While profit levels are low, this represents the first period of profitability since 2008 (Chart 32). Although increases in income have contributed to the return to profitability the main driver has been the reduction in the flow of new provisions. A stabilisation in impaired assets has led to a decline in impairment charges by 68 per cent in the first six months of this year compared with the corresponding period in 2013. Recent increases in property prices have also contributed to the easing of provisions. The extent and timing of any writing back of provisions must be carefully assessed and should reflect a conservative view of developments.

Operating efficiency has also improved with administrative costs declining by 10 per cent in the first half of 2014 relative to the same period in 2013. Cost-to-income ratios were 53 per cent in 2014H1 compared with 80 per cent in the six month period to June 2013 (Chart 33). Having declined over the last number of years, cost-to-income ratios are now in line with the EU average.

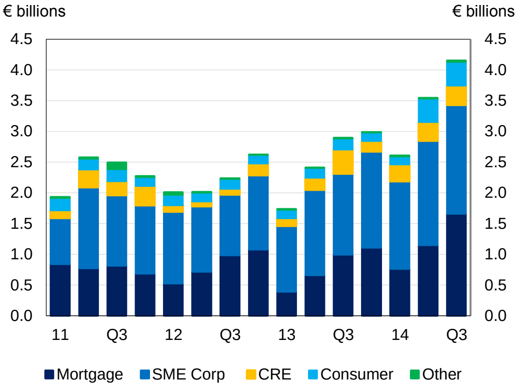
Although the domestic banking sector continues to demonstrate further improvement in terms of income generation, longer-term structural deficiencies remain within it. Issues such as the stock of impaired loans and low new lending volumes will need to be addressed before the sector returns to being a well-functioning banking system.

Credit risk and asset quality

There has been a marginal improvement in credit quality since the last Review. The value of non-performing loans (NPLs) has fallen by €6.6 billion from its peak (€57.1 billion) at the end of 2013 Q3, principally as a result of write-offs and disposals (Chart 34).[46] Nevertheless, the stock of NPLs remains elevated at 25 per cent of the value of outstanding loans, and is particularly high by international standards.[47] The need to set aside provisions for NPLs can hamper the ability of banks to provide credit to the real economy. Losses over and above what have

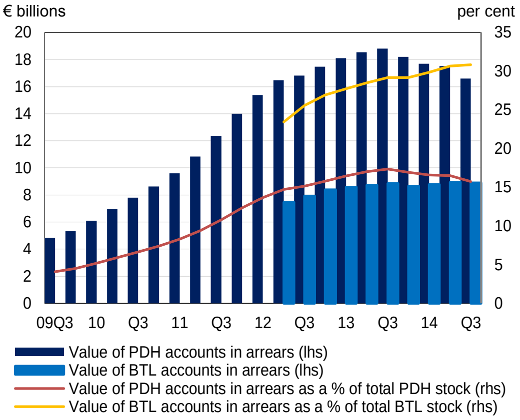
[45] The National Asset Management Agency (NAMA) was established in 2009 to purchase land and property development loans from participating banks. NAMA paid the loans it acquires from the five participating institutions by issuing a combination of senior debt (95 per cent) and subordinated debt (5 per cent). The payment of interest and redemption of subordinated debt is directly related to the performance of NAMA.
[46] Non-performing 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 of Ireland (2011) 'Impairments, Provisioning and Disclosure Guidelines'. December.
[47] The average NPL ratio for the domestic Irish banks is the highest in the EU according to the European Commission (2014) 'Macroeconomic imbalances: Ireland 2014', March..

Chart 36: Domestic banks' new lending



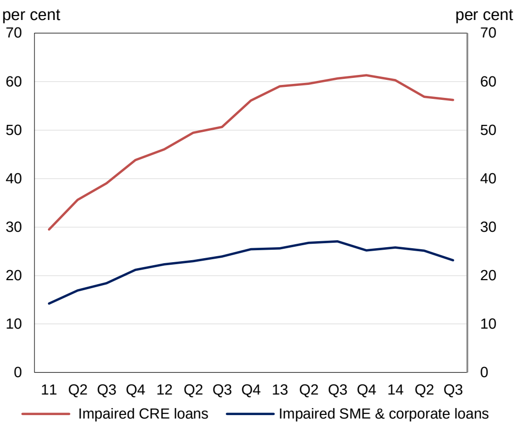
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 37: Residential mortgage arrears



Source: Central Bank of Ireland.
Notes: Data are consolidated. Data relating to BTL mortgages are only available from June 2012.

Chart 38: Domestic banks' rate of SME/corporate & CRE impaired loans



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

been provisioned for on impaired loans would also have an adverse impact on institutions' profitability and solvency.

Loan loss provisions were lower in the third quarter of 2014, primarily due to banks' efforts to resolve impaired loans and realise losses. The stock of provisions fell to €26.3 billion, approximately 9 per cent below the peak-figure at the end of 2014 Q1. Despite this decrease, the aggregate coverage ratio has been relatively stable at 52 per cent of impaired loans since the beginning of the year.[48] Even though the aggregate coverage ratio compares well internationally, provisioning levels vary across institutions, reflecting differences in sectoral and geographical exposures. In general, the scale of distress among SME and CRE loans is much higher than in the mortgage sector, and the UK portions of the loan book are currently performing better than the Irish parts (Chart 35).

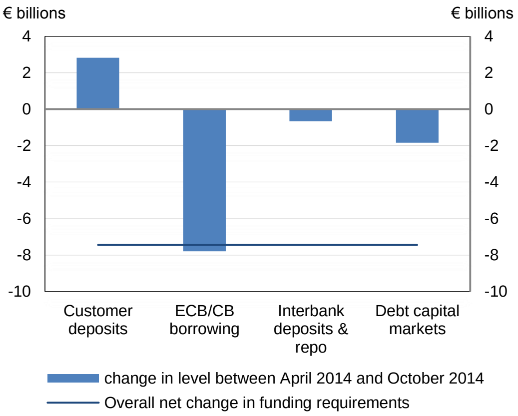
Loan balances at domestic banks continue to contract. The value of outstanding lending declined by 4.6 per cent in the 12 months to 2014 Q3, and by more than a fifth since the opening quarter of 2011, to €202 billion (Chart 34). Loan amortisation and the disposal of mainly overseas assets in recent years have also resulted in a more concentrated loan book. Irish loans now account for two-thirds of total loans, while the overall share of mortgage loans has increased from 50 to 59 per cent since the end of 2010.

Despite a pick-up in recent quarters, the flow of new lending by domestic banks remains relatively weak. Just over €4.2 billion was advanced in 2014 Q3, an increase of €1.3 billion over the figure in 2013 Q3 (Chart 36). There has been little change in the sectoral or geographical split of this lending, with the majority of new loans directed to the SME/corporate and mortgage sectors in Ireland.[49] Should economic recovery continue and demand for credit increase, it is important that any growth in new lending is not at the expense of appropriate credit standards. (Box 3 considers credit standards for mortgage lending and proposed macro-prudential measures.)

An important issue for the domestic banking sector remains the resolution of NPLs. While this has been a complex and lengthy process, there are signs of progress on arrears workout, particularly in the mortgage area. Lenders are reporting compliance with the MART and the overall value of mortgage arrears has fallen by over 13 per cent, to €31.9 billion, since the peak of 2013 Q2. In addition, the value of PDH loans greater than 90 days past due has fallen in each of the past four quarters (Chart 37). However, the lack of similar progress on impaired BTL loans and the persistent growth in very long-term mortgage arrears (of 720 days and over) are impediments to recovery in the sector. Moreover, with signs of recovery in the

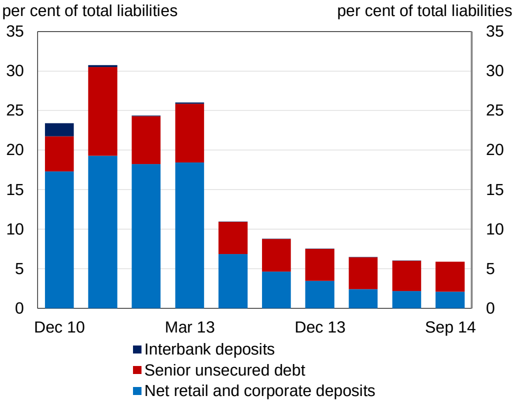
[48] The cover ratio is calculated by dividing the value of provisions for impaired loans by the value of impaired loans
[49] New lending to the SME/corporate sector has been mainly directed towards those involved in manufacturing, the primary industries and the retail sector. In terms of the geographical breakdown of new lending to date in 2014, approximately 60 per cent has been lent to Irish borrowers, 30 per cent to the UK and 10 per cent to the USA and elsewhere.

Chart 39: Change in funding composition



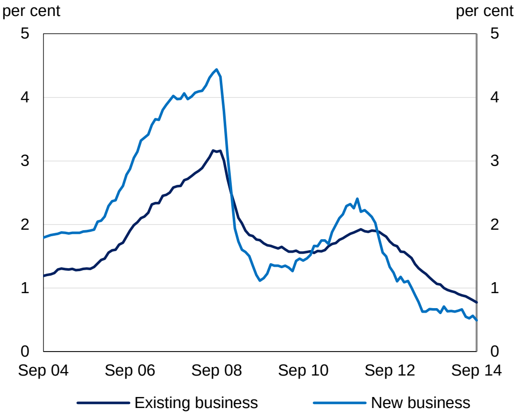
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 40: Domestic banks' guaranteed liabilities



Source: Central Bank of Ireland.
Notes: Data are consolidated. Net retail and corporate deposits are net of deposits covered by the deposit protection scheme.

Chart 41: New and existing deposit rates



Source: Central Bank of Ireland.
Notes: Data relate to new and existing business rates offered to households and NFCs conducted through resident offices of banks operating within the State.

housing market, it is important that banks remain proactive in dealing with these cases rather than adopting a wait-and-see approach in the hope that prices will continue to rise. The latest MART, providing targets to end-2014, sets a proposed sustainable solution rate of 85 per cent of customers over 90 days past due. Furthermore, it specifies that concluded solutions should amount to 45 per cent.[50]

CRE loans retain their position as the most distressed portfolio, with less than a quarter of the value of outstanding loans classed as "good quality".[51] However, there are some positive signs in the latest data, which show NPLs in this sector easing from 61 per cent at the end of 2013 to 56 per cent of loans in 2014 Q3 (Chart 38). Furthermore, the rise in commercial property capital values and market activity should assist those institutions with plans for further asset disposals.[52]

The value of impaired SME/corporate loans has also been declining slowly in recent quarters (Chart 38). While the Central Bank continuously monitors and challenges the efforts of banks to deal with these loans, the process of finding durable restructuring methods can be complicated because of some loans' links to property lending.[53] There is also a supervisory focus by the Central Bank on the improvement of arrears management strategies. In addition, restructuring targets are set to encourage banks to move distressed borrowers from short-term to longer-term forbearance.

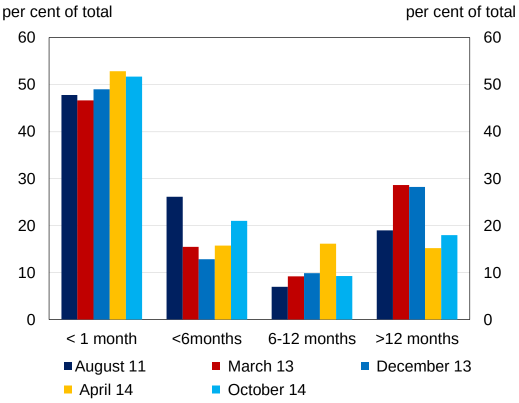
Funding

The overall funding requirements of the domestic banks continue to fall due to deleveraging and loan redemptions. Although still fragile, the funding position of the domestic banks is gradually improving with inflows of customer deposits and further declines in central bank borrowings. However, banks still face a number of funding challenges. These stem from the short-term nature of the maturity profile of funding, including a large amount of debt due to mature in the first quarter of 2015, and the forthcoming liquidity requirements of the Capital Requirements Regulation (CRR).[54] The sustainability of domestic banks' funding also remains vulnerable to a change in market sentiment towards the Irish sovereign.

Since the last Review, domestic banks' funding needs have declined further, with total funding requirements falling by over €7 billion to €224 billion (Chart 39). The lower funding requirements, coupled with improved market access and a further increase in customer deposits, have enabled domestic banks to reduce central bank borrowings by almost €8 billion. ECB/central bank funding support accounted for just over 6 per

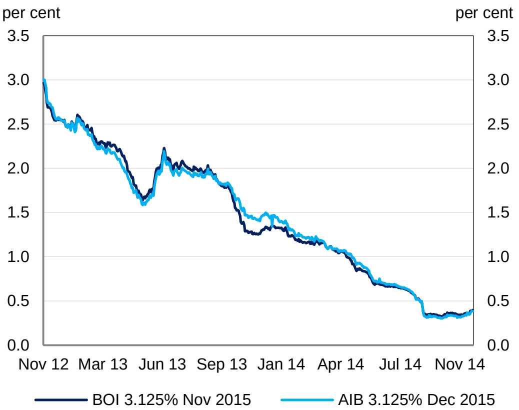
[50] For more see http://www.centralbank.ie/press-area/press-releases/Pages/MortgageArrearsResolutionTargetsJune2014.aspx
[51] In regulatory returns submitted to the Central Bank of Ireland, banks classify loans into 5 categories (good upper, good lower, watch upper, watch lower and impaired). "Good quality loans" consist of exposures classified as good upper and good lower.
[52] For more on commercial property developments, see Section 2.2.
[53] Monitoring consists of adherence to key performance indicators and targets.
[54] For details see the Central Bank of Ireland (2014) 'Implementation Notice of Competent Authority Discretions and Options in the CRR and CRD IV'.

Chart 42: Maturity profile of domestic banks' funding



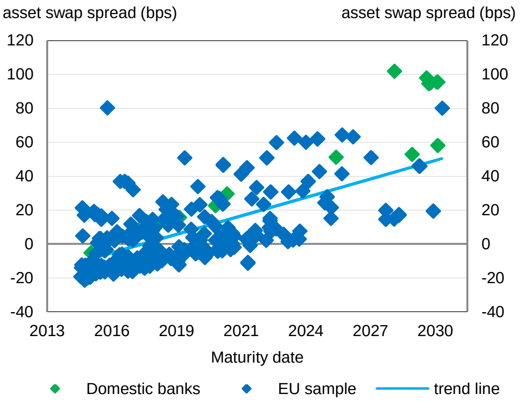
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 43: Domestic banks' covered bond yield



Source: Bloomberg.
Notes: Last observations: 28 November 2014.

Chart 44: Asset swap spread of EU bank covered bonds by maturity



Source: Bloomberg and Central Bank of Ireland calculations.
Notes: Sample of 22 European banks that issued covered bonds from parents located in Denmark, Finland, France, Guernsey, Germany, Italy, Norway, Spain, Sweden, Switzerland and UK. Data as at 28 November 2014. The asset swap spread is a measure of risk. It is calculated as the difference between the bond's yield and an appropriate reference rate. In this case the reference rate is the EURIBOR.

cent of total funding in October 2014, down from 9.3 per cent in April 2014. The deposit base remains susceptible to withdrawals of funds from large counterparties, such as the National Treasury Management Agency. Any such withdrawal would have to be offset by other sources of funding or further deleveraging.

The State's guarantee of liabilities under the Eligible Liabilities Guarantee scheme ceased for new liabilities in March 2013. Since then the share of domestic banks' liabilities that are guaranteed has steadily declined, with total guaranteed liabilities at just under 6 per cent of total liabilities at September 2014 (Chart 40). This has eased banks' cost of funding, particularly compared with 2011 when total guaranteed liabilities stood at over 30 per cent. However, the guarantee still holds for liabilities incurred prior to 29 March 2013 until their maturity date, subject to a maximum term of 5 years.

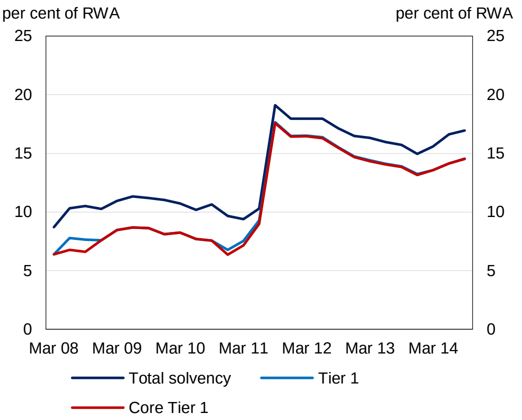
Domestic banks' deposit rates have continued to decline since the last Review (Chart 41). Deposit rates offered by Irish banks on new business declined by over 17 basis points between May and September 2014, while the interest rate on the stock of existing deposits fell by 11 basis points during that time. Although still re-pricing downwards, the rate of change in deposit rates has slowed and is not at the same pace as policy rate reductions. This could be a timing issue or a sign that banks are finding it difficult to increase their deposit base at lower interest rates.

The maturity profile of domestic banks' funding remains weighted heavily to the short term with over half of all funding having a maturity of less than one month (Chart 42). In part, the short maturity profile reflects the growing relative share of customer deposits which, although short term in nature, are generally a stable source of funding. Nonetheless, this leaves institutions susceptible to refinancing risk and changes in sentiment. A large proportion of debt is due to mature in the first quarter of 2015, which is expected to give rise to new debt issuance.[55] This is reflected in the increased share of funding due to mature within the next six months (Chart 42). Lengthening the maturity profile of funding remains a key challenge for the domestic banks.

The international funding environment is currently quite positive which may be due to investors' search for yield. These conditions, as well as improved sentiment towards Ireland, have led to an increased demand for Irish debt, which has proven favourable for domestic banks seeking market funding. Yields on existing bonds have recently stabilised at low levels and both AIB and BOI have continued to issue new debt in 2014 (Chart 43). Comparing Irish domestic issuances with those from European counterparties indicates that, on average, Irish banks pay a premium on longer-term debt (Chart 44).

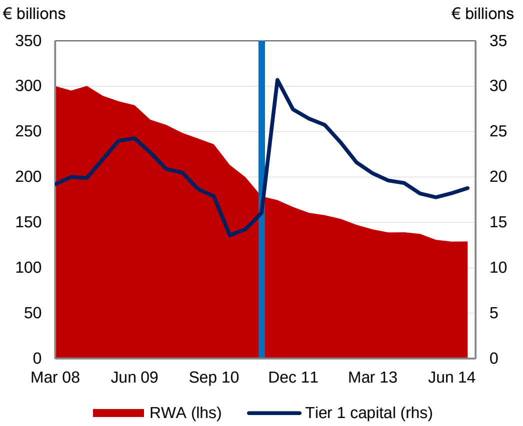
[55] For more details on debt funding of Irish domestic banks see Central Bank of Ireland Macro Financial Review 2014:I Box 5.

Chart 45: Domestic banks' solvency ratios



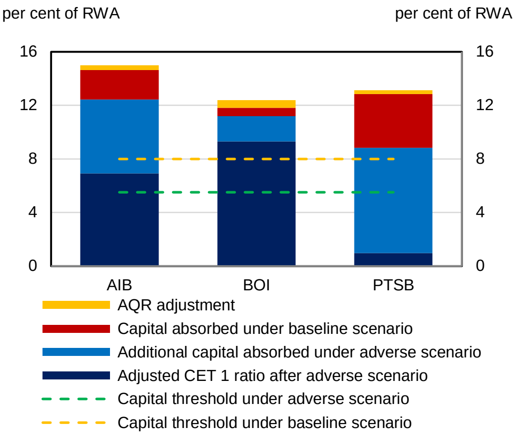
Source: Central Bank of Ireland.
Notes: Data are consolidated. Total solvency is defined as total owned funds divided by risk-weighted assets (RWA). Last observations: September 2014.

Chart 46: Domestic banks' tier one capital and risk weighted assets.



Source: Central Bank of Ireland.
Notes: Data are consolidated. Light blue vertical line refers to July 2011 Government capital injection. Last observations: September 2014.

Chart 47: Domestic banks' Comprehensive Assessment results



Source: ECB.

Domestic banks continue to make progress towards meeting the liquidity requirements of the CRR. These requirements are aimed at improving the resilience of bank balance sheets to stressed liquidity scenarios. Under these requirements, banks are required to meet two liquidity measures – the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). EU banks will be required to meet a minimum LCR of 60 per cent in 2015, rising in phases to 100 per cent by January 1 2018. The NSFR will be introduced in 2018. Meeting these requirements represents potential challenges for domestic banks over the medium term.

Solvency

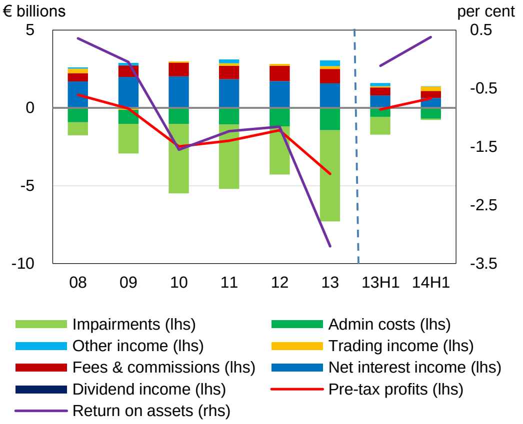
Domestic banks' capital ratios have improved since the last Review, supported by a return to profitability. In the short term, risks to domestic banks' capital levels stem from credit quality, weak profitability and full implementation of the Capital Requirements Directive (CRD IV). Any adverse macroeconomic shocks could also have a negative effect on solvency ratios.

Core tier 1 capital ratios of domestic banks averaged 13.4 per cent in June 2014, compared with 13.2 per cent in December 2013 (Chart 45).[56] Total solvency ratios and tier 1 ratios have moved in line with core tier 1 ratios. This recent increase in banks' solvency ratios has been driven by two components. The first relates to the on-going decline in risk-weighted assets (RWAs), which fell by almost €10 billion between December 2013 and June 2014 (Chart 46). This has been driven by loan repayments and the on-going deleveraging process. Secondly, the return to profitability has helped stabilise capital levels. While these developments in domestic banks' capital ratios are welcome, the overall assessment of capital adequacy should be examined in the context of the recent ECB Comprehensive Assessment (CA). AIB and BOI have been deemed to hold sufficient capital; however, PTSB did not meet the required threshold set in the adverse scenario (Chart 47). It has outlined its capital plan to address this shortfall to both the ECB and Central Bank. This includes a set of actions that it intends to undertake to address the shortfall arising in the hypothetical adverse scenario. (For more on the CA, see Box 4.)

In the longer-term, Irish domestic banks are required to meet the capital requirements under the CRD IV/CRR. Although introduced on a gradual basis, some EU banks have been publishing fully-loaded ratios in advance of full implementation of the regulations. Pro-forma fully loaded ratios published by the two largest domestic banks, BOI and AIB, were 10 per cent and 10.8 per cent, respectively, for June 2014. Although these are in excess of the 7 per cent minimum required under CRD IV, they also include Government preference shares which will not be eligible for capital purposes from 2018. While banks have taken

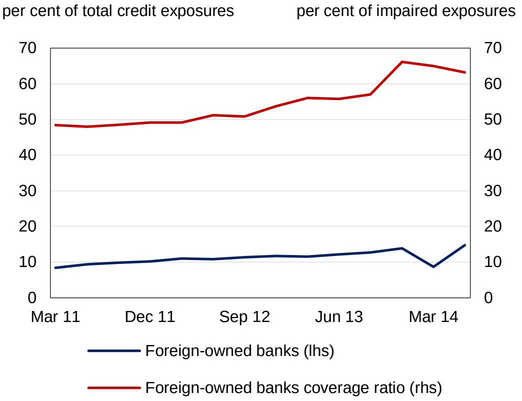
[56] Core tier 1 capital comprises the highest quality capital in terms of both permanence and loss absorption capacity. For example core tier 1 capital would include paid-up equity capital and interim profits, net of foreseeable charges or dividends,

Chart 48: Foreign-owned banks' profitability



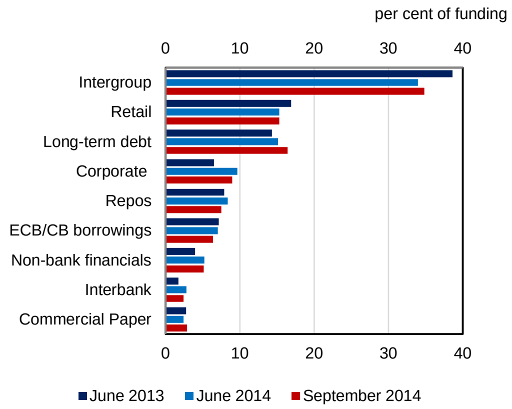
Source: Central Bank of Ireland.
Notes: Data are collected in accordance with the EBA's FINREP reporting requirements. Impairments include provisions. Data as at June 2014.

Chart 49: Foreign-owned banks' impairment rates



Source: Central Bank of Ireland.
Notes: Data are consolidated. Last observations: June 2014.

Chart 50: Foreign-owned banks' breakdown of funding



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

some initial steps in replacing these shares with equity, they remain a significant proportion of the capital base.

Foreign-owned resident banks[57]

Foreign-owned banks resident in Ireland are an important part of the Irish banking system, both as sources of employment and as additional credit suppliers. These banks can be grouped according to business activity: those with an Irish retail market presence, such as KBC Ireland and Ulster Bank Ireland; and large International Financial Services Centre (IFSC) banks, such as Unicredit Bank Ireland plc. and Citibank Europe plc. In general, the latter have tended to perform better in recent years as they are less exposed to domestic macro-financial risks than the retail market-focussed banks.

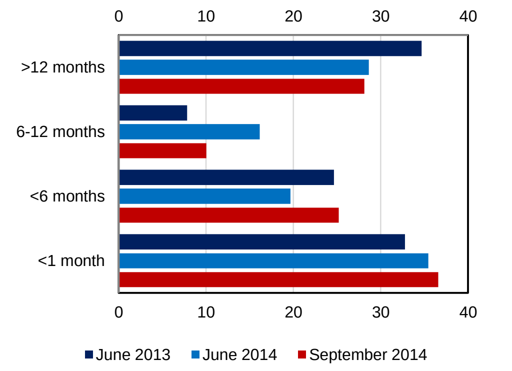
The decline in assets of foreign-owned resident banks that has occurred in recent years has begun to stabilise. The banks have continued to restructure and some institutions with a more international focus have transferred large shares of their assets out of the Irish banking system. New impairment charges increased in 2013, following a review of asset quality by the banks, and have subsequently declined in 2014 (Chart 48). Both internationally-focussed banks and retail banks experienced falls in net-interest income, reflecting the low interest-rate environment. The internationally-focussed banks saw a fall in profits in the first six months of 2014, driven by a decline in trading income. Those banks with a retail presence have reported a modest pre-tax profit and return on assets for the first time since before the crisis, mainly due to a large decline in the flow of new impairment charges.

Foreign-owned resident banks' asset quality remains weak with elevated levels of impaired exposures (Chart 49). This has been driven by banks with an Irish retail focus. These banks' impairment exposures have continued on an upward trend while impaired exposures of internationally-focussed banks have remained negligible. Provisioning levels have eased in recent times. The cover ratio has declined as the flow of new impairment charges has not kept track with the level of impaired exposures.

The funding patterns of foreign-owned resident banks have remained relatively stable since the last Review, with the overall level of funding unchanged between June and September 2014. Although declining between June 2013 and September 2014, intergroup borrowings continue to form the largest component of foreign-owned resident banks' funding, accounting for over one third of total funding (Chart 50). This heavy dependence on parental support represents a potential channel for contagion. ECB/central bank borrowings fell by over half of one per cent between June and September of 2014. There have been small increases in long-term debt issuance and commercial paper

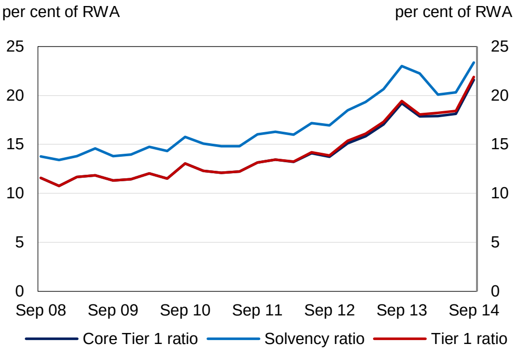
[57] The term *foreign-owned resident bank* refers here to a selection of the larger banks whose ultimate parent is domiciled outside the State. The sample of banks has changed since the previous Review in order to reflect changes in the Irish banking system.

Chart 51: Foreign-owned banks' funding maturity profile



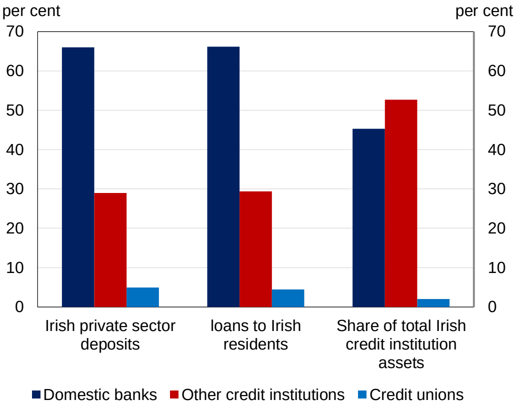
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 52: Foreign-owned banks' solvency



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

Chart 53: Credit unions: share of Irish deposits, loans and assets in Ireland



Source: Central Bank of Ireland.
Notes: Data are resident statistics for all credit institutions in Ireland. Data as at September 2014.

trading, which could be an indication of improved market conditions.

In terms of foreign-owned resident banks' funding maturity, short-term funding (less than one month) remains high, driven mainly by corporate deposits (Chart 51). Reflecting ECB/central bank funding due to mature in the first six months of 2015, there has been an increase in the share of funding in the less-than-6-month category. As with the domestic banks, lengthening the maturity profile of funding is a key challenge for foreign-owned banks' funding plans to reduce refinancing risk.

Capital ratios have increased since the last Review and remain well in excess of minimum regulatory requirements. Core tier 1 capital ratios increased from 18.1 per cent in June 2014 to 21.6 per cent in September 2014 and the aggregate solvency ratio increased by over three percentage points in the same period (Chart 52).

As part of the ECB's Comprehensive Assessment Ulster Bank Ireland Limited and Merrill Lynch International Bank Limited were deemed to hold sufficient capital to withstand the hypothetical stress scenario outlined in the exercise.

Credit Unions

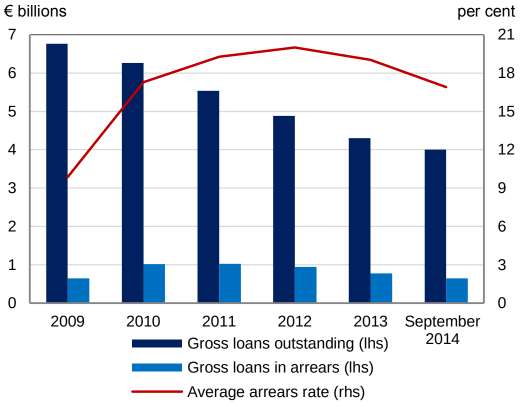
Credit unions continue to face challenges including low levels of lending, high level of impairments, and declining margins as investment yields fall while costs rise.

The total assets of credit unions remained broadly unchanged in the year to end-September, amounting to about €14.2 billion or just under 2 per cent of total assets of Irish credit institutions (Chart 53). Gross loans outstanding have continued to decline and now stand at €4 billion (Chart 54). Low levels of new lending and compressed margins have impacted income. Reflecting the low interest rate environment, declining yields on investment have also had an adverse effect on income.

Asset quality remains an issue for credit unions. While the amount of loans in arrears has declined marginally in the nine months to September 2014, (Chart 54) the average arrears rate remains high at almost 17 per cent of outstanding loans. Reflecting the challenge of high loan arrears and low levels of income, returns to credit union members remain relatively low. The average dividend rate for 2013 remained below 1 per cent.

The number of credit unions operating in Ireland continues to decline. At the end of September, there were 388 credit unions registered in Ireland, which compares to 428 in 2006. During 2014, the number of registered credit unions has fallen by 6 arising from voluntary restructuring. In terms of credit union resolution, it proved necessary for the Central Bank to act in relation to Berehaven Credit Union (BCU) in July 2014. The credit union had serious financial difficulties due to poor governance, lending practices and a lack of internal controls. The Central Bank had engaged with the credit union in recent

Chart 54: Credit union loan arrears



Source: Central Bank of Ireland.
Notes: Arrears refer to customer loans that are more than nine weeks in arrears.

years in an attempt to find a resolution to these difficulties. In seeking the appointment of a liquidator, the Central Bank took this course of action as BCU was no longer viable as a stand-alone credit union. Alternative options to resolve the financial difficulties at the credit union were examined but were found not to be feasible.[58]

[58] For more on the liquidation of Berehaven Credit Union please see http://www.centralbank.ie/press-area/press-releases/Pages/CentralBankconfirmsprovisionalliquidatorappointedBerehaven.aspx

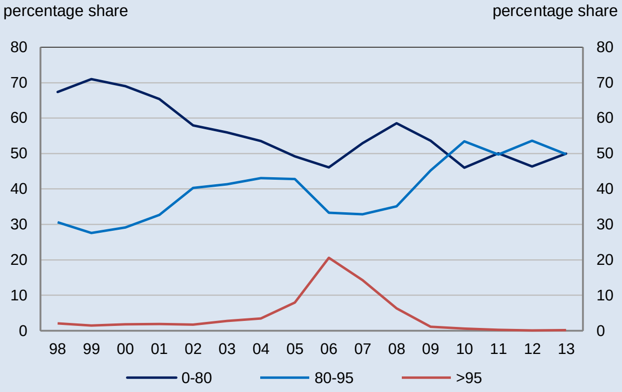
Box 3: Credit standards for mortgage lending and proposed macro-prudential measures

This box presents an analysis of credit standards of new residential lending by the domestic banks. Two key metrics are considered: the loan-to-value (LTV) ratio and the loan-to-income (LTI) ratio of loans at origination. Research has shown both of these ratios to be important indicators of the probability of default in the mortgage market; LTI affects borrower affordability while LTV affects the equity position of the borrower.[1] In addition, LTV at origination is also positively associated with the size of losses once default occurs, making high LTV loans risky for both the homeowner and the financial institution holding the mortgage. While recovery of the current stock of mortgage lending is a high priority for policy makers, ensuring the resilience of future lending is also important for financial stability. This box uses loan-level data on the outstanding stock of residential property loans of the domestic banks at end-2013 to assess current lending standards pertaining to mortgages and how they compare to previous years. It concludes by outlining measures the Central Bank is proposing in relation to residential property lending so as to strengthen the resilience of the financial system.

In 2013, new lending at particularly high LTV ratios (>95 per cent value) had declined to extremely low levels (Chart A). Lending at 80-95 per cent of collateral value has had a high share of new loans in recent years. This coincides with the general downward trend in the low LTV (0-80 per cent) category over time. Mortgages with a 100 per cent LTV, which were a feature of the credit boom, accounted for less than one half of one per cent of the value of new lending in 2013. Although the highest leverage lending category no longer accounts for a substantial proportion of new mortgage loans, lending at a 80-95 per cent LTV is high compared with the beginning of the last decade and with international and regulatory standards (some of this effect, it can be noted, is explained by the high proportion of first time buyers in receipt of new loans).

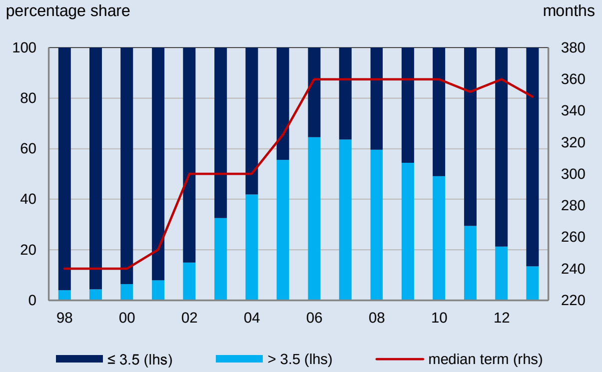
The proportion of new lending at greater than 3.5 times gross household income accounted for 13 per cent of the value of new lending in 2013 (Chart B), down from its peak in 2006, when 65 per cent of the value of new lending occurred at these income multiples. At end-2013, the median value of LTI was 2.17, a level comparable with 2001. Chart B also shows that median loan terms have been stable since 2006, when they reached a peak median value of 30 years, having climbed considerably in the preceding years.

Chart A: Loan-to-value ratios at origination



Source: Central Bank of Ireland

Chart B: Loan-to-income and loan term at origination



Source: Central Bank of Ireland

The Central Bank is proposing to introduce limits on the amount of new mortgage lending that can take place at higher LTV and LTI ratios in order to ensure prudent lending standards throughout the cycle. The proposed measures will require lenders to restrict lending for primary dwelling purchase (PDH) above 80 per cent LTV to no more than 15 per cent of the value of all new mortgage lending for PDHs in a given period, and above 3.5 times LTI to no more than 20 per cent of the value of new loans for this purpose. Lending for investment purposes is considered higher risk than lending to owner occupiers, and thus lenders will be required to limit new buy-to-let loans above 70 per cent LTV to 10 per cent of all buy-to-let loans. Given the high proportion of loans currently in negative equity, the Central Bank proposes to allow excess LTV ratios to be carried across to new properties. Allowing lenders to advance some flexibility above the thresholds reflects the fact that some high LTV and LTI lending may be appropriate, depending on the situation of the borrower.

The Central Bank issued a consultation paper on 7 October containing a detailed policy proposal and rationale for these measures.[2] The consultation ran until 8 December. All responses will be considered before a final policy is issued in 2015.

[1] See Hallissey, N., Kelly, R., and O'Malley, T. (2014) 'Macro-prudential Tools and Credit Risk of Property Lending at Irish Banks', Central Bank of Ireland, Economic Letter Vol. 2014, No. 5.
[2] See Central Bank of Ireland (2014) 'Macro-prudential policy for residential mortgage lending', Consultation Paper CP87.

Box 4: 2014 Comprehensive Assessment of European banks

This box presents the results of the 2014 Comprehensive Assessment (CA) of European banks. The CA provided clarity on bank balance sheets in advance of 04 November 2014, when the ECB assumed responsibility for the direct supervision of large euro area banks. The year-long exercise covered 130 banks with assets totalling €22 trillion, representing 82 per cent of total banking assets in the euro area. It was performed under the current EU Capital Requirements Regulation and Directive (CRR/CRDIV), which includes certain national discretions. In Ireland, five banks were subject to the CA: Allied Irish Banks plc; The Governor and Company of the Bank of Ireland; Permanent TSB plc; Ulster Bank Ireland Limited and Merrill Lynch International Bank Limited.

The assessment had a three-fold objective: (i) *transparency*, that is, enhancing the quality of information available concerning the condition of banks; (ii) *repair*, by identifying and implementing necessary corrective actions to place the banking system on a sounder basis to secure solvency and (iii) *confidence building*, namely enhancing stakeholder confidence in European credit institutions. The assessment included both an Asset Quality Review (AQR) and a stress test. The AQR was an in-depth assessment of the banks' balance sheets at 31 December 2013 and the stress test was a forward looking assessment of banks' capacity to absorb shocks under two scenarios, a baseline and a hypothetical adverse scenario. These two parts were combined via a "join-up" exercise designed to ensure overall consistency of the exercise. The baseline scenario is based on macroeconomic forecasts from the European Commission at end-2013. The adverse scenario, which is not an actual prediction of future events, simulates an extreme worsening of the baseline scenario. As such, the exercise should be interpreted as a prudential exercise.

The results, published on 26 October 2014, revealed a total capital shortfall of €24.6 billion detected at 25 participant European banks. Twelve of the 25 banks had already covered their capital shortfall in advance of the results by increasing their capital in 2014. The remaining thirteen banks, including Ireland's Permanent TSB, submitted capital plans to the ECB in line with requirements of the CA. Banks have six months to cover any shortfalls arising from the AQR or baseline scenario and nine months to address shortfalls identified under the adverse scenario.

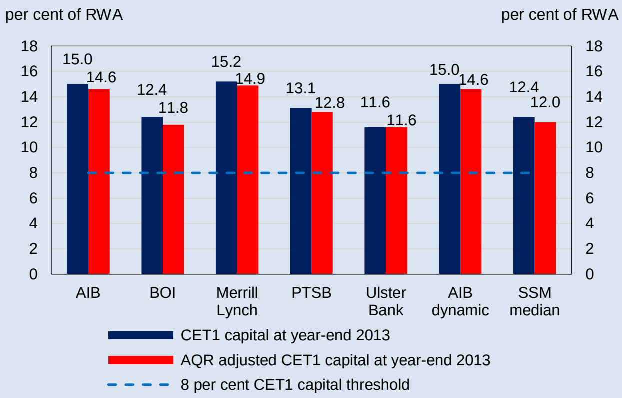
For Ireland, the outcome from the CA shows the progress that has been made in recent years to stabilise and rebuild the banking system in Ireland. The AQR confirmed the robustness of the balance sheet assessment conducted by the Central Bank in 2013. A shortfall was identified in one bank in the adverse scenario applied by the stress test. The results can be decomposed further based on each of the three components of the CA:

(i) **AQR:** The AQR had negligible impact on Irish-based institutions (Chart A) and confirmed that the accounting practices applied by Irish banks were generally appropriate and in line with international accounting standards. This was reflected, in particular, in the overall adequacy of the level of provisions for the in-scope credit portfolios. The AQR resulted in an average capital adjustment equivalent to 0.3 per cent of risk weighted assets for Irish institutions.

(ii) **Baseline Scenario:** The results of the baseline scenario show all Irish based banks meet the ECB requirements to have, at least 8 per cent common equity tier one capital (CET1, the minimum solvency ratio) through to end-2016. The average CET1 ratio for Irish based banks would decline from a post AQR 13.1 per cent in 2013 to 11.1 per cent at the end of 2016.

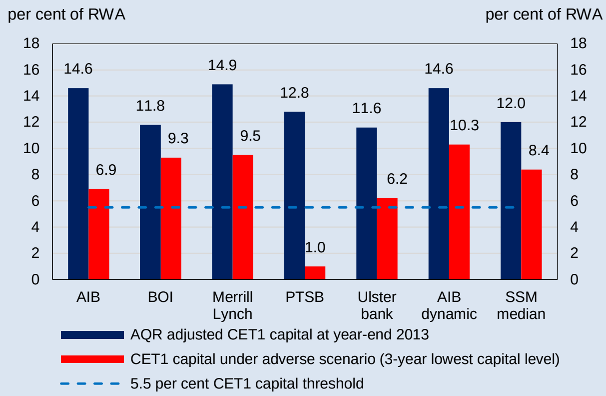
(iii) **Adverse Scenario:** The results of the adverse scenario (Chart B) show that all Irish-based banks, with the exception of Permanent TSB, meet the requirements of having at least 5.5 per cent CET1 through end-2016. Permanent TSB had a capital shortfall of €855 million identified in the adverse scenario. The bank has submitted capital plans to the Central Bank and the ECB in order to address the shortfall within the required 9 month timeframe.[2]

Chart A: Results of the Asset Quality Review (AQR)[1]



Source: [ECB (2014) 'Aggregate Report on the Comprehensive Assessment'](#)

Chart B: Results of the CA – adverse scenario



Source: [ECB (2014) 'Aggregate Report on the Comprehensive Assessment'](#)

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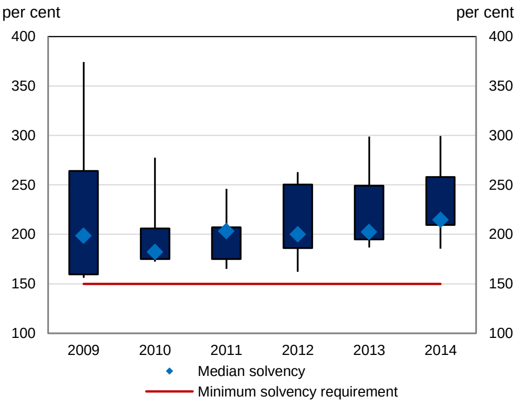
[1] Allied Irish Banks plc. assessment was based on a static balance sheet approach. However, results under a dynamic balance sheet were additionally disclosed as the bank received DG-COMP approval for its restructuring plan after 31 December 2013.
[2] Additional Tier 1 (AT1) capital is eligible for inclusion to cover shortfalls in the adverse case only (subject to certain limits and as published by the ECB). Permanent TSB's contingent convertible capital notes are considered as eligible AT1.

3.3 Insurance sector

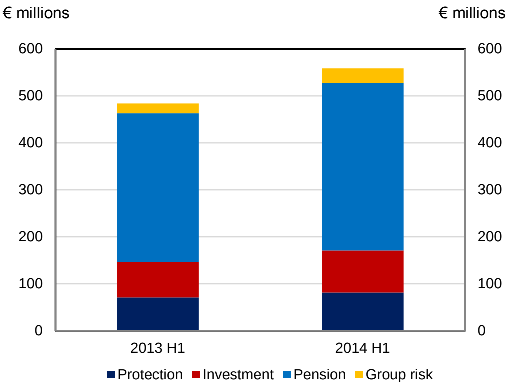
The domestic insurance sector has been subject to a long period of weak premium income growth due to the operating conditions associated with a weak economy and low interest rates. While recent improvements in the economic climate, if maintained, should serve to support the sector, the persistence of the low yield environment continues to present challenges to the profitability of both the domestic life and non-life sectors. Domestic insurance firms have extensive links to financial markets through their asset holdings, while adverse events that might emerge in the sector may impact economic activity.

Chart 55: Solvency position of life insurers



Source: Central Bank of Ireland.
Notes: Data for 2014 are as at end-June. The box at each point shows the interquartile range of solvency positions and the vertical lines show the maximum and minimum solvency positions.

Chart 56: Premium income of life insurers



Source: Central Bank of Ireland.
Notes: Data are annual premium equivalent (APE) for the first half of 2013 and 2014. Group risk includes protection purchased by firms for their employees, for example, death-in-service benefits and health and disability protection.

The Irish insurance sector is diverse in nature. There is a domestic life and non-life market and a substantial international sector. The latter is concentrated in the variable annuity and reinsurance businesses. The contribution of the sector to the Irish economy, as represented by gross value added (GVA) was approximately €3.4 billion in 2012, compared to €5.6 billion for the banking sector.[59] The insurance sector employed over 14,300 people in Ireland in 2013.[60] A stable insurance sector can promote financial stability and contribute to economic activity by transferring risks faced by households and businesses and also by allowing the mobilisation of savings from the household sector to the corporate and public sectors. An interruption to the provision of insurance services can disrupt economic activity.

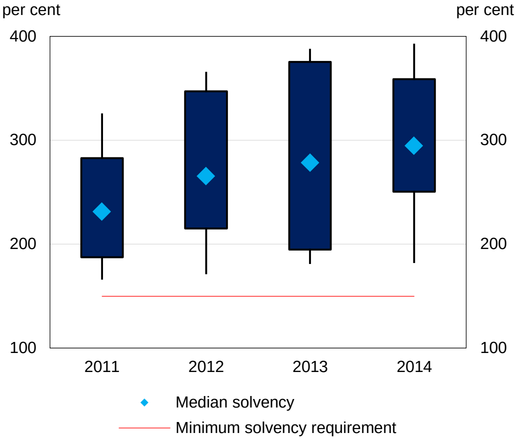
Life sector[61]

The tentative signs of improvement in the domestic life insurance sector that were evident at the time of the last Review have strengthened since then. The solvency position of domestic life insurance firms improved in the first half of the year (Chart 55) and Fitch Ratings upgraded Irish Life's Insurer Financial Strength rating from A to A+ in August 2014.

The overall life market experienced growth of 14 per cent in premium income in the first half of 2014 compared to the same period in 2013 (Chart 56).[62] Much of the growth in the sector is being driven by developments in the corporate segment of the market where there have been substantial purchases of bulk annuities by defined-benefit pension schemes in an attempt to address funding deficits. The demand for these, however, is expected to decline during the year as the de-risking of pension schemes abates. The retail pensions and investment segments of the market experienced growth of 13 per cent and 17 per cent, respectively, over the same period. In line with developments in many other countries, the aging population structure and the need to shift responsibility for pensions from the state to individuals should provide the sector with future growth opportunities.[63] The announcement in Budget 2015 of the

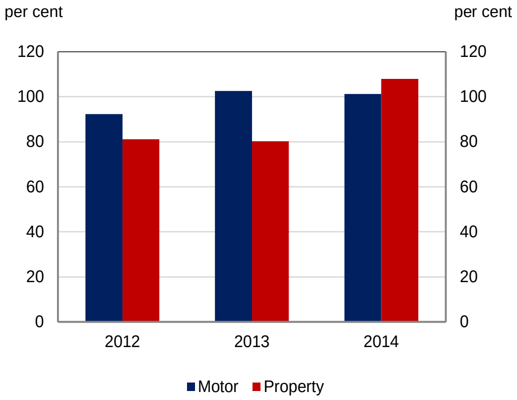
[59] GVA, as measured by the CSO, is the gross income from operating activities before personnel costs have been deducted.
[60] See Insurance Ireland Fact File 2013.
[61] Analysis of the domestic life insurance sector is based on the four largest firms by gross written premium, who collectively write 88 per cent of Irish risk business.
[62] As measured by annual premium equivalent (APE) which is a measure of what the premium would be if paid once for a year's period.
[63] See European Insurance and Occupational Pensions Authority (2014) 'Financial Stability Report'. May.

Chart 57: Solvency position of non-life insurers



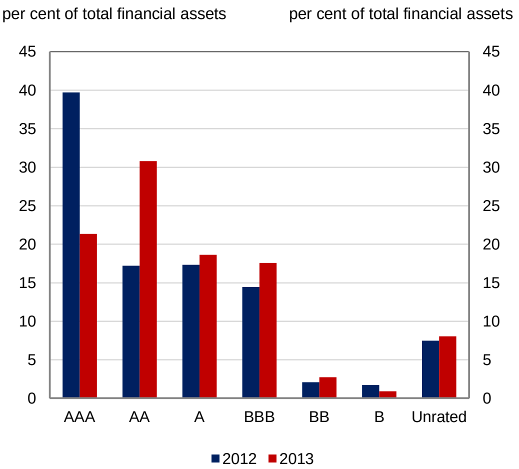
Source: Central Bank of Ireland.
Notes: Data for 2014 are as at end-June. The box at each point shows the interquartile range of solvency positions and the vertical lines show the maximum and minimum solvency positions.

Chart 58: Net combined ratio of motor and property business



Source: Central Bank of Ireland.
Notes: Combined ratios are calculated as cost of incurred claims and expenses as a percentage of earned premium income. A combined ratio below 100 per cent indicates that a company is making an underwriting profit while a ratio above 100 per cent means that the cost of claims is greater that the premium income earned. Data for 2014 are as at end-June. Sample excludes RSA.

Chart 59: Financial asset credit ratings



Source: Central Bank of Ireland and company financial statements.
Notes: Financial assets are a subset of total assets.

abolition of the pension levy by the end of 2015 should help to remove previous disincentives to saving for retirement.

Despite the recent signs of growth, the domestic sector remains vulnerable on a number of fronts. The challenge for firms is to attract new business and income, which are key drivers of future profitability given the long-run focus of the sector. Growth in the protection business line remains stagnant as it faces on-going competition from foreign firms selling through branches in Ireland. There is also evidence of high levels of switching between firms by consumers as they seek out more favourable product terms.

Lapse rates in the investment and pensions business have stabilised, albeit at high levels.[64] They may remain at these levels if consumers are dissatisfied with the returns offered in the low interest rate environment. Increasing competition from other savings and investment providers which offer similar products to unit-linked products, the predominant product offering of Irish life insurance firms, may be contributing to high lapse rates.

Insurers offering products with guaranteed returns, such as in the variable annuity (VA) sector, are the most exposed to a prolonged period of low interest rates. Box 5 outlines the key outcomes of the Central Bank's VA Stress Testing exercise that was completed during 2014.

Non-life sector[65]

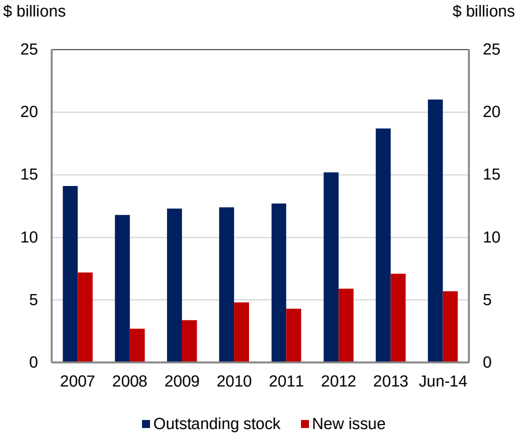
The domestic non-life insurance sector continues to demonstrate resilience in a difficult operating environment. The majority of firms strengthened their solvency position in the first half of 2014 (Chart 57). The forthcoming capital requirements of Solvency II are likely to have contributed to the build-up of capital by firms.

The growth in premium income remains muted due to an intensely competitive market which is likely to prevent any significant increases in premium rates. The two largest classes of insurance underwritten by firms in the domestic market are motor and property insurance. The cost-competitive nature of motor insurance makes it challenging to generate substantial profits on this book, as is evident in the net combined ratio of over 100 per cent, as the cost of claims is greater than the premium income earned (Chart 58). Severe weather events at the start of the year have also had an adverse effect on profitability for those insurance firms with exposure to property risk. While the recent rise in new car sales and increased activity in the housing market may help to promote premium volume growth, these gains may be offset by an increased volume and higher value of claims.

While domestic non-life insurance firms experienced underwriting losses of €211 million in 2013, profits of €65 million were reported in the first half of 2014. Underwriting profits have

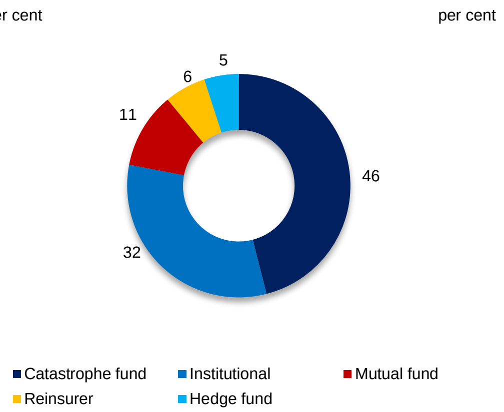
[64] A policy lapse is the voluntary discontinuance or surrender of a policy before the expected maturity.
[65] In analysing the non-life sector in Ireland, the largest six firms by gross written premium who collectively write 88 per cent of Irish risk business are considered. Some of these firms also write non-Irish risk business.

Chart 60: Issuance and stock of catastrophe bonds



Source: Fitch Ratings *Global Reinsurance Guide 2015.*
Note: Catastrophe bonds are risk-linked securities that transfer a specified set of catastrophe risks from an insurer to investors.

Chart 61: Investors in insurance-linked securities



Source: AON Benfield.
Notes: Data are for year ending June 2014. Insurance-linked securities (ILS) are financial instruments whose values are driven by insurance loss events.

become a declining proportion of firms' overall profitability over the past number of years. Investment income as a proportion of total profits increased from 40 per cent in 2005 to an average of 78 per cent in the five years to 2013. This increasing reliance on investment income to support profitability presents a significant risk to the industry in the low interest rate environment. The return on investment has been somewhat volatile in recent years, falling from €971 million in 2012 to €480 million in 2013, and then increasing to €529 million in the first half of 2014.

While pressure on investment returns can prompt insurers to seek out higher yielding assets, domestic insurers' asset allocations have not changed much in recent years. About 34 per cent of the current asset allocation is in EU sovereign bonds and 29 per cent in corporate bonds. However, the data indicate that there has been some shift down the credit ratings ladder (Chart 59). An increase in holdings of riskier assets can make insurance firms more exposed to macroeconomic shocks.

Reinsurance sector

In general, developments in the domestic macro-financial environment have little impact on reinsurers based in Ireland as they operate on a world-wide basis.[66] Six of the top ten global reinsurance groups have a presence in Ireland.[67] Irish reinsurers' global market share in 2013 was 4.6 per cent, unchanged from 2012.[68]

Although the sector has high capitalisation levels and sustained profitability, considerable challenges remain in its operating environment. The persistence of the low yield environment constrains investment income and exerts pressure on earnings. The on-going reductions in premium rates, driven by an oversupply of reinsurance capital and competition, are likely to continue to place a strain on profitability. Rating agencies Moody's and A.M. Best, which focuses on the insurance sector, changed their outlook for the global reinsurance sector from stable to negative in June and August 2014, respectively, reflecting these challenges.

The inflow of alternative capital into the global reinsurance sector continues at record levels. The issuance of catastrophe bonds, which are high-yield debt instruments linked to insurance, reached $5.7 billion in the first half of June 2014 and the total value of outstanding bonds is currently $21 billion (Chart 60). While these volumes of issuance are small compared to total activity in financial markets, the pace of growth is noteworthy. This securitisation of insurance risk also creates growing linkages with broader financial markets. The counterparties of these bonds are typically other financial institutions, such as hedge funds, mutual funds and pension funds (Chart 61). They are attracted to the bonds' high return and the diversification benefits of investing in an asset class that is uncorrelated with

[66] See Kelly, A. and O'Leary, B. (2014) 'Reinsurance in Ireland: Development and Issues', Central Bank of Ireland, Quarterly Bulletin 3 for an overview of the sector.
[67] Based on listing of the top reinsurance groups in Standard & Poor's (2014) 'Global Reinsurance Highlights 2014'
[68] Estimate of Irish reinsurers' market share is based on reinsurance listings in Standard & Poor's (2014) 'Global Reinsurance Highlights 2014'.

other financial assets.

EIOPA stress tests

The European Insurance and Occupational Pensions Authority (EIOPA) launched an EU-wide insurance stress test in April of this year. The aims of the exercise were to test the overall resilience of the insurance sector and to identify major vulnerabilities. This involved testing participants against shocks in financial market sectors such as sovereigns, corporate bonds and equities, as well as shocks to real estate asset prices and interest rates. A set of independent insurance-specific shocks covering mortality, longevity, insufficient reserves and catastrophe were also considered. A second module considered the impact of a low yield environment.

The results of the exercise were announced on 1 December 2014. Individual participant results were not presented. The results of the baseline scenario indicated that the EU insurance sector is, in general, sufficiently capitalised in Solvency II Standard Formula terms. Nevertheless, 14 per cent of companies, representing 3 per cent of total assets, had a Solvency Capital Requirement (SCR) below 100 per cent.[69] Although the sector is most vulnerable to a "double-hit" stress scenario of decreases in asset values combined with a lower risk-free rate, 56 per cent of firms have sufficient capital to withstand this shock.

The low yield module first considered the impact of a prolonged low yield scenario for all maturities in which 24 per cent of participants did not meet their SCR. In the second scenario, 20 per cent of firms did not meet the SCR, which assessed the impact of an atypical change in the shape of the yield curve. A continuation of the current low yield conditions could see some insurers having problems in fulfilling their promises to policyholders in 8-11 years' time.

EIOPA have issued a set of general recommendations to all National Supervisory Authorities in order to address the identified vulnerabilities in a coordinated manner.

[69] SCR represents economic capital to be held by (re)insurers to ensure that they will be able, with a probability of at least 99.5 per cent, to meet their obligations to policyholders and beneficiaries over the following 12 months.

Box 5: Stress tests of variable annuity firms

Variable annuities (VAs) are unit-linked insurance products with investment guarantees designed to facilitate savings for old age/retirement planning and can also be used to facilitate the provision of a guaranteed income in retirement. These guarantees can be long-term in nature and contain market risks which are mitigated through the use of derivatives.

VA writers have experienced significant growth in sales in the US and Japan since the 1990s and in recent years have become increasingly widespread in Europe. This is in large part due to demographic trends (i.e., ageing population, increased longevity) and the greater demand for income protection in retirement.

At present, there are a number of large insurance groups with subsidiaries domiciled in Ireland writing VA business into European markets, through freedom of establishment or freedom of services. As at 30 September 2014, the Central Bank has responsibility for the supervision of ten such insurance and reinsurance entities, of which four entities no longer actively write VA business.[1]

In response to the potential risks arising from a prolonged period of low interest rates on the solvency position of firms, the Central Bank developed a framework for the quantitative assessment of the scope and scale of the risks for the VA industry in Ireland. This exercise fed into the European Insurance and Occupational Pensions Authority (EIOPA) stress tests that were issued in 2014.

The target outcomes of the exercise were to help examine the preparedness of these firms for the potential impact of a prolonged low interest rate environment and help inform any future policy decision making and supervisory engagement.

The stress tests focused on firms' ability to meet policyholder claims under various stressed conditions, having regard to how market, policyholder behaviour and other insurance risks interact with one another. The stress-testing framework consisted of both quantitative requirements (sensitivity, scenario and reverse stress testing) and qualitative requirements. These included resilience to an instantaneous equity fall with a subsequent low growth period combined with changes in interest rate regimes, prudent lapses and operational risk.

The results of the exercise demonstrate that VA firms have suitable and appropriate risk management frameworks in place to react to a range of stresses and scenarios and retain an ability to meet policyholder obligations in reasonably foreseeable stressed conditions. These results reflect the significant changes to VA writers' portfolios and strategies in recent years. These include de-risking of in-force portfolios[2], where appropriate and permissible to do so, improvements in hedging performance and further strengthening of risk governance frameworks.

The exercise demonstrated the need for hedging strategies to be sufficiently robust to mitigate more volatile interest rate movements. The operational-risk stress emphasised the importance of these hedging programmes for VA providers, and the need for strong operational controls and limits to be embedded within these programmes. The recently launched VA risk monitor will enable the Central Bank to have more direct oversight of the effectiveness and efficiency of hedging programmes.

To protect against the risk of stressed market conditions, firms have engaged in the area of innovative product design, including introducing alternative fund strategies. The exercise highlighted the strong reliance on the effectiveness of these measures under stressed conditions and while they represent enhanced risk management it is important to make allowance for break-downs under stressed conditions within exercises such as this and also within internal models proposed by firms to calculate capital requirements under Solvency II[3].

The exercise highlighted the importance of firms' modelling capabilities. Firms should continue to strengthen capability toward more dynamic and sophisticated modelling approaches that are integrated into firms' risk management frameworks. This will form an important part of firms' Solvency II internal model application process.

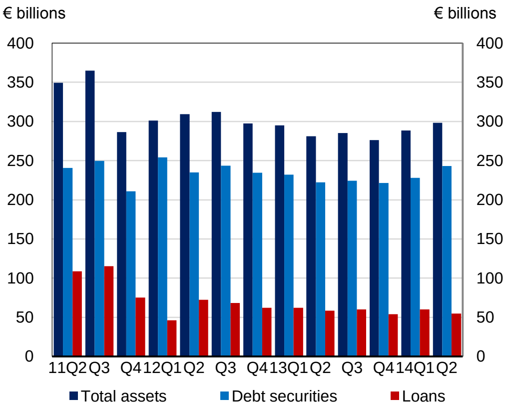
On an aggregate basis, the exercise supports the position that no policy updates to the VA capital framework are merited for the industry at this time but supports the Central Bank's decision to implement a VA risk monitor which enhances the level of oversight. Furthermore, this exercise informed the internal model decision committee process. At a firm-specific level, a number of weaknesses and exposures were demonstrated which have been communicated to each firm.

[1] The four entities are closed to new business for VA products but manage a back book of business.
[2] In-force portfolios refer to portfolios of long-term insurance contracts, written in previous years, for which contractual obligations still exist for future premiums and/or benefits.
[3] Solvency II is an EU directive that harmonises EU insurance regulation.

3.4 Money market funds and other financial intermediaries

Irish-domiciled investment funds, money market funds and financial vehicle corporations held just over €2 trillion of assets in 2014 Q2. However, domestic financial stability risks emanating from these entities remain low, as their assets and liabilities are predominantly located outside of Ireland. Therefore, these entities, with their links to the wider financial system, are more exposed to international financial developments. Within Ireland, the sector employs over 10,000 people and the main risks for the Irish economy are reputational in nature.

Chart 62: MMF total assets and components



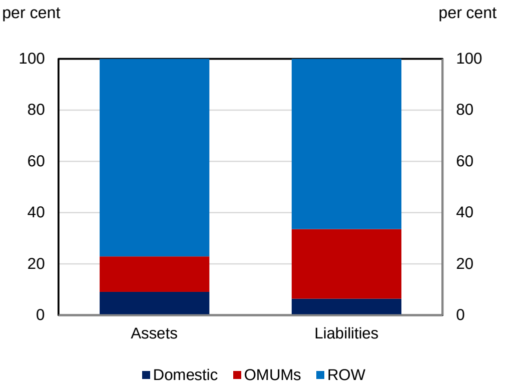
Source: Central Bank of Ireland.
Notes: The movement from 2011 Q3 to 2011 Q4 includes €114 billion of money market funds that were reclassified as investment funds.

Money market funds

Money market funds (MMFs) are an important source of funding for the international financial system and are also a key component of the euro area money supply. They provide short-term funding to euro area banks and corporates. Irish MMFs are a substantial part of the euro area industry. Global financial conditions since 2012 have proved particularly challenging for MMFs as yields on money market instruments have remained low. As a result, many MMFs have been forced to waive their expenses fees in order to generate some form of positive returns for their investors.

Despite the challenge of maintaining a return in a low yield environment, total Irish MMF assets increased by €22 billion in the first half of 2014 to €298 billion (Chart 62). This was largely driven by an increase in net investor inflows. This increase in MMF asset values reveals the robustness of the Irish MMF industry in 2014, despite very low net returns and following a period of sustained outflows. Irish MMFs will face a period of adjustment as money market interest rates react to the unwinding of low policy interest rates.

Chart 63: Investment fund asset and liability location



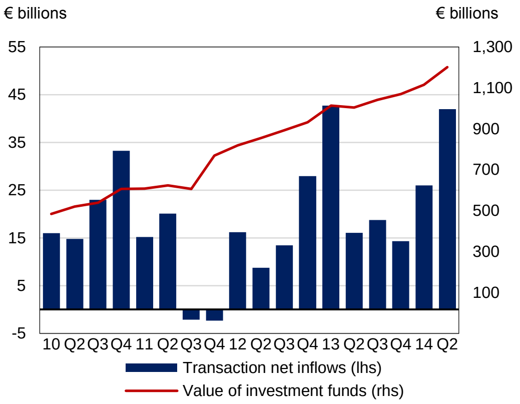
Source: Central Bank of Ireland.
Note: Domestic = Ireland, OMUM = Other Monetary Union Members, ROW = Rest of the World.

Investment funds

Investment funds cover a wider risk profile in comparison to other financial entities. Any risk associated with investment funds is predominately located outside of Ireland (Chart 63). In general, Irish investment funds employ a relatively conservative investment strategy and invest in debt and equity instruments. However, there are some hedge funds which engage in more risky behaviour such as short selling of assets and the use of leverage to purchase assets.

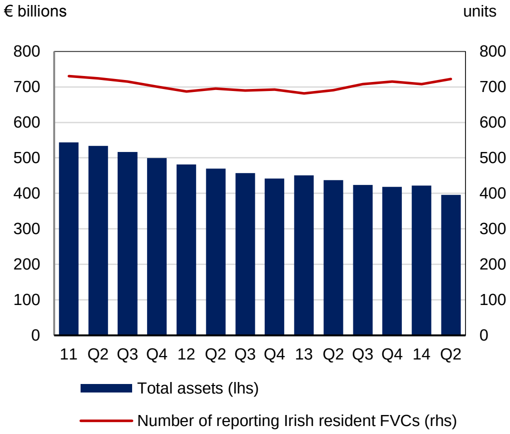
The long-run trend of strong growth in Irish-domiciled investment funds continued, with the industry growing by 12 per cent since the start of the year. Net asset values of these funds increased to just over €1.2 trillion by 2014 Q2 (Chart 64). This growth was mainly driven by investor inflows of €42 billion and positive revaluations of €45 billion in the second half of the year. The revaluations were largely as a result of gains in equity prices, particularly in US equity markets. Most fund types experienced investor inflows, with bond funds showing the strongest growth

Chart 64: Value of investment funds shares/units



Source: Central Bank of Ireland.
Notes: The movement from 2011 Q3 to 2011 Q4 includes €114 billion of money market funds that were reclassified as investment funds.

Chart 65: Total assets and number of reporting Irish resident FVCs



Source: Central Bank of Ireland.

amid buoyancy in bond markets. Like MMFs, bond funds will also face the challenge of a normalisation in the interest rate environment.

Financial vehicle corporations

Financial vehicle corporations (FVCs) are special purpose vehicles (SPVs) that carry out securitisation transactions. The majority of FVCs convert securitised loans from banks and other financial institutions into asset-backed debt securities. This allows these financial institutions to access funding from a diverse range of investors. Since the financial crisis in 2007, the global appetite for securitisation has declined and European securitisation activity remains low. This can partly be explained by the difficulties investors face in assessing and managing risks involved in securitisation activities. (Box 6 considers how FVC and SPV activity in Ireland are monitored.)

Irish resident FVCs' assets continued their trend of overall decline evident since 2010 Q4, falling by €23 billion since the start of the year, to €396 billion in 2014 Q2 (Chart 64). Despite this, the trend of increasing numbers of reporting entities (seen since 2013 Q2) continued in the first half of 2014 and now stands at 722 vehicles. This indicates renewed investor appetite in more diverse securitisations, with a move away from larger FVC vehicles involved in the securitisation of mortgages towards smaller securitisation type vehicles engaged in activities such as aircraft leasing. Finally, the volume of loans securitised by Irish banks declined by just over €1 billion to €41 billion in the first half of 2014.

Box 7 discusses regulatory/supervisory issues in relation to contracts for differences.

Box 6: Monitoring FVC and SPV activity in Ireland

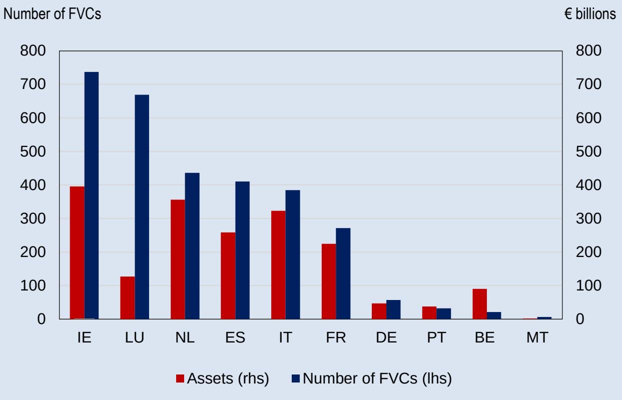
This box discusses Irish-domiciled Financial Vehicle Corporations (FVCs) and Special Purpose Vehicles (SPVs). These vehicles can have a significant impact on Irish macroeconomic statistics, particularly external debt.[1] FVCs and SPVs have few links to the Irish economy but are connected to the wider financial system as the majority of their assets and liabilities are located outside of Ireland.

FVC and SPV activities are part of the Other Financial Intermediary (OFI) sector in Ireland. They are an important component of the shadow banking sector which has gained increasing attention since the start of the global financial crisis in 2007. These vehicles are linked with banking, insurance, pension and other sectors within Ireland and overseas. The types of activities undertaken by these vehicles include, but are not limited to, investment transactions, securitisation transactions, distressed debt transactions, balance sheet management, and fund-raising.

Under the ECB definition[2], an FVC has to be set up as a bankruptcy remote vehicle from their sponsoring firm[3] and is an entity whose primary activity is securitisation. Securitisation has taken place where (i) an asset or the credit risk of an asset, through the use of derivatives, has been transferred to the vehicle from the sponsor or the vehicle's debtor and (ii) the vehicle issues a marketable security. This allows originators, including banks, to turn illiquid assets (for example, loans) into funding. In contrast, an SPV's main activity is loan origination, for example via loan participation notes. Following the ECB regulation on FVCs, a register of Irish domiciled FVCs is maintained by the Central Bank and quarterly balance sheet data have been collected from FVC vehicles since 2009 Q4. The ECB data show that within the euro area there are ten countries which have resident FVCs. Ireland has the largest proportion of domiciled FVCs by number and value of assets of any euro area Member State (Chart A). However, at present there is no comparable euro area dataset for SPVs which fall outside the ECB's definition of an FVC.

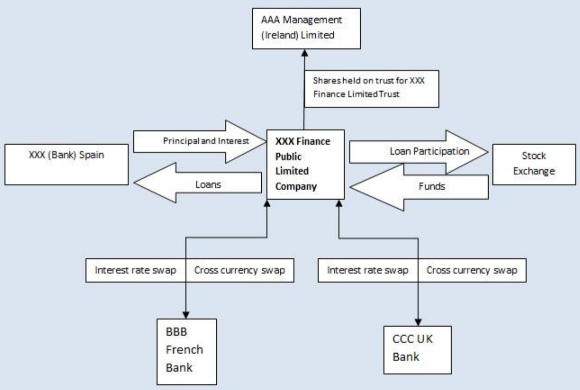
In Ireland, there are a large number of SPVs involved in loan origination which are created at the discretion of a sponsoring firm, usually a major bank, finance company, investment bank or insurance company. Various sectoral financial services regulations are likely to apply, directly or indirectly, to these types of SPVs (e.g., banking, insurance and fund regulations, investor disclosure and market monitoring regulations). Chart B presents an example of a simple SPV structure which (a) makes loans to a regulated European bank, (b) funds itself by issuing paper which is listed on a stock exchange (and must therefore comply with disclosure regulations and listing rules) and (c) hedges various exposures with derivatives (and must therefore comply with the European Market Infrastructure regulation).[4] The cross sector and border interlinkages, illustrated in Chart B, can raise concerns regarding contagion and financial stability risks. Looking ahead, a better understanding of the activities of FVCs and SPVs will be an area of focus for policy makers.

Chart A: Number and assets of FVCs resident in the euro area



Source: Central Bank of Ireland.
Notes: Data as at 2014 Q2.

Chart B: Example of SPV structure



Source: Central Bank of Ireland.

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[1] For a discussion on the measurement of Ireland's external debt see Creedon, C., Fitzpatrick, T. and Gaffney, E. (2012) 'Ireland's External Debt: Economic and Statistical Realities' Central Bank of Ireland, Economic Letter, Vol. 2012 No. 12.
[2] ECB Regulation No. 24/2009 concerning statistics on the assets and liabilities of FVCs, which are engaged in securitisation type transactions.
[3] See Joint Forum of the Basel Committee on Banking supervision (2009) 'Report on Special Purpose Entities', Bank for International Settlements.
[4] Note that this is only one of many different structures which a SPV may have.

Box 7: Revised Transparency Directive – Addressing hidden shareholdings

Market disclosure requirements in relation to derivatives have been developed over the past number of years as different instruments and markets have emerged. Equity-related derivatives have become increasingly attractive for investors because many investors aim to gain a return from the price performance of the equity without physically holding the equity itself. The use of such derivatives can increase efficiency and reduce risk in settling a transaction at maturity. The risk is reduced to the timely transfer of the price difference from the seller to the buyer of the option, such that there is almost no cost, time delay or foreign exchange exposure in executing what is in effect a cash settlement, especially in the case of cross border transactions.

Within this context, the Transparency Directive (TD) was introduced in 2004 and became Irish law (Transparency (Directive 2004/109/EC) Regulations 2007) on 13 June 2007. The TD seeks to enhance transparency in EU capital markets in order to improve investor protection and market efficiency. The Regulations establish disclosure requirements on an on-going basis for issuers with securities admitted to trading on a regulated market situated or operating within the EU.

The TD *inter alia* provides a framework for *"the disclosure of accurate, comprehensive and timely information about security issuers in order to build sustained investor confidence and allow for an informed assessment of their business performance and assets. This enhances both investor protection and market efficiency. To that end, security issuers should ensure appropriate transparency for investors through a regular flow of information. To the same end, shareholders, or natural persons or legal entities holding voting rights or financial instruments that result in an entitlement to acquire existing shares with voting rights, should also inform issuers of the acquisition of or other changes in major holdings in companies so that the latter are in a position to keep the public informed."*[1]

Financial markets increasingly make use of a variety of market-developed derivative financial instruments (such as equity swaps, contracts for differences (CFDs) and cash settled options as well as market practices such as securities lending) that were not covered by the 2004 TD. Synthetic positions construed by these financial instruments make it possible to split off the economic interest from the legal interest in share positions.[2]

Non-notification of major holdings of synthetic positions could hamper the strategic goal of the TD to give insight into the control structure (voting position) of a listed company. CFDs are amongst those financial instruments that can be used to build up large economic positions in a company prior to a possible takeover without any transparency to the company or to the market. A CFD is an agreement between a 'buyer' and a 'seller' to exchange the difference between the current price of an underlying asset (shares, currencies, commodities, indices, etc.) and its price when the contract is closed. CFDs are leveraged products. They offer exposure to the markets while requiring an investor to put down only a small margin (or deposit) of the total value of the trade. Investors may be asked by a broker to deposit more cash or securities to cover any losses, known as a "margin call". They can also have agreements with their CFD providers to buy the underlying shares at a later date. Investors who build more than a 3 per cent equity stake in an Irish-listed company usually have to disclose their positions to the stock market. That has not been the case with stakes built through CFDs because an investor in a CFD never actually buys or owns the asset underlying the CFD.

Cases have arisen where cash-settled derivatives were used to gain economic exposure in a specific issuer without the concurrent assignment or transfer of the right to buy or sell the underlying share. These cases included Fiat, Porsche-Volkswagen and Continental/Schaeffler involving undisclosed positions being built up using equity swaps as well as the Quinn-Anglo Irish Bank case where a 28 per cent stake was built up in the bank using CFDs. These cases demonstrate that instruments originally construed for liquidity or hedging purposes can be used to acquire material stakes in companies at a price that is influenced by a lack of transparency. These cases had the capacity to create turbulence in the markets and to have an adverse impact on financial stability.

The Central Bank has advocated for change in this area since 2008 and the Minister for Finance acknowledged this in 2009 and indicated he was minded to make regulations to address the issue.[3] A 2010 EU Commission Report concluded that the regulatory/supervisory regime should be improved with respect to the disclosure of corporate ownership, acknowledging that financial innovation has created such financial instruments and that they may facilitate the build-up of secret stakes in companies.[4]

Work at EU level has since amended the Transparency Directive to extend the major holdings notification requirements to financial instruments that have a similar economic effect to holding shares and entitlements to acquire shares.[5] This was adopted in 2013 and must be transposed in each Member State within two years. In Ireland, the Department of Finance has indicated legislation is likely to be introduced in early 2015 to give effect to this. The revised Directive requires disclosure of major holdings of all financial instruments that could be used to acquire economic interest in listed companies and has the same effect as holdings of equity.

[1] See EU Directive 2004/109/EC.
[2] Legal interests give voting rights regarding the issuing company and economic interests give no voting rights.
[3] Dáil Éireann: Investment of the National Pensions Reserve Fund and Miscellaneous Provisions Bill 2009: Committee and Remaining Stages; 4 March 2009.
[4] See Report from the European Commission on the Harmonisation of Transparency Requirements .
[5] See EU Directive 2013/50/EU.

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