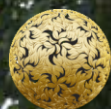


2014: I

Macro-Financial Review



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

MACRO-FINANCIAL REVIEW

Notes

1. Unless otherwise stated, this document refers to data available on 30 May, 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 is 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	iv
1 OVERVIEW	1
2 MACROECONOMIC ENVIRONMENT	3
2.1 Macroeconomic overview	3
2.2 Non-financial corporations	5
Box 1 Profiling the indebtedness of Irish SMEs	9
2.3 Household sector	10
Box 2 Residential property price expectations survey	14
2.4 Sovereign sector	15
Box 3 Unexpectedly low inflation and debt sustainability	17
Box 4 Who holds Irish Government debt?	18
3 FINANCIAL SYSTEM	19
3.1 Financial system overview	19
3.2 Banking sector	21
Box 5 Assessment of debt funding of Irish domestic banks (2014Q1 – 2015Q4)	31
Box 6 Macroprudential policy in Ireland – An overview	32
3.3 Insurance sector	33
Box 7 Low interest rate environment and non-life insurers' portfolio compositions	37
3.4 Money market funds and other intermediaries	38

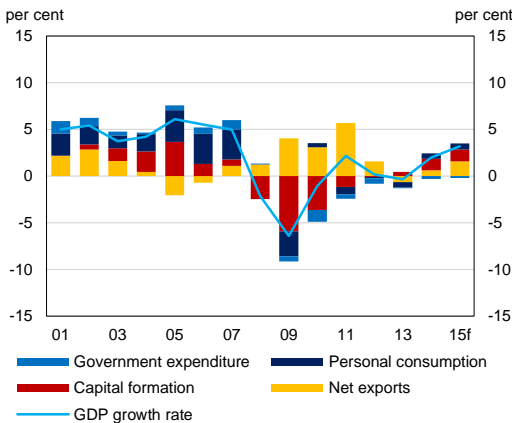
Preface

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 December 2013.

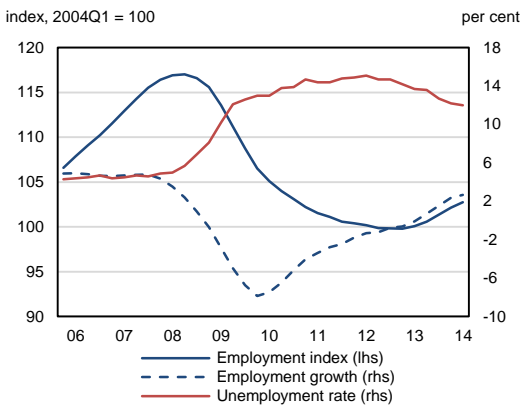
1. Overview

Chart A1: Sources of GDP growth



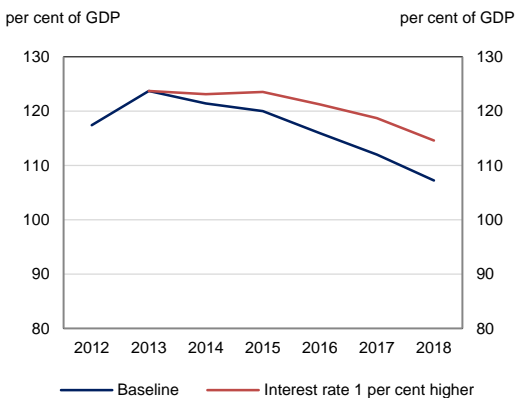
Source: Central Statistics Office (CSO) and Central Bank of Ireland. Notes: Government expenditure and personal consumption relate to purchases of goods and services. 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 2, 2014.

Chart A2: 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 growth rate is measured as a year-on-year change. The employment index and growth rate are based on a 4-quarter moving average. All data are seasonally adjusted. Data as at 2014 Q1.

Chart A3: Impact of 1 per cent increase in policy interest rates on the General Government debt ratio



Source: Ireland's Stability Programme – April 2014 Update, Department of Finance.

Overview

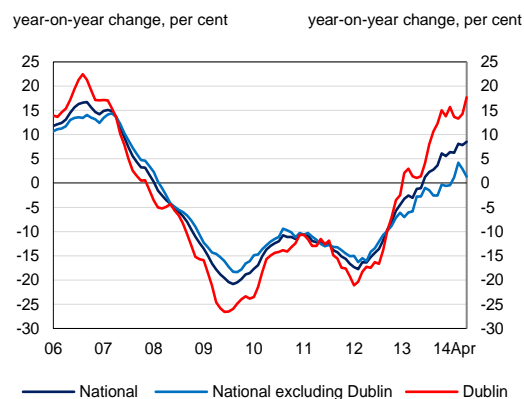
Since the publication of the last Macro-Financial Review in December 2013, Ireland has exited the EU-IMF official assistance programme without the aid of a precautionary credit line. Reflecting market sentiment globally and vis-à-vis the Irish sovereign, yield spreads in Irish government paper have narrowed since the programme exit. Nevertheless, the macro-financial environment remains challenging and further efforts are essential to reinforce market confidence.

Salient evidence of continuing macroeconomic imbalances include the high level of non-performing loans, an aggregate unemployment rate still expected to be in double digits for at least a further year and the still extremely high levels of public and private indebtedness.

Following a decline in output last year, a balanced recovery in Gross Domestic Product (GDP) growth continues to be expected in 2014 and 2015, with both exports and domestic demand contributing (Chart A1). A number of headwinds will continue to restrain growth, however, including modest external demand growth, high household indebtedness, elevated unemployment numbers, weak prospects for disposable income growth, and the continuing need for fiscal adjustment. Overall, GDP growth of around 2 per cent is expected this year, rising to a projected 3.2 per cent next year. Employment growth has increasingly been driven by full-time jobs (Chart A2). Unemployment has fallen from its peak of 15.1 per cent in 2012 Q1 and is projected to decline further to an average rate of 10.4 per cent next year. Nevertheless, this remains high by historical and international comparison and is contributing to the high level of loan-servicing arrears by over-indebted households.

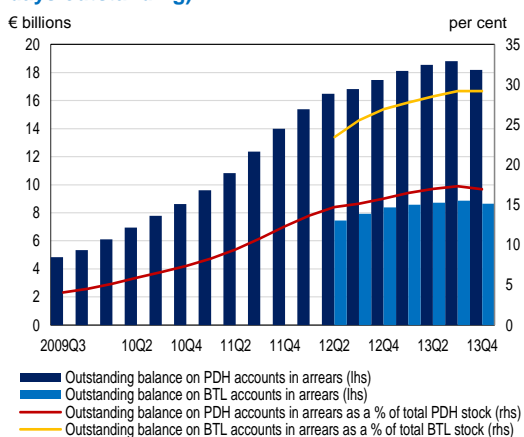
Following the exit from the EU-IMF programme, a number of long-term sovereign bond issuances at low yields have been undertaken by the National Treasury Management Agency (NTMA). Investor demand for these issuances has been both strong and broadly-based. As a result, over 80 per cent of the NTMA's funding target of €8 billion for 2014 had been raised by early May. Rating agency Moody's raised Ireland's sovereign credit rating to investment grade in January and then upgraded its rating by two notches to Baa1 in May. The General Government debt ratio, nevertheless, remains above 120 per cent of GDP, while the deficit ratio is greater than the 3 per cent of GDP Stability and Growth Pact ceiling. Not only will the projected downward path of both ratios remain dependent on fiscal commitments being maintained but both are sensitive to interest rate and output growth developments (Chart A3). A failure to adhere to agreed fiscal measures and to maintain compliance with EU fiscal rules in the coming years would

Chart A4: House price growth: National, Dublin & non-Dublin



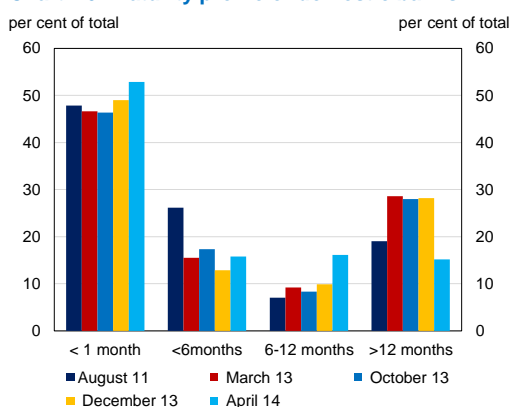
Source: CSO.

Chart A5: Residential mortgage arrears (over 90 days outstanding)



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

Chart A6: Maturity profile of domestic banks



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

undermine investor confidence and would not support financial stability.

House prices are up strongly in year-on-year terms in Dublin with signs of recovery evident also outside the capital (Chart A4). Sales have also picked up, although transactions volumes remain low by historical comparison and much of the purchasing activity is driven by non-mortgage buyers. Supply shortages are an important factor in recent house price increases. By their nature, they take time to address and, accordingly, should be a priority for policy, if imbalance in the housing market is not once again to become a potential source of financial instability. In contrast, policy initiatives aimed at increasing demand might put unnecessary upward pressure on prices. The overall commercial property market has also begun to display signs of recovery. This mainly reflects developments in the office sector, which have been supported by strong international investment demand, while conditions in the retail and industrial sectors remain relatively subdued.

The key systemic issue for the Irish economy remains the high level of impaired bank loans. Despite some recent reductions, mortgage arrears remain high (Chart A5), while the number of cases of very long-term arrears of over 720 days continues to increase. Loan-servicing arrears among small and medium enterprise (SME) borrowers are also a significant problem. Other challenges facing the SME sector include weak domestic demand conditions, difficulties accessing credit, and high indebtedness among a small proportion of firms (see Box 1). Resolving the loan arrears problem for both households and SMEs is essential for borrowers and lenders and in order to support growth and recovery in the broader economy. Lenders are reporting compliance with mortgage arrears resolution targets. On-going progress will need to be maintained across both the household and SME sectors.

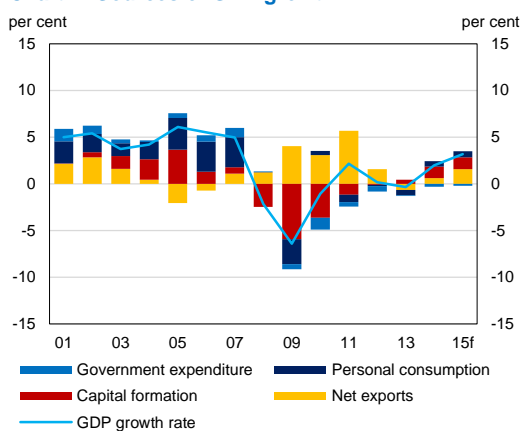
The large stock of non-performing loans is the key factor in the difficult operating environment facing the banking sector. Low new business volumes and the short maturity profile of funding are additional challenges (Chart A6). Some favourable developments reported in the last Review have continued, including an on-going improvement in earnings capacity, lower funding costs, a further reduction in central bank funding and stable customer deposits. The credit market, nevertheless, remains far from well-functioning and, consequently, is not supporting economic growth to the extent that would normally be expected. The outcome of the European Central Bank (ECB) Comprehensive Assessment, which includes a point-in-time Asset Quality Review and forward-looking stress tests, is due in November 2014. It will be important in determining the resilience of the major banks to future shocks, notwithstanding the capital injections of recent years.

2. Macroeconomic environment

2.1 Macroeconomic overview

A balanced recovery in GDP growth is expected in 2014 and 2015, with both exports and domestic demand contributing. The robustness of the recovery is dependent on anticipated growth in Ireland's main trading partners and the easing of domestic factors that could constrain consumption and investment activity. Most recent economic indicators, particularly in the labour market, have been broadly positive.

Chart 1: Sources of GDP growth



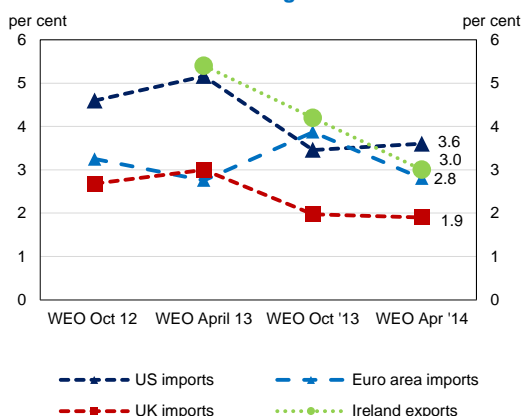
Source: CSO and Central Bank of Ireland.
Notes: Government expenditure and personal consumption relate to purchases of goods and services. 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 2, 2014.

External environment

The contribution of external trade to Irish GDP growth was negative in 2013 (Chart 1). Weak export performance due to the impact of patent expiry in the pharmaceutical sector, which accounts for one quarter of merchandise exports, was the main reason for this outcome. Stronger than anticipated import growth, related to a pick-up in investment, however, occurred in the second half of 2013. The patent-cliff drag on exports and overall GDP growth is expected to ease in 2014.

Economic performance is sensitive to demand for imports from Ireland's main trading partners. The outlook for import growth in the UK and the US in 2014 is broadly unchanged since the last Review (Chart 2). Import growth in the euro area is expected to be lower than forecast at the time of the last Review. Factors such as a persistent disinflationary trend in the euro area, continuing high private and public debt in a number of euro area Member States, as well as spill-over effects from the events in Ukraine and Russia could dampen global growth. The demand dynamics projected in Ireland's main trading partners and the continuing, albeit smaller, patent-cliff effect have led export growth forecasts for 2014 to be revised progressively downwards over the past year. However, they remain positive in value.

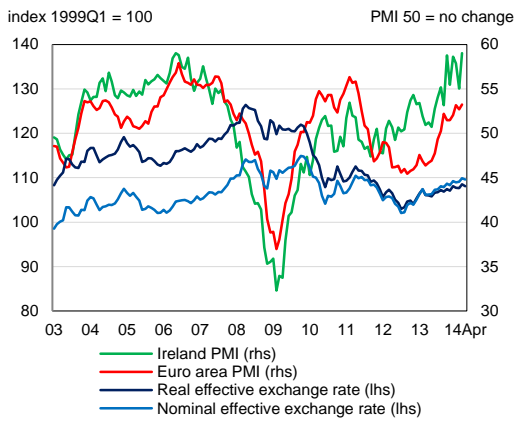
Chart 2: Evolution of trade growth forecasts



Source: IMF and Central Bank of Ireland.
Notes: Forecasts are from the IMF's World Economic Outlook (WEO), except Irish exports forecasts, which are from the corresponding Central Bank of Ireland Quarterly Bulletin.

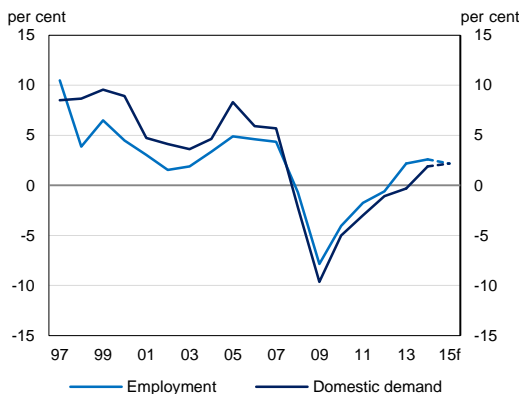
The economy remains in a position to benefit from the expected growth in foreign demand this year and next, despite some erosion in cost-competitiveness (Chart 3). While the rise in the real effective exchange rate since mid-2012 is of some concern, the underlying factors relate mainly to the appreciation of the euro and less so to adverse relative labour cost developments. The high level of unemployment and the spare capacity in the labour market expected over the near-term should help contain labour cost growth in general in 2014 and 2015. Sentiment indicators for both services and manufacturing sectors point towards continued expansion, driven primarily by higher export orders (Chart 3).

Chart 3: Competitiveness and PMI indicators



Source: Central Bank of Ireland and Markit.
 Notes: A rise in the effective exchange rates implies a deterioration in competitiveness while a fall represents an improvement. For the Purchasing Managers' Index (PMI), a value above 50 implies an improvement in sentiment while below 50 implies a deterioration.

Chart 4: Employment and domestic demand growth



Source: CSO and Central Bank of Ireland.
 Notes: Data are annual. 2014 and 2015 are forecasts from the Central Bank of Ireland Quarterly Bulletin 2, 2014.

Domestic environment

Real GDP growth of 2 per cent is expected for this year, as it was at the time of the last Review, rising to 3.2 per cent in 2015.¹ Divergent developments in domestic demand were evident through 2013, with investment recovering from its low base as consumption continued to contract (Chart 1). Employment growth accelerated through 2013, but the factors adversely affecting consumption in particular meant domestic demand growth lagged behind (Chart 4). Those headwinds persist into 2014, namely high household debt levels (see section 2.3), an elevated unemployment rate and weak prospects for disposable income growth. Since the last Review, high-frequency indicators suggest a more favourable outlook for consumption in 2014, with the volume of retail sales expanding from mid-2013 onwards. Fiscal consolidation is expected to continue to weigh on domestic demand in 2014 and 2015, albeit to a lesser degree than in recent years.

There was a broadly-based expansion of investment in 2013 with indicators pointing to a continuation of these trends in 2014. A number of potential constraints could act as a drag on the recovery in investment in the near-term. For example, a lack of bank finance, where required, could hinder expenditure in both building and construction, and machinery and equipment. This constraint is most binding for indigenous enterprises. Investment by multinational enterprises is not constrained by the domestic credit market and, as a result, foreign direct investment will continue to be an important feature of the overall recovery in investment. In terms of construction, any delays in planning approval on top of difficulties with securing access to credit, for example, could dampen activity and exacerbate supply bottlenecks, which are already evident in the Dublin area in particular.

The labour market has continued to improve since the last Review, and at a faster pace than expected at that time. Unemployment is projected to fall to 10.4 per cent in 2015 from 12 per cent in 2014 Q1. While the reported distribution of recent employment growth makes analysis of labour market developments difficult², it is apparent that the recovery in employment is taking place in relatively low-value-added sectors with little wage growth evident. Employment growth has, however, been increasingly driven by full-time jobs in recent quarters. Although total labour compensation is expected to rise this year and next, growth in nominal compensation per employee is only expected to be in the region of 0.7 to 1 per cent in 2014 and 2015. Projected consumption growth will, therefore, also rely on a further reduction in the savings ratio.

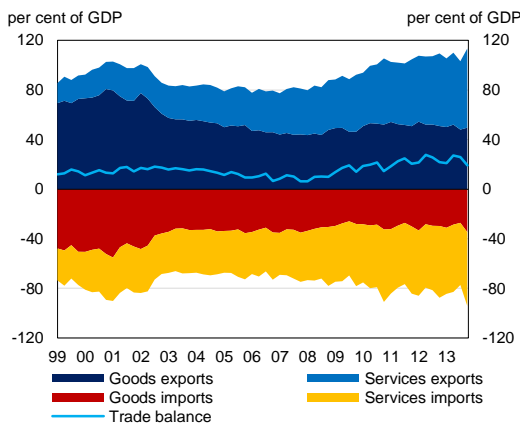
¹ See [Central Bank of Ireland Quarterly Bulletin 2, 2014](#) for forecast details.

² See Conefrey, T. and Linehan, S. (2014) 'Box B: Recent employment recovery', [Central Bank of Ireland Quarterly Bulletin 2, 2014](#).

2.2 Non-financial corporations

While improvements in demand conditions are expected, high levels of indebtedness and difficulties accessing credit remain challenges for the NFC sector, particularly for its small and medium enterprise (SME) component. The Irish commercial property market, however, has begun to display signs of recovery over the past year. There is evidence of strengthening rental growth particularly in “prime” locations where demand is outstripping supply, while investment activity in 2013 was noticeably higher than in 2012. The positive headline figures, however, mask the uneven nature of the recovery across sectors and locations.

Chart 5: Exports, imports and trade balance



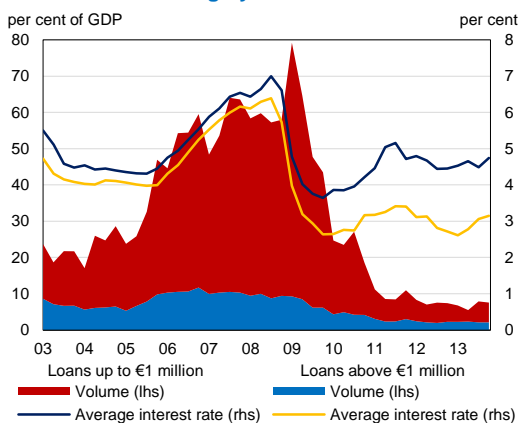
Source: CSO.
Notes: Last observation 2013 Q4.

Demand

Exports by multi-national corporations (MNCs) have been a strong contributor to national output in recent years (Chart 5). However, the impact of the ‘pharma-cliff’ (patent expiry in the pharmaceutical sector) meant exports for 2013 were below that expected at the time of the last Review. This factor is expected to have an on-going, but declining, effect on MNC exports. Overall, the projected recovery in external demand should lead to an improvement in export performance over the next two years. However, exchange rate developments may continue to affect competitiveness adversely. Import growth in the euro area is forecast to be lower than expected at the time of the last Review, while forecasts for the UK and US remain broadly unchanged. The UK accounts for almost half the exports of Irish-owned firms.³

Domestic demand, although remaining constrained by high unemployment, deleveraging and on-going fiscal consolidation, is expected to increase modestly this year. This will benefit non-exporting firms, which account for the bulk of the employment and the activity of Irish-owned enterprises.⁴

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 2013 Q4.

Financing

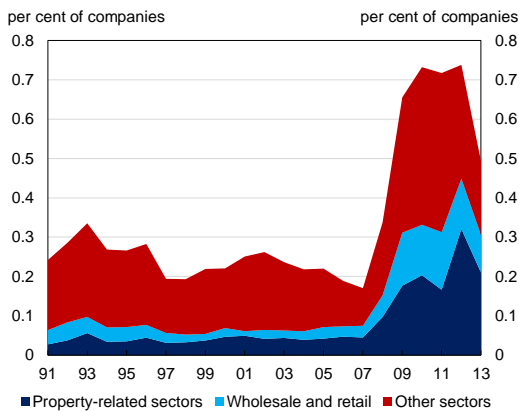
Access to credit remains a challenge for the domestic NFC sector. Chart 6 shows that new lending by Irish banks to NFCs continues to be extremely weak, constrained by subdued domestic demand, the low value of available collateral, such as property, and the high level of impaired loans. The interest rate on loans up to €1 million remains substantially higher than that on larger loans, while both have increased marginally of late. The former rate is generally regarded as a proxy for the prevailing lending rate to SMEs, which have few alternative sources of credit, and indicates tougher financing conditions for this group. Irish NFC interest costs as a percentage of GDP exceed the euro area average but have declined recently.

A recent study of bank market power and SME financing

³ O'Brien, D. and Scally, J. (2012) 'Cost competitiveness and export performance of the Irish economy'. Central Bank of Ireland Quarterly Bulletin Q3, 2012.

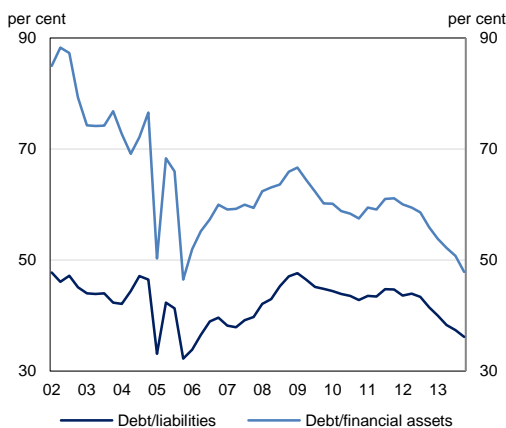
⁴ This group accounts for over 80 per cent of employment and around two-thirds of economic activity, as measured by gross value added, of Irish owned enterprises. See Lawless, M., McCann, F. and McIndoe-Calder, T. (2012), 'SMEs in Ireland: Stylised facts from the real economy and credit market'. Central Bank of Ireland Quarterly Bulletin Q2, 2012.

Chart 7: Potentially-insolvent liquidations



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

Chart 8: 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 2013 Q4.

constraints across Europe found that greater bank market power is associated with lower investment by firms and that this effect is particularly strong in countries such as Ireland where the private sector is heavily reliant on banks for funding.⁵ There are indications that some diversification in SME funding is underway in Ireland, to include internal funding, trade credit and equity, but these may be more expensive and less developed than bank-financing.^{6,7} Government initiatives have also been introduced to support SMEs in accessing finance.⁸

The most recent figures from the Red C SME Credit Demand Survey for the period April–September 2013 show a reduced demand for credit, compared to the previous six month period.⁹ Improved trading conditions reported by survey participants, may mean that fewer SMEs have a need to seek finance, in particular for working capital purposes. The survey notes that, if this is indeed the case, it may lead to an increased demand for credit for investment and growth purposes in the future. This is because a natural lag would be expected between the times when financing requirements for expansion rather than working capital purposes arise.¹⁰ Data from the Companies Registration Office show an increase in new company registrations of 11 per cent in 2013 following a decrease of 4 per cent in 2012. Furthermore, the annual rate of liquidations of potentially-insolvent companies, although still elevated, has declined significantly over the last two years (see Chart 7).

Indebtedness

When measured relative to balance sheet size, Irish NFC debt has been on a downward trend in recent years, falling slightly since the last Review (Chart 8).¹¹ Net loan repayments to domestic credit institutions now exceed revaluations, unlike in the early stages of the financial crisis. While the sector as a whole is highly indebted, 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 (see Box 1). A small proportion of firms are highly indebted, however, and are consequently vulnerable to adverse movements in interest rates and profits which could affect their ability to service debt. A recent comparative study of the euro area corporate sector has concluded that further deleveraging is likely in the economies that experienced the most intense pre-crisis boom, suggesting that Irish NFC indebtedness should fall further.¹²

⁵ Bank market power refers to the extent to which banks can maintain a price level above their own marginal costs, where the price level is proxied as the ratio of interest income to total assets. See [Ryan, R.M., O'Toole, C. and McCann, F. \(2014\), Does bank market power affect SME financing constraints?, Central Bank of Ireland Research Technical Paper 03/RT/14](#).

⁶ [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](#).

⁷ The European Commission recently adopted a package of measures to develop new methods of long-term financing including a legislative proposal for new rules for occupational pension funds to support long-term investment in the real economy, developing EU capital markets and improving SME access to financing.

⁸ The Government launched two initiatives in 2012 aimed at SMEs: the Credit Guarantee Scheme and the Microenterprise Loan Fund Scheme. In Budget 2014, an increase in the limit for loan applications that can be appealed to the Credit Review Office from €0.5 million to €3 million was introduced.

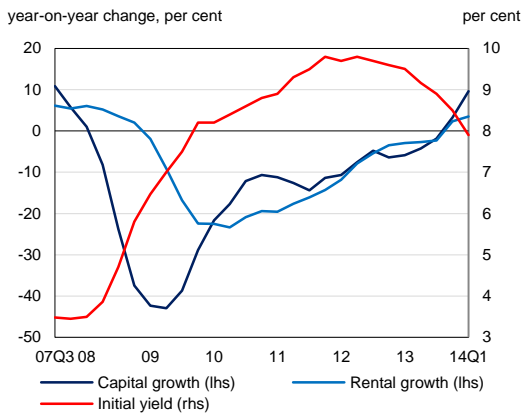
⁹ This is a survey of 1,500 SMEs prepared for the Department of Finance.

¹⁰ NFC overnight deposits with Irish resident banks have also been growing strongly recently which may be a sign of increasing confidence and preparation for future spending or investment. See [Box A: Recent Trends in NFC Deposits in Central Bank Quarterly Bulletin 2, 2014](#).

¹¹ NFC debt as a percentage of GDP remains the second highest in the euro area after Luxembourg and around twice the euro area average. 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, significantly lower.

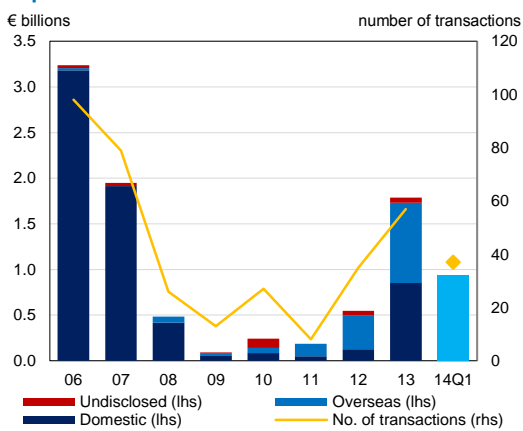
¹² [Deleveraging Patterns in the Euro Area Corporate Sector, ECB Monthly Bulletin February 2014](#).

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



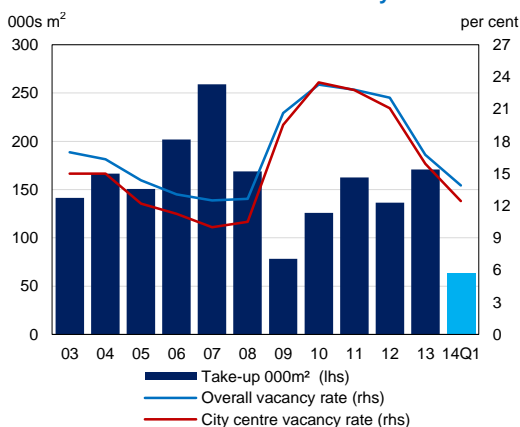
Source: Investment property databank.
Notes: For definition of initial yield, see footnote 14.

Chart 10: 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 14Q1 which is for the first 3 months of 2014.

Chart 11: Dublin office market activity



Source: CBRE Research.
Notes: Observations on take-up activity are for a 12 month period, apart from 14Q1 which is for the first 3 months of 2014.

Commercial property

Following a peak-to-trough fall of over 67 per cent, commercial property values ended a six year period of decline by rising 3.3 per cent year-on-year in 2013 Q4. This trend continued in the opening quarter of 2014, with the latest data showing an increase of 9.6 per cent in capital values since 2013Q1 (Chart 9). Office space posted a large capital increase (14.6 per cent year-on-year) and continues to be the main driver of the recovery in the commercial real estate market. In the retail sector, capital values grew year-on-year (4.2 per cent) for the first time since 2008. In contrast, despite a moderation in the pace of capital value decline, the industrial sector remains weak, having fallen by 1 per cent year-on-year.

There was an increase in the volume of investment transactions in 2013, as the pick-up in activity which began in the latter half of 2012 persisted. Data show that 2013 saw the largest investment spending (€1.8 billion) since 2007 (Chart 10). Furthermore, the 57 commercial property transactions completed in 2013 surpassed the 35 agreed in 2012. Investment activity remained strong in 2014 Q1, with the signing of 37 investment transactions, worth a total of €940 million. Again, the office sector is performing best and tends to be the preferred destination for investment, accounting for over 60 per cent of total investment since 2011.¹³

The diverse sources of demand at present in the commercial real estate market are a notable feature. International investors now compete with Irish funds and private investors and were responsible for approximately half of the value of investments throughout 2013 (Chart 10). Attracting finance from abroad is a positive development in terms of aiding the market recovery. The swift pace at which these investors often enter and exit markets, however, leaves the Irish property market exposed to sudden adverse changes in investor sentiment. The vast majority of investment activity is concentrated on prime assets in and around Dublin. The more muted demand for non-prime assets outside the capital means a substantial overhang of stock still exists in some locations.

Comparable trends to those exhibited by capital values are emerging across the commercial property rental market. The first annual increase in overall rental values since the end of 2008 (2.3 per cent) also occurred in the final quarter of 2013 (Chart 9). This was followed by a year-on-year increase of 3.5 per cent in 2014 Q1. Again, the office sector performed best, with rents up 9.8 per cent year-on-year. Industrial sector rents also increased, by 1 per cent over the year, but retail sector rents were down 5.7 per cent year-on-year. The strength of the recovery in capital values throughout 2013 resulted in an additional moderation in

¹³ See Goodbody Report on the Irish property market, "A detailed analysis of the prospects for Irish property", September 2013.

initial yields, which were below 8 per cent by the end of March 2014 (Chart 9).¹⁴

Take-up (letting and sales activity) in the Dublin office market increased by over 25 per cent to over 170,000 m² last year, due in part to the continued flows of foreign direct investment (FDI) into Ireland (Chart 11). According to commercial real estate firm CBRE, 184 individual office lettings were signed in Dublin during 2013, with 45 taking place in the fourth quarter. Moreover, the 63,000m² of office transactions signed in Dublin during the first quarter of 2014, is the highest volume of Q1 lettings in the capital for more than a decade.¹⁵ High-tech sector and financial services firms accounted for more than half of the demand for space. Dublin's office vacancy rate has fallen steadily in the past couple of years, to 13.9 per cent at the end of 2014 Q1, the lowest since 2008 Q3. A rise in market activity throughout 2013 and a dearth of commercial property development in the capital since 2008 is contributing to a scarcity of prime office accommodation in certain city locations, which is placing upward pressure on rents. If this situation is not addressed, it could have negative consequences for competitiveness and may hinder efforts to attract multinational firms.

Legislative changes allowing the introduction of Real Estate Investment Trusts (REITs) into the Irish market were announced in Budget 2013, in the hope of promoting international investment in the Irish property sector. A REIT is a listed company used to hold investment properties. Shares in a REIT can be traded at any time, making it an attractive vehicle for many investors. REITs may be used by financial institutions and the National Asset Management Agency (NAMA) as part of their deleveraging strategies and as a route to market for the collateral underlying non-performing loans. Three Irish REIT vehicles have been established in the past year, while others may emerge in due course. As the Irish REIT market is still in its infancy and is relatively illiquid, the withdrawal of a few large investors has the potential to have a large, negative impact on it.

The activities of NAMA and other financial institutions with sizeable portfolios of Irish commercial property, which they intend to dispose of, will continue to influence the market. Indeed, recent announcements by these firms of their intentions to increase their disposal activity in the Irish market make it likely that the current, brisk level of market activity will continue throughout 2014.

¹⁴ The 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.

¹⁵ See CBRE "Dublin office market view – Q1 2014", available from [CBRE website](#).

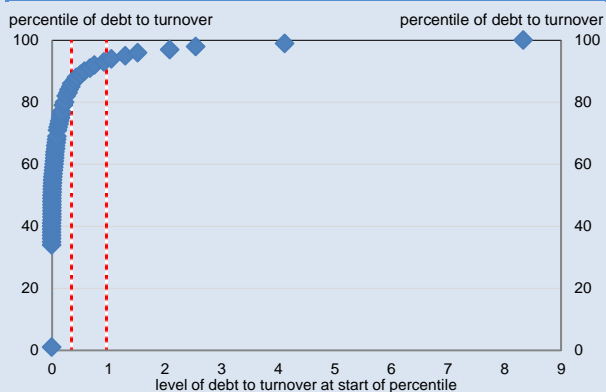
Box 1: Profiling the indebtedness of Irish SMEs

The over-indebtedness and resulting loan servicing arrears of Small and Medium Enterprises (SMEs) are issues of crucial policy importance, with far-reaching macroeconomic implications: SMEs with large debt burdens are more likely to enter arrears or liquidation, to shed employment, and are less likely to invest and expand. As of 2013 Q4, the impairment rate on Irish SME and Corporate lending by domestic banks was 32.4 per cent¹, up from 30.4 per cent in 2012 Q4, indicating significant distress in the sector.

While loan level data can be used to measure the level of debt held, and loan *performance* of SMEs, there has up to now been no measure of *indebtedness* available for a representative sample of Irish SMEs. Such a measure requires a firm-specific denominator against which to measure the debt level of the firm, such as turnover or assets. The Red C SME credit demand survey, carried out six-monthly on behalf of the Department of Finance, allows this information gap to be filled. A total of 1,500 SMEs are surveyed in each survey wave, with information on the debt and turnover levels of each firm being requested in the three survey rounds from March 2012 to September 2013. The Debt to Turnover ratio (DT) is used as a measure of SME indebtedness. The survey data are advantageous over loan level data in another regard: loan level data represent a sub-sample of the SME population in that all firms not carrying bank debts are excluded from the data by construction.

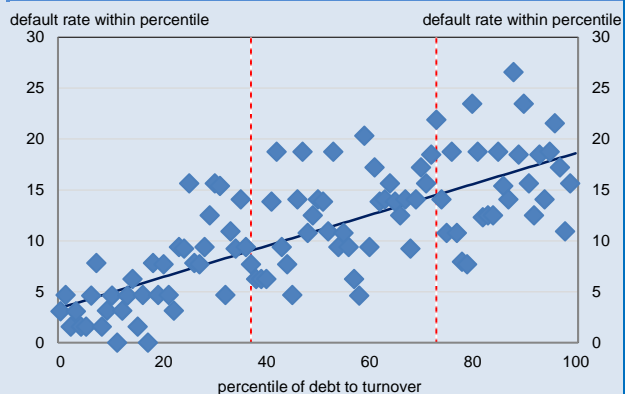
Chart A presents a detailed distributional analysis of the indebtedness of 2,508 SMEs reporting in 2012 and 2013. The data reveal that one third of Irish SMEs have no debt. The cut-off points of Chart A (DT of one third and DT of one) are represented with vertical dotted lines. The chart visually depicts the minimum DT level in each percentile of the DT distribution. The concentration of Irish SMEs at low levels of DT is apparent in the data, as is the small percentage of SMEs that have particularly high levels of DT. An analysis of the data behind Chart A by firm size indicates that Medium firms, those with between 50 and 250 employees, are substantially more indebted than Small and Micro firms (those with 10 to 49 employees, and under 10 employees, respectively) – 22.7 per cent of Medium firms have a DT greater than one third, compared to 14 per cent for smaller firms.

Chart A: Distribution of Irish SME debt to turnover



Source: Red C SME Credit Demand Survey 2012-13 and Central Bank of Ireland calculations.
Notes: Dotted lines at DT equal to one third and DT equal to one.

Chart B: Default rate across the DT distribution



Source: Central Bank of Ireland calculations.
Notes: Dotted lines at DT equal to one third and DT equal to one.

The above description of the DT distribution can be complemented by an analysis of the dangers posed by an increasing DT. Data on both DT and loan performance are available for a sample of 7,000 large SMEs at December 2010, received as part of the Central Bank of Ireland's PCAR³ exercise, conducted in March 2011. The loan default rate⁴ within each percentile of the DT distribution is plotted in Chart B. The chart shows a clear positive relationship between default rates and movements along the DT distribution, indicating that as DT increases, it is more likely that SMEs will default on their obligations. This will have knock-on effects for employment and investment from firm closures and restructurings. The data do not reveal obvious trigger point values for DT, beyond which default rates suddenly rise at a faster rate. Rather, rises in DT appear to lead to increased default risk across the DT distribution.

The data presented in this box reveal that 83.7 per cent of Irish SMEs have a debt to income ratio lower than one third, with one third of companies having no debt at all. This suggests that issues of extremely high indebtedness are in fact concentrated in a smaller percentage of the enterprise population than might have been expected given the current scale of bank loan default among SMEs. Despite this, the 16.3 per cent of firms with DT greater than one third corresponds to 125,000 employees of private sector SMEs⁵ currently working in highly indebted firms, where default risk is at its highest.

¹ Central Bank of Ireland data. The 2013 Q3 version of this data was reported in the [Central Bank of Ireland Macro-Financial Review 2013: II](#), Chart 31.

² One third was used as a cut-off in describing the data as it is often used as a threshold beyond which mortgage debts relative to household income become unsustainable. It is illustrative in this context and should not be viewed as a reliable indicator of financial distress for SMEs. The share of companies in the LLD dataset with a DT less than one third is far lower than in the Red C survey data for two reasons: the LLD contain only companies with non-zero debt by construction; this particular data set focussed explicitly on firms with large SME exposures, mostly medium sized firms.

³ Prudential Capital Assessment Review.

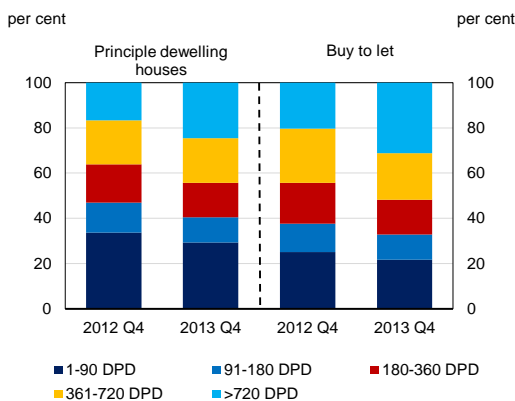
⁴ Default is defined in this dataset as Basel II default, where a loan is declared as defaulted when more than 90 days past due or it is unlikely that the obligor will be able to repay its debt to the bank without giving up any pledged collateral.

⁵ The CSO's *Business in Ireland 2011* reports that there are 1,223,047 employees working in the Irish private sector, of which 68.8 per cent work in SMEs (19 per cent at Medium, 22.6 per cent at Small and 27 per cent at Micro firms).

2.3 Household sector

The household sector continues to face the challenges of high levels of unemployment and debt. The outlook for the labour market, however, has improved since the last Review, while indebtedness has been on a gradually declining trend. Continued progress in resolving the mortgage arrears problem is critical for sustainable growth and recovery in the wider economy. The increase in house prices which began early last year continued through 2013. Recent data suggest that the recovery in prices is beginning to spread beyond Dublin. Supply constraints are a significant contributory factor to the price rises being observed.

Chart 12: Mortgage accounts by duration of arrears as a percentage of total mortgages in arrears

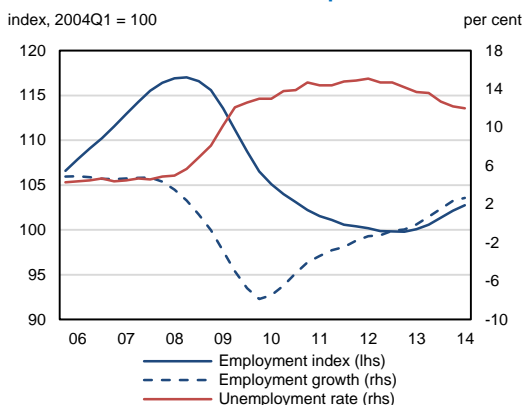


Source: Central Bank of Ireland.
Notes: DPD stands for days past due.

Mortgage arrears

The economic environment facing the household sector remains challenging, with high levels of unemployment and debt. The level of mortgage arrears remains high, despite recent falls in the total number of mortgages in arrears and in early arrears (less than 90 days past due) in both the principal dwelling houses (PDH) and buy-to-let (BTL) sectors.¹⁶ At end-2013, almost 18 per cent of PDH mortgages were in arrears along with 27 per cent of BTL mortgages. End-2013 saw the first quarterly decline in the total number of PDH mortgage accounts in arrears of over 90 days since the series began in September 2009. However, the number of cases of very long-term arrears of over 720 days in both sectors has increased to stand at around one-quarter of all arrears cases in the PDH sector and just over 30 per cent in the BTL sector (Chart 12). In value terms, this category accounts for 62 per cent of the total value of PDH arrears and almost two-thirds of total BTL arrears.

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 growth rate is measured as a year-on-year change basis. The employment index and growth rate are based on a 4-quarter moving average. All data are seasonally adjusted. Data as at 2014 Q1.

Resolving the mortgage arrears problem would support growth and recovery in the broader economy. The Central Bank continues to require lenders to accelerate their work to conclude sustainable long-term arrangements, in accordance with the mortgage arrears resolution strategy (see Section 3.2). At end-2013, 26.6 per cent of PDH accounts in arrears over 90 days were classified as restructured. The corresponding figure for BTL accounts was just under 20 per cent. These figures illustrate that progress in resolving longer-term arrears cases has been slow. However, the most recent data for end-2013 show an increase in longer-term restructures such as loan arrears capitalisation, split mortgages and extending the term of the mortgage, while the numbers of shorter-term arrangements such as reduced payments and interest-only payments have declined.¹⁷

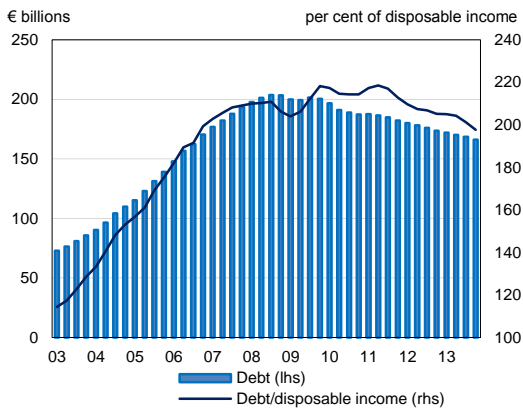
Income and employment

The outlook for the labour market has improved since the last Review, with stronger employment growth and a fall in the

¹⁶ At end-December 2013, 136,564 PDH mortgages and 39,250 BTL mortgages were in arrears with total outstanding balances amounting to €24.405 billion and €10.614 billion, respectively. The equivalent end-September 2013 figures were 141,269 PDH and 40,396 BTL cases with total outstanding balances of €25.52 billion and €10.98 billion, respectively.

¹⁷ Arrears capitalisation is an arrangement whereby some or all of the outstanding arrears are added to the remaining principal balance, to be repaid over the life of the mortgage.

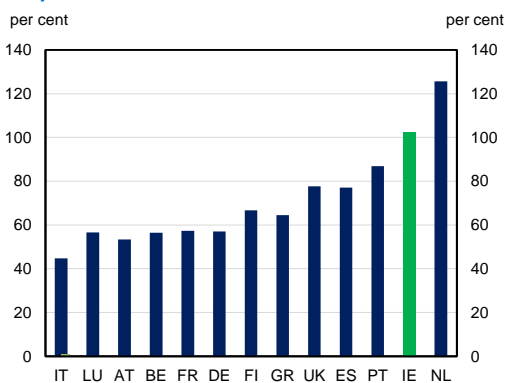
Chart 14: Household debt



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. Data as at 2013 Q4.

unemployment rate being features of recent data (Chart 13). Total employment increased by 61,000 jobs in the year to end 2013, most of which was accounted for by full-time employment. However, the unemployment rate remains high at 12 per cent while the rate of employment growth was lower in 2014 Q1 than at the end of 2013. It is likely that the effect of improving labour market conditions will feed through only gradually to mortgage arrears. Furthermore, a recent study shows that many borrowers experiencing arrears are currently employed but have suffered a significant drop in their income, a change in employment conditions or are in ‘fragile’ employment.¹⁸ Despite rising employment, there is little evidence of upward pay pressure and, given the high rate of unemployment, this may remain the case for some time. Household disposable income has been on a downward trend and remains weak.

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



Source: CSO and Central Bank of Ireland.
 Notes: Data as at 2013 Q4 for selected European countries.

The Bank has revised upwards its forecasts for personal consumption since the last Review as consumer sentiment is increasing and recently reached levels last recorded in 2007.¹⁹ However, on-going deleveraging may act as a drag on consumption.²⁰ The household sector remains highly indebted and further reductions in debt levels are likely. Despite a fall in nominal debt in recent years, the ratio of household debt to disposable income remains high at around 200 per cent as disposable income has also declined (Chart 14). However, the ratio has been on a downward trend as debt reduction has outweighed the fall in disposable income. In an international context, the Irish household sector remains one of the most indebted in Europe (Chart 15).²¹ A recent study shows that the decision to deleverage has negative implications for consumption patterns.²² The results also show that it is a relatively older, more affluent cohort of the population who are likely to deleverage, suggesting that less well-off sections of the mortgaged population will remain highly indebted.

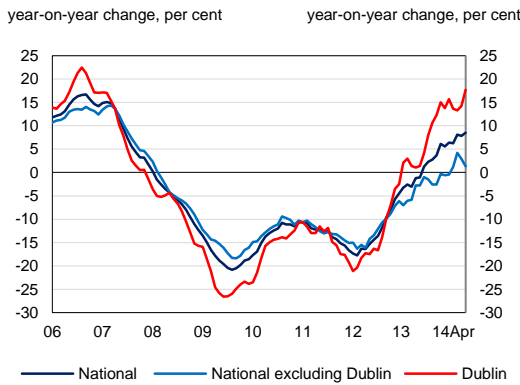
High debt levels leave the sector vulnerable to further falls in income. Another risk is increases in interest rates which may arise as banks aim to rebuild margins or through a general rise in rates, which may occur when the euro area returns to stronger growth.

Residential property

While there appears to be broad agreement that the overall trend in house price movements remain positive, the volatility of the Central Statistics Office’s (CSO) Residential Property Price Index in recent months makes analysis of the market difficult.²³ The increase in house prices which began early last year continued through 2013, with the latest CSO data showing a

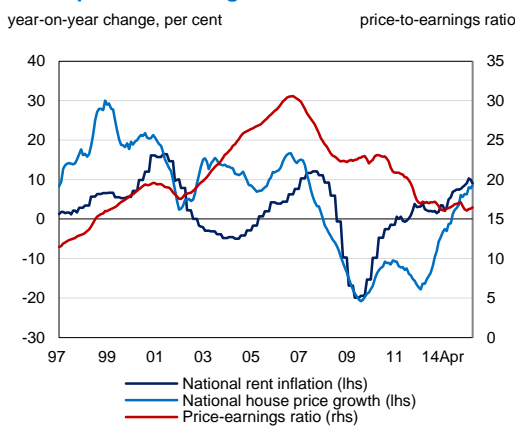
¹⁸ Fragile employment is defined as employment on a temporary contract, have been with their employer for a short time or have a history of unemployment. See [McCarthy, Y. \(2014\). "Dis-entangling the mortgage arrears crisis: The role of the labour market, income volatility and housing equity", Central Bank of Ireland, Research Technical Paper, 2/RT/14.](#)
¹⁹ See [Central Bank of Ireland Quarterly Bulletin 2, 2014.](#)
²⁰ Household deleveraging means the reduction of personal debt levels. This can mean that households make payments on loans greater than the repayment due to clear their debt more quickly or use savings to supplement their payments.
²¹ The Irish experience of a declining debt to disposable income ratio is also evident in Spain and Portugal but contrasts with Italy and Greece where the ratio has been rising. See Box B: Analysis of Recent Trends in Households’ Debt Reduction in [Central Bank of Ireland Quarterly Bulletin 1, 2014.](#)
²² 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.](#)
²³ The CSO residential property price index, upon which much of the analysis of the Irish property market is based, is calculated using properties financed with a mortgage only. As a result, a large cohort of non-mortgage based transactions is excluded from the data.

Chart 16: House price growth: National, Dublin & non-Dublin



Source: CSO.

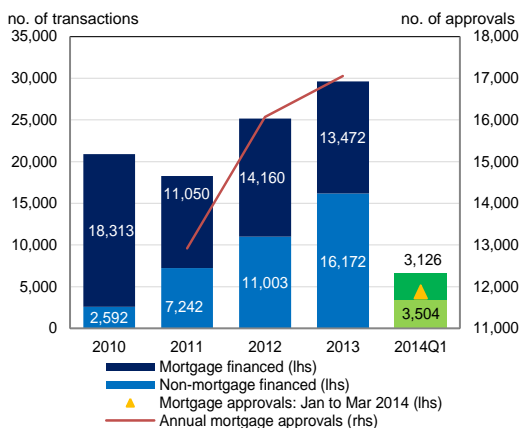
Chart 17: House price growth, rent inflation & house price-to-earnings ratio



Source: CSO, Daft.ie, Permanent TSB/ESRI and Central Bank of Ireland calculations.

Notes: Rental values for the price-earnings ratio are calculated using the Daft.ie average national rent figure for 2014Q1 and adjusting by the CSO private rent index.

Chart 18: Housing market transactions, finance and mortgage approvals



Source: IBF, Department of Environment Community and Local Government and Property Services Regulatory Authority (PSRA).

Notes: "Non-mortgage financed" series is calculated as the difference between transactions registered with the PSRA and IBF mortgage drawdowns for transactional activity, (i.e. "First Time Buyers", "Mover" and "Residential Investment Letting" purchasers).

slight increase in year-on-year national residential property price inflation from 7.8 per cent in March to 8.5 per cent in April 2014.²⁴ The largest gains have occurred in the Dublin market, where prices in April 2014 were 17.7 per cent higher than a year earlier.²⁵ In contrast, prices in the rest of the country finished marginally lower in 2013.²⁶ Data from the opening months of 2014 suggest that the recovery in residential property prices is beginning to spread beyond Dublin. In January, year-on-year prices outside the capital turned positive for the first time since February 2008, and have since recorded year-on-year growth rates of 2.9 per cent in March and 1.3 per cent for April (Chart 16).

A recovery in regional markets seems likely to be uneven in nature. While sources such as the 2014Q1 Daft.ie "House Price Report" point to increased asking prices in the other main urban centres such as Cork, Galway and the Dublin commuter-belt in the first quarter of 2014, weaker economic fundamentals²⁷ and excess supply mean that price appreciation in many parts of the country is unlikely for now.²⁸

On the rental side of the market, the pick-up in rents that began in 2011, gathered pace in 2013 and into 2014. National figures indicate an increase of 9 per cent in private rents year-on-year to April 2014, up from 5 per cent in April 2013. The house price-earnings ratio has declined from a high of almost 31 in 2007 to remain relatively stable in recent months at approximately 16, owing to the corresponding rise in house prices in the latter half of 2013 (Chart 17). As with residential prices, rents too are increasing at a faster rate in the major population centres, particularly Dublin. According to regional rental data compiled by Daft.ie, rents in Dublin in the opening quarter of 2014 were rising at 13 per cent per annum compared with 5 per cent per annum a year before. Sharp increases were also recorded in commuter-belt counties such as Kildare and Wicklow.

Residential property transactions increased by 18 per cent in 2013 (Chart 18) and in 2014 Q1 were 36 per cent higher than in 2013 Q1.²⁹ Sales volumes, however, remain quite low by historical standards. Indeed, some commentators³⁰ have observed, that the approximately 30,000 sales registered by the Property Services Regulatory Authority last year, representing about 1.5 per cent of the State's housing stock, is less than half of what would be considered a "normal" rate of market activity. Mortgage activity is also relatively subdued. The volume of mortgage drawdowns (for transactional activity) fell 5 per cent in 2013, to 13,472 (Chart 18), while the value of drawdowns fell by a similar percentage, to less than €2.4 billion. In 2014 Q1,

²⁴ According to CSO data, national residential property prices rose by 1.4 per cent in the month of April, having fallen by 1.3 per cent over the first quarter of 2014. The removal of the property tax exemption at the end of last year for purchasers in 2013 may partially explain price behaviour during the opening months of 2014.

²⁵ CSO data suggest that there was a slight easing in Dublin prices during 2014 Q1. While prices grew month-on-month in April, growth for March was flat and the data show a monthly fall of 1.3 per cent and 0.6 per cent for January and February, respectively. On a quarter-on-quarter basis, Dublin prices were down 1.9 per cent at the end of 2014 Q1. Other sources, however, such as estate agent Sherry Fitzgerald indicate that prices continued to rise in the capital during the first quarter, by as much as 5 to 6 per cent.

²⁶ CSO data suggest that the "National excluding Dublin" residential property price index fell by 0.4 per cent in 2013.

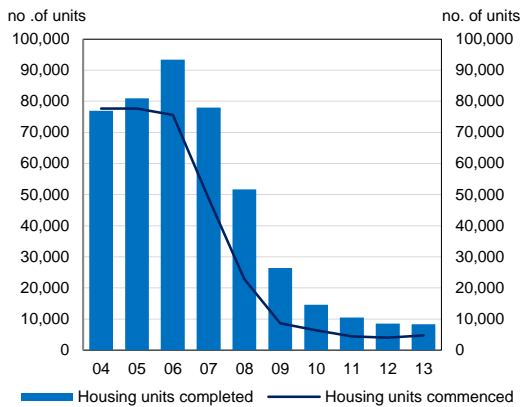
²⁷ For example, the results of the 2014 Q1 Quarterly National Household Survey show a higher unemployment rate in regions such as the South East (15.7 per cent), Midlands (14.3 per cent) and Border (13.1 per cent), compared to others such as Dublin (10.4 per cent, the South-West (11.4 per cent) and Mid-East (11.6 per cent).

²⁸ The Daft.ie 2014 Q1 Report also highlighted annual declines in asking prices of circa 10 per cent in counties such as Donegal, Roscommon and Monaghan.

²⁹ In 2014 Q1 approximately 6,600 were registered with the Property Services Regulatory Authority compared to 4,900 in 2013 Q1.

³⁰ See, for example, O'Sullivan, P. & E. Gaffney, "Investec Economic Research, Irish Housing from Stabilisation to Recovery", February 2014.

Chart 19: Housing market activity: completions and commencements



Source: Department of Environment Community and Local Government.

however, the volume and value of transactions were markedly above the levels of 2013 Q1.³¹ The discrepancy between transaction levels and mortgage drawdowns is explained by the diminished role of credit in the market. The figures suggest that finance not from Irish Banking Federation (IBF) members (a proxy for cash buyers) may have been responsible for approximately 50 per cent of transactions since 2011 (Chart 18).

In contrast to drawdowns, mortgage approvals are rising according to the latest IBF data. Approvals for 2013 were up by 6 per cent on the previous year (Chart 18), while approvals for the first 3 months of 2014 were 55 per cent higher than the same period in 2013. These developments point to a potentially greater availability of mortgage credit in the years ahead.

The supply of available housing is another key driver of prices and rents in the residential property market. The lack of construction activity in recent years has given rise to localised supply shortages and may partially explain the large house price gains in certain areas (see Box 2 for survey findings in relation to supply and demand conditions in the housing market). A protracted delay in addressing these shortages has the potential to put house prices on an unsustainable path. Accordingly, it is important that impediments to the provision of new housing supply are identified and tackled. In 2013, the number of new completions fell to a historical low of just over 8,000 units, compared to a peak of approximately 90,000 in 2006 and an annual average annual output of about 33,000 units since 1970. Forward-looking indicators such as commencements notices do not give the impression that an increase in the supply of new builds is likely any time soon (Chart 19).

The stock of second-hand properties on the market has also become quite constrained. Daft.ie estimate that the total number of properties on the market in 2014 Q1 was just over 33,000, or approximately half of the mid-2009 peak. In addition, estate agent Lisney reported a 23 per cent drop in the number of Dublin properties available for sale at the end of 2013. These developments, again, emphasise the relative importance of supply-side issues in the housing market. By their nature, they take time to address and, accordingly, should be a priority for policy, if imbalance in the housing market is not once again to become a potential source of financial instability.

³¹ See [IBF/PWC Mortgage Market Profile 2014Q1](#).

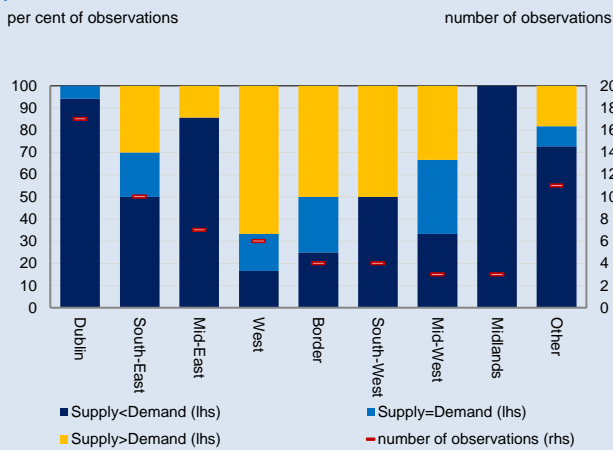
Box 2: Residential property price expectations survey

This Box presents findings from the latest “Central Bank/SCSI Quarterly Property Survey” concerning current supply and demand conditions in the residential property market and house price expectations.¹ The results of these surveys are a timely means of monitoring key developments in the housing market. The 2014 Q1 survey was the first to seek views on current demand and supply dynamics. Standing questions related to expected national and regional house price developments over a number of different time intervals were also included. The results indicate a degree of diversity in views on the level of supply and demand for residential property across the country. They also reinforce the trend seen in recent surveys of an increase in the percentage of respondents anticipating national residential house prices to rise in the twelve months ahead.

Chart A summarises participants’ descriptions of the relationship between the supply and demand of residential property in their locality in the opening quarter of 2014. While the majority believe that demand is currently outstripping supply in their area, this was not the case in every region. The 3 observers operating in the Midlands felt there was a greater level of demand than supply in their area. In Dublin, 16 out of 17 of those participating in the property market believe there is a shortage of residential property units in the capital at present. Likewise, 6 of the 7 surveyed in the Mid-East relay a similar story in the Dublin commuter counties. In contrast, half of those from the border counties and South-West, as well as 4 of the 6 participants from the West reported the view that excess supply was an issue in their areas.^{2,3}

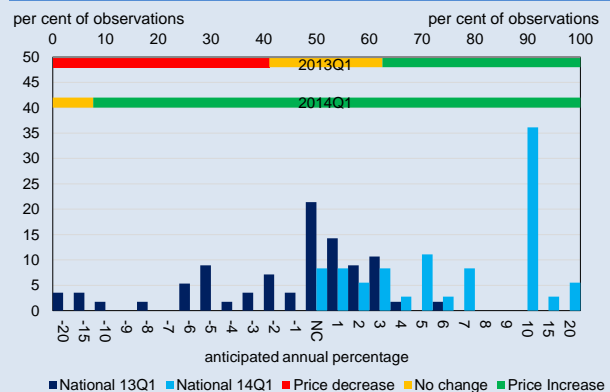
In terms of house price expectations, 92 per cent of participants expect national house prices to rise over the next twelve months, while no one anticipates a fall (Chart B). The corresponding split in the 2013 Q1 survey was more balanced, with 38 per cent envisaging higher prices, versus 41 per cent who expected a decrease in prices. The evidence presented in Chart A, i.e., the widespread sense that there are supply shortages in mainly urban areas, may explain part of the reason behind the change in expectations. Other reasons cited for expecting prices to rise include a more benign economic outlook, improving employment prospects and a perception that the availability of finance has improved. There has also been a notable movement in terms of the extent to which respondents believe house prices will change over the next year, which may reflect recent house price dynamics. One-third of respondents believe house prices will be 10 per cent higher at the end of the first quarter in 2015, with 2 individuals anticipating a 20 per cent increase. A year ago, zero or low percentage growth expectations constituted the dominant view.

Chart A: Regional demand and supply dynamics: (2014Q1)



Source: Central Bank of Ireland and SCSI data
 Note: Chart is based on the responses of 65 individuals. “Other” category includes participants who indicated that they operate on a national level, in more than 1 region or did not indicate a region of activity.

Chart B: Expectations of national residential property price change over the coming 12 months: (2013Q1 vs. 2014Q1)



Source: Central Bank of Ireland and SCSI data
 Note: Chart is based on 56 responses to the question on house price expectations 1 year from now, in 2013 Q1 and 39 responses to the same question in 2014 Q1.

¹ The Central Bank/SCSI Quarterly Property Survey began in 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. The most recent survey focussed on 2014 Q1 and was carried out in late March/early April 2014.

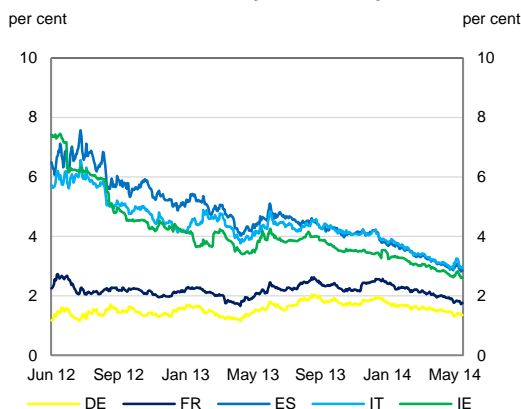
² Those reporting a shortage of supply in these regions tend to be located in more urban areas such as Dundalk (border), Cork city (south-west) and Galway city (west).

³ 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

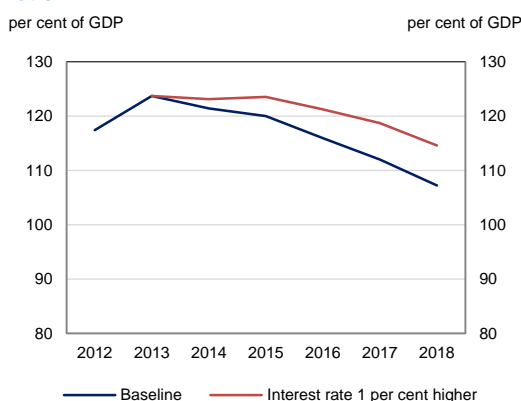
Government deficit and debt ratios remain at high values. The Irish sovereign, however, has raised funds in the bond market at low interest rates in recent months following its exit from the EU-IMF programme. Confidence in the sovereign remains dependent on macroeconomic conditions and further fiscal consolidation. International financial market developments could impact bond yields and sales.

Chart 20: Sovereign bond yields for selected euro area Member States, 10-year maturity



Source: Bloomberg.
Notes: Chart shows yields on sovereign bonds, ten-year maturity. For Ireland, a generic eight-year maturity bond yield is used until 14 March 2013. Last observation is 30 May 2014.

Chart 21: Impact of 1 per cent increase in policy interest rates on the General Government debt ratio



Source: Ireland's Stability Programme – April 2014 Update, Department of Finance.

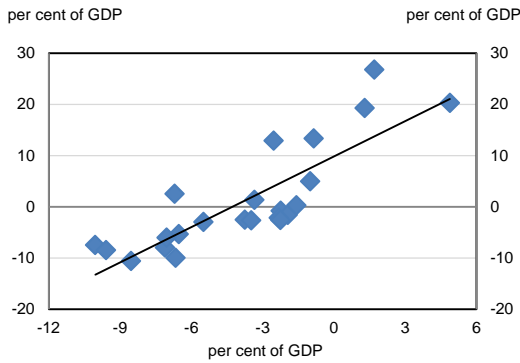
External and domestic environment

Against a background of high deficit and debt values, Ireland's sovereign bond yields have continued to decline (Chart 20). This has occurred against a background of a number of recent developments affecting the Irish sovereign. In November, the Government announced its decision to conclude the EU-IMF programme in December 2013 without a pre-arranged precautionary credit facility. Credit ratings agency Moody's upgraded its rating on Irish sovereign debt to an investment grade (Baa3) in January 2014. All three main credit rating agencies now have an investment-grade credit rating on Irish sovereign bonds. This allows certain investors to purchase Irish sovereign bonds when they couldn't do so previously owing to Moody's sub-investment grade rating on Irish sovereign bonds. In May, Moody's upgraded its rating on Irish sovereign debt by two notches to Baa1.

There have been a number of bond issuances by the State in 2014. In early-January, €3.75 billion was raised in a syndicated 10-year treasury bond issuance at a yield rate of 3.54 per cent. In mid-March, there was an auction of €1 billion worth of 10-year bonds at a yield of 2.97 per cent. A further €1 billion was raised in early April through an auction of the benchmark 10-year government bond, the 3.40 per cent Treasury Bond 2014, at a yield of 2.917 per cent. An auction of €750 million of the same bond occurred in early May at a lower yield of 2.73 per cent. The National Treasury Management Agency (NTMA) had aimed to raise €8 billion this year to complete pre-funding for 2015 and with these four issuances more than 80 per cent of that target has been met.

These developments have occurred while the General Government deficit and debt ratios remain high. The deficit ratio has been declining in recent years and it is projected by the Department of Finance at 4.8 per cent of GDP in 2014 and 2.9 per cent in 2015. The latter deficit projection is dependent on further fiscal consolidation being implemented in the 2015 Budget. A failure to adhere to agreed fiscal measures, and to binding EU fiscal rules, would endanger the Excessive Deficit Procedure requirement to reduce the deficit below 3 per cent of GDP by 2015. It could also undermine investor confidence which has been supported by the commitment to fiscal consolidation in recent years.

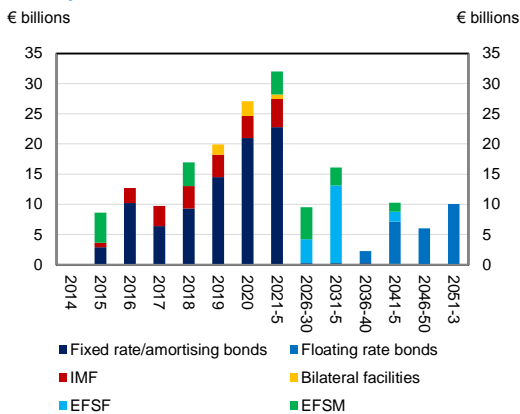
Chart 22: Impact of nominal GDP growth on Ireland General Government debt ratio, 1991-2013



Source: EU AMECO database.

Notes: Each point in the chart shows the overall change in the General Government debt ratio (vertical axis) in a given year (expressed as a percentage of GDP) and the contribution of nominal GDP growth (horizontal axis) to that change in the debt ratio in the same year (also expressed as a percentage of GDP). Positive output growth will act to reduce the debt ratio, and vice versa. The positively-sloped trend line indicates that reductions in the debt ratio tend to be associated with nominal GDP growth acting to lower the debt ratio in the same year.

Chart 23: Maturity profile of Government debt, end-April 2014



Source: NTMA.

The debt ratio is projected at 121.4 per cent of GDP at end-2014 and to decline slowly thereafter. Its future path is, however, dependent on interest rate and output growth developments, as well as the government adhering to fiscal commitments. A rise in interest rates above baseline projected values would, all other things being equal, lead to the debt ratio being higher than its current projected path (Chart 21).

While domestic developments could affect yields on Irish sovereign debt, rising interest rates more generally could also have an impact. Yields on US Treasuries have increased by over 100 basis points since May 2013. The impact of the US Federal Reserve adjusting its programme of quantitative easing could put upward pressure on interest rates. It is also possible that investors could switch their bond holdings away from sovereigns such as Ireland to “safe haven” assets such as US and German sovereign bonds in response to poor economic outcomes in major economies, developments in emerging economies or increased geopolitical concerns. Such events could put upward pressure on Irish sovereign bond yield rates.

Positive output growth can be an important factor in reducing the government debt ratio (Chart 22). Likewise, lower-than-expected nominal growth in the years ahead would endanger medium-term fiscal targets. A threat to nominal output growth is the possibility of unexpectedly low inflation (see Box 3).

Debt developments

The maturity profile of Irish government debt (Chart 23) was extended in 2013 as a result of a number of policy decisions relating to the liquidation of the Irish Bank Resolution Corporation (IBRC), the replacement of government-issued Promissory Notes with longer-term Irish government bonds, and amendments to repayment schedules on loans provided under the EU-IMF programme of financial support. An examination of the holdings of Irish government debt by different parties raises a number of financial stability issues, such as the consequences of domestic banks holding a large, or rising, quantity of bonds from home governments (see Box 4).

Box 3: Unexpectedly low inflation and debt sustainability

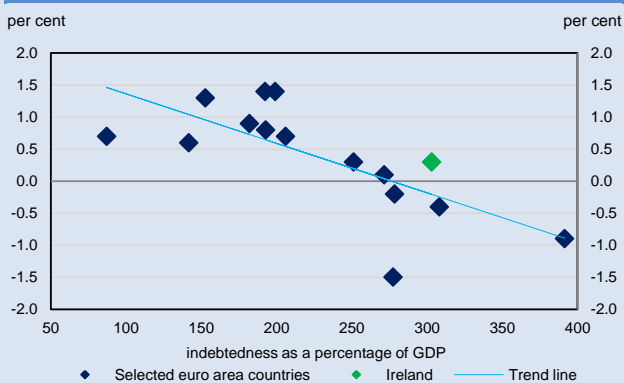
This box discusses the relationship between unexpectedly low inflation rates and indebtedness. The change in the public debt ratio from one year to the next is (approximately) given by: $\Delta d_t = (i_t - \pi_t - g_t)d_{t-1} - \frac{g_t}{1+g_t}d_{t-1} - p_t$, where d_t is the debt-to-GDP ratio at time t , i_t is the nominal interest rate, π_t is the inflation rate, g_t is the growth rate of real GDP and p_t is the primary balance.¹ An equivalent relationship holds for the non-financial private sector with g_t then representing real income growth and p_t representing new borrowing/lending in the year. The nominal interest rate is determined before the inflation rate is realised, and is based on the expected inflation rate and lenders' required rate of return, $r_t = i_t - E\pi_t$. This relationship implies that an unexpected decline in the inflation rate ($\pi_t < E\pi_t$), all other variables being equal, will increase the debt ratio. If rising debt ratios lead creditors to charge higher nominal interest rates, this can reduce inflation and increase real interest rates further, placing more upward pressure on debt ratios.

The impact of unexpectedly low inflation will depend on the length and size of the deviation of the inflation rate below the expected rate. It seems reasonable that most debt contracts agreed in the past assumed medium term inflation in line with the ECB's stated target of close to, but below, 2 per cent. On average, the annual inflation rate in the euro area has been 0.85 percentage points below 2 per cent since February 2013, and 1.33 percentage points below it in the first quarter of 2014. This largely reflected the high level of slack in the economy. Since inflation has declined by more than nominal interest rates, the real interest rate on non-financial private sector bank loans has increased by over 1 percentage point.² In its April 2014 World Economic Outlook (WEO) the IMF forecast inflation in the euro area below 2 per cent until at least 2019. It may appear that unexpectedly low inflation will mainly impact fixed rate loans since floating rates can adjust more quickly to changes in inflation. However, real floating rates on new private sector bank loans have also increased over 1 percentage point in the last year, implying that unexpectedly low inflation will affect all debt.³

Turning to country-specific inflation rates, in March 2014 all 18 euro area countries had inflation rates below 2 per cent, and 15 had rates below 1 per cent. In addition, many euro area countries are highly indebted: Chart A shows private and public sector debt-to-GDP ratios and inflation rates for a sample of euro area countries (Ireland is highlighted in green). The correlation coefficient is -0.72, implying that low inflation, if it is unanticipated, may be adding disproportionately to the burden in already highly-indebted countries.⁴

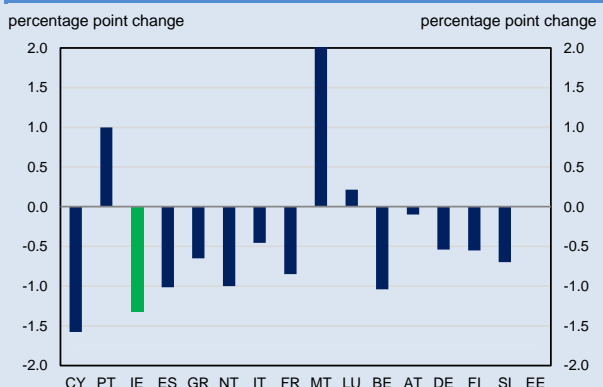
To see the extent to which inflation in euro area countries is currently below expectations, Chart B compares the IMF's 2014 inflation forecasts for euro area countries in its April 2012 and April 2014 WEOs. In the Chart, the countries are in descending order of public and private sector indebtedness from left to right (Ireland is highlighted in green). With the exception of Malta, Portugal and Luxembourg, all inflation rates are below expectations, with 10 countries experiencing inflation half a percentage point or more below expectations, implying a corresponding increase in the real interest rate in these countries.

Chart A: Indebtedness and inflation rates in the euro area



Source: World Bank, Eurostat and Central Bank of Ireland calculations.
Notes: Sample countries as per Chart B. Private-sector indebtedness is measured as bank loans. Data are for 2012.

Chart B: Change in 2014 inflation expectations, 2012-2014



Source: IMF WEO Updates, April 2012 and April 2014 and Central Bank of Ireland calculations.
Notes: Countries are ordered by level of indebtedness as measured in Chart A.

This box has described how unexpectedly low inflation rates can impact private and public sector indebtedness. The analysis indicates that current low inflation rates are likely to raise debt ratios placing additional strain on both private and public sectors, particularly in highly-indebted countries. Indeed, there is potential for a large cumulative effect if, as forecast, inflation remains low until at least 2019.

1 This equation is an approximation of equation 24 (originally owing to E.D. Domar) in Escobedo, Julio, (2010), "A practical guide to public debt dynamics, fiscal sustainability, and cyclical adjustment of budgetary aggregates", IMF, January, taking $r_t = i_t - \pi_t$ and $\frac{i_t - \pi_t}{1+g_t} \approx i_t - \pi_t - g_t$.

2 Weighted average interest rates are for existing business, weighting is by volume of lending.

3 This is loans at floating rates and up to 1-year initial fixation for households and corporate loans; corresponding data on existing business is not available, however real rates on all types of existing business have increased by between 0.96 and 1.24 percentage points.

4 It is important to note that this is not a time series characteristic of debt-to-GDP ratios and inflation; in Ireland the correlation coefficient over the period 1923-2012 was 0.18.

Box 4: Who holds Irish Government debt?

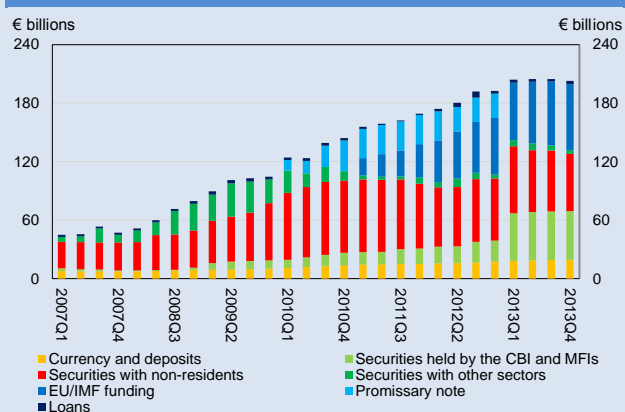
The amount of Irish government debt has increased substantially in recent years, rising from 25 per cent of GDP at end-2007 to 124 per cent at end-2013, a high ratio by historical and cross-country comparison.¹ With it, the sources of funding and breakdown of parties who hold the debt have changed, a development which needs to be examined from a financial stability perspective. Prior to 2010, a considerable proportion of the rise in government debt involved increased holdings of Irish securities by non-residents and by other sectors (Chart A). Holdings of Irish securities by non-residents stood at €58.5 billion by end-2013. This was lower than its peak value of €74.8 billion in 2010 Q3. The decline reflected, in part, the redemption of some long term securities by the State and fewer new issuances. Household deposits (constituting most of “Currency and deposits” in Chart A), a source of financing usually associated with low rollover risk, increased throughout the period, rising from €8 billion at 2007 Q1 to €18 billion by 2013 Q3, partly reflecting the issuance of new savings products by the NTMA at a time when some households reduced their deposit holdings with Irish banks at the height of the banking crisis.

Another notable feature of Chart A is funding from the EU-IMF programme which commenced in 2011 Q1 and stood at €67 billion by 2013 Q4. Government securities held by the Central Bank and other monetary financial institutions increased substantially in 2013, reaching €50.1 billion at 2013 Q4. The liquidation of the Irish Bank Resolution Corporation (IBRC) in February 2013 was largely responsible for this increase.² In addition, there were higher holdings of Government debt securities by Irish monetary financial institutions (MFIs) from 2009 onwards, reflecting greater holdings of sovereign bonds in general and an increased “home bias” in bond holdings, a feature common to most euro area Member States during the crisis.³

Chart B provides a comparison of Irish government debt holders with debt holdings in a number of other euro area Member States at end-2013. It can be seen that holdings of government debt by non-residents in Ireland are relatively high (although about half of this owes to EU/IMF funding). Holdings of Irish government securities by other MFIs (mainly domestic banks), which have increased over time, are not particularly large as a proportion of government debt in comparison to most other Member States.

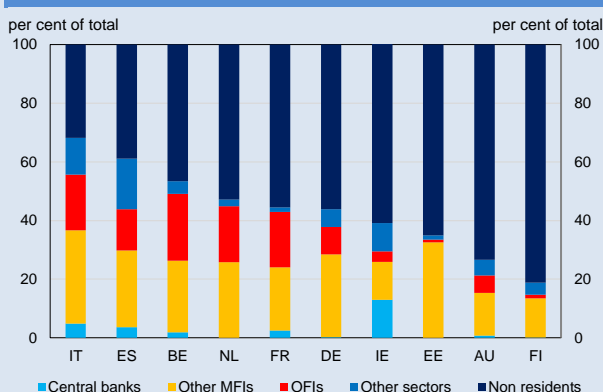
This survey of the data points to a number of financial stability issues. Domestic banks holding a large, or rising, quantity of bonds from home governments can increase the ties between the sovereign and banking sectors with the possibility of destabilising the financial system should either or both sectors be hit by adverse shocks. Increased home bias also makes the euro area sovereign market more segmented in nature. Greater foreign ownership of government bonds, when it arises, can make the sovereign vulnerable to more volatility, as foreign investors may prove more ready than domestic holders to relinquish their holdings when turbulence affects financial markets. Ireland’s reliance on EU-IMF funding during the period 2010-13 is evident from Chart A. Following the sovereign’s exit from the programme, it will be dependent on market funding in the years ahead. Finally, the Central Bank acquired a large holding of Irish sovereign bonds following the liquidation of IBRC. The Bank is committed to an agreed minimum disposal plan for those bonds and will sell them as soon as financial stability conditions permit.

Chart A: Holdings of Irish government debt



Source: CSO and Central Bank of Ireland calculations.

Chart B: Holdings of government debt, by Member State, at end-2013



Source: European Central Bank and Central Bank of Ireland calculations.

¹ Government debt is defined as General Government consolidated debt at nominal value.

² For more details, see “Box 3: Liquidation of Irish Bank Resolution Corporation”, *Macro-Financial Review*, 2013: I, p. 15.

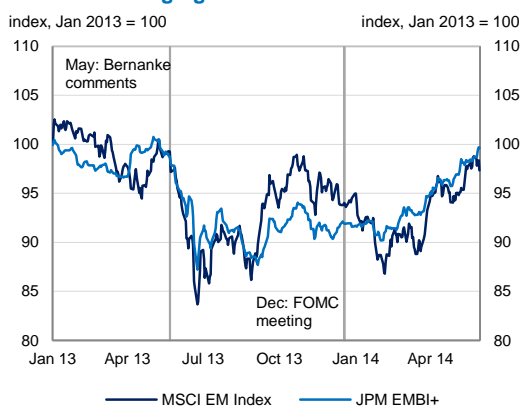
³ See, for example, Battistini N., M. Pagano and S. Simonelli (2013), “Systemic Risk and Home Bias in the Euro Area”, *European Economy: Economic Papers* 494.

3. Financial system

3.1 Financial system overview

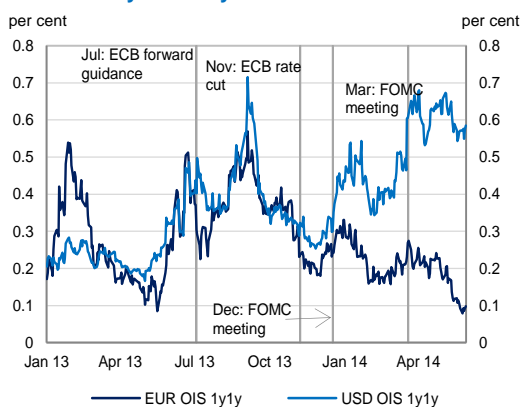
A key development in financial markets since the publication of the last Review was the Federal Reserve’s decision to begin reducing the pace of its monthly asset purchases. This announcement has added to existing concerns about weaknesses in emerging markets, which present risks to developed economies. While equities in advanced economies were buoyed by more positive investor sentiment, risks remain regarding a weakening in the Chinese economy and tensions between Russia and the Ukraine. Domestically, Ireland exited its EU-IMF programme at the end of 2013 and was upgraded by Moody’s to an investment grade credit rating. The NTMA has raised long-term funds on three occasions in 2014.

Chart 24: Emerging market indicators



Source: Bloomberg.
Notes: The MSCI Emerging Markets Index is an equity index. The JP Morgan EMBI+ tracks total returns for actively traded external debt instruments in emerging markets issued by sovereigns. The first vertical line denotes 22 May 2013, when former Federal Reserve Chairman Ben Bernanke indicated that the pace of asset purchases could be reduced later in the year. The second line corresponds to the FOMC meeting on 18 December 2013, when it was announced that the pace of asset purchases would be reduced beginning in January 2014. Last observation 30 May 2014.

Chart 25: 1-year in 1-year forward OIS rates



Source: Bloomberg.
Notes: The chart reflects the expectations of overnight index swap rates (OIS) over a one-year horizon beginning in one year’s time. The first line denotes the introduction of forward guidance by the ECB. The second corresponds to 7 Nov 2013, when the ECB cut its main refinancing rate to 0.25 per cent. The third line indicates the 18 Dec 2013, when the FOMC announced that it would begin reducing the pace of its asset purchases from Jan 2014. The fourth line corresponds to the FOMC meeting on 19 March 2014, when asset purchases were reduced further and the FOMC revised its median forecast for the Fed funds rate to 1 per cent by end-2015 from 0.75 per cent. Last observation 30 May 2014.

Since the start of 2013, there has been a general decline in the performance of equities and other financial instruments in emerging markets, reflecting a correction of some of the imbalances that had built up during the period of exceptionally loose monetary policy in advanced economies. This decline accelerated after former Federal Open Market Committee (FOMC) Chairman Ben Bernanke indicated in May 2013 that the Federal Reserve could begin reducing the pace of asset purchases by the end of the year (Chart 24). In mid-December, the FOMC announced that it would begin reducing the size of its monthly asset purchases. It started reducing those purchases in January by \$10 billion a month. Further reductions of \$10 billion a month were announced in February, March and April. This decision contributed to a renewed focus on existing fragilities in emerging markets. The slowdown in emerging market economies poses direct risks to the euro area through trade and financial linkages, and further indirect risks given the linkages of other developed economies to emerging markets.

As the FOMC has started to reduce the pace of asset purchases, the ECB has reaffirmed its forward guidance on interest rates, which it first introduced in July 2013. In November 2013, the ECB cut the main refinancing rate to 25 basis points. With the combined effects of forward guidance and a rate reduction, there has been an overall decoupling of forward euro and US dollar interest rates. Overnight index swap rates in the euro area over a one-year horizon beginning in a year’s time are expected to be around 50 basis points lower than US rates (Chart 25). Equity markets in the euro area and advanced economies have benefited somewhat from more upbeat investor sentiment, but the potential for a weakening in the Chinese economy and geopolitical tensions in Ukraine have increased risks.

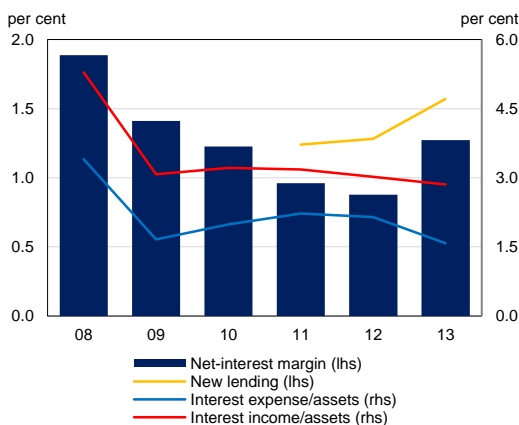
Domestic developments were marked by Ireland’s exit from the EU-IMF programme at the end of last year without a precautionary credit line. This was viewed positively in financial

markets and Ireland's sovereign credit rating was upgraded by Moody's to investment grade in mid-January, with a further two-notch upgrade in May. The NTMA has raised long-term funds on three occasions to date in 2014. Bank of Ireland raised €750 million of 5-year senior unsecured debt at a yield of 3.337 per cent in January, while AIB Mortgage Bank raised €500 million of secured funding in March via a 7-year ACS bond issue at 2.33 per cent.

3.2 Banking

The large stock of non-performing loans (NPLs), particularly the growing share of very long-term mortgage arrears, and the short maturity profile of funding remain key challenges for the domestic banks, leaving them exposed to a reassessment of credit risk premia by investors and bank or sovereign downgrades. In addition, low new business volumes are impeding plans to build pre-provisions profits. The credit market, which is essential to supporting economic growth, therefore, remains far from well-functioning. Domestic banks' earnings capacity continues to improve, reflecting declines in impairment charges and deposit funding costs in particular. The value of impaired loans was lower in 2014 Q1 compared to the same quarter in 2013, and there is evidence of progress on arrears workout. There has also been a further reduction in central bank borrowings, customer deposits are stable and market issuances have been at attractive yields. Nevertheless, the outcome of the ECB Comprehensive Assessment (CA), which includes a point-in-time Asset Quality Review (AQR) and forward-looking stress tests, will be important in determining the resilience of the major banks to future shocks, notwithstanding the substantial capital injections of recent years. The results of the AQR and the stress tests are due to be published simultaneously in November 2014 at the time that the Single Supervisory Mechanism (SSM) enters into force.

Chart 26: Domestic banks' net-interest income



Source: Central Bank of Ireland.

Notes: Data are collected in accordance with the European Banking Authority's FINREP reporting requirements. New lending is the sum of new lending carried out in the four quarters of each year expressed as a percentage of the average stock of loans to customers in each year.

Income and profitability

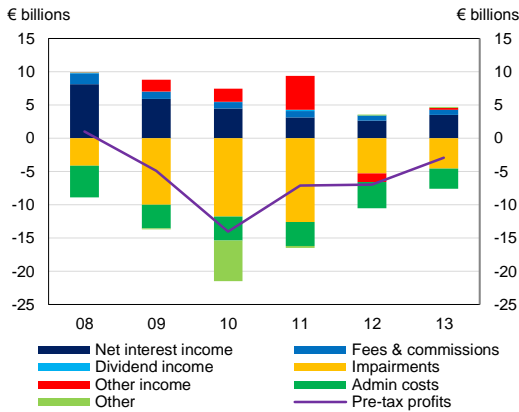
The income-generating capacity of the domestic banks continues to show signs of improvement but the normalisation of the banking system is still some way off.

Based on full-year financial accounts for 2013, total operating income increased by 220 per cent compared to 2012.

Net-interest income – the main source of income for domestic banks – increased by over a third from €2.6 billion to €3.5 billion. While there was a fall in interest income, this was more than offset by a reduction in interest expenses (Chart 26). The latter reflects on-going attempts by domestic banks to reduce funding costs through lower deposit pricing and also the phasing out of the Eligible Liabilities Guarantee (ELG) scheme. In addition, broadly favourable market conditions have benefited domestic banks through a reduction in new debt funding costs. Nonetheless, the scope for additional cost cutting in this area may be limited by the low interest rate environment and market sentiment.

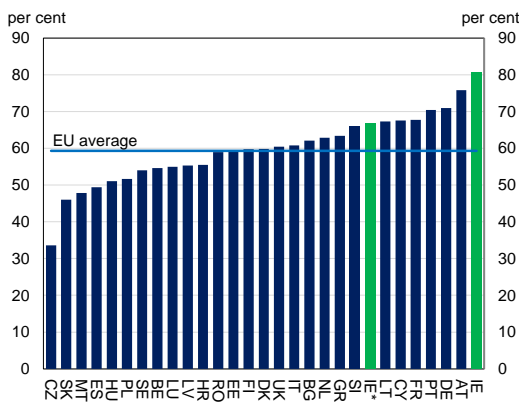
The scale of new lending remains low and volume growth is just one challenge that domestic banks face in trying to support a sustained increase in net-interest income. The low-yielding tracker mortgage loan book and high share of impaired loans will also limit domestic banks' ability to increase margins on existing business. A rise in interest rates would tend to improve margins,

Chart 27: Domestic banks' profitability



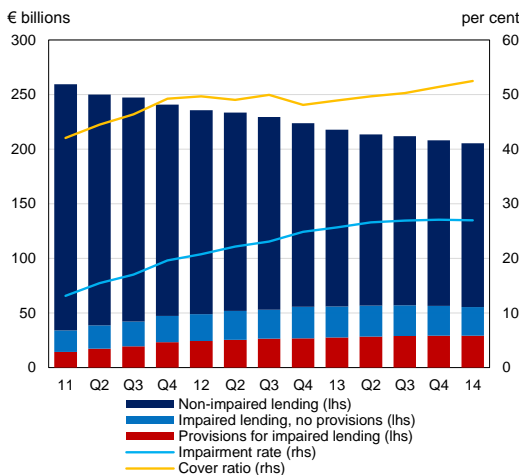
Source: Central Bank of Ireland.
Notes: Data are collected in accordance with the European Banking Authority's FINREP requirements. Impairments include provisions.

Chart 28: International comparison of cost-to-income ratios



Source: ECB and Central bank of Ireland calculations.
Notes: All observations are at June 2013 except for IE* which is an update of IE data at December 2013. Data for Greece exclude negative goodwill and German data relate to a subset of large domestic banks.

Chart 29: Domestic banks' credit exposures and asset quality



Source: Central Bank of Ireland.
Notes: Data are consolidated. Total lending is represented by drawn exposures. Impaired loans 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.

although it could have a negative impact on loan arrears.

A contributing factor to the improvement in operating income in 2013 was the recovery in non-interest income (Chart 27).³² Fee and commission income remained broadly unchanged from 2012, with most of the improvement coming from returns on financial assets. The latter is a reversal of the situation in 2012 when losses were incurred. While diversification of income sources is an important step in returning to sustained profitability, earnings on financial assets are volatile in nature given their vulnerability to adverse changes in market valuations and investor sentiment.

Post-provision losses declined further in 2013 as impairment charges continued to fall. Impairment charges dropped from a peak of €12.6 billion in 2011 to €4.6 billion in 2013, but were still almost equal to the total income generated by domestic banks in 2013 (Chart 27).

Operating efficiency also remains a challenge for domestic banks. Cost-to-income ratios declined in 2013 as administrative costs dropped by 22 per cent, while operating income increased. Nevertheless, there is scope for further progress when compared internationally, as the domestic banks' cost-to-income ratio remains above the EU average (Chart 28).

Given that domestic banks are primarily focused on the Irish economy, the future path of profitability will be guided by the recovery in the wider economy. Insufficient credit supply for small and medium enterprises (SMEs) and for the overall economy, therefore, remains a key medium-term performance issue for the banks.

The outcome of the ECB's CA may also impact provisioning and, in turn, the profitability of the domestic banks. The ECB and relevant national authorities commenced the CA in November 2013. The assessment exercise comprises three distinct elements: an Asset Quality Review (AQR); a Supervisory Risk Assessment; and a stress test. This exercise will be completed before the Single Supervisory Mechanism (SSM) enters into force on 4 November 2014. In total, the CA will be carried out for 128 banking groups in the Eurozone. Five credit institutions in Ireland will be subject to this assessment – AIB, Bank of Ireland, Permanent TSB, Ulster Bank and Merrill Lynch as the ECB will directly supervise them under the SSM. Subsidiaries of Eurozone banking groups, such as KBC and ACC, also fall indirectly within the scope of this CA, as they may have loan or asset portfolios subject to the AQR.³³

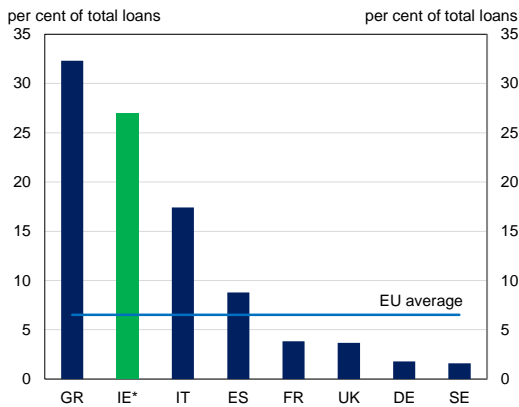
Credit risk and asset quality

Domestic banks' credit exposures haven fallen further since the publication of the last Review. The value of gross outstanding

³² Traditionally non-interest income has accounted for a relatively small proportion of income for domestic banks. See Holton et al (2013) 'The Impact of the Financial Crisis on Banks' Net Interest Margins', *Central Bank of Ireland Economic Letter Series, Vol. 2013, No. 1*.

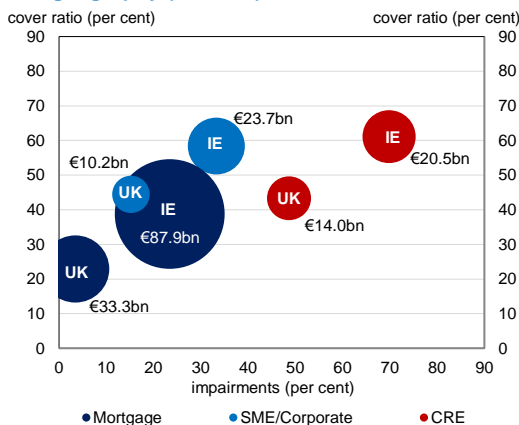
³³ For more information on the ECB's CA and AQR see <http://www.centralbank.ie/Pages/SingleSupervisoryMechanism.aspx>.

Chart 30: Impaired loans: European comparison (2013 Q3)



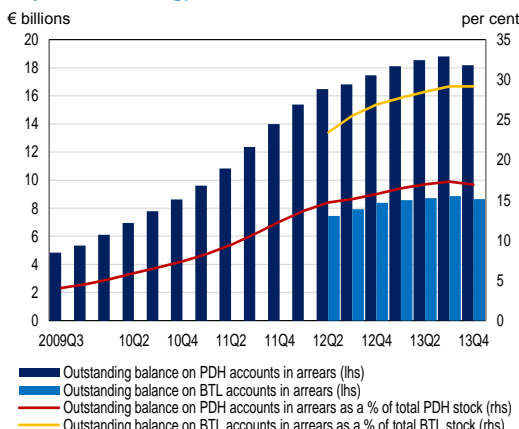
Source: European Banking Authority and Central Bank of Ireland.
Notes: For Ireland, impairments are represented by CRD default loans and data are consolidated. Remaining data are impaired loans and past due (>90 days) loans, median levels by country.

Chart 31: Domestic banks' asset quality by sector and geography (2014 Q1)



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.

Chart 32: Residential mortgage arrears (over 90 days outstanding)



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

loans declined by 5.8 per cent in the twelve months to the end of 2014 Q1, and by 26 per cent since the end of 2010, to €205 billion (Chart 29). This reflects relatively low levels of new lending and on-going loan amortisation. The disposal over recent years of predominantly overseas assets has led to a marked increase in the degree of concentration risk in the banks' loan books.³⁴ Irish loans rose from 62 to 68 per cent of the total, between the first quarter of 2011 and the first quarter of 2014, while mortgage loans increased from 52 to 59 per cent of overall lending during the same period.

The value of impaired loans was lower in 2014 Q1 compared to the same quarter in 2013. Lenders are reporting compliance with sustainable arrangement targets for distressed mortgages and there is some evidence of progress on loan arrears workout. Nevertheless, the elevated stock of non-performing loans (NPLs) and the growth in very long-term mortgage arrears remain key challenges for domestic banks' recovery. Further progress is required in this area as these issues hamper the ability of institutions to lend and support economic growth.³⁵

At the end of 2014 Q1, impaired balances stood at €55.4 billion, €640 million lower than at the end of March 2013. At 27 per cent of the value of outstanding loans (Chart 29), the impairments figure is particularly high by international comparison (Chart 30).³⁶ Nevertheless, there has been a marked improvement in recent quarters. The value of impaired loans declined by 1.2 per cent between 2013 Q3 and 2013 Q4, the first quarterly decline in a number of years and by a further 1.8 per cent in the opening quarter of 2014.

Loan-loss provisions increased by over €1.6 billion in the year since 2013 Q1, due in part to the implementation of the Central Bank of Ireland's "Impairment Provisioning and Disclosure Guidelines" issued in May 2013.³⁷ The outcome of the Asset Quality Review (AQR)/Balance Sheet Assessment (BSA), carried out by the Central Bank in the latter part of 2013, also contributed to higher end-2013 provisioning levels in the domestic banks' 2013 annual accounts.³⁸ Consequently, the aggregate cover ratio increased by 3.6 percentage points over the year to 2014 Q1, to 52.5 per cent. While the cover ratio compares well internationally,³⁹ differences persist in provisioning levels across institutions, reflecting varying sectoral and geographical exposures (Chart 31). In general, the Irish portion of the loan books is more impaired than the UK part, and the rates of distressed SME and commercial real estate (CRE) loans are significantly higher than in the mortgage sector.

³⁴ The domestic banks were required to adhere to deleveraging plans, as part of the Financial Measures Programme. For more details see [Central Bank of Ireland \(2011\) Financial Measures Programme Report Dublin](#).

³⁵ Non-performing or impaired loans are defined in accordance with the EU's Capital Requirements Directive (CRDIII), and refer to loans which are impaired as defined under IFRS accounting regulation (IAS 39) and/or classified as greater than 90 days in arrears.

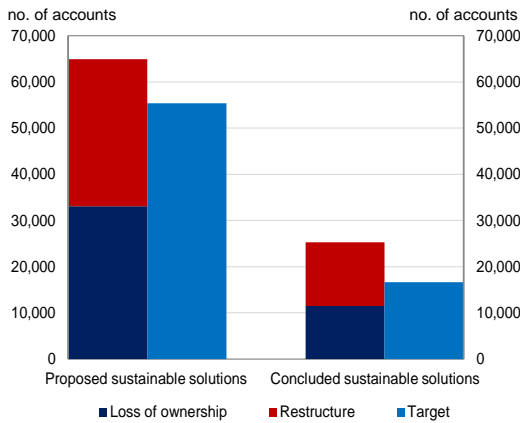
³⁶ See [Macroeconomic imbalances: Ireland 2014](#) and/or [EBA "Risk dashboard" 2013 Q4](#).

³⁷ For more information on impairment guidelines, see Central Bank of Ireland, "Impairment Provisioning and Disclosure Guidelines".

³⁸ The Central Bank undertook a Balance Sheet Assessment of the Covered Banks, which concluded in November 2013. This assessment was intended to be in line with the ECB AQR. Both involve a review of the adequacy of provisions and a review of the classification of loans on the banks' balance sheets. Therefore the appropriate time for the authorities to disclose information is when the overall exercise, including the stress test, is completed later this year. This is consistent with the approach taken at the European level where consolidated results of both the point-in-time AQR and forward-looking stress test will be published simultaneously.

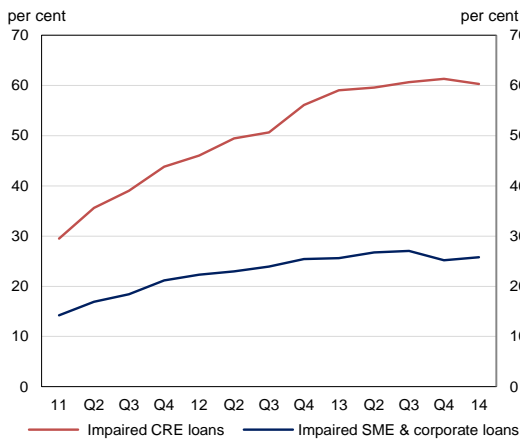
³⁹ See [Economic Adjustment Programme for Ireland, Summer 2012 Review](#), p13.

Chart 33: Aggregate proposed and concluded mortgage arrangements as reported (2013 Q4)



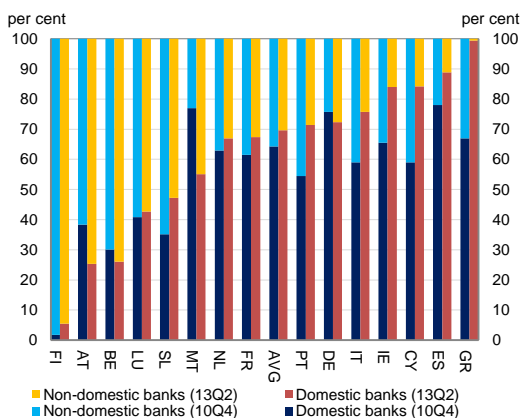
Source: Central Bank of Ireland.
Notes: Data are based on unaudited and unchallenged figures provided by the main mortgage lenders in accordance with their December 2013 MART requirements. "Loss of ownership" includes cases where properties are surrendered voluntarily or repossessed through legal means.

Chart 34: Domestic banks' rate of SME/corporate & CRE impaired loans



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

Chart 35: Domestic sovereign bonds held by domestic/non-domestic banks



Source: European Banking Authority and Central Bank of Ireland.
Notes: Chart shows the split of each country's bank-held sovereign bonds between domestic and non-domestic institutions, (who took part in the EBA "Transparency Exercise"). For further details see the [EU-wide Transparency Exercise 2013 Summary Report](#).

The future viability of the domestic banking sector depends to a large extent on a successful resolution of the NPL issue. To this end, an institutional framework has been established enabling the banks to tackle the high stock of impaired lending. In terms of mortgage arrears, a multi-faceted approach has been adopted.⁴⁰

Accordingly, the level of engagement between the banks and distressed mortgage borrowers has increased and signs of progress are beginning to emerge. Data for December 2013 show the value of principal dwelling house (PDH) and buy-to-let (BTL) loans greater than 90 days past due (DPD) declined by 3.3 and 2.3 per cent, respectively, since September 2013. That was the first reduction in these figures since either series began in September 2009 (Chart 32). In addition, although the annual pace of arrears formation (between 1-90DPD) has been slowing since the beginning of 2013, the final quarter of the year was the first when the overall level of longer term arrears (greater than 180 DPD) also fell. In contrast, the very long-term category (greater than 720 DPD) increased further and now accounts for 31 per cent of the value of all arrears.⁴¹

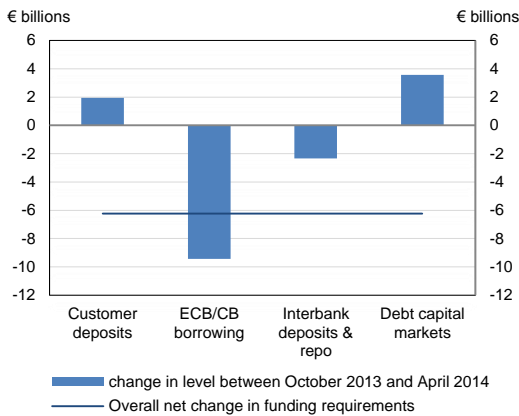
Under the Mortgage Arrears Resolution Targets (MART), mortgage lenders were due to propose sustainable arrangements for at least 50 per cent of borrowers greater than 90 DPD and to have reached sustainable arrangements with at least 15 per cent of these borrowers before the end of 2013. All institutions reported compliance with this target. Across banks, an average of 59 per cent of eligible borrowers were reported to have had a sustainable arrangement proposed, while the average for sustainable conclusions was 23 per cent, although the data provided are still being audited. In terms of the breakdown between the choice of sustainable arrangement (i.e. restructure vs. voluntary/threatened loss of ownership), restructures accounted for 49 per cent of proposed arrangements and made up 55 per cent of concluded arrangements (Chart 33). Further targets have been set for 2014, under which banks must achieve a 70 per cent proposal rate and 25 per cent conclusion rate by the end of 2014 Q1, rising to a 75 per cent proposal rate and 35 per cent conclusion rate by Q2.

Progress in the resolution of distressed SME and CRE portfolios is also being monitored by the Central Bank against key performance indicators and targets. The impairment rates amongst SME and CRE borrowers are noticeably higher than the residential mortgage cohort. Together, they account for over 36 per cent of total outstanding lending but 56 per cent of total NPLs by value. The latest data indicate that the proportion of impaired CRE loans rose from 59.1 per cent in 2013 Q1 to 60.3 per cent in 2014 Q1, while the share of SME and corporate

⁴⁰ This involves the reform of bankruptcy laws, a change to the rules governing repossessions, the revision of the Code of Conduct for Mortgage Arrears and the issuance of Mortgage Arrears Resolution Targets (MART). The resolution targets are set out by the Central Bank and require the banks to put in place sustainable long-term arrangements with customers in arrears.

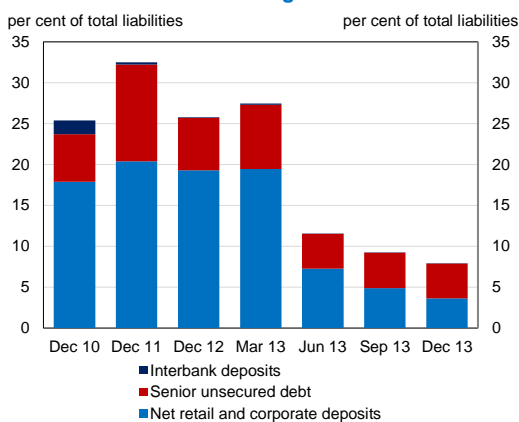
⁴¹ For more information see the [Central Bank of Ireland's Mortgage Arrears Statistics](#).

Chart 36: Change in funding composition



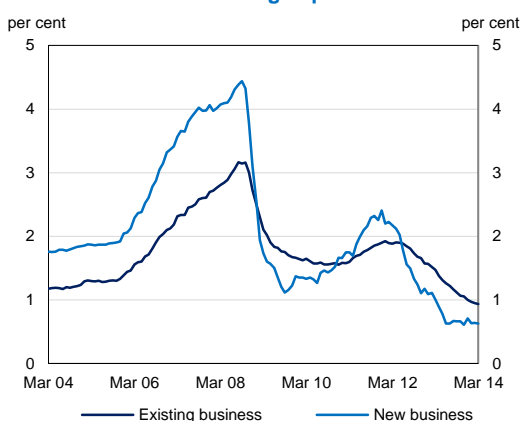
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 37: 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 38: 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.

NPLs was also up slightly from 25.6 per cent to 25.8 per cent over the same period (Chart 34). The Central Bank has carried out targeted loan file reviews across institutions, required improved arrears management strategies and set restructuring targets to encourage banks to move distressed borrowers from short-term forbearance to longer-term solutions.

While domestic banks have reduced lending in recent years, their other financial assets, particularly government bond holdings, have increased. As part of the European Banking Authority's EU-wide Transparency Exercise, data were collected on the sovereign exposures of European Economic Area (EEA) countries. Details of changes in the share of bank-held sovereign bonds, held by domestic credit institutions between December 2010 and June 2013, are presented in Chart 35. While there appears to have been an increase in the proportion of domestic sovereign bonds held across the majority of domestic banking systems, this pattern is particularly pronounced for sovereigns under stress, including Ireland. Concentration risk in the sovereign bond holdings of the domestic banks has, therefore, increased.

Funding

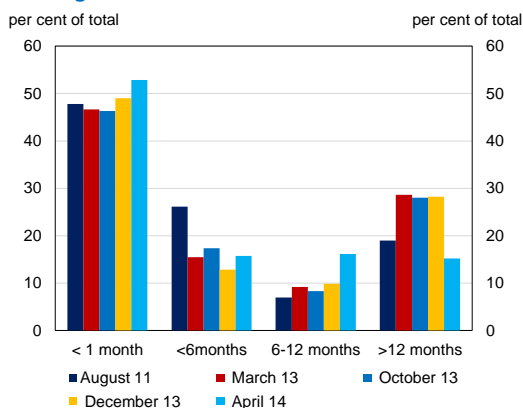
Since the publication of the last Review, central bank borrowings by domestic banks have continued to decline, customer deposits are stable and market issuances have been at attractive spreads. Nevertheless, the overall funding profile of the domestic banks remains fragile and more progress is required. The maturity profile is short with a significant amount of debt funding due to be refinanced in 2015 Q1 (see Box 5). As such, the banks are exposed to any reassessment of credit risk premia by investors and/or bank/sovereign downgrades.

The funding requirements of domestic banks have fallen further since the last Review, reflecting on-going balance sheet consolidation. Total funding declined by €6 billion to €231 billion between October 2013 and April 2014 (Chart 36). Domestic banks' reliance on central bank borrowing fell by approximately €9 billion. Over the same period, customer deposits increased by almost €2 billion. Increases in retail deposits (€3 billion) more than offset a drop in deposits from non-bank financial institutions (NBFI) and corporates. Domestic banks remain sensitive to individual counterparty risk in the NBFI category.

As a result of the phasing out of the Eligible Liabilities Guarantee (ELG) scheme, announced in March 2013, there has been a further reduction in liabilities covered by the Government guarantee (Chart 37).⁴² By the end of 2013, total guaranteed liabilities amounted to 7.9 per cent of total liabilities. This compares to a peak of over 30 per cent during 2011. The decline in covered liabilities and the associated reduction in ELG fees have helped ease the cost of funding for domestic banks. Some

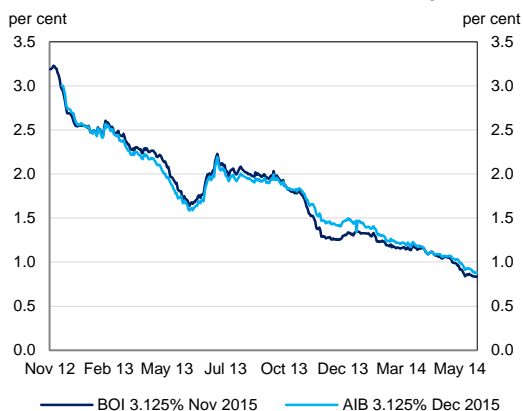
⁴² For more details on the ELG exit see [Box 7 in Central Bank of Ireland Macro-Financial Review 2013:II](#).

Chart 39: Maturity profile of domestic banks' funding



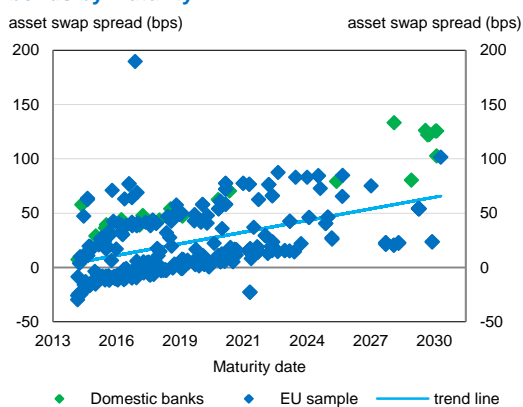
Source: Central Bank of Ireland.
Notes: Data are consolidated.

Chart 40: Domestic banks' covered bond yield



Source: Bloomberg.
Note: Last observation 30 May 2014.

Chart 41: 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 30 May 2014.

residual guaranteed funding is likely to linger. Under the phasing out of the scheme, liabilities incurred before 29 March 2013 will continue to be guaranteed until their next maturity, subject to a maximum term of 5 years.

The cost of both household and corporate deposit funding continues to decline in the Irish market. The interest rate on the stock of existing deposits declined by 18 basis points between September 2013 and March 2014, while the rate on new deposit funding was broadly unchanged over the same period. Given that the ECB cut its main policy rate by 25 basis points during this time, it may suggest limited scope for banks to enhance margins further from this source (Chart 38).

Refinancing risk faced by domestic banks has increased. The share of short-term funding (less than one month) in total funding has increased since October 2013. Over half of current funding has a maturity of less than one-month (Chart 39). This, in part, reflects the growing relative share of customer deposits, which often have a short-term maturity but tend to be among the most stable deposits, particularly the retail category. The most significant change in terms of maturity has been the increase in 6-12 month funding. A large quantity of central bank borrowing moved from greater than 12 months maturity into this category, resulting in a greater concentration of funding maturing within 12 months. Domestic banks face the dual challenge of reducing official-sector funding, while simultaneously lengthening the maturity of funding in order to stabilise their funding profile.

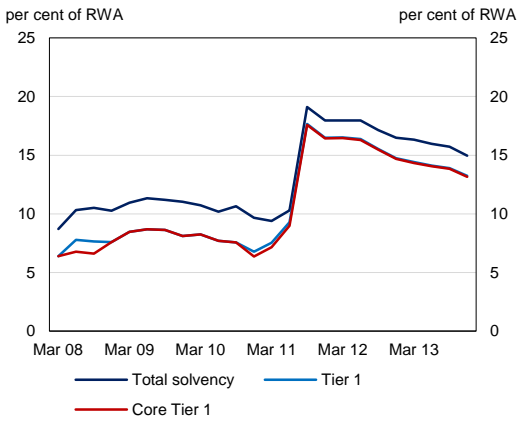
Domestic banks continue to benefit from favourable market sentiment. The two largest domestic banks, AIB and Bank of Ireland, have recently been able to issue new debt, including senior unsecured debt (see Box 5). Yields on existing bonds have declined further (Chart 40), even as the perceived risk premium on longer-term debt remains (Chart 41). Domestic banks are still vulnerable to potential changes in sentiment and higher market-based funding costs, particularly given the significant amount of debt funding due to be refinanced in 2015 Q1. Issuing more long-term market debt and further reducing ECB borrowing would improve funding stability but would also exacerbate pressures on profitability.

The forthcoming liquidity requirements of the Capital Requirements Regulation (CRR) represent another challenge for domestic banks.⁴³ The improvements in funding outlined above and a number of measures, such as the Advanced Monitoring Framework contained within the EU-IMF programme, have helped domestic banks prepare for the new requirements, although some details of the criteria remain to be finalised.⁴⁴ The inclusion of NAMA bonds as Level 1 High Quality Liquid Assets

⁴³ Under the new requirements EU banks are required to meet two liquidity measures, namely the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). The requirements are designed to promote both short and medium-term resilience of banks' liquidity risk profiles. See Doran et al. (2014), "[Some Implications of New Regulatory Measures for Euro Area Money Markets](#)", *Central Bank of Ireland Quarterly Bulletin Article, January 2014*.

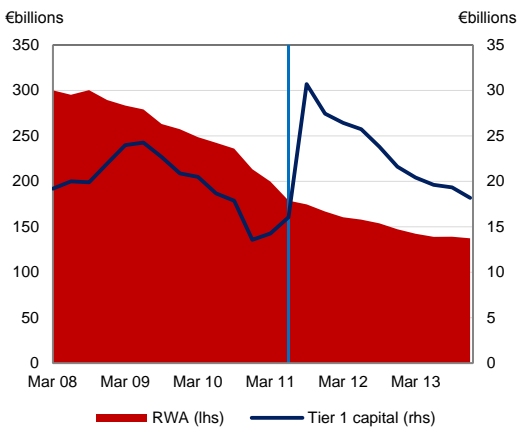
⁴⁴ Domestic banks did not publish pro-forma liquidity ratios in their 2013 annual accounts but do form part of the sample of EU banks which contribute to the European Banking Authority (EBA) Basel III monitoring exercise. See "[BASEL III Monitoring Exercise – Results based on data as of 30 June 2013](#)".

Chart 42: Domestic banks' solvency ratios



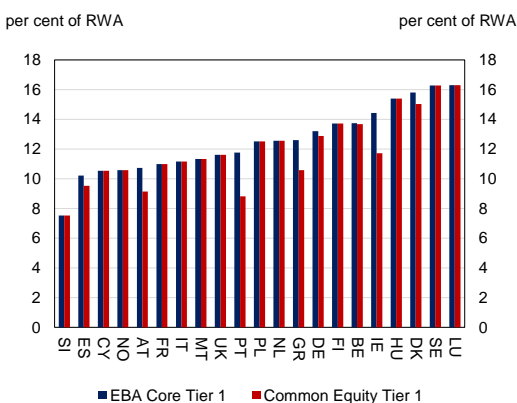
Source: Central Bank of Ireland.
Notes: Data are consolidated. Last observation December 2013.

Chart 43: Domestic banks' tier one capital and risk weighted assets



Source: Central Bank of Ireland.
Notes: Data are consolidated. Last observation December 2013. Light blue line refers to July 2011 Government capital injection.

Chart 44: European banking systems' solvency ratios



Source: EBA EU-wide transparency exercise.
Notes: Data as at June 2013. IE comprises Allied Irish Bank, Bank of Ireland and Permanent TSB. Common Equity Tier 1 ratios are provisional and as estimated by individual banks as certain details of the criteria were not fully determined in time for the transparency exercise.

(HQLA) (i.e., assets that remain liquid during times of extreme stress) in the measurement of the two new liquidity ratios will also benefit those banks with large holdings of those securities.

Solvency

The solvency positions of the domestic banks are slightly weaker since the last Review. Capital levels remain vulnerable to adverse macroeconomic shocks and the outcome of the ECB CA. Full implementation of the Capital Requirements Directive (CRD IV) also represents an important challenge for the banks.⁴⁵ CRD IV and CRR also empower the Central Bank, in conjunction with the ECB, to increase the financial system's resilience to shocks through the use of macroprudential tools (see Box 6).

Domestic banks' Core Tier 1 capital ratios averaged 13.2 per cent at end-2013 compared to 13.8 per cent in September 2013 and a peak of 17.6 per cent after the July 2011 Government capital injections (Chart 42). On-going reductions in risk-weighted assets (RWAs) have supported capital ratios, partially offsetting the negative impact of impairment charges and income losses (Chart 43). The new provisioning standards issued by the Bank in May 2013 and the outcome of the BSA contributed to higher end-2013 provisioning levels and lower capital ratios in the domestic banks' 2013 annual accounts.

The domestic banks' solvency position compares favourably to European peers on the basis of Core Tier 1 capital but not quite as positively under the new CRD IV Common Equity Tier 1 capital ratio (Chart 44).⁴⁶ The banks have addressed the negative impact of new regulations on pension deficits and the shortfall on provisions for expected losses but have made less progress on deferred tax assets (DTA) and the Government's preference shares.⁴⁷ Although the requirements are being phased in over time, international banks are already publishing so-called "fully-loaded" ratios, which incorporate the majority of deductions in advance of the deadlines, due to market pressure. The weighted average pro-forma "fully-loaded" ratio published by the two largest domestic banks, AIB and Bank of Ireland, was 9.8 per cent as at December 2013. This includes the Government's preference shares which remain eligible until end-2017. It compares to a 7 per cent minimum (including capital conservation buffer but excluding countercyclical and other buffers) and a median ratio of just over 10 per cent for euro area large complex banking groups in 2013 Q3.⁴⁸

The two largest domestic banks have also published Basel III leverage ratios in advance of requirements, with the average pro-forma ratio, including Government preference shares, at 4.4

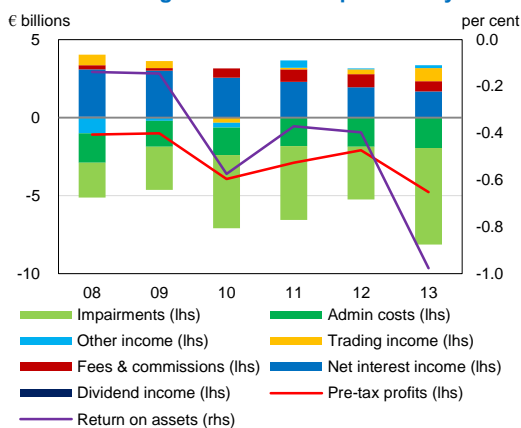
⁴⁵ CRD IV and the Capital Requirements Regulation (CRR) came into force on 1 January 2014. The CRD IV/CRR package incorporates the new Basel Committee on Banking Supervision (BCBS) standards generally known as Basel III. These standards were issued as a response to the banking crisis and are designed to support financial stability and to increase the financial sector's resilience to shocks.

⁴⁶ The 2013 EBA EU-wide transparency exercise provides data on selected European banks' composition of capital, etc. For further details see "EBA EU-Wide transparency exercise".

⁴⁷ The removal of the 50 per cent restriction on the use of DTAs related to NAMA in 2013 will have a positive capital effect and help to offset these deductions in part. See Macro Financial Review 2013:II Box 7 "New capital rules for EU financial institutions" for more details.

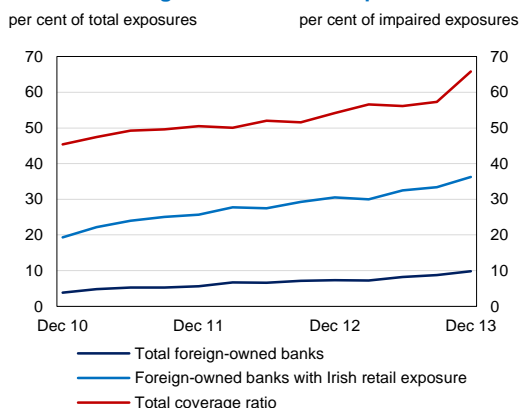
⁴⁸ See for example chart 3.8, page 68, "ECB Financial Stability Review, November 2013".

Chart 45: Foreign-owned banks' profitability



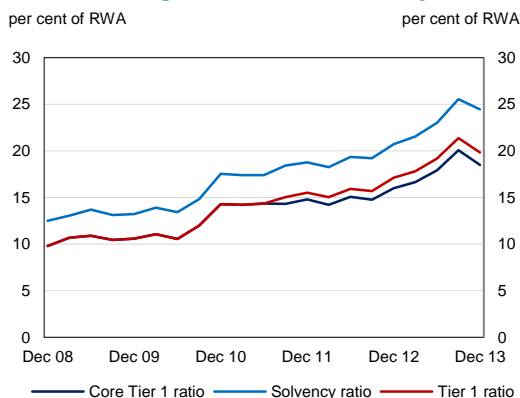
Source: Central Bank of Ireland.
Notes: Data are collected in accordance with the EBA's FINREP reporting requirements. Impairments include provisions. Data as at December 2013.

Chart 46: Foreign-owned banks' impairment rates



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

Chart 47: Foreign-owned banks' solvency



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

per cent as at December 2013.⁴⁹ The minimum Leverage Ratio requirement proposed by the Basel Committee on Banking Supervision is 3 per cent.

Market speculation persists in relation to the options facing the banks to replace these preference shares, particularly since one bank successfully replaced a small proportion with equity in December 2013.⁵⁰

Foreign-owned resident banks⁵¹

As additional sources of credit supply to the domestic market, foreign-owned resident banks domiciled in Ireland play a significant role in the Irish banking system. They also contribute to employment in the economy. These banks can be divided into those with an Irish retail presence, such as Ulster Bank Ireland Limited and KBC Bank Ireland, and those with an international focus, such as UniCredit Bank Ireland plc and Citigroup Europe plc.

As with the domestic banks, foreign-owned resident banks in Ireland continue to undergo a process of consolidation following the financial crisis. Total assets declined by over 20 per cent between December 2012 and December 2013, driven by a fall in lending and an increase in the volume of impairments. Difficult operating conditions, combined with changes to the international regulatory environment, have led some banks to review their structures and have contributed to the planned wind-down and exit of a number of institutions from the Irish banking system.

In contrast to domestic banks, foreign-owned resident banks' impairment charges increased in 2013 (Chart 45). This resulted in on-going pre-tax losses and a negative return on assets, driven by banks with an Irish retail presence. Net interest income declined by almost 17 per cent in 2013, reflecting lower interest rates (Chart 45). This fall in net interest income is not isolated to those banks with a retail presence in Ireland as net interest income for the group of banks with an international focus fell by over a quarter in 2013. Those banks, however, saw overall pre-tax profits rise by 16.5 per cent in the year to December 2013, mainly driven by an increase in trading income, which more than tripled during the period. Trading income accounted for over 91 per cent of 2013 profits for this group – a high reliance on trading income for profit can leave banks exposed to sudden negative shocks to markets.

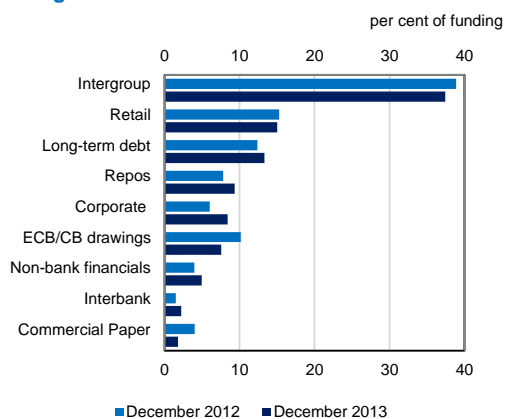
Impairment rates for foreign-owned banks with an Irish retail presence rose to 36 per cent in 2013 (Chart 46). Impairment rates for banks with an international focus were negligible during 2013. Cover ratios for total foreign-owned banks rose by almost

⁴⁹ The Leverage Ratio is intended to be supplementary to the risk based capital ratio when determining a bank's capital requirement. This is a non-risk based measure and the proposed calculation is the Total Tier 1 assets divided by total exposure. Initially, the Leverage Ratio will be non-binding but public disclosure of the ratio will begin on 1 January 2015. See Doran et al. (2014), "Some Implications of New Regulatory Measures for Euro Area Money Markets", *Central Bank of Ireland Quarterly Bulletin 1, 2014*.

⁵⁰ On 4 December 2013, Bank of Ireland announced a capital package in relation to its 2009 Preference Shares which had been agreed with the State and the Central Bank, comprising (i) the placing of new units of ordinary stock to generate proceeds of about €537 million (net of expenses), to redeem approximately €537 million of the 2009 Preference Shares and (ii) the sale by the National Pensions Reserve Fund Commission (NPRFC) of €1.3 billion 2009 Preference Shares to private investors. AIB also announced in its 2013 annual results that that Department of Finance has indicated that it will enter into discussions with AIB during 2014 regarding AIB's future capital structure, including the potential conversion of the 2009 Preference Shares into equity.

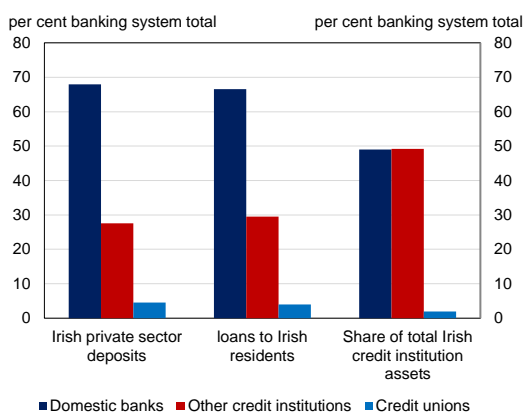
⁵¹ The term *foreign-owned resident banks* refers here to a selection of the larger banks whose ultimate parent is located outside the State.

Chart 48: Foreign-owned banks' breakdown of funding



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

Chart 49: The role of credit unions in Ireland



Source: Central Bank of Ireland.
Note: Data are resident statistics for all credit institutions in Ireland. Data as at 31 December 2013.

a fifth in the year to December 2013 to 65 per cent, driven by a 22 per cent increase in impairment provisions (Chart 46).

Capital ratios increased during 2013 as a whole but have fallen slightly since the last Review, with Core Tier 1 capital ratios declining from 20.2 per cent to 18.6 per cent between September and December of 2013 (Chart 47). This reduction was driven by the aforementioned increase in impairment charges at year-end although the capital ratios remain relatively high.

Foreign-owned resident banks benefit from intergroup support. This continues to form the largest component of their funding, despite some reduction in the past year (Chart 48).⁵² These banks also cut their Eurosystem borrowings and increased corporate funding, long-term debt issuance and repos, reflecting improving liquidity conditions in markets. Overall funding requirements have fallen by almost 12 per cent in the year to December 2013. However, the reliance on parental funding remains a potential channel for contagion.

A number of foreign-owned resident banks are subject to the ECB's CA, due for completion in late 2014. The results of this may further impact provisions and capital requirements.

Credit unions

The operating environment for credit unions remains challenging and, as a result, the sector continues to consolidate. At present, there are 390 credit unions registered in Ireland, a reduction of three since the publication of the last Review and a decline of fourteen since the report of the Commission on Credit Unions in 2012.^{53,54}

In the twelve months to December 2013, total assets of the sector have remained broadly stable at €13.9 billion. Loans to members have decreased by almost 13 per cent from December 2012 and currently stand at €4.3 billion. The scale of credit union operations remains relatively small when compared to other credit institutions (Chart 49). Approximately 50 per cent of credit unions have total assets of less than €20 million.

The continuing decline in loan books across the sector is having a direct negative impact on the interest income generated by credit unions. This, along with declining investment returns, and rising operating costs is likely to continue through 2014. At the same time, the sector continues to face heightened levels of credit risk. Average loan arrears at end-December 2013 were approximately 19 per cent, broadly unchanged since the last Review and down marginally from 2012. Based on the latest financial accounts, the average dividend paid to members in 2013 was less than 1 per cent. Continued low dividends may impact the ability of credit unions to expand or indeed maintain their current funding base.

⁵² Analysis of funding focuses on a smaller subset of the main foreign-owned banks.

⁵³ Includes two resolution cases under the Bank's resolution powers.

⁵⁴ See [Commission on Credit Unions \(2012\) "Report of the Commission on Credit Unions", Department of Finance, 12 March.](#)

Owing to the scale of issues identified within the sector, almost half of all credit unions are now subject to some form of lending restriction.

Given the challenging outlook, it may be appropriate for some credit unions to adapt and change business models in order to ensure operational sustainability. The scope for consolidation through mergers and the development of close networks and shared services has already been identified.⁵⁵ This is reflected in the cases of Howth Sutton Credit Union (HSCU) in 2014 and Newbridge Credit Union in 2013.⁵⁶ Following an application by the Central Bank, the High Court approved on 5 March 2014 the transfer of HSCU to Progressive Credit Union, which has assumed ownership and management of the assets and liabilities of the HSCU. The Central Bank sought the transfer, with the support of HSCU's Board, because HSCU was no longer viable as a stand-alone entity.

The Bank works closely with the statutory Restructuring Board (ReBo) to deliver its mandate of voluntary incentivised time-bound restructuring of the sector.

⁵⁵ For more details see [Commission on Credit Unions \(2012\) "Report of the Commission on Credit Unions", Department of Finance, 12 March.](#)

⁵⁶ Following an application by the Central Bank in November 2013, the High Court approved the transfer of Newbridge Credit Union's balance sheet to Permanent TSB. In January 2012, the Central Bank identified that the credit union's regulatory reserves had fallen below the required level and there were concerns about its financial position. A special manager was appointed at that time to run the day-to-day activities of the credit union. However, following a thorough assessment, it was determined that the only viable resolution of the financial difficulties was a transfer to another entity.

Box 5: Assessment of debt funding of Irish domestic banks (2014 Q1–2015 Q4)

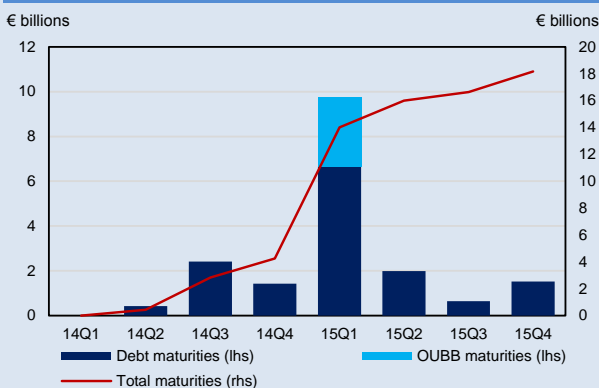
This box outlines the debt funding position of the domestic banks up to year-end 2015. The banks' upcoming debt maturities out to 2015 Q4 total circa €18.2 billion as at end May 2014. This comprises market-issued debt of €15.1 billion and the necessary replacement of Own Use Bank Bonds¹ (OUBBs) of circa €3.1 billion. Chart A below shows the quarterly debt maturities for the period to 2015 Q4, highlighting the peak of debt maturities of €9.8 billion in 2015 Q1, when debt of €6.7 billion matures (the majority of which was issued under the ELG scheme) and the OUBBs become ineligible for use in Eurosystem operations. At an aggregate level, maturing debt is largely expected to be met by a further reduction in both balance sheet size (including reductions in both customer and wholesale assets) and new debt issuance over the period out to December 2015.

Against a background of improving market sentiment, funding for both the Sovereign and Irish banks has improved, with both AIB and BOI issuing debt totalling €1 billion and €2.25 billion respectively in the first four months of 2014. Chart B below shows the reduced cost of funding for AIB and BOI, with a comparison to the sovereign yield curve as at end May 2014. The cost of the AIB and BOI ELG covered bonds issued in 2010 was just over 4 per cent which, when compared to more recent issuance, highlights a subsequent reduction in funding costs. Market analysts² and credit ratings agencies expect further issuance in 2014 as the banks move to pre-fund redemptions and to capitalise on the credit rating upgrades of Irish sovereign debt. Net interest margins (NIM) may also benefit if these bonds are rolled-over at lower funding rates (and without the requirement to pay guarantee fees to the State).

The recent issuances indicate a renewed market appetite for Irish bank debt, potentially leading the way to more normalised access to market funding, and allowing the banks to reduce further their reliance on Eurosystem funding. As of December 2013, the Irish banks had €22 billion of senior NAMA bonds outstanding. A reduction in NAMA bonds, as NAMA redeems the debt it has issued, will also have the effect of reducing banks' wholesale assets over the period to 2015 Q4. This in turn could potentially lead to a further reduction in domestic banks' Eurosystem borrowings, which have already fallen from circa €49 billion at end-2012 to circa €28 billion at end-2013.

Notwithstanding improved market access, the domestic banks still face a large redemption profile out to 2015 Q4 as outlined in Chart A. Factors which will determine on-going market access include developments in the euro area and in money markets, which should remain accessible in line with the Eurosystem's accommodative monetary policy stance. Furthermore, a move beyond a sustainable balance sheet size would require banks either to utilise existing liquidity buffers or have increased recourse to Eurosystem borrowings. Banks must also meet this redemption profile while ensuring compliance with the Central Bank of Ireland's and CRR/CRD IV liquidity requirements including the Liquidity Coverage Ratio (LCR)³, as well as preparing to meet the Basel III Net Stable Funding Ratio (NSFR)⁴. In addition, banks' credit ratings, which can determine the extent of market access, will likely be tied to sovereign developments. Finally, the outcome of the ECB's forthcoming Comprehensive Assessment will play an important role in influencing investors' perceptions of the domestic banks.

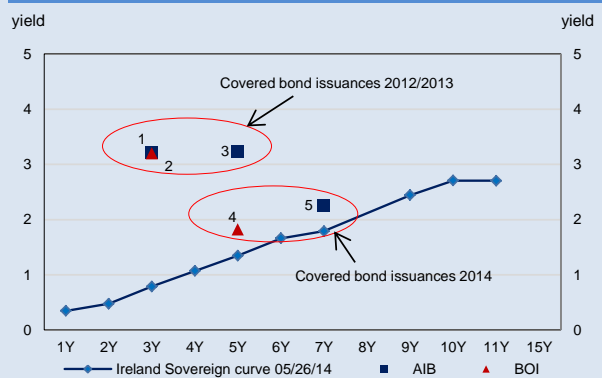
Chart A: Debt maturity profile (including OUBB's) (2014 Q1–2015 Q4)



Source: Bloomberg.

Notes: Total maturities, refers to cumulative total maturities to 2015 Q4.

Chart B: Irish bank covered bond issuance versus Irish Sovereign



Source: Bloomberg.

Notes: 1: AIB CB 3.125; 11/2012 2: BOI CB 3.125; 09/2013 3: AIB CB 3.125; 11/2012 4: BOI CB 1.75; 03/2014 5: AIB CB 2.25; 03/2014

¹ See Box on Development of Own-Use Bank Bonds for Funding Purposes, [Central Bank of Ireland Quarterly Bulletin 1, 2014](#) pgs. 39-41 for a description of OUBB's.

² See, for example, ["Irish banks research – Moody's upgrades €7 billion of Irish government guaranteed debt"](#).

³ The LCR is expressed as Stock of high quality liquid assets divided by Total net cash outflows over the next 30 calendar days.

⁴ The NSFR is expressed as: Available amount of stable funding (ASF) divided by Required amount of stable funding (RSF). The NSFR requires that the amount of a bank's available stable funding is equal to or greater than the required amount of stable funding it should hold over a one year horizon.

Box 6: Macroprudential policy in Ireland – An overview

This box gives an overview of macroprudential policy and the Central Bank of Ireland's role and responsibilities in this area. The financial crisis highlighted that traditional macroeconomic stabilisation and microprudential policies need to be complemented by a higher-level, systemic view of risk and related policies. Macroprudential policy uses regulatory instruments to contribute to the maintenance of financial stability and to help avoid costly crisis episodes.¹ It does so according to its three defining elements: (i) its objective (to limit system-wide or "systemic" risk) (ii) its scope (focus on the financial system as a whole) and (iii) its instruments and associated governance (the use of primarily prudential tools calibrated to target the sources of systemic risk).²

The Central Bank's responsibility for macroprudential policy derives in part from its legislative mandate for the overall stability of the financial system.³ The European Systemic Risk Board (ESRB) is the body responsible for macroprudential oversight at a European level. The Central Bank is the national macroprudential authority for the purposes of the ESRB and is responsible for fulfilling its requirements in this regard at a national level.⁴ The Minister for Finance has designated the Central Bank as the Designated Authority under the new European banking legislation, making it responsible for certain macroprudential tools and discretions under the Capital Requirements Regulation (CRR) and Capital Requirements Directive IV (CRD IV). Macroprudential policy will also be a shared competency with the ECB under the new Single Supervisory Mechanism.

ESRB recommendations state that the ultimate objective of macroprudential policy "is to contribute to safeguarding the stability of the financial system as a whole, including by strengthening the resilience of the financial system and decreasing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth".⁵ The financial system's resilience to shocks emanating from excessive credit growth and leverage can be enhanced by building capital buffers to absorb their impact. Excessive credit growth to certain sectors can also be curbed through targeted policies; for example, loan-to-value or debt-to-income ratio limits could be applied to curb excessive borrowing for residential real estate. Exposure concentration risks can be alleviated through caps on exposures to certain sectors or counterparties or sectoral capital requirements. The accumulation of risks from market illiquidity and excessive maturity mismatch can be limited through liquidity buffers including requirements on the use of more stable funding sources and holding high-quality liquid assets to ensure refinancing of short-term funding.

The macroprudential policy cycle can be thought of as a four-step process.⁶ In practice, these stages are interlinked and cannot be considered in isolation. Step one in the policy cycle involves an assessment of potential areas of increasing risk in the financial system, based on a range of qualitative and quantitative indicators and culminates in an assessment of whether a policy intervention is warranted. The second step involves choosing the most appropriate macroprudential instrument to be employed. This is based on the objective of the policy intervention, for example, curtailing credit growth or preventing market illiquidity, and consideration as to which instrument is best suited to meet this objective. Step three in the cycle is concerned with how the policy tool should be applied and how the policy is to be communicated to relevant stakeholders. Finally, the fourth step evaluates the appropriateness and effectiveness of the policy. To be effective in its pursuit of policy objectives, a macroprudential authority must select and assemble a set of instruments capable of addressing systemic risks. Instruments of macroprudential policy can be categorised as being credit related, liquidity related or capital related.⁷

Macroprudential policy is a relatively new area and, as such, there is little international experience of policy interventions with an explicit macroprudential purpose. The potential for conflict between macroprudential and other economic policy measures, such as monetary policy, also warrants consideration. Understanding and controlling for spillover effects from other policy areas is important for formulating appropriate macroprudential policy. It can be difficult to quantify the effectiveness of macroprudential policy. The costs of policy interventions are direct and immediately felt but the potential benefit is harder to define. This presents a challenge for policymakers in communicating and justifying actions. Macroprudential policy is also limited in that it cannot control risks emanating from the unregulated parts of the financial system

Macroprudential policy has risen in prominence in recent years yet much work remains to be done in Ireland and elsewhere on this topic. The development of this area is important to the work of the Central Bank and will build on the Bank's existing financial stability related research. Future work in the macroprudential area will include both policy focused reports and analytical work on the appropriateness and performance of macroprudential indicators and instruments in an Irish context.

¹ White, W. R. (2014), "The Prudential Regulation of Financial Institutions: Why Regulatory Responses to the Crisis Might Not Prove Sufficient", OECD Economics Department Working Papers, No. 1108.

² Financial Stability Board, International Monetary Fund and Bank for International Settlements (2011), "Macroprudential Policy Tools and Frameworks: Progress Report to G20".

³ The Bank's mandate in relation to financial stability arises from Section 6A2(a) of the Central Bank Act 1942 (as amended by the Central Bank Reform Act 2010).

⁴ See ESRB recommendation on the macroprudential mandate of national authorities (ESRB/2011/3). The ESRB has the power to issue recommendations which must be fulfilled on a comply or explain basis.

⁵ ESRB Recommendation on intermediate objectives and instruments of macroprudential policy (ESRB/2013/1).

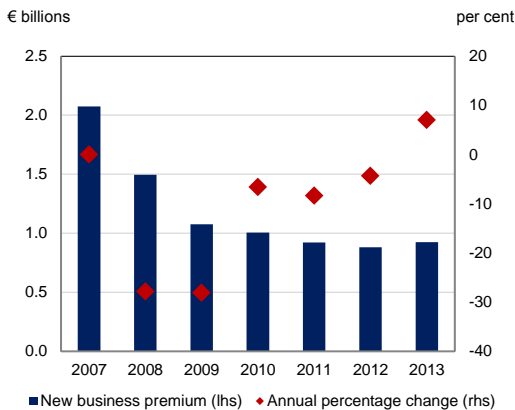
⁶ ESRB (2014) Handbook on operationalizing Macroprudential Policy in the banking sector.

⁷ For more information on new capital requirements introduced by the CRD IV and CRR see Box 7 in Central Bank of Ireland Macro-Financial Review 2013:II. See also Central Bank of Ireland (2013) Consultation on Competent Authority Discretions and Options in CRD IV and CRR.

3.3 Insurance sector

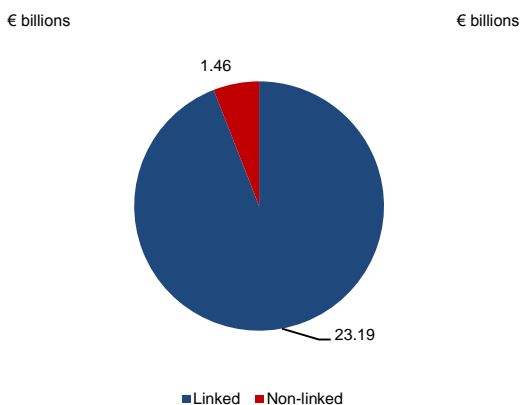
Despite facing difficult operating conditions, the Irish insurance sector has generally remained resilient to the continued weak macro-economic conditions and prolonged low interest rate environment. The agreement in the EU on Solvency II, which aims to harmonise insurance regulation across the EU, has removed considerable regulatory uncertainty for firms.

Chart 50: New business premium income for domestic life firms



Source: Central Bank of Ireland.
Notes: Data are annual premium equivalent (APE) which is a measure of what the premium would be if paid once for a year's period.

Chart 51: New business written by life insurers in 2013



Source: Central Bank of Ireland.
Notes: Data include Irish business and non-Irish business of all life insurers supervised by the Central Bank of Ireland.

The insurance sector in Ireland is diverse, encompassing life, non-life and reinsurance firms operating across a range of markets. There is a domestic life and non-life market and a large international sector. The international sector is concentrated in the variable annuity and reinsurance businesses, while a significant proportion of the non-life sector is foreign-risk focused.

Life sector

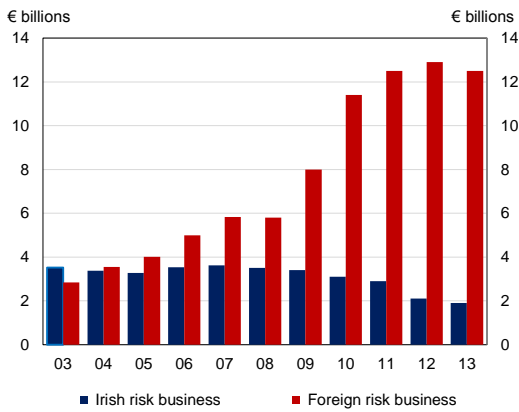
Since the last Review, the outlook for the Irish life insurance market has shown some signs of improvement. The majority of domestic life insurers improved their solvency position over the course of 2013.⁵⁷ The domestic life market stabilised in 2013 as the market increased for the first time since 2007 with premium growth of 7 per cent, although the market is 45 per cent below its peak value (Chart 50). This stabilising trend appears to be continuing into 2014 Q1. The main driver of the market in 2013 was the changing pension landscape. As defined benefit pension schemes faced challenges in meeting future funding commitments, schemes engaged in de-risking through the purchase of bulk annuities.⁵⁸ Up to end-October 2013, pension schemes invested €400 million in sovereign annuities.⁵⁹ Sales for 2014 are projected to be stable as the de-risking of pension schemes moderates.

However, weak economic conditions continue to impact the sector. The retail market remains price sensitive, particularly in the protection line which declined by 13 per cent in 2013. This was in part due to competitive pressures arising from UK domiciled insurers selling through Irish branches. Lapse rates are now showing signs of stabilisation, but remain at rates well above the established long-term norms.⁶⁰

The prolonged low interest rate environment is considered to present a significant risk to life insurers internationally.⁶¹ However, the Irish life sector is somewhat insulated from this risk as it predominantly offers unit-linked products to customers (Chart 51). The variable annuity (VA) sector, which primarily writes foreign-risk business, is exposed to interest rate risk as products are designed with built-in guarantees. VA firms typically

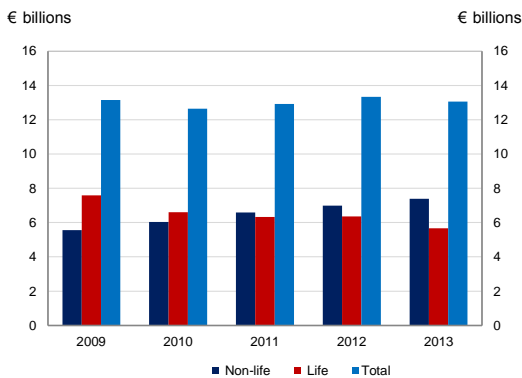
⁵⁷ Domestic life insurers comprise top five life insurance firms operating in the Irish life insurance market.
⁵⁸ A bulk annuity describes a contract between a pension scheme and an insurance company whereby the insurance company insures some or all of the liabilities of the pension scheme, and hence reduces the risk to the pension scheme in meeting its future payment commitments.
⁵⁹ See [press release](#) by Department of Social Protection, 22 October 2013.
⁶⁰ A policy lapse is the voluntary discontinuance or surrender of a policy before the expected maturity.
⁶¹ See [EIOPA Financial Stability Report, Autumn 2013](#).

Chart 52: Non-life gross written premium



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

Chart 53: Reinsurance gross written premium



Source: Central Bank of Ireland.

engage in reinsurance or hedging to reduce their exposure to this risk. The Central Bank conducted a stress-testing exercise in the final quarter of 2013 to assess the scope and scale of the risks posed by a prolonged low interest rate environment to the sector. The results of this exercise are currently being evaluated.

Non-life sector

The weak economic climate and low interest rates remain the main challenges impacting the two key components of non-life insurers’ profitability: underwriting profits and investment income.

The business written by non-life insurance firms domiciled in Ireland includes foreign-risk as well as Irish-risk business (Chart 52). The Irish risk business experienced declines in premium income for the sixth consecutive year in 2013. The market has seen some increases in premium pricing but the overall market remains very competitive. Competitiveness on pricing puts pressure on firms to contain costs. The severe wind and flood events in late 2013 and early 2014 are estimated to have cost the sector €130 million.⁶² Insurers may experience a rise in future reinsurance costs as reinsurers have seen more erratic weather patterns both domestically and globally. While there are expectations that the sector will experience premium growth in 2014 and 2015, there would be further pressure on profitability if this were not to materialise.

Given the compression in underwriting profits, insurers may look to bolster profitability through the generation of investment returns. Irish insurers have been particularly reliant on investment returns in this regard (see Box 7). However, investment returns are also being compressed and may prompt firms to alter their investment strategy to seek out higher earning but riskier assets. Together, the reductions in underwriting profits and investment returns may increase pressure on firms to release reserves. Reserve adequacy remains a focus of supervisors’ engagements with firms.

The last Review noted that the Central Bank had identified claims irregularities and insufficient reserves in RSA Ireland following an onsite review of claims cases in August 2013. This led to an injection of capital by the RSA Group.

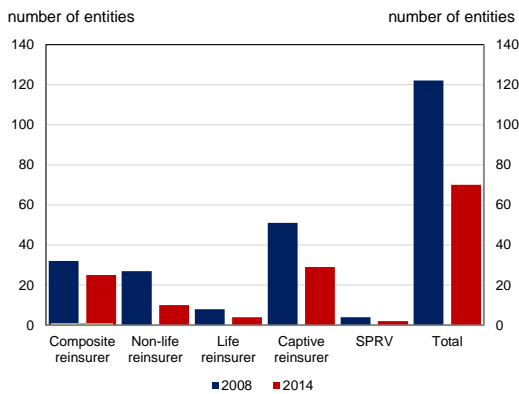
Despite the challenges faced by the sector, the majority of insurers strengthened their solvency position over the course of 2013.⁶³ A strengthening of the macro-economic environment would also serve to support the sector by promoting premium growth. There are, however, some uncertainties facing the market. While not a significant feature of Irish claims settlements at present, periodical payment orders (PPOs) are becoming more prevalent in the UK.⁶⁴ These developments could present significant challenges for insurers, impacting on all facets of the

⁶² This is an industry estimate.

⁶³ This analysis is based on the insurance firms designated as high-impact under the Central Bank’s PRISM supervisory model which account for approximately 93 per cent of the Irish risk market (excluding health insurance) by gross written premium.

⁶⁴ Rather than paying a lump-sum on settlement to cover all future needs, PPOs pay a proportion of the settlement as a continuing index-linked annual payment for the claimant’s lifetime.

Chart 54: Number of reinsurance entities



Source: Central Bank of Ireland.
Notes: SPRV are special purpose reinsurance vehicles.

business.

Reinsurance sector

Reinsurers with a presence in Ireland are subsidiaries of global groups and operate internationally. In 2013, the premium income of Irish firms was €13 billion (Chart 53).

Globally, 2013 was a low catastrophe event year with losses well below the long-run average which supported reinsurers' financial performance. However, the sector continues to face a number of operating challenges, namely, low interest rates, price/rate reductions, excess capacity, greater retention rates by primary insurers in an effort to reduce costs and diminishing reserve releases.

The inflow of alternative capital seeking non-correlating yield into the reinsurance market from third-party investors, such as hedge funds and pension funds, continues to put pressure on firms to reduce prices. This is particularly affecting the smaller players in the market who may struggle to compete. Also, large buyers of reinsurance are focusing on a small pool of well-diversified reinsurers. This is resulting in a tiering of the market worldwide, whereby the bigger firms continue to grow while smaller firms have to consolidate or leave the industry. The sector in Ireland, as measured by the number of regulated firms, has been diminishing in recent years as a result of such market changes (Chart 54).

The oversupply of capacity in the market is prompting reinsurers to explore new sources of business. While the reduction in retention rates by primary insurers in an effort to reduce costs has impacted on reinsurers, the finalisation of the implementation date for Solvency II may provide market opportunities. There may be an increased demand for reinsurance cover as primary insurers look to reduce their net risk profiles. The global pension crisis may prompt an increase in activity in the area of longevity reinsurance.

Regulatory developments

Although the effects of the financial crisis were less severe in the global insurance sector than in the banking sector, there is an international focus on renewed supervisory frameworks across the financial sector. Nine global insurance groups, of which seven have subsidiaries in Ireland, have been designated as "Global Systemically Important Insurers" (GSIs) and will face more stringent supervision and capital standards.

The implementation timelines and requirements of Solvency II have been agreed in the EU which removes considerable regulatory uncertainty for firms. Solvency II will introduce revised EU-wide capital requirements and risk management standards, with the aim of increasing protection for policyholders. While the development of Solvency II has been on-going for some time, firms face demanding timelines to ensure their readiness by the implementation date of 1 January 2016.

The European Insurance and Occupational Pensions Authority

(EIOPA) are conducting a stress-testing exercise of large insurers in the EU during 2014. The key elements to the exercise relate to testing resilience to:

- market risks under various historical and hypothetical scenarios;
- insurance risks; and
- the possibility of a prolonged period of low yields and low interest rates.

The nature of the insurance stress test is different to that in the banking sector in that the test is not designed to be a pass-or-fail exercise nor is it intended to automatically lead to a requirement to hold additional capital. The aim is to assess preparedness for different scenarios and to better inform the dialogue between firms and supervisors around the adequacy of a firm's risk management and mitigation framework.

Box 7: Low interest rate environment and non-life insurers' portfolio compositions

This box considers the impact of the low interest rate environment on the composition of non-life insurers' investment portfolios. From 2010 to 2013, 72 per cent of profits before tax on average in the Irish non-life insurance sector have been accounted for by investment income and gains (both realised and unrealised), and only 28 per cent from underwriting (Chart A). This composition is a significant shift from 2005, a typical pre-financial crisis year, when investment income accounted for 40 per cent of the total profits. The increasing share of investment income in total profits masks a significant decrease in investment returns over the same period.

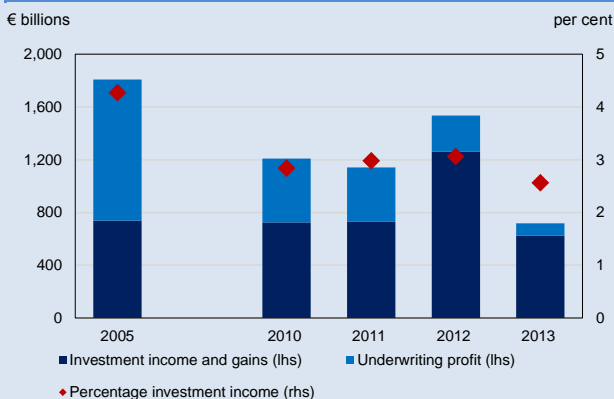
Increased competition, falling premium levels, frequent weather events and, for some insurers, a high expense base have led to a deterioration in underwriting profits. The prolonged low interest rate environment is making it increasingly difficult to compensate for weaker underwriting results. Investment income which averaged 4.27 per cent of the insurers' investment portfolios in 2005 fell to 2.56 per cent by 2013 (Chart A). This is a 40 per cent decrease in investment returns.

The current environment has put underwriting performance into the spotlight, requiring companies to revisit their business model and focus on underwriting discipline. These challenging conditions are also compelling non-life companies to revisit the composition of their investment portfolios. This resulted in a shift between 2009 and 2013 from relatively secure but low-yielding assets (typically government bonds) into higher yielding but potentially less secure assets (for example, corporate bonds).

In 2009 government bonds accounted for 35 per cent of the total assets of all non-life insurance companies regulated by the Central Bank but by 2013 this had fallen to 31 per cent (Chart B). Conversely corporate bonds had increased from 18 per cent to 24 per cent in the same period. Equity holdings fell from 8 per cent to 4 per cent of the total assets.

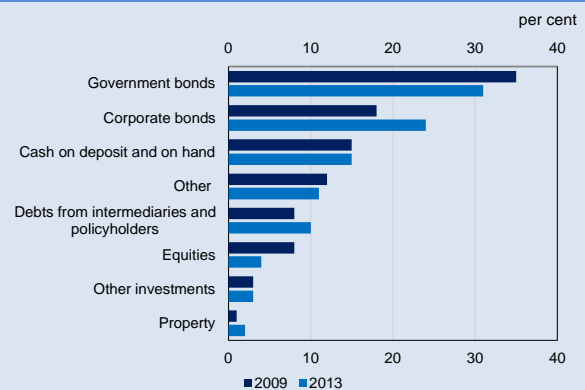
A further decrease in interest rates or investment yields would, in the short term, result in unrealised gains for non-life insurance companies but would, in the long term, make the conditions significantly more challenging. An increase in interest rates would have an opposite effect in the short and long term.

Chart A: Non-life firms' profit before tax and investment income



Source: Central Bank of Ireland.
Notes: Profit before tax data relate to the Central Bank of Ireland regulated non-life sector and exclude Quinn Insurances Ltd (under administration). Percentage investment income is income from investments as a percentage of insurers' investment portfolios.

Chart B: Non-life firms' investment asset allocations

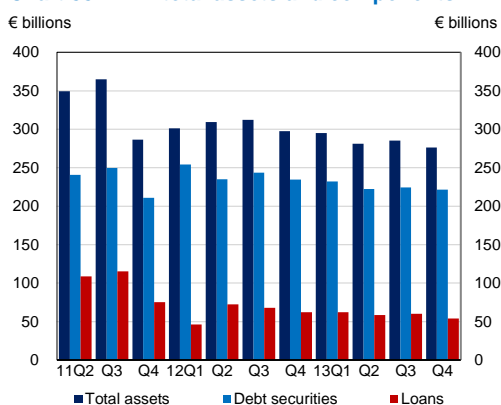


Source: Central Bank of Ireland.

3.4 Money market funds and other intermediaries

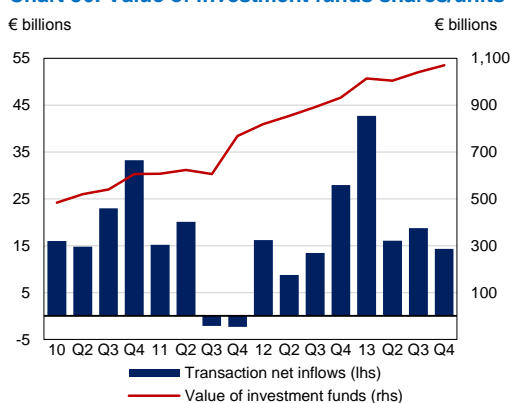
Irish-domiciled investment funds, money market funds and financial vehicle corporations amounted to €1.85 trillion of assets in 2013 Q4. Although many of these funds are domiciled and administered in Ireland much of the investment management activity relating to them takes place in regulated entities in other jurisdictions. As the assets and liabilities of these entities are predominantly located outside of Ireland (and in some cases outside of the euro area), the potential risks to the Irish domestic economy are low. However, developments in these sectors may impact the wider financial system.

Chart 55: 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.

Chart 56: 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.

Money market funds

Money market funds (MMFs) are a key component of the euro area money supply and are an important source of funding for European banks. About 30 per cent (by asset value) of euro area MMFs are located in Ireland and most of these are constant net asset value funds. The main challenge faced by Irish-domiciled MMFs over the course of 2013 was the continued low yield environment. In addition, in the middle of the year, MMF flows were impacted by investor reactions to the prospect of a reduction in quantitative easing by the US Federal Reserve.

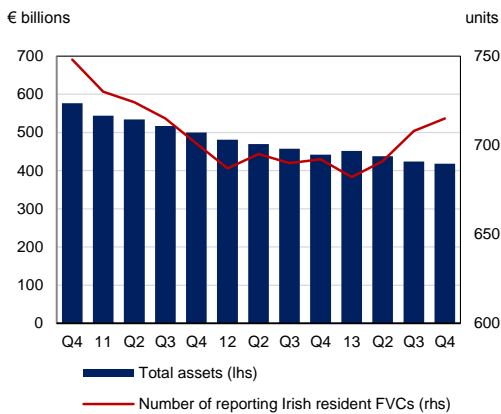
As average MMF yields declined in 2012 and the early part of 2013, many MMFs waived their expense fees in order to maintain a positive return for their investors. In some cases, where net yields were negative, MMFs chose to absorb the income losses by redeeming fund units at zero through compulsory redemptions. Investors withdrew around €18 billion from MMFs in May and June 2013, because of the low interest rate environment and volatility in bond markets. In the year to 2013 Q4, total MMF assets declined by €21 billion to €276 billion, with MMFs reducing their holdings of debt securities and loans given to other entities in the form of repurchase agreements (Chart 55).

Other investment funds

Apart from MMFs, there are other investment funds which cover a broad spectrum of investor risks ranging from index-tracking funds, passive-strategy funds and actively-managed funds. These funds invest in a variety of assets with different income, volatility and liquidity characteristics – from equities, high-grade fixed income to private equity. Exchange traded funds (ETFs), commonly used to track different indices, are also popular with investors.

The long-run trend of strong growth in Irish-domiciled investment funds continued over the past year. Net asset values of these funds broke through the €1 trillion mark for the first time in 2013 Q1, rising to €1.07 trillion by 2013 Q4 (Chart 56). This was largely driven by net inflows of €92 billion over the year. In the first half of the year, there was a clear investor preference for

Chart 57: Total assets and number of reporting Irish resident FVCs



Source: Central Bank of Ireland.

holdings of debt securities, with a reversal in the second half of the year as investors increased their equity holdings. This was due to significant increases in equity prices in Europe and the US over 2013. Equity markets in emerging countries performed less well over the year, but Irish investment funds had relatively small holdings of securities with exposure to these markets.

Financial vehicle corporations

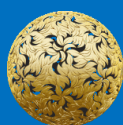
Financial vehicle corporations (FVCs) are special purpose vehicles that carry out securitisation transactions. The majority of FVCs convert securitised loans from banks into asset-backed debt securities. Since 2007, the global appetite for securitisation has declined. Rating downgrades of debt securities backed by securitised loans originated by euro area monetary financial institutions meant they were no longer eligible as collateral for ECB funding. This has caused the liquidation of some of the larger multi-billion euro vehicles in Ireland over the past year.

Irish resident FVCs' assets continued their trend of overall decline seen since 2010 Q4, falling by €23 billion to €418 billion in the year to 2013 Q4 (Chart 57). Despite this, the number of reporting entities started to increase from 2013 Q1 onwards, increasing to 715 by 2014 Q4. This reflects a move away from the larger FVCs towards smaller securitisation type vehicles and the first signs of stabilisation for the sector as a whole.⁶⁵ Finally, the volume of loans securitised by Irish banks declined, with a fall of €6 billion to €42 billion at end-2013.

⁶⁵ Securitisation vehicles are moving away from the larger type vehicles such as mortgage backed securities (MBS) and into smaller type transactions such as acquisitions of commercial property loans and auto loans, for example.

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