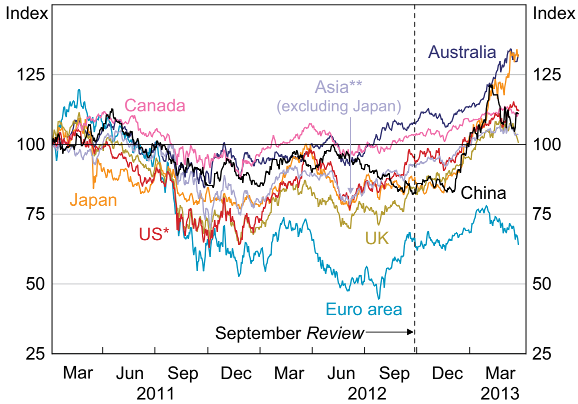
1. The Global Financial Environment

Despite the recent uncertainty associated with the handling of the sovereign bailout of Cyprus, global financial conditions have improved overall since the September *Review*. In large part, this reflects various policy developments in Europe that had generally strengthened market perceptions of the ability of the euro area to deal with its sovereign debt and banking sector problems while keeping the monetary union intact. Prices of peripheral euro area sovereign bonds and euro area bank shares have risen since the middle of 2012, despite falls in recent weeks. More broadly, prices for a wide range of other risk assets globally have risen, including bank share prices in a number of other countries, implying that risk appetite has increased (Graph 1.1). Together with the improved sentiment towards Europe, the partial resolution of the US 'fiscal cliff' around the turn of the year and further signs of recovery in some of the major economies have boosted confidence in recent months.

Even though sentiment has improved, the euro area still faces significant challenges to its stability from fiscal and banking sector problems. Political and policy implementation risks also cloud the outlook for economic growth and financial stability in the region. The negotiations over the rescue package for Cyprus in recent weeks highlight the problems some euro area countries are still facing and the challenges of resolving them. Accordingly, it is too early to tell whether the improvement in market sentiment is the beginning of a sustained recovery, or merely a temporary upswing; since the onset of the global financial crisis, there have been a number of periods of optimism which ultimately turned out to be short-lived as financial markets refocused on unresolved underlying problems.

Graph 1.1
Banks' Share Prices
1 January 2011 = 100



* Market capitalisation-weighted index of 18 large US banks
** MSCI financials index
Source: Bloomberg

The Euro Area Crisis and Sovereign Debt Markets

There were a number of developments over the past few quarters that helped boost confidence towards the euro area, with positive spillovers for global market sentiment. The European Central Bank's (ECB's) announcement of its Outright Monetary Transactions (OMT) program in September, even though it has yet to be activated, was pivotal in reassuring markets that the ECB would do all that it can to preserve the euro. Under this program, the ECB would purchase sovereign debt of euro area countries that are meeting the terms of their European Union (EU) assistance programs but still facing significant financing pressures, with the aim of bringing down sovereign borrowing costs for these countries and safeguarding the monetary transmission mechanism in the euro area. When it was announced, it was widely expected that Spain would request a full EU assistance program in order to qualify for OMT. However, the implicit support provided by OMT has brought down Spanish sovereign bond yields and so far avoided the need for the country to go down this route. More recently, Ireland and Portugal – which are already on EU assistance programs – have successfully auctioned sovereign bonds, thereby moving closer to 'full market access' which is another precondition for OMT purchases.

After protracted negotiations, the EU, ECB and International Monetary Fund (IMF) agreed to adjust Greece's aid program and debt position in late November. The interest rate charged on loans extended by other euro area nations was lowered, the maturity of existing loans was extended and a buyback of Greek bonds held by private sector investors was carried out. These adjustments, along with agreed fiscal and structural reforms, were designed to put Greece's sovereign debt position on a more sustainable path. However, there is still considerable doubt about whether Greece can meet its new fiscal targets, particularly given the country's weak economic performance.

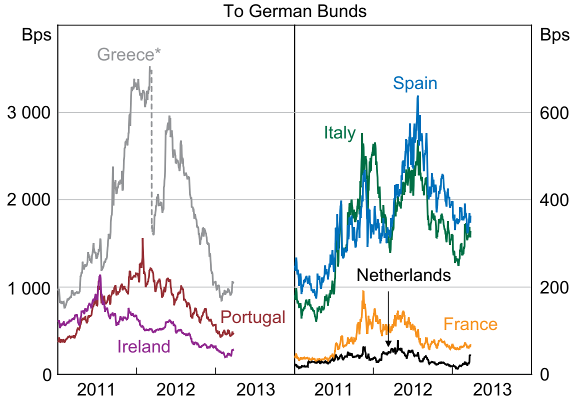
In Spain, an independent stress test of the banking system completed in late September provided greater clarity about the size of capital shortfalls, estimating the public cost of bank recapitalisation at around €40 billion (considerably lower than the €100 billion that was potentially available from the EU). The recapitalisation of troubled banks commenced in December, together with the transfer of problem loans to a newly created 'bad bank'. Though these measures appear to have restored some confidence and improved funding conditions, Spain's weak economy and property market conditions are still creating a challenging environment for many of its banks.

At the European level, broad agreement has been reached on the implementation of a single bank supervisory mechanism, expected to come into effect in about a year. The ECB will have ultimate responsibility for supervising all euro area banks, although it will directly supervise only the largest banks in each country, delegating supervision of the others to national supervisors. Under this new supervisory framework, it is expected that the European Stability Mechanism (ESM), the euro area's permanent bailout fund, will be able to directly recapitalise banks that experience losses in the future. However, there has been opposition from some countries to allowing the ESM alone to recapitalise euro area banks that have had to write down legacy assets, with the suggestion that national governments be required to boost these banks' capital before they receive any funds from the ESM. If the ESM were to be limited in this way, it could make the single supervisory mechanism less effective at reducing the destabilising link between sovereign and bank balance sheets.

More recently, there has been an increase in market uncertainty associated with the handling of an EU/IMF rescue package for Cyprus, which will be the fourth euro area country to receive such a package since the sovereign debt crisis began. To prevent Cyprus' sovereign debt burden rising to an unsustainable level, the EU and IMF had insisted that the country mobilise around €6 billion of internal resources to go with their €10 billion loan. Initially, there was a proposal to do this via a one-off 'tax' on deposits in Cypriot banks, including on deposits under €100 000 that were covered by a deposit guarantee scheme, though this was met with widespread opposition. Following further negotiations, an alternative approach was agreed in recent days in which insured depositors would be protected but uninsured depositors and other bank creditors would face large losses as part of a significant restructuring and downsizing of the country's banking system. Even though it did not go ahead, the unusual step of proposing a haircut on insured deposits could in the future raise concerns about the credibility of other EU deposit guarantees.

Even though the euro area economy remains weak, the ECB's commitments and other policy developments have generally bolstered investor confidence in euro area periphery government bonds, allowing spreads on these bonds to narrow (Graph 1.2). While spreads have widened again somewhat in response to recent events such as the inconclusive Italian election and the Cyprus bailout, the reaction has so far been limited, with peripheral bond yields still significantly lower than they were in the middle of 2012.

Graph 1.2
Euro Area Government 10-year Bond Spreads
To German Bunds

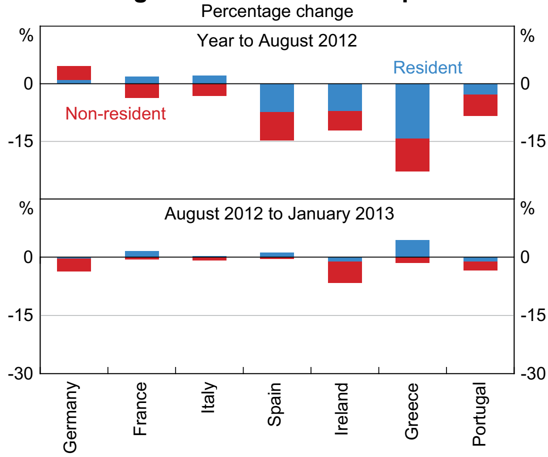


* Break on 12 March 2012 due to the first private sector debt swap
Source: Bloomberg

The easing of concerns about a possible break-up of the euro area since the middle of last year has also helped staunch some of the capital outflows from the troubled euro area economies that had been evident over the previous year or so, though financial fragmentation in the region is still greater than before. Since the September *Review*, safe-haven deposit flows from peripheral economies into Germany have slowed considerably and some countries, Greece in particular, have experienced a notable repatriation of domestic deposits (Graph 1.3). Foreign holdings of sovereign bonds issued by some troubled countries, such as Spain, have increased in recent quarters, after declining over the previous year.

Outside of the euro area, government bond yields in most advanced economies have been relatively steady, or up a little at the long end of the yield

Graph 1.3
Change in Private Sector Deposits*
Percentage change



* Includes deposits from monetary financial institutions
Source: central banks

curve, over the past six months. Although yields remain low and other indicators of demand for safer sovereign assets strong, some of these governments have nonetheless tightened fiscal policy to address their high debt levels. If the fiscal adjustment is front-loaded, it could stymie the economic recoveries in those countries, which would make the task of repairing bank balance sheets more difficult. In this respect, the partial resolution of the 'fiscal cliff' in the United States was a positive development in that it averted a significant near-term tightening. While some automatic spending cuts did commence in March, they are not anticipated to be severe enough to derail the emerging recovery.

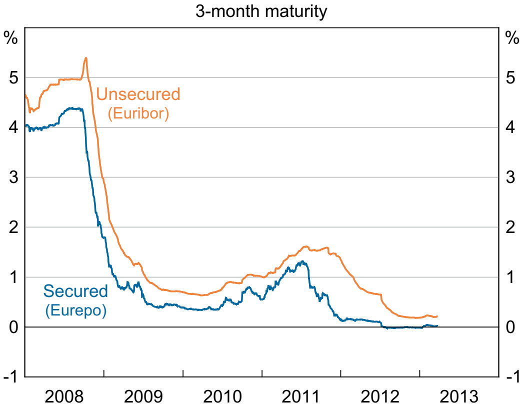
In the United Kingdom, however, fiscal tightening has been quite extensive and this might have had a greater effect on economic growth. Given that the profitability of UK banks has been lower than at banks in some other non-euro area advanced economies (see below), the implications of weaker growth for the financial system could also be greater. Although Moody's downgrade of the United Kingdom's sovereign credit rating in February had little lasting effect on UK bond yields, sovereign yields more generally remain sensitive to political or other shocks. Since many financial institutions are highly exposed to the debt of their sovereign, a sudden large increase in yields would impose significant losses on banks, insurance companies and pension funds.

Bank Funding Conditions and Markets

The improvement in global market sentiment over recent quarters has been reflected in easier funding conditions for many euro area banks. Spreads on short-term unsecured interbank loans are now around their lowest levels since mid 2007, and differentiation in spreads across banks has narrowed as perceptions of relative credit quality have converged somewhat (Graph 1.4). Secured (repo) lending rates have drifted above zero in recent months, after being slightly negative for most of the second half of last year. The volume of interbank lending remains low, however, partly because many banks are still flush with central bank funding, despite repayments by some. Around €240 billion out of a total of around €1 trillion in three-year funding provided by the ECB in late 2011 and early 2012 was repaid early by euro area banks. Data on ECB lending by country indicate that banks from France, Germany and Spain accounted for a significant share of the early repayments.

Euro area banks' access to term funding markets has also improved since the middle of 2012. Yields on

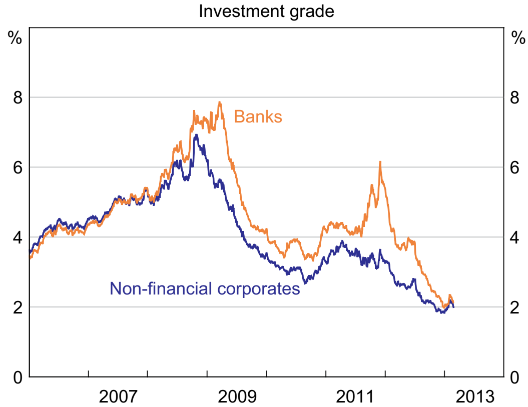
Graph 1.4
Euro Interbank Interest Rates
3-month maturity



Source: Bloomberg

bonds issued by euro area banks have declined over this period and differences in the borrowing rates faced by individual banks have narrowed, though peripheral banks continue to face a sizeable premium compared with banks from the core countries. Euro area bank bond yields are now around the same levels as bond yields for similarly rated non-financial corporates, after having been above them for the past few years, which is consistent with the perceptions of reduced default risk among banks (Graph 1.5).

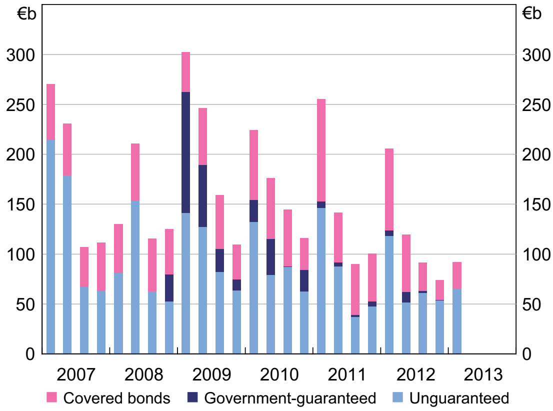
Graph 1.5
Euro Area Corporate Bond Yields
Investment grade



Sources: Bank of America Merrill Lynch; Bloomberg

Despite the reduction in yields, euro area bank bond issuance has remained subdued in recent months, partly because weak asset growth has limited banks' financing needs. Euro area banks have issued around €165 billion in bonds since October last year (Graph 1.6). This is well down on the issuance levels seen in the first half of 2012, though a large part of that earlier issuance was retained within the banking sector to provide it with additional collateral for central bank funding; there has been less of this collateral-driven issuance recently as banks have been reducing their reliance on central bank financing. Covered bonds have accounted for a smaller share of recent bank bond issuance than was the case in early 2012, consistent with improved market appetite for unsecured debt. In line with weak economic activity, euro area banks' aggregate

Graph 1.6
Euro Area Banks' Bond Issuance*



* March 2013 is quarter-to-date

Sources: Bloomberg; Dealogic; RBA; Thomson Reuters

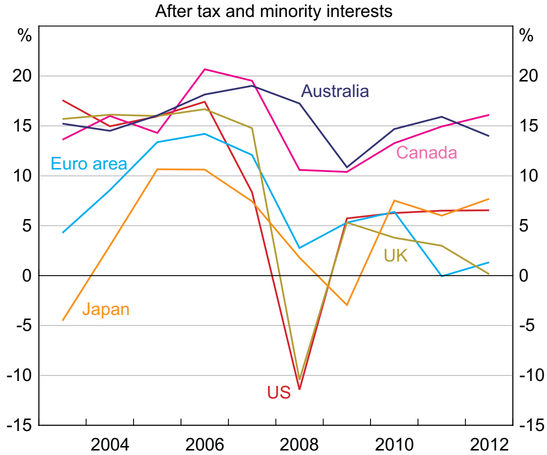
outstanding deposits have been contracting in recent quarters, despite the recent increases in deposits in some of the region's most troubled economies (discussed above).

Bank funding conditions in the major banking systems outside the euro area have continued to improve, with bank bond yields falling further over the past six months. Nonetheless, bond issuance by banks is still generally subdued by historical standards. Partly this reflects slow credit growth in these economies, but many banks have also been continuing to increase the share of their funding from customer deposits. Some banks have been trying to reduce their reliance on market-based sources of funding that are perceived to be less stable. The shift towards deposit funding is also likely to have been partly demand driven, as investors have been attracted to the safety of deposit insurance in a more uncertain and volatile global financial environment. In the United States, for example, temporary unlimited coverage of non-interest bearing deposits had been in place between October 2008 and end 2012, coinciding with a period in which banks' non-interest bearing deposits increased substantially; a combined cap of US$250 000 per depositor was reinstated from the beginning of this year.

Banks' Profitability and Capital

Profits of the large banks in most of the major advanced economies increased last year, though returns on equity generally remain well below pre-crisis averages (Graph 1.7). In the euro area, aggregate return on equity for the largest banks increased to around 1¼ per cent in 2012 after being slightly negative in 2011. Much of this increase came from improved trading income in the latter part of the year, and the absence of special factors that had affected performance in 2011, such as goodwill charges at large Italian banks and writedowns on holdings of Greek debt. Underlying profitability in the euro area is still being weighed down, though, by weak asset performance, balance sheet contraction and narrow net interest margins. In the United Kingdom, weak net interest income and significant legal costs arising from earlier inappropriate business practices, notably the mis-selling of payment protection insurance, have continued to weigh on the large banks' profits; aggregate return on equity for the five largest UK banks was close to zero in 2012, down from 3 per cent in 2011.

Graph 1.7
Large Banks' Return on Equity*
After tax and minority interests



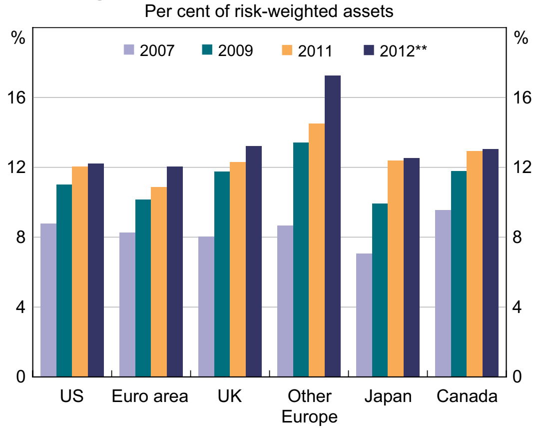
* Includes the six largest US banks, eight largest listed euro area banks, four largest UK banks, three largest Japanese banks, six largest Canadian banks and four largest Australian banks; adjusted for significant mergers and acquisitions; reporting periods vary across jurisdictions

Sources: Bloomberg; RBA; banks' annual and interim reports

While the profitability of US banks has improved over recent years, profit growth has been limited by the slow recovery of the US economy and, in a number of cases, ongoing legal expenses associated with the resolution of previous poor mortgage practices. Muted credit growth and narrower net interest margins associated with the prolonged low interest rate environment have also weighed on banks' net interest income. Loan-loss provisions have now broadly stabilised after falling over the previous few years. Across all institutions insured by the Federal Deposit Insurance Corporation (FDIC) in the United States, the share of loss-making institutions declined to 14 per cent in the December quarter of 2012, down from 20 per cent the year before, but above the pre-crisis average of about 6 per cent.

Most large banks in the major banking systems have continued to strengthen their capital positions over the past year in response to market and regulatory pressures (Graph 1.8). On a pre-Basel III basis, aggregate Tier 1 capital ratios of large banks are now at least 12 per cent in all of the major banking systems, a significant increase from the levels of around 8 per cent that were common before the crisis. The large Swiss and Nordic banks have been subjected to capital requirements that are notably higher than those in some other jurisdictions.

Graph 1.8
Large Banks' Basel I/II Tier 1 Capital*
Per cent of risk-weighted assets



* Tier 1 capital ratios across banking systems are subject to definitional differences; reporting periods vary across jurisdictions; includes the weighted average of 18 large US banks, 52 large institutions from across the euro area, the four largest UK banks, 13 large other European banks, the three largest Japanese banks and the six largest Canadian banks

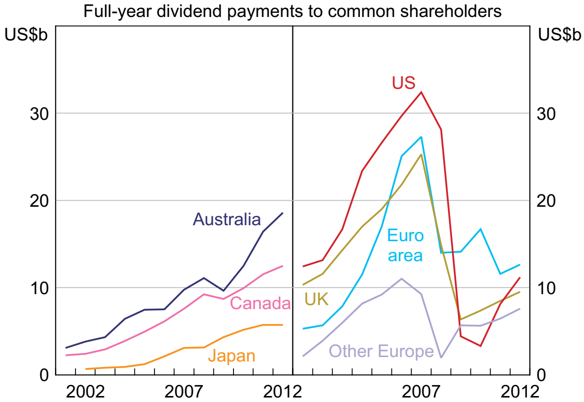
** Latest available data used where banks have not reported their 2012 full-year results

Sources: Bloomberg; FDIC; RBA; SNL Financial; banks' annual and interim reports

In the euro area, the large banks increased their aggregate Tier 1 capital ratio by a little over 1 percentage point over the year to December, to 12 per cent, mainly by reducing their risk-weighted assets. There remains a large degree of dispersion, though, as some euro area banks are still struggling to accumulate capital due to their low profitability and equity valuations. Accordingly, a number of them have needed to be recapitalised in recent months, especially in the troubled peripheral economies. As noted, the Spanish banking sector is undergoing considerable restructuring, with the four state-controlled banks receiving public capital injections in December and recapitalisations of a number of other Spanish banks having occurred in March. In accordance with Greece's EU/IMF aid program, the four major Greek banks are expected to be recapitalised soon, while the Italian bank Monte dei Paschi di Siena recently received its second injection of government capital. Public interventions have also occurred in a number of other countries: SNS Reaal (the fourth-largest bank in the Netherlands) was nationalised in early February and Dexia received its second capital injection from the Belgian and French governments in December.

As their profitability is still generally subdued, banks have sought to bolster their retained earnings and therefore capital by limiting their dividend payouts. For example, many banks in Europe (including the United Kingdom) are still paying little or no dividends to common shareholders, as their profitability remains weak and some are yet to fully repay public capital received during the crisis (Graph 1.9). By contrast, dividends paid by large banks in the United States have been increasing for the past couple of years as their profitability has recovered, though they remain well below pre-crisis levels and the resulting payout ratios are below average. Some large US banks have recently announced plans to further increase their capital distributions (through higher dividends and/or share buybacks) following the latest round of supervisory stress tests. The US Federal Reserve approved most large US banks' capital plans, though JP Morgan and Goldman Sachs received conditional approval owing to apparent weaknesses in their capital planning processes; these two institutions will be required to resubmit their plans by the end of September.

Graph 1.9
Large Banks' Dividend Payments*
Full-year dividend payments to common shareholders



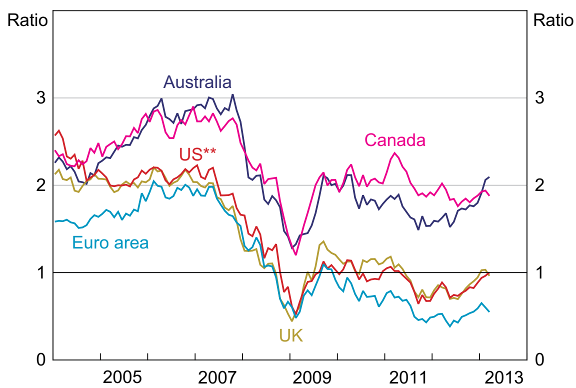
* Reporting periods vary across jurisdictions; includes the six largest US banks, eight largest listed euro area banks, four largest UK banks, 12 large other European banks, the three largest Japanese banks, six largest Canadian banks and four largest Australian banks
Sources: APRA; Bloomberg; RBA; SNL Financial; banks' annual and interim reports

Another way banks have been able to increase their regulatory capital ratios is by reducing their risk-weighted assets, such as by allowing asset portfolios to run off or by selling them completely. This kind of deleveraging has been particularly notable among euro area banks over the past year given the greater difficulties these banks have had increasing their capital. Across the major banking systems, reductions in risk-weighted assets over the past few years have coincided with a steady fall in average risk weights. In repairing their balance sheets, banks have tended to shed non-core assets with above-average risk weights, and have increased their holdings of lower-risk securities, such as government bonds, which will help them meet forthcoming liquidity requirements under Basel III. There have been concerns, however, that some banks may be overstating their reported capital positions by using overly optimistic assumptions in their internal risk models. This has prompted a number of global and country-level initiatives to improve the reliability and consistency of banks' risk-weight calculations (see the 'Developments in the Financial System Architecture' chapter). As discussed further below, a few European jurisdictions are also concerned that their banks may be forbearing on problem loans and that these banks' capital positions may weaken if economic conditions do not recover as anticipated.

Investor scepticism over banks' asset valuations may be one factor explaining the persistently low equity valuations of euro area banks. The price-to-book ratio – the market valuation of equity compared with the book valuation – remains well below 1 for euro area banks, despite increasing since the first half of 2012 (Graph 1.10). Low equity valuations may also reflect investors' expectations that banks' profitability will remain subdued and/or an additional risk premium to compensate for heightened uncertainty. While the price-to-book ratios for US and UK banks had also been below 1 for much of the past two years, they have recently been much closer to 1, consistent with the improved investor sentiment towards these banks.

Looking ahead, banks' capital positions will also come under pressure as the new Basel III bank capital standards come into full effect. Implementation of the new standards, which was due to begin this year,

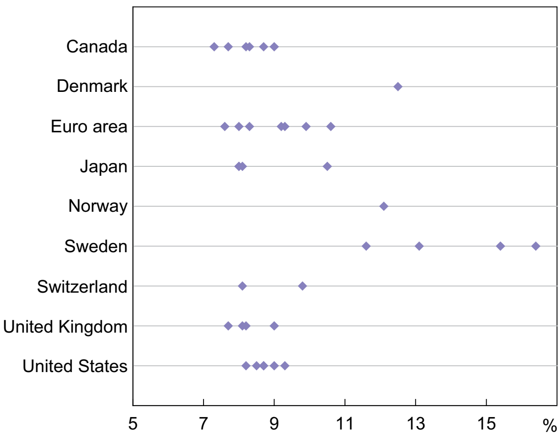
Graph 1.10
Banks' Price-to-book-value Ratios*



* Monthly; March 2013 observation is the latest available
** Diversified financials
Source: Bloomberg

was recently delayed in Europe (including the United Kingdom) and the United States. Even so, most of the large global banks have started reporting their capital ratios on a Basel III basis. The Basel III common equity Tier 1 capital ratio, which includes stricter definitions of common equity and higher risk weights, is about 2½ percentage points lower for these banks on average compared with current definitions. They all have a ratio above 7 per cent though, according to their most recent reports, and therefore are above the minimum that will eventually be required under the Basel III framework (Graph 1.11). However, many of these banks will need to improve their common equity positions further, partly to meet the extra capital buffers that will be required of them for being systemically important.

Graph 1.11
Basel III Common Equity Tier 1 Capital Ratios*
December 2012

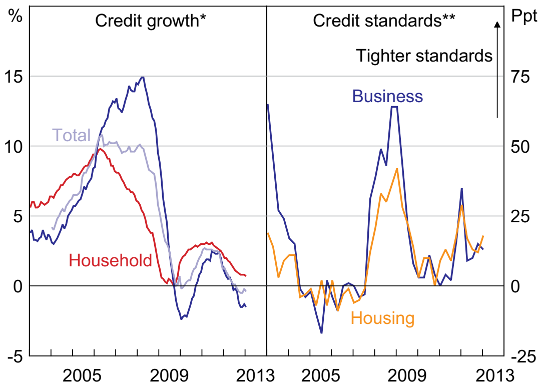


* Banks' estimates; latest available data used where banks have not reported for December 2012; largest banks by location of head office which have reported their capital ratio assuming full implementation of Basel III
Source: banks' financial disclosures

Credit Conditions and Asset Quality

Reflecting weak economic activity and market pressures on banks, credit conditions have remained tight in the euro area in recent quarters. Despite banks reporting some improvement in their access to funding, the ECB's bank lending survey showed that a net balance of euro area banks continued to tighten their business and household loan standards in the September and December quarters last year (Graph 1.12). The survey also showed that credit demand had fallen further, though this was partly because some larger businesses were substituting towards (relatively inexpensive) non-intermediated debt financing. Aggregate euro area credit contracted slightly over the year to January, as modest (and declining) growth in household credit was more than offset by a fall in business credit. The contraction in credit has been particularly pronounced in the more troubled economies in the region, particularly in Greece, Portugal and Spain. The pick-up in corporate bond issuance in the euro area since 2011 has been notable, particularly given that the euro area has traditionally been more reliant on intermediated finance. That said, smaller businesses generally do not have access to alternative sources of finance and so a continuation of tight lending conditions could impede economic activity.

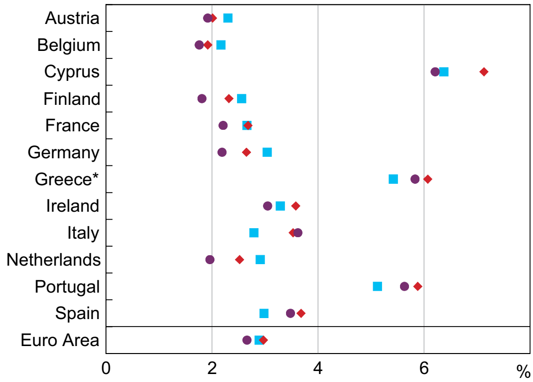
Graph 1.12
Euro Area Credit Conditions



* Year-ended; series not adjusted for securitisations prior to 2009
** Net percentage of respondents reporting tighter standards
Sources: ECB; RBA

Despite there being no change in the ECB policy rate since July, there was a further reduction in interest rates on new housing and business loans in the second half of 2012, including in the troubled peripheral economies (Graph 1.13). The reduction in rates has unwound some of the divergence in lending rates between the core and peripheral economies that had opened up over the past few years. Even so, businesses in France and Germany

Graph 1.13
Average Interest Rates on New Corporate Loans



* Average interest rate on outstanding corporate loans
Source: ECB

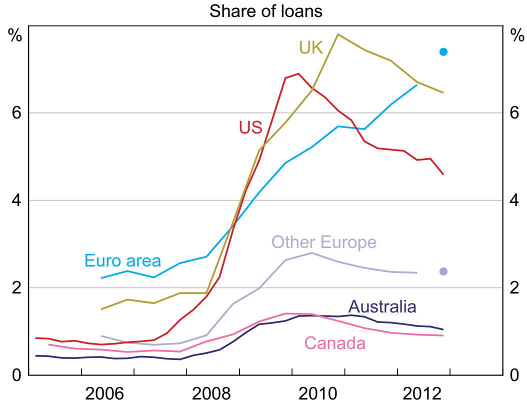
continue to face lending rates around 1 percentage point less than those in Ireland, Italy and Spain and about 3 percentage points less than in Greece and Portugal. With the exception of Spain, mortgage rates in the southern periphery are also still considerably above those in Germany.

A further deterioration in euro area banks' asset performance over 2012, associated with weakening economic activity, is one factor that has been contributing to the tight credit conditions in that region. The aggregate non-performing loan (NPL) ratio of the large euro area banks is estimated to have risen to about 7½ per cent at the end of 2012, up from about 2¼ per cent in mid 2007, driven by banks in the most troubled countries, as well as those with significant exposure to the Spanish property market (Graph 1.14). Particularly large increases of more than 2 percentage points over the year were recorded in the NPL ratios for a number of banks based in Cyprus, Ireland, Italy and Spain (information about NPL developments at Greek banks is limited). The two largest Spanish banks, which are more geographically diversified than their smaller counterparts, reported only modest increases in their NPL ratios over 2012.

Outside the euro area, credit has also contracted in the United Kingdom over the past year. To improve the availability of credit, the UK authorities introduced a 'Funding for Lending Scheme' in July last year which provides access to lower-cost funding for banks that expand their lending to the real economy. Although nearly £14 billion was borrowed under the scheme during the December quarter 2012, lending by scheme participants still contracted by £2½ billion over the same period. However, a fall in borrowing costs and an increase in credit over January suggests that the scheme may have gained more traction this year. Credit growth in the United States remains subdued, as an ongoing contraction in housing credit has partly offset faster growth in business and consumer credit.

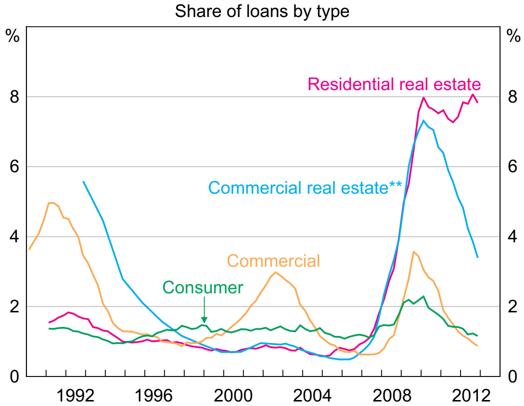
Asset performance in the major banking systems outside the euro area has continued to improve but is still weaker than the pre-crisis period in most advanced economies, consistent with generally subdued macroeconomic conditions. In the United States, the aggregate NPL ratio for the largest banks declined to 4½ per cent in December 2012, down from a peak of 7 per cent in early 2010 (Graph 1.14). The NPL ratio for residential real estate loans remains high, however, and rose further over 2012, partly as a result of new regulatory guidance requiring banks to reclassify loans to individuals that have filed for bankruptcy as non-performing (Graph 1.15). While conditions in the US housing market remain

Graph 1.14
Large Banks' Non-performing Loans*
Share of loans



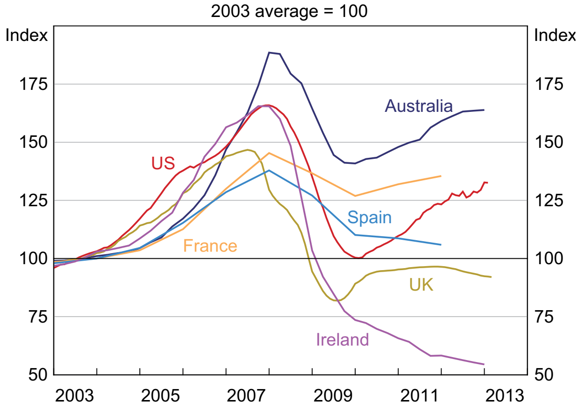
* Definitions of 'non-performing' differ across jurisdictions, and in some cases exclude loans that are 90+ days past due but well secured; includes 18 large US banks, 52 large institutions from across the euro area, 13 large other European banks, four largest UK banks, the six largest Canadian banks and the four largest Australian banks; latest available data used where banks have not reported for December 2012; reporting periods vary across jurisdictions
Sources: APRA; RBA; SNL Financial; banks' annual and interim reports

Graph 1.15
United States – Non-performing Loans*
Share of loans by type



* FDIC-insured institutions
** Includes construction and development loans
Source: FDIC

Graph 1.16
Commercial Property Prices
2003 average = 100



Sources: Bloomberg; Jones Lang LaSalle Research; Moody's and Real Capital Analytics; RBA

challenging, indicators such as construction activity and house prices have started to pick up. There are still a large number of borrowers in the United States facing repayment strain that have been reluctant to sell because they have been in negative equity. The recent pick-up in house prices could therefore encourage them to sell their homes, potentially tempering the overall recovery in house prices. Asset performance in other parts of the US banks' portfolios has continued to improve in recent quarters; NPL ratios for the commercial and consumer portfolios are now at levels usually seen during sustained economic expansions, while the ratio for the commercial real estate portfolio has also declined sharply from its peak, consistent with the partial recovery in commercial property prices (Graph 1.16).

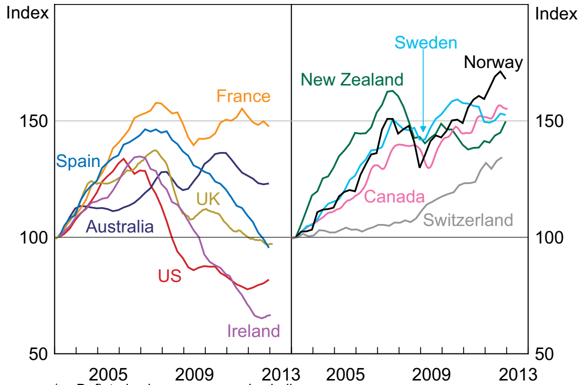
While the large banks' aggregate NPL ratio has also been declining in the United Kingdom, it remains elevated at around 6½ per cent and the authorities there have raised concerns similar to those in the euro area about the adequacy of banks' provisioning for problem loans. Around one-third of UK banks' commercial property exposures are believed to be subject to forbearance, in that banks have restructured or otherwise modified the terms of loans to help struggling borrowers cope with the repayments and thereby avoiding having to classify the loan as non-performing. The low level of corporate insolvencies in the United Kingdom, despite the run-up in debt during the boom, is thought to be linked to forbearance; 8 per cent of UK businesses report that they can only meet interest payments on their debt and are unable to pay down principal. It is also estimated that between 5 and 8 per cent of UK mortgages have been subject to forbearance, such as conversion to interest-only terms. Helping viable borrowers recover from temporary repayment difficulties can be prudent, but if banks are overly optimistic about the potential for borrowers to sustainably recover, it could result in large increases in their loan losses.

The European authorities have also highlighted forbearance of commercial property loans as a potential risk to banks' asset performance in some euro area countries. Commercial property prices remain depressed in many euro area countries, which has resulted in commercial real estate exposures generating concern for several euro area banks (Graph 1.16). For example, the problems of the recently nationalised Dutch bank SNS Reaal stemmed mainly from its domestic and Spanish commercial property portfolios.

Outside the United States, the United Kingdom and the euro area, banks in some other advanced economies have been experiencing more favourable asset performance in recent years, amid stronger economic activity and rapid house price appreciation (Graph 1.17). Several smaller open economies, including Canada, New Zealand, Norway, Sweden and Switzerland, have experienced faster credit growth and buoyant housing market conditions fostered by low interest rates and strong competition for mortgages. In some of these countries, monetary policy may have been constrained by exchange rate regimes and related considerations. Because a prolonged period of low interest rates can result in a build-up of credit risk long before inflation starts to rise, the authorities have instead sought to restrain mortgage lending through prudential measures, such as higher capital requirements and tighter lending standards. The authorities in Sweden and Norway, for example, have proposed increased capital requirements for residential mortgages through higher risk weights and capital add-ons, to address their concerns that banks' own models do not fully capture the systemic risks from their lending. Similar concerns prompted the Swiss authorities to recently activate their Basel III countercyclical capital buffer: Swiss banks will be required to hold additional common equity Tier 1 capital of 1 per cent of risk-weighted assets by September 2013 against their Swiss residential property exposures. In Canada, the government has tightened the criteria for government-guaranteed mortgage insurance in response to concerns about rising household indebtedness, since the government – rather than lenders – would bear the initial losses from any future downturn.

The strong pick-up in residential property prices in New Zealand recently, particularly in Auckland and Christchurch, has been accompanied by an increase in high loan-to-valuation ratio (LVR) lending. The Reserve Bank of New Zealand (the bank supervisor) has been investigating the possible role for prudential tools, such as sectoral capital requirements and restrictions on high-LVR mortgages, to constrain credit growth and reduce any overheating in housing markets. Any deployment of these kinds of tools would have implications for the major

Graph 1.17
Real Residential Property Prices*
March quarter 2003 = 100



* Deflated using consumer price indices
Sources: BIS; Bloomberg; RBA; RP Data-Rismark; SNB; Teranet-National Bank; Thomson Reuters

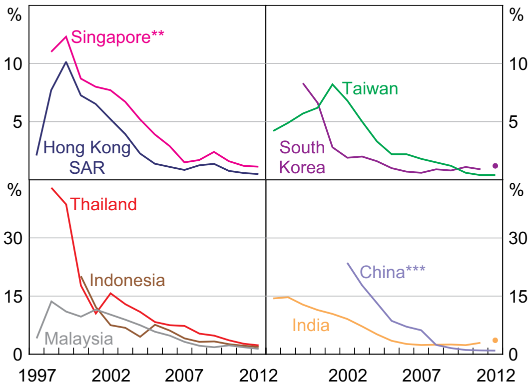
Australian banks as their subsidiaries account for the bulk of the New Zealand banking system.

Banking Systems in the Asian Region

Banking systems in Asia remain solidly profitable. Despite the headwinds from the euro area financial crisis and the recent slowing in regional economic growth, NPL ratios in most banking systems in Asia are near cyclical lows (Graph 1.18). A number of larger banks in the region, particularly the Japanese banks, have been actively seeking to expand within Asia, which has helped offset the pullback by some euro area banks, particularly in areas such as trade and project finance on which Asian growth is quite dependent. Aggregate capital ratios across Asian banking systems have generally increased over 2012 and remain relatively high. This has put them in a good position to meet the Basel III capital rules that most banking supervisors in the region have begun to implement from the beginning of this year, consistent with the internationally agreed timetable.

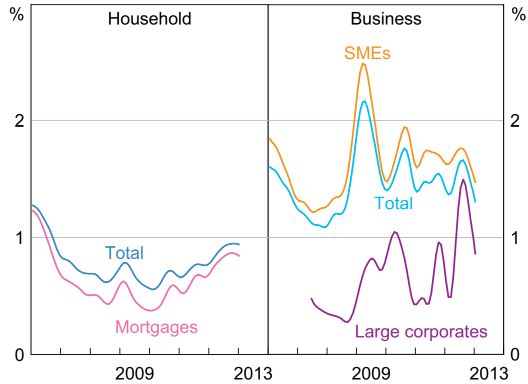
Despite solid asset performance overall, a long period of strong credit expansion within a relatively low interest rate environment has raised a general concern about a build-up in credit risk. There has been a particular focus recently on loans made

Graph 1.18
Asia – Non-performing Loans*
Share of loans



* Definitions of 'non-performing' differ across jurisdictions; latest available data used where December 2012 data are not available
** Singaporean-owned banks only
*** Data for 2002–2004 are for major commercial banks only
Sources: CEIC; RBA; banks' annual reports; national banking regulators

Graph 1.19
South Korea – Loans in Arrears*
Share of loans

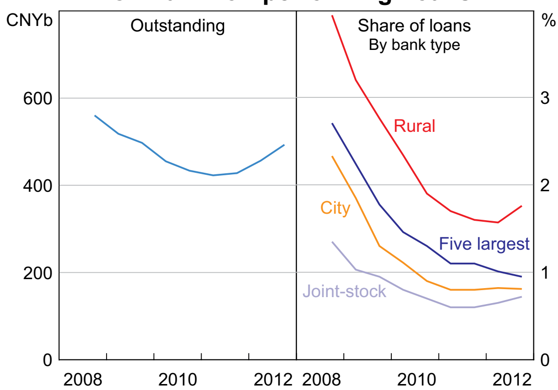


* Loans for which repayments are one or more days past due; won-denominated loans only; 13-period Henderson trend
Sources: Bank of Korea; Korean Financial Supervisory Service

to trade-exposed companies with slowing profit growth (particularly in Korea, China and Indonesia). In Korea, the share of loans in arrears has increased over the past year driven by loans to large companies and low-income and self-employed households, particularly those in older age groups (Graph 1.19). Korean authorities have focused their supervisory oversight on loans for housing-related construction, shipbuilding and shipping, as a housing market downturn in the Seoul metropolitan area and soft external conditions are expected to weigh on these industries in particular. In India, the banks' NPL ratio has also started to rise from a low base. This is largely related to loans to 'priority sectors', such as agriculture and small business, to which domestic banks have been required to target 40 per cent of their total lending. Further deterioration in export performance and weakening property markets could raise NPL ratios in a number of countries in the region.

In China, the stock of NPLs on banks' balance sheets has continued to increase steadily since its trough in the September quarter 2011 (Graph 1.20). However, solid growth in lending has kept the aggregate NPL ratio on a downward trend and saw it reach a new low of just under 1 per cent in December 2012. This decrease was driven by

Graph 1.20
China – Non-performing Loans*



* Commercial banks only
Sources: CBRC; banks' annual and interim reports

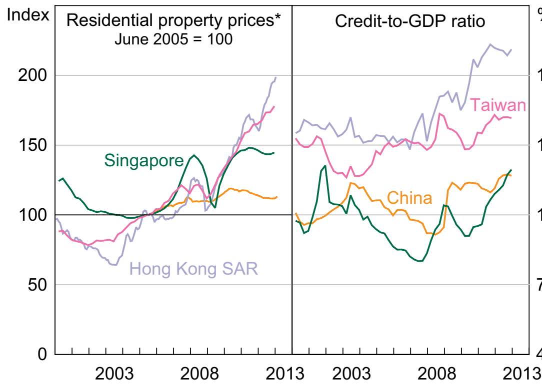
the five largest commercial banks, which account for about half of Chinese banking system assets. The aggregate NPL ratio of smaller banks, such as joint-stock and rural banks, rose slightly over 2012. Concerns remain over the quality of infrastructure-related loans made to local governments during the 2009–2010 countercyclical credit surge and banks are commonly thought to be forbearing on some of these loans, which could result in higher loan losses in the future.

The strong issuance of wealth management products (WMPs) in recent years has also garnered attention and could present additional risks to the

Chinese banking system. These products are lightly regulated, higher-yielding alternatives to deposits typically offered to high-wealth individuals. Despite their short-term nature, the funds raised through these off-balance sheet vehicles are often invested in longer-term assets to generate higher returns; the resulting maturity mismatch exposes WMPs to refinancing risk. In addition, while the WMPs disclose little information about their credit risks, their underlying asset quality is likely to be poorer relative to banks' on-balance sheet exposures. These risks were highlighted by the default of a WMP marketed by a small bank in late 2012. Further defaults could put pressure on sponsoring banks and on the Chinese authorities to regulate the sector more tightly. There has been some media speculation that the Chinese authorities are looking at ways to increase transparency about banks' involvement in and risk exposure to WMPs.

Some countries in the Asian region have fixed or managed exchange rate regimes and have therefore effectively imported the exceptionally low interest rates prevailing in the large advanced economies. This has contributed to rapid property price increases in Hong Kong, as well as strong credit growth in both Hong Kong and Singapore (Graph 1.21). Regulators in these countries have responded by implementing further rounds of macroprudential measures in an attempt to restrict lending activity and growth in prices. In Hong Kong, regulators have sought to reduce speculative demand by increasing stamp duty on residential properties sold within three years of their purchase and imposing stamp duty on non-residents' purchases. Banks have also been instructed to lower their maximum LVRs for mortgages, apply a minimum 15 per cent risk weight to their mortgage portfolios and undertake stricter debt-serviceability testing of mortgage applicants. Similarly, the Singaporean authorities have sought to reduce investor and foreign demand by capping loan terms at 35 years for residential properties, decreasing maximum LVRs and increasing stamp duty on purchases of properties by non-citizens

Graph 1.21
Asset Prices and Credit



* Adjusted for inflation; for China, data are an average of new and existing residential property prices

Sources: CEIC; RBA; central banks

and on purchases of second properties by citizens. Elsewhere, recent rates of credit growth seem to have broadly matched the pace of growth in incomes. The repeated steps some Asian countries have taken to tighten macroprudential policy settings over recent years in response to continued credit and property market expansion illustrates some of the challenges associated with calibrating and targeting these kinds of policies.

In China, earlier steps to ease monetary and fiscal policy settings have contributed to a recovery in property prices since the middle of last year. This pick-up in property prices has more recently led the Chinese authorities to implement a fresh round of measures aimed at curbing speculative demand. Measures implemented include the stricter enforcement of capital gains tax on property sales and increased minimum down payments and mortgage rates for second-home purchases in cities where property price growth has been judged as being excessive. Given conservative mortgage lending standards and low household indebtedness in China, these measures do not appear to be motivated by concern about excessive growth in household credit. Rather, earlier statements by the Chinese authorities suggest that the main objective has been to improve housing affordability and to reduce the Chinese economy's reliance on the property sector.

Banks have also been instructed to restrict lending to the property development sector in recent years, other than to developers of affordable housing. These credit restrictions have reinforced the effect of earlier property market measures in dampening activity in some segments of the property market, but they have also encouraged developers to seek alternative sources of funding. For example, bond issuance by Chinese property developers has surged in recent years, particularly by issuers with low or no credit ratings. There has been strong demand for such bonds, allowing them to be issued at quite low yields, indicating high risk appetite and perhaps some complacency by investors about the business models of such firms.