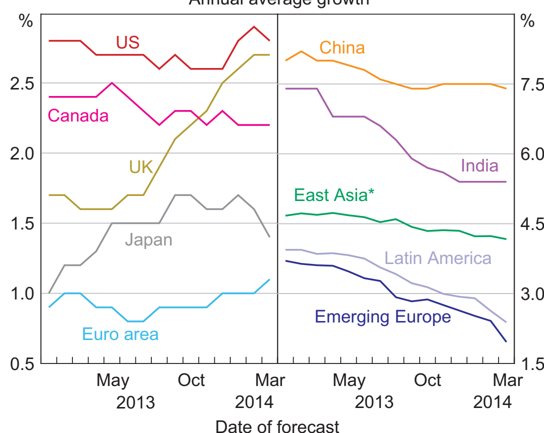
# 1. The Global Financial Environment

The risks to global financial stability have continued to evolve in line with shifting outlooks for growth and monetary policy. Developments in advanced economy financial systems have been broadly favourable since the previous *Financial Stability Review,* consistent with an ongoing recovery in economic conditions in many countries (Graph 1.1). However, vulnerabilities remain in Europe and market concerns about emerging markets have persisted. These concerns, initially sparked last year by shifting expectations for US monetary policy, surfaced amid a broader reassessment of prospects for emerging market growth and country-specific concerns. Recent events in Ukraine underline that geopolitical events can have repercussions on financial markets and sectors, often with little warning.




* Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand and Philippines

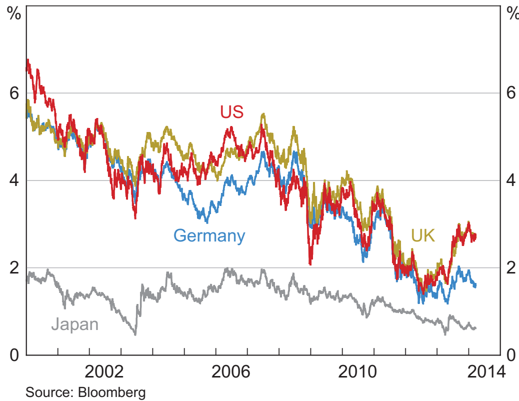
Sources: Consensus Economics; RBA

## Global Financial Markets

### Developed markets

In response to improving economic conditions in the United States, the Federal Reserve has taken initial steps towards a normalisation of monetary policy by reducing the pace of its asset purchase program at its December, January and March meetings. This is a positive development for financial stability, not least because an extended period of highly stimulatory monetary policy can encourage excessive risk taking. That said, there are also risks associated with exiting from highly accommodative monetary policy, as rising yields may trigger heightened volatility in financial markets, expose risk among investors and borrowers, and weigh unduly on economic growth. Reduced dealer inventories of bonds and the rising importance of investment vehicles that may be vulnerable to redemption risk in times of stress, such as exchange traded funds, have contributed to concerns about the potential for overshooting of bond yields.

In advanced economies, the adjustment to the reduced pace of monetary stimulus by the US Federal Reserve has to date been measured, in contrast to developments in May, when the Federal Reserve initially raised the prospect of 'tapering' asset purchases. Sovereign bond yields in the major advanced economies rose over 2013, but have traded within a narrow range during the past six months (Graph 1.2). Yields remain low relative to historical norms, reflecting subdued inflation

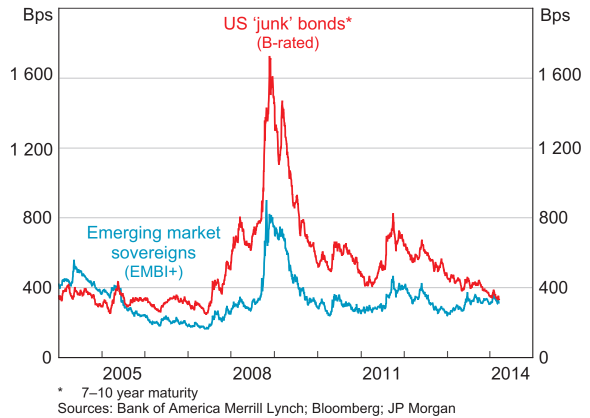



expectations and the outlook for modest economic growth in most economies. Equity prices also rose over 2013, and are higher over the past six months.

More broadly, international monetary conditions are likely to remain very accommodative for some time. The Federal Reserve has noted that it will remain appropriate to maintain the policy rate near zero for a considerable time after the asset purchase program ends and the economic recovery strengthens. The European Central Bank (ECB) reduced its main policy rate further in late 2013, and is ready to use a range of additional policy measures should further action be required. The Bank of Japan also continues to provide monetary stimulus, with its balance sheet expanding rapidly.

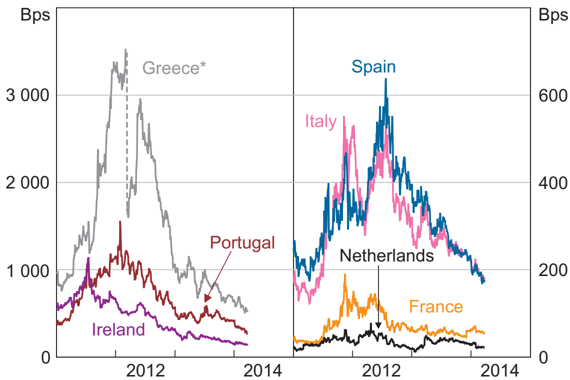
The protracted period of low interest rates in advanced economies, while necessary to support the global economic recovery, can also provide incentives for possibly excessive risk taking by investors. Over the past year, issuance of syndicated leveraged loans has grown strongly in the US, and underwriting standards on the underlying assets have reportedly loosened. In some economies, there has also been a revival in the commercial real estate sector.

Fund flow data show that some investors have continued to adjust their risk positions since May, for example by moving out of emerging market bonds and equities. Search for yield behaviour is still apparent, though investors appear to be increasingly discriminating among asset classes and markets. For example, spreads on lower-rated US corporate bonds have continued to narrow over the past six months and average spreads on US dollar denominated emerging market sovereign bonds have been broadly unchanged (Graph 1.3). In contrast, for some of those emerging market economies that are considered to be more fragile, spreads on sovereign bonds continued to increase.




In euro area financial markets, conditions have continued to improve gradually, assisted by a tentative economic recovery, progress with structural reforms in stressed euro area economies, and ongoing ECB support. Spain and Ireland have now exited their assistance programs and Portugal is expected to exit in mid 2014. In the crisis economies, bond spreads have narrowed (Graph 1.4), banks have reduced their reliance on central bank funding, and the level of deposits at banks has generally stabilised. Steps have also been taken towards strengthening the ability of the euro area to deal with its banking sector problems. In particular, the ECB will assume responsibility for supervising large banks by November. Member states have also agreed on methods of resolution and the establishment of a common resolution fund, though this is only scheduled to be complete by 2024 and the European Parliament is yet to formally pass these reforms.

## Graph 1.4
## Euro Area – Government 10-year Bond Spreads
To German Bunds



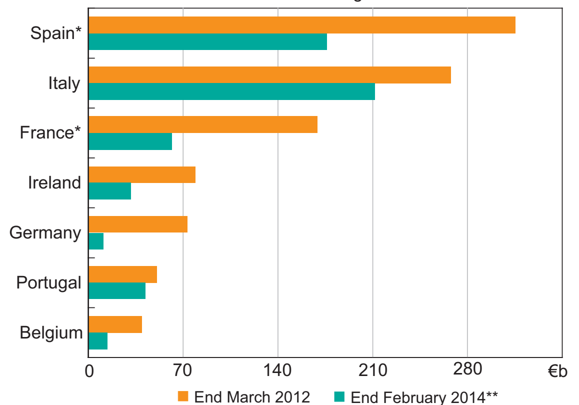

* Break on 12 March 2012 due to the first private sector debt swap
Source: Bloomberg

Risks to the euro area remain. Banking systems and sovereigns continue to face financial pressures, high unemployment persists, and price declines in some countries – while helpful in improving competitiveness – increase the real burden of debt service. The ECB's long-term refinancing operation (LTRO), which has been instrumental in improving sentiment towards European financial institutions, is due to expire in early 2015. Though around half of the peak in LTRO funding has been repaid (Graph 1.5), and ECB officials have said that shorter-term refinancing operations will be conducted if necessary, banks still dependent on ECB funding could face increased scrutiny.

A key focus in 2014 will be the results of the ECB's comprehensive assessment of banks' balance sheets and stress tests. Outcomes will be disclosed at the country and bank level, together with any recommendations for supervisory measures, ahead of the ECB assuming its supervisory role in November. The exercise is aimed at fostering confidence in euro area banks through improved transparency, and by encouraging balance sheet repair. It is not without risk, however, as negative results could hasten the pace of deleveraging and drag on the economic recovery. There is also the potential for renewed disruption in financial markets if major shortfalls in bank capital cannot be met by the private sector or national governments before there is a credible European backstop in place to shield sovereigns from their banking sectors.

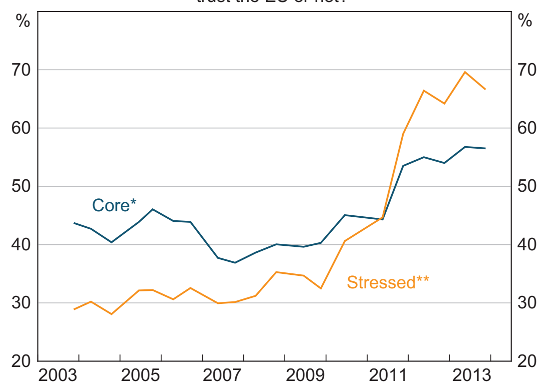
Political risks to reforms believed to be necessary to safeguard stability of the currency union continue to have the potential to weigh on markets. Against a backdrop of high unemployment, and the implementation of austerity measures by several euro area governments, shifting sentiment has supported a rise in representation from Eurosceptic parties at the national level, which is likely to see increased representation of these parties at upcoming European Parliament elections (Graph 1.6). These

## Graph 1.5
## LTRO Borrowing
Amount outstanding




* Month-average
** Germany as at January 2014
Source: central banks

## Graph 1.6
## Negative Sentiment Towards the EU
Share of respondents who answer no to 'Do you tend to trust the EU or not?'




* Belgium, France, Germany and Netherlands
** Greece, Ireland, Italy, Portugal and Spain
Source: Eurobarometer (European Commission)

developments have the potential to slow progress on unpopular structural reform measures aimed at restoring fiscal balance and competitiveness.

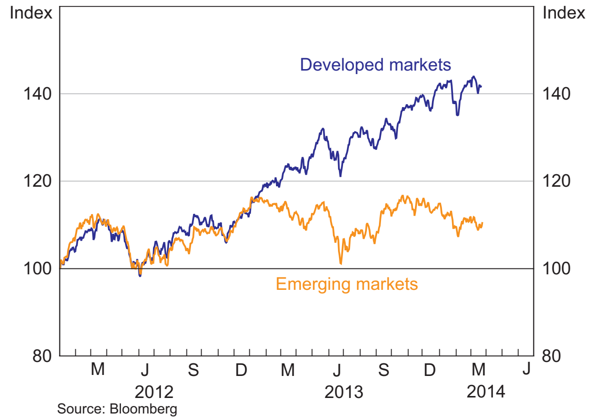
## Emerging markets

Vulnerabilities in emerging markets have again been a focus for financial markets, with equity prices and exchange rates falling and bond yields rising in late January amid renewed capital outflows (Graph 1.7 and Graph 1.8). Although this has occurred in the context of 'tapering' by the US Federal Reserve, the most recent episode of volatility appears to reflect lingering concerns about the outlook for economic growth in China and other emerging markets, in addition to external imbalances that have built up in some countries during an extended period of accommodative financial conditions.

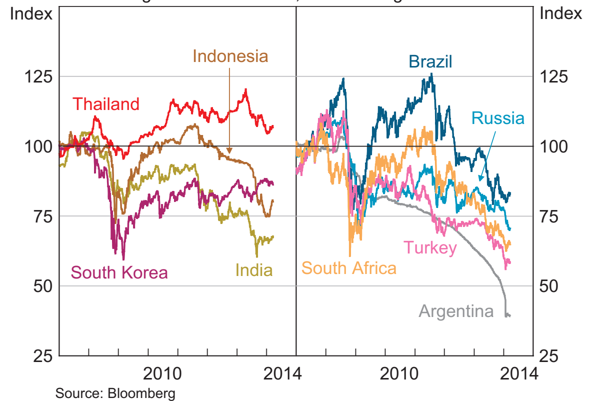
In 2013, particularly large adjustments were observed in economies with some combination of larger current account deficits, lower foreign currency reserves and building inflation pressures. More recently, there has been even greater investor discrimination between emerging markets, with concerns about growth prospects and domestic political circumstances featuring prominently in some of the more affected countries, such as Turkey and Argentina. For most emerging markets, however, capital outflows have been more moderate and asset price adjustments reflect a degree of normalisation following a long period of accommodative financial conditions.

The rapid pace of depreciation and rise in long-term interest rates for some countries have raised concerns about inflation and financial stability risks arising from exchange rate and interest rate exposures. Policymakers in the more affected countries have responded in various ways, including by raising policy rates, intervening to stem the pace of depreciation and/or reduce exchange rate volatility, and by implementing policy measures designed to encourage capital inflows and/or restrict capital outflows. Most emerging market currencies have stabilised since February and some have appreciated

**Graph 1.7**
**Equity Prices**
2 January 2012 = 100




**Graph 1.8**
**Emerging Market Currencies**
Against the US dollar, 2007 average = 100




against the US dollar. Similarly, equity prices have recovered much of their losses and bond yields have been stable in these markets.

In most respects, emerging market economies appear to be considerably less vulnerable to external shocks than they were in the 1990s. The foreign currency exposure of many emerging economies has declined sharply over the past two decades, mainly reflecting a fall in aggregate external debt (Table 1.1) but also aided by a lower foreign currency-denominated share of external debt. Many emerging market sovereigns have become less indebted, and are now more able to

**Table 1.1: Emerging Markets External Debt by Sector[a]**
Per cent to GDP

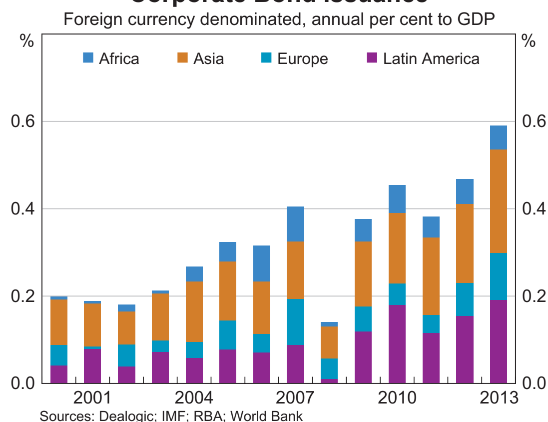
| | Total | | Public[b] | | Private[b] | |
|---|---|---|---|---|---|---|
| | 1995 | 2013 | 1995 | 2013 | 1995 | 2013 |
| **Asia** | | | | | | |
| India | 26 | 22 | 22 | 6 | 4 | 14 |
| Indonesia | 62 | 29 | 32 | 13 | 29 | 16 |
| Malaysia | 39 | 33 | 18 | 8 | 21 | 26 |
| Philippines | 48 | 23 | 35 | 16 | 13 | 7 |
| South Korea | 21 | 35 | 1 | 8 | 20 | 27 |
| Thailand | 60 | 37 | 10 | 11 | 50 | 27 |
| **Latin America** | | | | | | |
| Argentina | 38 | 29 | 21 | 14 | 17 | 11 |
| Brazil | 21 | 19 | 13 | 5 | 8 | 14 |
| Mexico | 49 | 31 | 28 | 19 | 21 | 12 |
| **Emerging Europe** | | | | | | |
| Poland | – | 71 | – | 29 | – | 42 |
| Turkey | 32 | 44 | 22 | 12 | 10 | 31 |
| Russia | 39 | 33 | 32 | 15 | 6 | 18 |

(a) Sum of public and private debt in 2013 may not sum to total; different World Bank data sources have been used for sectoral and total data
(b) Publicly guaranteed debt is treated as public debt, except for Poland; for South Korea, only the debt of the monetary authority is treated as publicly guaranteed
Sources: IMF; RBA; World Bank

issue long-term debt denominated in their local currencies. Exchange rates are now more flexible, inflation is lower, and most central banks have higher holdings of foreign exchange reserves. Banks have higher levels of capital, and may be better able to manage their foreign exchange risks by hedging, as the availability of foreign exchange derivatives products has generally improved in these markets.

However, some new risks have emerged. Private sector external debt has increased in several emerging markets since the 1990s and, for some economies, now accounts for a larger share of external debt than sovereign debt (Table 1.1). Gross foreign currency-denominated bond issuance by non-financial corporations has increased over recent years, particularly in China, India and Mexico (Graph 1.9). Many emerging market firms issuing debt externally are likely to be from export-oriented sectors with foreign currency denominated revenue streams, creating a natural currency hedge. However, given the magnitude of the increase, some of these firms are likely to have been first-time issuers and there are reports that, in some limited instances,

**Graph 1.9**
**Emerging Market Gross Non-financial Corporate Bond Issuance**
Foreign currency denominated, annual per cent to GDP



Sources: Dealogic; IMF; RBA; World Bank

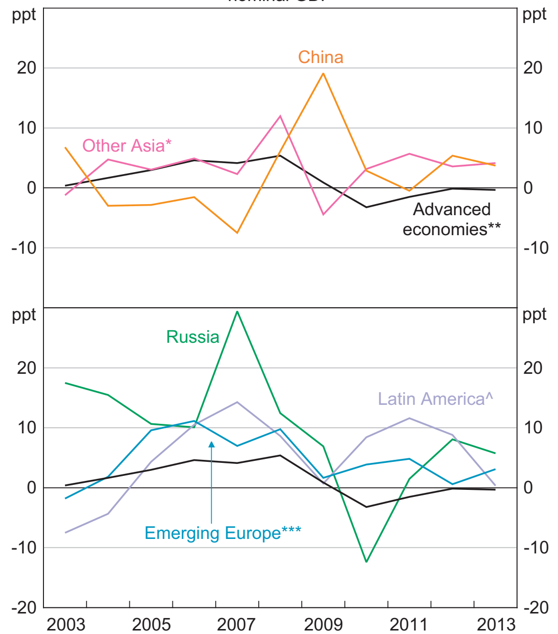
they may have used these funds to purchase domestic assets that will generate local currency revenue streams, creating a currency mismatch. There is also some concern that hedges of foreign currency exposures may be inadequate following a period of relative exchange rate stability and/or if these firms are inexperienced in the conduct of hedging operations. Available data suggest that the use of financial currency hedges by non-financial corporations remains limited.

The rise in long-term interest rates represents a degree of normalisation from a period of unusually accommodative financial conditions in some emerging markets. In Asia, this was evident in a period of rapid growth in debt and property prices in several economies, primarily those with fixed or managed exchange rate regimes (Graph 1.10 and Graph 1.11). Increased household indebtedness has raised concerns about borrowers' ability to repay if interest rates rise or economic conditions deteriorate. More recently, property price growth has moderated in some economies in line with a broader softening in economic conditions.

If instability in emerging markets arises, developed markets, including Australia, could be affected through trade and financial channels, and also via the broader impact on sentiment. Emerging markets now account for half of global GDP and one-third of global trade, compared to around one-third and one-fifth in the mid 1990s. For Australia, a key channel of contagion would be the effect of a regional slow-down on commodity prices, although the exchange rate could reasonably be expected to depreciate in such a circumstance and provide some support to income. The potential for contagion through financial channels appears limited as advanced economies' direct exposure to emerging markets via bank lending is small (Table 1.2). However, as these data focus on direct aggregate banking system linkages, they do not rule out the possibility that problems in emerging markets might adversely feed back on individual banks with large exposures.

## Graph 1.10
## Growth in Credit and Nominal GDP

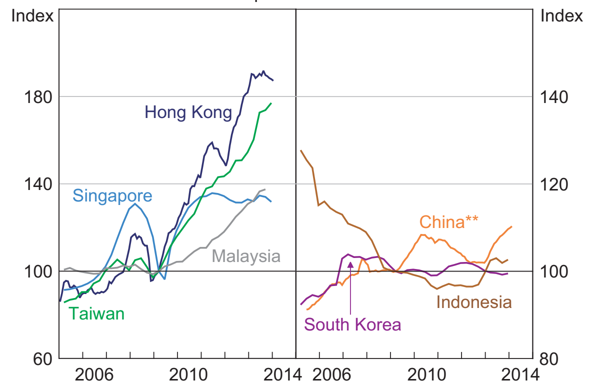
Year-ended credit growth less year-ended growth in nominal GDP




* Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand
** Canada, euro area, Japan, United Kingdom and United States
*** Hungary, Poland and Turkey
^ Argentina, Brazil and Mexico
Sources: BIS; CEIC Data; ECB; Federal Reserve; IMF; RBA; Thomson Reuters

## Graph 1.11
## Asia – Real Residential Property Prices*

March quarter 2009 = 100




* Deflated using consumer price indices
** Average of new and existing residential property prices
Sources: CEIC Data; RBA

**Table 1.2: Foreign Bank Lending**
Per cent of total assets, as at 30 September 2013; ultimate risk basis

| | Emerging Asia | Latin America | Emerging Europe |
|---|---|---|---|
| Euro area banks | 0.6 | 1.4 | 2.9 |
| UK banks | 4.1 | 1.2 | 0.6 |
| US banks | 2.5 | 1.9 | 0.7 |
| Japanese banks | 1.6 | 0.4 | 0.2 |
| Australian banks | 2.2 | 0.1 | 0.0 |

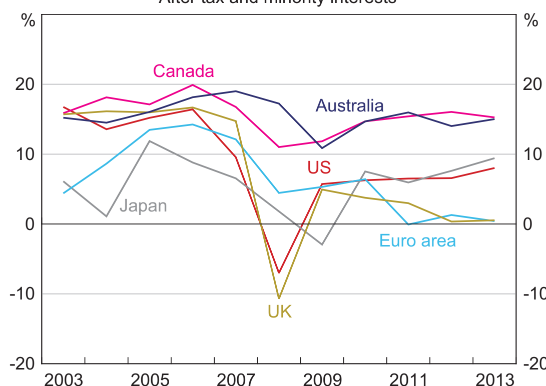
Sources: BIS; national sources

# Banking Systems in Advanced Economies

## Bank profitability and capital

Conditions in most of the major banking systems improved over the past six months. Over this period bank share prices increased in the United States, euro area and Canada, and fell somewhat in the United Kingdom and Japan. Profits of large banks in most major advanced economies increased or were broadly stable last year, though rates of return remain well below pre-crisis averages (Graph 1.12). Outside of the euro area, improvements in banks' asset quality contributed to profits through lower loan loss provisions. Net interest margins, however, generally remained under pressure in the low interest rate environment, particularly for Japanese banks. Recent profits at many large banks have also been negatively affected by legal expenses arising from past dubious practices. In the euro area, bank valuations suggest that concerns about banks' asset quality and earnings outlook remain (Graph 1.13). In late 2013, some of these concerns were realised, with several banks reporting significant increases in loan loss provisions ahead of the ECB's asset quality review and stress tests. In some instances, share prices have responded positively to the announcement of higher provisions, potentially in recognition that banks are cleaning up their balance sheets.

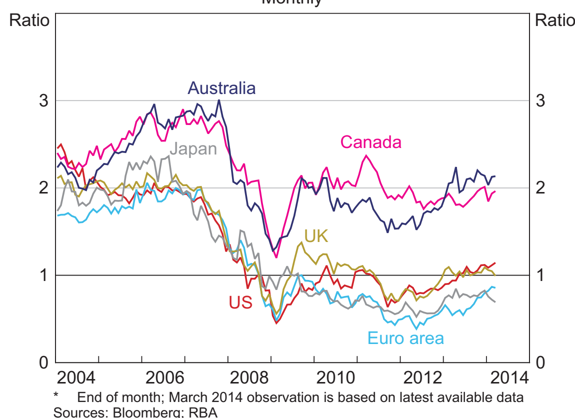
**Graph 1.12**
**Large Banks' Return on Equity***
After tax and minority interests




* Includes six US banks, eight euro area banks, four UK banks, three Japanese banks, six Canadian banks and four Australian banks; adjusted for significant mergers and acquisitions; reporting periods vary across jurisdictions; latest available data used where banks have not reported for December 2013

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

**Graph 1.13**
**Banks' Share-price-to-book-value Ratios***
Monthly



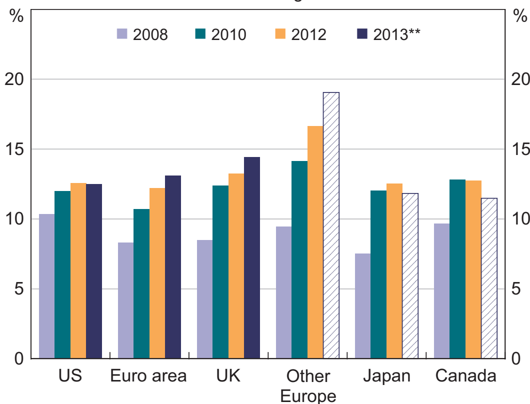

* End of month; March 2014 observation is based on latest available data

Sources: Bloomberg; RBA

Capital levels have remained favourable for large banks in the major countries. Basel III capital rules were implemented on 1 January 2014 in the United States, the euro area and the United Kingdom; the capital ratios of large banks in these jurisdictions

continued to rise over the previous six months, though their reported ratios are likely to decline a little under the new rules, as was observed in countries where Basel III was implemented earlier (Graph 1.14). In the euro area and the United Kingdom, this increase in capital ratios was achieved through further deleveraging, retained earnings and capital raising, including issuance of Basel III compliant bonds. In the United States, capital ratios were mainly supported through retained earnings, though some smaller banks also benefited from capital transfers from parent holding companies.

**Graph 1.14**
**Large Banks' Tier 1 Capital***
Per cent of risk-weighted assets

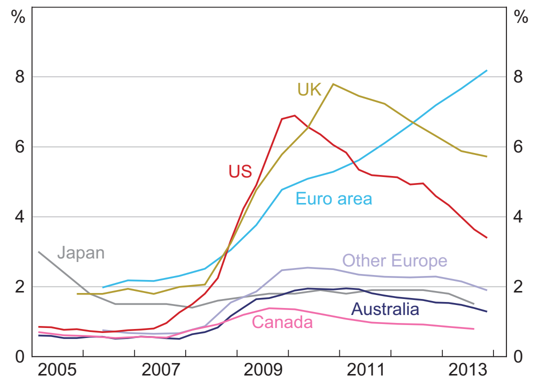



* Tier 1 capital ratios are subject to definitional differences; shaded bars indicate that some banks in a region are reporting under Basel III; includes 18 US banks, 41 euro area institutions, four UK banks, 10 other European banks, three Japanese banks and six Canadian banks
** Latest available data used where banks have not reported their 2013 results
Sources: Bloomberg; FDIC; RBA; SNL Financial; banks' annual and interim reports

## Asset performance

With the exception of the euro area, the non-performing loan (NPL) ratios of large banks in the major economies continued to fall over the past six months, though they remain high compared to pre-crisis averages (Graph 1.15). In the United States, the overall improvement in asset quality has been driven by falls in the NPL ratios for residential and commercial real estate loans. In contrast to other major advanced economies, asset performance in the euro area has continued to deteriorate, particularly in the corporate sector and for banks

**Graph 1.15**
**Large Banks' Non-performing Loans***
Share of loans



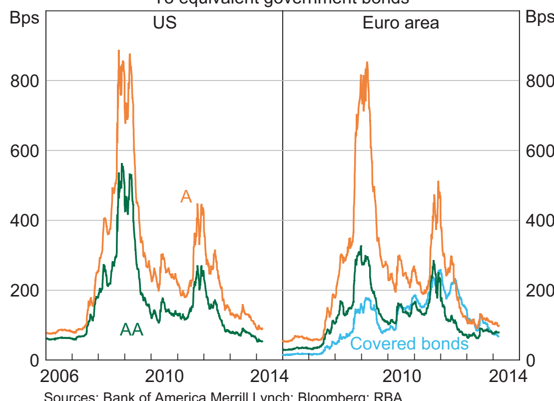

* Definitions of 'non-performing loans' differ across jurisdictions, sometimes including loans that are 90+ days past due but well secured and in the case of Australia small amounts of non-loan assets; includes 18 US banks, 41 euro area institutions, 10 other European banks, four UK banks, six Canadian banks, five Japanese banks and four Australian banks; latest available data used where banks have not reported for December 2013
Sources: APRA; FSA; RBA; SNL Financial; banks' annual and interim reports

with relatively large exposures to stressed euro area economies. In part, this is because some banks reviewed their accounting for impairments ahead of the ECB's asset quality review.

## Bank funding conditions

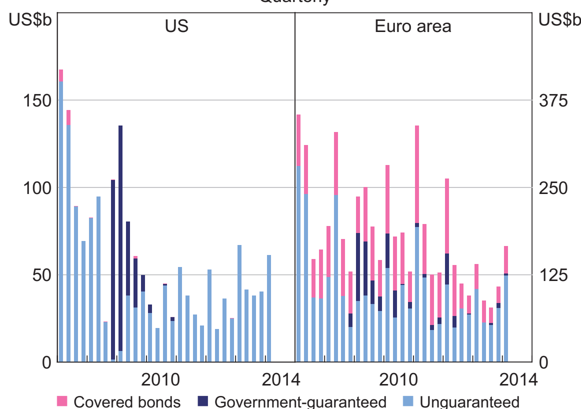
Funding conditions have remained favourable for large banks in the major countries and spreads on short-term interbank loans are around their lowest levels since mid 2007. Despite this, the volume of interbank lending remained low and other types of short-term wholesale funding continued to decline. Banks' bond spreads have narrowed over the past six months in the rising yield environment (Graph 1.16). In 2013 as a whole, bond issuance by US banks was at its highest level since 2009, though it remains below pre-crisis levels (Graph 1.17). High levels of deposit funding and weak asset growth have reduced banks' need for wholesale funding over time. In the euro area, overall funding conditions have improved, though some smaller banks and banks in stressed economies are still reliant on central bank liquidity. Banks have chosen to repay around half of the LTROs before the early 2015 deadline, although Spanish and Italian banks still have significant amounts outstanding.

## Graph 1.16
### Banks' Bond Spreads
To equivalent government bonds




Sources: Bank of America Merrill Lynch; Bloomberg; RBA

## Graph 1.17
### Banks' Bond Issuance*
Quarterly



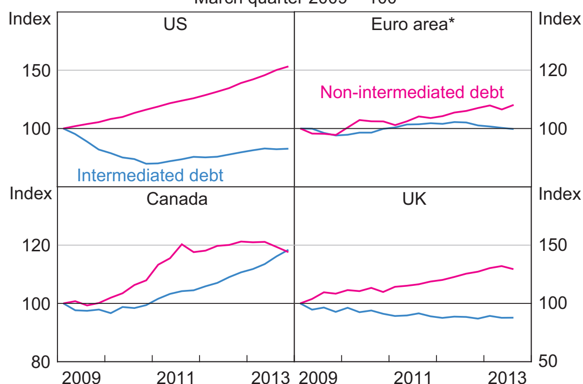

* March 2014 is quarter-to-date

Sources: Dealogic; RBA

## Credit conditions

With corporate bond yields remaining close to historical lows and euro area banks deleveraging, private non-financial corporations' non-intermediated debt funding has generally grown more quickly than intermediated debt (Graph 1.18). Nonetheless, consistent with developments in bank and economic conditions, intermediated credit markets in most major advanced economies have shown some signs of improvement. Total credit in the United States expanded over the past six months, as growth

## Graph 1.18
### Private Non-financial Corporations' Debt Funding
March quarter 2009 = 100




* Refers to public and private non-financial corporations

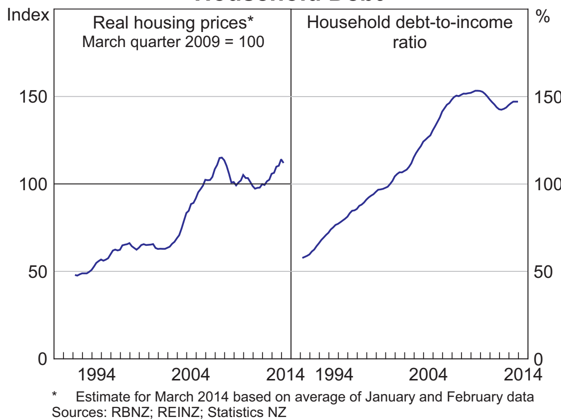
Sources: ECB; ONS; RBA; Statistics Canada; Thomson Reuters

in consumer and business credit offset a further contraction in housing credit that followed increases in mortgage rates in the middle of last year. Demand for business loans has increased alongside an easing of lending standards. In the United Kingdom, after an extended period of stagnation, credit rose by around 1 per cent over 2013, consistent with improving macroeconomic environment. Credit growth in the United Kingdom may also have been supported by the Help to Buy Scheme, which enabled buyers to take on mortgages with smaller deposits.

In the euro area, credit conditions remain relatively difficult, in line with the soft economic environment. The ECB's lending survey shows that demand for business loans continued to fall over the six months to December 2013 and banks continued to tighten lending standards. Accordingly, credit growth continued to decline over the year to December, driven by falls in business sector credit. The outlook for credit conditions appears to have improved, however, with the ECB lending survey suggesting that banks expect demand for loans to increase and lending standards to ease. Weak lending to small and medium enterprises (SMEs) has been of particular concern to policy makers, and the ECB has signalled a willingness to purchase securitised SME assets to stimulate investment.

## New Zealand

Developments in New Zealand remain an important focus given the large Australian banks' operations there. Historically low mortgage rates and reported supply constraints contributed to a pick-up in housing price growth in recent years (Graph 1.19). This has increased focus on household and bank balance sheet risks, particularly given increases in high loan-to-valuation ratio (LVR) borrowing. In mid 2013 the RBNZ concluded that raising interest rates was not an appropriate response given the high exchange rate. The RBNZ instead opted to limit the availability of high LVR loans from October 2013, as well as raise banks' capital and liquidity requirements. The New Zealand government and regional councils also fast-tracked building approvals to alleviate supply shortages. In early 2014, the share of new lending with an LVR over 80 per cent fell to around 5 per cent from over 30 per cent, and housing price growth moderated. At its March 2014 meeting, the RBNZ increased its policy rate in response to increasing inflationary pressures. The RBNZ noted that pressure on housing prices had started to ease – which it attributed to the LVR restrictions – and that higher interest rates were likely to have a further moderating influence. However, an increase in net immigration flows would remain an offsetting influence.

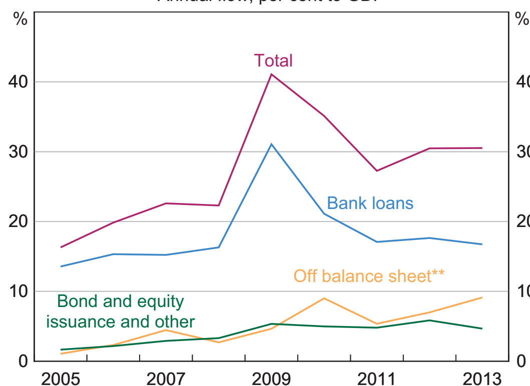



# Banking Systems in Emerging Markets

## Performance of Asian banking systems

Conditions in Asian banking systems remained generally favourable in 2013 despite increased volatility in financial markets and slower economic growth in the region. Most banks in Asia have large deposit bases and relatively wide net interest margins, which have enabled them to continue to earn solid profits. In China, banks' profits have continued to grow, albeit at a slower pace than in recent years. The liberalisation of deposit rates in China over the next two years, while positive for long-term financial stability, may reduce bank profits in China in the near term. Banks in Asia have used their profits to raise their capital ratios through retained earnings. Aggregate capital ratios across Asian banking systems are relatively high, and well above minima specified by the Basel III capital rules, which already apply in most jurisdictions in the region. NPL ratios generally remain low, although these are typically a lagging indicator and there have been signs of deteriorating asset quality in certain economies and sectors (see 'Box A: Non-performing Loans at Asian Banks').

A potential risk to China's financial stability continues to be its 'shadow' banking system. Lending by non-bank entities and through banks' off-balance sheet activities has grown rapidly as a result of restrictions on the price and quantity of credit intermediated by the banking sector (Graph 1.20). Chinese savers, seeking higher yielding alternatives to deposits, invest in wealth management products (WMPs) which have short maturities, but are frequently used to fund long-term lending by trust companies. As trust companies lend in areas where there are restrictions on bank lending, their underlying asset quality is likely to be poorer than banks' on-balance sheet exposures. Because these products are often marketed through banks, many investors are under the impression that they are implicitly guaranteed, a view perhaps supported




by recent instances when government pressure was reportedly exerted to find a buyer for trusts nearing default. If investors were to lose confidence in WMPs, they may decide not to roll over their existing investments, exposing trust companies and the banking system more broadly to liquidity risk. Concerns of this nature were highlighted by the near default of a WMP in January. The gradual liberalisation of deposit rates should assist in removing the incentives for investment in WMPs and help ensure that the returns on savings products better reflect their risks. ✠