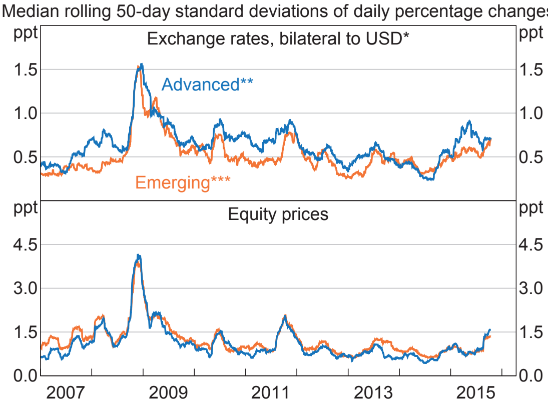
1. The Global Financial Environment

The focus of global financial stability risks has been shifting to emerging market economies and their potential to contribute to destabilising adjustments in financial markets. Volatility has picked up in global financial markets, following a lengthy period of very low volatility and compressed risk premia (Graph 1.1). Concerns about the prospects for economic growth in China, against the backdrop of a significant run-up in debt in recent years, helped trigger the downward revaluation of global equity prices and higher financial market volatility. These concerns weighed on investors' expectations for growth in a number of emerging market economies, particularly commodity exporters given lower commodity prices. Higher debt, fiscal pressure and political instability have been compounding factors for some emerging markets. With the first US Federal Reserve policy interest rate increase since 2006 in prospect in the period ahead, the risk remains that this combination of factors could trigger a sharp repricing in markets where for several years investors have been searching for yield. Recent price movements in some financial markets, including in advanced economies, have, on occasion, been amplified by short periods of market dislocation, underlining concerns that liquidity risk might be underpriced by some investors.

Graph 1.1
Financial Market Volatility
Median rolling 50-day standard deviations of daily percentage changes



* Exchange rate data for China from August 2010
** Australia, Canada, euro area, Japan, New Zealand, Switzerland, United Kingdom and United States
*** Argentina, Brazil, Chile, China, Colombia, Czech Republic, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Philippines, Poland, Russia, Saudi Arabia, South Africa, South Korea, Taiwan, Thailand and Turkey

Sources: Bloomberg; RBA

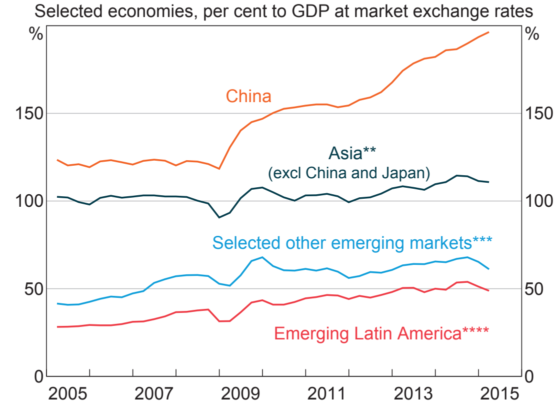
The global banking sector has continued to improve its resilience, which should help mitigate the risks to broader financial system stability arising from these developments. In the major advanced economies, bank profitability has been supported by further improvements in asset quality, particularly in the United States. In the euro area, near-term concerns about Greece have abated following the rescue package agreement reached in August. Gradual improvements in economic conditions in most euro area economies have supported bank profits, although there continues to be slow progress in reducing the large stock of non-performing loans. Key banking indicators in emerging markets have generally remained sound to date, including in more vulnerable markets; however, some banking systems face very challenging operating environments, which could entail a future weakening of asset performance.

Emerging Market and Non-Japan Asia Financial Systems

China

China has been an engine of growth for Australia and the world in the post-crisis period, yet financial stability risks have been building. Credit grew rapidly alongside strong asset price growth and there was apparent over-investment in some sectors of the Chinese economy such as real estate and heavy industry (Graph 1.2). Debt provision spilled beyond the heavily regulated banking system to the more opaque shadow banking sector. If economic growth continues to slow from the very strong pace in recent years, any past excesses may be exposed.

Graph 1.2
Total Debt of the Private Non-financial Sector*
Selected economies, per cent to GDP at market exchange rates



* Loans and other debt funding provided by domestic and non-resident sources
** Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand
*** Czech Republic, Hungary, Poland, Russia, Saudi Arabia, South Africa and Turkey
**** Argentina, Brazil and Mexico
Sources: BIS; CEIC Data; RBA; Thomson Reuters

Risks in China are particularly prominent for highly leveraged firms, including some firms in the oil and gas industries that are exposed to a decline in energy prices and construction firms that have raised significant foreign currency denominated bond funding in recent years. Similarly, many local governments have large debts, and land sales account for a sizeable share of their revenues. Links between the formal banking sector and the shadow banking sector could be another channel for risks to emerge and amplify a macroeconomic downturn.

Policy challenges from the heavily controlled financial system in China have become more evident, highlighting the difficulty the authorities face in promoting financial liberalisation while supporting financial stability and economic growth. Recent developments in the Chinese stock market associated with leveraged investors, and the measures adopted to address them, provide an example of such challenges. Chinese equity prices have fallen by around 35 per cent from their June 2015 peak, after rising by 150 per cent over the previous year (Graph 1.3).[1] Initial price falls were contained by a range of policy actions by the Chinese authorities, which included direct purchases of shares. Price falls continued as policymakers reportedly stepped back from these efforts, though prices have been more stable in recent weeks.

Graph 1.3
Chinese Share Prices
Shanghai A shares, 2 January 2014 = 100

Source: Bloomberg

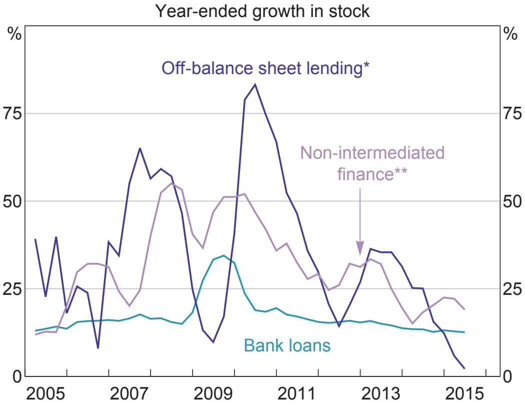
The policy challenges facing the Chinese authorities were further underscored by the volatility in international financial markets that followed the People's Bank of China's announcement of reforms to make the renminbi (RMB) exchange rate more market determined. While this policy is likely to be

1 See RBA (2015), 'Box A: The Recent Decline in Chinese Equity Prices', *Statement on Monetary Policy*, August, pp 28–29.

beneficial for macroeconomic stability, the reform's announcement prompted widespread concern about the potential for further depreciation of the RMB and added to near-term pessimism over Chinese economic conditions and private capital outflows.

Since the previous *Review*, the Chinese authorities have continued to implement a range of measures to ameliorate financial risks and reduce some market restrictions. For example, a debt swap program has allowed local governments to use lower-yield bonds to refinance existing borrowings raised off-balance sheet via financing vehicles. A range of measures have also been implemented to address other distortions that have encouraged growth of the shadow banking sector. Official data suggest that these measures – which include restricting banks' interbank investments, further liberalising interest rates and insuring bank deposits – have helped slow growth in off-balance sheet lending in China (Graph 1.4).

Graph 1.4
China – Total Social Financing
Year-ended growth in stock



* Entrusted loans, trust loans and bank accepted bills
** Corporate bond and non-financial corporate equity issuance
Sources: CEIC Data; PBC; RBA

Despite ongoing policy challenges, the Chinese authorities have supported growth and financial stability to date, and in many ways remain well placed to continue to do so. They have many levers given the ongoing large role of the state in the economy and the heavily regulated financial system. Capital account controls limit the potential for pressure to arise from foreign creditors, and foreign exchange reserves are large, despite falls in recent months. The measured central government fiscal position is also very strong, though the overall public sector fiscal position is considerably less so given the build-up in debt among local governments and state-owned enterprises.

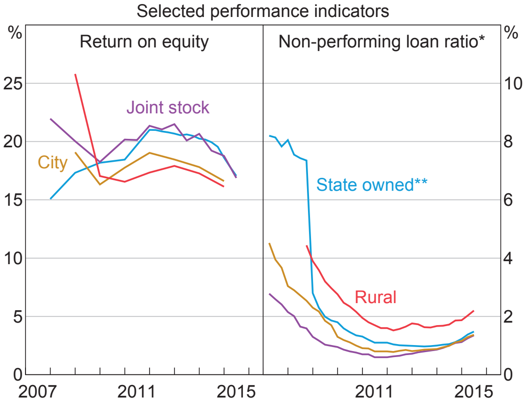
The main financial risks to the rest of the world from an economic downturn in China are likely to be indirect, through the implications for world trade volumes, commodity markets and the associated effect on sentiment in financial markets. Direct financial links are much less significant because China's capital account is still relatively closed. That said, there are growing direct financial linkages with the rest of the world that could reverberate in particular jurisdictions in the event of difficulties in China: these include large exposures to China by banks located in Hong Kong and Chinese banks' lending overseas, particularly if overseas lending by other Asian banks were to slow as well.

Banking system in China

The profitability of Chinese banks continued to decline in the first half of 2015, though the banks reportedly remain highly profitable overall (Graph 1.5). State-owned and joint stock commercial banks, which account for 60 per cent of banking system assets, continued to be more profitable than many smaller Chinese commercial banks. The moderate decline in aggregate profitability reflected lower growth in both net interest income and non-interest income, as well as increased provision expenses. The outlook for profitability remains pressured by expectations of a further deterioration in banks' asset quality in conjunction with slower rates of credit growth and the potential for net interest margins to narrow if the liberalisation of interest rates increases price competition for funding.

Though Chinese banks continue to report low non-performing loan (NPL) ratios, these ratios and associated loan-loss expenses have risen as

Graph 1.5
Chinese Commercial Banks
Selected performance indicators



* Share of loans
** Decline in non-performing loan ratio in 2008 due to removal of policy-related loans from Agricultural Bank of China
Sources: CEIC Data; RBA; SNL Financial

economic growth has slowed. Loans to the manufacturing and the wholesale & retail trade sectors have primarily driven these increases; loans to these sectors appear to be less well collateralised than other categories of lending.

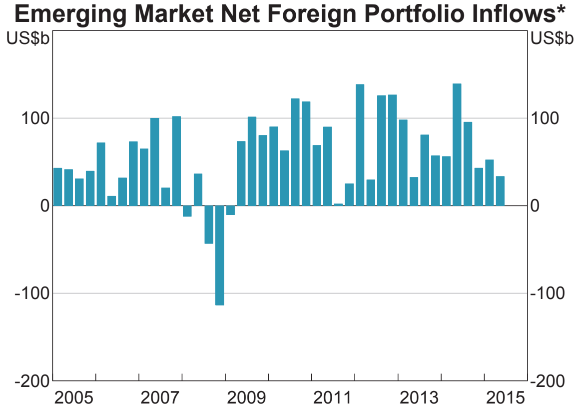
Several factors have raised concerns that Chinese banks' asset quality could deteriorate more markedly: existing corporate leverage is high and there are signs that economic activity has slowed further recently. In addition, the share of loans classified as 'special mention' – where there are some doubts surrounding repayment but loss is not yet expected – has picked up. A sizeable share of bank lending is to the construction industry. Relevant to collateral values in this segment, national property prices in the residential property market have risen in recent months, primarily in the largest cities, which has partly unwound earlier declines. The pace of annual growth in land prices slowed through 2014, but has shown signs of improvement over 2015.

Large Chinese banks' capital ratios increased marginally during the six months to June 2015, supported by preference share offerings by two of the large banks. Large Chinese banks' Common Equity Tier 1 (CET1) capital ratios also increased over the half year and currently range between 9.2 and 12.2 per cent of risk-weighted assets, compared to the end-2015 transitional CET1 regulatory minimum of 7.3 per cent and global systemically important bank (G-SIB) surcharge of 1 per cent (where applicable). The aggregate CET1 capital ratio for the broader banking system was stable at 10.5 per cent over the half year. As of June 2015, each of the five largest Chinese banks was reported to be compliant with the Liquidity Coverage Ratio on a fully phased-in basis.

Other emerging market and non-Japan Asia financial systems

For emerging markets more broadly, capital inflows have been strong in the years following the global financial crisis, supported by low interest rates in the advanced economies, relatively strong economic growth and high commodity prices (Graph 1.6).[2] However, portfolio capital inflows have slowed significantly and appear to have reversed for some economies more recently. This has occurred alongside interrelated concerns about economic growth prospects in China, weaker domestic growth outlooks, commodity price falls and expectations

Graph 1.6
Emerging Market Net Foreign Portfolio Inflows*



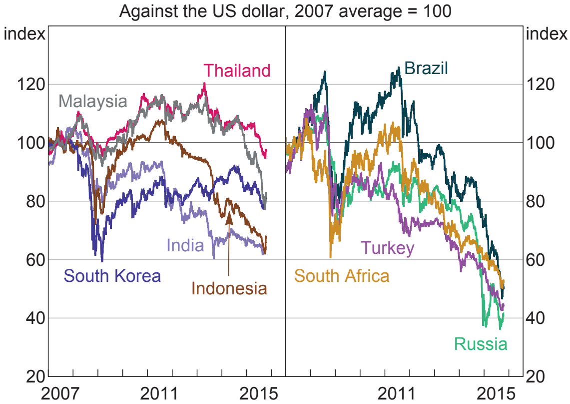
* Argentina, Brazil, Chile, China, Colombia, Czech Republic, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Philippines, Poland, Russia, Saudi Arabia, South Africa, South Korea, Taiwan, Thailand and Turkey
Sources: CEIC Data; IMF; National Sources; RBA; Thomson Reuters

2 There are various definitions of emerging markets. The definition used in Graph 1.6 and elsewhere is based on the fairly broad group of economies in the MSCI Emerging Markets Index (which includes countries such as Korea that are excluded from narrower definitions, such as that used by the International Monetary Fund). Hong Kong is also added to this group given its close financial linkages with China.

that the US Federal Reserve would soon increase its policy interest rate for the first time since 2006.

These developments have been reflected in sharp depreciations of several emerging market currencies, especially for economies that are reliant on commodity exports and/or where there is political instability, such as Brazil, Russia and Turkey (Graph 1.7). Equity prices have generally fallen in these economies, and for some corporate bond spreads have widened significantly.

Graph 1.7
Emerging Market Currencies
Against the US dollar, 2007 average = 100

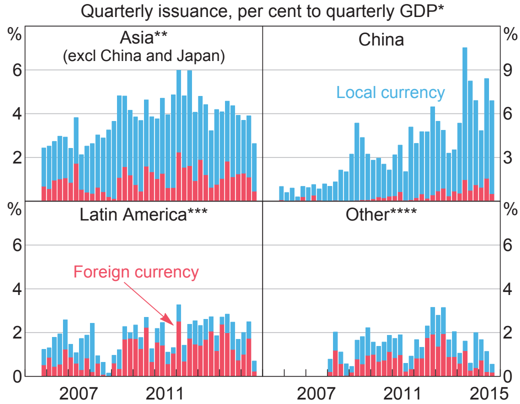


Source: Bloomberg

The shift in capital flows and lower economic growth expectations have raised concerns about vulnerabilities associated with emerging market corporate sector leverage, which has increased significantly in some economies since the financial crisis. While most emerging market corporate debt has continued to be intermediated by banks, corporations have increasingly sourced funding directly from markets, partly because financing conditions in global markets have been so favourable in recent years. This pattern reversed in the September quarter, when corporate bond issuance dropped sharply across most emerging markets.

Some of the increase in emerging market corporate borrowing in recent years reflects financial deepening in these economies and available evidence suggests currency and rollover risks – which have been associated with past financial crises – may be low in aggregate. While bond issuance by emerging market corporations has increased – especially in Asia – the ratio of foreign currency bond issuance to nominal GDP has been broadly stable (Graph 1.8). In addition, an increasing share of debt funding has been raised via long-term bond issuance, which may have lengthened aggregate maturity profiles and reduced rollover risk.

Graph 1.8
Emerging Market Corporate Bond Issuance
Quarterly issuance, per cent to quarterly GDP*



* Includes financials and non-financials; September 2015 GDP based on IMF forecasts

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

*** Argentina, Brazil, Chile, Colombia and Mexico

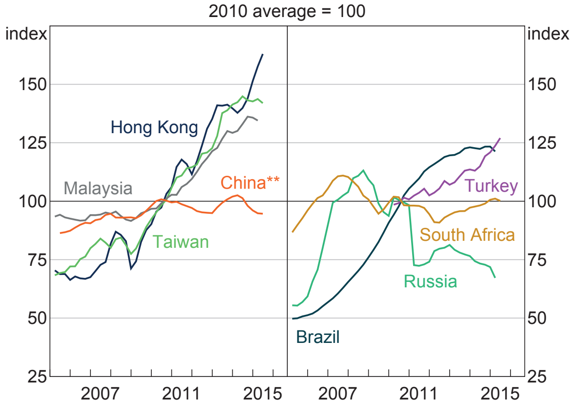
**** Czech Republic, Hungary, Poland, Russia, Saudi Arabia, South Africa and Turkey

Sources: Dealogic; RBA

Nevertheless, corporations in some sectors – such as construction and energy – and in some countries – such as Brazil, India, Indonesia and Turkey – have increased their foreign currency borrowings in recent years. Depending on whether and how they hedged, the profits of some corporations might come under pressure because of domestic currency depreciations and slower economic growth. More generally, increased exposures of advanced economy investors to emerging market corporations and sovereigns in recent years may be a channel through which financial stresses in emerging markets spill over to advanced economies.

In the low-yield environment, residential property prices have appreciated considerably over recent years in a number of economies, including Brazil, Malaysia and Taiwan. More recently, however, price growth has moderated in these economies (Graph 1.9). Housing prices in Hong Kong have risen especially quickly, partly as a result of the accommodative monetary policy setting associated with its fixed exchange rate system. In response to a further increase in prices – particularly for residential apartments – and a historically high household debt-to-GDP ratio, the Hong Kong Monetary Authority tightened macroprudential policies in February. While growth in loan approvals has decelerated somewhat since these measures were implemented, housing price growth remains rapid.

Graph 1.9
Real Housing Prices*
2010 average = 100



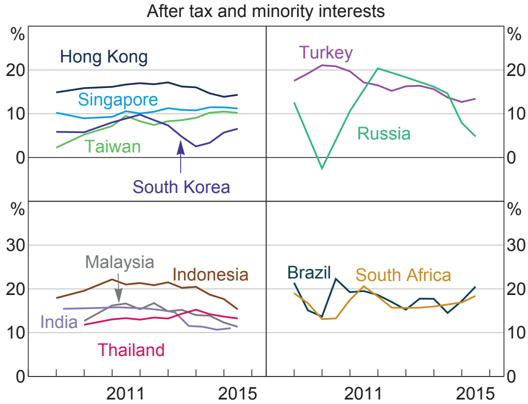
* Deflated using consumer price indices
** Average of new residential property prices
Sources: BIS; CEIC Data; RBA

Banking systems in other emerging and non-Japan Asia markets

Weaker economic growth and the build-up in debt imply that banking systems in emerging markets face a more challenging near-term operating environment, but key banking indicators remained sound in the first half of 2015 even across the more vulnerable emerging markets, such as Brazil and Turkey. Russian banks continue to be pressured by a combination of rouble depreciation, contracting economic activity, economic sanctions and rising NPLs.

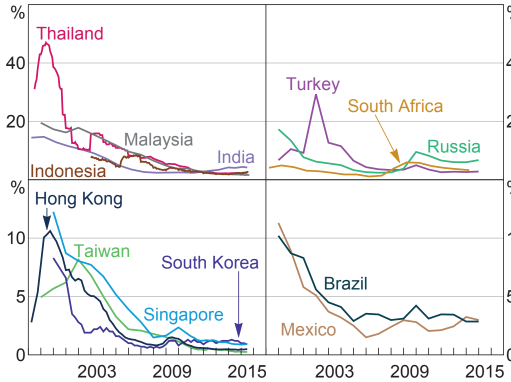
Key banking indicators in east Asian economies generally remained sound in the first half of 2015. Most large banks in the region remained highly profitable, despite some moderation in the profitability of banks in Indonesia, Malaysia and Thailand associated with increased loan-loss expenses and slower growth in net interest income (Graph 1.10). Korean banking system profitability continued to recover in the six months to June 2015 following significant losses for some banks in 2013, but remains pressured by lower non-interest income and higher provisioning expenses than east Asian peers. All banking systems in Asia continue to report low aggregate NPL ratios, and aggregate capital ratios are well above regulatory minimums (Graph 1.11).

Graph 1.10
Selected Banks' Return on Equity*
After tax and minority interests



* Number of banks: Brazil (11), Hong Kong (19), India (39), Indonesia (37), Malaysia (34), Russia (22), Singapore (3), South Africa (7), South Korea (16), Taiwan (29), Thailand (22) and Turkey (25); adjusted for significant mergers and acquisitions
Sources: Bloomberg; RBA; SNL Financial

Graph 1.11
Selected Banking Sector Non-performing Loans*
Share of loans



* Definitions of non-performing loans differ across jurisdictions

Sources: CEIC Data; National Banking Regulators; RBA; SNL Financial; World Bank

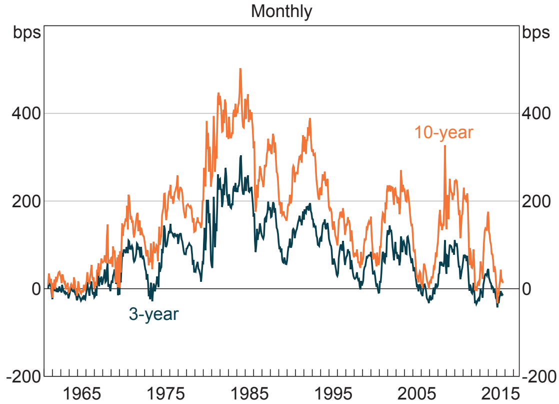
Advanced Economy Financial Systems

Since the previous *Review,* heightened concerns about growth in China and other emerging market economies has led to a broad reassessment of risk in financial markets, causing a moderate tightening in financial conditions in the advanced economies. In advanced economy equity markets, where valuations had been relatively high by historical standards, prices are around 10–15 per cent lower than their recent peaks. Similarly, corporate bond spreads have widened to be around historical averages, with spreads widening further for lower-rated bonds.

Monetary conditions in the major advanced economies are expected to be very accommodative for some time, even though economic conditions in these economies have generally improved and the US Federal Reserve is expected to start raising its policy interest rate in the period ahead. For example, sovereign bond yields remain around historically low levels, though they have increased slightly since the previous *Review.* Thus, although investors appear to have become more discerning about risk, search for yield behaviour continues to be supported by accommodative monetary policy and is evident in a range of asset markets where prices remain elevated.

Low interest rates support economic growth and economic risk taking but, if persistent, can encourage investors to increase financial risks in an attempt to maintain expected nominal returns. For example, term premia in US Treasury securities are estimated to have fallen to be around zero, indicating that investors are receiving minimal compensation for bearing the risk that interest rates do not evolve as expected – which is larger for a given maturity when yields are low (Graph 1.12). Low yields can be particularly challenging for insurance firms and defined benefit pension plans, which typically rely on financial asset returns to meet their long-term liabilities (see 'Box A: Effects of Low Yields on Life Insurers and Pension Funds').

Graph 1.12
Estimated Term Premia in US Treasury Securities
Monthly

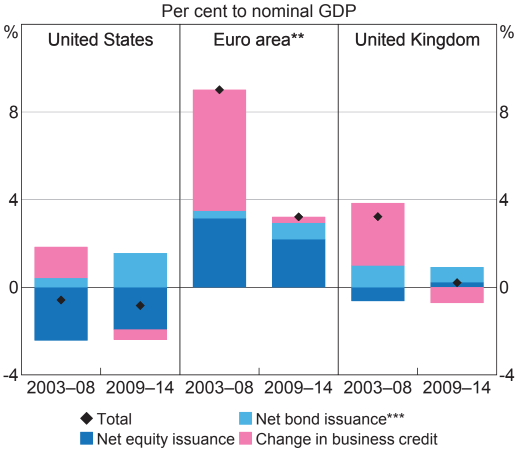


Source: Federal Reserve Bank of New York

The low-yield environment has been reflected in buoyant activity in a range of markets. Commercial real estate prices have increased in a number of countries in recent years to be near or above pre-crisis peaks, and credit standards appear to have eased for commercial property lending in the United States. Residential real estate prices have also increased in many advanced economies over recent years, such as Germany, Sweden and the United Kingdom. Corporate bond issuance in major advanced economies has also remained solid in the period since the previous *Review*, including for sub-investment grade issuers. A significant share of proceeds appears to have been used to fund mergers and acquisitions and share buybacks, rather than new investments.

The strong pace of bond issuance reflects the growing importance of financial intermediation through markets and asset managers, rather than banks, in the post-crisis period as banks' business models and the regulatory environment in which they operate have changed (Graph 1.13). This has focused attention on the potential for a sell-off in bond markets to have disruptive effects on the broader economy, possibly exacerbated by rapid redemptions by bond fund investors and a structural decline in bond market liquidity in recent years.

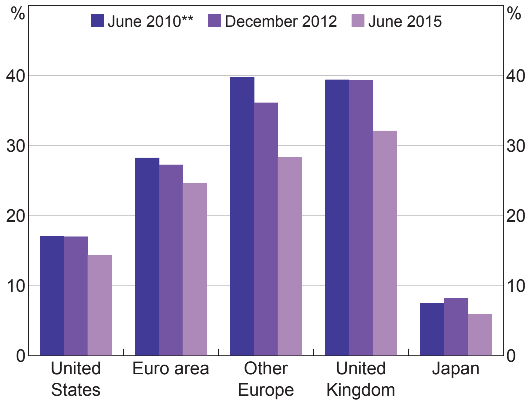
Graph 1.13
Private Non-financial Corporates' Net External Funding*



* Definitions differ across jurisdictions
** Includes unincorporated non-financial enterprises
*** Includes commercial paper in the United States and United Kingdom; includes all debt securities in the euro area
Sources: BOE; ECB; RBA; US Federal Reserve

The structural decline in bond market liquidity is mostly attributable to reduced market-making activities by banks, and is reflected in a range of indicators including the declining share of trading assets on the balance sheets of the G-SIBs (Graph 1.14).[3] The decline in market making by banks reflects regulations that were designed to shift some risks from banks to end investors, as well as changes

Graph 1.14
Advanced Economy G-SIBs' Trading Assets*



* Includes banks classified by the Financial Stability Board as G-SIBs as of November 2014; excludes ING and Standard Chartered
** December 2010 for the euro area and June 2011 for Japan
Sources: RBA; SNL Financial

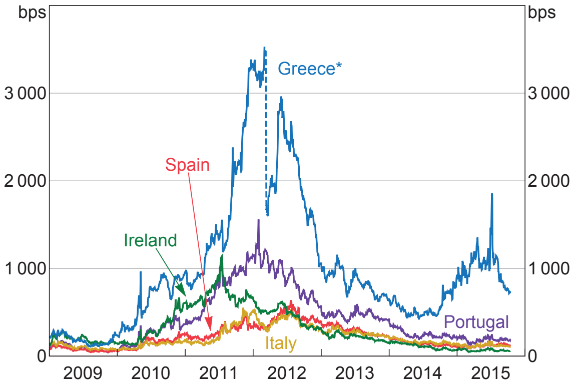
in financial institutions' own risk preferences. Both of these factors are expected to add to overall financial system resilience.

While equity market volatility picked up in recent months, bond markets were relatively stable, even as outflows accelerated from some bond funds. However, concerns persist about broader market resilience to large shocks. Challenges in equity markets on 24 August, and prior episodes of bond market turbulence, such as the 'flash rally' in US Treasuries on 15 October 2014, have shown that the implications of developments such as growth in exchange-traded funds and algorithmic trading may not be fully understood.

In the euro area, immediate concerns associated with Greece were allayed when agreement over a third bail-out package was reached. In contrast to the situation in 2011, market reactions to uncertainty prior to the agreement were muted. For example, Greek sovereign bond spreads rose but widening in other peripheral European sovereign bond spreads was limited relative to what was observed during previous episodes (Graph 1.15). This reflected a number of factors that have reduced channels for contagion including significantly lower private-sector exposures to Greece, increased

3 See Cheshire J (2015), 'Market Making in Bond Markets', RBA *Bulletin*, March, pp 63–73.

Graph 1.15
Euro Area 10-year Government Bond Spreads
To German Bunds



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

support from the European Central Bank (ECB), and further advances in the European framework for financial regulation.

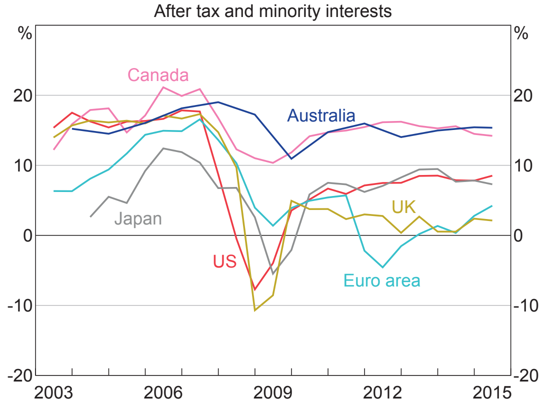
Nevertheless, longer-term challenges to the Greek Government and banking system remain, and deposit withdrawals and international transfers continue to be restricted. It is unclear if Greece can implement all of the extensive commitments in the agreement or what their economic impacts might be; a slow recovery would exacerbate vulnerabilities in the banking system and reduce the Greek Government's ability to reduce its debt to a more sustainable level. Greek banks remain burdened by a large volume of NPLs, are undercapitalised and continue to be reliant on Emergency Liquidity Assistance funding from the ECB. Up to €25 billion of the €86 billion rescue package has been earmarked for Greek bank resolution and recapitalisation, which will include the bail-in of senior bondholders. The recapitalisation of Greek banks is likely to occur before year-end, after the conclusion of asset quality reviews and stress tests in October, but before the Single Resolution Mechanism becomes fully operational on 1 January 2016.

Although broader euro area financial market contagion from recent developments in Greece was limited, if difficulties were to again arise, confidence in the euro area could be undermined and risk in financial markets reassessed more broadly. More generally, the euro area remains susceptible to financial stress because the gradual economic recovery and low inflation continue to weigh on bank profits and the debt-servicing capacity of highly indebted sovereigns.

Bank profitability

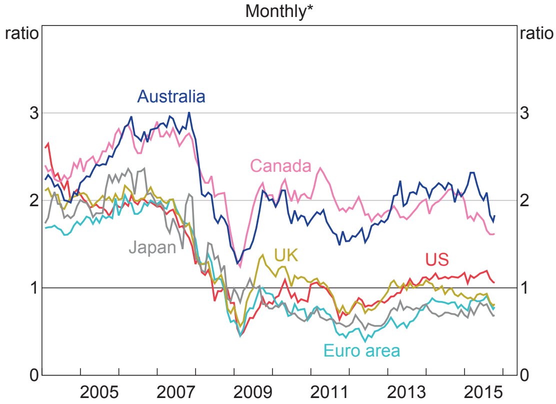
Profitability of the major banking systems increased somewhat in the six months to June, primarily in the United States and the euro area where profits were supported by improving asset quality and stronger credit growth; profitability was generally stable in other banking systems. Returns on equity remain below pre-crisis levels in most countries, however, because equity funding has increased and returns on assets are lower (Graph 1.16). Returns on assets have been weighed down by factors including compressed net interest margins associated with low interest rates and flat yield curves, litigation expenses and, mainly for some euro area banks, stubbornly high levels of NPLs. These factors continue to dampen the outlook for bank profitability, which is reflected in low share price to book value ratios (Graph 1.17). Bank share prices have fallen in the major advanced economies since the previous *Review,* generally in line with, or by less than, broader equity price falls.

Graph 1.16
Large Banks' Return on Equity*
After tax and minority interests



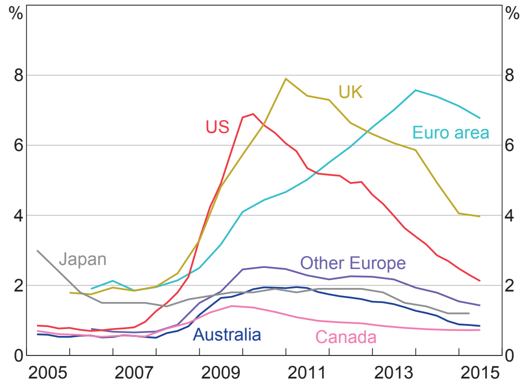
* Number of banks: Australia (4), Canada (6), euro area (41), Japan (4), United Kingdom (4) and United States (18); adjusted for significant mergers and acquisitions; reporting periods vary across jurisdictions
Sources: Banks' Annual and Interim Reports; Bloomberg; RBA; SNL Financial

Graph 1.17
Banks' Share Price to Book Value Ratios
Monthly*



* End of month; October 2015 observation is based on latest available data
Sources: Bloomberg; RBA

Graph 1.18
Large Banks' Non-performing Loans*
Share of loans



* Definitions of 'non-performing loans' differ across jurisdictions; number of banks: Australia (4), Canada (6), euro area (41), Japan (5), other Europe (10), United Kingdom (4) and United States (18)
Sources: APRA; Banks' Annual and Interim Reports; Bloomberg; FSA; RBA; SNL Financial

Asset performance and exposures

NPLs continue to vary widely across jurisdictions and are a factor explaining some of the variation in bank profitability and valuations. For most jurisdictions outside the euro area, loan-loss provisions amongst large banks have returned to be around pre-crisis levels. The decline in provisions has been associated with improving asset performance, with NPL ratios continuing to decline over the first half of 2015. However, these ratios remain above pre-crisis levels in most jurisdictions (Graph 1.18).

In the United States, further declines in NPL ratios for residential real estate loans continued to underpin asset quality improvements, which have been supported by better economic conditions and a small pick-up in credit growth. NPL ratios continued to fall in the euro area – most notably in Ireland and Spain – but remain high in most euro area countries compared with both pre-crisis levels and relative to other banking systems. The aggregate NPL ratio in the United Kingdom has declined to be at its lowest level since 2008, though the pace of improvement has slowed more recently.

Some international banks have significant exposures to emerging markets (Table 1.1). As a proportion of global consolidated assets, banks headquartered in the United Kingdom have the largest exposures to Asia, most notably to China and Hong Kong. Japanese banks also have large exposures to this region and have been actively expanding their overseas activities recently. Exposures to emerging markets outside of Asia are generally smaller.

As discussed in the previous *Review,* banks in the advanced economies do not appear to have large direct exposures to the energy sector and commodity producers, so their profitability seems unlikely to be adversely affected by the falls in commodity prices. Nonetheless, lower commodity prices could indirectly reduce bank profitability in commodity-exporting economies if economic growth were to slow in these countries. Some banks in the United States and Canada are reported to have undertaken actions to mitigate the risk of losses associated with loans to oil and natural gas producers, including reducing credit lines, tightening credit standards and restructuring existing loans.

Capital

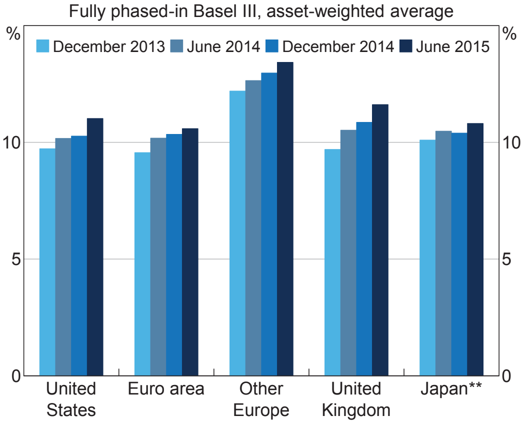
The majority of large banks in the advanced economies increased their CET1 ratios over the first half of 2015 (Graph 1.19). This was mainly achieved through an increase in retained earnings,

Table 1.1: Advanced Economy Banks' International Exposures[a]
Claims by BIS reporting banks, ultimate risk basis, March 2015

	Share of global consolidated assets (per cent)			
	Euro area[b]	Japan	United Kingdom[b]	United States
Emerging Asia and Pacific	**1.1**	**3.5**	**4.8**	**2.3**
China	0.4	0.8	1.8	0.6
India	0.2	0.3	0.7	0.5
Indonesia	0.0	0.3	0.2	0.1
Malaysia	0.0	0.2	0.5	0.1
South Korea	0.2	0.6	0.7	0.6
Thailand	0.0	0.8	0.1	0.1
Asian Offshore Financial Centres	**0.5**	**1.3**	**4.3**	**0.8**
Hong Kong	0.2	0.7	3.3	0.4
Singapore	0.3	0.5	0.9	0.4
Emerging Europe	**2.9**	**0.3**	**0.5**	**0.5**
Russia	0.3	0.1	0.1	0.1
Turkey	0.5	0.1	0.3	0.1
Latin America and Caribbean	**1.8**	**0.8**	**1.2**	**1.5**
Brazil	0.7	0.4	0.6	0.5
Mexico	0.6	0.2	0.4	0.7
Africa and Middle East	**0.6**	**0.4**	**1.9**	**0.5**

(a) Regional totals for emerging markets are equivalent to the BIS totals for 'developing' economies; selected individual economy exposures do not sum to regional totals
(b) Global consolidated assets are as at 30 June 2014
Sources: BIS; BoJ; ECB; FDIC

Graph 1.19
Advanced Economy G-SIBs' CET1 Ratios*
Fully phased-in Basel III, asset-weighted average



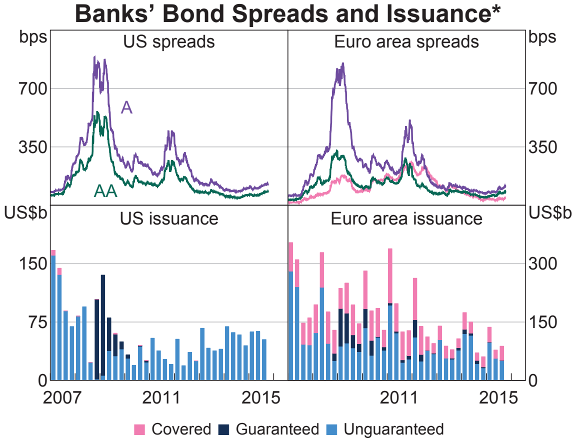
* Includes banks classified by the Financial Stability Board as G-SIBs as of November 2014; excludes Standard Chartered
** Japanese banks' CET1 ratios are based on transitional Basel III requirements
Sources: Banks' Annual and Interim Reports; Bloomberg; RBA; SNL Financial

though a modest increase in CET1 issuance and a fall in risk-weighted assets in the United Kingdom also contributed. All of the G-SIBs that report fully phased-in Basel III CET1 ratios continued to exceed the minimum Basel III targets including the capital conservation buffer and G-SIB surcharge, even though full phase-in does not occur until 2019. Issuance of Additional Tier 1 (AT1) and Tier 2 capital declined somewhat over the first half of 2015, although this followed very strong issuance in the second half of 2014; under Basel III, banks have been required to report non-risk weighted leverage ratios since 1 January 2015, which can be met with CET1 or AT1 capital. Most G-SIBs in the major advanced economies report leverage ratios that are either close to meeting, or exceed, the fully phased-in Basel III and supplementary requirements.

Funding and liquidity

Bank funding conditions generally remained favourable in the first half of 2015, despite a modest widening in bond spreads and increased deposit competition in the euro area (Graph 1.20). The volume of bank bond issuance has slowed somewhat, with maturities continuing to exceed issuance in the euro area; in the major banking systems, balance sheets continue to be increasingly funded with deposits and, to a lesser extent, equity.

Graph 1.20
Banks' Bond Spreads and Issuance*



* Spread to equivalent government bonds
Sources: Bank of America Merrill Lynch; Bloomberg; Dealogic; RBA

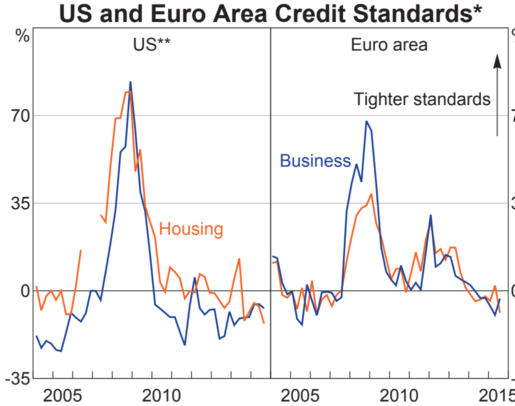
The phase-in of the Liquidity Coverage Ratio (LCR) commenced in most of the major banking systems during 2015. The LCR requires banks to hold a sufficient amount of high-quality liquid assets to cover expected net cash outflows over a 30-day stress period. Banks have generally been active in positioning their balance sheets to meet the new liquidity requirements ahead of regulatory deadlines; most G-SIBs in the major advanced economies already report LCRs that exceed the fully phased-in Basel III requirements. As discussed in previous *Reviews*, some banks have achieved this, in part, by reducing deposits of large institutional customers, which are treated less favourably under the new liquidity requirements.

Credit conditions and lending standards

Lending standards in some of the major advanced economies continued to ease in the first half of 2015, with banks citing increased competition as the primary driver. Across the major markets, improving economic conditions and accommodative monetary policies, in conjunction with easier lending standards, have supported moderate increases in loan demand and credit growth. Lending surveys in the United States, euro area and Japan noted in particular further easings in household lending standards (Graph 1.21).

Though growth in domestic bank lending has recently picked up in Japan, overseas lending continues to be the key driver of the expansion of the large Japanese banks' loan portfolios. The Bank of Japan has continued to highlight foreign currency liquidity risk arising from Japanese banks' overseas operations – a significant proportion of foreign currency lending is funded via short-term money markets – as well as increased interest rate risk mainly associated with Japanese banks' accumulation of euro-denominated bonds with long maturities.

Graph 1.21
US and Euro Area Credit Standards*



* Net percentage of respondents reporting tighter standards
** US housing is total housing before 2007, a simple average of prime and non-traditional mortgage loans from June 2007 to December 2014, and an average of government-sponsored enterprise eligible, qualified and non-qualified mortgage loans from January 2015; business series represents large and medium respondents only
Sources: ECB; RBA; Thomson Reuters

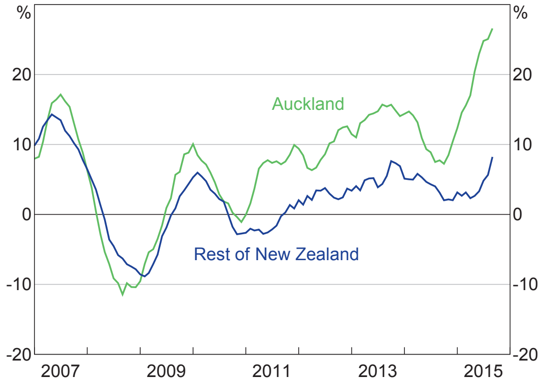
In the United Kingdom, buy-to-let (investor) mortgage lending has continued to grow more rapidly than lending to owner-occupiers. With little available evidence that underwriting standards of major UK lenders have fallen, the Bank of England's Financial Policy Committee (FPC) has judged that there is no immediate case for additional prudential measures specifically for the buy-to-let mortgage market. However, the FPC has said that it remains alert to the potential risks that the sector could pose to broader UK financial stability, both through credit risk to banks and the potential amplification of movements in housing prices, especially given already high levels of household debt. The FPC was granted Powers of Direction over mortgage lending for owner-occupied properties earlier in 2015 and HM Treasury is expected to consult on FPC Powers of Direction for buy-to-let lending later in 2015.

New Zealand

Australia's major banks have significant operations in New Zealand, making its banking system of particular interest. The housing and dairy sectors continue to be key areas of focus for New Zealand financial stability.

For some time, the Reserve Bank of New Zealand (RBNZ) has been concerned about rapid housing price inflation given already elevated levels of mortgage debt relative to household income. While housing price inflation slowed significantly following the implementation of restrictions on high loan-to-value ratio (LVR) lending in late 2013 and increases in the official cash rate in 2014, house price growth in Auckland has subsequently picked up sharply (Graph 1.22). The RBNZ attributes this to ongoing supply constraints, increased demand driven by high net immigration, stronger investor participation and low mortgage interest rates; the RBNZ has cut interest rates by a cumulative 75 basis points in the period since the previous *Review*. In May, the RBNZ announced that most mortgages on investment properties in the Auckland Council area will soon be required to have maximum LVRs of 70 per cent. Banks will also be expected to hold additional capital against all investor housing loans in New Zealand. The stated aims of these policies are to moderate the cyclical role of residential investors in the Auckland housing market and to strengthen the resilience of banks against any future housing market downturn.

Graph 1.22
New Zealand Housing Price Growth
Year-ended, three-month moving average



Sources: RBA; REINZ; Statistics New Zealand

The RBNZ has also raised concerns about the fall in dairy incomes associated with lower international milk prices. The dairy sector is both important to the New Zealand economy and highly indebted. Lending to the dairy sector accounts for around 10 per cent of New Zealand bank lending, with around half of all dairy sector debt held by one-tenth of dairy farmers. International milk prices have fallen by around 50 per cent since their 2013 peak and are below the estimated industry average break-even point. The RBNZ estimates that one quarter of New Zealand dairy farmers had negative cash flow in the 2014–15 season. To date, dairy land prices have held up, but a scenario where both agricultural land prices and income are falling would place highly leveraged farmers under significant pressure.