### 1. The Global Financial Environment

As advanced economy banking systems continue to recover, potential risks arising from broader financial market developments are increasingly in focus. International markets had, until recently, been remarkably stable, with historically low volatility and 'search for yield' behaviour prevalent. Financial asset prices reacted remarkably little to credit and geopolitical events that might have been expected to affect investor risk appetite. This has been somewhat unwound in recent weeks.

The low interest rate environment has continued to support a modest recovery in the global economy and an ongoing improvement in most banking systems. In the past six months, there has been a broad-based decline in non-performing loan (NPL) ratios for banks in the major advanced economies, with the ratio at euro area banks declining for the first time since the financial crisis. This has supported bank profits in most advanced economies, while for banks operating in emerging markets, continuing strong credit growth has underpinned profits. Search for yield behaviour has also supported an improvement in banks' capital positions.

Nonetheless, a sudden reassessment of risk could lead to a sharp repricing of assets, particularly if markets are less liquid than anticipated. In Europe, a decline in investor risk appetite could worsen banks' standalone funding profiles and increase recourse to the European Central Bank's (ECB) funding program. Similarly, while conditions in many emerging markets have largely stabilised since early 2014, past rapid growth in credit and property prices in some countries – including China – have made these economies more sensitive to adverse shocks.

#### Global Financial Markets

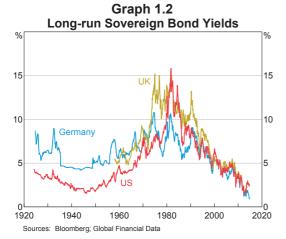
Global financial conditions remain buoyant overall and measures of market volatility remain low despite recent increases in some markets (Graph 1.1). Yields on a range of financial assets drifted down during much of the past six months. Part of the decline occurred because investors expected policy rates in major economies to remain low for a more extended period, but investors have also been willing to accept less compensation for taking on risk. Global equity prices in several advanced economies have risen strongly, and advanced economy long-term sovereign bond yields fell over the past year and remain at very low levels by historical standards (Graph 1.2). Spreads between the yields on higherand lower-risk financial assets have generally narrowed (Graph 1.3).

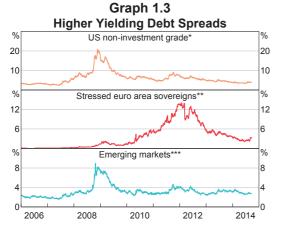
Graph 1.1
Financial Market Volatility



- \* Australia, euro area, Japan, New Zealand, United Kingdom and United States
- \*\* Brazil, Chile, Colombia, India, Indonesia, Malaysia, Mexico, Philippines, Russia, South Africa, South Korea, Taiwan, Thailand and Turkey

Sources: Bloomberg; RBA





- \* Non-financial corporations, B-rated bonds
- \*\* Average of Greece, Ireland, Portugal and Spain
- \*\*\* Global index; includes emerging Asia, Latin America and emerging Furope

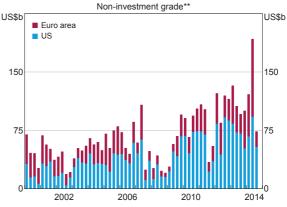
Sources: Bank of America Merrill Lynch; Bloomberg; Thomson Reuters

In an environment of elevated risk appetite, strong issuance of lower-rated debt was met with robust investor demand. Stressed-economy European sovereigns, such as Cyprus and Portugal, successfully returned to funding markets at favourable pricing relative to the recent past, often with oversubscribed issuance. Favourable financial conditions also extended to stressed-economy banks. For example, beginning in March, Greek banks returned to capital markets, with oversubscribed bond issues at comparably low yield spreads.

Similarly, issuance of both investment grade and non-investment grade corporate bonds have remained robust across the advanced economies (Graph 1.4). In the United States, issuance of 'covenant-lite' loans has increased, pointing to some relaxation in underwriting standards, and there has been rising investor demand for complex products such as collateralised loan obligations. Large global banks have also managed to issue hybrid securities (also known as contingent convertible bonds, or CoCos) that count towards the new Basel III capital requirements, although the risks associated with these relatively new securities are uncertain and difficult to price (see 'Box A: Recent Trends in the Issuance of Basel III Compliant Contingent Capital Instruments').

To an extent, increased risk taking is an intended consequence of accommodative monetary policy. Financial conditions have supported an improvement in economic activity in a number of advanced economies over the past year. Ongoing policy support has also allayed investor concerns about the probability of damaging tail-risk events. Important in this regard has been the ECB's long-term refinancing operations (LTROs), which were recently extended as 'targeted' LTROs.

Graph 1.4
Corporate Bond Issuance\*



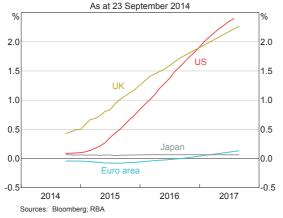
- \* September 2014 is quarter-to-date
- \*\* Includes unrated bonds

Source: Dealogic

Nonetheless, the buoyant financial environment also raises concerns that investors may not be adequately taking risks into account. A key consideration for policymakers is the extent to which the favourable pricing on riskier assets is justified by fundamental developments, and how resilient markets would be to changing circumstances. The concern is that a sudden reassessment of risk could lead to a sharp and damaging repricing of assets that undermines economic activity and aggravates debt burdens among sovereigns, households and businesses in a number of countries. Potential triggers for an adjustment in asset prices include revised expectations for monetary policy in advanced economies, adverse credit events, or geopolitical events, such as the tensions in Ukraine or Irag. That said, recent events of this nature have so far had a limited impact on broader markets.

On interest rate risk, the extent of monetary accommodation in the global economy is unprecedented (Graph 1.5), so it is unclear how the process of an eventual unwinding of current monetary settings will play out. Events in mid 2013, when financial markets reacted strongly to changed expectations for the stance of monetary policy, suggest that the adjustment could be pronounced. On that occasion bond yields moved higher globally, despite differences in expectations for monetary policy across countries. There was a marked

Graph 1.5
Market Implied Policy Rate Expectations



investor retreat from riskier assets, triggering sharp depreciations in the currencies of several emerging market economies that had been net recipients of portfolio inflows in the years prior. In many markets, these movements largely unwound when it became clear that an increase in the Federal Reserve's policy interest rate was not imminent and as central banks in other major advanced economies acted to loosen monetary policy.

A broader concern about the potential for a damaging repricing of financial assets in response to a shock is that some investors might be underestimating the difficulty of exiting a position. 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 also contributed to concerns.

Search for yield behaviour has, however, been supportive of financial conditions. The stability of euro area banks' funding profiles became more robust to market shocks as they decreased their reliance on central bank liquidity. Favourable euro area funding conditions have extended to stressed-economy banks, supported by the ECB's LTRO funding.

There has also been progress with establishing arrangements for the Europe-wide banking union. The European Parliament passed banking union legislation in April that seeks to reduce the reliance of banks on public sector support in a crisis. The scheme, which begins in January 2015, establishes a common fund for resolving banks, requires the imposition of losses on shareholders and bondholders before resolution funds can be disbursed, and guarantees deposits (up to a cap of €100 000).

While European sovereign and banking risks have lessened, a decline in investor risk appetite could hamper recent improvements in euro area banks' capital and balance sheet positions. The recent failure of the third-largest Portuguese lender, Banco Espírito Santo (BES), has heightened focus on the

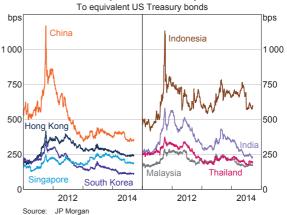
ECB's Asset Quality Review (AQR) and stress test exercise, for which results are due in the second half of October. Many banks have pre-positioned themselves by increasing capital issuance and provisioning coverage.

Conditions in Asian financial markets have been comparably stable over recent months, following periods of investor retreat in both mid 2013 and early 2014. Sovereign and corporate bond spreads have generally been stable or narrowed over the past six months (Graph 1.6), in line with broader global search for yield behaviour as well as ongoing portfolio inflows. Equity prices have also increased strongly since the beginning of the year, with markets in India and Indonesia particularly buoyed following elections. Most exchange rates for emerging Asia have been relatively stable and Asian central banks have generally continued to increase their gross foreign currency reserves.

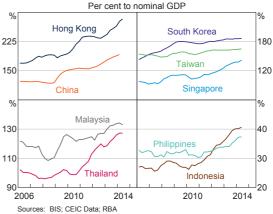
Nonetheless, financial system vulnerabilities in emerging Asia remain. Very low interest rates in the advanced economies and brighter growth prospects in emerging markets post-crisis have been supportive of rapid credit growth in many Asian economies in recent years, potentially increasing their vulnerability to adverse shocks (Graph 1.7). In China, around half of all new credit has originated outside the prudentially regulated sector. Concerns about asset quality have been rising in China, amid the slower pace of economic growth and a more recent softening of conditions in the residential property market.

In addition to growth in bank-intermediated credit, non-financial corporate bond issuance has picked up in many economies in emerging Asia, some of which has been denominated in foreign currencies. This may be of particular concern if exchange rates depreciate further in response to revised expectations for monetary policy in advanced economies. An associated vulnerability is that liquidity in the secondary market for bonds in some emerging economies is relatively low, with subdued trading volumes despite strong issuance. Low

Graph 1.6
Asian Corporate Bond Spreads



Graph 1.7 Asia – Total Credit



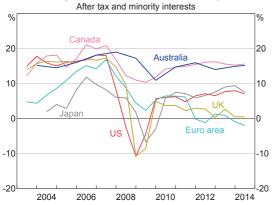
liquidity in secondary markets could amplify asset price dynamics under stress.

# Banking Systems in Advanced Economies

### Bank profitability and capital

Profitability in the major banking systems has remained mixed over the past six months (Graph 1.8). Drivers of weakness have varied. In the United States and Japan, net interest margins have narrowed further. Loan-loss provisions continue to be high for the large euro area banks, but are now around pre-crisis levels for the large US and UK

Graph 1.8
Large Banks' Return on Equity\*



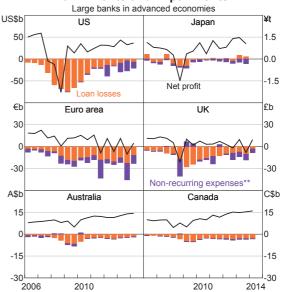
Number of banks: Australia (4), Canada (6), euro area (8), Japan (3), UK (4) and US (6); adjusted for significant mergers and acquisitions; reporting periods vary across jurisdictions; estimates used where banks have not reported for June 2014

Sources: Banks' Annual and Interim Reports; Bloomberg; RBA; SNL Financial

banks (Graph 1.9). Legal expenses, arising from past dubious practices and increased regulatory scrutiny, are detracting noticeably from profits for some banks in the United States and in Europe. Uncertainty remains over banks' ongoing exposure to litigation, with additional provisioning expected to weigh on future profits.

On average, large banks in advanced economies increased their Common Equity Tier 1 (CET1) capital ratios over the past six months, with all the global systemically important banks (G-SIBs) reporting CET1 holdings in excess of their fully phased-in Basel III regulatory minima including G-SIB surcharges (Graph 1.10). The large continental European banks improved their capital ratios mainly through issuance. In contrast, banks in the United States did so primarily through retained earnings. The increase in the United States also partly reflected responses to increased regulatory scrutiny of planned capital distributions (such as dividends), through the annual stress test and capital review. Preparations for the introduction of the supplementary US leverage ratio requirement, which is higher than the Basel III requirement, also contributed.

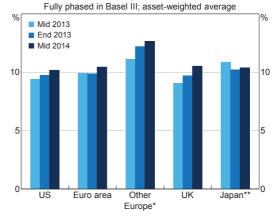
Graph 1.9
Bank Profits and Impairments\*



- \* Number of banks: Australia (4), Canada (6), euro area (6), Japan (3), UK (4) and US (6); adjusted for significant mergers and acquisitions; reporting periods vary across jurisdictions
- \*\* Includes, but is not limited to, goodwill and non-loan asset adjustments and one-off legal expenses; US data include only one-off legal expenses since 2008

Sources: Bloomberg; RBA; SNL Financial

### Graph 1.10 Advanced Economy G-SIBs' CET1 Ratios



- \* Includes Credit Suisse, Nordea and UBS
- \*\* Japanese banks' CET1 ratios are based on transitional Basel III requirements

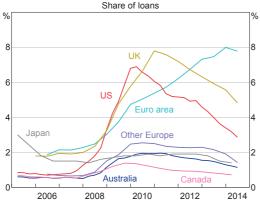
Sources: Bloomberg; RBA; SNL Financial

#### Asset performance

For the first time since before the global financial crisis, in the first half of 2014, all major advanced economy

banking systems have shown signs of improvement in asset quality (Graph 1.11). In the euro area, the aggregate NPL ratio fell modestly, though it remains elevated. In particular, NPL ratios fell for many stressed-economy banks, including those in Ireland, Italy and Spain, while in the rest of the euro area NPL ratios have been stable for several years. A number of euro area banks increased provisions in late 2013, especially for loans they had been forbearing on, to strengthen their balance sheets ahead of the AQR, which is based on banks' balance sheets at the end of 2013. For other euro area banks, loan-loss provisions have fallen to pre-crisis levels. In the United States, asset quality improvements have been driven by continued declines in non-performance rates for residential and commercial real estate loans.

Graph 1.11
Large Banks' Non-performing Loans\*



 Definitions of 'non-performing loans' differ across jurisdictions; number of banks: Australia (4), Canada (6), euro area (41), Japan (5), UK (4) and US (18)

Sources: APRA; Banks' Annual and Interim Reports; Bloomberg; FSA; RBA; SNL Financial

#### Bank funding conditions

Funding conditions have remained favourable for large banks in major advanced economies as wholesale borrowing costs continued to fall and spreads on bank bonds continued to narrow (Graph 1.12). Spreads on short-term interbank loans remain close to their lowest levels since 2007. Bond issuance by US and euro area banks has picked up,

**Graph 1.12** Banks' Bond Spreads and Issuance\* hns US hns Euro area 700 700 Covered bonds 350 350 ΔΔ US\$b US\$b US Euro area 150 300 150 75 2010 2014 2010 2014

Covered ■ Guaranteed ■ Unguaranteed
Spread to equivalent government bonds; September 2014 issuance is quarter-to-date

Sources: Bank of America Merrill Lynch; Bloomberg; Dealogic; RBA

though increases in banks' total assets over the first half of 2014 were largely funded by an increase in the stock of deposits. In Europe, there has been strong issuance of Basel III compliant Additional Tier 1 capital instruments, reflecting the introduction of European regulations and increased demand from investors.

Within the euro area, large stressed-economy banks reported lower interbank borrowing costs at longer maturities. Along with favourable wholesale funding conditions, this has helped banks reduce their reliance on the ECB'S LTROS

#### **Credit conditions**

Consistent with the ongoing recovery in economic conditions and banks' balance sheets, credit conditions in the major advanced economies seem to have improved. In the June quarter 2014, bank lending standards are reported to have simultaneously eased in both the United States and in Europe, and for all types of loans, for the first time since 2007 (Graph 1.13).

Bank lending is now growing in the United States and the United Kingdom, after prolonged periods of weakness. The pace of decline in the euro area

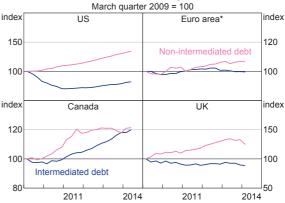
**Graph 1.13** US and Euro Area Credit Standards\* LIS Euro area Tighter standards 70 70 Business 35 35 Housing\* Housing **Business** -35 -35 2006 2010 2014 2010 2006

- Net percentage of respondents reporting tighter standards
- \*\* Simple average of prime and non-traditional mortgage loans from June 2007
- \*\*\* Large and medium respondents only Sources: ECB; RBA; Thomson Reuters

has moderated, though subdued lending to small and medium enterprises remains a concern for policymakers. Authorities have expressed concern about housing price and credit dynamics in several advanced economies, including the United Kingdom and Canada. While housing credit growth has not been unusually strong in these economies, housing leverage has remained elevated, so households could be vulnerable to an unexpected increase in mortgage rates or a fall in housing prices.

The recent period of bank deleveraging, in conjunction with the current search for yield environment, has seen a trend towards disintermediation in many advanced economies. With corporate bond yields remaining low, private non-financial corporations' use of non-intermediated debt funding has grown more quickly than intermediated debt for many advanced economies in recent years (Graph 1.14).

Graph 1.14
Private Non-financial Corporations'
Debt Funding

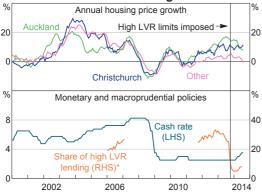


\* Refers to public and private non-financial corporations Sources: ECB; ONS; RBA; Statistics Canada; Thomson Reuters

#### New Zealand

Developments in New Zealand remain an important focus given the large Australian banks' operations there. The Reserve Bank of New Zealand (RBNZ) has been concerned about high household indebtedness and banks' exposures to the housing market in an environment of rising housing prices. In response, in 2013 the RBNZ placed temporary limits on high loan-to-valuation ratio (LVR) lending and increased banks' capital and liquidity requirements; the government also moved to expedite building approvals to address supply shortages. Banks have adhered to the RBNZ's limit on high-LVR lending, with the share of new housing lending with a LVR over 80 per cent falling to below 10 per cent from over 30 per cent (Graph 1.15). Over the past six months, the RBNZ has also increased the overnight cash rate by one percentage point. Annual housing price growth has eased in some cities but remains strong overall. While the RBNZ had planned to unwind the high-LVR limits at the end of 2014, it has noted that a recent increase in housing demand from increased net migration may delay this. (For further discussion on Australian banks' exposure to New Zealand, see 'The Australian Financial System' chapter.)

Graph 1.15
New Zealand Housing Market



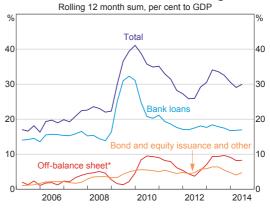
\* Share of mortgages with a loan-to-valuation ratio above 80 per cent Sources: RBNZ: REINZ

## Banking Systems in Emerging East Asia

#### China

Chinese banks remain highly profitable, and continue to report high capital ratios and low NPL ratios. Nonetheless, risks posed by the ongoing build-up of debt could be rising given the slower pace of economic growth compared to a few years ago. Part of this build-up in debt has been in the non-prudentially regulated 'shadow banking' sector, due, in part, to limits placed on bank lending and deposit interest rates (Graph 1.16). Borrowers in certain sectors, such as property developers and local governments, are restricted from accessing bank loans, so they access non-bank finance instead. Much of this lending is funded in ways that create off-balance sheet exposures for the banking system. For example, banks sell wealth management products on behalf of trust companies, which then invest in a variety of assets, including loans to developers and local governments. Often these channels involve the risks of long-term lending funded by short-term borrowing and high leverage, yet their regulatory supervision and internal risk assessment tend to be weaker than for the formal banking sector.

Graph 1.16
China – Total Social Financing



Includes entrusted loans, trust loans and bank accepted bills
 Sources: CEIC Data: RBA

Concerns about asset quality in China have been heightened by softening conditions in the residential property market. After rising strongly in recent years, property prices and sales volumes have declined in recent months amid reports of excess supply in some cities (Graph 1.17). This has prompted several local governments to review policies that had been aimed at restricting property activity.

Weakness in the property market could also have implications for the performance of Chinese banks' loans to property developers and local governments, many of which generate a significant portion of their revenue from land sales. Though lending to these sectors accounts for a relatively small share of banks' on-balance sheet lending, banks could also be exposed through shadow banking activities. More broadly, land is an important source of collateral for financing in China and housing is an important store of wealth. While China has been able to manage a small number of defaults in trust funds and corporate bonds, a more widespread series of private-sector defaults - potentially associated with a sharp correction in property prices - could be more damaging.

The focus on risks to China partly reflect China's large contribution to global growth. Foreign banking systems' exposures to China are generally small compared to their total assets, although they are

Graph 1.17
China – Residential Property Market



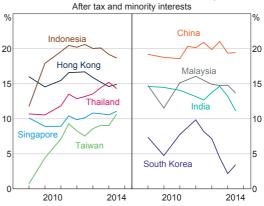
growing quickly in a number of countries, including Australia, and are sizeable for some individual foreign institutions. Banking linkages with China are particularly large for Hong Kong, where such exposures make up around 20 per cent of system assets; this reflects the close ties between the two economies, as well as Hong Kong's role as a major financial centre. For Australia, the links would instead be largely macroeconomic, including through the commodity sector.

#### Other East Asia

Sources: CEIC Data; RBA

Conditions in Asian banking systems have remained generally favourable in the past six months. Most banks in Asia continue to report high rates of return on equity compared to advanced economies (Graph 1.18). The level of profits has been supported by strong growth in bank lending and non-interest income. NPL ratios are generally very low, although they are typically a lagging indicator and there have been signs of deteriorating asset performance in certain economies and sectors (Graph 1.19). Banks' aggregate capital ratios continued to be well above Basel III minimum requirements. The notable exception to the otherwise strong profitability in Asian banking systems is South Korea, where banks' return on equity remains low relative to its peers in the region. This partly reflects the impact of corporate failures in the construction, shipbuilding and shipping sectors on a number of banks.

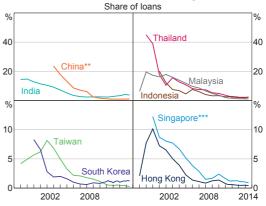
Graph 1.18
Asian Banks' Return on Equity\*



Number of banks: China (23), Hong Kong (32), India (39), Indonesia (47), Malaysia (36), Singapore (4), Taiwan (44) and Thailand (19); adjusted for significant mergers and acquisitions; estimates used where banks have not reported for June 2014

Sources: RBA; SNL Financial

Graph 1.19
Asian Banks' Non-performing Loans\*



- \* Definitions of 'non-performing loans' differ across jurisdictions
- \*\* Data for 2002–04 are for major commercial banks only
- \*\*\* Singaporean-owned banks only

Sources: Banks' Annual Reports; CEIC Data; National Banking Regulators; RBA; SNL Financial

While reported NPL ratios remain low, higher indebtedness in many Asian economies raises concerns about borrowers' ability to repay if interest rates rise or economic conditions deteriorate. Property price growth has recently moderated in several economies. This has followed a moderation in economic growth in some economies. However, some local authorities, particularly in Hong Kong and Malaysia, remain concerned about price levels. \*\*