1. The Global and Macro-financial Environment

Summary

The increase in inflation and interest rates since 2021 has put pressure on household and business finances in Australia and around the globe. It has also exposed vulnerabilities in some overseas banks, financial markets and non-bank financial institutions (NBFIs). However, in the face of a more challenging macroeconomic environment, households and businesses have been largely resilient to date, which has kept loan arrears low, and the global banking system continues to be supported by high levels of capital and liquidity.

Global financial stability risks remain elevated and include the following:

- **The spread of property sector stress in China to the rest of its economy and financial system**, which has other longstanding vulnerabilities. While direct links between China's financial system and the global financial system (including Australia) are generally limited, financial stress in China could spread to the rest of the world via its effect on global economic activity and associated changes in risk aversion (see 5.1 Focus Topic: Vulnerabilities in China's Financial System).
- **A sharp tightening in financial conditions and disorderly asset repricing** caused by, for example, a severe global economic downturn or a reassessment of the interest rate outlook if inflation stays high for longer than expected. A tightening in global financial conditions could transmit to Australia via linkages in funding markets and risk aversion.
- **NBFIs in key financial centres could amplify abrupt adjustments in global financial conditions**, as seen in episodes of stress in the global financial system in 2022.
- **A further weakening of conditions in commercial real estate (CRE).** Current challenges – including higher interest rates, declining incomes and falling prices – are weighing on the ability of borrowers in this market to service and roll over their debt; as a result, stress in the sector could intensify. However, banks in most overseas markets and in Australia should generally be more resilient to CRE stress than in past, owing to conservative lending practices implemented in recent years. Banks in some economies,

including Australia, are also less exposed to the CRE sector compared with previous periods of high inflation and interest rates, such as in the early 1990s.

- **A sharp increase in unemployment and a slowdown in economic growth.** While most banks are well placed to withstand a sharp economic slowdown, higher-than-anticipated loan losses resulting from high unemployment could lead to a tightening in lending standards, which would in turn amplify that downturn.
- **Renewed pressure on smaller banks, especially in the United States**, due to a significant increase in their cost of funding and the potential for a rise in non-performing loans (NPLs), including from CRE exposures. This could lead to a broad-based tightening in financial conditions, because these banks account for a large share of loans outstanding.
- **Ongoing threats to global financial stability generated from outside the financial system continue to build**, including those related to cyber-attacks, geopolitical tensions and risks associated with climate change.

1.1 Global financial markets and non-bank financial institutions

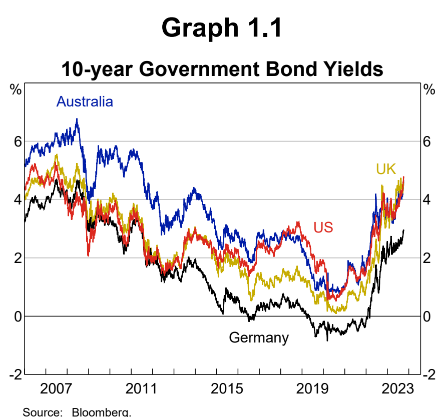
Higher interest rates and high inflation have exposed vulnerabilities in some parts of the global financial system and put pressure on households and businesses.

Global interest rates have increased substantially since late 2021, after a prolonged period of historically low rates (Graph 1.1). This increase has exposed vulnerabilities in some banking systems, and stresses experienced by NBFIs have disrupted functioning in parts of the global financial system. Such events – including liquidity stress in commodity and energy markets in 2022, stress in UK government bond markets caused by pension funds in September 2022, and banking stress in the United States and Switzerland in March 2023 – have required interventions by authorities to ensure broader system stability.[1]

By contrast, households and businesses, both overseas and in Australia, have (to date) largely been resilient to high inflation and rising interest rates. Continued low unemployment and savings buffers built up during the pandemic have supported household finances. However, increased pressure on household budgets has led some to cut back on consumption, and the combination of slowing sales and high costs is affecting the cash flows of many businesses. Lending standards have tightened significantly overseas, making it more difficult for some households and businesses to obtain or roll over financing.

Markets appear to be pricing in a soft landing for the global economy. Spreads on

Graph 1.1



Source: Bloomberg.

high-risk bonds remain around historical averages in major overseas markets (despite an increase in defaults to above pre-pandemic levels), valuations in equity markets (including in Australia) have increased over the past year, and analyst expectations of corporate earnings over the next 12 months continue to be strong (Graph 1.2). These higher valuations partly reflect positive sentiment in the IT sector related to developments in artificial intelligence. Nonetheless, yield curves have been persistently inverted in many economies, which point to expectations for substantially weaker growth and policy easing in the period ahead.

A large and disorderly adjustment in asset prices remains a risk to global financial stability.

Two possible triggers include:

- a sharp downturn in China and/or the global economy
- persistently high inflation, which requires interest rates to be increased further or held higher for longer than is currently expected.

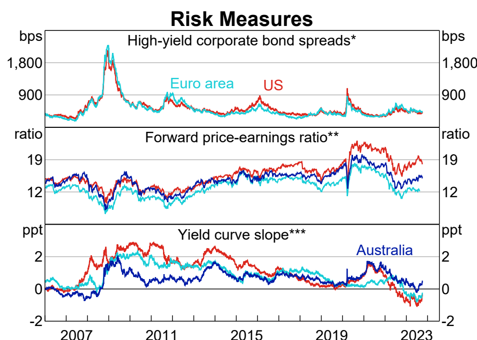
Further increases in the cost of borrowing in advanced economies or disruptions in key international funding markets would likely tighten financial conditions in Australia.

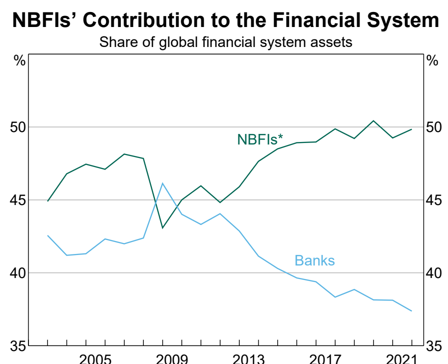
A related international risk is posed by the strong growth in assets managed by NBFIs in key global financial centres. These entities now account for around half of global financial system assets (Graph 1.3). Vulnerabilities in NBFIs, particularly investment funds, include high levels of leverage, liquidity mismatches and risk management practices that are generally less well developed compared with banks. These vulnerabilities have significantly amplified stresses in global financial markets over the past few years (see above).[2]

Addressing vulnerabilities in NBFIs remains one of the key priorities of global regulatory bodies, including the Financial Stability Board, with particular emphasis on the following areas:

- strengthening the resilience of money market funds and repo markets to shocks
- improving liquidity risk management practices in open-ended investment funds
- enhancing the monitoring of, and addressing financial stability risks from, leverage in NBFIs.

The Bank of England (BoE) also announced plans to create its first lending facility for insurance companies, pension funds and liability-driven investment managers. This is the first step of a





much broader effort to develop an effective backstop lending tool for NBFIs.

Important differences in the composition of the financial system mean these vulnerabilities are not as prevalent in Australia. The Australian NBFI sector is largely comprised of superannuation funds that do not guarantee member returns, use little leverage, and have a lower risk of redemptions that could spark unforeseen liquidity calls. Outside of superannuation funds, credit intermediation from non-banks (including from hedge funds) is also limited in Australia compared with other economies, comprising 4 per cent of outstanding housing credit and 9 per cent of business credit.

1.2 Global commercial real estate markets

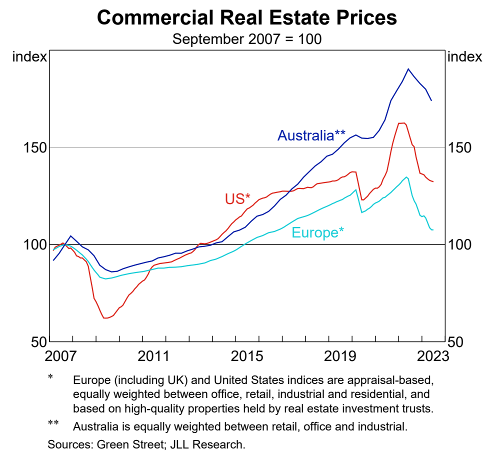
Weak conditions in CRE markets pose risks to global financial stability, although banking systems should be more resilient than in the past.

Conditions in global CRE markets continue to deteriorate.[3] Higher interest rates and weaker demand have weighed heavily on CRE prices, and further falls are likely given the lag in how commercial property prices tend to adjust to negative conditions. Prices have fallen by around 10–20 per cent since mid-2022 in Europe (including in the United Kingdom) and in the United States; price declines in Australia to date have been toward the lower end of this range (Graph 1.4). Price falls have been even larger for offices, where weak demand due to a shift towards working from home and a preference for higher quality office space has led to a significant increase in vacancy rates and a drop in landlord income (see Chapter 2: Resilience of Australian Households and Businesses).

Higher interest rates are also contributing to growing debt-servicing difficulties for some CRE borrowers. Loan arrears and defaults have increased in the (largely US-based) commercial mortgage-backed security market. US banks' CRE loan quality is also worsening, though from a strong starting point (Graph 1.5).

Weaknesses in CRE markets pose risks to the global financial system through links to banks and NBFIs in some economies. In the United States, smaller banks' exposure remains a concern as CRE loans represent around one-quarter of their assets (and a much larger share for some small banks), compared with 5 per cent of larger banks' assets. In Norway and Sweden, authorities are drawing attention to some banks' large exposures to CRE. For most economies, the

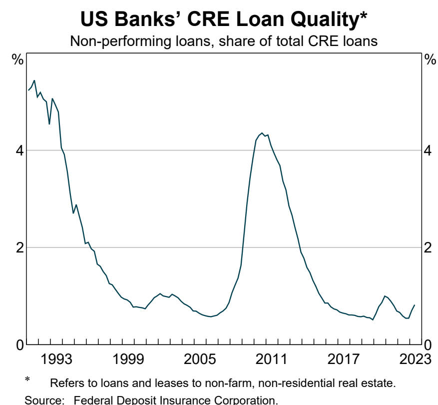
Graph 1.4



* Europe (including UK) and United States indices are appraisal-based, equally weighted between office, retail, industrial and residential, and based on high-quality properties held by real estate investment trusts.
** Australia is equally weighted between retail, office and industrial.
Sources: Green Street; JLL Research.

Graph 1.5

US Banks' CRE Loan Quality*



* Refers to loans and leases to non-farm, non-residential real estate.
Source: Federal Deposit Insurance Corporation.

strong starting point for underlying credit quality, improvements in lending standards over the past decade and high levels of capital should enable most banks to withstand any further deterioration in CRE market conditions. However, there are rising concerns regarding liquidity mismatches in funds that invest in CRE (as noted recently by the European Systemic Risk Board and the European Central Bank); in the event of large, unexpected redemption requests, these funds may be forced to sell their CRE assets at large discounts, contributing to steeper price falls.[4]

1.3 Households and businesses

Household debt levels are high in a number of economies, and resilience will be tested if unemployment increases sharply.

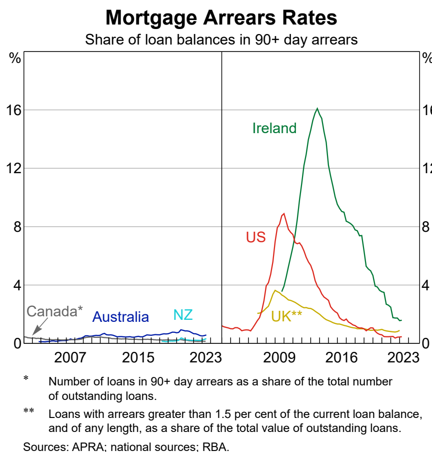
In Australia and elsewhere, most households have been resilient to high inflation and the significant tightening in monetary policy, supported by strong labour markets and the large liquid savings buffers accumulated during the pandemic. Mortgage arrears rates remain near historical lows in many economies (Graph 1.6).

However, the experience across households has been uneven, and signs of early-stage financial stress are beginning to appear in some economies. Consumer loan arrears rates have increased in Canada and the United States, albeit from low levels, and households are relying more on credit cards to sustain spending in Canada, the United Kingdom and the United States.

Many borrowers face substantially higher required mortgage repayments than a year ago, particularly in economies with predominantly variable-rate and shorter term fixed-rate mortgages (Graph 1.7). Regulators generally expect that most borrowers will be able to continue to service their mortgages. However, more recent borrowers who took out loans near the peak of the housing price cycle when interest rates were at their lowest tend to be more vulnerable. Household debt levels are high in a number of economies; a greater-than-expected increase in unemployment or interest rates staying high for a prolonged period due to persistent inflation would pose significant challenges for household debt serviceability (and, in turn, present upside risks to banks' loan arrears).

Stabilising housing prices are providing support to household balance sheets.

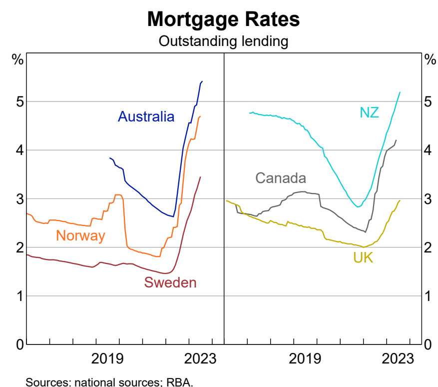
Housing prices have stabilised or increased recently in many advanced economies



* Number of loans in 90+ day arrears as a share of the total number of outstanding loans.

** Loans with arrears greater than 1.5 per cent of the current loan balance, and of any length, as a share of the total value of outstanding loans.

Sources: APRA; national sources; RBA.



Sources: national sources; RBA.

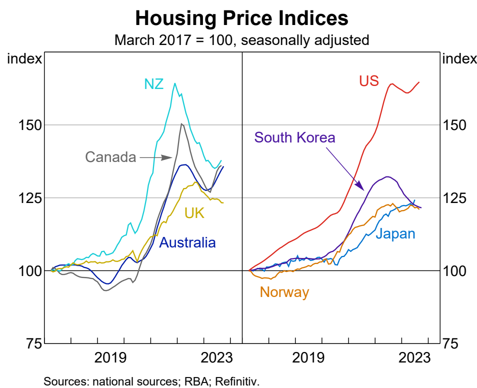
(Graph 1.8). Prices have risen by 7 per cent in Canada since their recent trough, 6 per cent in Australia, and 2 per cent in the United States and New Zealand.[5] Housing prices in several economies, including Australia, have been supported by:

- strong labour market conditions
- expectations that interest rates are approaching their peak for the cycle
- solid increases in population relative to housing supply.

Sustainable increases in housing prices can contribute to financial stability by supporting households' net wealth and reducing losses to lenders in the event of default (by reducing the share of borrowers in negative equity and the extent to which such loans are 'underwater').

In June 2023, the Reserve Bank of New Zealand (RBNZ) eased macroprudential loan-to-valuation (LVR) requirements for investor and owner-occupier mortgages. The RBNZ judged that risks to financial stability posed by high-LVR lending have fallen because housing prices are now more consistent with medium-term fundamentals.

Graph 1.8



Corporations could come under pressure if there is a sharp slowdown in economic growth.

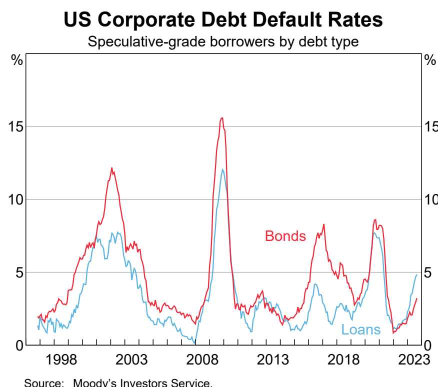
Corporations both in Australia and overseas have generally been resilient to higher interest rates, and indicators of financial stress are low. Arrears rates on bank loans to corporations remain near historical lows in many advanced economies, and corporate earnings have generally held up well. However, firms in advanced economies have started drawing upon the large cash balances established during the pandemic. Furthermore, after a period of fewer business failures, bankruptcies have risen in a range of economies, including Australia, Europe and the United States. While the increase has generally only seen a return to pre-pandemic levels of bankruptcies, a sharp economic slowdown would amplify this trend.

Consistent with rising bankruptcies and tighter credit conditions, default rates have increased for market-based corporate debt, with vulnerabilities more pronounced for lower grade corporations (Graph 1.9). Lower grade corporate debt is characterised by more variable-rate lending, including for leveraged loans in Europe and the United States, and is dominated by sectors exposed to cyclical trends, such as consumer products, real estate, and media and entertainment. Default rates on speculative-grade debt have increased to be above pre-pandemic levels in Europe and the United States, and default rates are higher for variable-rate borrowers. Refinancing risks for lower grade borrowers appear limited in the near term; however, this risk rises sharply over coming years with a peak in expected maturities around 2026. Financial conditions and the state of the economy at that time will be decisive in determining whether this refinancing profile proves problematic.

Graph 1.9

US Corporate Debt Default Rates

Speculative-grade borrowers by debt type



Source: Moody's Investors Service.

1.4 Banking sector

Large global banks remain liquid and well capitalised, and should be resilient to large shocks to economic activity …

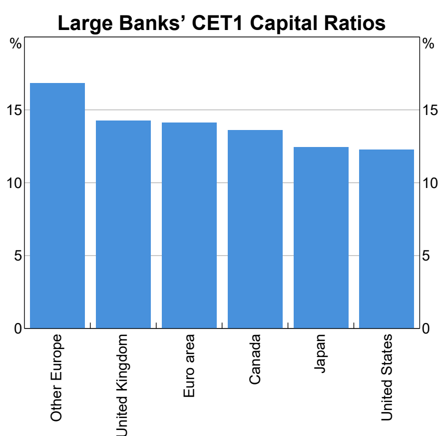
Large banks in advanced economies remain well capitalised and hold large buffers of liquid assets (Graph 1.10). Increases in interest rates have supported banks' profits through higher net interest margins (NIMs), as lending rates have increased faster than deposit rates. However, this effect is slowing and in recent times has begun to reverse in some economies, including in Australia, the United Kingdom and the United States. Revenue from investment banking has also fallen sharply over the past year due to reduced demand for mergers and acquisitions and initial public offers by companies.

Higher interest rates have had a limited effect on credit quality for advanced economy banks so far this cycle, including in Australia. NPLs remain very low as a share of total loans. Banks in advanced economies have increased provisions in response to the uncertain macroeconomic outlook and vulnerabilities in CRE (Graph 1.11). However, provisions remain historically low and might need to be increased further in the period ahead if economic conditions were to become materially worse than expected.

Recent stress tests conducted by authorities indicate that large banks in advanced economies would be resilient to a significant economic downturn, supported by strong starting positions for capital and liquidity. In the United States, unrealised losses on banks' securities holdings (which was one of the causes of the banking stress in March 2023) declined by around one-fifth between their peak in the September quarter of 2022 and the June quarter of 2023. Similarly, the European Banking Authority found unrealised losses to be 'modest' for euro area banks in April 2023.

Graph 1.10

Large Banks' CET1 Capital Ratios

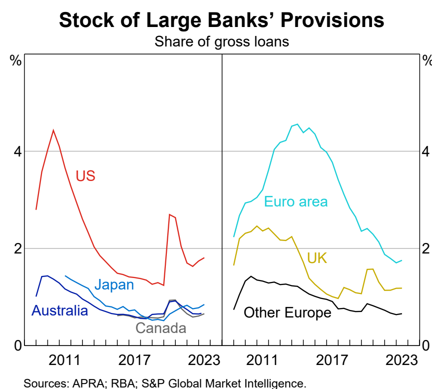


Sources: RBA; S&P Global Market Intelligence.

Graph 1.11

Stock of Large Banks' Provisions

Share of gross loans



Sources: APRA; RBA; S&P Global Market Intelligence.

… but some smaller US banks remain under pressure.

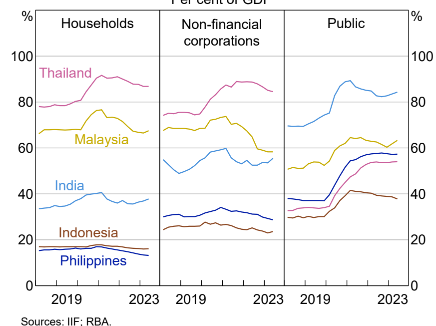
Some smaller US banks remain under pressure following the failure of three regional banks in March 2023.[6] This is despite a stabilisation in deposit levels and a decrease in the share of uninsured deposits. Increased competition for deposits, reliance on expensive wholesale funding (including from Federal Home Loan Banks) and borrowing from the US Federal Reserve have led to significantly higher funding costs and a reduction in NIMs at some banks. NIMs among smaller banks fell by up to 65 basis points in the June quarter of 2023. These funding and profitability pressures recently led to the announced merger of PacWest and Banc of California; such mergers may become more common if the business models of some regional banks prove unviable.

US regional banks may face strengthened capital and liquidity requirements in the period ahead. This follows the announcement of proposed rules to implement the final components of Basel III standards for banks with at least US$100 billion in assets or banks with large trading activities. US banking regulators have stated that most affected banks already have sufficient capital to meet the proposed requirements, which are expected to be phased in over a number of years beginning in mid-2025.

1.5 Emerging markets (excluding China)

Financial stability risks in most non-China emerging markets have remained moderate in the face of ongoing global uncertainty.

Since April 2023, financial conditions for emerging market economies (EME) in Asia have been little changed. Non-resident portfolio inflows and spreads between EME US-dollar-denominated bonds and US Treasuries have been stable. Foreign exchange reserves remain above the adequacy metrics set by the International Monetary Fund, despite recent foreign exchange intervention in some EMEs, and the ratio of debt-to-GDP has been broadly stable (Graph 1.12). However, in recent years, a significant share of sovereign bond issuance has been at shorter maturities, raising the risk associated with refinancing debt, and many EMEs continue to face significant external financing needs.



Capital levels in Asia are expected to be high enough to allow banks to absorb higher credit losses under the most plausible scenarios; Common Equity Tier 1 capital ratios remained relatively stable in most EMEs over the June quarter of 2023. However, delays in the recognition of losses associated with the extension of (pandemic-related) regulatory loan forbearance in some economies have created uncertainty around asset quality. Regulatory forbearance is due to lapse at the end of 2023 in Thailand, while in Indonesia the relaxation of loan classification standards that was set to expire in March 2023 has been extended for another year.

Box: Lessons from the recent banking stress

The banking stress in the United States and Switzerland in early 2023 has reinforced some important lessons for bank supervision and regulation from previous crises and has also provided some new areas of focus. The following lessons have guided the initial regulatory response, both internationally and domestically:

- **Stress can spread quickly**, including to institutions and jurisdictions not directly affected by a shock. For example, while Credit Suisse did not have direct connections with the failed US regional banks, stresses in financial markets rapidly spread to Credit Suisse, exacerbated by its long-running reputational and management problems.
- **The failure of smaller banks can have systemic consequences** depending on circumstances and sentiment. The failures of Silvergate, Silicon Valley Bank and Signature Bank in March 2023 caused wider stress in the US banking system despite these three banks not being considered systemically important beforehand.
- **Deposit outflows can be significantly larger and quicker than accounted for by regulatory frameworks for managing liquidity risk.** This could have implications for appropriate minimum levels of liquidity for banks and is a key area under active review by policymakers globally.
- **Current recovery and resolution frameworks and deposit insurance schemes need to be improved.** The US Federal Deposit Insurance Corporation recommended widening the deposit insurance scheme to allow for higher or unlimited deposit insurance for business payment accounts. The BoE is reviewing its Financial Services Compensation Scheme in light of the failure of Silicon Valley Bank UK. International bodies and national regulators are also actively considering the implications of the banking failures for recovery and resolution frameworks. In Australia, the Council of Financial Regulators is reviewing Australia's crisis management arrangements to ensure they remain robust, and the Australian Prudential Regulation Authority has begun exploring options to improve the effectiveness of AT1 instruments as crisis management tools (see Chapter 4: Domestic Regulatory Developments).

Endnotes

[1] See Choudhary R, S Mathur and P Wallis (2023), 'Leverage, Liquidity and Non-bank Financial Institutions: Key Lessons from Recent Market Events', RBA *Bulletin*, June.

[2] See Choudhary, Mathur and Wallis, n 1.

[3] See Lim J, M McCormick, S Roche and E Smith (2023), 'Financial Stability Risks from Commercial Real Estate', RBA *Bulletin*, September.

[4] See European Systemic Risk Board (2023), 'Recommendation on Vulnerabilities in the Commercial Real Estate Sector in the European Economic Area', January; European Central Bank (2023), 'Financial Stability Review', May.

[5] Latest observations for the house price indices are September 2023 (Australia, South Korea, United Kingdom), August 2023 (Canada, New Zealand, Norway, United States), and June 2023 (Japan).

[6] See RBA (2023), 'Box A: Recent International Bank Failures – Causes, Regulatory Responses and Implications', *Financial Stability Review*, April.