Financial Stability Risks from Commercial Real Estate

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Abstract

Current conditions in global commercial real estate (CRE) markets are challenging. Weak leasing demand and higher interest rates are weighing on CRE owners' loan servicing ability and asset values. Globally, appetite to lend to CRE investors is softening and signs of financial stress are emerging especially among office owners in the United States. While CRE markets are less likely to pose risks to the banking system given improved lending standards following the global financial crisis (GFC), systemic risks are higher in jurisdictions where the banking system is more exposed to CRE, such as in the United States and Sweden. Australian CRE markets face similar challenging fundamentals, though signs of financial stress appear low at present and systemic risks are lower than in the past. This is a result of Australian banks' reduced CRE exposures as a share of their total assets and tighter lending standards since the GFC. However, risks would increase in the event of a sharp economic downturn or if systemic risks were to spill over from overseas CRE markets.

Introduction

Commercial real estate (CRE) markets have historically been one of the main sources of banks' losses during periods of banking sector difficulties (Ellis and Naughtin 2010). This is because CRE markets tend to be more exposed to the business and credit cycle relative to other bank assets, and supply imbalances can build due to long construction times. Commercial property investors

are often dependent on rental income, such that weak leasing conditions decrease owners' income (and therefore the ability to service their loans) and the value of the underlying asset at the same time. CRE investors are also heavily exposed to refinancing risk, as their loans are mostly interest only and for relatively short terms. In addition, CRE loan terms generally impose ongoing conditions on borrowers, which can exacerbate price cycles if

widespread covenant breaches trigger property sales.

This article outlines developments in global and domestic CRE markets, with a focus on the relatively large office market and overseas CRE markets that are connected to Australia, including the United States, Hong Kong and Europe. It concludes with an assessment of risks in Australia, including how stress in overseas markets could transmit to the Australian CRE sector.

Current conditions in the CRE sector CRE market fundamentals are weak

Investors in global CRE markets are experiencing challenging fundamentals, especially in the office sector. Leasing demand for commercial property, particularly in the large office segment, is being affected by structural and cyclical headwinds partly brought on by the COVID-19 pandemic. A shift towards working from home has reduced office attendance rates globally, to around 60-70 per cent below pre-pandemic levels in some major cities (Graph 1). In the retail segment, the shift to online shopping has weighed on demand for many years, with the transition to online shopping gathering further momentum during the pandemic. At the same time, the industrial segment has benefited from the associated increase in demand for logistics space. While there is some uncertainty over the outlook for these structural trends in leasing demand, the forecast slowdown in employment growth and consumption in advanced economies over the coming years is expected to weigh on demand across all CRE markets.

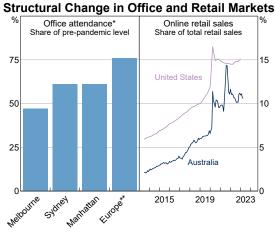
Lower leasing demand for office space has led to an increase in vacancy rates. Office vacancy rates in the United States and Hong Kong are now above levels seen during the global financial crisis (GFC) (Graph 2). In the United States, vacancy rates have increased the most in the largest cities and are expected to remain high as new projects currently under development reach completion. In Europe, the increase in prime office vacancy rates has been less pronounced as there has been an undersupply of prime office space in many cities alongside a greater return-to-office rate following the pandemic.

In Australia, the central business district (CBD) office vacancy rate is around its highest level since the mid-1990s, with vacancy rates around 14 per cent across both prime and secondary grade CBD offices. While strong growth in employment has helped sustain demand for prime grade office space, this has been more than satisfied by a large amount of new supply in recent years. The prime office vacancy rate is expected to remain high over the next few years as the pipeline of already commenced office construction projects reach completion. As in other countries, leasing conditions for secondary grade offices are even more challenging. There has been no growth in demand for secondary grade stock over recent quarters. Information from the Reserve Bank's liaison program suggests that many employers' preferences are shifting to higher quality office space (which often have higher sustainability ratings) over secondary to encourage workers back and to meet environmental goals.

Owners' profitability and asset valuations are declining

Higher vacancy rates and debt-servicing costs are weighing on office returns. High vacancy rates have reduced landlord income, through both higher levels of vacant stock and downward pressure on 'effective' rents (which are adjusted to include incentives attached to leases, such as rent-free

Graph 1



- Sydney, Melbourne and Europe data as at February 2023; Manhattan is at March 2023.
- ** Europe is the average of Paris CBD, Madrid, Stockholm, Dublin, Prague, London West End, London City and Warsaw.

Sources: ABS; Property Council of Australia; RBA; Real Estate Board of New York; Savills; U.S. Census Bureau.

periods and fitouts) on new (including renewed) leases. In Australia and the United States, effective rents on new leases remain around 5–10 per cent below pre-pandemic levels (Graph 3). Office market conditions are significantly weaker in Hong Kong, where effective rents are 25 per cent below pre-pandemic levels. In Europe, where a comparable measure of effective rents is not available, market commentary suggests effective rents have been more resilient, reflecting lower new supply, stronger tenant demand and stable lease incentives.

Alongside weak rental income, higher interest rates are adding to indebted CRE owners' debt-servicing costs. Combined, these factors are lowering interest-coverage ratios (ICRs) (earnings over

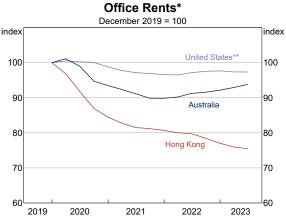
Graph 2



* Europe is the average across London, Paris, Amsterdam, Berlin, Frankfurt, Madrid, Rome and Stockholm; United States is the average of New York, San Francisco and Los Angeles; Australia is national CBD office.

Sources: Bloomberg; Colliers; JLL Research; RBA; REIS

Graph 3



* Net effective rents.

* United States is the average of New York, San Francisco and Los Angeles.

Sources: Bloomberg; Colliers; JLL Research; RBA; REIS.

interest expenses) and placing pressure on the returns accruing to indebted commercial property owners. That said, some owners have been at least partially shielded from these developments to date, through fixed or inflation-linked rent increases on existing leases, longer term fixed-rate debt or interest rate hedges.

In addition to increasing debt-servicing costs, higher interest rates weigh on CRE valuations as CRE assets are valued by discounting expected future income. Aggregate CRE valuation measures have begun to fall across most countries. In the United States, Europe and the United Kingdom, aggregate CRE valuation measures have fallen by around 10-20 per cent since mid-2022 depending on the valuation measure used (Graph 4).^[1] The large fall in Europe partly reflects that the interest rates used to discount asset valuations have risen by more than in other jurisdictions. In Asia, Hong Kong has seen the largest decline in valuations; in other markets, such as Singapore, valuations have been more resilient as vacancy rates have remained low and rental growth positive.

In Australia, aggregate valuation measures have fallen by around 10 per cent in the office segment and by around 8 per cent in the retail and industrial segments since mid-2022. This is broadly consistent with recently announced revaluations of CRE assets by some listed Australian real-estate investment trusts (A-REITs) and superannuation funds.

Further falls in valuation measures are likely, though the magnitude and pace are uncertain. Discount rates on CRE valuations have not yet fully reflected higher interest rates as valuations typically take some time to reflect changes in fundamentals. This is because transactions are infrequent (particularly during periods of heightened uncertainty) and costly, and they have long lead times so sale prices tend to lag actual conditions.

The share prices of listed real-estate investment trusts (REITs) can provide more timely (albeit imperfect) information on valuations, as REIT shares are highly liquid and their value largely reflects estimates of the value of trusts' underlying holdings of CRE. These have fallen by around 30–40 per cent

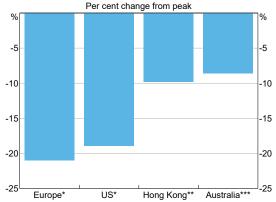
in most jurisdictions – including Australia – since interest rates started to rise (Graph 5).

Conditions and risks in overseas CRE markets

Lending conditions have tightened

Lenders to CRE markets are becoming increasingly cautious as declining asset values and weaker owner profitability have increased risks in the segment. In the United States, a large share of banks (which hold around half of US CRE debt) have tightened standards, including by reducing maximum loan sizes, widening the spread of loan interest rates to benchmark rates, lowering

Graph 4
Commercial Real Estate Valuations



- * Latest data is June 2023. Represents average institutional-grade assets typically held by REITs and is equally weighted between office, retail, industrial and residential. Calculated based on appraisal-value.
- ** Latest data is June 2023. Equally weighted between office and retail properties.
- *** Latest data is June 2023. Equally weighted between office, retail and industrial properties.

Sources: ABS; Green Street; Hong Kong Rating and Valuation Department; JLL Research; RBA.

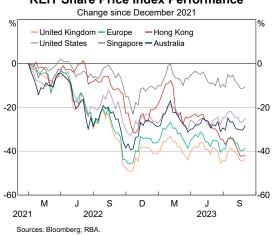
maximum loan-to-valuation ratios (LVRs), and increasing minimum debt-service coverage ratios for loans secured by CRE (Graph 6). The tightening has been broadly based across large and small banks. Lending standards and the availability of credit funded by US commercial mortgage-backed securities (CMBS) markets (accounting for around 12 per cent of US CRE lending) have also tightened. This reflects that investors in CMBS – which includes pension funds and insurers – have reduced appetite to hold these securities.

Banks in Europe are also tightening lending standards for CRE loans. In the United Kingdom, lenders reported reduced credit availability for CRE over the past year and further contraction is expected, which has been partly attributed to declines in CRE valuations.

While a tightening of lending standards at this point in the cycle can reduce risks for lenders and the financial system in the future, it can increase nearterm risks. This is because tighter lending standards make it more difficult for borrowers to meet minimum leverage and serviceability standards on a loan when refinancing is due. Indeed, combined with falling income and valuations, more borrowers could face a funding gap when refinancing. If these constrained borrowers are unable to refinance and are forced to sell their CRE assets, valuations could fall even further than implied by weak fundamentals, constraining even more borrowers.

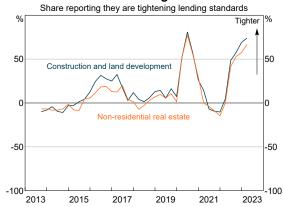
Graph 5

REIT Share Price Index Performance



Graph 6

US Banks' Lending Standards



* Refers to the net percentage of loan officers in the US Senior Loan Officer survey that are tightening lending standards for loans secured by non-residential real estate and construction and land development loans.

Source: Federal Reserve.

Financial stress is emerging

The quality of CRE loans has started to deteriorate in the United States, albeit from a historically strong level. In the United States, several large CRE owners have recently defaulted on their loans, largely due to rapidly increasing interest rates on variable-rate loans. Most of the defaulted loans were secured by older office properties, which are experiencing a particularly challenging leasing environment. However, overall arrears rates remain relatively low. Arrears rates on loans in US CMBS (which is the timeliest measure of arrears available) have increased by around 1¼ percentage points since mid-2022 (though they are still well below levels seen in the GFC and 2020). By sector, arrears rates in offices have more than tripled over this period, while rates in retail and other segments have remained broadly steady. Arrears rates on US bank loans (which are less timely) also ticked up in the first two quarters of 2023, but from a very low level (Graph 7). Charge-off rates – which capture loans that are removed from banks' books and charged against loss reserves – also remain low, although these typically lag arrears rates. Non-performing loans to CRE remained at historically low levels in Europe in the first guarter of 2023 (the latest available data).

With arrears rates expected to increase further, US and European banks have increased provisioning on CRE loans. Given lending standards have become more prudent over the past decade, CRE arrears and non-performing loans are unlikely to reach the heights recorded in the 1990s or during the GFC. However, loan quality could still deteriorate sharply if borrowing costs increase further or stay higher for longer, and/or economic or funding conditions deteriorate markedly.

Policymakers in a number of jurisdictions are alert to financial stability risks

Banking supervisors and central banks in a number of jurisdictions are increasingly drawing attention to the financial system risks posed by CRE, particularly where banking exposures are high – such as in the United States, Sweden and Norway (Graph 8) (Federal Reserve 2023; Riksbank 2023; Norges Bank 2023). In the United States, CRE loans make up

around 11 per cent of banks' assets; smaller US banks have even larger exposures at 22 per cent. As seen during March 2023, stress among some smaller banks can quickly spread to other similar banks (Federal Reserve 2023). While the US authorities are alert to US banks' relatively high CRE exposures, they also note that lending standards have become more prudent over the past decade and banks' starting positions for capital and asset quality are collectively much higher than in past CRE downturns; these factors should in principle provide some buffer for banks against deteriorating conditions. Central banks in Norway and Sweden have also highlighted the risks from CRE given banks' exposures in these jurisdictions are relatively high on average and some banks have much larger exposures. While bank exposures tend to be lower elsewhere in Europe, relatively high levels of loans at LVRs greater than 80 per cent in some countries is a concern for regulators (European Systemic Risk Board 2023; ECB 2023).

Overseas regulators are also drawing attention to vulnerabilities inherent in non-bank financial institutions, including liquidity mismatches in unlisted property funds (European Systemic Risk Board 2023; IMF 2023). If investors in these funds abruptly withdraw their funds, the fund may be forced to sell assets quickly to meet redemptions; this would likely entail steep price discounts in the current environment of low transaction liquidity and falling valuations. Evidence of fire sales resulting

Graph 7

US Banks' CRE Loan Quality*

%

12

9

Arrears rate

6

3

Charge-off rate
1993 1999 2005 2011 2017

Arrears rates are those past due 30 days or more and still accruing interest as well as those in nonaccrual status. Charge-off rates are the value of loans and leases removed from the books and charged against loss reserves. Excludes farmland loans.

Source: Federal Reserve.

from redemptions have been limited so far. The use of liquidity management tools, such as redemption limits and liquid asset buffers, have become more commonplace since the GFC. These tools help limit disorderly selling in response to redemptions, but work is still underway to enhance their operation (FSB 2023).

Conditions and risks in domestic CRE markets

There have been limited signs of financial stress among owners of Australian CRE

Available information shows few signs of financial stress among owners of Australian CRE. In aggregate, listed A-REITs – which own roughly 10 per cent of office space and 60 per cent of retail space in Australia – continue to maintain balance sheets with relatively low levels of leverage and ICRs of more than three times their earnings (Graph 9). High ICRs, in particular, provide A-REITs with headroom to absorb weaker rental income or further debt-servicing increases as interest rate hedges roll off.

There is less information available on the financial health of other types of trusts (e.g. unlisted trusts and foreign listed trusts), which estimates suggest own roughly 35 per cent of office space in Australia. Information from liaison suggests that Australian unlisted trusts (excluding superfund-related products) have higher leverage than A-REITs. Signs

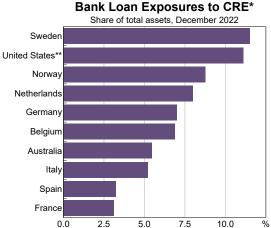
of financial stress among unlisted trusts have increased in recent months; some have experienced an increase in redemption requests from unit holders. As discussed above, this can lead to forced sales and sharp price declines in the absence of prudent liquidity management practices; to manage liquidity, some trusts have suspended distributions and limited redemptions, which have likely occurred after drawing down buffers of liquid asset holdings. Since the GFC, the unlisted trust sector in Australia has become smaller and investors better understand that unlisted property funds can limit access to withdrawals through redemption limits. To date, this has meant that unlisted trusts appear not to have been forced to rapidly sell assets at steep discounts.

Other commercial property owners in Australia include high net worth individuals, companies, sovereign wealth funds and pension funds.

Sovereign wealth funds and pension funds are less likely to be forced to sell CRE assets in a downturn given they tend to have low leverage and hold commercial property as long-term investments. Indeed, Australian superannuation funds (which in aggregate hold around 5 per cent of total assets in unlisted property including direct ownership or indirect ownership via unlisted trusts) tend not to be leveraged on their direct ownership of properties.

Smaller leveraged commercial property owners in Australia are more likely to source funding from

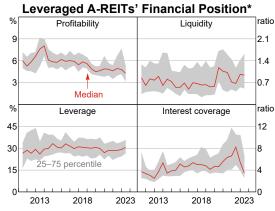
Graph 8



* For European countries, this refers to commercial real estate loans and advances made to non-financial corporates.

** For the United States, this includes both residential and non-residential real estate, and excludes construction and land development, and farmland.
Sources: APRA; European Banking Authority; Federal Reserve; RBA.

Graph 9



Profitability measured by annual EBITDA over assets, liquidity by current assets over current liabilities, leverage by debt over assets, and interest coverage by annual EBITDA over annual interest expenses There is a gradual structural break in ratios in late 2019 to early 2020 due to an accounting change.

Sources: Morningstar; RBA.

banks. Non-performing rates on Australian banks' commercial property lending remain negligible across all bank types and segments – and are far below the levels seen during the GFC (Graph 10). Information from liaison suggests that some landlords are struggling to meet ICR requirements; however, banks are willing to work with existing borrowers provided they can demonstrate a path back to meeting minimum loan requirements. While indicators of financial stress among owners that borrow from banks are low at present, they are expected to increase over the coming quarters as incomes and valuations are likely to decline further.

Stress could spill over from overseas markets to Australia

Even if developments in domestic CRE markets remain relatively orderly, there is a possibility that stresses in overseas CRE markets could spill over to affect the Australian CRE market through common ownership and funding sources. Widespread financial stress among owners of CRE overseas could increase the risk of a disorderly fall in domestic valuations if (realised or unrealised) losses on foreign assets force owners to sell and lead lenders to reduce lending to the Australian CRE market. Indeed, global CRE prices have become more correlated since the GFC (BIS 2020).

Common funding sources

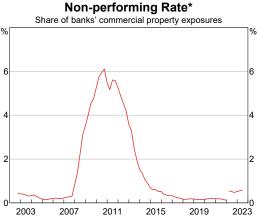
Large commercial property owners in Australia – in particular, listed A-REITs – rely heavily on foreign investors for debt funding. Around 45 per cent of

total debt borrowed by the large A-REITs is sourced from overseas funding markets, predominantly the United States, which accounts for around one-quarter of total debt (Graph 11). Foreign investors are also key participants in local corporate bond markets, from which around 20 per cent of large A-REIT debt is sourced. If reduced appetite for lending in US CRE markets broadens out to a reduction in willingness to lend to other CRE markets including Australia, A-REITs would need to refinance at higher interest rates than otherwise, turn to other (potentially more expensive) funding markets and/or issue shares to cover maturing debt. If these options were not available, A-REITs may be forced to sell properties, potentially at a steep discount.

However, most A-REITs are well placed to manage any temporary dislocation in global commercial property debt markets. Very little debt issued by A-REITs is maturing in the near term (Graph 11). Market research also suggests that most A-REITs have ample liquidity in the form of undrawn debt facilities to cover all debt maturities to mid-2024.^[2]

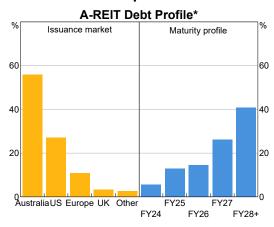
Australian CRE markets are also linked to global markets through the increased participation of foreign banks in Australia. Asian banks, in particular, have increased their exposures to Australian commercial property in recent years. Lending by Asian banks accounts for around 14 per cent of bank lending to CRE in Australia, while European banks provide around 7 per cent (Graph 12). If foreign banks sustain losses on their commercial property exposures overseas, they may impose





* Excludes overseas exposures. Prior to 2022, data reported as impairment rates.
Sources: APRA: RBA.

Graph 11



* As at December 2022. Coverage include the large A-REITs and is different across panels. Includes drawn-down and undrawn debt. Sources: Company Reports; JP Morgan; Morgan Stanley; RBA. mandates to reduce exposures and tighten lending standards across their commercial property portfolios – including in Australia. This could reduce the supply of credit to commercial property markets, which would make it more difficult for some investors to refinance their loans. There is some evidence that this occurred during the GFC when European banks reduced their exposures to Australian CRE following years of strong growth.

Common ownership of global CRE assets

Owners of Australian CRE assets that also own CRE assets overseas can be a channel for stress in overseas markets to propagate locally. On the one hand, if large losses are realised on foreign commercial property holdings, investors may be forced to divest other commercial property assets – including those in Australia – to satisfy covenants on existing debt or to allow refinancing (Lane, Sinclair and Orsmond 2014; Zhu and Lizieri 2021). On the other hand, concerns around fundamentals and valuations in overseas CRE markets could push foreign capital towards jurisdictions where investors perceive fundamentals to be stronger. There is some evidence that this occurred in Australia during the pandemic, when strong demand from foreign investors at pre-pandemic prices supported office valuations over this period.

The risk of foreign stress being transmitted to Australia through this channel has increased over the past decade as foreign investors (which are more likely to own CRE assets in other countries) commercial property market, particularly for offices (Graph 13). Some of the large foreign owners of Australian commercial property include global real estate funds and trusts that hold commercial property assets globally. Estimates from commercial property transactions, construction and withdrawals data since 2007 show that roughly 30 per cent of Australian offices are owned by foreign investors and these owners are concentrated in relatively few jurisdictions. The top five jurisdictions of domicile are Singapore, China, the United States, Hong Kong and Canada. [3]

have become more active in the Australian

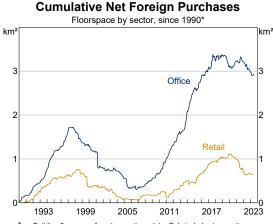
In Australia, banks' conservative CRE lending practices and small exposures limit systemic risks

Banks operating in Australia have conservative lending practices that reduce the potential for systemic risks arising from commercial property markets. Lending practices have improved since the GFC in part due to increased regulatory oversight from the Australian Prudential Regulation Authority (APRA) following bank losses on CRE exposures during the GFC. The early 1990s period also saw even larger CRE losses experienced by some banks, and some of the lessons learned from this episode continue to inform bank risk appetite in the CRE sector. Over recent years, most commercial property bank loans have been written with a LVR of less than 65 per cent and have requirements that borrowers have earnings that cover twice their interest expenses (equivalent to an ICR greater than

Graph 12

Banks' Commercial Property Exposure Limits* Australian exposures, by bank origin \$b \$b Australia Asia Other 300 300 200 200 100 100 2023 2011 2015 2019 Total limits on facilities committed by banks. Sources: APRA; RBA.

Graph 13



* Building floorspace from transactions data. Only includes transactions greater than \$5 million.

Sources: JLL Research; RBA.

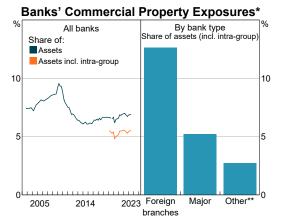
2). Many institutional customers borrow at much lower LVRs due to their internal leverage limits.

The limited CRE exposures of banks in Australia also help mitigate potential systemic risks from a downturn in commercial property. Having declined since the GFC, banks' aggregate exposures to commercial property markets are small, making up around 5 ½ per cent of total assets (Graph 14). This figure is low both by historical standards and compared with a number of other countries. Foreign bank branches have the most concentrated exposures to Australian commercial property, reflecting the specialised nature of their Australian banking operations. However, this exposure likely makes up a small share of total international group assets. And despite strong growth in lending from foreign bank branches in recent years, information from liaison suggest lending standards at these banks are broadly in line with standards at domestic banks.

In line with developments overseas, the share of banks operating in Australia that have reported reduced lending appetite to CRE markets and tightening lending standards has increased over the past year. However, as mentioned above, banks appear willing to continue to extend credit, including refinancing loans, to creditworthy customers, even where they fall short of minimum ICR requirements.

Non-bank lending in Australian commercial property markets tends to be focused on the riskier

Graph 14



- * Excludes overseas exposures.
- ** Includes non-major Australian banks and Australian subsidiaries of foreign banks.

Sources: APRA; RBA

financing of construction and development rather than buy and hold investments in established properties. Information from liaison suggests that lending standards at non-banks are more accommodative than at banks. For example, nonbanks typically have appetite for higher LVR loans, and some do not impose minimum ICRs. [4] However the risks to financial stability in Australia from non-bank lending in the CRE sector are low as non-banks make up a small share of total lending and do not have large connections to the banking system (Hudson, Kurian and Lewis 2023). However, stress could transmit from non-banks to other commercial property lenders if there were to be extensive defaults among non-banks' borrowers, triggering wide-spread fire sales.

Conclusion

Conditions in global CRE markets are currently weak. Low leasing demand and higher interest rates are putting pressure on landlords' cash flows and asset valuations. Some signs of financial stress among CRE owners have emerged. In response to this and expected future stress, there has been a fall in the appetite of banks and investors to lend to CRE markets, particularly in the United States. If many CRE owners are unable to refinance or service their debts, owners may be forced to sell their CRE assets at a steep discount, which could exacerbate falls in valuations. Although lending standards have generally strengthened since the GFC, bank exposures remain relatively high in some jurisdictions, raising concerns about wider financial stability risks in these countries.

The Australian CRE market faces some similar headwinds. While signs of financial stress among owners of Australian CRE remain low, pressure on the asset class is likely to continue for some time. Links between the Australian and global CRE markets through common ownership and funding could also mean stress in foreign CRE markets spills over to Australia. Investors in CRE could realise large losses, but broader systemic risks appear limited. Banks in Australia have conservative lending practices for CRE loans and exposures to the segment are small. Indeed, lending standards have strengthened and exposures as a share of total

assets have declined since the GFC. There is some evidence to suggest that riskier lending could have shifted to non-banks, but this poses little systemic risk to financial stability in Australia as non-banks account for a small share of total credit and banks

have relatively limited exposures to non-bank lenders. \checkmark

Endnotes

- [*] The authors are from Financial Stability Department. They would like to thank Eden Hatzvi and Natasha Cassidy for their contributions.
- [1] The estimate of US CRE valuations is based on Green Street's US Commercial Property Price Index (CPPI), which uses an appraisal-based estimate of prices. Alternative measures of US CRE valuations, such as Real Capital Analytics' repeat-sales CPPI or NACREIF's appraisal-based Property Index, show declines of around 6–10 per cent since their mid-2022 peaks.
- [2] Analysis by Morgan Stanley and JP Morgan, which covers the large A-REITs.
- [3] Many owners domiciled in Canada and Singapore are pension funds or connected to the country's sovereign wealth fund. As discussed above, these types of owners are less likely to be forced to sell their CRE assets in a downturn.
- [4] This, at least in part, reflects that non-bank lenders operate with fewer regulatory constraints than banks. It is important to note, however, that if non-bank lending in Australia were to pose a risk to financial stability, APRA could avail its reserve powers to regulate the sector. For more detail on non-bank lending in Australia, see Hudson, Kurian and Lewis (2023).

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