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Commercial property and financial stability

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Commercial property lending has been the main reason for defaults during most financial crises, both internationally and in New Zealand. With the commercial property market recovering strongly, this article reviews the structure of the New Zealand market and its relationship to financial stability. A key conclusion is that risks in commercial property have declined since the global financial crisis (GFC) because less leverage is being used to fund new purchases and developments.

1 Introduction

Commercial property provides the physical infrastructure for commercial economic activity. It includes industrial space (factories and warehouses), office buildings, retail (restaurants and shops) and accommodation buildings.[2] However, lending to the sector carries several inherent risks which can undermine financial stability. Evidence from past crises, including the GFC, shows that commercial property loans have typically been the main source of loan losses.

The New Zealand commercial property sector is enjoying a period of expansion, following a substantial fall in property values in the wake of the GFC. Over the past two years, prices have increased at an annual rate of more than six percent, vacancy rates have declined, sales activity has increased, and several major developments have moved into the consenting phase. In light of these conditions, it is timely to examine how this period of renewed strength in commercial property could pose risks to financial stability.

The next section of this article examines the nature of the link between the commercial property sector and financial stability in general terms, while section 3 considers evidence from past financial crises. Section 4 outlines key features of the New Zealand market. Section 5 takes a look at the recent New Zealand commercial property experience, and discusses how risks have evolved since the GFC.

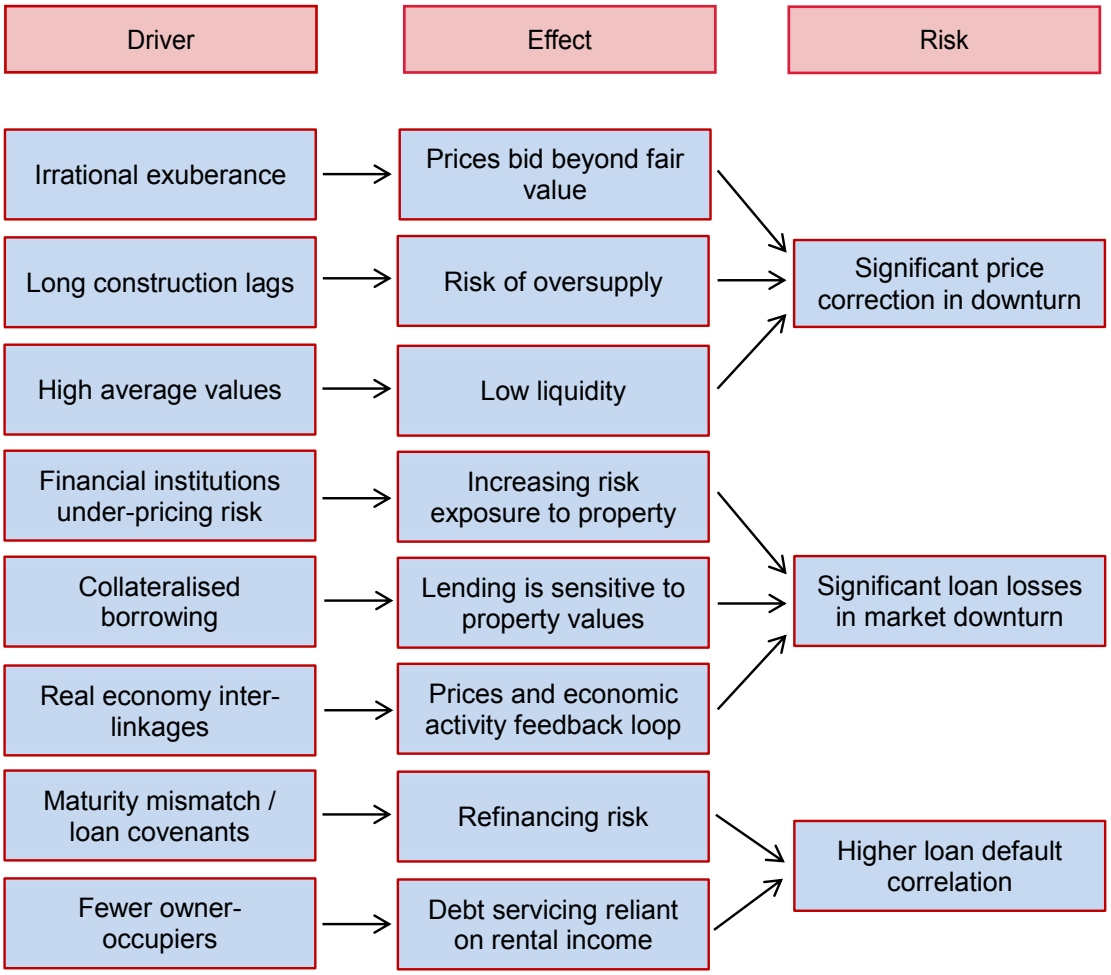
2 Commercial property and financial stability

Several factors contribute to the high risk nature of commercial property lending, as highlighted in figure 1, overleaf. We can divide these links into three broad categories: (i) significant swings in commercial property values throughout a typical cycle; (ii) feedbacks between the commercial property sector, real economic activity and the financial institutions that provide funding to the sector; and (iii) a strong tendency for commercial property

[1] The authors would like to thank Chris Hunt and other colleagues at the Reserve Bank, Nicholas Cox of Statistics New Zealand, and Justin Kean of Jones Lang LaSalle (JLL), for their useful advice and feedback.

[2] Non-market property, such as public-owned education buildings and hospitals, is not typically considered to be commercial property, and is outside the scope of this article.

Figure 1
Factors linking commercial property to financial stability



borrowers to experience financial stress at the same time (higher loan default correlation).

One source of instability is the potential for large swings in property values throughout a typical cycle. Factors such as irrational exuberance (investors over-paying due to misplaced optimism about returns) can result in long periods when prices are higher than the levels implied by economic fundamentals (such as rents, vacancy rates, and interest rates). In an efficient market, this would induce a supply response that moderated the increase in prices. However, the long time it takes to build commercial property typically delays any such response. The eventual downward price movements can be amplified by relatively low liquidity (the absence of a large number of transactions), due to high average values and significant transaction costs involved in commercial property. Late-cycle construction might also exacerbate a downturn when space becomes available after market conditions have started to deteriorate.

The effect on financial stability of a decline in commercial property prices can be amplified by links between the property sector, financial intermediaries and the real economy (ECB, 2008). For instance, a fall in commercial property prices reduces the profitability of construction projects, increasing stress among developers. By further reducing economic activity this can, in turn, lead to a sharper fall in property prices as rental demand falls away, resulting in greater losses on commercial property lending.[3] These feedback loops are likely to be larger if the vulnerability of the financial system to the commercial property market has increased during the boom. Debt financed property investment is generally secured by the

[3] Other factors, such as the prevalence of property investment vehicles, are also likely to affect the link between commercial property and financial stability. See, for example, ECB (2008).

underlying real estate. As commercial property prices fall, banks' willingness to extend credit to the sector declines, putting more pressure on the market.

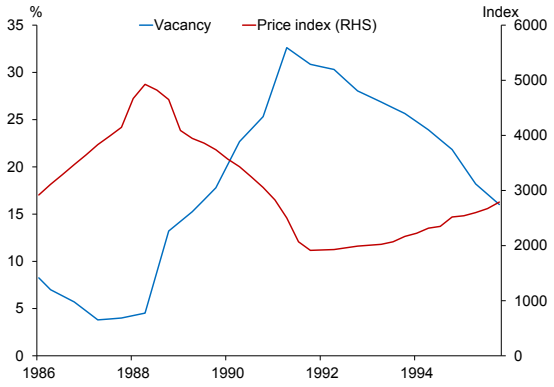
Several features of the commercial property market distinguish it from other property markets, including a higher default correlation across commercial property loans (Ellis and Naughtin, 2010). Compared to the residential property market, commercial property has a relatively small number of owner-occupiers. Investors will typically rely more than owner-occupiers on rental income for debt servicing, which is highly correlated with economic conditions and property values. While large investors may be able to achieve diversification benefits (of holding different types of assets), in practice commercial property portfolios tend to be highly correlated. In a number of countries, loans secured by commercial property also tend to be short-term relative to the expected holding period. This can also increase default correlation because many borrowers will be refinancing, typically with tighter covenants, during periods of financial stress.

3 Commercial property and financial crises

Commercial property has played a critical role in many past banking crises. Commercial property played a significant role in the crises that occurred in Sweden, Finland, Norway and Japan in the early 1990s – four of the 'big five' post-war advanced economy financial crises, prior to the GFC, that were associated with a large and long period of economic decline. Each crisis featured rapid growth in commercial property prices, property construction, and lending following financial liberalisation. Significant loan losses were incurred when rising interest rates and slowing economic activity triggered a sharp fall in commercial property prices. Kragh-Sørensen and Solheim (2014) survey a range of post-war financial crises and confirm that commercial property accounted for a large share of financial system losses in almost every case.[4]

Commercial property also played a dominant role in New Zealand's period of financial stress in the late 1980s (Hunt, 2009). Similar to the Nordic and Japanese crises discussed above, financial liberalisation during the mid-1980s contributed to a sharp rise in both commercial property and share prices, and an associated boom in construction of large scale office properties. A sharp decline in share prices in the months following October 1987 increased financial stress among leveraged corporates. This meant the number of vacant properties rose and, coupled with a large supply of properties coming to market, triggered a major downturn in commercial property prices. In the market for prime office property in Auckland, vacancy rates reached more than 30 percent and prices fell by more than 60 percent from peak to trough (figure 2). As a result, commercial property loan defaults were widespread, which played a key role in the substantial losses experienced by the Bank of New Zealand, NZI Bank and DFC New Zealand at the time.

Figure 2
Auckland prime office market during the late 1980s crisis



Source: JLL.
Note: Prices expressed in nominal terms.

The GFC had its epicentre in the US residential property market, and is often associated with 'sub-prime' mortgage lending. However, the GFC also serves to further highlight the strong interconnection between commercial property and financial stability.

Before the GFC, strong occupier demand for office and retail space, coupled with easy credit conditions and low interest rates, led to rapidly rising commercial property prices in many advanced economies. Commercial property values in a sample of OECD countries rose by 50 to 110

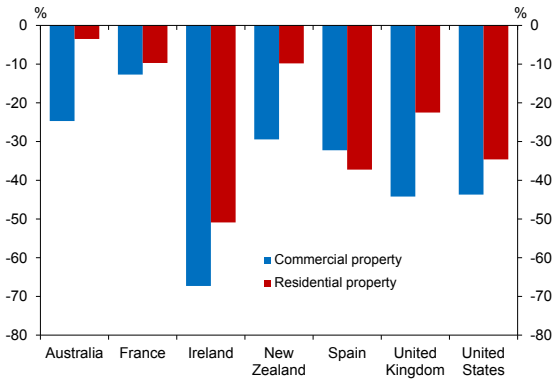
[4] Their survey also includes the US Savings and Loans crises, the Asian crisis, and the period of financial stress in the UK during the early 1990s.

percent between 2000 and 2007.[5] In this environment, bank lending to commercial property investors grew rapidly – for example, commercial property loans in the UK expanded to more than a third of outstanding loans to corporates (Benford and Burrows, 2013). Rapid growth in commercial mortgage-backed securities (CMBS) was also an important component of the build-up in leverage among commercial property investors in some countries, although not in New Zealand.[6] These conditions triggered a sharp increase in non-residential construction, particularly in Ireland and Spain.

Rapid growth in commercial property prices and increasing leverage left several commercial property markets vulnerable to the rise in vacancy rates and decline in rental growth that followed the GFC. Commercial property prices fell significantly in many OECD countries, with the size of the fall larger than that for housing in almost all cases (figure 3). Many commercial property investors found themselves unable to roll over loans due to significantly tighter bank lending to the sector, exacerbated by CMBS issuance coming to an abrupt standstill in the UK, US and Europe. This contributed to a sharp slowdown in investment and development, further dampening GDP growth and contributing to the fall in property prices.

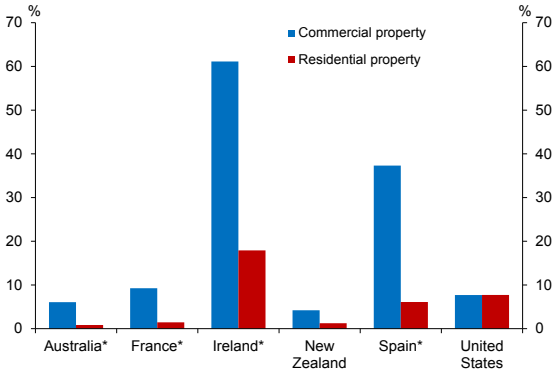
As property prices fell and economic conditions deteriorated, an increasing proportion of borrowers – especially those borrowing to finance new developments – were left with vacant buildings worth less than the debt owed. This led to a substantial rise in the share of bank loans to commercial property classified as 'non-performing' (figure 4).[7] Consistent with previous financial crises discussed above, the contribution of commercial property to total non-performing loans (NPLs) was larger than that of residential property in most countries (despite residential property loans accounting for a much greater share of the loan book).[8]

Figure 3
Peak-to-trough property price movement during the GFC



Source: CoreLogic NZ, Ellis and Naughtin (2010), IPD, Irish Central Statistics Office, JLL, Spanish Institute of National Statistics, Standard & Poor's.
Note: Australian commercial property prices reflect prime office space only. Spanish commercial property prices have continued to decline since the GFC, and have therefore yet to reach a trough.

Figure 4
Banks' post-crisis peak sectoral non-performing loan ratios
(percent of sectoral lending)



Source: ACPR, Bank of Spain, Central Bank of Ireland, FDIC, RBA, RBNZ.
Note: The definition of NPLs varies across countries. The share of non-performing housing loans in France has continued to rise since the onset of the GFC. * indicates the value of commercial property NPLs exceeded the value of housing NPLs at their respective peaks.

5 See figure 3 for a list of countries included in this comparison. These countries are primarily included on the basis of data availability and comparability.

6 Commercial mortgage-backed securities are a form of financial asset that are generally secured by a pool of commercial property loans, and offer liquidity to both commercial property investors and lenders. Similar to residential mortgage-backed securities, which played an important role in the GFC, CMBS issuance often picks up considerably during booms, which facilitates greater leverage among commercial property borrowers.

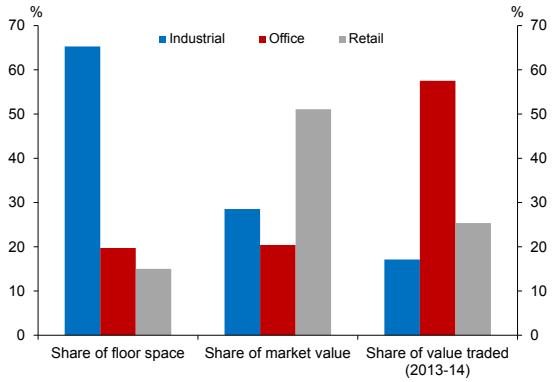
7 For most countries, non-performing loans are defined as those that are either in default or more than 90 days in arrears.

8 The best measure of the relative importance of each sector in generating losses is loan write-offs. Unfortunately, sectoral write-offs data are not widely available, so non-performing loans serve as a proxy for loan losses. US data from the GFC show that write-offs shares broadly correspond with NPL shares. UK data also show that write-offs on commercial property loans accounted for a much larger share of total write-offs than residential property, despite banks' loan books being much more heavily weighted towards residential mortgages (Benford and Burrows, 2013).

4 The New Zealand commercial property market

The New Zealand commercial property stock is estimated to be worth approximately $180 billion, about a quarter of the value of residential property.[9] Analysts generally group commercial property into four sub-markets: accommodation buildings, industrial space, office buildings, and retail. Figure 5 shows the relative size of various commercial property sub-markets in New Zealand, excluding accommodation buildings. In terms of total floor space, industrial property constitutes the majority of commercial property.[10] By contrast, retail represents more than half of the stock by value. Office property has been the most actively traded in recent years, accounting for about half of commercial property sales.

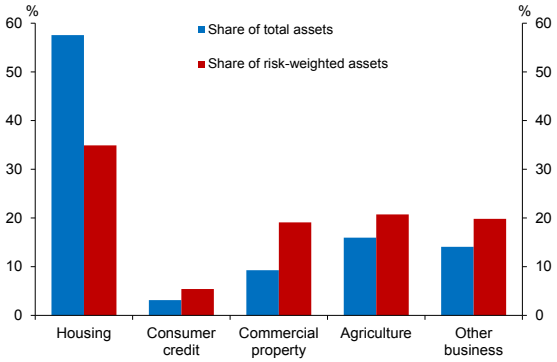
Figure 5
Relative size of New Zealand commercial property sub-markets



Source: JLL.
Note: Only properties valued at $5 million or more are included.

Commercial property lending accounts for about $30 billion of debt supplied by financial intermediaries – now mainly from the banking system. While commercial property lending makes up only 9 percent of total bank lending, it is perceived as relatively high risk and so plays a comparatively important role in determining banks' capital requirements (figure 6). Indicative estimates suggest that commercial property has an average risk weight of approximately 95 percent, compared with about 30 percent for housing loans, implying that the sector accounts for 20 percent of banks' risk-weighted assets.

Figure 6
New Zealand banks' sectoral exposures



Source: RBNZ *Standard Statistical Return* (SSR).

Investors in commercial property can be grouped into several categories, according to business models (table 1). Based on data from Statistics New Zealand's *Annual Enterprise Survey* (AES), at least 66 percent of the commercial property stock is owned by investors, with the remaining stock held mainly by owner-occupiers.[11] A large proportion of firms in the industry are investors with a small portfolio of commercial property. Smaller investors are able to take a stake in high value properties, which might otherwise be beyond their financial resources, through investment vehicles such as property trusts or syndicates. Investors with significant resources directly hold high value office/retail properties. This includes high net worth individuals (or families) and institutional investors, sometimes from overseas. In more recent years, listed property trusts (LPTs) and high net worth individuals have tended to play the greatest role in funding new development activity.

Figure 7 shows the contributions of these different investors to large value sales since 2010, where

[9] The reported figure is based on the total value of commercial property reported by firms in Statistics New Zealand's *Annual Enterprise Survey*, as at June 2013. The figure excludes non-market property, such as schools and other government holdings of land.

[10] Figure 5 uses data from JLL, which focuses only on relatively large properties (with values above $5 million) located in the main centres (Auckland, Christchurch, and Wellington). The JLL data give more granular information than is available from other data sources. Large value properties are also potentially higher risk (due to lower liquidity and more prevalent development activity) and are estimated to account for under half of the value of total commercial property.

[11] The AES identifies assets as being held by commercial property investors only if this is the primary purpose of the entity. Thus, in addition to owner occupiers, the remaining 34 percent is likely to capture entities, such as some financial institutions, who may directly own commercial property for investment purposes.

Table 1

Indicative description of commercial property owners

Investor	Description	Share of assets (%)	Leverage (% of assets)	Involved in development?
Owner occupiers	Corporates or small businesses owning their own premises.	≤34	Unknown	No
Small investors*	Own 1-3 properties, generally in small scale retail and industrial property.	≥59**	≤25** (Loan-to-value ratio (LVR) at origination capped at 60)	No
High net worth individuals*	Domestic and offshore individuals active in the 'core' commercial property market, particularly large office and retail space.			Yes
Institutional investors (excluding LPTs)*	Pension funds, wealth management firms, both domestic and offshore, typically invested in prime grade property.			No
Listed property trusts (LPTs)	Pool investors' funds and hold a portfolio of large properties, often diversified across sectors and regions. Listed on NZ stock market.	6	35 (25-45 range)	Yes
Syndicates	Pool individual investors' funds but, unlike trusts, typically hold a single property rather than a diversified portfolio.	1	40 (25-50 range)	No

Source: Bloomberg, interest.co.nz, Statistics New Zealand *Annual Enterprise Survey*, RBNZ SSR.

* All these categories will often hold assets in unlisted property trusts. These are typically not available for investment by the public, with trusts owned by some managed funds being the main exception.

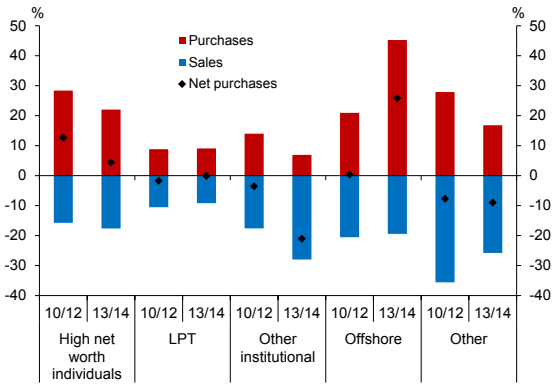
** Implied by subtracting assets and debt of listed property trusts and syndicates from the overall assets and debt in the commercial property industry.

unit record data are available. Domestic high net worth individuals and LPTs together account for more than 30 percent of purchases in recent years. Offshore investors also account for a relatively large and growing share of purchases, seeking the comparatively high yields in the New Zealand commercial property market (in a climate of very low yields on assets in much of the rest of the world).[12] Meanwhile, domestic institutional investors, outside of the LPT sector, have reduced their assets. The recent sale of an AMP portfolio valued at more than $1 billion to a Canadian pension fund was a key driver of both of these trends.

Figure 7

Commercial property transactions by entity

(percent of total value traded)



Source: JLL.

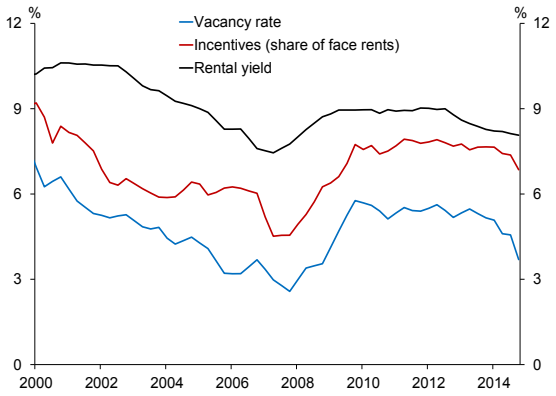
Note: Only sales valued at $5 million or more are included.

[12] Yield refers to the income received by the owner of an asset, such as interest, rent, or dividends, as a share of the asset's value.

5 Recent developments and outlook for commercial property

The GFC has had significant implications for the structure of the commercial property sector. Throughout the early 2000s, growing risk appetite, robust economic growth, and easy credit conditions led to a surge in commercial property prices. Rental yields steadily declined, reflecting rapid growth in property prices, in excess of rental growth (figure 8). The GFC resulted in a substantial revision to the required yields in the sector, driven by the fall in property values and an increase in incentives as a share of face rents.[13] Although yields have recently declined to near pre-GFC levels, the level and growth of property prices remain well below their previous peaks.

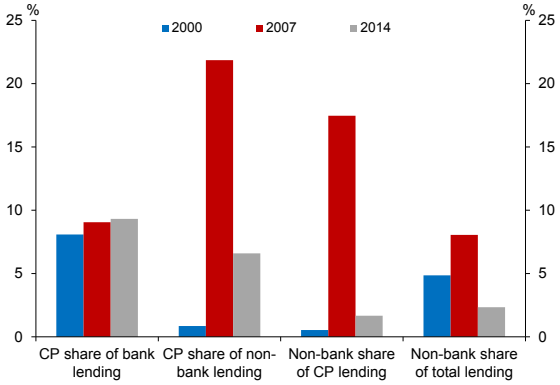
Figure 8
Commercial property market conditions



Source: JLL.

The pre-GFC boom was associated with a substantial shift in the funding of commercial property investment. Between 2000 and 2007, non-bank lending institutions' exposure to commercial property increased from 0.9 percent to 21.9 percent of their (rapidly growing) total lending, while the non-bank share of total commercial property lending rose from 0.5 percent to 17.5 percent (figure 9). Moreover, finance companies in particular became heavily exposed to higher-risk – or mezzanine – tranches of property development loans, where they did not have the first claim on the underlying security if a default occurred (the first claim typically rested with a bank). Bank lending to commercial property also grew rapidly, although the portfolio share of commercial property was relatively stable due to strong lending growth in other areas.

Figure 9
Bank and non-bank exposures pre- and post-GFC
(June years)

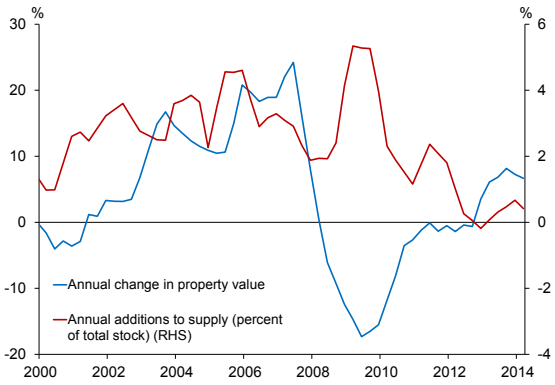


Source: RBNZ SSR.
Note: Property, business services, building, and construction used as a proxy for commercial property (CP). Excludes assets of deposit-taking finance companies in receivership or moratorium.

Rapid price and lending growth, and compressed rental yields, left the sector vulnerable to reduced economic activity and risk-appetite in the wake of the GFC. Moreover, the pre-GFC boom had prompted a significant increase in development activity, much of which became available after prices had reached their peak. As a result of these factors, commercial property prices fell by more than 30 percent from peak to trough (figure 10). Deteriorating market conditions also meant that many of the developments funded by finance companies were no longer profitable. This contributed to a large number of failures in the sector in subsequent years, which has resulted in the share of non-banks in commercial property lending falling to less than 2 percent. By contrast, New Zealand banks experienced relatively low loan losses on both commercial and residential property, with NPLs on commercial property peaking at 4 percent of outstanding commercial property loans.

[13] Face rents are defined as the prevailing contract dollar amount paid per annum, per square metre of property space. Landlords often provide incentives to induce tenants to pay a contracted face rent when market conditions necessitate. Incentives generally take the form of cash payments at the outset of the rental contract or a rent free period, and can be quoted as a dollar amount per square metre or as a percentage of face rents.

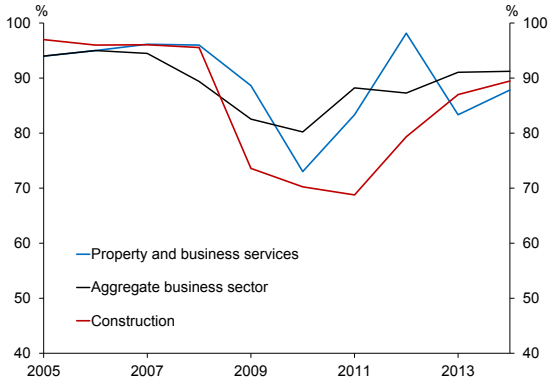
Figure 10
Supply and price movements of New Zealand commercial property



Source: JLL.

The contraction of the non-bank finance sector, combined with tighter bank lending standards in the wake of the GFC, led to significantly limited access to finance for both investors and developers (figure 11). This put further downward pressure on commercial property prices. Meanwhile tighter bank lending standards also exacerbated the difficulties faced by finance companies. Access to finance has generally improved since 2011 as banks have been more actively competing for commercial property business. However, market contacts report that standards remain tighter than before the GFC, with new originations of commercial property lending now typically capped at LVRs of 60 percent (although some existing owners may have higher LVRs). Banks are also restricting the ability of borrowers to take out mezzanine finance.

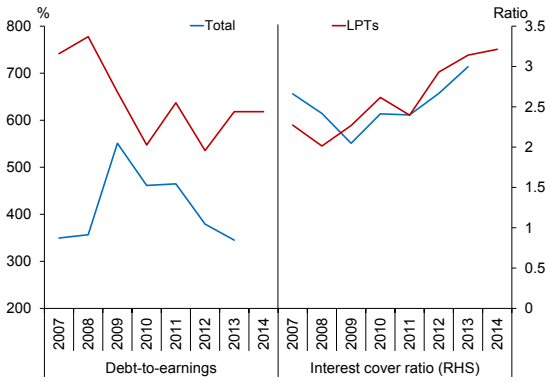
Figure 11
Reported availability of finance on acceptable terms
(percent of firms)



Source: Statistics New Zealand *Business Operations Survey.*
Note: Refers to firms who reported accessing debt finance.

The aggregate balance sheet of commercial property investors is in a much stronger position than before the GFC. Aggregate debt as a share of earnings increased significantly in the wake of the GFC, as earnings declined, some commercial property investors drew on credit lines, and borrowing for late-cycle construction projects continued (figure 12). Debt-to-earnings has since declined, alongside reduced sales activity and falling property prices, and as some indebted investors exited the market. Interest cover ratios have also improved since 2012 as interest rates have declined and earnings have increased. In the LPT sector, where good data are readily available, debt-to-income ratios and interest cover ratios have improved since 2007. Although these trends are encouraging, more detailed information needs to be collected about the distribution of debt within the commercial property sector.

Figure 12
Debt-to-earnings and interest cover ratios for commercial property investors



Source: Bloomberg, Statistics New Zealand AES.
Note: Earnings are before interest and tax.

Development activity is picking up again in response to recent increases in property values, particularly in the office sector. With the lack of mezzanine finance restricting leverage available for property development, this supply pipeline is mostly being funded through high net worth individuals and LPTs – with significantly more equity than their counterparts before the GFC. This increase in equity buffers, along with the exit of riskier deposit-taking finance companies from the sector, has reduced the direct risks to the financial system associated with development lending. Moreover, the scale

of the supply pipeline is forecast to remain well below that seen before the late 1980s crisis and the GFC.

6 Conclusion

This article has explored the relationship between the commercial property sector and financial stability. Experience, here and abroad, suggests that developments in the commercial property market can be critically important to financial sector health. In particular, evidence from the GFC, for which comparable data were available for several countries, highlighted that commercial property was often a major driver of loan losses, despite generally accounting for a much smaller share of banks' loan books than residential property.

With the commercial property market showing signs of a robust recovery, this article has also reviewed the structure of the New Zealand market and structural changes in the wake of the GFC. The risks associated with commercial property appear to have fallen after the GFC, as the use and availability of leverage has decreased, alongside improved interest cover ratios. The Reserve Bank will continue to closely monitor developments in the commercial property sector in the *Financial Stability Report.*

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