Australian Securities Markets through the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic disrupted many parts of the Australian economy, including securities markets. These markets play an important role in our economy, including as a source of funding for firms and in the transmission of monetary policy. This article describes how Australian markets for private securities weathered the impact of the COVID-19 shock. As the pandemic escalated, volatility in securities markets increased sharply, and some assets became difficult or costly to trade. The Reserve Bank, along with federal, state and territory governments in Australia, introduced policies to help support the economy and to ensure financial institutions were able to continue lending to households and businesses. These measures helped to support conditions in securities markets, which improved substantially from mid-2020. In turn, the recovery in securities markets helped to support the availability of low-cost funding for Australian businesses and households. Overall, the volatility in these markets at the beginning of the pandemic was brief when compared with the global financial crisis.

Introduction

The COVID-19 pandemic had a noticeable effect on Australian securities markets. These markets – where financial instruments including bonds and listed equity can be issued and traded – play an important role for firms and households. They provide an opportunity for savers to invest and for firms to source funding; firms can raise debt or equity by issuing securities in primary markets. Securities markets also provide real-time information on the performance of firms and on market participants' expectations, via changes in the prices of securities as they are traded. Moreover, the pricing of securities helps to facilitate the transmission of monetary policy to the broader economy. Any of these roles can be interrupted

during periods of economic stress. This article discusses how Australian securities markets weathered the economic impact of the COVID-19 pandemic. Overall, prices in securities markets declined sharply, while volatility in equity markets increased substantially for a time. However, the period of volatility was brief, particularly when compared with the disruption experienced during the global financial crisis of 2007–2009.

The importance of securities markets

Securities markets channel funds from savers (investors) through to businesses that need finance. Firms rely on securities markets for funding to varied degrees (Graph 1). For non-financial corporations, debt securities constitute a relatively small share of funding – less than 10 per cent. For most of these firms, the majority of debt funding is from bank loans, which reflects the large role of the banking system in Australia. Around one-third of the funding for non-financial corporations comes from issuing equity on listed markets, though this is an aggregate figure and includes firms that are not listed on equity markets. Among listed firms, equity generally accounts for around three-fifths of funding.

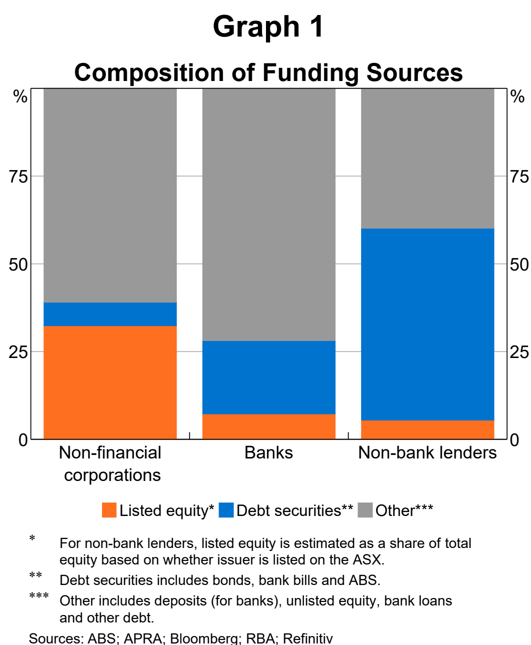
While banks source most of their funding from deposits, bonds, along with other debt securities such as bank bills and asset-backed securities (ABS), provide one-fifth of banks' funding. Banks have a significant presence in the bond market – over the past five years, they accounted for 60 per cent of all Australian non-government corporate bonds that were issued in Australia or international bond markets. Non-bank lenders source the majority of their funding (55 per cent) via debt securities, predominantly ABS.

Firms source funding from securities markets for several reasons. They may be able to obtain larger volumes of funds, or funding at longer tenors, than might be available from other sources such as bank loans. Securities funding can also provide diversity to firms' funding sources, particularly as debt securities can be issued in both domestic and offshore markets. Issuing debt securities and, to a lesser extent, equity securities might enable an issuer to retain more control of the business than would be the case using some other sources of funding, such as private equity. In addition, conditions in secondary markets provide a real-time read on the performance of firms, as well as the expectations of market participants. Moreover, by offering an alternate source of finance, securities markets provide competition to bank and non-bank loans, thereby placing downward pressure on funding costs.

Securities markets and monetary policy

One benefit of securities markets is that they can provide additional channels for the transmission of monetary policy. The price of a security is the present value of expected cash flows, where the discount rate used to calculate the present value comprises a risk-free rate plus a risk premium. When the Reserve Bank of Australia (RBA) reduces the cash rate target, risk-free rates tends to decline. All else equal, this will lower the discount rate and increase the present value of the security. This higher present value, or lower discount rate, reduces the cost of securities funding for businesses, including banks and non-bank lenders. A lower cost of funding for financial institutions will also put downward pressure on the interest rates they charge to households and non-financial businesses.

However, economic stress can impede the ability of securities markets to provide funding and to



facilitate the transmission of monetary policy. In a downturn, businesses' expected cash flows can decline and become more uncertain, and so too does the value of their assets. This can cause investors to demand a higher risk premium. The increase in risk premiums can offset the effect on firms' funding costs of easier monetary policy, which acts to reduce the risk-free rate.

In addition, frictions in securities markets could exacerbate an economic downturn. For example, if banks are uncertain about the availability and cost of their securities funding, they may reduce new lending. If this impedes firms' access to funding, either through securities or bank loans, they may also reduce employment and investment.

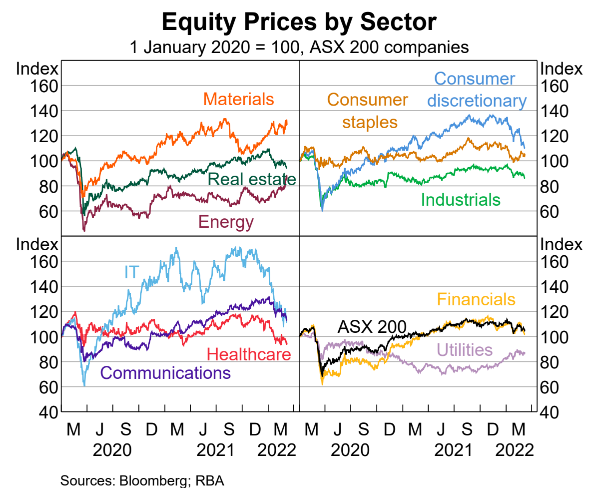
The impact of the pandemic on secondary markets

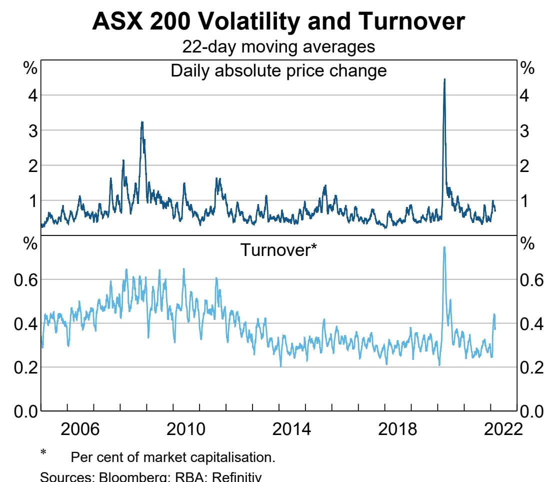
The first known cases of COVID-19 in Australia were diagnosed in late January 2020. Throughout much of February, securities markets were relatively unaffected as market participants were cautiously optimistic about the expected economic effects of the virus. However, with rising case numbers both here and abroad it became apparent that the virus was highly transmissible and that economic activity would be severely disrupted by measures necessary to contain it. On 11 March, the World Health Organization declared COVID-19 a pandemic.

Concerns about the economic effects of the pandemic soon became evident in equity markets, where prices fell across all sectors (Graph 2). These falls were particularly large for sectors that tend to be more exposed to the economic cycle, such as energy, financials, consumer discretionary and IT. On 16 March, the ASX 200 fell by 9.7 per cent – the largest one-day fall in over 30 years. By 23 March, the ASX 200 was 35 per cent below its 20 February peak. By this time, prices were very volatile and changing in either direction by an average of nearly 4.5 per cent each day (Graph 3). Meanwhile, the average share of securities that were bought and sold each day more than doubled.

Conditions in non-government bond markets deteriorated in mid-March 2020 as investors reassessed credit risks, and corporate and bank bond spreads widened significantly (Graph 4).[1] This led to a significant reduction in investor demand. At the same time, many fund managers were facing increasing redemptions, creating general selling pressures and contributing to an overhang of supply in the secondary market. Market liquidity declined, as bond dealers (which act as intermediaries between buyers and sellers) became constrained in their ability to undertake more trades. Bid-ask spreads – the difference between the price at which participants are willing to buy and sell securities – increased notably. Similar issues arose in the ABS market, where selling by offshore investors was particularly heavy, albeit brief.

In March 2020, governments in Australia began introducing movement restrictions to prevent the transmission of the virus. Meanwhile, a range of





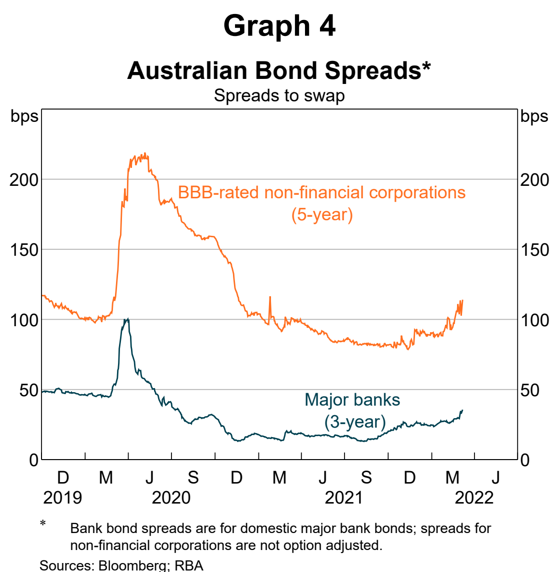
economic policies were announced by governments, regulators and the RBA. These were largely designed to cushion the economic impact of those movement restrictions.

Business and household finances were supported by government fiscal policies like JobKeeper, as well as relaxed eligibility criteria for accessing JobSeeker. Banks offered borrowers repayment holidays on their loans. This action was supported by the Australian Prudential Regulation Authority (APRA), which confirmed that the banks did not need to automatically classify those loans as being in arrears (APRA 2020).

The RBA announced a package of measures to support the economy on 19 March 2020 (Lowe 2020). These included a reduction to the cash rate, as well as the introduction of a target yield for the three-year Australian Government bond. The RBA also introduced the Term Funding Facility (TFF), through which banks could access low-cost three-year funding. The aim of the TFF was to lower funding costs for banks and encourage them to continue lending, particularly to small and medium-sized businesses. Other actions from the RBA included committing to purchase government bonds if doing so was necessary to ensure market functioning. The RBA also increased the tenor of its repurchase operations – this is where the RBA provides funding to financial institutions in exchange for collateral, thereby providing greater

Graph 4

Australian Bond Spreads*



* Bank bond spreads are for domestic major bank bonds; spreads for non-financial corporations are not option adjusted.

Sources: Bloomberg; RBA

funding stability at a time of heightened uncertainty.

Also in March, the Australian Office of Financial Management (AOFM) announced that it would purchase ABS in both primary and secondary public securitisation markets, as well as invest in private securitisations (or ‘warehouses’). These actions supported non-bank lenders, who rely heavily on securitisation markets for their funding, as well as smaller bank lenders that could not access the TFF.

With the support of these policies, conditions in financial markets began to stabilise in late March 2020. Bank bond spreads to benchmark rates, along with bid-ask spreads, started to decline in early April. This occurred quite rapidly, particularly as it became clear that banks had ample access to funding – from both the TFF and strong inflows of deposit funding – and so the need to issue new bank bonds would be subdued for a time. Non-financial corporate bond spreads remained elevated for slightly longer, before starting to fall in early May. Overall, the adjustment in securities prices as COVID-19 spread was sharp, but also brief.

Raising funding – the primary market

The early stages of the pandemic created a high degree of uncertainty around the economic outlook. As a result, firms were unsure about their future cash flows and many sought to build precautionary liquidity buffers. This section describes the role of securities markets in providing liquidity to firms during this period.

Banks

Even though banks sought precautionary liquidity in the early stages of the crisis, bank bond issuance volumes declined significantly after January 2020 (Graph 5). This was partly because banks had issued an unusually high level of bonds in January 2020 – which is already a month known for high bank bond issuance – providing some buffer for the months to follow. More importantly, large volumes of funding became available to banks as a result of RBA policies. As the pandemic unfolded, the RBA provided substantially more liquidity, at longer maturities than usual, through its daily liquidity operations (Dowling 2021). And then, with the

announcement of the TFF on 19 March, banks knew that they would have access to ample funding through that facility when it became operational (in early April). At the same time, low-cost deposit inflows further reduced banks' need to access funding from securities markets. These deposit inflows were a result of strong business credit growth as businesses drew down credit lines, as well as banks acquiring government bonds and repaying their own maturing bonds (both of which can create deposits).[2]

The large banks, however, continued to issue Tier 2 hybrid securities at a pace similar to that prevailing before the pandemic. Hybrid bonds are a type of security with both debt and equity features. Rather than purely for funding purposes, this issuance was partly to prepare for an increase in certain capital requirements set for 2024. These hybrid bonds were predominantly issued offshore, where they attracted strong demand.

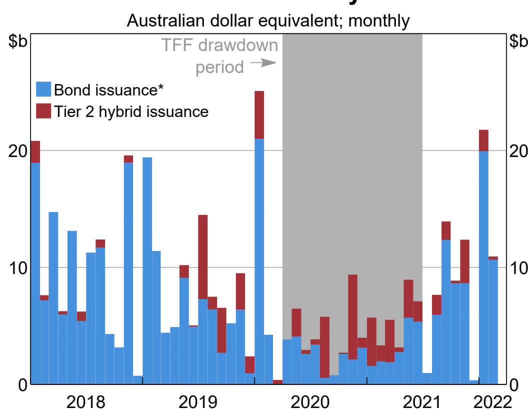
The reduction in the supply of bank bonds contributed to a significant decline in secondary market bank bond spreads over 2020 (Graph 6). After the close of the TFF drawdown period at the end of June 2021, there was a modest pick-up in bank bond issuance, and spreads widened moderately over the second half of 2021. The spreads paid on hybrid bonds remained around pre-COVID-19 levels in the first half of 2020, before narrowing as the year progressed.

Non-bank lenders

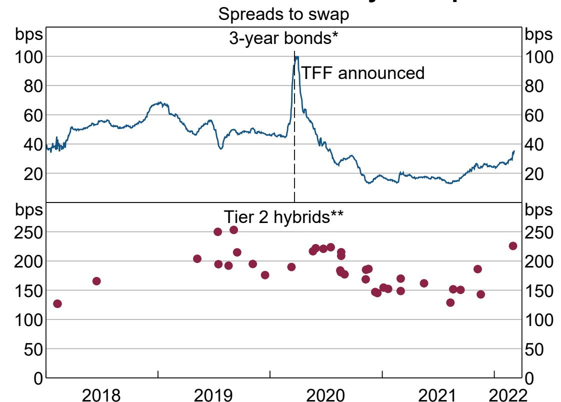
Non-bank lenders use securities markets extensively to fund the loans that they originate. They generally raise funding by issuing ABS (i.e. securities backed by a pool of loans). Launching a public ABS deal typically requires a large pool of assets, and so it is common for these lenders to use 'warehouse' facilities – which act as a line of credit and are structured as private securitisations – until the issuer has generated a sufficient volume of assets to launch a public deal.

In the early stages of the pandemic, many investors tried to sell their holdings of ABS. This resulted in an overhang of supply in the secondary market as well as uncertainty about the market's ability to absorb new issuance. If this uncertainty had continued, non-bank lenders might have become concerned about their ability to fund new loans. This could have led to non-bank lenders trying to slow the flow of new lending by either tightening their lending standards or increasing their interest rates. Ultimately, however, market conditions improved, and so these actions were not necessary on a prolonged basis.

Market conditions were bolstered by the Structured Finance Support Fund, which was administered by the AOFM. Through this fund, the AOFM invested in public securitisations in both the primary and secondary markets. It also replaced some of the private warehouse investment that had been



* Includes senior unsecured and covered bond issuance.
Sources: Bloomberg; Private Placement Monitor; RBA



* Secondary market spreads for domestic major bank senior unsecured bonds.
** Primary market spreads for major bank Tier 2 hybrids; hedged to first call date.
Sources: Bloomberg; RBA

withdrawn by offshore investors. This intervention helped to clear some of the secondary market overhang and to restore confidence in the market. The slow pace of bank ABS issuance also contributed to improved conditions, as investors in these securities instead purchased non-bank ABS. In addition, demand reportedly grew as investors searched for alternative investments amid the low level of bank bond issuance.

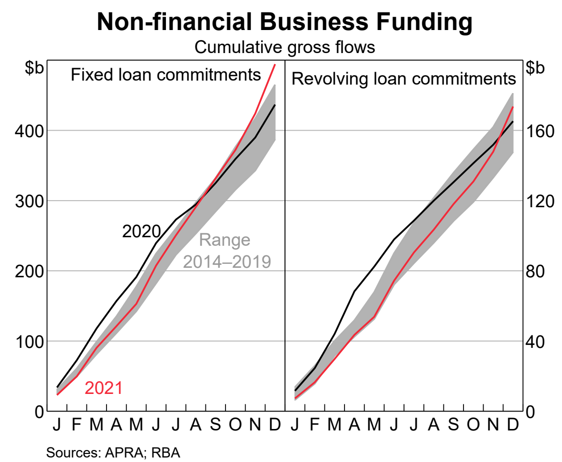
Volumes of ABS issuance by non-bank lenders picked up by the second half of 2020 and remained high through 2021, supported by a lack of competing supply of bank securities, which bolstered demand for non-bank issuance. The September quarter of 2020 saw a record volume of non-bank residential-mortgage backed securities (RMBS) issuance, at $9.6 billion (Graph 7). By early 2021, the spreads paid on those securities had narrowed to the lowest levels since the global financial crisis. Again, this was largely caused by strong demand for these assets, combined with record-low market interest rates more generally.

Non-financial corporations

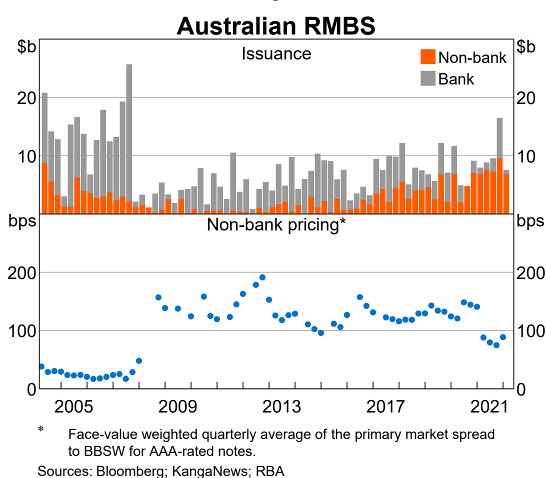
Non-financial corporations first turned to banks for liquidity in the early stages of the pandemic. Firms drew down revolving lines of credit at a faster pace than average, while also increasing their credit lines further (Graph 8). As a result, business credit increased by nearly 3 per cent over the month of March 2020 – about 10 times faster than the average monthly growth rate in the preceding year.

A similar phenomenon was seen overseas, including in the United States, with firms drawing down credit lines in the early stages of the pandemic (Li, Strahan and Zhang 2020).

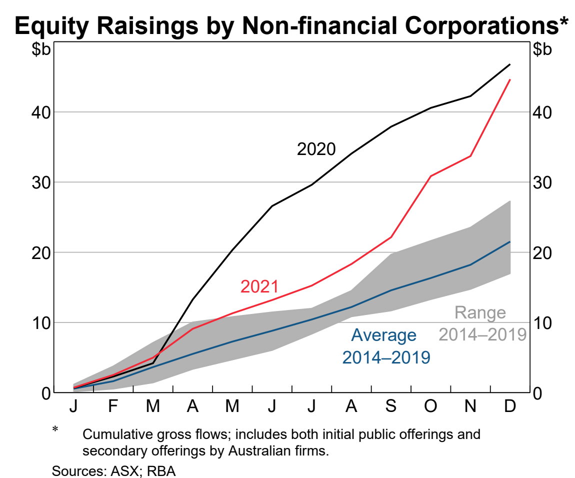
From late March 2020 through to the June quarter, listed firms raised large volumes of equity funding via secondary issues (Graph 9). This activity was dominated by firms from the sectors that had experienced the largest peak-to-trough price falls, many of which were looking to strengthen their balance sheets (Graph 10). While there were large volumes from secondary raisings, there were very few initial public offering (IPO) listings; this likely reflected the fact that investors typically view IPOs as higher risk than secondary issues, and so are more reluctant to invest in IPOs during times of stress.



Sources: APRA; RBA



* Face-value weighted quarterly average of the primary market spread to BBSW for AAA-rated notes.
Sources: Bloomberg; KangaNews; RBA



* Cumulative gross flows; includes both initial public offerings and secondary offerings by Australian firms.
Sources: ASX; RBA

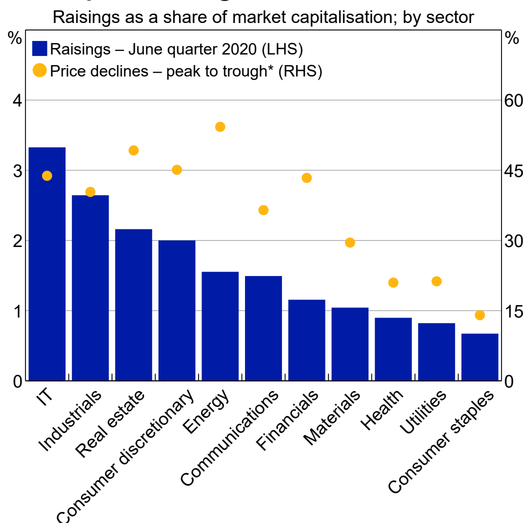
Many of these secondary issues were conducted via a placement, which is a comparatively quick way to raise capital because the disclosure requirements are lower than other structures for raising equity. The restrictions on the quantity of capital that a firm can raise via placements were temporarily eased by the Australian Securities and Investments Commission (ASIC), and the Australian Securities Exchange (ASX) temporarily enabled companies to request back-to-back trading halts (ASIC 2020a; ASX 2020). These measures helped firms to both plan and execute raisings.

These raisings, alongside the recovery of pandemic-related equity price falls, caused the market value of equity outstanding to increase significantly from mid-2020 (Graph 11). The value of securities held by each major investor type increased by similar proportions, such that the share of equity outstanding held by each group remained steady. The stability in households' share of equity ownership through the pandemic masked a significant rise in trading activity, as was seen in many economies overseas. ASIC reported that, in the early stages of the pandemic, the number of new retail accounts created each day increased to be well above average, and a large number of 'dormant' account holders resumed trading (ASIC 2020b).[3]

Graph 10

Capital Raisings and Price Declines

Raisings as a share of market capitalisation; by sector



* Change in price from 20 February 2020 to 23 March 2020.

Sources: ASX; Bloomberg; RBA

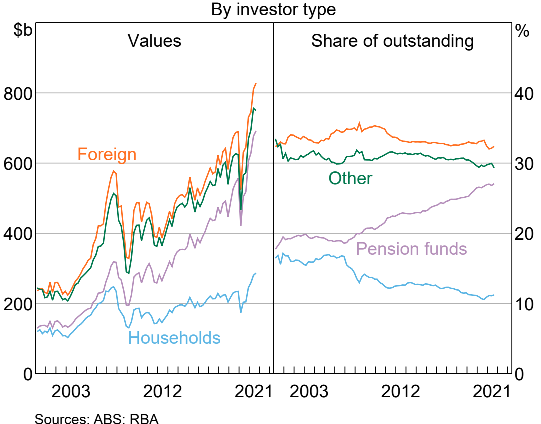
Bond issuance from non-financial corporations was low in the initial months of 2020 (Graph 12). Like the ABS market discussed above, there was an overhang of supply in the secondary market for non-financial corporate bonds. This overhang, combined with an increase in spreads, created uncertainty about the volumes and prices that could be achieved in the primary market, and some firms postponed their planned February and March bond issuance. Over March and April, several Australian firms issued into overseas markets, much of which was denominated in euros. These offshore markets were performing well at the time, buoyed in part by purchases of other bonds by central banks such as the European Central Bank.[4] The only non-government bonds issued in the domestic market during these months had very high credit ratings, such as covered bonds from banks and a few unsecured bonds from highly rated supranational development banks.

Around May 2020, conditions in the secondary market started to improve and issuance began to pick up. This occurred along with a general improvement in market conditions, and also came soon after the RBA broadened the range of non-financial corporate bonds eligible to be used as collateral in open market operations to include all of those with an investment grade rating (previously AAA only). This broadening was done to assist with the smooth functioning of the market, and liaison suggested it boosted sentiment among some issuers; however, it is difficult to quantify any effect

Graph 11

Ownership of Equity

By investor type



Sources: ABS; RBA

on issuance or pricing given the high level of volatility during this period.

Domestic issuance was high for the remainder of 2020, with $14.4 billion raised across the year (Graph 13). This compared to an annual average of $8 billion for the five years prior. Moreover, the share of issuance with a tenor of at least 10 years doubled to 50 per cent. There were suggestions in liaison that this lengthening in bond tenor was a response to changing investor demand. It is possible that, in a very-low rate environment, these investors were seeking the higher returns provided by longer-dated bonds. On the other hand, several long-dated bonds were issued in late 2019, so it could also be the case that this was a continuation of a pre-existing trend. However, in 2021, the share of domestic bonds with a long tenor declined to around 30 per cent, which is close to the pre-pandemic average.

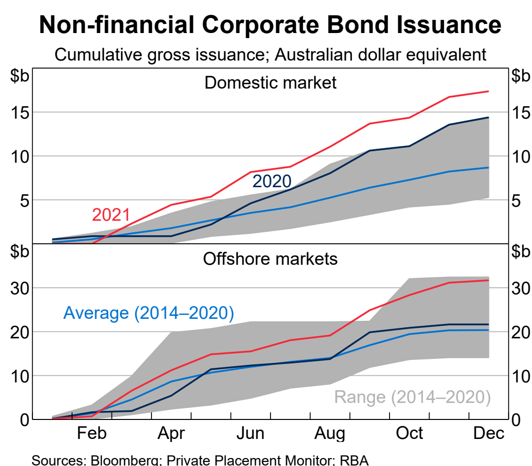
Comparison with the global financial crisis

Before the COVID-19 pandemic, the most severe economic disruption in recent history was the global financial crisis of 2007–2009. Given the significance of both these shocks, it is useful to understand some of the similarities and differences in financial market conditions during the two episodes. This section provides a comparison of outcomes in securities markets and offers possible explanations for why conditions differed between the two periods. Overall, the deterioration in financial market conditions during the global financial crisis was more severe, and had a longer duration, than in the pandemic. In large part, this is likely to be because the financial crisis originated from within the financial sector itself. During the financial crisis, stress in the US mortgage market spilled over to the broader global financial system, with many financial institutions curtailing lending as a result. These developments amplified the initial shock to the real economy and hampered the recovery in economic and financial conditions. In the recent episode, the economic effects originated from a pandemic rather than from within the financial sector, and financial institutions were in a stronger position than in the late 2000s.

Corporate bond spreads and equity volatility increased during both the financial crisis and the pandemic (Graph 14). These measures tend to be closely correlated because a higher level of expected equity volatility is associated with a higher perceived probability of default, causing investors to demand a wider risk premium on bonds.[5] While the spike in equity volatility during the pandemic was higher than the spike of late 2008, the period of elevated volatility in 2020 was shorter and had returned to pre-pandemic levels by late that year. Notwithstanding the larger spike in equity volatility, the pandemic-induced increase in corporate bond spreads was much smaller than during the financial crisis. This may be partly because, in the recent episode, investors correctly anticipated that the period of elevated equity volatility would be less prolonged.

Graph 12

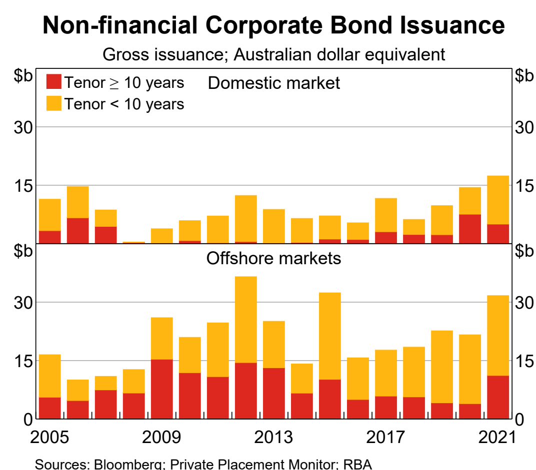
Non-financial Corporate Bond Issuance



Sources: Bloomberg; Private Placement Monitor; RBA

Graph 13

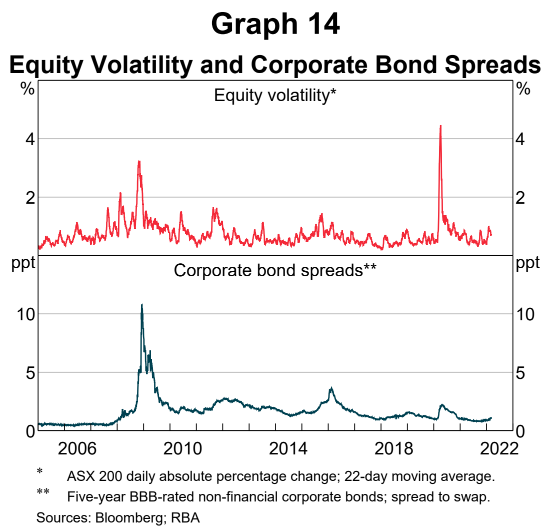
Non-financial Corporate Bond Issuance

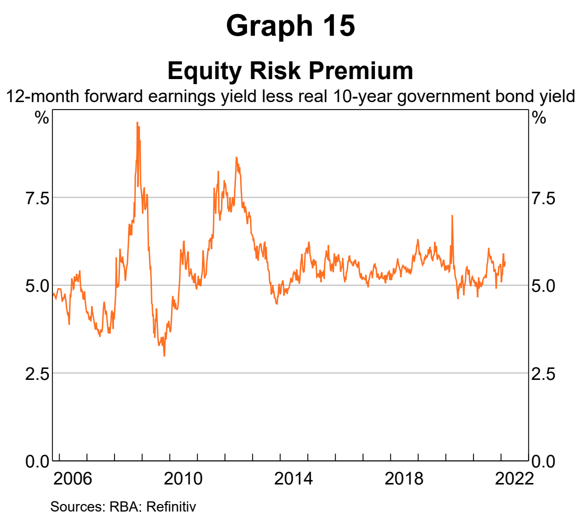


Sources: Bloomberg; Private Placement Monitor; RBA

The equity risk premium – which represents the additional return that equity investors require over risk-free rates to compensate them for the risk of holding equities – was elevated during both periods but, at least by some measures, was much more volatile during the financial crisis than during the pandemic (Graph 15). This was because the financial crisis originated within the financial sector, making it difficult to assess the risk of financial instruments, and causing financial institutions to be less able to bear risk. The equity risk premium can be difficult to measure, and can be estimated in several ways. One such method – the earnings yield less the 10-year risk-free rate – did not increase substantially as the pandemic unfolded.[6]

The impact of the financial crisis on the ABS market was particularly severe. The crisis originated in US securitisations, causing distrust of the asset class that spread to other economies. This affected sentiment towards Australian ABS, even though these securitisations were not plagued by the same underlying issues as those in the United States. Foreign investors sold Australian ABS heavily from mid-2007, creating a severe overhang in the secondary market (Graph 16). In response, the AOFM provided support to the market by investing in ABS, as it did during the pandemic. Although this helped improve conditions significantly, issuance remained low by pre-crisis standards.





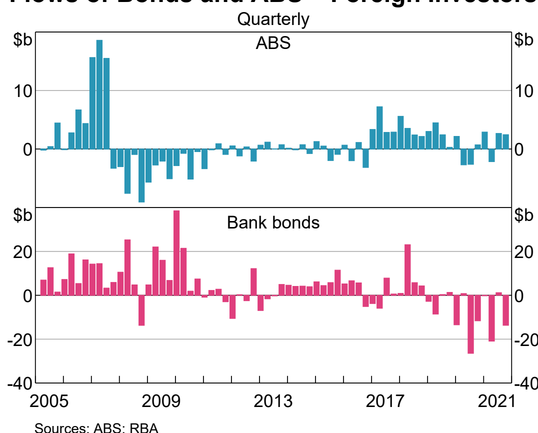
The deterioration in the bank bond market was also more apparent during the financial crisis and funding concerns were addressed with a strong policy response. The availability and cost of wholesale funding for banks deteriorated amid concerns about the stability of the global financial system. At the height of the crisis in the September quarter of 2008, investor appetite for bank bonds evaporated globally and foreign investors sold off Australian bank bonds (Black and Kirkwood 2010) (Graph 16). These disruptions led governments around the world, including the Australian Government, to introduce debt guarantee schemes, whereby banks could issue bonds backed by the government (Schwartz and Tan 2016). Australian banks utilised this scheme heavily, issuing large volumes of guaranteed bonds over the life of the scheme, from late 2008 to early 2010. Demand from foreign investors recovered in 2009, and they absorbed the majority of guaranteed issuance (Black and Kirkwood 2010). By contrast, the deterioration in conditions in the bank bond market as the pandemic unfolded was relatively mild. This reflects that the pandemic shock was external to the banking sector, and that banks' balance sheets and risk management practices have been strengthened by Basel III reforms enacted since the financial crisis. Foreign investors did not sell bank bonds in large volumes in early 2020. However, the policy response from the RBA meant that banks did not need to issue bonds for an extended period. As a result, the stock of bank bonds outstanding decreased over 2020, causing a decline in foreign investors' holdings as existing bonds matured.

As well as being less severe overall, the period of volatility during the pandemic was also

comparatively quick. Within a few months, conditions in the securitisation market had improved markedly and non-financial corporations were issuing domestic bonds with long tenors. The domestic bond market was slower to recover during the financial crisis, with corporate issuance remaining low until late 2009. By late 2020, risk premiums had generally declined to pre-pandemic levels. And, combined with declines in risk-free rates, the estimated weighted average cost of capital for a typical firm was lower by late 2020 than before the outbreak of COVID-19 (Graph 17). The ASX 200 also rebounded relatively quickly, rising back to its February 2020 level just over a year later, whereas it took over a decade to recover to its pre-crisis level following the financial crisis.

Graph 16

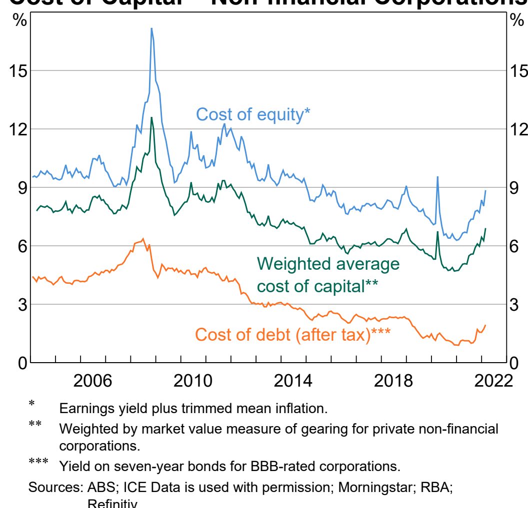
Flows of Bonds and ABS – Foreign Investors



Sources: ABS; RBA

Graph 17

Cost of Capital – Non-financial Corporations



* Earnings yield plus trimmed mean inflation.
** Weighted by market value measure of gearing for private non-financial corporations.
*** Yield on seven-year bonds for BBB-rated corporations.
Sources: ABS; ICE Data is used with permission; Morningstar; RBA; Refinitiv

The relative resilience of Australian securities markets throughout the pandemic when compared with the global financial crisis partly reflects the strength of financial institutions. This can be largely attributed to the Basel III reforms implemented since the financial crisis, which included requirements for banks to hold increased levels of capital and liquid assets, and improved risk management practices. The financial crisis highlighted the economic consequences of a reduction in the banking sector's appetite to lend in response to a shock, although Australia was less affected than other countries in this regard. Owing to the strength of their balance sheets throughout the pandemic, banks continued to lend to businesses and households, and facilitated the easing of monetary policy by reducing lending rates. Beyond the financial sector, many other Australian corporations were also better placed to weather the shock of the pandemic. In particular, real estate firms had lower leverage in 2020 than was the case in the late 2000s. Finally, the performance of securities markets following both the global financial crisis and the pandemic benefited from support, tailored to circumstances at the time, from central banks and fiscal authorities globally.

Conclusion

The COVID-19 pandemic led to a deterioration in conditions in Australian securities markets in early 2020. In secondary markets, concerns about the economic effects of the virus and associated restrictions caused steep declines in equity prices and an increase in bank and corporate bond spreads. At the same time, selling pressures in secondary markets for corporate bonds and ABS created an uncertain environment for firms wanting to raise funding in those markets. Non-financial corporations sought liquidity as the pandemic unfolded, drawing on lines of bank credit. Listed firms raised equity funding in large volumes to support their balance sheets.

The suite of policy measures introduced by the RBA, governments and other regulators supported the economy and financial market functioning during the pandemic. These comprehensive levels of

support made an important contribution to the resilience of Australian securities markets throughout the period, ensuring that funding remained available to households and businesses at low cost. ✠

Endnotes

[*] The authors are from Domestic Markets Department. This article builds on the speech by Kohler (2021).

[1] For a discussion of conditions in the government bond market, see Finlay, Seibold and Xiang (2020).

[2] For further detail about the creation of bank deposits in 2020, see RBA (2020). For a broader discussion of the deposit creation process, see Kent (2018).

[3] These retail investors may have been trading with the aim of supplementing their income. Commentators have also suggested that some investors may have been investing in equity as an alternative to gambling that was inaccessible during the lockdown. For further exploration of this hypothesis, see Chiah, Tian and Zhong (2021).

[4] Bonds issued by Australian firms were not eligible to be purchased, but nonetheless these purchases indirectly helped by contributing to improved conditions in those markets.

[5] The expected level of volatility in a firm's assets, for which equity volatility can serve as a proxy, is a key determinant of bond spreads in so-called structural models (Merton 1974). When the value of assets is more volatile, it is more likely to decline below the level of a firm's debt, prompting default on bondholders.

[6] The earnings yield is calculated as expected aggregate earnings over the next 12 months divided by the current aggregate market capitalisation.

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