

An overview of the Australian corporate bond market

Ric Battellino and Mark Chambers¹
Reserve Bank of Australia

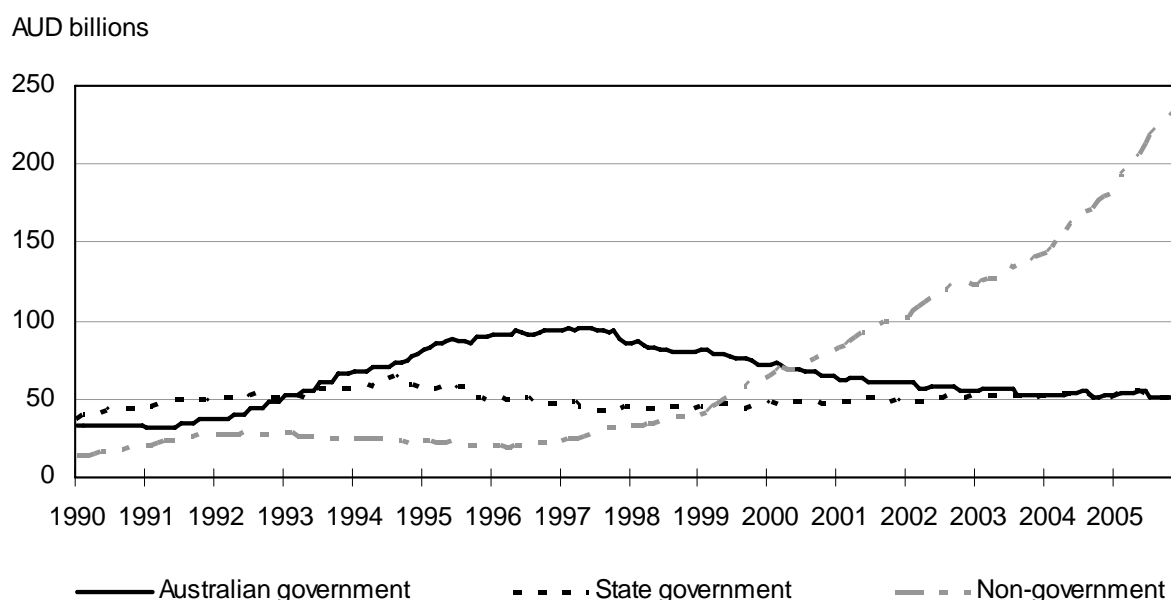
I. Introduction

It was only relatively recently that a well-functioning corporate bond market emerged in Australia. Until the early 1990s, the domestic bond market was largely confined to government borrowers. While a small number of large financial and non-financial borrowers occasionally issued bonds into the domestic market, for the most part they found it easier to source longer-term debt funding through overseas bond markets. Other businesses relied on bank finance and the equity market as their main sources of long-term external funds.

Over the past decade, however, the corporate bond market in Australia has expanded rapidly. Currently, there is around AUD 220 billion of non-government bonds on issue in Australia (an amount equivalent to 25% of GDP), compared with around AUD 30 billion at the end of 1997 (equivalent to 5% of GDP at the time). Over the same period, government bond outstandings have fallen as successive budget surpluses have reduced the borrowing requirements of central and state governments. Consequently, in recent years, non-government bonds have become the largest segment of the Australian bond market (Graph 1).

Graph 1

Bonds on issue in Australia



Source: Reserve Bank of Australia.

¹ Ric Battellino and Mark Chambers are, respectively, Assistant Governor (Financial Markets) and Senior Manager (Securities Markets Section, Domestic Markets Department) at the Reserve Bank of Australia.

II. What was needed for the Australian corporate bond market to grow?

Many preconditions for the development of the Australian corporate bond market had been in place for at least five to ten years prior to its eventual take-off. Perhaps the most important element was the existence of a well-functioning government bond market, which had grown quickly from the early 1980s thanks in large part to financial deregulation. The deregulation programme saw the removal of various controls and regulations, which had limited yield movements and the ability of investors to buy or sell bonds.

The growth of this market gave rise to a host of features that were supportive of the development of a corporate bond market:

- The government debt market provided a benchmark curve free of credit risk, which could allow market participants to separate views on credit risk from views on interest-rate risk.
- The government bond market's growth also supported the development of a very active futures market in government debt, which went on to eclipse the physical market in terms of turnover.
- Bond indices were constructed, and became available as investment benchmarks.
- Market participants invested in improved market infrastructure, such as clearing and settlement systems, and in-house trading systems that could also be utilised for non-government bonds.
- Financial institutions and the associated workforce became financially sophisticated, often with first-hand experience of offshore corporate bond markets.

By the mid-1990s, then, the government bond market was quite large, efficient and liquid by international standards. Further supporting the development of a corporate bond market was the fact that the domestic legal system had well-established procedures for recovering creditors' funds in the event of a corporate default. Investment uncertainty was also reduced by regulatory oversight of capital market fund-raising and corporate governance. In addition, rating agencies were familiar with the Australian corporate environment, and a number of borrowers had public credit ratings.

There were other factors, though, that impeded the development of the market:

- Australia experienced a recession at the start of the 1990s, which resulted in substantial deleveraging within the corporate sector during the first half of the 1990s.
- Until the late 1990s, the government sector was running sizeable deficits, with associated large borrowing requirements. At its peak, government bond issuance might have resulted in some crowding out of corporate issuance.
- Until the 1990s, the domestic pool of investment funds was relatively small. Furthermore, foreign investment was deterred by interest withholding tax on corporate bonds.

Over the course of the decade, these impediments were reduced. Strong economic growth led to renewed demand by businesses for external finance. The government sector was able to take advantage of sound domestic economic conditions to move budgets into surplus and reduce borrowing requirements, thereby easing competition for investment funds. At the same time, the pool of funds available for investment was boosted by the introduction of a compulsory retirement savings system in the early 1990s. The removal of interest withholding tax on foreign investment also made Australian capital markets more attractive to foreign investors.

The 1990s also saw a low and stable inflation environment established in Australia. The resulting decline in the level of nominal interest rates meant that banks' low-cost retail deposit base was no longer such a significant competitive advantage in the lending market when compared with loans funded at wholesale money market rates. This, in turn, meant that for some large customers it became more profitable for banks to receive fee income from facilitating non-intermediated debt issues than to receive net interest income from on-balance sheet lending.

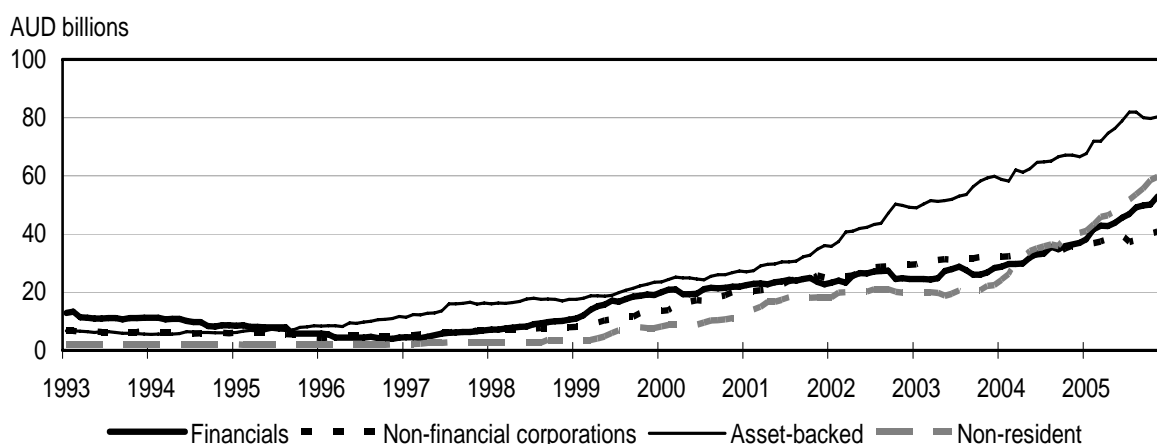
As well as a decline in the level of interest rates, this period also saw a marked reduction in the volatility of money market rates relative to retail lending rates which, in turn, increased the economic feasibility of loan securitisation - particularly residential mortgage-backed securities (RMBSs). (The relatively small margin between RMBS vehicles' funding rates and the rates they receive from

households means that they have limited ability to cope with large fluctuations in wholesale rates.) As a result of this, many new participants entered the Australian securitisation industry.

III. Recent growth of Australia's corporate bond market

Since the mid-1990s, the Australian corporate bond market has grown very quickly, roughly doubling in size every two to three years (Graph 2).

Graph 2
Non-government bonds on issue in Australia



Source: Reserve Bank of Australia.

Over this period, asset backed securities (ABSs) have been the largest component of the corporate bond market, with most of this consisting of RMBSs. Two factors have driven the volume of issuance of these bonds. First, as mentioned above, macroeconomic developments in the 1990s meant that it became economically feasible for mortgage originators to enter the household lending market and aggressively compete with banks and other traditional lenders. Second, Australia experienced a housing boom up to 2003, thanks to the entry of large numbers of retail investors into the residential housing market. With both mortgage originators and traditional lending institutions needing to fund large volumes of housing loans, issuance of RMBSs has increased very quickly. Currently, there is around AUD 65 billion of RMBSs outstanding in Australia, as well as around AUD 15 billion of other types of ABS.

The housing boom, as well as the expansion of lending to businesses, has also led to increased demand by domestic financial institutions for on-balance sheet funding. Currently, there is around AUD 50 billion of these institutions' bonds on issue in Australia, a net increase of around AUD 45 billion since 1995.

The amount of non-financial corporate bonds on issue has also grown rapidly, with around AUD 40 billion outstanding at present. However, for the most part, non-financial corporates continue to be heavily reliant on intermediated funding, with only very large Australian non-financial corporates issuing bonds in the domestic market.

IV. The Australian corporate bond and foreign exchange markets

The development of the domestic bond market has been facilitated by the existence of a deep and liquid foreign exchange market. The interaction between these two markets takes place through three main channels:

1. If foreign issuers are to participate in the local bond market, they need a deep and liquid cross-currency swap market in order to convert proceeds back into their currency of choice.
2. In order for domestic issuers to be able to tap into investor bases overseas, they too need a developed cross-currency swap market in order to hedge their liabilities back into domestic currency.
3. A deep forward foreign exchange market helps foreign investors in the local bond market, and domestic investors wishing to invest overseas, fund their purchases without taking on currency risk.

Australia has a very active foreign exchange market: at present the Australian dollar is the sixth most traded currency in the world, with the AUD/USD cross being the fourth most traded currency pair globally. This market developed only after the floating of the exchange rate and the removal of restrictions on foreign exchange activity.

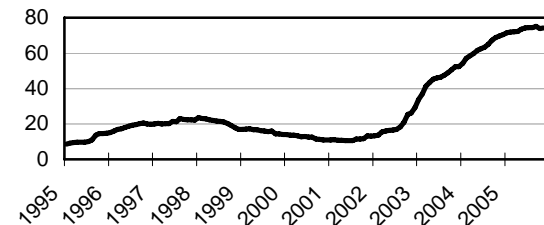
Graph 3.1

Australian-dollar bonds issued by non-residents

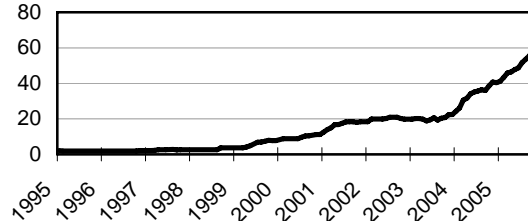
Offshore

Onshore

A\$ billion



A\$ billion



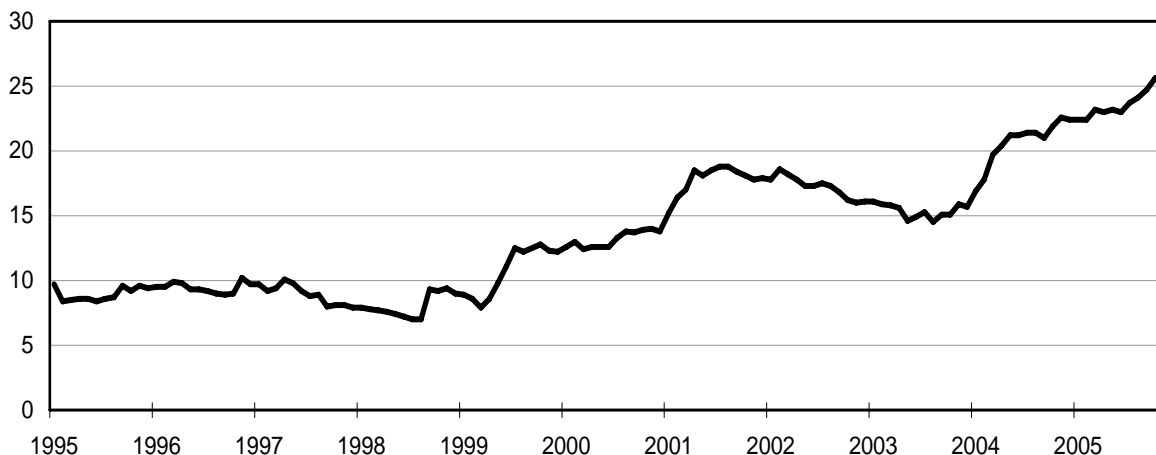
Source: Reserve Bank of Australia.

Graph 3.2

Australian-dollar bonds issued by non-residents

Percentage of domestic non-government bonds on issue

%



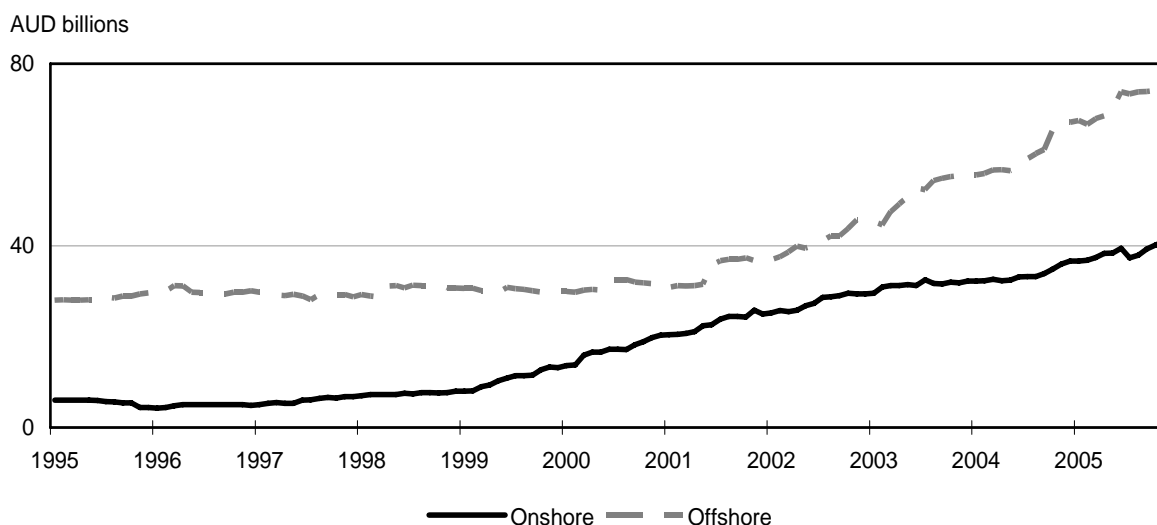
Source: Reserve Bank of Australia.

In the past two years, around AUD 40 billion of debt has been raised in the Australian bond market by non-residents, bringing total outstandings of this group to AUD 60 billion. Non-resident borrowers are now the second largest category of bond issuers in the Australian market, accounting for about a quarter of non-government bonds issued in Australia (Graphs 3.1 and 3.2). This issuance has broadened the range of names that Australian fund managers can easily invest in, thereby adding to the depth and diversity of the domestic bond market.

Issuance by non-resident borrowers into the local market does not crowd out domestic borrowers, as non-resident borrowers will usually swap the Australian dollar funds they have raised back to their home currency. This puts downward pressure on the cross-currency basis swap, which, in turn, can make it attractive for domestic borrowers to issue offshore and swap back into Australian dollars.

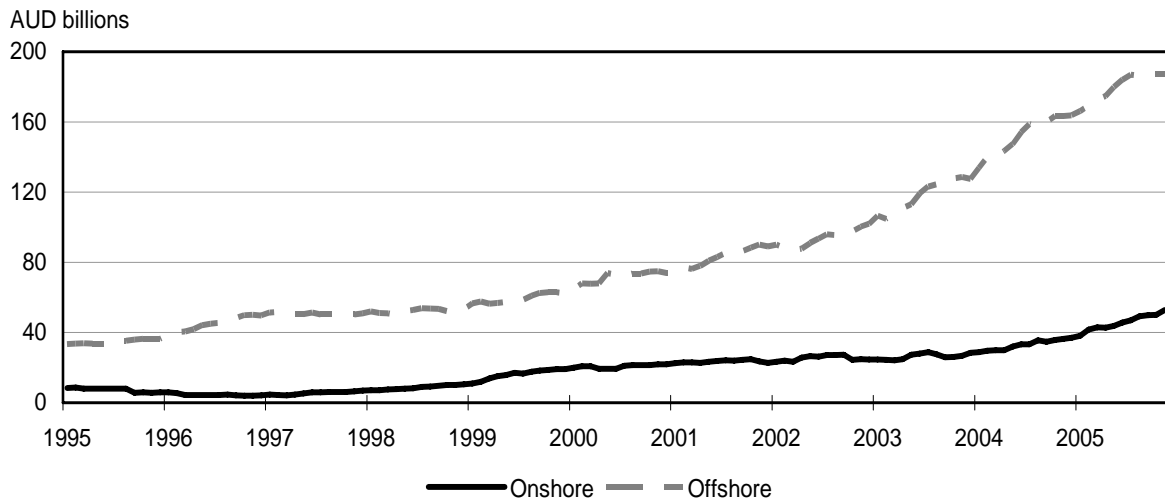
Encouraged by attractive swap rates, Australian non-government entities - particularly financial institutions - have been active in offshore bond markets. Australian borrowers currently rely on offshore markets for around 60% of their bond issuance (Graphs 4.1 to 4.3). This is all hedged back to Australian dollars using foreign exchange derivatives.

Graph 4.1
Bonds issued by Australian borrowers
 Non-financial corporations



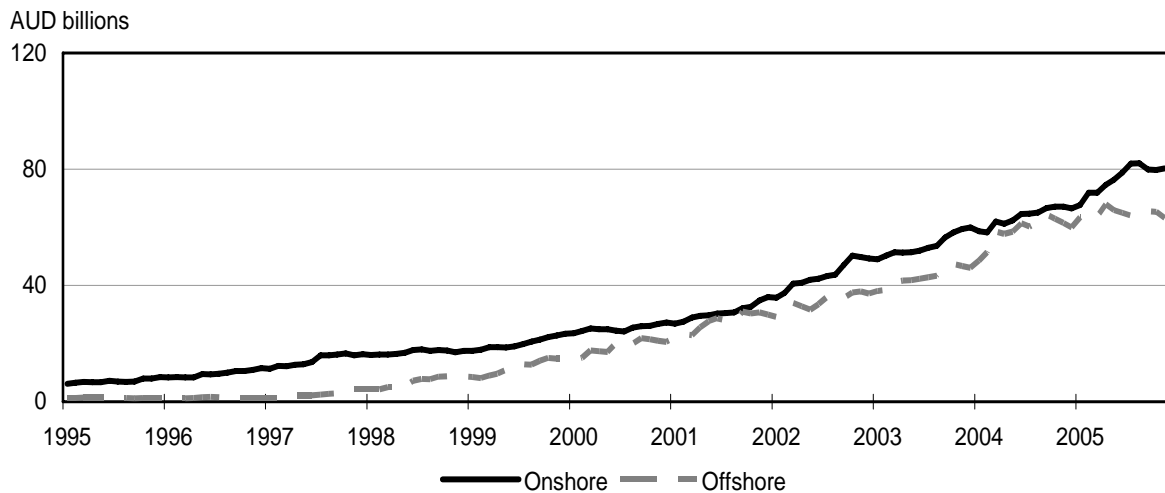
Source: Reserve Bank of Australia.

Graph 4.2
Bonds issued by Australian borrowers
 Financial corporations



Source: Reserve Bank of Australia.

Graph 4.3
Bonds issued by Australian borrowers
 Asset-backed securities



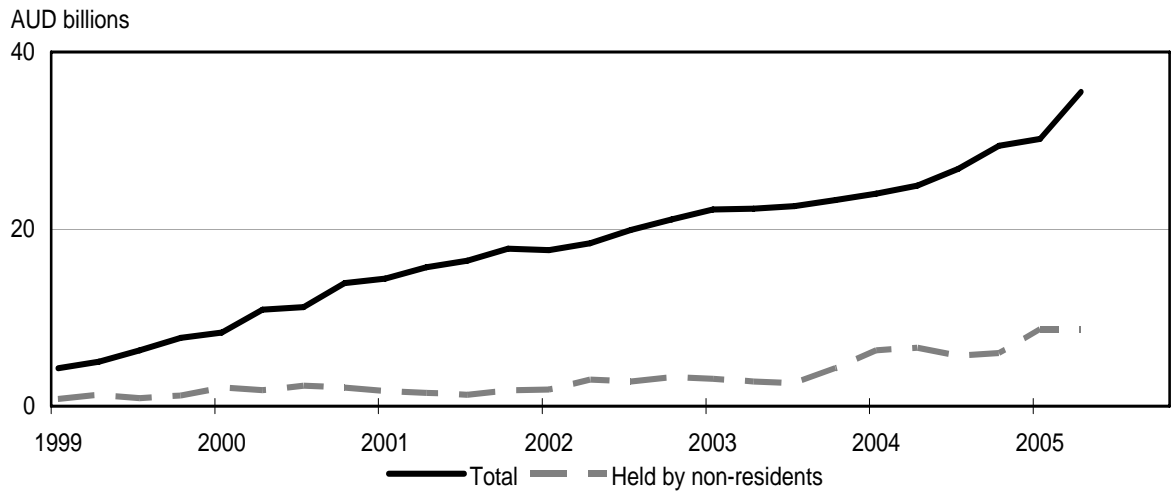
Source: Reserve Bank of Australia.

A well-functioning foreign exchange market also encourages non-resident investors to participate in the local bond market, since it allows them to readily hedge their currency risk. In Australia, the share of Australian entities' domestically issued bonds held by non-residents has steadily risen over the past five years (Graphs 5.1 to 5.3).

Graph 5.1

Non-resident investment in the Australian bond market

Bonds issued by non-financial corporations

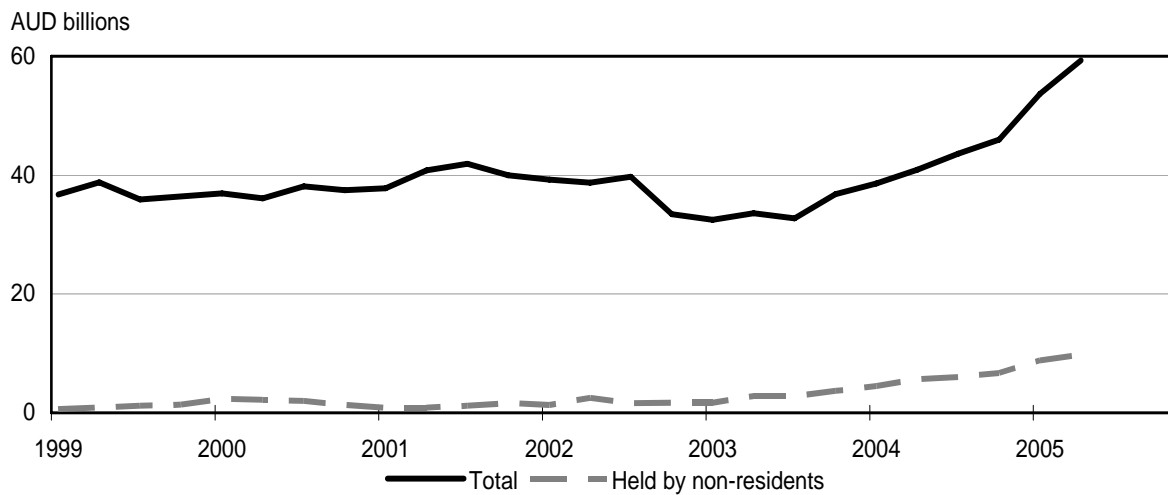


Sources: Australian Bureau of Statistics; Reserve Bank of Australia.

Graph 5.2

Non-resident investment in the Australian bond market

Bonds issued by financial corporations

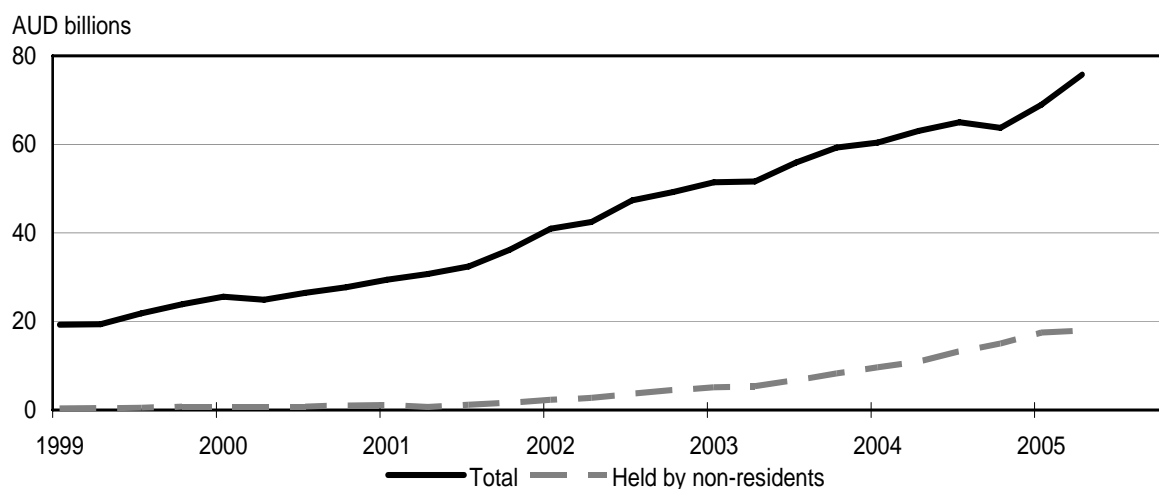


Sources: Australian Bureau of Statistics; Reserve Bank of Australia.

Graph 5.3

Non-resident investment in the Australian bond market

Bonds issued by asset-backed vehicles



Sources: Australian Bureau of Statistics; Reserve Bank of Australia.

V. Current features of the Australian corporate bond market

Primary market issuance

The main rating agencies operating in Australia are Fitch Ratings, Moody's and Standard & Poor's. Most domestic bonds outstanding in Australia have been issued with a high credit rating (Table 1). Around half of all domestic corporate bonds outstanding are rated AAA, reflecting the large amount of RMBSs on issue, the bulk of which enjoy AAA ratings.

The high proportion of AAA bonds is also a result of many lower-rated non-financial issuers arranging credit enhancement for some or all of their bonds; of the AUD 14 billion of AAA-rated bonds issued by these corporations, nearly all have credit enhancement (mainly through monoline insurance). Bonds rated BBB or lower are still a small component of the Australian market, and many lower-rated corporations find it easier to issue bonds in offshore markets.

Table 1

Credit ratings of corporate bonds on issue in Australia

At end-June 2005

	Total (AUD billions)	Percentage of total by borrower type					
		AAA	AA	A	BBB	Sub- investment- grade	Unrated/ unknown
Financials	45.6	14	51	30	5	0	0
Non-financials	39.4 ¹	41	4	39	10	0	6
ABSs	78.9	86	7	3	1	1	1
Non-residents	48.8	53	26	20	1	0	0
Total non- government	212.7	55	20	19	3	0	2
<i>Memo:</i>							
<i>Australian government</i>	55.1	100	0	0	0	0	0
<i>State government</i>	52.3	89	11	0	0	0	0

¹ Of the AUD 16.1 billion of AAA-rated non-financial corporate debt, AUD 14.7 billion is credit-enhanced debt issued by lower-rated borrowers.

Source: Reserve Bank of Australia.

In Australia, investment-grade corporate bonds are typically issued at spreads that are in line with those of similarly rated bonds in overseas markets.

By global standards, Australia's domestic corporate bond maturity profile is relatively short, averaging around four to six years. The shorter maturity profile of domestically issued bonds partly reflects a preference among investors for securities of this tenor. However, the maturity profile appears to be shifting: in 1994 only 15% of issues had maturities longer than five years, whereas in 2005 this figure had increased to 43%.

In the past, some borrowers have preferred to make larger-sized issues offshore because of the perception that the domestic market is too small to be able to absorb these large deals - but this too appears to be changing. Further, over the past year a record number of non-resident entities have made "jumbo" bond issues (AUD 1 billion or more) in the domestic market.

Corporate bond investors

Domestic pension funds, life insurance offices and other fund management institutions are the largest investors in the domestic corporate bond market (Table 2). For the last five years, these institutions have held around 50% of total corporate bonds outstanding in the Australian market. As noted earlier, Australia's compulsory retirement savings system means that these institutions have a large appetite for fixed-interest securities.

Non-resident investors are the next largest group of corporate bond owners in Australia, currently holding a little under a quarter of total non-government bonds outstanding. This share has increased from a negligible amount only five years ago, thanks partly to the sound quality and positive yield differential of Australian corporate bonds over this period.

Investment by banks and related institutions account for 20% of the market. Some of the demand from banks has been driven by a desire to diversify balance sheet risk and to support their broking operations.

Direct investment by households in the Australian corporate bond market is very limited, currently amounting to less than 2% of outstandings. It is difficult for retail investors to access the corporate bond market, since for almost all bond issues the minimum investment amount is AUD 500,000. (This is due to securities regulations requiring a prospectus to be issued for amounts less than this, which can significantly add to the issuer's transaction costs.)

Table 2
Ownership of Australian corporate bonds on issue

At end-June 2005

	Percentage of total						
	Banks	Insurance companies	Pension funds	Other financial institutions	Households	Other domestic	Non-residents
Financials	25	21	10	11	3	13	17
Non-financials	19	25	9	18	1	2	26
ABSs	18	19	9	27	3	1	24
Total non-government	20	21	9	20	3	5	22
<i>Memo:</i>							
<i>Australian government</i>	4	20	17	0	0	5	54
<i>State government</i>	22	32	17	0	0	19	11

Source: Australian Bureau of Statistics.

Trading and pricing in the secondary market

The secondary market for both government and corporate bonds in Australia is an over-the-counter market. Around ten market-makers are active at present - the same participants as for the government market - though they may not always be able to quote bid and ask prices for every security.

Price discovery for corporate bonds relies on the Australian government yield curve - in particular, government bond futures contracts - and the interest-rate swap curve. Additional price information for particular credit ratings is available through credit derivatives such as credit default swaps, with liquidity in this market increasing rapidly since 2000.

Liquidity in the corporate bond market is good compared with other international markets (with the exception, of course, of the United States), but less than that in the government bond market (Table 3). Over the past four years, turnover as a ratio to outstandings has been fairly constant at around three, compared to a liquidity ratio of eight for government bonds. Liquidity is highest for bonds issued by banks and supranationals, since these bonds are typically issued in large lines and are of high credit quality. Liquidity is lowest for small, lower-rated ABS tranches.

Settlement of transactions is on a T+3 basis. Transactions are settled electronically via real-time gross settlement. Almost all fixed income securities in Australia are registered in Austraclear, a registry system owned by the Sydney Futures Exchange.

Table 3

Bond market turnover in Australia

Turnover in year to June 2005, AUD billions

Australian government	State government	Banks	ABSs	Other domestic bonds	Non-resident	Total
368	251	89	68	105	181	1063

Source: Australian Financial Markets Association.