

Australian Debt Securities and Corporate Bonds

**Improving access to the Corporate Bond Market
for retail investors**

An independent report prepared for National Australia Bank
by the Australian Centre for Financial Studies.

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 **AUSTRALIAN CENTRE
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1. Introduction

Much has changed in the Australian bond market over the last year since the release of the last report in the ACFS-NAB *Australian Debt Securities and Corporate Bonds* series.

This report is part of a series covering:

- The role that corporate bonds can play in diversifying a portfolio and therefore potentially enhancing returns for a given level of risk;
- The risk-return characteristics of different types of debt securities and corporate bonds, and tools for assessing the risk of various corporate bond issues;
- Methods and vehicles for accessing corporate bonds and an explanation of the various markets in which corporate bonds trade; and
- Barriers to the development of a strong corporate bond market and regulatory initiatives to overcome these barriers.

In the last year, a number of things have changed:

- There has been a significant increase in new corporate bond issues (and other hybrid securities) that can be accessed by sophisticated retail investors, including growth of issues by unrated companies.
- Ways for retail investors to access corporate bonds have continued to develop.
- Regulatory changes to reduce impediments to retail investment in corporate bonds are slowly occurring.

However, the market remains small and underdeveloped, as discussed in Appendix 1 on page 12.

Ultimately, the maturation of the retail corporate bond market depends upon three key factors: underlying demand of investors; potential supply by corporate issuers; regulatory and other impediments to connecting investors and issuers.

Demand

The underlying demand of retail investors (particularly those with self-managed super funds (SMSFs)) is driving an appetite to take on exposure to corporate credit risk in return for higher expected returns from debt securities investments. The low interest rate world in which we currently live has increased investor incentives to take on risk in search of higher yields, although to date much of that focus among retail investors has been upon equity and property market investments rather than bonds.

Supply

The other side of the spectrum but just as significant is the willingness of companies to issue bonds available to retail investors via:

- Direct purchase at the time of primary issue (involving much smaller minimum parcel sizes than the \$500,000 amount which applies for wholesale investors), or
- Subsequent purchase in the secondary market (through intermediaries converting wholesale market parcels of bonds into smaller parcel sizes), or
- Purchase as part of a diversified portfolio of bonds through a managed investment scheme or other structure created by market intermediaries.

Regulatory factors

Finally, the emergence of favourable regulatory arrangements which are more conducive to retail bond market development. Such changes are underway and the recent Financial System (Murray) Inquiry made the importance of this explicit in its Recommendation 33 on the Retail Corporate Bond Market to “reduce disclosure requirements for large listed corporates issuing ‘simple’ bonds and encourage industry to develop standard terms for ‘simple’ bonds”.¹

1. Appendix 2 provides an overview of the definition of “simple” corporate bonds contained in the Corporations Amendment (Simple Corporate Bonds and Other Measures) Act 2014, passed in September 2014

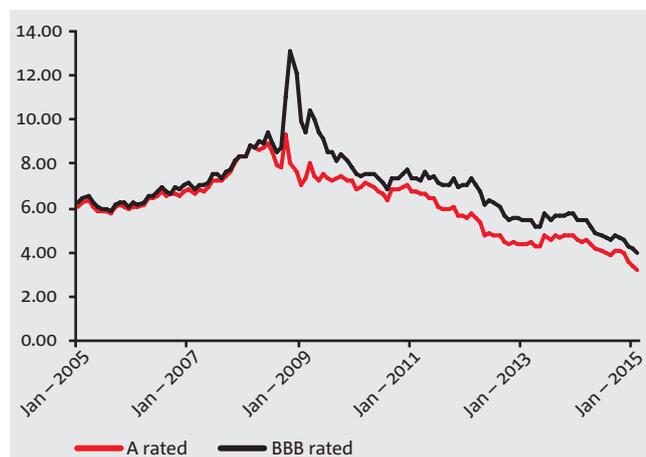
2. Retail investor interest in Corporate Bonds

The continuing growth of SMSFs creates a large potential retail investor base for corporate bonds. This is particularly so for those funds with older members for whom fixed interest investments with more stable income streams and market value become more important in, and approaching, the retirement phase. So, in the current low interest rate world, some willingness to take on additional risk to seek higher yields, such as via corporate bond rather than government bond or bank deposit investments, is understandable.

Unfortunately, one consequence of current low interest rates and Quantitative Easing (QE) policies which have been followed by major Central Banks in recent years is that corporate credit spreads have been reduced. Institutional investors seeking higher returns, have been willing to accept lower corporate bond yields (relative to risk free rates). And because institutional investors have well diversified portfolios, acceptable credit spreads for them, which determine market rates, are much lower than should be the case for retail investors without the safety of such diversification.

Figure 1 shows corporate bond yields in Australia over the past decade and highlights the significant decline since the global financial crisis.

Figure 1: Corporate Bond Yields – Australia



Source: ACFIS

This decline reflects both the downward trend in the general level of interest rates (such as government bond rates) as well as a compression of the spread of corporate bond yields over government rates – as shown in Figure 2. For example, at March 2015 the spread of 5 year AA-rated corporate bond yields (such as for issues by the major banks) over commonwealth government bonds in the wholesale market was in the region of 100 basis points, giving a total yield of around 3 per cent. Investors could, at that time, get equivalent or better rates on 5 year term deposits from many including the major banks.

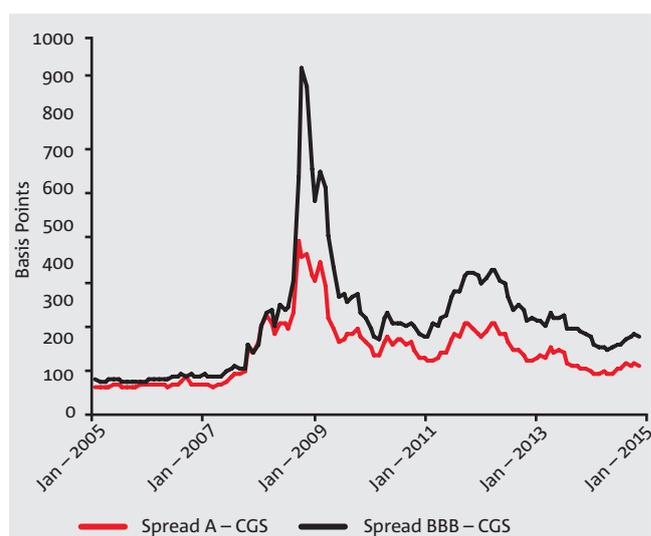
While spreads have not declined to the very low levels prior to the Global Financial Crisis, whether they provide adequate compensation for taking on corporate credit risk for retail investors is open to question.

Corporate Bond investments and market risk

Figures 1 and 2 also illustrate one important source of risk for investors in corporate bonds – that of fluctuations in price, often referred to as market risk. It is the case that a bond held to maturity offers a guaranteed rate of return as long as the issuer does not default (the risk of that event being generally referred to as credit risk). However, changes in market conditions can lead to significant changes in the market value of a bond, creating significant risk of capital gain or loss for an bond holder wishing to exit that holding prior to maturity.

Take, for example, the case of a BBB rated bond purchased in 2006 for \$100 at a yield of 6 per cent p.a., and maturing at end 2013. The spike in bond yields at end 2008 to over 12 per cent p.a. meant that the market price of the bond at that time would have fallen to below \$80.

Figure 2: Corporate Credit Spreads – Australia



Source: RBA

A fundamental issue for retail investors to minimize credit (default) risk is the ability to invest in a diversified portfolio of corporate bonds such that the yields available are commensurate with the risk of the portfolio. We discuss later the various innovations which are available and emerging to facilitate this. But while the low interest rate environment may encourage search by investors for greater yield by taking on credit risk, the rewards available

from highly rated corporate bonds do not currently look adequate to stimulate interest. The emergence of bond issues by unrated corporates (discussed later) which are not of interest to many institutional investors (often subject to requirements to only invest in highly rated bonds) does however provide an opportunity in this regard.

Also relevant for investors in bonds is the typically relatively low liquidity. Many corporate bonds trade infrequently, making it difficult for an investor to exit a particular holding speedily without having to accept a discounted price.

The level of retail investor holdings of corporate bonds in Australia is very low. RBA researchers estimates that direct holdings (which were between one quarter and one half of all holdings until the 1980s) are less than 1 per cent of bonds on issue.² This very low level is not unusual by international standards – with the exception of the USA. It has been estimated that in the USA, households directly hold around 19 percent of all corporate bonds on issue, and that when indirect holdings via ETFs (Exchange Traded Funds) and mutual funds (discussed later) are considered the percentage is around 37 per cent. However, in Japan and the UK, retail holdings are very small while an IOSCO survey suggests that retail investors hold about 9 per cent of corporate bonds in emerging market economies.³

Corporate bonds are not the only way for retail investors to seek higher returns by taking on some credit exposure, and one emerging competitor to corporate bond investments is Peer to Peer (P2P) lending. In P2P lending, the provider of a (generally) internet based facility enables retail (or other) investors to lend directly to a group of household (or SME) borrowers. Investors have higher expected returns than on bank deposits, but are exposed to the credit risk of that group of household borrowers. Depending on the nature of the P2P model, investments may also suffer from illiquidity – with no access to funds until maturity of the investment and no secondary market available through which to sell out of the investment. While still in the early stages of development in Australia, the growth potential is large.

How the risk-return trade-off for such investments (which depends on the P2P provider's credit risk assessment and management skills, and diversification across a number of loans provided to investors) will compare with that of corporate bonds remains to be seen. However, this innovation, like retail corporate bonds, should be seen as one potential component of a "fixed interest" portfolio (also incorporating bank term deposits, and preference shares), each with differing risk characteristics.

As well as those comparative risk-return considerations for potential retail investors in corporate bonds, the mechanics and regulation of the bond market have, to date, been impediments to participation. There are at least four issues of market mechanics which warrant discussion: issuers preference for OTC markets, minimum parcel size, transparency and pricing, and liquidity.

1. Exchange versus OTC markets

For reasons discussed later Australian corporates have shown a longstanding preference for their bonds being issued into and traded in the over-the-counter (OTC) market rather than on a listed exchange. However, once bonds are issued into the OTC market, where trading is between institutional and sophisticated investors in large parcel sizes of \$500,000 or more, retail investors can no longer invest directly in the bonds.

2. Minimum parcel size

Sophisticated investors can invest directly in OTC bonds but must, in most cases, purchase a minimum parcel size of \$500,000 – an investment size that would make sufficient diversification for many sophisticated investors impossible.

Listed corporate bonds trade in smaller minimum parcel sizes. However, low turnover means a lack of liquidity and potentially large bid-ask spreads.

Industry players have recently developed innovative structures that have reduced the minimum parcel size of some non-listed bonds for investors. These developments are discussed later in this report

3. Transparency and pricing

An additional barrier facing sophisticated investors when accessing the OTC market is the lack of transparency as buy and sell prices must be obtained from the various dealers in the market.⁴ Infrequent, non-specialist, participants face the risk of being quoted and trading at prices which are at a wide margin to the current market price. Obviously, dealing with a trusted intermediary with whom an ongoing relationship exists helps avoid this problem.

Technology has begun to improve transparency in the OTC market with online platforms like Yieldbroker and Bloomberg amalgamating and providing real-time dealer pricing information. At present these platforms are expensive and typically only available to institutional investors.

2. Susan Black, Joshua Kirkwood, Alan Rai and Thomas Williams A History of Australian Corporate Bonds, Reserve Bank of Australia, RDP 2012-09. They attribute the marked decline to the introduction of compulsory superannuation (and subsequent investment via the funds management industry) and the cost of disclosure requirements leading to targeting of institutional investors.

3. See Celik, S., G. Demirtaş and M. Isaksson (2015), "Corporate Bonds, Bondholders and Corporate Governance", OECD Corporate Governance Working Papers, No. 16, OECD Publishing. <http://dx.doi.org/10.1787/5js69lj4hvnw-en>

4. See Appendix 3 for information on different pricing arrangements in OTC markets versus exchanges.

4. Liquidity

Finally, while varying significantly across bond issues, corporate bonds are generally not as liquid as shares. While that could change when retail corporate bonds become widely traded on the stock exchange, the likelihood that many retail bond investors will adopt largely “buy and hold” (rather than active trading) strategies suggests that lack of liquidity may remain a matter of concern.

A final issue which is relevant, albeit more subtle, is the administrative costs and information requirements of retail investors who are managing a wealth portfolio across a range of investments. The ability to have a “single view” of all investments (shares, bonds, managed funds etc) which shows current market values, income etc., is valuable for administratively efficient portfolio management. While many financial institutions provide such facilities to their clients, the lack of an OTC market in retail bonds from which direct feeds of current prices can be sourced, makes such a “single view” less feasible for independent, self-directed investors. The benefits of having such a single view which incorporates investments in unlisted managed funds is one of the motivations for the creation of the *mfunds* platform at the ASX (which is discussed later).

Self Managed Superannuation Funds and fixed interest investments

SMSFs are a large potential investor group for corporate bonds. The sector is growing rapidly and an ageing membership means that fixed interest investments warrant greater attention in portfolios. However, SMSFs have been notable by their absence from fixed interest investments. Table 1 provides an outline of the current holdings of fixed income instruments by SMSF investors relative to those by institutional superannuation funds.

Table 1: Differences in asset allocation by super fund – 2013

	Retail	Industry	SMSF
Australian shares	26.4%	26.5%	32.5%
International shares	21.9%	24.9%	0.4%
Property	6.8%	9.5%	15.2%
Fixed interest	21.6%	14.4%	0.8%
Cash	13.9%	8.2%	30.7%
Other assets	9.4%	16.5%	20.4%

Sources: APRA and ATO, noting some differences in classification

One partial explanation for the lack of fixed interest investments may be found by the interaction of bond issuance being primarily into wholesale markets with the regulatory requirements surrounding SMSF participation in such markets. Up until August 2014, when ASIC withdrew QFS150, SMSFs (or trustees thereof who are responsible for investment decisions) could only be regarded as sophisticated investors if the SMSF had assets in excess of \$10 million.⁵ Subsequently, the normal sophisticated investor rules appear to apply, such that assets in excess of \$2.5 million or annual income of over \$250,000 are the qualifying criteria. Unfortunately, the precise arrangements, such as whether assets and income of the trustee as well as SMSF assets and income, or whether assets of multiple members in the SMSF can be aggregated, remain unclear – and warrant clarification.

While such a regulatory change enables greater access of high value SMSFs to wholesale market investments, there remains a need for market innovations to allow smaller transaction sizes than those common in wholesale markets. While brokers have devised beneficial interest structures to allow sophisticated investors to access corporate bonds in parcel sizes as low as \$50,000, a single investment of this size would still represent a large proportion of many individual investor portfolios. For example, in June 2013, the average SMSF balance was \$992,000 meaning a single corporate bond investment would still represent more than 5 percent of total assets in the average SMSF portfolio. Even for an SMSF with \$2.5 million in assets under management, a single corporate bond investment would represent 2 percent of the portfolio. In order to allow many sophisticated investors to achieve sufficient diversification in their corporate bond holdings, industry participants will have to continue to devise ways to further reduce the minimum parcel sizes of beneficial interests in OTC corporate bonds.

5. ASIC, 14-191MR Statement on wholesale and retail investors and SMSFs, Media release, Friday 8 August 2014

3. Improving retail access to Corporate Bonds

There are two broad ways in which retail investors can access corporate bonds:

- 1. Directly:** whereby an investor selects and invests in individual bonds either through a platform or a broker.
- 2. Indirectly:** whereby corporate bonds are assets in a pooled, professionally managed investment structure like a mutual fund or ETF.

There are a number of developments underway, drawing on modern technology to facilitate both forms of access. Some developments, such as depository interests (discussed later) fall between these methods by linking wholesale and retail markets.

3.1 Indirect access to Corporate Bonds

Indirectly accessing corporate bonds involves an investor using the services of an institutional investor who selects and holds a pool of bonds on the individual investor's behalf. The individual investor buys a percentage ownership of the overall pool, typically in the form of units, which entitles the investor to participate in any coupon payouts as well as capital gains and losses. By this means the investor benefits from both the management expertise and the access of the pool operator to existing corporate bonds and new issues which otherwise may not be available to the individual.

An investor who chooses to access corporate bonds through a managed structure should be aware of the investment fee charged by the investment manager and the time required to purchase or sell units in the structure. Investing in bonds indirectly also requires the investor to accept the bond selection of the pool operator as indirect investors cede discretion in choosing the individual assets that are held in the portfolio to their investment manager.

Historically, managed funds were the primary vehicles for indirectly accessing corporate bonds. These funds can be either listed funds which can be bought or sold on the ASX like any other asset, or unlisted funds which require an investor to contact a fund to either purchase or sell shares in a fund. Listed funds are typically 'closed', meaning the fund has a set number of units and the price of each unit fluctuates with market demand. This means that the price of units in the fund can diverge from the value of the underlying assets.

Unlisted funds can be either 'open' or 'closed'. The number of units in an 'open' fund fluctuates with investor demand meaning the units are more likely to track the underlying asset value rather than investor sentiment. (If the unit price is, for example, below the value of assets held by the fund, there is an incentive for investors to subscribe

for new units. This drives the unit price closer to the underlying asset value). However, units in 'open' funds can typically only be bought or sold at pre-specified intervals – such as at the end of each day.

There are however significant liquidity management issues for 'open' bond funds which allow investors to withdraw their funds on demand. Because the assets held are often not particularly liquid, such funds can be potentially subject to runs (as occurred with unlisted property and mortgage trusts in Australia at the time of the GFC) and the need to introduce limits on withdrawals.

Technology and innovation have increased the range of indirect investment structures available to retail investors, in some cases reducing the cost, liquidity and ease of investing in indirect investment vehicles. In Australia there have been two innovations of this nature that warrant further mention: Exchange Traded Funds (ETFs) and mFunds.

Bond Exchange Traded Funds (ETFs)

From the retail investor's perspective, an ETF is a listed fund in which units are bought on the stock exchange and where the price of units is virtually guaranteed to equal the value of the underlying assets.⁶ Their structure means that they are generally very liquid and trade with a very low bid-ask spread.

Unlike managed funds which can be either actively managed (with variable asset composition at the discretion of the manager) or passively managed (with a fixed asset composition), ETFs have to date been only passively managed.⁷

Despite the substantial increase in ETF volumes, the range of ETFs with corporate bond exposure currently available to investors remains limited with only one specialist corporate bond ETF, the Russell Australian Select Corporate Bond ETF, currently on the market.

This absence of corporate bond ETFs likely reflects several factors. First, unlike shares which are perpetual in nature, bonds mature. This means that the composition of the assets held must change over time with, as yet, unissued bonds replacing maturing bonds if the ETF is to continue. Specifying such arrangements is more problematic than in the case of shares where the fund can specify that its holdings will replicate a particular index (such as the top 100 stocks weighted by market capitalisation). Second, the need for market makers to buy and sell specific quantities of corporate bonds in the OTC market to perform arbitrage in response to on-market ETF trades by retail investors make market-maker arrangements more complicated and potentially risky.

6. This is achieved by the fund manager committing to issue new units to, or redeem existing units from, a specified group of "market makers" in exchange for the specified underlying assets. Arbitrage activity by those market makers will prevent the unit price deviating from the value of the underlying assets, and see the number of units on issue vary directly with investor demand.

7. This is necessary to enable the market makers to know what portfolio of assets is involved in exchanges for units. Recently, however, there have been initiatives to structure disclosure arrangements which enable actively managed ETFs to operate.

XTBs

A recent innovation involving a form of ETF has been the introduction of exchange traded bond units (XTBs) that commenced trading on the ASX in the first half of 2015. In this structure an XTB is a unit in a fund which holds a specified amount of a particular corporate bond. XTBs for bond Z are created by authorised participants selling some amount of bond Z to the fund in exchange for a number of XTB units which they then offer for sale to the public on the ASX. (Each bond may have denomination of for example \$10,000 such that if the denomination of each XTB is \$100 (which facilitates retail investor participation), then 100 XTBs equate to one bond.) Purchasers of the XTB unit then have an asset with the same pro rata cash flows as for the underlying bond, and essentially the same risk. (Some additional risks may exist because of the nature of the trust structure under which the XTBs are created).

Authorised participants act as market makers for the XTBs. As with other ETFs further XTBs can be created or redeemed by them providing bonds in exchange for XTBs, or providing enough XTBs equivalent to receive one bond, to the trust. This mechanism, similar to ETFs, can be expected to ensure the price of the XTBs moves in line with the equivalent OTC wholesale market price of the bond. For example, if the XTB price was sufficiently below the bond price, authorised participants would buy up sufficient XTBs to redeem them from the trust for a higher valued bond. (The XTB price is likely to be above the wholesale bond market price due to authorised participants incorporating the management fees charged by the fund managers into the sale price).

The success of this innovation remains to be seen. It provides the opportunity for retail investors to purchase diversified portfolios of indirect claims on corporate bonds, by being able to buy affordable size parcels of XTBs of different bonds. However, there are significant management costs which reduce the yields relative to wholesale market yields (most likely by around 40 basis points p.a. based on information in the PDS), while brokerage costs have a further depressing effect on yields. It is also the case that the XTBs can only be created on bonds which have been trading in the wholesale market for at least a year (since this is a requirement of current regulation relating to sales of bonds to retail investors).

mFunds

mFunds are a recent development, first announced by the ASX in 2014. The mFund platform allows investors to access participating unlisted managed funds without having to contact the fund directly and complete paper based applications. The mFund service also allows investors to view their investments in managed funds alongside other ASX investments, providing a more complete portfolio view of investments and potentially improving ease of administration. The number of participating funds has increased quickly with 75 funds listed on the mFund platform by early 2015. Table 2 shows the fixed interest mFunds available at mid-March 2015. A number of these specialise in exposure to Australian fixed interest securities (the others are global), and hence involve some exposure to Australian corporate bonds – along with other fixed interest securities such as government bonds.

In December 2014, AMP Capital created the first Australian corporate bond only mFund, by including on that platform the AMP Capital Corporate Bond fund which has attracted almost \$1 billion in funds under management since its original inception sixteen years earlier.

Table 2: Fixed interest mfunds – March 2015

Name	Sector	mFund Commencement Date	Launch Date	Fund Size
AMP Capital Corporate Bond	Fixed Int – Australian Dollar	8/12/2014	8/12/2014	\$892.2m
Aberdeen Australian Fixed Income	Fixed Int – Australian Dollar	22/12/2014	30/06/1993	\$389.5m
Aberdeen Diversified Fixed Income	Fixed Int – Global	1/09/2014	31/05/2006	\$21.3m
Bentham Global Income ASX Class	Fixed Int – Global	8/05/2014	7/05/2014	\$0.4m
Bentham Syndicated Loan ASX Class	Fixed Int – Global	8/05/2014	7/05/2014	\$0.4m
Ibbotson Dynamic Income Trust	Fixed Int – Global	8/05/2014	8/12/2009	\$326.7m
Alpha Diversified Income	Fixed Int – Global	8/05/2014	30/04/2012	\$27.0m
Enhanced Yield Alpha	Fixed Int – Australian Dollar	8/05/2014	2/04/2007	\$42.8m
Western Asset Australian Bond Trust A	Fixed Int – Australian Dollar	22/09/2014	1/07/1983	\$187.0m
Brandywine Global Opportunistic Fixed Income Trust A	Fixed Int – Global	9/03/2015	31/03/2011	\$268.2m
PIMCO EQT Wholesale Global Credit B	Fixed Int – Global	8/05/2014	30/11/2001	\$814.4m
PIMCO EQT Wholesale Diversified Fixed Interest B	Fixed Int – Global	8/05/2014	31/05/1999	\$1502.6m
PIMCO EQT Wholesale Global Bond B	Fixed Int – Global	8/05/2014	31/07/1998	\$3326.0m
PIMCO EQT Wholesale Australian Bond B	Fixed Int – Australian Dollar	8/05/2014	31/07/1999	\$2274.5m
PIMCO EQT Wholesale Australian Focus B	Fixed Int – Australian Dollar	8/05/2014	27/02/2009	\$224.9m
PIMCO EQT Wholesale Unconstrained Bond B	Fixed Int – Global	8/05/2014	14/03/2014	\$46.7m
Smarter Money Higher Income	Fixed Int – Australian Dollar	27/10/2014	8/10/2014	\$10.4m

Source: ASX

Typical management fees for such funds are in the order of 0.5 – 0.75 per cent p.a. of funds under management, while investors may face a buy-sell spread when buying or redeeming units. While that varies from fund to fund, 20 – 40 basis points is indicative of the magnitude.

It is too early to assess the impact of the *mfunds* initiative on the extent of retail investor exposure to corporate bond investments. However, by providing an alternative means of access to such unlisted funds it can be expected to increase indirect investment of such investors in diversified portfolios of such bonds.

3.2 Linking retail and wholesale markets

One innovative development is the ASX's proposal to directly link the OTC wholesale corporate bond market with the listed retail market. The technology to facilitate this link was developed in 2013 and is currently being utilised to provide retail investors access to Australian Government bonds. Linking the OTC and retail markets would allow retail investors to trade corporate bonds on the exchange, while institutional investors continue to trade the same bonds in the inter-dealer RFQ market. This process is known as 'transmutation'.

Transmutation allows any listed corporate that has issued simple corporate bonds through the OTC market to also make Chess Depository Interests (CDIs) in the securities available to retail investors through the listed market. The process requires a market maker, an institutional investor who also operates in the OTC market to hold the bonds through the OTC market and to subsequently create CDIs. CDIs provide holders of the instruments with the right to a proportion of the coupons and capital appreciation or loss derived from the underlying bond.

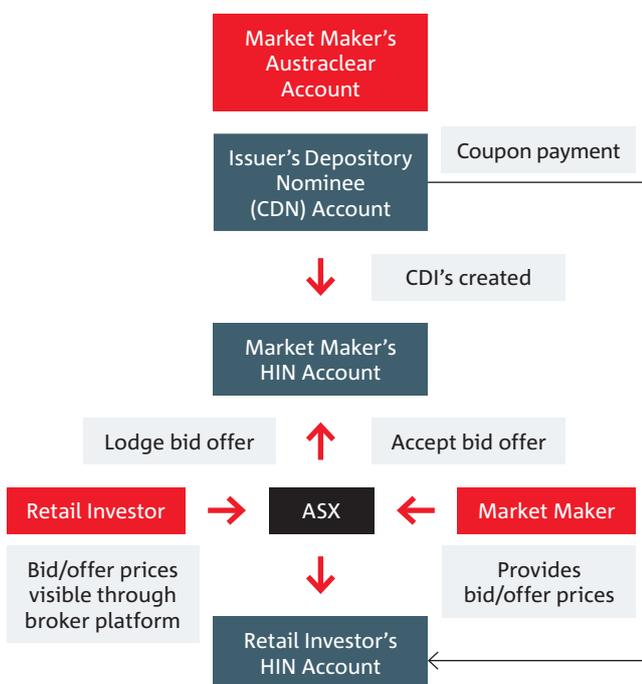
The advantage of CDIs is that they can be sold in much smaller denominations relative to the minimum parcels issued in the OTC market. For example, CDIs in Australian Government Bonds currently trade in parcels equal to \$100 of face value of the underlying bond. Once CDIs are created the market maker provides continuous bid and offer prices for the instruments to ensure liquidity, while other market participants can narrow the market spread by offering a higher bid price or lower offer price than that offered by the market maker.

This model will provide retail investors with price transparency equivalent to that available in the equity market while also providing the benefit of a market maker acting as a liquidity backstop in the security. Figure 3 presents an illustration of the likely operation of the linked ASX and OTC markets.

In summary, the potential benefits of a CDI link between the listed market and the OTC market for retail investors are:

- Increased suite of corporate bonds available to retail investors,
- Reduced minimum parcel sizes,
- Improved liquidity in retail corporate bond market,
- Improved transparency and price discovery, and
- A familiar quoting system for retail investors while maintaining the preferred OTC market for wholesale investors.

Figure 3: Likely operation of the linked ASX and OTC markets



How well such a mechanism will work to stimulate demand for corporate bonds by retail investors is open to question. Experience with CDIs for government bonds is not encouraging to date. Over the year ending February 2015 the monthly average trading value has been \$6.3 million. The total holdings of Australian Government Bonds via CDIs has climbed gradually to be around \$58.6 million of face value at end February 2015 from \$35.6 million a year earlier. Not all retail investors appear to have been “buy and hold” investors. A substantial degree of active trading can be inferred by noting that total trading volume over the previous 12 months was \$66.8 million of face value, with the increase in amount outstanding being \$23 million. Thus around one third of trading was purchases of new CDIs and the rest being turnover of existing CDIs.

3.3. Direct access: Minimum parcel sizes

In addition to innovations intended to provide retail investors with direct access to the OTC market, some corporate bond brokers are developing structures to provide sophisticated investors with direct access to unlisted corporate bonds in smaller minimum parcel sizes. As discussed previously, even for individual investors who meet the sophisticated investor definition, the minimum parcel size of \$500,000 for corporate bonds in the OTC market has acted as a significant barrier for many investors interested in corporate bonds.

NAB Access Bond Service allows sophisticated investors to invest in OTC corporate bonds in minimum parcel sizes of \$100,000 and is working to reduce sizes further. These smaller parcel sizes take the form of beneficial interests in the underlying bonds, a similar process to that being proposed for the linking of the ASX and OTC markets. An advantage of this innovation when compared with the CDI model discussed earlier is that it provides investors with access to new issues as well as issues trading in the secondary market. Furthermore, the NAB Access Bond Service also offers sophisticated investors access to non-vanilla bonds issued into the OTC market, including floating rate notes and capital indexed bonds.

Using a structure that creates beneficial interests in the underlying securities, FIIG's DirectBonds service allows sophisticated investors to invest in OTC corporate bonds in minimum parcel sizes as low as \$50,000. FIIG reported that in the first week of March 2015, 13 different corporate bonds were traded by retail investors through its DirectBonds service. Just over 300 trades at an average size of around \$75,000, or \$24.5 million in total, were made. FIIG acting as the counterparty to such trades operates with a bid-ask spread of around 20-30 basis points.

By creating structures that allow sophisticated investors to directly access beneficial interests in corporate bonds, these full service brokers have increased the range of corporate debt securities available to sophisticated investors beyond those that will be potentially available through the linked ASX and OTC markets. However, investors accessing bonds through these structures should be aware that because the bonds do not trade in a central location, pricing information is less transparent than what is available through a listed market structure. Brokers also warn investors that trading through these structures is typically illiquid and investors should expect to hold the security to maturity.

4. Regulatory change and other initiatives

In addition to initiatives aimed at improving investor access to corporate bonds, both industry innovations, changes to regulation, and government initiatives, are seeking to improve the depth and breadth of Australia's corporate bond market. As noted in the Interim Report of the Financial System (Murray) Inquiry:

"In recent years, the Government has taken a number of steps to stimulate the corporate bond market:

- The Australian Office of Financial Management has extended the length of the yield curves for CGS to 20 years.
- The RBA has begun publishing pricing data for non-financial corporate bonds.
- The Government has made exchange-traded Commonwealth Government Bonds available for trading on the ASX since May 2013, to provide a visible pricing benchmark for corporate bonds and to encourage retail investors to consider diversifying their asset portfolio to fixed income products."

Simple Corporate Bonds and Other Measures Act

In September 2014 the *Simple Corporate Bonds and Other Measures Act* was passed. One important element was the introduction of *simple corporate bonds depository interest* provisions, whereby a nominee (financial institution) could create depository interests in bonds which it holds in trust. In addition to paving the way for the linking of the listed and OTC corporate bond markets in this manner, this legislation reduces the prospectus requirements for eligible corporate bonds issues by introducing a two-part prospectus regime.

The regime allows issuers interested in accessing retail investors through the listed market to lodge a base prospectus that remains valid for a period of three years. The corporate can then make any number of corporate debt issues during this period by providing a shorter transaction specific prospectus. It is expected that while these amended disclosure requirements are still greater than those required of issuers accessing the OTC market, the cost discrepancy between the two methods will be significantly narrowed, potentially leading to more corporate bonds being issued directly into the listed market.

Also important are amendments which reduce legal risks to directors of a corporation issuing simple corporate bonds, by specifying circumstances in which reliance on information provided to them by others is an acceptable defence against charges of providing misleading information. Another requirement, aimed at ensuring sufficient liquidity, is that an issue needs to be for at least \$50 million.

Unrated Corporate Bonds

Another potentially significant development is the increasing number of unrated corporate bonds being issued into the Australian OTC corporate bond market. Prior to 2014 the Australian OTC corporate bond market was limited to corporate issuers with an official credit rating typically provided by a global rating organisation like Standard & Poors, Moody's or Fitch. Receiving a credit rating is an additional cost for issuers both in regard to the explicit fee that must be paid to the rating agency and the indirect costs that relate to the documentation and time required to receive a rating. According to Mulino (2013), these additional costs have resulted in less than 30% of Australia's top 200 companies having a credit rating.⁸

The major industry players bringing unrated corporate debt issues to market are again NAB and FIIG, with NAB facilitating its first unrated corporate bond issue in June 2014. In June 2014 it enabled an issue of \$60 million by ASX listed company NEXTDC, which while offering a coupon of 8 per cent (and initial yield of 9 per cent) also included an issuer call option feature exercisable after 2.5 years. Such options provide the opportunity for the issuer to redeem the bond should its credit rating improve (or market interest rates fall) and issue new bonds at a lower cost. Other unrated corporate issuers over recent years (with issue sizes in the \$50 million region) include G8 Education, Payce Consolidated Limited, PMP Limited and Cash Converters International Limited. Typically these issues have involved initial yields in the order of four to six percentage points above government bond rates. Arguably, the lack of many institutional investors in unrated issuers means that credit spreads are not driven down to the same degree as for rated issues, potentially providing a better risk-return trade-off for sophisticated retail investors.

Having unrated corporate bonds issued into the OTC market reduces barriers to accessing the Australian corporate bond market and increases the breadth and diversification options available to sophisticated investors. Many of these issues can be accessed by sophisticated investors through a specialist broker such as those described in the previous section. But clearly there is potentially higher credit (default) risk associated with such issuers, such that professional advice to assist in assessing the credit risk is important, as is diversification across a number of issuers.

8. Daniel Mulino "Improving Australia's Financial Infrastructure", Australian Centre for Financial Studies, July 2013, <http://www.fundingaustraliasfuture.com/improvingaustraliasfinancialinfrastructure>

5. Conclusions

Access has long been a problem for individual investors with an interest in investing in Australian corporate bonds. The number of different issuers making their corporate bonds available through the ASX has been limited and the OTC markets, have traditionally been the sole domain of institutional investors due to their opaqueness and complexity.

However, as this report has made clear, technology and new investment structures have in recent times significantly improved sophisticated investor access to bonds issued into the OTC market. Furthermore, recent regulatory changes (such as the Simple Corporate Bonds legislation passed in 2014) and proposed market innovations suggest that in the near future, retail investors will have increased options to hold interests in corporate bonds listed on the ASX or other exchanges. These include depository interests as well as managed fund structures. Whether corporate issuers will find it efficient to issue directly to retail investors via an offer of bonds to be listed on the exchange rather than a wholesale issue accompanied by depository interests created by intermediaries remains to be seen.

While there have been significant developments in the regulatory sphere to assist the development of the retail corporate bond market, there remains some ambiguity about the treatment of SMSFs and their trustees as sophisticated investors, and their consequent ability to participate in wholesale market offerings. This ambiguity warrants resolution given the increasing importance of that sector and the increasing relevance of fixed interest investments for funds with ageing members.

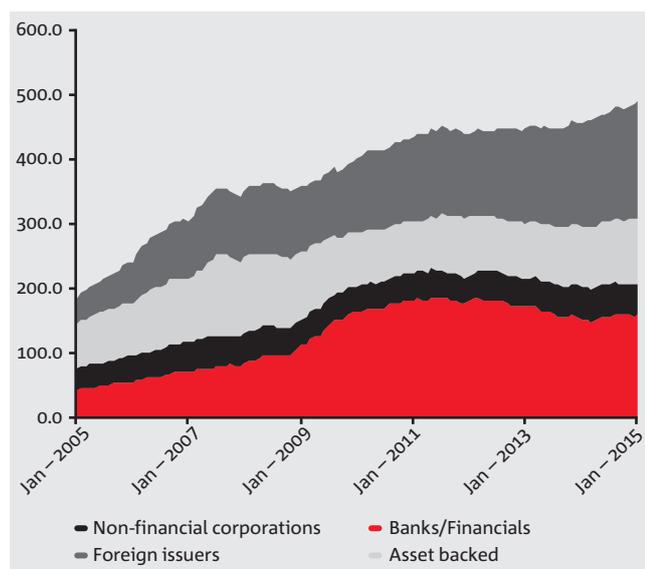
Appendix 1

Current state of the Australian Corporate Bond market

The Australian corporate bond market has historically been much smaller relative to those of other major economies, with banks and equity markets traditionally being the main source of long term funding for most corporates. By December 2014 the turnover in all debt market instruments was over \$11 trillion. Of this, Australian Government outstanding issuance amounted to \$540 billion and the Australian Bond Market, including financial and asset backed issuance, sat at \$474 billion dollars. Despite this, the total size of the Australian Corporate Bond Market remains at \$50 billion – compared to the Australian equity market which has a total market capitalisation of over \$1.5 trillion.

Figure A1 provides an overview of the size and growth of the corporate bond market in Australia. It can be seen that bonds issued by non-financial companies remains relatively small compared to amounts from other issuers (banks and other financial institutions, asset backed securities and foreign issuers and the Australian government. The Australian issuance by non-financial companies is also relatively small compared to issuance overseas. At end 2014, there was approximately three times the value of bonds on issue by Australian non-financial companies overseas as domestically.

Figure A1: Australian Corporate Bonds outstanding



Source: Reserve Bank of Australia

The extent of corporate bond issuance by Australian non-bank companies (internationally and domestically) from July 2014 to mid April 2015 is Shown in Table A1. There has been significant activity (AUD 31 billion raised from 89 issues), partly reflecting the historically low yields available – with the average yield for AUD issues being 4.2% p.a. While yields on foreign currency issues appear lower, the costs of hedging the exposure back into AUD terms would bring the effective cost of borrowings back close to the AUD cost. Nevertheless, Australian companies have tapped those markets (particularly in USD and EUR) because of investor demand and the opportunity to improve borrowing costs marginally relative to AUD issues. The ability to raise larger amounts in foreign markets (USD and EUR average sizes of over \$600 million relative to AUD average size of \$151 million) is also relevant – although it is generally larger companies also tapping those markets.

Table A1: Global Australian Corporate Bond Issues: July 2014 – April 2015

Currency	Amount Issued (AUD Million)	Average Years to Maturity (or Call)	Average Yield to maturity (%)	Number of Issues	Average Size (AUD Million)
AUD	6,663	5.5	4.20	44	151.4
EUR	8,110	8.2	1.32	11	737.3
GBP	2,667	6.2	1.72	6	444.5
JPY	32	2.8	0.47	4	7.9
NZD	192	4.5	4.36	3	64.0
USD	13,474	8.6	3.93	21	641.6
TOTAL	31,137	6.4	3.45	89	349.9

Source: Reserve Bank of Australia

Appendix 2

Corporations Amendment (Simple Corporate Bonds and Other Measures) Act 2014

Principal Requirements for “Simple Corporate Bonds” status

1	Have a fixed term not exceeding 15 years
2	Must be quoted on a prescribed financial market (eg ASX)
3	Must be denominated in AUD
4	Provide for repayment of the principal sum at the end of the fixed term
5	Have periodic interest payments which cannot be deferred
6	Carry a fixed interest rate or floating rate of interest comprised of a reference rate plus a fixed margin, which cannot be decreased
7	Interest must be paid periodically and cannot be deferred
8	Maximum security size no more than \$1,000
9	Not convertible into other securities
10	Be issued by a listed company (or its subsidiary)
11	Not subordinated to unsecured creditors

Appendix 3

Alternative quote mechanisms

Lower liquidity in fixed-income markets has led to a preference amongst some institutional investors for the dealer market's 'request for quotation' (RFQ) method of trading whereby dealers stand ready to make offers to purchase and sell fixed income issues at a specified price. This contrasts with the 'central limit order book' (CLOB) trading method used by most listed exchanges in which the highest bid and lowest offer price posted by market participants (including institutional market makers) is made available to all market participants. According to a 2014 report by McKinsey, although the US has a large and active retail corporate bond market that utilises a CLOB system, US institutional investors enjoy the immediacy, anonymity and larger parcel sizes that can be traded through the RFQ method.⁹ Table 2 below outlines some of the key differences between the RFQ and CLOB trading systems.

Table A2: Comparing RFQ and CLOB trading systems

	Request for Quotation (RFQ)	Central Limit Order Book (CLOB)
Venue	Typically Over-the-Counter (OTC)	Typically Exchange
Capital Required	Dealer uses its balance sheet to hold inventory	No inventory required
Cost of Execution	Bid-offer spread	Explicit commission or fee
Who Takes Execution Risk?	Dealer / Sell-side	Customer / Asset Owner

Source: Adapted from Blackrock 2014

9. McKinsey and Company and Greenwich Associates (2014) Corporate Bond E-Trading: Same Game, New Playing Field

Appendix 4

Glossary

Accrued interest

The amount of interest accumulated on a bond from the last coupon payment date.

Asset allocation

An investment strategy that attempts to balance risk versus reward by adjusting the percentage of each asset in an investment portfolio.

Asset class

A group of investments that display similar characteristics.

Bank bills

A short-term money market investment.

Basis point

A measure used to calculate interest returns. One basis point equals one hundredth of one percent or 0.01%.

Benchmark

An index which measures the change in value of a market over a period of time.

Buy and hold strategy

A passive investment strategy whereby the investor intends to retain the investment until maturity.

Capital markets

A group of markets in which investors can buy and sell various debt and equity securities.

Commonwealth Government Securities

Debt securities issued and guaranteed by the Commonwealth of Australia. The Commonwealth guarantees the coupon payments and the return of the original capital at the maturity date.

Convertible bond

A traditional fixed income style security that gives the investor the right to convert into ordinary shares of the company at redemption.

Corporate bond

A debt obligation (bond) issued by a corporation, either senior secured, senior unsecured or subordinated.

Corporate bond market

A secondary market for investors to buy and sell corporate bonds.

Coupon rate

The rate of interest paid by the issuer of a bond. The rate is usually expressed as a percentage of the face value of the security.

Credit default swap

A form of insurance against the risk of default by the issuer of a specified corporate bond.

Credit rating

An assessment of an entity's credit worthiness.

Credit risk

Credit risk is an assessment of the likelihood that a company issuing a bond may default on its obligation to pay interest or repay principal.

Credit spread

A spread is the difference in yield between two securities. A credit spread generally measures the degree of risk between 'risk free' assets, (i.e. Commonwealth Government Securities), and lower rated assets.

Derivative

A financial instrument or contract based on (derived from) an underlying financial asset.

Duration (modified duration)

A measure of the sensitivity of a bond's price or market value to a change in interest rates.

Face value or principal

The amount that the issuer borrows which must be repaid to the investor at maturity. Also known as par value.

Fixed income investment

A financial instrument that can be bought and sold between secondary parties that has a defined rate of interest which must be paid on a specified date to avoid default.

Fixed rate bond

Bond on which the coupon rate has been set at the time of issue and will remain fixed for the life of the security.

Floating rate note

A debt security that has a variable coupon, equal to a money market reference benchmark plus a quoted margin.

Hybrid Security

A financial instrument that shares characteristics of both debt and equity securities.

Inflation-linked bond

A bond created to provide protection from the risk of inflation.

Issuer

Borrower (government, financial institution or company) that issues the bond (that is, borrows the money) and pays the interest.

Liquidity

The ease with which an asset can be bought or sold in the market without significantly affecting the price. A liquid bond can be bought and sold more easily than an illiquid one.

Maturity

The end of a bond's life, when capital must be repaid to the investor.

Over-the-Counter

Off-exchange trading that is done directly between two parties.

Perpetuals

A floating rate note with no specific maturity date.

Retail Investor

An investor that does not meet the criteria of a wholesale investor.

Secondary market

A market in which previously issued financial instruments such as stock, bonds, options, and futures are bought and sold.

Secured debt

Secured debt is debt in which the borrower pledges some assets as collateral.

Sub-investment grade bond

A corporate bond rated below vvv or Baa3 by the credit rating agencies or with no rating. Also known as high yield bond or junk bond.

Subordinated debt

Debt that ranks behind the liquidator, government tax authorities and senior debt holders in the hierarchy of creditors. It should be noted that in the case of liquidation or bankruptcy the holders of subordinated debt rank ahead of equity or shareholders.

Unsecured debt

Unsecured debt has no collateral backing from the borrower.

Sophisticated investor

An individual with more than \$2.5 million in assets and an income of more than \$250,000 over two years.

Yield

The coupon or interest payment on a bond expressed as a percentage of the bond's market value or price.

Yield curve

A line that maps the yields on comparable bonds (for example, bonds issued by the same borrower) of different maturities (1 year, 2 year, 10 years, etc).

Yield to maturity

The rate of return earned by an investor assuming that the bond will be held until maturity and that all coupon and principal payments will be made on schedule

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The Australian Centre for Financial Studies (ACFS) is a not-for-profit consortium of Monash University, RMIT University and Finsia (Financial Services Institute of Australasia) which was established in 2005 with seed funding from the Victorian Government. Funding for ACFS is also derived from corporate sponsorship and through research partnerships such as the one with the National Australia Bank which has led to this report.

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Published June 2015