Report

for

the Financial Services Council (FSC)

Capital Market Structure Comparisons

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Executive summary and key points

Capital markets should act to service and provide the corporate financing needs of firms so as to maintain efficient operations. This report examines the capital market structure in Australia and makes comparisons to three comparable markets: Canada, the United Kingdom (UK), and South Korea. Specifically, the corporate financing options available to companies are reviewed, and in each jurisdiction considered the capital mix of companies and size of debt and equity markets is analysed. Particular emphasis is given to the financing options for small and medium enterprises (SMEs).

The key points of this report include:

- The Australian capital market is comparable to the three other markets considered on size, efficiency and operation, with no apparent capital flow distortions;

- Australian businesses are able to access a range of financing options, with large firms more likely to use public equity and smaller firms more likely to use retained earnings and debt from banks and intermediaries;

- The corporate bond market in Australia is small, particularly when compared to the government bond market, though it is showing signs of steady expansion;

- The size of the Australian corporate bond market appears to be affected more by market outcomes than any single distortion arising from financial system regulation. The bonds issued by non-financial corporates are generally issued at a credit rating at the lower end of the investment-grade category, making them unsuitable for most superannuation funds. Small businesses access the majority of their funding through equity (especially retained earnings), banks and new forms of finance, such as crowd sourcing. As such the capital markets including corporate bonds are not relevant to them directly;

- Debt-to-equity for SMEs in Australia is high compared to UK, indicating that there is no “financing gap” in our market as SMEs are able to source debt from banks. Bank financing is typically cheaper for SMEs than accessing finance via the capital markets;

- Dividend imputation provides an incentive for large corporations to use equity rather than debt as this system lowers the net cost of financing to the firm and matches the aggregate preferences of the investors within the market. This does not appear to have an impact on aggregate cost of raising capital in Australia.
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1. Introduction

This research report will examine the structure and regulatory elements of the Australian capital market and compare it to several comparable jurisdictions: the UK (global benchmark), Canada (scale comparable market), and South Korea (regional comparable market). Particular emphasis will be placed on the financing of operations of small and medium sized enterprises.

Companies face many decisions regarding the method by which they finance their operations. The initial choice is between external and internal financing. Where internal financing is largely sourced through retained earnings, external financing requires further decisions regarding the composition and source of debt and equity financing.

The external equity markets in each of the markets considered is relatively large and well-developed. The corporate bond markets, while growing strongly, have developed with markedly different levels of success. Investment in infrastructure and supportive regulations in South Korea have seen the outstanding value of corporate bonds in that market grow to US$847 billion, far outpacing the US$209 billion Australian market.

A significant difference exists between how small and large companies are financed. Specifically, small companies are typically restricted from public debt and equity markets, and tend to operate on the equity of the owner and other relatively small private investors. This limits their ability to finance future projects at optimal capital costs leading to constrained growth options. This is part is predicted by finance theory, but is further skewed by regulatory and cost considerations.

Companies in Australia have an average debt-to-equity ratio of 0.835, which is relatively high compared with companies in the UK (0.531) and South Korea (0.798). Debt-to-equity ratios, however, are significantly different between large (1.417) and small firms (0.459), reflecting the greater access to external debt financing available to large companies.

Other factors influencing the capital market structure of an economy are taxation policy and regulation. Dividend imputation and superannuation fund preferences skew investment in Australia to equity over debt. This is an area for consideration in the development of a domestic corporate bond market.

The report outlines and analyses the corporate financing options available to companies in section 2. Section 3 then examines the relative size of external debt and equity financing in the four markets under consideration. The capital structure mix of companies operating in these markets and factors
driving these decisions are then reviewed in section 4. Section 5 looks in detail at the key taxation and regulatory factors influencing capital market structure in Australia, particularly the influence of dividend imputation and superannuation mandates in the Australian market. Section 6 of this report analyses and discusses other considerations, as well as exogenous impacts and recent innovations, on the access to various forms of financing. The final part of this report summarises the key findings and sets out a series of recommendations to develop and enhance the domestic capital market.

2. Forms of financing

This section reviews the financing methods available to companies, presenting an introduction to the theories that have developed to explain the financing decision of firms. Specific methods by which companies may access external debt and equity capital are reviewed with reference to the key differences in the capital market structure of each of the four markets considered.

Companies may finance their operations through internal or external means. The primary source of internal financing is retained earnings. This is a significant component of financing for many companies, particularly small and new firms. However, the emphasis of this report is on external financing.

There are two traditional broad options by which a company may obtain external capital to finance its operations: debt financing, encapsulating various forms of borrowing, and equity financing, involving a sale of some portion of ownership in the company.¹ The benefits of debt financing and equity financing are summarised in the table below.

<table>
<thead>
<tr>
<th>Debt Financing</th>
<th>Equity Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention of business ownership</td>
<td>No requirement to meet repayment schedule</td>
</tr>
<tr>
<td>Debtors have no input to management</td>
<td>In case of bankruptcy, no repayment obligation</td>
</tr>
<tr>
<td>Interest repayments are tax deductible</td>
<td>Profit can be reinvested rather than loan repayment</td>
</tr>
<tr>
<td>More certainty in returns schedule</td>
<td>May be easier to secure where assets/cash flow are</td>
</tr>
<tr>
<td></td>
<td>more uncertain</td>
</tr>
</tbody>
</table>

¹ Note that this report does not consider derivatives, structured products and other hybrid forms of financing. Grants and other government-related support are also omitted.
2.1 Debt financing options

There are several common forms of debt financing used by companies. This sections outlines the alternative options and presents statistics to demonstrate the size and growth of the debt financing options in selected markets.

i. Financial intermediary lending

This includes unsecured and secured debt services provided by financial intermediaries (most commonly banks) such as overdraft facilities, line of credit lending, fully-drawn advances, debtor financing (credit secured against sales invoices) and fixed-asset backed loans.

Figure 1 below shows the total growth in business credit from banks to Australian companies from 1993 to September 2013, as well as the trends in small loans (defined as being issued under $2 million) relative to large loans. The size of Australian bank lending to business is close to $720 billion.

For small unincorporated companies, debt may also be sourced using personal assets, especially the entrepreneur’s personal residential property, as security. Connolly et al (2012) show that in Australia, the balance sheets of households which own businesses have significantly more debt than households which do not, concluding that “many small businesses may be financed indirectly by household borrowing rather than through explicit business borrowing.”
The characteristics of small and medium sized enterprises in Canada follows a similar pattern to that of Australia, with domestic banks and credit unions providing the vast majority of small business debt financing in the form of credit (Oliver Wyman, 2010).

ii. Debt financing through capital markets

The debt capital market raises business financing through the sale of bonds to external lenders via an intermediary, typically an investment bank who operates as the loan originator. These debt securities may then be traded in the secondary bond market. This method of debt financing involves significant costs, and thus is typically limited to only the largest businesses in the market and government bodies.

Australian corporates have steadily been increasing their use of debt financing through bond markets over the past two decades. As figure 2 shows, the growth in outstanding bond value of Australian corporations increased particularly strongly through the period 1998-2006. However, the main driver of this growth has been increasing access to international debt markets. Large firms are increasingly seeking debt financing in off-shore markets, particularly the US and parts of Asia. Figure 3 shows the relative size of net debt issuances in Australia and off-shore by non-financial corporations.
2.2 Equity financing options

Equity financing equates to some portion of ownership in the business. Put differently, equity is an investment in the business that gives the investor a claim to some part of the future cash flows it generates. There are two general forms of equity that a company may raise: private equity and public equity.

i. Private equity

In its simplest form, private equity is an investment in a company that is not publicly traded. For many small companies, this represents the largest source of the financing and may come from the business owner and their personal network of family and friends, and even suppliers or employees. For firms with strong forward growth estimates, this could extend to private placements of equity with venture capital firms (which have more restrictive return on equity requirements) and other
formal private equity vehicles. The advantage of this form of equity financing is that the total dispersion of ownership can be controlled (and minimised).

\textit{ii. Public, or listed, equity}

Public equity is exchange-listed, giving investors the ability to relatively easily and cheaply trade their investment while the business seeking financing can appeal to a wider pool of potential investors. The main limitation of public equity financing is the cost and time taken to complete an equity issuance. For companies going public for the first time, an initial public offering (IPO) process is followed, involving an intermediary as the underwriter of the listed stock. Additional requirements are set by exchanges and regulatory bodies (such as ASIC in Australia), regarding documentation, disclosure and operating history. The costs of an IPO are also estimated at over 20 per cent of the total financing raised. For these reasons, public equity is typically restricted to large companies.

Figure 4 shows the trend in the number of IPOs and the amount of equity capital raised through IPOs in Australia from 1999. The pattern in IPO issuance is strongly correlated with prices in the secondary equity market. During the calendar year 2012 there 83 new equity listings on the ASX, worth a total of approximately $7.15 billion.

Figure 5 shows the 2013 annual value of capital raised from initial public equity offerings in each of the four countries considered. It can be seen that the UK IPO market, worth an average US$13.3 billion a year, has significantly more equity this way than the other markets considered. The average annual IPO value in Australia in 2013 is just over US$8.7 billion, buoyed by strong economic conditions and confidence. The value of the domestic IPO market in 2013 was greater than that of Canada ($5.2bn) which is experiencing relatively economically-depressed business conditions, and the South Korean market ($2.1bn) where continued growth in debt issuances as a preferred financing method over equity, particularly among the chaebol and other large firms.
**Figure 4: Australian IPO: number and value, 1999-2012**

Source:  *Australia Cash Equity Market Report –ASX 2013*

**Figure 5: Average Annual Value of Proceeds Raised from Initial Public Equity Offerings**

*Source: World Federation of Exchanges*
In Australia both the value of IPOs and SEOs has been steadily rising. The total value of proceeds raised through IPOs in 2012 was A$7.15bn, with a further $5.02 billion raised through secondary offerings, primary through institutional placements and share purchase plans. Figure 6 shows the relative breakdown of secondary raising on the ASX by value.

![Figure 6: Secondary public equity capital raising in Australia](image)

**Source: ASX**

3. **The relative size of debt and equity capital markets**

This part of the report examines the relative size of bond and equity markets in each of the four countries under consideration. Figure 7 shows the relative market capitalisation of the four markets considered in this report and the world’s other largest equity markets. Australia (8th), the United Kingdom (4th), Canada (5th) and South Korea (11th) are home to some of the largest stock markets globally.
Unlike equities, where the vast majority of secondary market transactions take place on organised exchanges, most trade in corporate bonds takes place in over-the-counter (OTC) markets. As such, direct and standardised estimates of outstanding corporate bond value is problematic.

The focus in this section of the report is the size and operations of the domestic bond market of Australia and the three comparison markets. Table 2 presents current estimates of the outstanding value of the corporate bond market in each of the countries considered.

The total size of the debt market in Australia is comparable to the Australian listed equities market (approximately $1,210 billion v $1,400 billion). However, this figure includes government bonds and short-term interbank lending which account for 80% of the Australian debt market. After filtering out these securities, the total value of corporate bonds outstanding in Australia is approximately $209 billion (equal to around 20% of GDP), of which non-financial corporations represent less than 20% of the market. This represents in itself significant growth in the size of the market; in 1997, the market value of corporate bonds was approximately $30 billion (equal to approximately 5% of GDP).
Table 2: Outstanding value of corporate bonds issued by corporates within each market

($US billion)

<table>
<thead>
<tr>
<th>Domestic Corporate Bonds</th>
<th>International Corporate Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>209</td>
<td>51</td>
</tr>
<tr>
<td>45</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>328</td>
<td>376</td>
</tr>
<tr>
<td>170</td>
<td></td>
</tr>
<tr>
<td>376</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
</tr>
<tr>
<td>330</td>
<td>213</td>
</tr>
<tr>
<td>202</td>
<td></td>
</tr>
<tr>
<td>213</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td>847</td>
<td>49</td>
</tr>
<tr>
<td>491</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bank for International Settlements, AsianBondsOnline, ABS

Many countries have attempted to grow and develop their market for corporate bonds over the past two decades. The establishment of solid government debt markets which form the benchmark for the credit risk curve for other debt issues in the market has been a large component of the success of this in various countries, including Australia.

In general, however, corporate bond markets globally have not developed as rapidly or efficiently as equities markets. Myriad reasons in part explain this result. Sections 4 and 5 of this report examine some of these reasons.

4. Capital structure mix and factors in the financing decision

Companies will optimally choose the combination of debt and equity – the capital structure mix – that minimises their overall cost of capital. A company’s cost of capital is typically calculated as the weighted average of the cost of debt and cost of equity. The formula for calculating the weighted average cost of capital (WACC) for a company is typically given by:

\[
r = r_D \frac{D}{V} (1 - t_c) + r_E \frac{E}{V}
\]

where \( r_D \) and \( r_E \) are the required rates of return to debt and equity respectively, \( D \) is the total value of debt in the firm, \( E \) is the equity value in the firm and \( V \) is the total value of the firm (defined as \( D + E \)). The corporate tax rate is denoted as \( t_c \), and is incorporated so as to include the tax-offset value of interest payments.
WACC is the discount rate that will typically be used to determine firm value and assess the profitability of projects. Companies with a high WACC essentially are paying more to finance their operations, and thus must find more profitable projects than firms with lower WACC.

Companies will choose the optimal capital structure – that balance of debt and equity – which minimises the WACC through a trade-off between debt tax shield benefits and bankruptcy risks and agency costs.

In practice, there is no single optimal financing structure, as a number of confounding factors affect the corporate financing decision.

An extensive literature has examined the relationship between financing preferences and market structures. Three of the main factors which may influence the preferences of a firm to issue debt over equity or vice versa are examined below. These factors affect the issuer’s cost of financing options and/or the risk-adjusted return available to potential investors and, consequently, the market demand for particular forms of investment. These factors and their effect on the cost of debt and equity financing, as well as the likely effect on debt/equity ratios in a market are summarised in Table 3.

<table>
<thead>
<tr>
<th>Table 3: Factors affecting capital financing costs and ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of debt</strong></td>
</tr>
<tr>
<td>Tax rates</td>
</tr>
<tr>
<td>Dividend imputation</td>
</tr>
<tr>
<td>Investor rights</td>
</tr>
</tbody>
</table>

Companies with debt financing are able to offset their tax bill through deductibility of interest repayments. As such, Miller and Modigliani (1963) show that companies are incentivised to hold higher debt-to-equity ratios, and the leverage ratio should be positively increasing in the corporate tax rate.

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Dividend imputation is a system whereby shareholders may “impute” the tax already paid by companies in the dividends they receive as income. In effect, the imputations credits enable eligible shareholder taxpayers to reduce the net tax paid on their income. While relatively popular through the late 20th century, many countries have since unwound their imputation tax system. Only Australia and New Zealand now operate a dividend imputation system among developed countries.

Graham (2003) shows that dividend imputation has the effect of skewing investor preferences towards equity investments, lowering the implicit cost of equity financing and partially removing the benefits of external debt financing. As such, companies operating in jurisdictions with a dividend imputation tax system are expected to have lower debt-to-equity ratios than companies operating under a classical taxation system.3

Strong investor rights in a jurisdiction give guarantees to the providers of external financing, thus reducing some part of the risk premium they demand. As such, countries with strong investor rights are expected to have lower costs of both debt and equity. In aggregate, however, the update of external financing is not necessarily positively related with investor rights, particularly where there may be ambiguity in the application of such laws. As such, evidence of legal strength in enforcing laws regarding investor rights have an even more significant effect in supporting the use of external finance (Bhattarcharya and Daouk, 2002), though it is unclear whether the benefit is greater to debt or equity investors.

Table 4 below shows the average debt-equity ratio and debt-value ratio for listed companies in each of the four markets considered.

<table>
<thead>
<tr>
<th></th>
<th>Average Debt-Equity ratio</th>
<th>Average Debt-Value ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.835</td>
<td>0.208</td>
</tr>
<tr>
<td>Canada</td>
<td>0.844</td>
<td>0.320</td>
</tr>
<tr>
<td>UK</td>
<td>0.531</td>
<td>0.291</td>
</tr>
<tr>
<td>South Korea</td>
<td>1.254</td>
<td>0.319</td>
</tr>
</tbody>
</table>

Source: Datascope

3 The impact of dividend imputation on corporate financing in Australia is discussed in further details in section 5.
Firms in Canada (0.844), Australia (0.835) and South Korea (1.25) have the higher average debt-equity ratio of the countries considered. This could partly be due to the rapid movement to deleverage among corporates in the UK post-GFC relative to the less-affected markets. Another possible influence in the market-wide average figure is the proportion of small firms and financing differences between large and small firms. There are potentially significant differences in the financial structure of firms of different sizes. The following subsection examines the relationship between company size and corporate financing in further detail.

**Company size and corporate financing**

In this subsection, the relationship between company size and corporate financing options is analysed. Finance theory predicts that smaller companies will face a higher cost of capital than large companies due to their increased risks. Smaller companies are more likely to have volatile cash flows, less secure assets and collateral, and shorter operating histories. As a result, both equity and debt investors to these companies will demand a higher return to compensate for this increased risk. This result explains the preference for smaller and new firms to rely on retained earnings.

Table 5 summarises three key factors affecting small firms and shows the expected relationship between the factor and the cost of financing and debt-equity mix of the firm.

<table>
<thead>
<tr>
<th>Information Asymmetry</th>
<th>Cost of debt</th>
<th>Cost of equity</th>
<th>Debt-Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversification of Operations</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Lack of Collateral</td>
<td>+</td>
<td>?</td>
<td>-</td>
</tr>
</tbody>
</table>

Information asymmetry is a significant concern for small firms seeking finance. To external capital providers, the uncertainty surrounding the operations of many small firms attracts a higher risk premium than larger, well-established firms experience. As such, many small firms are expected to avoid external financing options and rely on retained earnings or lending from banks to finance
operations. Diamond (1984) argues that bank loans will have greater access to internal information about small companies and build ongoing relationships which leads to a lower cost of borrowing than would be required on corporate debt securities.

Pecking order theory formalises the information asymmetry-driven expected financing preferences of companies. Attributed to Myers and Majluf (1984), pecking order theory argues that information asymmetries and costs of financing are positively related. Information asymmetries, which are typically higher in small and new firms, further increase the cost of external capital to these firms relative to retained earnings, supporting the pecking order theory. When there is a high degree of information asymmetry between management and investors, firms are more likely to use retained earnings. Once this source of financing is depleted, Myers and Majluf argue that firms will prefer to access external debt over equity, as investors perceive the issuance of new equity as a signal from management that the stock is currently overpriced.

A further factor which may explain differences in the capital structure of firms of different sizes is the ease of access to capital markets. Larger firms are shown to have lower marginal costs of access to external capital markets, particularly external debt. Titman and Wessels (1988) argue that the lower borrowing cost of larger firms is explained by the higher diversification of their operations and therefore more stable cash flows.

In practice, the requirements placed on potential borrowers to access external debt financing (evidence of solvency, repayment capacity) skews the financing of small companies towards equity. This particular financing constraint is greatest in companies with R&D-heavy operations where guarantees for debt financing are less and the fixed-repayment schedule of most debt limits the activities undertaken by the firm.
The results from our analysis follow the expectations set out above. Table 6 shows the average debt-equity ratios for companies of different size in each of the markets considered.

<table>
<thead>
<tr>
<th></th>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1.417</td>
<td>0.927</td>
<td>0.459</td>
</tr>
<tr>
<td>Canada</td>
<td>1.181</td>
<td>0.963</td>
<td>0.152</td>
</tr>
<tr>
<td>UK</td>
<td>1.246</td>
<td>0.796</td>
<td>0.220</td>
</tr>
<tr>
<td>South Korea</td>
<td>3.746</td>
<td>0.710</td>
<td>0.676</td>
</tr>
</tbody>
</table>

Source: Datascop

On average, the debt-to-equity ratio is lower for small companies than for large companies. This result is in line with the expectations set out in the discussion earlier in this section. Furthermore, this pattern has been relatively consistent over time. As figure 8 shows, for the Australian market average debt-to-equity ratios have been higher for large companies than small companies since 1999.

Figure 8: Debt Ratio, Australian Companies by Value

Source: Datascop
The significance of the corporate bond market and related debt market to Korean firms is highlighted in table 6. This reflects the success policymakers have had in establishing a deep and functioning secondary market for the bonds of chaebol and other large firms.

The Australian and Canadian markets are roughly comparable in terms of the debt-to-equity ratios of listed firms. In both countries though the source of funding for smaller companies increasingly comes from banks, not from external debt capital markets.

The results presented in this section support the findings in Baldwin et al (2002), who show that after retained earnings, equity financing is the most significant type of funding for small firms in Canada, with 47% of the financing of new firms obtained as equity. Long and short-term debt, conversely, combined account for less than 35% of financing for new firms.

SMEs may face a “financing gap” where the access to established external debt and equity financing is limited for such companies. While Vos et al (2007) argue that in a market like the UK which has well developed financing systems, there is no “financing gap” for SMEs, a large proportion of similar companies in the other markets considered are likely to source financing from friends and/or relatives, and bank loans.

Small businesses in Australia are less likely to use less debt financing than large businesses. A recent research paper using taxation data produced by the Reserve Bank of Australia estimates that less than 40 per cent of businesses with EBIT under $100,000 utilised any debt financing (Connolly et al., 2012). Of those small businesses which do have some form of debt financing, the median gearing ratio is approximately 50%. This compares to a median gearing ratio of almost 60% for larger firms (Matic et al., 2012). The structure of the Australian capital market and its influence on the financing decision of companies is examined in further detail in the next section.
5. Taxation, regulation and the structure of the Australian capital market structure

Both the Australian listed equities and corporate bond markets have performed well in recent years and strong market structures are in place to see them continue to grow. The uptake of external financing options is affected by taxation and regulatory environments. In this section, factors specific to the financing decision of companies in Australia are examined in further detail.

**Dividend Imputation**

Dividend imputation is a system of taxation that attempts to avoid the “double taxation” of the classical taxation system. A dollar of corporate earnings is taxed at the corporate tax rate before it may be distributed as dividend income to shareholders. Under the classical taxation system, shareholders then pay tax on the entire value of the dividend received at their marginal taxation rate. Under an imputation system, companies can choose to attach a franking credit to the dividends they distribute. This franking credit enables the recipient shareholder to offset the tax they would pay on the dividend income, up to either a partial amount or the full amount of the tax paid by the company. Shareholders with marginal tax rates above the corporate tax rate then may attached a value to franking credits. Shareholders with marginal tax rates below the corporate tax rate or who are unable to exercise the franking credit, such as foreign residents, place no value on franking credits.

Under a dividend imputation taxation system, the calculation of WACC adjusts to reflect the relatively lower cost of equity. The equation for calculating WACC in a dividend imputation economy is given as:

\[
r = r_b \frac{D}{V} (1 - t_c) + r_e \frac{E}{V} \times \frac{1 - t_c}{[1 - t_c(1 - \gamma)]}
\]

where \( \gamma \) represents the proportion of franking credits valued by shareholders in the company, and all other variables are defined as in equation 1.\(^4\)

\(^4\) Interestingly, in a 2001 study by Lonergan it is observed that less than 5% of valuations surrounding corporate restructuring incorporated the value of franking credits in to the calculation of WACC.
It can be seen that dividend imputation lowers the cost of capital for companies with shareholders that value franking credits. As such, imputation systems may encourage business investment and grow supporting financial markets.\(^5\)

These benefits notwithstanding, there are confounding biases arising from dividend imputation which affect the market’s capital structure. Firstly, some investors will prefer equity over debt if they can access the tax offset benefit (Graham, 2003). These will generally be higher-income earning residents in the same country as the company (as access to imputation credits is often restricted to residents). This may, in part, explain the relatively large off-shore issuance of corporate bonds compared to domestic issuance.

Secondly, those investors who attach a value to franking credits will prefer to hold companies which have operations primarily in Australia. This is because the Australian government regulation on franking credit treatment limits creditability of earnings that have paid foreign taxes. This consideration, however, needs to be weighed up against the comparative tax rates of the foreign markets.

Finally, the dividend imputation system can be seen to disproportionately benefit large companies over small companies. The cost of capital under imputation is lowered only when there is franking credit value. Many small companies reinvest their earnings (as noted earlier in this report, retained earnings is a significant part of small business financing), which dictates a low or non-existent dividend policy. Individuals who value franking credits will prefer to hold companies paying large dividends, and thus prefer to direct their investments away from small companies.

**Superannuation Mandates**

A significant component of the Australian financial market is the superannuation industry, estimated to now represent some $1.62 trillion of assets. The structure of the Australian superannuation has a twofold effect on the development of a corporate bond market. Firstly, the largest average asset allocation of superannuation funds is to Australian equities (29%), while only 6% on average is

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allocated to Australian fixed interest securities.\textsuperscript{6} Secondly, while the vast majority of corporate bonds issued in Australia fall within the investment grade category (BBB- and above), Black et al (2012) report that most bonds issued by non-financial corporations in Australia are below the stringent mandates for most investment and superannuation funds. As such, many lower-rated companies find it cheaper to issue bonds offshore.

Maddock (2014) reports that these factors mean that, “Australian super funds allocate considerably less to fixed interest products than do pension fund managers in many other countries” (p.16). This result may rationally be drawn from the relatively large proportion of young investors into superannuation who are targeting growth strategies, however another part of the allocation skew appears to be linked to a cultural preference for equity investments by retail investors.

\textit{Exchange-Traded Australian Government Bonds}

Australian Government Bonds (AGBs) listed for exchange on the ASX in June 2013.\textsuperscript{7} This has boosted the size of exchange-traded fixed interest securities in Australia from $35 billion to nearly $300 billion, and provides a range of positive influences for the development of the domestic corporate bond market.

Depth in the AGB market through OTC markets is already well-established. As discussed earlier, the strong AGB market provides a solid benchmark for yield curve estimation. This is further strengthened through existence of a liquid exchange-based location for AGB transactions. This development also helps to improve overall competitiveness and infrastructure efficiency of the Australian bond market, as well as develop critical mass and cultural acceptance of the space, particularly among retail investors.

\textsuperscript{6} Maddock, R., Superannuation asset allocations and growth projections, Paper prepared for the Financial Services Council, February 2014.

\textsuperscript{7} Similar exchange-traded government bond markets have been established in the UK (2010) on the London Stock Exchange and Italy (1994) through the MOT exchange.
Corporations Amendment (May 2013)

In May 2013, the federal government introduced legislation to simplify and lower the costs of vanilla bond issuances in Australia. The Corporations Amendment (Simple Corporate Bonds and Other Measures) Bill 2013 is intended to stimulate corporate bond activity in Australia, particularly by firms outside the top size-bracket for whom the cost of bond issuance typically makes this form of financing infeasible.

If passed, this regulation change is also expected to boost the interest of retail investors in Australian corporate bonds. Currently, investment into Australian corporate bonds is dominated by superannuation funds and foreign investment corporations, with retail investors directly holding less than 1% of the market. This, in part, is attributed to the observation that most corporate bonds in Australia require a minimum investment of A$500,000 as a prospectus is required for issues below this amount. The proposed legislation change will remove many of the costs associated with prospectuses for ‘vanilla’ corporate bond issues. This in turn could see more corporate bonds issued in smaller tranches designed to attract retail investors.

Additional Considerations

The corporate bond market, in particular, is well supported by infrastructure and a range of other measures to help it develop. A well functioning money market exists in Australia, though the well-established government bond market. It is of critical significance to the development of a strong capital market (both bonds and equities) that an efficient money market operates, as these securities set the short-end of the yield curve. Furthermore, post-GFC there is increasing interest in the development of a strong corporate bond market and options for corporate financing diversification. However, several issues remain as limitations to the expansion of the domestic corporate bond market:

- Banks typically offer better borrowing rates to firms than they could achieve through corporate bond markets.
- Secondary market liquidity is limited. While annual turnover in the Australian corporate bond market has increased 31.2% to $777 billion in 2012-13 from 2011-12, this is a fraction of the exchange equity market turnover in Australia ($1,151 billion) and equity derivatives market ($3,327 billion).
- The strength of the government bond market in Australia, while providing a number of benefits to the development of broader capital markets, may also have done a disservice to corporate bonds which, in effect, are “crowded-out” of the fixed-interest demand space.

- Retail investors prefer higher yielding assets than most corporate bonds offer (which may be a result of the dividend imputation system). Bond issuers are unwilling to pay an additional premium, and retail investors instead hold hybrid securities as an alternative to meet their return demand.

- Conversely, companies are able to access a range of innovative subordinated and mezzanine financing alternatives.

- Investors are also less likely to prefer to hold corporate bonds over a range of other investors given the low and inconsistent historical issuance of volumes.

- Bondholder rights are limited in Australia as corporate issuers are reluctant to give many covenants. In part, this may improve as the education and culture surrounding corporate bond investments improves in Australia.

- The interest withholding tax applied to payments received by foreign investors of Australian corporate bonds was removed in 1999. It was not until 2008 and 2009, respectively, that foreign-investor withholding taxes were removed from state and federal government bonds. The removal of these taxes was intended to stimulate international investment into the domestic bond market, particularly at times when bond issuance was rising.

6. Other considerations in capital market structure and current developments

Financing Costs and Bank Competition

In general, debt financing is more secure than equity financing from the investor’s perspective. As outlined in Table 1, debt financing often involves a defined repayment schedule and loan security against collateral in the form of assets or trade credit/accounts receivables. Equity financing, by contrast, has little asset security, return on investment guarantee, or liability in the case of default and bankruptcy. Consequently, debt financing is typically less costly than equity financing. That is, the required return to debt is lower than the required return to equity.

Smaller businesses, however, face a higher average cost of debt than larger businesses. This is attributable to the relatively high volatility in their cash flows, and use of no collateral or less reliable forms of collateral. In Australia, the cost of debt financing to small businesses is typically higher ever than the borrowing cost households face (Matic, 2012). Figure 9 shows this pattern.
Despite the relatively higher borrowing rate small businesses face in Australia (and other countries), they are more likely to source debt funding from banks than the bond market. There are a range of reasons for this, including:

- Traditional use of banks to finance SMEs and long-running relationships between banks and commercial lenders. This relationship means information asymmetries between small companies and banks is expected to be lower than their relationship with external capital market financiers, and subsequently lead to loans being a lower cost than bonds (Diamond, 1984).
- Costs of corporate bond market access are prohibitive to many small companies.
- Competition between the banking sector for loans has further improved the credit proposition to SMEs over corporate bond markets.

**Figure 9: Comparative lending rates in Australia**

![Graph showing comparative lending rates in Australia](image-url)
Other Government Programs and Incentives

The Canadian Small Business Financing Program, established 1961, allows SMEs (defined as having gross annual revenue no greater than $5 million) to access loans up to $500,000 for the purpose of financing a specific large asset purchase, which then serves as the security for the loan. Riding et al (2007) demonstrate that 75% of firms who receive debt funding under this program would not have qualified for similar financing without the program.

Effect of the GFC and Recent Innovations in Business Financing

The Global Financial Crisis (GFC) led to a dramatic decrease in overall liquidity and lending activity. A number of recent innovations in business funding have been attributed to this period.

Popular methods of alternative financing in the UK (and more recently being advanced in the other markets under consideration) include crowdfunding, hyperfunding, peer-to-peer lending, and merchant cash advances. A report produced late last year estimates that the size of these alternative funding sources has grown significantly in the past five years to represent £939 million of all UK business funding in 2013 (Collins et al., 2013).

Informal equity financing is also rising in prominence, though exact figures on its size are limited by data availability. So-called “love money” equity from friends and relatives and investments by “angel investors”, informal equity investors who can also contribute skills and expertise to the firm are an important part of start-up funding for SMEs. In Canada, the use of angel investments is seen as a significant contributor to the development of small firms. The growth of angel investors were supported through the Canadian Community Investment Program from 1995-2000 with the intention of this informal equity investment acting as a precursor to venture capital or formal external equity financing (Haines et al, 2003).
7. Summary

There are a range of economic and efficiency motivations for a market to establish well functioning capital markets. Capital markets facilitate optimal financing for companies to operate. Assessing the business environment and use of regulation to promote the efficient financing of business operations has significant implications for overall economic growth. Various financing constraints, from limitations in the market microstructure to taxation policy and governance concerns can hinder growth.

This report compares the size of the Australian capital market and business financing options to several comparables: the UK (global benchmark), Canada (scale comparable market), and South Korea (regional comparable market). All-in-all, the Australian capital market appears to provide financing options to business at as effectively as several key comparable markets. However, there is still scope for improvement. While the Australian equity market is one of the largest and most liquid in the world, non-financial firms face a number of barriers in accessing the corporate bond market.

To date, debt financing has been primarily provided by bank and intermediary lenders, and so Australian businesses do not experience a financing gap. The significance of an efficient capital market structure is highlighted post-GFC. Through 2008-09, the risks of credit shortage and financing limitations brought forward the need for Australian firms to diversify their capital structure, particularly the composition of debt lenders. Furthermore, deep bond markets are also going to be required going forward for Australia’s capital markets to remain competitive in light of new accounting and reporting standards. AASB and Basel II will require corporate managers to be more active with regards to their corporate finances and need to receive continuous credit ratings.

The size and continually growing significance of the superannuation industry in Australia provides further impetus to develop a cohesive capital market to ensure optimal and efficient investment across the market. A growing area of interest in capital market policy-setting may be how best to target the SMSF space, as well as growing education of investors as to the prospects of corporate bond investment. Exchange-listing of AGBs is a particularly exciting development in achieving greater acceptance among retail investors of the fixed interest asset space.
8. Recommendations / Conclusions

It is recommended that the Financial System Inquiry recognise the following outcomes from this report:

a. There are no significant distortions to capital flows in Australia when compared to like capital markets;

b. Australian businesses of different sizes – small, medium, and large – do not experience a financing gap;

c. The corporate bond market in Australia, while comparatively small, is growing;

d. The size of the corporate bond market in Australia is the result of market outcomes in Australia rather than any single distortion arising from the extant regulation of the financial system; and
9. References


