Kangaroo bond issuance in Australia

The issue of kangaroo bonds (foreign A\$-denominated bonds) has become a significant part of the Australian bond market. Issuers are overwhelmingly high credit quality, including major banks, financial organisations and supranationals attracted to Australia's highly liquid foreign exchange and derivatives markets. The Australian experience offers some lessons to other countries interested in developing their domestic bond markets.¹



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EXTERNAL FINANCING of Australian companies is primarily via stock markets and banks rather than domestic debt securities markets. Despite this, and the substantial decline in the size of the government bond market, Australia's bond markets are among the most economically significant in the Asian region.² While there is still a need for longer-term development of the local corporate bond market, Australia has developed as a preferred regional location for bond issuance by high credit quality nonresident issuers.

The issue of bonds by nonresidents, termed foreign bonds or more specifically, 'kangaroo bonds', when denominated in Australian dollars, has become a major part of the Australian bond market. The key objective of this paper is to analyse those factors that have facilitated development of this particular market. This country study contributes to the ongoing and developing literature on corporate bond market development: the 'missing market' of Herring and Chatusripitak (2000) and extends recent work on foreign bond market growth in developing markets (Batten and Szilagyi, 2007).

After the Asian Crisis of 1997–98, Asia-Pacific governments specifically set about developing local and regional bond markets as an alternative to the traditional forms of intermediated (bank) financing (see Kim 1999; Rhee 2000; Thompson and Poon 2000; Park and Park

2005). For example, since the Asian Crisis, Thailand's debt markets have nearly quadrupled from 9.6% to 37.4% of GDP, while Korea's nearly doubled from 45.9% to 82.5% of GDP (Lejot et al. 2004). From this perspective, Australia's corporate bond markets could be larger and better developed, especially given the sophistication of its financial market infrastructure and the savings that are channelled from statutory savings schemes.

The Australian picture is further complicated by the fact that since the 1980s the more creditworthy domestic firms and institutions have accessed international markets, in particular Eurobond, US and, more recently, Japanese financial markets for funding. In turn, the more creditworthy international borrowers have sought financing through kangaroo bonds. Thus, it would seem that local institutional investors prefer better credit-rated foreign issuers to that of domestic issuers, even though many are well-known names and carry investment grade credit ratings.

Within the Asia-Pacific region, the development of foreign bond markets (Samurai bonds in Japan, Arirang in Korea and Kangaroos in Australia), and often domestic corporate bonds as well, have made limited progress, with issuance remaining concentrated in a handful of advanced countries. Australia is one such case; others include the financial centres of Singapore, Hong Kong and Japan. Of the Asian crisis economies that implemented radical regulatory change, only Korea has made some progress towards developing a market along the lines of those in Japan and the United States.

Batten and Szilagyi (2007) note that the shared characteristics of these major markets are the sophistication of their legal systems and the presence of complex overthe-counter (OTC) and exchange-traded derivatives markets, enabling hedging and risk management. Of particular concern is the need for currency and interest rate swap markets to enable domestic bond issues to be converted into the preferred currency and cash flow pattern of the issuer. The deep foreign exchange and derivatives markets in Australia, Singapore and Hong Kong easily accommodate risk transformation by foreign issuers. Also, academic investigations³ of emerging financial market developments frequently cite the importance of the 'rule of law' as a facilitator for sustainable economic growth, while others highlight the importance of bond settlement, clearing and other technology-based infrastructure. The common law legal heritage of Australia, Hong Kong and Singapore may account for the relative importance of their bond markets compared with others in the region. Such a conclusion would also be consistent with the strong international evidence linking stock market development and the mitigation of agency conflicts in common law based legal domains (Nestor and Thompson 1999; Thompson 1999; La Porta et al. 2000).

The following section, which outlines characteristics of the foreign bond markets in Australia, is followed by a discussion of some lessons about bond market development from Australia's experience.

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Kangaroo bonds

The first foreign issuer in the fledging 'kangaroo market' was Credit Local de France in 1991. We examine subsequent issues until March 2008 using data sourced from the Reuters Fixed Income Database (RFID), which includes details of 315 bonds issued during this period.⁴

TABLE 1: Country of issuer of kangaroo bonds Period: 17/01/1992–1/03/2008

Country of issuer	Number	% Number	Volume (million)	% Volume
Australia	1	0.3	25	0.0
Austria	1	0.3	600	0.5
Canada	5	1.6	1,350	1.1
Cayman Islands	22	7.0	4,525	3.7
Finland	3	1.0	1,600	1.3
France	19	6.0	6,970	5.7
Germany	27	8.6	13,725	11.2
Hong Kong	1	0.3	50	0.0
Iceland	2	0.6	600	0.5
Ivory Coast / Cote d'Ivoir	e 1	0.3	300	0.2
Luxembourg	7	2.7	6550	5.4
Netherlands	28	8.9	10,050	8.2
New Zealand	5	1.6	899	0.7
Norway	5	1.6	1,400	1.1
Philippines	5	1.6	3,900	2.9
South Korea	5	1.9	730	1.0
Spain	5	1.6	3,750	3.1
Sweden	1	0.3	200	0.2
Switzerland	10	3.2	5,970	4.9
Taiwan	1	0.3	350	0.3
United Arab Emirates	2	0.6	250	0.2
United Kingdom	32	10.2	11,135	9.1
United States	127	40.3	47,400	38.8
Total	315	100.0	122,055	100.0

Source: Reuters Fixed Income Database.

Table 1 provides information on the number and volume of bonds issued by the country of residence of the issuer. Some 7% were issued by listed companies in tax havens (Cayman Islands), although the majority were issued by companies listed in the United States (40.3%) and the United Kingdom (10.2%). High credit quality German and Dutch issuers also comprised a significant segment (17.5% together). The industrial sector of each issuer is presented in Table 2. It is clear that most issuers were banking and financial services corporations (together 75.9% of bonds issued and A\$80.8 billion in total issues to date) with sovereign and state (10.5% and A\$21.6 billion in issues) and supranational issuers (10.1% and A\$21.6 billion in issues) together accounting for most of the remaining issuers.

TABLE 2: Industry sector of issuer of kangaroo bonds Period: 17/01/1992–1/03/2008

Industry sector	Number	% Number	Volume (million)	% Volume
Banking	109	34.6	40,930	33.5
Business & public services	1	0.3	100	0.1
Financial services	130	41.3	39,869	32.6
Insurance	2	0.6	750	0.6
Real estate	1	0.3	465	0.4
Sovereign government	1	0.3	600	0.5
Sovereign government – agency	27	8.6	15,250	12.5
State and provincial	5	1.6	1,350	1.1
Supranational organisation*	32	10.1	21,595	17.7
Telecommunication services	1	0.3	265	0.2
Utilities - electrical & gas	7	2.2	1,730	1.4
Total	315	100.0	122,304	100

Notes: These included 11 issues by Eurofima, 7 by the European Investment Bank, 5 by the Asian Development Bank, 5 by the International American Development Bank, 2 by the Nordic Investment Bank, 1 by the African Development Bank and 1 by the World Bank.

Source: Reuters Fixed Income Database.

Table 3 provides information on the coupon type of each issue. The market is overwhelmingly, fixed rate with simple 'plain vanilla' pricing (62.4%), with the remainder on a floating rate; of these, most (30.6%) are priced over the floating rate BBSW benchmark. The plain vanilla fixed rate bonds had an average maturity of 6.1 years, which was longer than the maturity of index-based floating rate bonds (five years). The remaining 16 bonds with more complex floating rate formulas had an average maturity of 10 years. The RFID records that only seven of the bonds issued (2.2%) were private placements, none included put features, and 20 (6.4%) were callable. The callable bonds had significantly longer maturities (an average of 10.4 years) than the non-callable bonds (an

average of 5.7 years). Thus, consistent with issues in other markets, kangaroo bonds rarely contain option features, instead comprising simple pricing features.

TABLE 3: Coupon type of kangaroo bond issues Period: 17/01/1992–1/03/2008

Coupon type	Number	% Number	Volume (million)	% Volume
Fixed: plain vanilla fixed coupon	197	62.4	82,834	67.7
Floating: fixed margin over index	96	30.6	33,045	27.0
Floating: fixed then floating	10	3.2	3,290	2.7
Floating: step up – margin over index	12	3.8	3,135	2.6
Total	314	100.0	122,304	100

Source: Reuters Fixed Income Database.

Given the prominence of banking, financial and sovereign issuers, it is not surprising that the credit quality of the issues is very high. Tables 4a and 4b list the credit ratings for each of bonds by Moody's and Standard & Poor's. While all the bonds listed were rated by at least one of the rating agencies, not all bonds carried two ratings. A number of issues (24.1% of Moody's and 39.6% of Standard and Poor's) either had their rating withdrawn (due to the bond maturing) or were never rated. The one non-investment grade issue (rated C by Standard & Poor's) was issued by the Korea Exchange Bank in December 1996. Since then the market has been overwhelmingly high quality with 28.3% of issues carrying Moody's highest rating of Aaa and 26.7% carrying Standard & Poor's highest rating of AAA.

TABLE 4A: Credit rating (Moody's) of kangaroo bond issues Period: 17/01/1992–1/03/2008

Moody's credit rating	Number	% Number	Volume (million)	% Volume
Ba2	2	0.6	305	0.3
Baa1	10	3.2	3,115	2.6
Baa3	4	1.3	925	0.8
A1	23	7.3	5,405	4.4
A2	12	3.8	2,775	2.3
Aa1	24	7.6	10,075	8.2
Aa2	21	6.7	6,340	5.2
Aa3	54	17.1	20,284	16.6
Aaa	89	28.3	50,140	41.0
Not available	76	24.1	22,939	18.8
Total	315	100.0	122,304	100.0

Source: Reuters Fixed Income Database.

TABLE 4B: Credit rating (Standard & Poor's) of kangaroo bond issues Period: 17/01/1992–1/03/2008

SP credit rating	Number	% Number	Volume (million)	% Volume
С	1	0.3	180	0.1
BB	1	0.3	125	0.1
BBB-	2	0.6	600	0.5
BBB+	2	0.6	750	0.6
Α	11	3.5	2,200	1.8
A-	9	2.9	2,915	2.4
A+	25	7.9	5,835	4.8
AA	17	5.4	4,090	3.3
AA-	28	8.9	10,760	8.8
AA+	11	3.5	3,490	2.9
AAA	84	26.7	48,565	39.7
Not available	124	39.4	42,794	35.0
Total	315	100.0	122,304	100.0

Source: Reuters Fixed Income Database.

Major banks, financial organisations and supranationals dominate the league table of top issuers. This is consistent with Table 4b, where nearly 45% of issues were rated AA or better by Standard & Poor's and reflects market perceptions that the foreign bond market is dominated by high credit quality financial intermediaries which attempt to create sub-LIBOR/SIBOR funding. These intermediaries will only access the domestic market if it is opportune to do so.

Table 5 records the top 20 Kangaroo bond issuers by total amount issued. This list is clearly dominated by major international banks, supranationals and investment houses. Interestingly, issuers with higher ratings tend to issue bonds with longer maturities. For example, the Aaa category has an average bond maturity of 7.1 years compared with the A1 category of five years. There is also greater variation in maturity as ratings increase, suggesting that issuers with lower ratings have less choice in maturity: they generally issue bonds that mature in three to five years. Similar results exist when Standard & Poor's ratings are used. For example, bonds rated AAA have an average maturity of 7.4 years and those rated with a single A have an average maturity of four years. Sovereign and supranational issuers prefer longer maturities. For example, the 32 supranational issues have an average maturity of 8.2 years compared with the 109 issues by banks, which mature in an average 5.85 years. The greatest variation in the maturities of the bonds issued is in the sovereign/ supranational class. There is also significant variation in the country of issuer and the maturity of the bonds. Issuers based in Austria, France, Luxembourg, New Zealand, and Switzerland issue bonds with longer maturities than those in the Scandinavian countries and the US.

TABLE 5: Top 20 kangaroo bond issuers Period: 17/01/1992–1/03/2008

Issuer Name Total iss	ued (descending order)
Landwirtschaftliche Rentenbank	6,350,000,000
European Investment Bank	6,200,000,000
Eurofima	5,970,000,000
KfW International Finance Inc	5,750,000,000
Morgan Stanley	5,705,000,000
Citigroup Inc	5,400,000,000
Merrill Lynch & Co Inc	5,305,000,000
Bank of America Corp	3,925,000,000
Instituto de Credito Oficial	3,750,000,000
Asian Development Bank	3,600,000,000
ABN AMRO Bank NV	3,500,000,000
Wells Fargo & Co	3,250,000,000
Goldman Sachs Group Inc	2,650,000,000
Inter American Development Bank	2,625,000,000
Dexia Municipal Agency	2,420,000,000
Bank Nederlandse Gemeenten	2,050,000,000
Bear Stearns Co Inc	1,975,000,000
Royal Bank of Scotland Plc	1,900,000,000
HSBC Finance Corp	1,750,000,000

Source: Reuters Fixed Income Database.

Currency swaps

Foreign bond issuance represents one option in a menu of funding alternatives available to high creditworthy institutions and corporations. From the perspective of Australia, that menu involves the following markets in which prices are linked by cross-currency swap prices:

- foreign bonds issued in local currency (kangaroo bonds);
- issues by local residents in foreign markets in foreign currencies (US\$ Eurobonds and Yankees);
- issues by local residents offshore in local currency (e.g. A\$ Eurobonds and uridashi bonds);
- non-resident issues in the local currency in offshore markets (e.g. IBM NY issuing A\$ uridashi bonds in Japan); and
- local residents issuing corporate bonds in Australia.

Liquidity mismatches between prices in these markets create the opportunities that attract issuance from one segment to the next. Arbitrage then drives prices back to equilibrium.

The Reserve Bank of Australia (2004)⁷ notes the need for offsetting transactions to drive the spreads:

Foreign borrowers issuing in Australia and seeking to swap back to their home currency usually receive favourable prices in the currency swap market because of greater demand by

Australian borrowers to do the reverse – i.e. borrow in foreign currency and swap into Australian dollars. Record foreign currency bond issuance by Australian entities in 2004 has pushed up the cost of converting foreign currency to Australian dollars and made it cheap for foreigners to do the opposite.

This situation has been very evident in Australia where resident issuance offshore (e.g. Yankee bonds or Eurobonds) is highly correlated with the foreign bond issuance and to a lesser extent corporate bond issuance. Also, since Australian residents may also borrow in A\$ in domestic and foreign markets, this helps to limit the cost of swapped foreign currency bonds. In the case of Australia, a rare opportunity existed for issuance in the Japanese uridashi market and may have triggered opportunities in the other markets (RBA Bulletin, May 2003): 'Increased demand from uridashi and other Eurobond issuers to pay US dollars and receive Australian dollars in the first quarter of 2003 caused the basis swap spread to decline to the point where it became negative, although it has subsequently recovered somewhat'.

Overall, the extraordinary rise in foreign issuance in Australia is due to a set of circumstances which cannot be easily replicated in other markets. However, it would appear that in Australia's case, the offshore issuance by local residents – first in foreign currencies and then in local currency – may well be the chicken needed for the egg. It is important to recognise that the swap-driven foreign bond market in Australia is concerned with cost and has little to do with long-term strategic bond market development.

From the investors' perspective, there is an ongoing need for quality investment opportunities to accommodate the vast sums that accumulate from compulsory superannuation. While fund managers are able to meet risk profiles through hedged offshore investment, quality Australian and offshore issuers have also been encouraged to participate in the domestic markets to satisfy local demand. Apart from the issues by organisations such as GE Capital, which are rated AAA, there have also been a large number of sovereign issues (notably Eurofima). While these issues are encouraging, they also reflect a domestic market bias for issues at the quality end. Developing the non-investment grade end of the market will present the challenge for the next decade.

Lessons and conclusions

The development of Australia's domestic and foreign bond markets provides five clear lessons for other countries interested in developing their domestic bond markets:

1. Market forces will drive development so it is difficult to regulate to avoid the risks.

Eichengreen and Luengnaruemitchai (2004) have highlighted several obstacles to the development of bond markets within the Asia-Pacific region. These obstacles include: the small size of public debt markets in Asia; the failure of countries to follow international accounting

The cross-currency swap market also appears to be critical to the development of the foreign bond markets since it enables the transformation of both foreign exchange and interest rate risks.

standards; the slow development of private debt markets; corruption and unreliable securities market regulation; and a legacy of capital controls. It is not a simple matter to overcome these obstacles.

It is important to remember that Australia has built up its bond market infrastructure over many years with a recent focus on corporate markets, although we believe more needs to be done to encourage domestic issuance by the corporate sector. The corporate bond market struggled in the early stages of its development in the early 1990s. This also coincided with pressure on the Australian banking system with massive bad loan write-offs by several major banks, the most notable being Westpac Banking Corporation. Thus it was not surprising that on the demand side, markets were sensitive. The Australian experience suggests that the presence of enabling infrastructure is no guarantee that corporate and foreign bond markets will develop: it appears to need the right mix of issuers' supply and investor demand. The crosscurrency swap market also appears to be critical to the development of the foreign bond markets since it enables the transformation of both foreign exchange and interest rate risks. The inability to offset risk via other derivatives is one explanation of why some regional markets are underdeveloped despite the best deregulatory effects.

2. Certain risks are predictable and can be managed with proper guidance from government and in consultation with industry.

In Australia, the withdrawal from the bond markets by the Federal and, to a lesser extent, state governments due to fiscal surpluses has created opportunities for foreign issuers at the quality end of the investment spectrum. Noteworthy is the decision by government to maintain benchmark liquidity, and the presence of a sophisticated floating rate OTC (forward rate agreement – FRA) and the exchange-traded (90-day bank bill futures) market. In Australia, quality issuers look for pricing windows where they can achieve sub-LIBOR funding. Deep, liquid and diverse products crossing a host of derivative and cash-based markets are necessary to ensure low-cost arbitrage and the enabling of risk transformation.

3. An ordering of issuance helped build confidence in the fledging stage of the market.

In Australia, supranationals issued first; it was only then that quality offshore banks and some multinationals issued. Overall, the extraordinary rise in foreign issuance in Australia is due to a set of circumstances which cannot be easily replicated in other markets.

The foreign bond market appeared to require an order of issuance. This particular order seems to have been derived by intermediaries to assist pricing and related issues.

4. Under what circumstances would foreign firms enter the market – foreigners with local currency requirements or those seeking costefficient funding that may then be swapped?

The Australian case suggests that funding foreign direct investment or local currency portfolios has little to do with why foreign firms enter a local market to issue securities. The favoured maturity for these issuers is five years, so pricing opportunities must exist in this period. To apply these experiences elsewhere, governments would need to provide support, for example, by providing enabling legislation which facilitates risk management and creates an environment conducive to the transfer of skills and technology. The presence of foreign institutions is a vital ingredient in the development of bond markets. However, one should not underestimate the commitment required from industry in particular financial intermediaries to support the markets in their embryonic stage.

5. There is an ongoing need to maintain liquidity in all markets and especially benchmark bonds.

The Australian experience with the local Treasury bond market suggests that risk-free benchmarks remain an integral and necessary part of the corporate bond markets for pricing and hedging purposes. Thus the strategy of providing adequate liquidity to the Treasury market, despite the fiscal needs of government, has been of critical importance to maintaining ongoing market development. Although counterparties of equivalent credit risk, may provide pricing substitutes – as those provided by foreign bond issuers in Australia have clearly demonstrated – investors appear to favour Treasury bonds over local corporate bonds, most likely for short-end cash flow management purposes, notably for repo transactions. \bigcirc

Notes

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- 2 See Jiang and McCauley (2004) for further discussion. Within Asia-Pacific, the first five largest bond markets were Japan (US\$6735 billion), China (US\$465 billion), Korea (US\$381 billion), Australia (US\$208 billion) and then Malaysia (US\$83 billion). The figures are as at 2002.
- 3 Many recent academic studies have focused on this issue. See Nestor and Thompson (1999); and Szilagyi and Batten (2004) for a discussion of this work and evidence on the impact regional differences in legal and banking structures have on the growth outcomes.
- 4 The RFID listed A\$122.1 billion of issued kangaroo bonds with A\$97.6 billion outstanding. This compares favourably with the data provided by the Reserve Bank (RBA 2008: Table D04), which listed A\$110.9 billion in outstanding issues. Thus the RFID captures 88.0% of outstanding kangaroo bonds as at March 2008.
- 5 There is one bond recorded for Australia, unusually made by an offshore subsidiary of John Deere Credit Ltd, which was a private placement made in March 2005.
- 6 The State and Provincial classification refers to the five bonds issued by the Canadian provinces.
- 7 Reserve Bank of Australia 2004, Report and financial statements, p. 43–44.

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