Can't see the wood for the trees – shedding light on Kauri bonds

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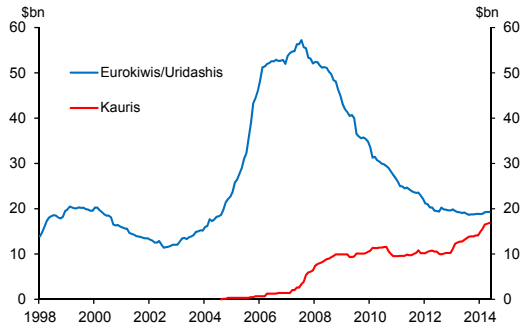
This article provides an update on the Kauri bond market. It identifies the major participants in the Kauri market, describes the factors which drive the supply of and demand for Kauri bonds, and looks at reasons for the strong Kauri issuance during 2013. Factors supporting increased issuance during 2013 included recovering global risk appetite, investors' search for yield amidst low global interest rates, and favourable pricing conditions.

1 Introduction

A Kauri bond is a New Zealand dollar denominated security, issued and registered in New Zealand by a foreign entity. The Kauri market is still quite young – the first Kauri was issued in August 2004 – but it has come a long way since its inception with over $16.8 billion of Kauri bonds currently outstanding.[2] Kauri issuance has risen as the stock of other New Zealand dollar bonds issued by non-residents, typically known as Uridashis and Eurokiwis, has fallen (figure 1).[3] Increased Kauri issuance has been accompanied by a rising foreign investor share in the Kauri market.

Figure 1
Eurokiwi/Uridashi and Kauri bonds outstanding



Source: RBNZ.

In July 2007, the Reserve Bank made highly-rated Kauris eligible for use as collateral in domestic open market operations, leading to a jump in supra-national, semi-government, and agency issuance (see box A). Kauri bonds have since cemented a place in New Zealand's capital markets as a source of highly-rated New Zealand dollar denominated debt, acting as partial substitutes to New Zealand Government bonds (NZGBs).

The first part of this article provides an overview of the Kauri market and describes some of the changes that have occurred since 2008. The second part investigates the factors which drive the demand and supply of Kauri bonds and explains the resurgence of Kauri issuance in 2013.

2 Market overview

Since the last update in 2008,[4] the Kauri market has continued to develop and increase in depth, with over $16.8 billion of Kauri bonds currently outstanding (around 7.5 percent of nominal GDP). The Kauri market grew rapidly over 2007 and 2008, in part driven by the Reserve Bank's decision to accept highly-rated (AAA) Kauri bonds as collateral in its domestic market operations. Between 2009 and 2012 Kauri issuance slowed markedly, as investor confidence remained low in the aftermath of the Global Financial Crisis (GFC), demand for assets in 'risk currencies' such as the New Zealand dollar fell and it became cheaper to issue in currencies such as the US dollar and euro. Last year saw a resurgence in the Kauri market with $5.5 billion of issuance priced, and this trend has continued into 2014, with around $3 billion issued so far (figure 2).

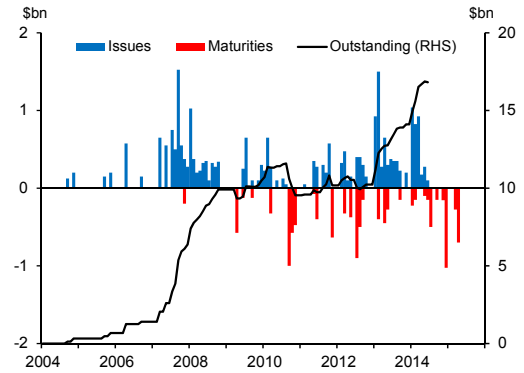
[1] The author would like to thank Lauren Rosborough, Chris Hunt, Michael Reddell, and other colleagues for their comments and advice.

[2] All data and figures in this article are as of end-May 2014 unless otherwise stated.

[3] For more details about Eurokiwi and Uridashi markets, see Eckhold (1998) and Drage, Munro, and Sleeman (2005).

[4] See Groom (2008).

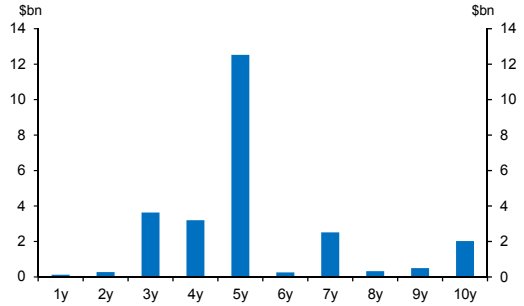
Figure 2
Kauri bond issues and maturities and total outstanding



Source: KangaNews, RBNZ.

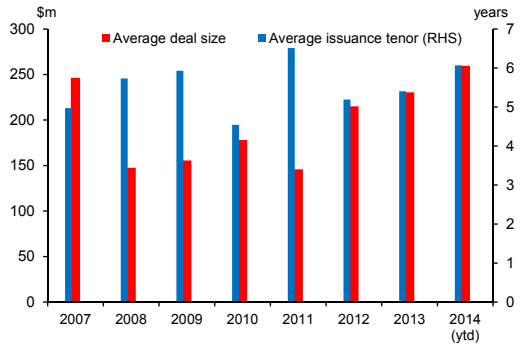
Table 1 contains some summary statistics of the Kauri market to date. Most Kauris are issued for three to five years (over 75 percent of gross issuance falls within this range), with some longer seven and 10 year issues (figure 3). This reflects both investor demand and the funding needs of issuers. The average deal size is $198 million, while the median size is $175 million. However, average deal size has trended higher since 2008, and is at a record $260 million year-to-date in 2014 (figure 4). While deal size obviously depends on an issuer's needs, strong investor demand has been a key factor driving the increase this year. Deals so far this year have been heavily subscribed, with several being scaled up from initial indications. In addition, as markets grow over time they develop the ability to absorb larger issues. This has coincided with an increase in the average tenor (time to maturity at issue) to just over six years, from 5.4 years in 2013 and 5.2 years in 2012 (figure 4).

Figure 3
Kauri issuance by tenor



Source: RBNZ.

Figure 4
Average deal size and issuance tenor per year



Source: RBNZ.

2.1 Who are the issuers?

Much of the early Kauri issuance between 2004 and 2007 was made by financial institutions (for example, Morgan Stanley was an active early issuer), but the majority of these bonds have since matured. Following the GFC, many global banks' credit ratings declined and investors grew wary of bank exposure. Consequently,

Table 1
Kauri market summary statistics

	New issues	Tap	Total
Number of issues	86	42	128
Issuance ($bn)	18.2	7.1	25.4
Average deal size ($mn)	212	170	198
Median deal size ($mn)	175	150	175
Average tenor (years)	5.3	-	5.3

Source: KangaNews, RBNZ.
Note: A tap is an increase to an existing bond.

Box A
SSAs: what are they?

The supranational, semi-government and agency (SSA) market sits between the sovereign government and private credit markets. It encompasses a wide range of issuers with different funding needs. Many SSA issuers are institutions that are vehicles for promoting growth, such as export development agencies.

A supranational is an institution whose mandate extends across national borders, and which is governed by representatives or shareholders from a number of countries. Examples of supranational issuers include the International Finance Corporation (IFC), which is a member of the World Bank group, and the Asian Development Bank (ADB). Supranationals generally have AAA credit ratings.

Semi-government (also known as sub-sovereign) issuers are generally the equivalent to a state or province as a sovereign issuer is at a country-wide level. While their credit ratings can vary, in some cases there is an implicit or explicit government guarantee.

The definition of an agency issuer is less clear-cut. Generally, an agency can be thought of as an institution that performs a task on behalf of its governing sovereign or sovereign-linked state (such as an export development financier or infrastructure development body). They have a wide variety of structures and guarantees provided. Agency issuers in New Zealand tend to have AAA ratings, and include Rentenbank (a German agency for developing agribusiness) and Export Development Canada.

appetite for this debt dried up. Since 2007 Kauris have been primarily issued by highly-rated supranational, semi-government and agency issuers (SSAs, see box A). SSA-issued Kauris make up 94 percent of current outstanding issuance and 86.5 percent of total gross issuance. SSA issuers in the New Zealand market tend to be AAA-rated, the highest possible credit rating, indicating a very low risk of default. This reflects the necessary criteria for eligibility in the Reserve Bank's domestic operations. In addition, there is a small amount of non-financial corporate Kauri bonds outstanding. Market participants expect that while the range of issuers will eventually broaden (like the Kangaroo market in Australia, which has more corporate and lower-rated issuers),[5] this will be a slow process given the relatively small size of the New Zealand market. In 2013 two Australian banks (National Australia Bank and the Commonwealth Bank of Australia) took advantage of beneficial funding conditions to issue Kauri bonds for the first time.

2.2 Why issue Kauris?

Kauri issuers generally have no need for New Zealand dollar funding, so why are Kauri bonds popular? The two major factors are diversification and cost. One reason for an institution to issue in the Kauri market is to diversify its investor base. This will (hopefully) provide the advantage of greater stability in overall funding – if there is a disruption in one market at a given point in time, funding can be accessed from alternate sources. Having a presence in a range of markets also allows an issuer to take advantage of favourable funding conditions in different places at different times, thus lowering its overall funding costs. A fuller description of how Kauri issuance may lower an institution's cost of funding is provided later in the article.[6]

2.3 Who are the investors?

The biggest group of investors in Kauri bonds is local banks, who hold them for a range of reasons including liquidity management purposes. Other domestic investors include fund managers and insurance companies, whose mandates require assets with high credit ratings to be

[5] The Kangaroo market is the Australian equivalent of the Kauri market, where non-resident entities issue Australian dollar bonds in the onshore market.

[6] In addition, Drage, Munro, and Sleeman (2005) address this issue in the context of Eurokiwi and Uridashi issuance.

held. In recent years, the international investor base has developed, and more offshore asset managers and central banks have started to diversify into the Kauri market. From a diversification and a return perspective, assets denominated in currencies like the Australian and New Zealand dollars are attractive. New Zealand is viewed as having a sound financial system and a strong fiscal position, while New Zealand dollar assets provide higher returns compared to other more traditional reserve currencies. Issuers have said that during late 2013 and early 2014 as much as 70-80 percent of Kauris issued were bought by offshore investors, with strong demand in particular from Asian central bank reserve portfolios. This is supported by a recent IMF survey of reserve managers, which noted that "[m]any [central bank reserve managers] are contemplating shifts to advanced country currencies other than the traditional reserve currencies … (with high interest expressed in commodity currencies such as AUD and CAD)" (Morahan and Mulder 2013, p. 7). The New Zealand dollar is often grouped with these currencies.

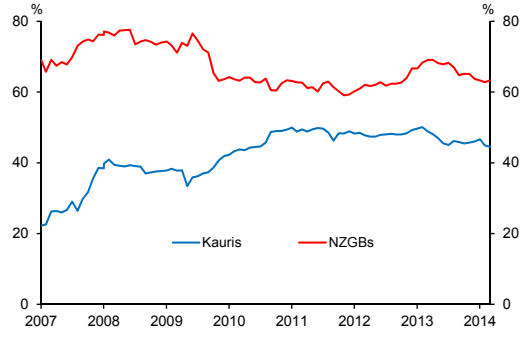
The trend towards increasing international investor involvement in the Kauri market can be seen in figure 5. Non-resident holdings of Kauris have increased from just above 20 percent of the value of total Kauris issued in 2007 to around 45 percent currently. By comparison, non-resident holdings of NZGBs have remained largely constant over this period. Offshore Kauri holdings remain lower than non-resident holdings of NZGBs (at 63 percent of the total). This difference is likely to be because offshore investors are more familiar and comfortable with NZGBs as an investment, and the greater liquidity NZGBs offer. However, the difference has narrowed substantially since 2006 as depth in the Kauri market has grown.

2.4 How does a Kauri transaction work?

As noted earlier, Kauri issuers generally have no need for New Zealand dollar funding. Indeed, most set their funding targets in US dollars or euros with reference to a floating rate (for example 3-month LIBOR). This means that issuers need to swap the New Zealand dollars they receive from a Kauri issue into the desired currency, by means of a cross-currency basis swap (see box B). Interest rate risk is generally hedged through the interest-rate swap market. Figure 7 (overleaf) shows a stylised example of the cash flows involved in such a transaction.

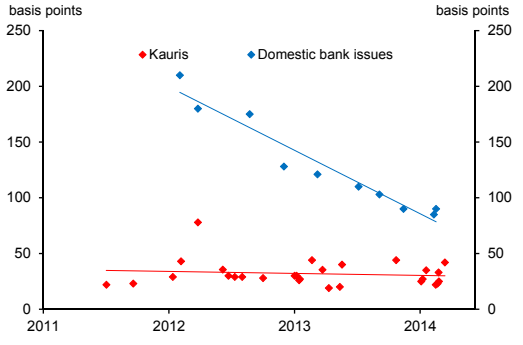
Given their high credit ratings and global name recognition, SSA issuers are able to issue in the domestic New Zealand market at significantly lower cost than, for example, domestic banks. Figure 6 shows the cost of issuing in the local market (the spread to mid-swap) by New Zealand's big four banks over recent years, along with comparable SSA Kauri issues. Although the difference has narrowed considerably over this period (likely a function of improving global risk appetite and the global search for yield), Kauris still command much tighter spreads. This reflects their higher credit rating and greater name recognition (especially to offshore investors).

Figure 5
Non-resident holdings of NZD securities
(percent of total)



Source: RBNZ.

Figure 6
Five-year onshore New Zealand dollar issuance
(spread to mid-swap)

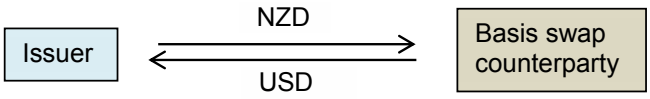


Source: KangaNews, RBNZ.
Note: This analysis looked only at five-year fixed coupon bonds.

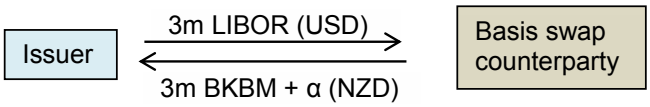
Figure 7
Stylised cash-flows of a Kauri transaction

- Initial issuance of bond – issuer receives New Zealand dollars (NZD) from investors.

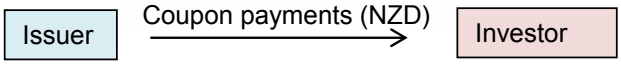
- Issuer will undertake a cross-currency basis swap to convert NZD into desired currency, say US dollars (USD).



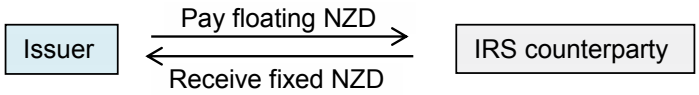
- Over the term of the basis swap, the two parties will swap floating rate interest payments. The 'borrower' of USD (the Kauri issuer) makes payments based on the US money market rate (LIBOR), while the NZD borrower payments are based on BKBM plus the basis swap spread (α).



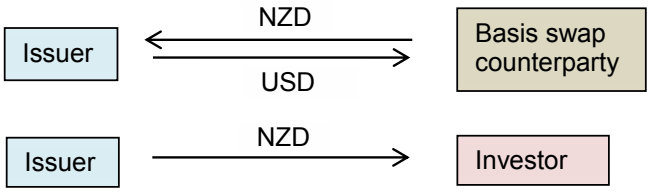
- The issuer must also make fixed NZD coupon payments to investors over the life of the bond.



- The issuer therefore receives floating-rate NZD interest payments through the basis swap, but is obliged to make fixed NZD coupon payments. This interest-rate exposure is hedged through the interest rate swap (IRS) market, where the issuer will receive fixed NZD payments and pay a floating NZD rate based on BKBM.



- As a result, the Kauri issuer has transformed their NZD bond with fixed NZD coupon payments into USD funding with coupon payments based on LIBOR.
- At maturity, the cross-currency basis swap payments are reversed, and the issuer repays the principal to the investor.



This funding cost advantage helps to illustrate another reason why Kauris may be issued. If a Kauri issuer enjoys a greater funding advantage compared to a domestic issuer (say a New Zealand bank) in the onshore New Zealand market than the funding advantage they would receive in an offshore market, then both can be made better off. The Kauri issuer issues in New Zealand and the New Zealand bank issues in, say, Europe. The parties can then swap the proceeds back into the desired currency, and achieve their funding targets at lower cost than if each had issued in the other market. In this case the Kauri issuer has a comparative advantage in the New Zealand market compared to a domestic issuer, and the New Zealand issuer has a comparative advantage in the European market. The key point to note is that while the Kauri issuer likely has access to cheaper funding in both markets, it has a bigger advantage in the New Zealand market.

3 Factors that affect Kauri issuance

3.1 Factors affecting demand

Because most Kauri bonds have high credit ratings and are repo-eligible, they are often seen as a quasi-substitute for NZGBs. They offer an attractive yield for relatively low credit risk, although secondary market liquidity is poor. Thus many of the drivers of demand for Kauri bonds will be similar to factors driving demand for NZGBs. These include:

- New Zealand dollar outlook. This is relevant especially for offshore investors, who may hold Kauris as part of an overall view on the New Zealand economy (as an alternative to NZGBs);
- Relative interest rates. Higher interest rates in New Zealand compared to offshore make Kauris a more attractive investment. (i.e. the search for yield); and
- Risk appetite. Currencies such as the New Zealand and Australian dollars tend to be in demand when global risk appetite is high, as they provide higher returns over traditional reserve currencies (such as the US dollar and euro).

In addition, there are factors which will make Kauris more attractive relative to NZGBs:

- Swap spreads (the spread between an interest-rate swap and the equivalent government bond). Kauris are often issued at a margin to the swap rate and a wider swap spread provides greater yield pick-up over comparable government bonds.
- Recent changes to the New Zealand Debt Management Office issuance programme will, at the margin, support demand for Kauri bonds. These changes include a reduction in overall NZGB issuance and increased issuance of inflation-indexed bonds, which will further reduce the issuance of nominal NZGBs.

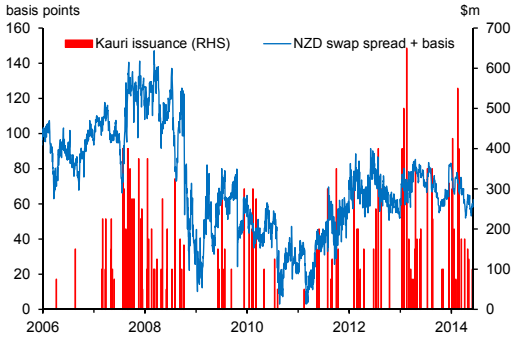
3.2 Factors affecting supply

Price is a key factor for an issuer when deciding which market to issue in. One part of this is the basis swap spread. A wider basis swap spread reduces the all-in cost for issuers (they are paid the spread when swapping out of New Zealand dollars), making the Kauri market a more attractive option. The other price factor is the margin to swap. From an issuer's perspective, wider swap spreads mean they may be able to offer tighter margins to swap while still offering higher yields than NZGBs. Thus if New Zealand swap spreads widen, it becomes more attractive to raise funds using New Zealand dollar issues relative to other currencies. Other factors influencing Kauri supply include:

- The upcoming Kauri maturity profile. Issuers may want to replace maturing bonds with new issuance to maintain their presence in the market; and
- Risk appetite. For issuers, positive risk sentiment may mean they expand their funding programmes, at the margin adding to Kauri issuance. It will also lower the cost (or 'risk premium') associated with currencies such as the New Zealand dollar.

As figure 8 illustrates, greater Kauri issuance tends to occur when it is relatively cheap. That is, when the basis swap spread is more positive and New Zealand swap spreads are wider, Kauri issuance tends to rise. However, there are obviously individual differences between issuers and other factors also influence the decision whether or not to issue. For example, the desire to retain a presence in the market may encourage issuance even if market conditions are less than optimal.

Figure 8
New Zealand swap spreads and Kauri issuance



Source: Bloomberg, RBNZ.

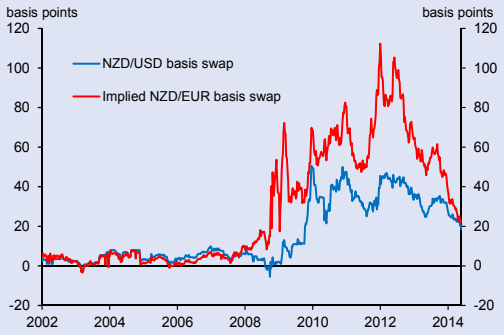
Box B
Cross currency basis swaps

Kauri issuers use cross-currency basis swaps to reduce exchange rate risk by converting the New Zealand dollars they receive at issuance into US dollars or another currency. The offsetting transaction to this is a New Zealand entity (for example a bank) issuing a foreign-currency bond and swapping this into New Zealand dollars. In practice, one leg of a basis swap transaction is usually against the US dollar. Therefore, to swap New Zealand dollars into euros, the New Zealand dollars will be swapped into US dollars, then the US dollars into euros.

The basis swap spread can be thought of as the 'market price' reflecting the relative demand and supply on either side of this transaction. A positive basis swap spread indicates that non-residents' New Zealand dollar issuance (Kauri and offshore New Zealand dollar bond issuance combined) is less than New Zealand residents' issuance in foreign currency. An increase in demand for New Zealand dollars from New Zealand residents issuing in foreign currency will increase the basis swap spread (i.e. New Zealand issuers will have to pay a premium to access New Zealand dollars), while increased supply of New Zealand dollars from non-residents (Kauris, Uridashis or Eurokiwis) will push the spread down.

Figure B1 shows the 5-year basis swap spreads for the New Zealand dollar against the US dollar and euro. Before 2007, there was strong demand in Europe and Japan for highly rated, high-yielding New Zealand dollar assets. Bonds issued by non-resident entities to meet this demand provided an offsetting transaction to the offshore foreign currency borrowing undertaken by New Zealand banks. Offshore entities found it cost effective to obtain foreign currency by issuing New Zealand dollar securities (initially in offshore markets, but increasingly onshore via Kauri bonds), and then swapping the New Zealand dollars with New Zealand banks. This resulted in a convergence in basis swap spreads between funding and receiving currencies, and reduced hedging costs for New Zealand banks.

Figure B1
5-year basis swap spreads



Source: Bloomberg.
Note: The implied NZD/EUR basis swap is derived from the NZD/USD and USD/EUR basis swap spreads, and does not account for transaction costs.

Following the GFC, New Zealand dollar bond issuance by offshore entities slowed significantly as global risk aversion rose and offshore entities' total funding requirements fell. In addition, increased NZGB issuance (caused by fiscal deficits arising from a number of factors including the economic recession and the Christchurch earthquakes) provided another source of New Zealand dollar exposure for investors, at the margin lowering demand for non-resident issued New Zealand dollar debt. At the same time, New Zealand banks moved to source more of their offshore funding from long-term sources (in part due to Reserve Bank requirements),[7] putting more pressure on basis swap spreads to rise. As a result, the basis swap spread jumped sharply higher. In the past couple of years basis swap spreads have narrowed as issuance of New Zealand dollar debt by foreign entities picked up. The increased issuance is due to decreased risk aversion (especially as the risk of a European debt crisis receded), investors' demand for higher returns amidst easy global monetary policy, and lower NZGB issuance as the fiscal deficit has narrowed.

[7] See Hoskin, Nield and Richardson (2009).

3.3 What drove the strong issuance during 2013?

During 2013, $5.5 billion of Kauri bonds were issued, the second highest on record. The Kangaroo market in Australia also saw strong issuance, suggesting there were reasons other than New Zealand domestic factors driving the increase. Strengthening global risk appetite – indicated by the outperformance of equity markets, low volatility, and a narrowing in credit spreads – drove a search for yield, boosting global demand for relatively high-yielding assets. However, domestic factors did play a part. From an issuer's perspective, basis swap spreads were still wide by historical standards, making issuance costs more attractive. Investors found Kauris relatively more attractive, due to wider swap spreads. At the margin, reduced NZGB issuance and the maturity of the April 2013 NZGB may have supported demand, as investors looked to replace highly-rated New Zealand dollar debt.

Looking ahead, the factors that supported issuance during 2013 are still in play. Appetite for risk remains high, volatility remains low, and the global search for yield has continued. Basis swap levels are not as attractive for issuers as in early 2013, but remain well above pre-2008 levels. There is a heavy maturity profile this year, with $1.8 billion of Kauris maturing in the second half of 2014, which should support 'replacement' issuance. Overall, market conditions are probably not as supportive of issuance as last year but fresh issuance to counter the heavy maturity profile might pick up some of the slack.

4 Conclusion

Since the first Kauri bond was issued in 2004, the Kauri market has grown to over $16.8 billion of bonds outstanding. In recent years, the international investor base has developed as more offshore asset managers and central banks diversify into Kauri bonds, attracted by higher returns compared to traditional reserve currencies and New Zealand's sound financial system. Strong issuance during 2013 was supported by high investor demand and favourable pricing conditions (in particular high basis swap spreads). These factors have continued to support issuance into 2014. The Kauri market looks set to continue to grow as an important part of New Zealand's capital markets.

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