Towards better data on New Zealand debt securities markets[1]

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The recent global recession and international financial crisis have sparked fresh interest in financial data. Traditionally, data on the balance sheets of financial intermediaries has been collected fairly comprehensively, but data on debt securities markets has been considerably more patchy. New Zealand's financial system is still dominated by lending intermediated by the balance sheets of banks. However, debt securities markets are likely to continue to grow in importance, and understanding developments, and changes through periods of stress, will be of growing importance, both to the Reserve Bank and to others wanting to understand the financial aspects of the New Zealand economy. The Reserve Bank has been seeking to build up its resources in this area and the next step in this will be the development of a security-by-security database covering the issuance of securities within New Zealand. This article outlines some of the reasons for wanting better, more comprehensive and more timely information on activity in New Zealand's debt securities markets, and some of the issues and challenges around developing such a database.

Introduction

Financial markets and institutions play a critical part in modern economic life. For individuals, they allow us to finance the purchase of a house early in our working lives, and then allow us to accumulate a diversified range of investments to help supplement our retirement income. And businesses are able to tap debt and equity capital beyond that which could readily be provided by the promoters of the business alone. In that sense, the quality and depth of financial institutions and markets, and the efficiency with which they accumulate and allocate savings and investment, are an important part in the overall mix of elements that makes a strong and growing economy.

In New Zealand, financial institutions – mostly banks – dominate the financial system. Banks gather deposits and wholesale funding, and make a wide range of loans which collectively underpin the claims of depositors. By contrast, securities markets cut out the middleman: companies or institutions looking to raise money do so directly from end-investors. Institutions such as the investment banking wings of financial institutions may help to arrange the placement and distribution of such securities, and may even underwrite the issue. But the intention is that the risk associated with the specific security will be held by end-investors themselves.

Securities can take the form of either debt or equity (or, indeed, some hybrid combination of the two). The focus of the discussion in this article, and the Reserve Bank's principal area of interest, is on debt securities. Simple equity securities – claims on the residual income flows of a business, without any specified maturity date – have their own issues and analytical challenges, but rather different ones from those associated with debt securities. In particular, debt securities mature and, hence, often need to be renewed or rolled over. And debt securities involve a claim that is independent of the underlying economic health of the business. Those features mean that debt securities, much like bank loans, are characterised by liquidity risk to the issuer and by credit risk to the holder. The similar economic roles played by bank loans and debt securities – and the interactions between the two markets, which can change quite quickly under stress – are a large part of the reason why the Reserve Bank has been putting more focus on trying to materially improve the data that are available on debt securities in New Zealand.

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Various types of securities present in New Zealand

Government securities

The New Zealand government currently issues three types of domestic debt instruments to meet its core financing requirements:

– Treasury bills – short-term zero coupon wholesale debt instruments;

– Government bonds – medium-term instruments paying a fixed coupon interest rate, aimed at the wholesale market; and

– Kiwi bonds – a fixed-interest instrument designed for retail investors.

Corporate debt

Bank certificates of deposit and corporate bills of exchange are important sources of short-term funding in New Zealand. Longer-term corporate debt instruments tend to be similar in structure to bonds issued by the government, although some may include additional features.

– Money market instruments - registered commercial paper and bank bills

– Corporate bonds - issued by State Owned Enterprises (SOEs), local authorities, banks and private sector corporations.

– Kauris - bonds issued in New Zealand, and denominated in New Zealand dollars, by non-New Zealand issuers.

Equities

The New Zealand stock (or share or equity) market instruments consist of:

- Ordinary shares;
- Preference shares;
- Redeemable preference shares;
- Convertible preference shares;
- Rights; and
- Warrants.

Bank loans and debt securities: some analytical perspectives

One of the great potential strengths of traditional banking[2] is diversification – your house mortgage loan is provided by a bank, which has tens of thousands of other such loans, typically spread quite widely across the country. Someone providing the savings – a depositor – cares greatly about the overall quality of the bank's loan book, and the level of capital shareholders have provided, but does not need to worry about or monitor closely any individual mortgage. And a small individual borrower does not need to search out a handful of individuals who will trust him and be able to monitor him, to supply the savings required for his mortgage.

The situation with securities issuance is almost reversed: the borrower is big enough to persuade savers to lend directly, confident that there are enough monitoring tools to manage the exposure they are taking on. But the holder of the security has no diversification. Someone buying, say, a Fonterra corporate bond is exposed wholly to the fortunes of that particular large company. To get the sort of diversification a bank deposit might provide, investors need to put together a portfolio of different securities.

From a depositor's perspective, the other great attraction of traditional banking is liquidity – the ability to withdraw one's deposit on demand. Most of us use that facility almost daily

[2] "Banking" here refers to loans and funding undertaken across the balance sheet of a financial intermediary. In a New Zealand context, banks are the largest such intermediaries, but credit unions, building societies and finance companies all play much the same economic role.

when we pay by EFTPOS or write a cheque. But that liquidity is also one of the great vulnerabilities of traditional banking – if lots of people (retail or wholesale) all want to withdraw funds at once (if, say, there are concerns, valid or otherwise, about the health of the bank) there can be a run on a bank. The risk of a run is constantly factored into banks' planning and operations.

Issuers of securities typically don't face the same sort of immediate liquidity risk: the issuer of a typical five-year bond has no expectation, or obligation, of having to return cash to those buying the security until the maturity date. If investors want cash in exchange for their security, they need to find another investor willing to buy the security, at whatever price they can mutually agree. Changes in the price of any particular security can provide useful information to potential investors (and other analysts).

In New Zealand – and most other advanced countries, including Australia – banks remain at the heart of the savings accumulation and credit allocation process. Most credit is booked on the balance sheet of a bank-like institution. The situation is somewhat different in the US, where bank assets are much smaller relative to GDP than in most advanced economies, and markets in debt securities are commensurately more important. There is a variety of reasons why securities markets are more important in the US; some grounded in regulatory distortions, and others founded on more fundamental factors.

There is a good reason why banks retain a very important role in the process. One of the fundamental challenges of providing credit is overcoming the asymmetry of information, in which borrowers know much more about themselves and their finances than potential lenders do. That problem is less severe for large entities (for example, stock broking analysts constantly monitor the financial health of major corporations) – which is why they can use securities markets themselves – but for individuals and for small-to-medium businesses in particular, it is handled in practice partly through the relationship built up between banks and borrowers.

Although balance sheet lending remains very important in all Western countries, debt securities markets have tended to grow in significance over time. To some extent, this involved new types of borrowers being able to tap securities markets directly. But perhaps more important, especially in the US, was the growth of securitisation – where bundles of loans that might have been originated by banks were turned into tradable securities (perhaps with quite complex structures) and sold on to end-investors. For a variety of reasons, securitisation has not yet become important in New Zealand. Of more immediate relevance to New Zealand, in many countries' banks themselves became larger issuers of securities to help efficiently fund their on-balance-sheet lending.

In many circles, including among many policy-makers, there had been a sense that the growing use of debt securities markets, was a 'good thing'. The apparent reduction in liquidity risk, and the notion of continuous market pricing of traded debt securities, were widely (and in many respects rightly) seen as virtues. The resulting reduction in the relative size of bank balance sheets was seen as potentially reducing the challenges posed by institutions that might have been regarded as 'too big to fail'.

Experience during the financial crisis and global recession of the last few years helped confirm that things were not quite so simple. Many of the securities that had been issued in the US weren't in fact traded very much at all, and many were rather complex, so getting a good sense of the value of those securities wasn't particularly easy. In other cases – as had also happened earlier in the decade during the previous recession – big US corporates had counted on being able to fund themselves by regularly rolling over short-term securities (commercial paper) only to find that in crisis conditions investors (each individually with no ongoing relationship with the issuer) simply were not interested in buying such paper at all. And in many cases, banks were actually quite closely associated with the securities that were issued, in ways that put pressure on them to provide liquidity support or even credit support when there might have been no legal obligation to do so.[3] In other words, not only did

[3] **Thus, for example, Structured Investment Vehicles (SIVs) in the US were often sponsored by banks, and held long-term mortgages, funded by the direct issuance of short-term commercial paper. A failure of a bank-sponsored SIV was often judged by the sponsoring bank as being likely to reflect badly on**

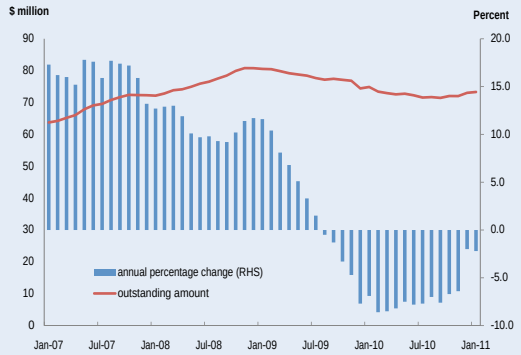
Case study – business credit

Statistics released by the Reserve Bank show that lending by financial institutions to the business sector has been falling over the last few years. On an annual basis business credit fell just over 2 percent in the year to January 2011.

However, businesses can source funding from alternative sources, like capital markets.

Figure 1

Bank and non-bank lending to the business sector

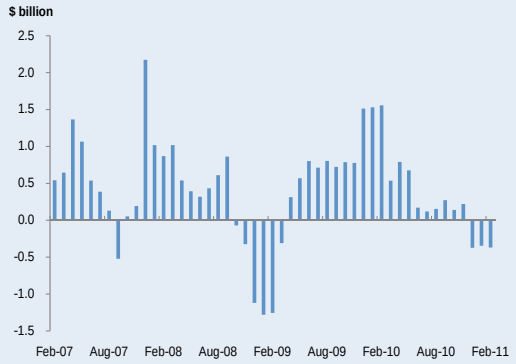


Source: RBNZ

Some indicative data sourced from NZClear on the issuance of non-financial sector corporate bonds shows that on an annual basis, net issuance, or the value of new bonds issued less the value of bonds maturing, continued to grow through 2009 and 2010, in contrast to quite a large fall in bank borrowing.

Figure 2

Net issuance of non-financial corporate bonds (12-month running total)



Source: NZClear.

the distinctions between securities-based lending and bank-based lending become more blurred, but the way those markets were used changed very quickly, in periods of stress when the 'fog of war' was at its height.

New Zealand provided an example of how, even during the crisis period, the changes in the roles of the respective markets was not all in a single direction. Short-term commercial paper issuance, always rather limited in scale, fell away quite markedly during the crisis period, here and elsewhere. But in 2008 and 2009, a number of corporates found themselves somewhat over-reliant on bank debt, and in some cases breaching, or coming close to breaching, covenants on those bank debts. With banks uneasy about their own funding situation and nervous about the state of the economy, in some cases it proved much more attractive for firms to cover some of their debt needs by tapping the corporate bond market directly. In New Zealand, it is relatively straightforward to sell corporate bonds directly to the household sector (more so, say, than in Australia). In the midst of the crisis one senior New Zealand financial market participant was heard to comment that the New Zealand retail corporate bond market was one of the few funding markets in the world to have remained open.

Overall, the experience of the last few years, including the fresh perspectives that the recession and financial crisis have provided on the complex and changeable connections between debt securities markets and traditional financial intermediaries, has reinforced the importance of understanding debt securities markets better. If stresses are beginning to build up, policy-makers will expect to be able to get answers relatively quickly to questions such as:

- Which types of institutions are dependent on debt securities markets?
- What scale of rollovers is expected in the period ahead?
- What sorts of back-up facilities might those issuers have?
- What types of investors have typically held the paper?

In more normal times, it is also important – if less urgent

perceptions of the bank itself, leading to the liquidity and credit risk being re-assumed by the bank itself.

–to have good data on credit provided to the non-financial sectors by securities markets. The implications of such credit growth for, say, aggregate demand and asset price, is much the same as for credit intermediated through institutions such as banks.

The Reserve Bank has long kept an eye on developments in debt securities markets in New Zealand, and has been active in maintaining and disseminating some of the data that already exist. However, there is clear scope for material improvements to provide better and more systematic information on debt securities in New Zealand. The Reserve Bank is not alone in its increased interest. Recently, two government working groups have also highlighted the need for more information and statistics on securities.

Producing statistics

Since it was founded in 1934, the Reserve Bank has put considerable focus on collecting good balance sheet data from financial intermediaries operating in New Zealand whose focus is on credit creation. Thus, today, we have comprehensive data on intermediation by lending institutions through our monthly and quarterly reporting requirements. There is always room for improving these collections, which need to stay abreast on continuing developments in the sorts of products offered, and – as far as possible – in line with international standards of comparability. These data collections do not encompass all bank-based credit provided to New Zealand borrowers – they do not capture, for example, lending by foreign banks to New Zealand borrowers where those banks are operating into New Zealand directly from abroad, rather than from New Zealand registration. At times, that sort of credit can become important at the margin (as it was for the property development sector late in the boom), but for lending entities with established operations in New Zealand the data collections are systematic and comprehensive.

The comprehensive nature of those collections has been helped by the relatively small number of entities involved, most of whom in any case now fall directly within the Reserve Bank's regulatory net. Securities markets offer slightly different challenges: there is a wide range of potential issuers, and most are not subject to powers under the Reserve Bank Act.

In other areas of economic activity, statisticians often have to source the data required to produce statistics using sample surveys. They often select a subset of individuals or businesses from the population that they are interested in due to the cost and complexity of collecting information from everyone. A questionnaire or interview is used to collect the information required, which is then aggregated to represent the entire population using a survey methodology. Surveys place reporting burden on those selected into the sample and are subject to various types of error. Developing, maintaining and operating surveys can be costly and making changes can be difficult without imposing additional reporting burden on those surveyed.

Security-by-security database

An alternative to surveying that statisticians are exploiting more often is the use of administrative data to produce statistics. Administrative data, in the context of statistical activities, is data that was originally collected for a non-statistical purpose, which is used secondarily to produce statistics (a good example, in a national accounts context, is the use of Inland Revenue tax data).

Administrative data offer the route towards more comprehensive and systematic data on securities markets. In particular, a security-by-security database collates a large quantity of low-level data[4] on securities from many different sources and stores and manages it in a flexible manner. The objective of a security-by-security database is to hold complete, accurate, consistent and up-to-date information on all individual securities relevant for statistical purposes. Statisticians can then use the database to produce aggregate statistics and analysts can use it for ad-hoc querying of micro-data.

[4] **Data can be sourced at the lowest level possible but, in practice, data for individuals is aggregated to preserve confidentiality.**

Benefits

For data on securities, a security-by-security database approach has many benefits over a survey.

Reporting burden

The data required for a security-by-security database is raw, low-level administrative data extracted from a reporting system. The volume of data being reported might suggest that this would be burdensome for data providers. However, it is often far easier for respondents to provide raw data, despite its volume, than to structure and aggregate the data prior to delivering it. This is particularly the case when reporting needs change and new aggregation rules must be applied.

Quality of data

Administrative data sources can often provide near complete coverage of the population of interest and to the extent that this is so, are not subject to sample error. However, given that administrative data are not originally collected for a statistical purpose, sometimes the data are not exactly what is required and compromise is required. In the case of securities, this is not the case because the information required to properly document debt issuance and ownership is closely aligned with what is of interest to agencies like central banks. In practice, surveys are not really an option for collecting reliable data on the debt securities market; good surveys require a clear definition of the characteristics of the relevant population, but since a wide range of types of borrowers can at times choose to issue securities, but most never do, the relevant population is not well defined.

Statisticians use statistical classifications to compile statistics, for example, ANZSIC (Australian and New Zealand Standard Industry Classification), and are reliant on survey respondents to understand these and apply them. One of the benefits of collecting raw, low-level data is that the statistician can apply all classifications required in a consistent manner.

Finally, data from a security-by-security database can help improve other statistics by validating data collected via surveys, pointing statisticians to reporting issues in a timely manner.

Timeliness

Data sourced directly from administrative systems, with no aggregation required, can be delivered to the statistician within days of the end of the reference period. This enables statistics to be produced in a much more timely manner than those compiled from surveys or, in the financial system, from traditional balance sheet-based reports (our current balance sheet data on banks is not published until the end of the month following the relevant reporting date).

Flexibility

New aggregate data requirements can be implemented very easily from a security-by-security database, with no need to trouble respondents. New ways of arranging and presenting data can also be easily implemented. The design of the database is such that data can be sliced and diced many different ways, which supports micro-financial analysis.

Costs

Building a security-by-security database incurs upfront costs. However, the operational costs of a security-by-security database are relatively low compared to alternative, less reliable, methods of collecting data. Statisticians and analysts face the additional work of manipulating and classifying a large volume of data, but the extra input is considered worthwhile for the improved quality of output.

What data are required to build a security-by-security database?

At the core of a security-by-security database is a register of all securities on issue. Nearly all securities issued in New Zealand are allocated a unique, standardised, internationally comparable identification number, or ISIN. The ISIN provides a useful, unique key for the database, which enables data from many different sources to be integrated with the issuance register.

In New Zealand, there are three main registers of securities. These businesses are responsible for registering securities, allocating ISINs and maintaining registers of those that are

holding the security. These registers are:

- Computershare Investor Services Limited is the register of all central government securities and also registers other debt and equity securities.
- Link Market Services Limited registers debt and equity securities.
- NZClear Limited, owned and operated by the Reserve Bank, is New Zealand's primary wholesale settlement system and is the register for wholesale market RCDs (registered certificates of deposit).

By combining data from the three registries, we can compile a list of all securities issued in New Zealand by residents and non-residents.

Securities are held on register by the registered holder. In some cases, this is the beneficial owner; however, owners may also hold securities through an intermediary, such as a nominee company or a security depository. In New Zealand, there are two main security depositories:

- NZ Central Securities Depository Limited (NZCSD) is fully owned and operated by the Reserve Bank. NZCSD becomes the legal registered owner of the securities on the relevant register, holding securities on behalf of its member, the beneficial owner. The inventory of securities held in the depository currently stands at around $100 billion.
- New Zealand Clearing and Depository Corporation Limited (NZCDC) is a wholly-owned subsidiary of NZX Limited. It operates through New Zealand Clearing Limited (NZCL), which operates a clearing house and the New Zealand Depository Limited (NZDL), which operates a depository.

Information from depositories and intermediaries is required in order to determine information such as the economic sector to which the beneficial owner of the security belongs and their residency.

Other types of data that can supplement the register include:

Information about the instrument

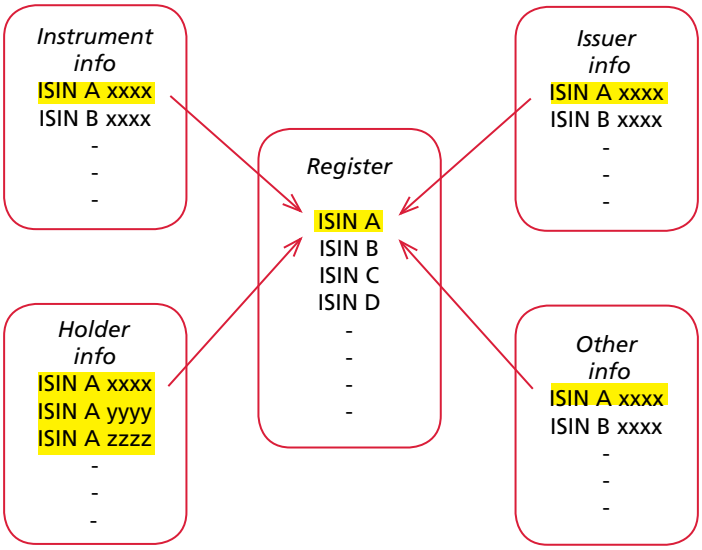
What type of instrument is it? Is it a government bond, a treasury bill or a share? What is its maturity date?

Information about the issuer

What is their country of residence? Are they based in New Zealand, or do they come from overseas? What sector of the economy do they operate in? Are they government? Are they a private business? Are they a registered bank?

In some countries, security-by-security databases are linked to the business register held by the national statistical office, which may hold additional information about the issuer.

Figure 3
Stylised diagram of a security-by-security database



Information about the holder

This information is similar to that collected for the issuer. However, while issuance data is usually public information, information on who is holding securities is usually not. While, technically, it is possible to collect data on individuals and businesses and store this in a security-by-security database, in practice the Reserve Bank requests a sectoral aggregation be performed prior to reporting. This ensures the privacy of individuals and businesses.

Price and yield

What is the current market price of the security? Have dividends been paid?

Statistical classifications

What is the issuer's industry or sector code?

All of this information for any particular security is integrated into a database using the unique ISIN.

What issues arise with security-by-security databases?

Identifying the holder of a security

While information on the issuance of securities is readily available, identifying the holder or holding sector of securities can pose a challenge to statisticians. Individuals and institutions often hold securities through intermediaries, such as nominee companies or fund managers.

To address this issue, a security-by-security database can be supplemented by a survey. For example, in the case of nominee companies, a follow-up question can be the residency and economic sector of the individual or institution that they are holding securities for. This, of course, does not always result in the residency or sector of the ultimate beneficial holder, as the security may be being held by yet another intermediary.

In the case of managed funds, which are predominantly used by individuals to diversify their investments, information could be requested, or an assumption made, about the proportion of the business that is on behalf of households.

Collecting or deriving a market price

Many of the international statistical frameworks, like the system of national accounts, require statistics to be represented at market prices. Where securities are regularly traded in a liquid market, the price is relatively easy to collect. However, where a market is illiquid, a market price cannot always be collected and has to be derived using other information. One of the benefits of the security-by-security database is that these types of valuation calculations can be applied consistently.

Issuance offshore

Of particular interest to the Reserve Bank are the securities New Zealand banks issue when they raise funds offshore –which make up a significant portion of their total funding. A security-by-security database that is dependent on data from New Zealand settlement systems and registries will only capture issuance, whether by New Zealand residents or others, in New Zealand markets. Data on offshore issues by New Zealand residents may be able to be obtained from commercial data suppliers or - in the case of banks - directly from those institutions.

A New Zealand database will also not capture issuance offshore in New Zealand dollars by non-resident issuers – the so-called Eurokiwi and Uridashi market, though data can be collated in a manual way using various commercial data sources. Activity in these markets can be important to understanding market conditions in New Zealand, since the New Zealand dollars are usually intermediated back to ultimate New Zealand borrowers.

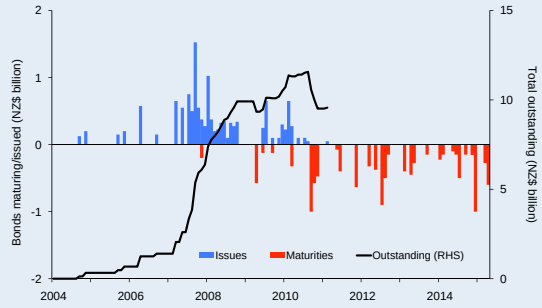
In the future, as more countries build security-by-security databases, there may be scope for an international initiative to pull the data together on a global scale. This would help to address a number of these limitations.

Kauri, uridashis and eurokiwi bonds

A Kauri bond is a New Zealand dollar-denominated security, registered in New Zealand and issued by a non-resident issuer. They are similar to the Australian Kangaroo, Canadian Maple and American Yankee bonds. The issuance of such securities is quite a recent development and most of the issuers have been supranational institutions; for example, the World Bank. Most issuers have no fundamental need for New Zealand dollars and so opportunities for issuance depends on the funding needs of domestic banks and the pricing in relevant swaps markets. The chart below highlights the large volume of issuance in 2008 and 2009. Market conditions for the issuance of these securities has since been less favourable.

Figure 4

Kauri bonds

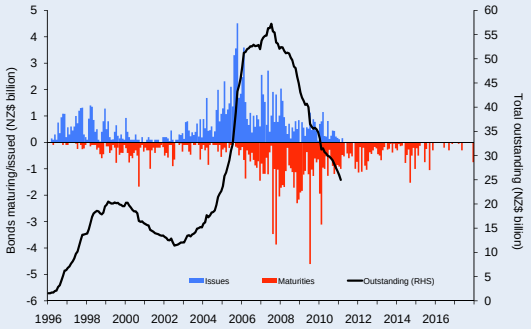


Source: Bloomberg, Reuters

Uridashis and eurokiwis are New Zealand-dollar denominated bonds issued in offshore markets, mostly by highly-rated non-New Zealand entities. They were very popular at the peak of the boom when domestic credit was growing rapidly, New Zealand interest rates were high and the New Zealand dollar was buoyant.

Figure 5

Eurokiwi and uridashi bonds



Source: Bloomberg, Reuters

Uses of a security-by-security database

A security-by-security database supports two main uses: the production of aggregated statistics and the ad-hoc querying of micro data. Continued improvement in the quality and comprehensiveness of data on New Zealand's financial sector and markets is crucial to the Reserve Bank.

Financial stability analysis makes use of both macro-financial statistics and micro-financial data, such as information on individual securities, issuers and types of instrument. Interest in the risks associated with different types of instruments and in the exposure of debtors and creditors, which is likely to grow as a consequence of the recent financial crisis, is also of interest. For monetary policy analysis, the stock and flow of debt held by sectors of the economy is essential. In addition, quality information on sectoral wealth, in particular household, and the development of asset prices related to securities is important.

A security-by-security database is a rich analytical tool for a central bank and will enable more detailed analysis of such things as market liquidity, maturity mismatch and roll-over risk. Better statistical data of this sort will complement the sorts of perspectives that the Reserve Bank can obtain from its close day to day contact with financial market participants.

A wide range of aggregated statistics can be produced from a security-by-security database, limited only by the data that is collected. For example, typical outputs include the value

Figure 6

Issuers and holders of debt securities

(Illustrative only, no real data used)

Issuer \ Holder		Residents					Non-residents	All holders
		Non-financial corporations	Financial corporations	General government	Households and NPISH	All residents		
Residents	Non-financial corporations	30	23	5	65	123	24	147
	Financial corporations	11	22	2	43	78	28	106
	General government	67	25	6	124	222	56	278
	Households NPISH	-	-	-	-	-	-	-
	All residents	108	70	13	232	423	108	531
Non-residents		34	12	19	43	108		
All issuers		142	82	32	275	531		

* **NPISH = non-profit institutions serving households**

of securities on issue by type, the value of securities held by each sector of the economy and the value of domestic securities held by non-residents.

The stylised and purely illustrative matrix in figure 6 shows how data can be presented to show, for the sectors of a notional economy, those sectors that issue securities and those that hold them.

The statistics produced by a security-by-security database will be able to be used to further improve the quality of New Zealand's macroeconomic statistics, such as the international investment position. Better data on securities markets will help plug important statistical gaps such as sectoral wealth statistics, financial accounts and flow-of-funds statistics. The data will be able to be used to produce new statistics, validate survey responses, lower data collection costs and improve the timeliness of some statistics.

A security-by-security database for New Zealand

As the owner and operator of NZClear, the Reserve Bank has for some time been making use of administrative data on debt securities sourced from the system. To date, our work has focused on the issuance of government securities (government bonds and Treasury bills) and the non-resident holdings of those securities. Data from one of the registries has also been collected for some time. A survey of nominee companies is used to supplement NZClear data to better estimate the country of holder. These statistics are available on the Reserve Bank website.

However, while NZClear has full coverage of government securities, it has incomplete coverage of securities issued by other sectors, such as local authorities and businesses.[5]

The absence of an authoritative list of all securities on issue in New Zealand has been an obvious weakness in New Zealand's financial data. The gap makes it more difficult to measure and analyse the evolution of New Zealand's capital markets. Over more recent years, we have been working together with the registries in New Zealand to source the information required to build a security-by-security database and, with the ongoing support of Computershare Investor Services Limited and Link Market Services Limited the Reserve Bank intends to have a security-by-security database for debt securities completed in 2012.

[5] **At 28 February 2011, NZClear had 100 percent coverage of government securities and Kauri bonds, approximately 74 percent coverage of other fixed interest securities and approximately 42 percent coverage of equities.**

Conclusion

The financial crisis has heightened interest in debt securities and intensified demand for quality macroeconomic and financial sector statistics.

This article has shown how a security-by-security database is one tool that can help statisticians in New Zealand meet the increasing and evolving demand for securities statistics. The usefulness of such information is only likely to grow in importance as New Zealand financial markets deepen and become more sophisticated. And periods of financial stress will recur, renewing the demand for easy access to timely accurate information on securities markets and the interface between them and traditional balance sheet-based bank lending. There are no silver bullet solutions that will quickly provide all the information analysts would like to have available, but a security-by-security database will have a wealth of data that can be sliced and diced many ways,enabling evolving user needs to be satisfied more quickly, with no need to collect additional data from respondents. Statistics derived from security-by-security databases are very timely and typically available within a matter of days, and the data is of high quality due to the full coverage of securities and because classifications are applied in standardised way. And because the data is administrative in nature – already held for underlying business purposes – the burden on respondents is minimised.

The activity of New Zealand borrowers in international markets will not be captured in this project, highlighting the way in which a New Zealand single security database will be simply one important component in the continuing project to lift our understanding of the role of debt securities markets as they affect New Zealand.

References

Sedlacek, G (2008), "Practical examples of policy relevant uses of security-by-security data", IFC *Bulletin*, no 29, January.

Petre, D (2008) "Mining individual securities database for analytical purposes: the example of the BIS international debt securities statistics", IFC *Bulletin*, no 29, January.

Wood, K (2008) "Aggregate debt securities statistics: classification by sector, currency, maturity and financial instrument", IFC *Bulletin*, no 29, January.

Bertaut, C (2008) "Methodological questions regarding debt securities: residency of issuer, location of issue, residency of obligor", IFC *Bulletin*, no 29, January.

BIS (2009) *Handbook on securities statistics, Part 1: Debt Securities Issues*, http://www.imf.org/external/np/sta/wgsd/hbook.htm

BIS (2010) *Handbook on securities statistics, Part 2: Debt Securities Holdings*, http://www.imf.org/external/np/sta/wgsd/hbook.htm