Graeme Wheeler: Meeting demand for statistics in a fast moving world

Remarks by Mr Graeme Wheeler, Governor of the Reserve Bank of New Zealand, to the Official Statistics User Forum, Wellington, 26 March 2014.

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Introduction

It's a pleasure to be here today and talk about the Reserve Bank's experience as a user of official statistics. Like many central banks, we're a major user and producer of statistics. We're a big user of economic statistics so I'll start by talking about some of our needs in this area. I'll then go on to discuss our role in collecting, using and disseminating statistics on the financial system and some of the changes we're facing. And I'll offer a central banker's view of some of the challenges that statisticians face in meeting the growing demands from users of these statistics.

At the Reserve Bank, we rely heavily on a broad range of economic data. Statistics New Zealand produces many of the statistics we use but we also rely on data from other domestic and offshore sources. Once every quarter, we undertake an in-depth forecast to arrive at our best projection of where the economy and inflation are headed in the future. This in turn helps guide our policy decisions. We use a range of economic models, all of which rely heavily on data, and apply lots of judgment.

Our assessment of the economy is very comprehensive. When we look at the external economy, we consider the economies of our major trading partners, the terms of trade, the exchange rate and the current account. When we look at the domestic economy we consider household and business spending, savings, credit trends and confidence. When we assess inflation pressures, we consider the economy's growth potential alongside its actual growth rate and take into account the labour market, import prices and other factors that influence prices.

Let me give you an idea of just how reliant we are on economic statistics. Our system for processing, storing and managing time series data is known as the Financial Sector Information System (FSIS). We developed it about six years ago and it provides us with a robust database for nearly all the data we produce or use. Today, FSIS holds around 36,000 time series. Around 20,000 of these are macro-economic time series relating to New Zealand and the global economy. Statistics New Zealand would produce the lion's share of those 20,000 series.

You'll be relieved to hear that I'm not going to talk about all 20,000 statistics but let me make a few comments about what matters to us as a large scale user. Timeliness and reliability are obviously important when we're trying to assess the economy in real time. So too is good quality guidance on how the statistics are compiled or what the statisticians call "metadata". When we encounter puzzles in the data, it is essential to be able to have open and honest conversations with Statistics New Zealand about what might be causing them. Revisions need to be handled carefully. Most data are revised from time to time, but if revisions are large enough to re-write history, the original data would have had the potential to mislead policymakers. The earlier we can learn about upcoming revisions and what is driving them the better.

Another thing that matters for us and for all users of Official Statistics is harmonisation. The economic data Statistics New Zealand produces should ideally be consistent with the financial data the Reserve Bank produces. There is real value in working off a common business register when we are putting together institutional statistics. That has real benefits for all users.

What would be our top four 'wants' from Statistics New Zealand? We'd like sector balance sheets that would tell us who owes what to whom across the economy and with the rest of the world. We'd like a quarterly income-based measure of GDP, which would provide a useful alternative perspective on output to the existing production and expenditure-based measures. We'd like GDP to be rebased at the very least every 10 years to capture structural change in the economy. And we would love a monthly CPI to enable more timely analysis and forecasting of inflation.

We recognise that there are many statistical needs and resources are limited. But nor should we lose sight of their value. New Zealand's annual GDP is more than $220 billion so better quality or more timely decisions that result in a very slight improvement in economic performance could easily be worth millions of dollars per annum.

We greatly value having a voice in Statistics New Zealand's data development process and the opportunity to engage at a point in the process where our views can be taken into account. By all accounts, our relationship with Statistics New Zealand is in a good shape but both parties need to work hard and keep improving it.

The Reserve Bank's financial statistics

Turning now to financial statistics, the Bank is a major user of data on the financial system, most of which we produce in-house, drawing on the powers under the Reserve Bank Act (1989) to collect data from financial institutions. These data account for most of the other 16,000 time series in our FSIS database and include institutional data collected for prudential purposes, data on the financial markets, data on notes and coins, and published financial system statistics.

Our survey respondents include banks and other financial institutions and this "micro-data" is used in our role as a prudential regulator and supervisor. Commercial confidentiality means that this data isn't generally published, but we use it to compile broader financial system statistics. We've a well-established practice of constructing and publishing these statistics. An example would be the Standard Statistical Return for the banking system, which provides comprehensive information on the banking system's balance sheet. Some of our statistics act as inputs in the production of Statistics New Zealand's own statistics, including the national accounts.

Table 1

Some key Reserve Bank Financial Sector Statistics

Collection	Coverage
Standard Statistical Return (SSR)	Banks and Non-bank lending institutions
Credit card survey	Credit card issuers
Liquidity survey	Banks
LVR new commitments	Banks with residential mortgage lending
Trade weighted indexes	Major trading partner currencies
Planned/Under Development	
Insurance data collection	Licensed insurers
Managed funds survey	Investment and superannuation funds managed by NZ fund managers
Income statement survey	Banks
Bank balance sheet survey	Banks
NZ Securities database	Securities issued in the New Zealand market

Financial statistics since the global financial crisis

Our financial data collections have grown substantially in recent years for three reasons.

First, the intensity of our prudential oversight has increased since the Global Financial Crisis of 2008/09. We've sought to strengthen our prudential regime for banks for example.

As elsewhere, the GFC showed that risks around bank liquidity and funding in a period of financial turmoil were potentially much greater than anyone had expected. In 2010, we introduced new standards for banks requiring new minimum liquid asset requirements and a minimum core funding ratio. Introducing these new standards meant that we needed new liquidity and funding data to monitor compliance with the new standards at both an individual bank and financial system level.

Another example of stronger prudential standards has been the introduction of temporary speed limits on the banks' high-loan-to-value (LVR) lending reflecting our concern at the growing risks in the housing sector. This, in turn, required us to collect additional data on banks' housing lending broken down by LVR.

A second driver expanding our need for statistics has been the expansion of our regulatory responsibilities in recent years.

Since 2008, the Reserve Bank has been given responsibility for the prudential regulation of the Non-Bank Deposit Taking Sector (NBDT). New standards for capital, liquidity and related party exposures inevitably require more data to be collected from the industry and may prompt a further upgrading of the sector's statistics in the future.

In 2010, we became the prudential regulator and supervisor of the Insurance sector, which up until that time had been relatively loosely regulated in New Zealand. This meant that there is currently little in the way of formal statistics on the insurance sector. Consequently we're currently planning a data collection from the industry designed to meet our prudential and broader statistical needs. This is a major job as there are around 100 newly licensed insurers, and there are a wide range of potential risks to cover.

The third driver behind the expansion in our financial collections has been growing demand from the general public, international agencies, media and financial analysts in the years following the financial crisis. There's a growing appetite for more granularity and detail in financial statistics and for coverage of new areas. For example, there's demand for more detail on the financial products and services offered by banks, expanded data on financial prices, and the ability to drill down into financial sub-sectors to a rather greater extent than before. And there's much greater interest in understanding the capital markets – an area that to date hasn't been well captured in statistics in New Zealand.

Meeting demand for statistics in a fast moving world

What statistics to produce and when poses important challenges for us as the main producer of New Zealand's financial statistics. We need to respond to the increasing demands for data and data transparency but we also need to manage the cost, size and complexity of our statistical function and keep respondent burden to an acceptable level.

Decisions to proceed with new collections must be based on a clear business case. In many respects the decision to begin a new financial data collection has the hallmarks of an investment decision to purchase a long-lived asset. We engage extensively with users in trying to identify clearly the benefits of the new data for financial analysis and policymaking in the future. Some of the benefits associated with new statistics accrue several years down the track once a good time series is developed. Choices made now about what (or) not to collect and how to collect it can have implications for the quality of financial analysis (or policymaking) for years into the future.

In assessing the costs of the new collection we also focus on the costs that our respondents might incur in undertaking significant internal system changes and enhancements in order to provide the information. We have an obligation to ensure that the costs that they incur are "worth it".

Keeping up with structural change is always a challenge. The absence of financial statistics on a particular part of the financial sector can sometimes mask structural changes completely, because financial analysts have no way of seeing them. More often, we may be aware of shifting patterns but lack the statistics that can properly capture them. This can occur when new types of financial institution develop or when existing financial activities migrate from one type of institution to another that isn't well represented by our statistics. Structural changes can be very difficult to detect when they involve new financial products, unregulated institutions or the provision of financial services from offshore.

Structural change can also arise due to shifts in trading patterns between New Zealand and the rest of the world. Since the 1970s, the Bank has published weighted average measures of the New Zealand dollar relative to the currencies of our major trading partners. We report a variety of real and nominal measures of these trade weighted exchange rates (TWIs) on our website. Our flagship TWI was developed 15 years ago following the introduction of the euro and is based on five currencies (the US dollar, Australian dollar, yen, euro and British pound). Since then, trading patterns have changed dramatically. In particular, China is now the largest single destination for New Zealand's merchandise exports and its exchange rate has become more flexible. Some years ago we developed a broader 14 currency trade weighted index, which included the Chinese currency and this is published daily on our website alongside the five currency index. However, we are currently undertaking a full review of all the exchange rate measures that we publish, which we hope to complete before the end of the year.

Even with good statistical practices, and extensive liaison with users, many statistical collections ultimately become obsolete and need overhauling. Our standard statistical return for the banking system has served us well over the past 15 years but we're now re-developing it. That reflects changes in the banking sector over the period and a better understanding of what to monitor in the sector. For example, the existing return provides little if any data on the banks' incomes and expenses and other performance metrics. Our hope is that a new collection methodology will serve us well for the next 15 years.

During the rapid changes associated with the GFC, it became clear that the traditional time lags in the availability of some of our financial sector data became too long for fully informed analysis. Increasingly we drew on data from banks' internal management systems that could be provided closer to real time.

We've used this experience to try and shorten the time lag in the availability of some of our financial data. We've done this in areas such as bank credit, liquidity, solvency and debt issuance. Timeliness is essential for good policy making but timing also needs to be weighed alongside other parameters such as data quality, respondent burden and the costs of processing the data more quickly.

Financial systems are complex, and users – especially uninformed users– often have difficulty interpreting the data. Our challenge is to provide the external users of our statistics with metadata and guidance around the use of our statistics without overloading them with too much information. As we seek to re-develop many of our statistics over the next few years and develop new ones, we will need to give equal attention to the support we provide to the users of the new statistics.

Let me conclude briefly by saying

There is no magic to good policy making. Good decisions depend on good quality statistics and information. Official statistics play a crucial role in informing the decisions that we take.

They also provide accountability for those decisions. As a user of official statistics we would like to see a number of improvements to the suite of data we consume. We want faster, higher frequency, more comprehensive and higher quality statistics.

New Zealand's financial sector statistics, most of which are collected by the Reserve Bank, are in the midst of substantial change. The insights and changes prompted by the global financial crisis have provided us with a unique opportunity to assess the quality and fitness of purpose of our financial statistics and given some urgency to introduce some new data collections, redevelop existing collections, and explore new avenues for data supply. Whilst we're the biggest user of our own statistics, we are taking into account the needs of a broad range of stakeholders in meeting this challenge.

I wish you a fruitful two days.

Thank you.