
Supporting Paper A10

Possible improvements to macroeconomic statistics

Introduction

Good data are essential to doing monetary policy well. The Reserve Bank is trying to determine today the appropriate interest rate to deliver best inflation outcomes a couple of years hence. And all the time we are looking through the rear-vision mirror, still a little uncertain about where the economy actually is today, or was even three months ago. Every modern central bank faces that challenge, but perhaps especially ones in small and commodity-dependent economies. This paper discusses some of the challenges we face with the data used for monetary policy purposes in New Zealand.

Our assessment and recommendations

New Zealand's official economic statistics are broadly adequate for our monetary policy purposes. However, significant improvements can be made to New Zealand's economic statistics, which would improve the basis for decision making (including for, but not limited to, monetary policy) and lift New Zealand's statistical base closer to international best practice. Good monetary policy will always depend primarily on the interpretation of the data, but better data can help us and others make better and more timely judgements. The magnitudes at stake if, for example, monetary policy tightening or easing decisions are taken too soon or too late, are significant. New Zealand's annual GDP is around \$160 billion, so if we can make better informed

and more timely decisions then even a slight resulting improvement in economic performance could easily be worth \$100 million per annum. The total budget of Statistics New Zealand, for all its statistics, not just economic ones, is \$95 million this financial year. Skimping on spending on statistics is often a false economy, and we believe that the Committee should recommend the allocation of additional resources to improve the overall standard of New Zealand's macroeconomic statistics.

Material payoffs could be made in two broad areas.

The first is around the frequency and timeliness of the sort of data we use each and every quarter to update our sense of where the economy is at right now. To be useful for monetary policy purposes, short-term indicators need to be timely and frequent. While data timeliness is a high priority the possible trade-offs between accuracy and timeliness must be respected and, where possible, overcome. Data that are extremely timely but subject to significant revision can, in some circumstances, be detrimental to the decision-making process. However, data which are reliable yet available with a significant lag can also have disadvantages when making monetary policy decisions.

The timeliness of many of New Zealand's economic statistics has improved over the past ten years. However, the Reserve Bank believes that further improvements in the timeliness of some key statistical outputs in New Zealand could and should be made, in line with best practice in other OECD countries. For example, the first reading on GDP for any quarter is not available until the very end of the following quarter, the longest delay in any OECD

country. Even monthly and quarterly retail sales data are not available until six weeks after the end of the relevant period (although the new electronic transactions survey has the potential to provide a more timely read on retail activity). New Zealand also remains one of the few OECD countries without any official monthly data on the labour market or key production sectors. We review the OCR every six weeks, so the significance of individual data deficiencies and delays should not be overstated. However, over time better data should lead to better policy, and to better commentary and research from those who observe and monitor us.

The second broad area for improvement concerns a range of economic statistics that help us to better understand the longer-term trends, structures and behaviours apparent in the economy. Timeliness may be less critical with some of this data. Examples of areas where improvements in existing data sources and/or the creation of new data sources would be desirable include:

- more comprehensive and timely information on incomes – including, ideally, the production of quarterly income-based GDP estimates;
- ensuring the integrity of New Zealand’s GDP estimates is maintained, including ensuring the continued adoption of international best practice techniques in their construction, particularly for some of the harder to measure sectors of the economy;
- the development of sectoral income and outlay accounts, balance sheets and other institutional sector accounts that trace key sector developments;
- continued improvements in the measurement of savings across sectors;
- the development of official estimates of business sector margins, which are currently unavailable in New Zealand;
- upgrading of New Zealand’s wage statistics, particularly the Labour Cost Index, to ensure that wage developments can be monitored more effectively over time;
- more up-to-date estimates of New Zealand’s industry input-output tables, which are invaluable for modelling inflationary impulses through the economy;
- capturing the foreign exchange hedging activity of exporters and importers;
- data to better capture the wealth of immigrants;

- data to better capture the participation in the housing market by non-residents;
- ensuring house price statistics adequately deal with changes in the quality of the housing stock;¹ and
- data capturing more fully the overseas assets and liabilities of New Zealand residents.

Developments in some of these areas are already under way, but we consider it important that Statistics New Zealand be given adequate resources to ensure that efforts can be sustained over the longer haul and/or to ensure that current development work occurs as speedily as possible.

The Reserve Bank strongly supports the continuous improvement of statistical output, to ensure the ongoing relevance, usefulness and international comparability of New Zealand data. However, improvements can lead to discontinuities in data. This can severely impact on the value of statistical series. As users we value long time series and encourage Statistics New Zealand to invest in backdating data whenever possible when new statistical frameworks are introduced.

Quarterly income-based GDP estimates should be a high priority for New Zealand. There are three ways of estimating output in an economy: looking at the output of firms (the production measure); adding up what is spent, adjusted for changes in stocks (the expenditure approach); and adding up the incomes received by each of the factors of production (the income approach). Quarterly income GDP estimates would produce timely and internally consistent data on corporate sector profits and compensation of employees (wages). Both these would enrich the basis on which monetary policy decisions are made. Quarterly income GDP estimates are common in other OECD countries.

We believe that CPI produced by Statistics New Zealand is timely, mostly of high quality, and generally fit for purpose. The New Zealand CPI is produced only quarterly (and of OECD countries only New Zealand and Australia do not have a monthly CPI series) but we do not see a monthly CPI as

¹ Quotable Value New Zealand Ltd currently produces a house price index that accounts for changes in house prices that are due to compositional shifts in house sales. It also accounts for some, but probably not all, of the quality changes in housing. It is likely that any improved index would draw on the rich data collected by Quotable Value New Zealand Ltd.

a high priority, at least compared with the other areas for improvement identified in this note.

Over the last two decades most other price data for New Zealand have tended to be of lower quality than the CPI. For example, the Reserve Bank considers the current array of data on wages to be less-than-ideal and has encouraged Statistics New Zealand to improve the current Labour Cost Index. Producer price data have tended to suffer from a lack of ongoing development and out-of-date weights and hence has tended to be less reliable as an indicator of inflation pressures. Although there have been some recent improvements on this front, we would support more comprehensive efforts to ensure these statistics are developed to a world best standard.

We also believe that there may be scope to improve house price data, and attention could usefully be given to a more timely, fixed weight, and quality-adjusted official measure of house prices. Other countries also benefit from a richer array of data on corporate cost and price pressures, enabling authorities in those countries to trace more fully the evolution of margin pressures through the various phases of production.

The Reserve Bank has strongly supported the work undertaken by Statistics New Zealand to improve measures of productivity in sectors where direct measurement is feasible. The resulting productivity measures have, however, highlighted the difficulties inherent in measuring activity in some parts of the economy and have raised some questions about the reliability of GDP estimates. While recognising that this is a difficult area, we would support further work on the issue.

More generally, we note that the growing internationalisation of the wider economy and the financial sector poses continuing, probably growing, challenges for statisticians. Boundaries can become murky and yet the need for good data to understand just what is going on only increases. Meeting the realistic expectations of users seems unlikely to be able to be done adequately without the provision of material additional resources.