Economic and Financial Research in the Reserve Bank in 2001

Introduction

Research at the Bank covered a wide range of topics over the past year. Issues raised by the Asian crisis featured in the annual Conference Volume, and in separate research on the effect of the crisis on Australian and New Zealand financial markets. Other areas of research included: the decline in the volatility of Australian output, changes in the determinants of inflation in Australia, measurement of the real exchange rate, the effect of macroeconomic conditions on banks' risk and profitability, the history of support for troubled institutions in Australia, a possible explanation for Australia's relatively high level of dwelling wealth, and the information content of surveys of business and consumer sentiment. The results of this research were made available in the Bank's Bulletin, the Research Discussion Paper series, the annual Conference Volume, and the Bank's website (www.rba.gov.au). This article provides an overview of the research published in 2001.1

Future Directions for Monetary Policies in East Asia

Many of the economic policies in the east Asian region, which had been viewed in a favourable light in the long years of spectacular economic growth, were reassessed in the light of the Asian financial crisis. A critical part of this reassessment involved monetary policy, and its close cousin in an open economy, exchange rate policy. To contribute to the debate about appropriate monetary policy frameworks in the region, the Bank's annual conference focused on the topic, *Future Directions for Monetary Policies in East Asia*.

In setting the scene for the papers to follow, Robert McCauley, from the Bank for International Settlements, provides an overview of the monetary policy goals, institutions and developments in east Asia both before and after the crisis. He notes the increasing prominence of inflation targeting since the crisis. While this trend has been seen more broadly than just in east Asia, McCauley also points to a number of areas where east Asian countries differ from other countries. As highly open economies, the exchange rate figures prominently in any discussion of monetary policy. Also, the acceptance of the need for a single focus for monetary policy and a high degree of independence for the central bank, while still important, does not seem to rate as highly as elsewhere.

With the institutional and historical background provided by McCauley's paper, the remaining papers look at a range of options for monetary policies in east Asia. Guy Debelle, a member of the Bank's staff, makes the case for inflation targeting in these countries. Given their openness to trade and

1. Papers referred to in this article are listed in the Appendix.

capital flows, managing the exchange rate will always be a challenging task. In this situation, a floating exchange rate in conjunction with inflation targeting is an obvious policy alternative. Debelle argues that, although there are a number of practical difficulties in implementing an inflation-targeting regime in east Asia, they are not insurmountable. He also highlights the transparency and coherence that an inflation-targeting framework brings to monetary policy.

John Williamson, from the Institute for International Economics, argues for an intermediate exchange rate option. He points to evidence that floating exchange rates can be subject to fads and bubbles, and argues that this behaviour imposes significant real costs on the economy. His favoured solution is a managed exchange rate regime which has elements of a basket, band and crawl (BBC). This regime would, Williamson argues, prevent some of the major misalignments of freely floating exchange rates, while providing a degree of insulation and flexibility that would be surrendered were the exchange rate to be fixed.

The final two papers in the volume consider the case for monetary unions. Charles Wyplosz, from the Graduate Institute of International Studies, Geneva, considers what lessons east Asia might learn from the European journey to monetary union. He emphasises that the keys to European success were pragmatism and the existence of pan-European institutions that supported the economic case for monetary union at critical moments. Andrew Coleman, from Michigan University, considers the specific case of monetary union between Australia and New Zealand. He argues that the benefits of such a union may be larger, and the costs smaller, than has previously been argued.

The Behaviour of Asset and Financial Markets

Three Research Discussion Papers written this year focused on aspects of the behaviour of asset and financial markets. In the first of these papers, Luci Ellis and Eleanor Lewis examine the response of Australian and New Zealand financial markets to the Asian crisis, focusing in particular on the increase in volatility that occurred around the time of the crisis. They find that news about the evolving crisis - both good and bad - had significant effects on the volatility of Australian and New Zealand financial markets. Additionally, they find that, despite quite different monetary policy responses in the two countries, there were few obvious differences between them in financial-market outcomes, at least over the short term. Furthermore, they find that financial market movements over the period were not dominated by news of the Asian crisis. US and domestic news continued to have a greater influence on prices and volatility than did Asian developments, although some of the US 'news' may have originated in Asia.

One of the most important asset prices in an open economy like Australia's is the exchange rate. For many purposes, it is the real exchange rate – usually calculated by adjusting the nominal exchange rate for differences in consumer price inflation – that is the important focus for analysis, rather than the nominal exchange rate itself. While it is conceptually straightforward to define the real exchange rate, there are several practical difficulties involved in constructing a real exchange rate index. Luci Ellis examines these difficulties, and considers some of the choices that must be made to construct a real exchange rate index.

Another important asset market, and one that has a direct impact on the livelihood of most Australian households, is the housing market. Australian households hold a relatively large fraction of their wealth in housing compared to those in other countries, and Australian house prices relative to income are high by international standards, as Luci Ellis and Dan Andrews explain in their paper. They argue that Australia's unusual urban structure – with a much larger proportion of the population living in the two largest cities than is the case in other countries – may account for much of the difference. As Ellis and

Andrews point out, house prices are generally higher in large cities, and hence the concentration of population in Sydney and Melbourne leads to higher average house prices in Australia than elsewhere.

Understanding Macroeconomic Developments

Understanding developments in the macroeconomy is a core area of interest for central banks. Four research papers written this year extend our knowledge in this area. Of the four papers, two address aspects of the macroeconomic environment in Australia that have been changing over the past decades, while the remaining two cover other aspects of the macroeconomy.

Australian inflation over the 1990s has been low and relatively stable compared with the preceding decades. In their paper, Jacqueline Dwyer and Kenneth Leong ask whether the recent good performance on inflation is the result of a series of favourable shocks or some fundamental change in the inflation process. They argue that, while it is difficult to find statistically significant changes in the relationship between inflation and its determinants, some economically significant structural changes may have been occurring.

In addition to the good inflation performance, Australian output growth has been strong and relatively stable throughout most of the 1990s. Indeed, as John Simon documents in his paper, the output performance over the 1990s forms part of a longer-term pattern, with the volatility of output growth displaying a trend decline over the past 40 years. Much of the decline can be explained by a change in the volatility of inventories. Abstracting from this, however, there is still a significant decline to explain. Simon finds that the primary explanation for the decline is a reduction in the size of the shocks hitting the economy, rather than a change in the way the economy responds to shocks. This pattern is also present in other countries. The fact that many countries have experienced lower volatility over the past decades suggests that there may be some common international factor responsible for the reduction in volatility, although it is not immediately obvious just what this factor may be

While the business cycles of the industrial economies of the world rarely move in lock-step, there is a degree of correlation between them. The reasons for this correlation, however, remain unclear. Glenn Otto, Graham Voss and Luke Willard look at a wide range of OECD economies to understand what leads them to move together. They also apply the insights from this general study to the co-movement of Australian and US GDP. Generally they find that institutions, such as accounting and legal frameworks, as well as transmission mechanisms, such as trade flows, can explain much of the cross-country correlation in growth rates. In the case of Australia and the US, they conclude that institutional features, such as legal systems and accounting standards, provide most of the explanation for the correlation, while trade accounts for very little.

Changes in macroeconomic conditions, both domestic and international, can have significant effects on individual firms. While the fortunes of individual firms are strongly influenced by their own unique circumstances, they are also hostage to broader macroeconomic forces. Of particular interest to central banks are the fortunes of financial institutions. Marianne Gizycki looks at the degree to which macroeconomic conditions affect banks' risk and profitability. She finds that, while much of the variability in banks' risk and profitability is due to individual bank characteristics, macroeconomic forces also have a strong role to play.

Other Research

Three final papers in the Bank's Research Discussion Paper series in 2001 cover three disparate subject areas. The first paper, by Bryan Fitz-Gibbon and Marianne Gizycki, examines the history of support for troubled financial institutions in Australia. It finds that, particularly during the 20th century, the Australian experience has been unusual by international standards; the central bank rarely provided lender-of-last-resort loans yet depositors have lost almost no money. Instead of direct loans, more indirect methods of support were employed.

The second paper, by Ivan Roberts and John Simon, looks at the results from surveys of consumer and business sentiment. Sentiment surveys are sometimes viewed as providing information on economic prospects that is not captured by conventional economic statistics.

The paper addresses the question of what information is actually contained in sentiment surveys. It finds that much of the movement in sentiment can be explained by economic series that are already available. Furthermore, the remaining variation is not found to be particularly useful for forecasting economic variables. Thus, apart from serving as a useful summary of other information, the paper finds that sentiment surveys contain little new information.

The third paper, by Susan Hornby and Ivan Roberts, presents a bibliography of published research by Bank staff over the period 1991 to 2001. This paper updates the earlier Research Discussion Paper 9013 on research published between 1969 and 1990.

Appendix: Research Material Released in 2001

Conference Volume

Future Directions for Monetary Policies in East Asia, edited by David Gruen and John Simon, contains papers prepared for the Bank's annual conference held in July 2001. Guy Debelle, a member of the Bank's staff, prepared a paper for the conference, and four papers by international economists were also commissioned. These papers were written by Robert McCauley from the Bank for International Settlements' Asian and Pacific Office in Hong Kong, John Williamson from the Institute for International Economics, Washington DC, Charles Wyplosz from the Graduate Institute of International Studies, Geneva, and Andrew Coleman from Michigan University. The volume also includes discussants' comments and an introduction. The papers in the conference volume are:

- Robert N McCauley, 'Setting Monetary Policy in East Asia: Goals, Developments and Institutions'.
- Guy Debelle, 'The Case for Inflation Targeting in East Asian Countries'.
- John Williamson, 'The Case for a Basket, Band and Crawl (BBC) Regime for East Asia'.
- Charles Wyplosz, 'A Monetary Union in Asia? Some European Lessons'.

Andrew Coleman, 'Three Perspectives on an Australasian Monetary Union'.

Research Discussion Papers

2001-01	John Simon, 'The Decline in Australian Output Volatility'.	
2001-02	Jacqueline Dwyer and Kenneth Leong, 'Changes in the Determinants of Inflation in Australia'.	
2001-03	Luci Ellis and Eleanor Lewis, 'The Response of Financial Markets in Australia and New Zealand to News about the Asian Crisis'.	
2001-04	Luci Ellis, 'Measuring the Real Exchange Rate: Pitfalls and Practicalities'.	
2001-05	Glenn Otto, Graham Voss and Luke Willard, 'Understanding OECD Output Correlations'.	
2001-06	Marianne Gizycki, 'The Effect of Macroeconomic Conditions on Banks' Risk and Profitability'.	
2001-07	Bryan Fitz-Gibbon and Marianne Gizycki, 'A History of Last-resort Lending and Other Support for Troubled Institutions in Australia'.	

2001-08	Luci Ellis and Dan Andrews,	2001-10	Susan Hornby and Ivan
	'City Sizes, Housing Costs, and		Roberts, 'A Select Bibliography
	Wealth'.		of Published Research by the
2001-09	Ivan Roberts and John Simon, 'What do Sentiment Surveys		Staff of the Reserve Bank of Australia: 1991–2001'.
	Measure?'.		