Central banking: back to the future

Bruce White, Economics Department
Reserve Bank of New Zealand Discussion Paper DP2001/05

In this recently released Discussion Paper, Bruce White explores the nature of the transmission of monetary policy from the central bank to the financial markets in a modern, deregulated, financial system in which there are few impediments to financial efficiency. The subject is one on which there is debate amongst monetary theorists and central banking practitioners alike. In particular, there has been a focus on the question of whether advances in information technology are changing the nature of money and undermining the ability of central banks to implement their monetary policies.

The Discussion Paper is mostly non-technical and the introductory section is reproduced here for Bulletin readers interested in the subject. The full Discussion Paper has been posted on the Reserve Bank’s website at http://www.rbnz.govt.nz. Printed copies are available on request to the Bank’s Knowledge Centre at: knowledge@rbnz.govt.nz. The views expressed are those of the author and do not represent an official position of the Reserve Bank.

Introduction

In recent years there has been increasing interest in the question: what is at the heart of a central bank’s ability to dictate monetary policy? Why is it that if the central bank says the cash interest rate will be “x”, it is “x”, while if a commercial bank were to say it will be “y”, it would remain “x”? What is it about a central bank, fundamentally, that gives it an ability to significantly control inflation? And why do other banks do not have the same ability?

These might seem odd questions. After all, there is little doubt that central banks can and do dictate monetary policy. But when people ask how and why it works, many central bankers find providing a simple, intuitive, explanation a challenging task.

Adding to the challenge have been two developments. First, whereas most textbook models of how monetary policy works centre on the role of the central bank in managing the money supply these days central banks tend to set an interest rate, and allow the money supply to find its own level. This poses the question how to reconcile the textbook theory with contemporary central banking practice.

Second, monetary economists have become increasingly interested in the question whether innovations in information technology may result in the demise of central banking. Benjamin Friedman, for example, has suggested that “several trends already visible in the financial markets of many countries today threaten to weaken or even undermine the relevance of [the central bank’s] role as monopolist over the supply of bank reserves”. He sees these trends as including “the erosion of demand for bank-issued money, the proliferation of non-bank credit, and aspects of the operation of bank clearing mechanisms”. In asking what to make of these threats, Friedman wonders whether “potentially aggressive regulatory measures [may be] required in an effort to forestall them” (Friedman (1999)).

This paper seeks to respond to these challenges to our understanding of how monetary policy works. It comprises three parts. Part I summarises the standard textbook model. It casts back to the underlying foundations of that model, and examines how they relate or, as the case may be, do not relate to the characteristics of a modern, deregulated, monetary system. Part II shows how, by modifying a key assumption in the textbook model, we arrive at a quite different understanding of how monetary policy is transmitted from the central bank to the financial markets. It also results in an understanding that better fits with the way central banks nowadays operate. Part III does two things. It draws the analysis in the preceding sections to a conclusion, and then offers some thoughts on how that analysis provides a platform for exploring a wider range of contemporary central banking issues.

See, for example, Posen (2000), Woodford (1997) and Friedman (1999).
References
