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RECENT DEVELOPMENTS IN MONETARY POLICY

VOLUME I

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Recent Developments in Monetary Policy Volume I

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Recent Developments in Monetary Policy
Volume I

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Introduction

Alec Chrystal and Paul Mizen

Monetary policy in the major industrial countries has largely been a success story in the recent past, as there has been general and persistent positive growth and low inflation. It has been accompanied by low volatility and has therefore been labelled the Great Moderation, but it was not always thus. The Great Moderation followed the Great Inflation and the boom and bust cycles of the late 1960s, 1970s and 1980s. There were signs in 2007–8 that the stability of the late 1990s and early 2000s has been threatened by a global 'credit crunch' triggered by problems in sub-prime mortgages in the US and, more generally, by the unwinding of substantial global imbalances. In addition, the pressure on prices from food and commodity price inflation has threatened to push inflation away from the target and, more worrying for the future, cause inflation expectations to be dislodged from levels consistent with current targets. Whatever the impact of these events, however, there is little doubt that the view will survive that monetary policy was much better conducted in the 1990s and 2000s than it had been previously – and that inflation would remain broadly under control, even if output growth became more variable.

How did central banks achieve the conquest of inflation and achieve positive growth at the same time? It seems reasonable to claim that the recent policy successes have been due in no small part to academic economists who have contributed to improvements in the understanding of the policy problem in a macroeconomic context. This has led to clear policy recommendations about how the monetary policy process should be structured, and what the monetary policy makers should aim to achieve. The broad consensus about these recommendations is linked to a previously unattainable consensus on how the economy works.

The papers in this volume reflect the key advances in recent thinking that underpin the modern policy advances in broadly chronological order, while later papers indicate some of the current controversies that remain.

Where do recent developments in monetary policy begin? We refer to 'recent' papers from selected literature starting around the late 1970s. The reason for this decision is that the advances in understanding of expectations and forward-looking behaviour that occurred in the late 1970s supported subsequent developments in theory and policy. Nevertheless, while our focus is on the recent developments we do not downplay the importance of earlier debates.[1]

The Post-War View of Monetary Policy

The early years of the post World War II period were dominated by the development of macroeconomics as a field of economic enquiry and the Keynesian analysis of how best to use monetary and fiscal policies to control aggregate demand. In practice, monetary policy took a back seat in all countries except the United States, because monetary policy was subordinated

to the task of maintaining a pegged exchange rate against the US dollar. As is well known in theory, there is no room for monetary policy independence under a pegged regime with perfect capital mobility, though some degree of independence was achieved in practice by use of exchange and capital controls in most countries until the 1980s. Robert Mundell's analysis of the 1960s assigned monetary policy the task of achieving 'external balance', while fiscal policy was assigned the target of internal balance, and was thus the key policy instrument for controlling domestic demand and thereby unemployment.

A major debate about the role of monetary policy did break out in the 1960s, and is now reported in textbooks as being between 'monetarists' and 'Keynesians'. The early phase of this debate focused on whether monetary or fiscal policy should best be used to achieve control over aggregate demand. In part, this debate was also about whether the money supply or interest rates should be used as the monetary policy instrument. But, as already noted, this debate did not influence policy outside the United States in a practical sense in the 1960s, as monetary policy was dominated by the necessities of exchange rate pegging for the major industrialised countries. It was only after exchange controls were fully lifted that the option to use monetary policy for purposes other than the external balance could be contemplated.

The Rational Expectations Revolution

An important ground-shift in these policy debates occurred in the 1970s with what is now known as the 'rational expectations revolution' (RE). The focus shifted to aggregate supply and expectations. Before this time policymakers were perceived to be external to the economy pulling strings in order to move the economy in the desired direction, or to offset harmful 'shocks'. Those in the private sector likewise were treated as responsive to policy and unable to shape it in any way – firms and households reacted to changes in fiscal and monetary stimuli. The only question had been whether the monetary or fiscal string was more effective in adjusting consumption and investment expenditures. However, RE changed this perception radically. Policymakers were no longer perceived to be 'exogenous' to the economy and their policy reactions were potentially predictable and, therefore policy impacts could be anticipated. The private sector could work out for themselves what the predictable part of policy was likely to be, and counter it through forward-looking wage and price setting behaviour. This turned out to have radical implications for policy. According to the 'New Classical' school, exemplified by Sargent and Wallace (1975),[2] expected policy changes would have no real effects, so only unexpected policy changes could be used to stabilise the economy. Critically, the RE revolution made the policymakers endogenous actors in the economy and the impact of policy depended critically on how they were perceived by private sector agents. This is the background to the policymaking debate prior to the recent developments on which we focus here.

The Consensus View of Monetary Policy since 1977

The first paper we consider in Volume I is by Kydland and Prescott (Chapter 1, Volume I) who recognised the fact that optimal policy changes with the beliefs and actions of the private sector. Therefore, they argued that policymakers would not necessarily be consistent in setting policy

even if they were optimising their response period by period. The development of the concept of time inconsistency revealed that policymakers might be tempted to divert from announced plans to surprise a forward-looking private sector and gain a temporary advantage. There are parallels here with the literature on political business cycles that implied governments could exploit myopic voters by using policy to engineer cycles in the economy that would prove politically advantageous.

Barro and Gordon (Chapter 2, Volume I) built on the time inconsistency insight to indicate the range of options available to policymakers that were credible. The key analytical advance was based on the important assumption that the game was played repeatedly and cheating on previous announcements would be punished by disbelief of future announcements. The result would be a positive inflation bias in practice, despite pronouncements to the contrary. Only in circumstances where the cost of cheating was greater than the benefit could the policies acquire credibility and achieve a low inflation outcome.

The focus of this literature caused an examination of the incentives and structure of policymaking institutions, i.e. the central banks and governments, that together set policy. The control of policy by government through the central bank was regarded as a weakness that resulted in temptations to deviate for short-term advantage. Accordingly the consensus recommendation emerged for central banks to be made independent of government. As a result, these institutions could focus on the technical task of setting policy to achieve a predetermined objective, without being diverted by political objectives that would affect politicians, such as trying to be popular in the run up to an election.

The next task was to set the operating rules and procedures for the independent central bank to ensure that its policy objectives were set out clearly and openly and that these objectives were coherent with the public interest. One such objective, in the aftermath of high and volatile inflation, was a low and stable inflation rate. Several proposals were put forward to support the achievement of this objective. Rogoff (Chapter 3, Volume I) proposed that the head of the central bank should be selected with greater aversion to inflation than the government, in order to ensure that inflation bias was minimised. However, even in these circumstances the inflation bias would not be eliminated, and the difficult task of finding a 'conservative central banker' would first need to be accomplished. Later literature focused on creating the right incentives for central bankers to be conservative, and in particular to ensure that inflation control was their main focus.

Several proposals were made in the European context, during the transition towards monetary union, to ensure that low inflation was achieved by creating conditions that limited exchange rate movements. In Chapter 4 (Volume I) Giavazzi and Pagano showed that a fixed exchange rate regime would effectively tie the hands of the policymaker, who would be obliged to maintain the exchange rate, and credibility for low inflation would be acquired as a result. Target zone models proposed in Chapter 5 (Volume I) by Krugman provided a path towards full monetary union in Europe, and provided a possible policy framework that would reduce the ability of higher-inflation countries to depreciate against their lower-inflation partners. Theoretically, this proposal should have delivered convergence of inflation rates towards that of the anchor country, which in practice was Germany, aided by the stabilising effect of speculation under credible intervention effects of the authorities. However, reunification of East and West Germany, speculation on the part of currency traders, the re-emergence of unemployment, and other domestic concerns undermined the credibility of this mechanism,

resulting in an inverted relationship between exchange rates and their fundamental drivers – which made speculation destabilising not stabilising – as illustrated in Bertola and Caballero (Chapter 6, Volume I).

The transition issues relating to the creation of the euro zone were important but not central to the bigger question of designing policy institutions that could deliver sustained low inflation in any major country. The main theme of the international literature on this issue was the importance of giving monetary policy control to an independent central bank, and taking decisions away from incumbent politicians. In Chapter 7 (Volume I) Debelle and Fischer and Cukierman (Chapter 8, Volume I) worked out the arguments in favour of independence of central banks from government control. Debelle and Fischer distinguished between instrument and goal independence. The former involves instrument setting (typically the policy interest rate) being delegated entirely to the central bank, while the latter requires the central bank to also set the policy target. In practice, many countries have subsequently given their central bank instrument independence but the goals (such as the inflation target) have continued to be set by the incumbent government.

Cukierman spelled out the implications of central bank independence for economic performance, financial stability, and accountability. The most compelling case for central bank independence was the potential credibility that independence would bring, and the urgent need to replace discredited alternatives based on monetary targets, the Exchange Rate Mechanism in Europe and post-war full employment objectives. For this reason the first independent central banks were found in New Zealand, the United Kingdom, and Sweden etc. where an anchoring of inflation expectations was much needed.

The details of the arrangements and incentives needed in an independent central bank regime were developed by monetary economists who focused on frameworks that were likely to eliminate the inflation bias. The leading ideas – contracts and targets for the central banks – had identical outcomes but different mechanisms to achieve them. The first, suggested in Chapter 9 (Volume I) by Walsh, was a proposed contract between the government and the central bank interest rate setters that penalised the latter for deviations of the inflation outcome from the inflation objective. This would create incentives for the central bank to set policy in order to keep inflation as close as possible to the government determined target. The second proposal in Chapter 10 (Volume I) by Svensson, was a simpler approach, it involved defining the inflation target explicitly and making this the stated goal for the central bank. Since inflation is observable to everyone, it would be clear whether the central bank had met its objective or not, and reporting requirements (transparency and accountability) could be created to ensure that it explained its actions to the public.

There is now a consensus that the inflation-targeting framework has been a practical success, delivering low inflation and steady positive growth for the countries that adopted it. The most common arrangement for independent central banks has been some form of forward-looking flexible inflation targeting that allows tradeoffs between inflation and output objectives. In Chapter 11 (Volume I) Bernanke and Mishkin study the adoption of inflation targeting in various countries around the world. They document the observed gains in terms of transparency, and coherence in monetary policy, and the end result of inflation expectations converging to target. They describe the regime as constrained discretion rather than an 'ironclad policy rule'.

The consensus view of the monetary transmission mechanism holds that central bank actions to deal with inflation normally take time (possibly 18–24 months) to feed through to inflation.

This lagged impact of policy changes requires central banks to be forward-looking in setting policy. Svensson (Chapter 10) indicates that under these circumstances central banks are effectively inflation forecast targeting, since they must anticipate the future inflation rate that they are targeting and make this an intermediate target for policy.

Recent Controversies and Unresolved Issues

At this point we depart from the consensus to discuss the unresolved issues in monetary policy. The remaining papers in this volume explore how central banks can achieve the low inflation objective more effectively. They represent extensions to knowledge about the transmission mechanism of policy, explorations of the optimal nature of policy rate setting, and investigations into the complications of policy when interest rates reach zero (as in Japan for five years in the late 1990s and early 21st century) or where there is uncertainty about the effects of policy. There are other controversies such as about the role of money growth data in an inflation targeting regime (for example, about whether information on money growth should have any role in the inflation forecast or whether there should be any role for money growth targets, or even reference rates, in setting policy). Finally, there are challenges and lessons learned through the process of policymaking and the recent economic experience of the rapidly changing world economy.

Monetary Transmission

The transmission from instrument to target occurs through many paths, but some recent analyses of these channels have focused on the supply of credit. Traditionally the monetary transmission mechanism has concentrated on the impact of short- and long-term interest rates on final demand by households and firms, modified and adjusted to allow for the impact of interest rates on asset values, exchange rates etc. Recent analyses have examined the response of banks lending decisions to monetary policy changes.

Bernanke and Gertler (Chapter 12, Volume I) developed the credit channel approach, allowing the state of the borrower's balance sheet to determine access to credit and thereby influence output dynamics. The credit channel covers two effects, one through banks directly (the bank lending channel) and the other through general financial health (the balance sheet channel) that influence the availability of credit to firms or households as monetary policy alters. The key assumption is that there is heterogeneity of firms and households and therefore some will be unable to access credit (at all or on the same terms) as others. Moreover, the impact of the initial decision by lenders to differentiate between borrowers and to restrict credit to some applicants makes their financial condition worse relatively speaking, which then influences the likelihood of access to credit in future periods, due to their worsening balance sheet. This mechanism – the financial accelerator – has been analysed by Kiyotaki and Moore in Chapter 13, Volume I and Carlstrom and Fuerst (Chapter 14, volume I) in the context of business cycle models and has important implications for monetary policy.

More orthodox attempts to model the transmission mechanism of monetary policy uses developments in econometrics focused on methods to identify policy 'shocks' and then estimate

the dynamic path of impulse responses in other endogenous variables. Christiano, Eichenbaum and Evans (Chapter 15, Volume I) is a good example of this approach, though these three authors as well as others, have written a large number of papers on this theme over the previous decade or so.

Goodfriend and McCallum (Chapter 16, Volume I) offers a new perspective on the Rotemberg-Woodford-Goodfriend-King model that has been so influential over the present generation of monetary economists. This paper adds a banking sector with short- and long-term assets and most importantly money in the system. All the previous models were essentially non-monetary and Goodfriend and McCallum argue that neglect of this dimension could be of first order importance. Increases in the value of collateral assets raises the loans made in the economy – as the accelerator explains – but the resulting demand for cash from the banking system by consumers as the accelerator kicks in may offset some of its effects. The 'banking attenuator' they argue could reduce the importance of accelerator effects. Their paper is a first attempt to quantify these offsetting effects, and also provides a model particularly suitable to investigate the respective rates of interest in the banking system and the relationships between them that have been distorted by the credit crunch.

Policy Rules

There has also been a lively debate about the nature of central bank policy actions and whether these should be guided by policy rules. A commonly used rule relating interest rates to deviations of inflation from a target value and output from its potential level was proposed in Chapter 17, Volume I by Taylor, and is widely known as the Taylor rule. The rule was derived from a statistical analysis using US data from the 1980s and 1990s, and proposes coefficient values on inflation and output gap terms of 1.5 and 0.5 respectively. This rule embeds the Taylor Principle – real interest rates should rise with an increase in inflation – while also allowing rates to respond to pressures arising from aggregate demand. Empirically, the rule has proved to be robust to the transition to inflation targeting, institutional differences between countries aiming for price stability, and to use of historical and real-time data, Clarida et al. (Chapter 18, Volume I). The only major modification that has been required is to allow for the serially correlated nature of interest rates set by central bank committees. Looking backwards, central banks appear to have followed something that approximates to a Taylor rule, but this is quite different from saying that these central banks were implementing Taylor rules at the time. Batini and Haldane (Chapter 19, Volume I) analyse the implications of forward looking rules of various kinds to reflect the fact that policymakers could not change the past but only aim to change the future. They conclude that a forecast horizon of three to five quarters is optimal; that an inflation-forecast-based rule delivers a degree of output stabilization; and that forecast rules are superior on welfare grounds to backward-looking rules.

A debate has emerged surrounding the usefulness of thinking in terms of Taylor rules. In Chapter 20 of Volume I, Svensson asks 'What is wrong with Taylor rules?' He argues that monetary policy is better described as a 'targeting rule' involving the specification of the central bank's optimisation function and the optimality condition that results from it when it is solved in a small model of the economy, rather than as an 'instrument rule' – like the Taylor rule – that describes the instrument responses to currently observed target variables. Svensson goes further

to argue that policy is superior when conducted using a targeting rule rather than an instrument rule because it reduces interest rate variability, allows for judgment involved in the policymaking process, is more robust and easier to verify than an instrument rule. In Chapter 21 (Volume I) McCallum and Nelson offer some objections to the arguments in favour of targeting rules. They refute the claim by Svensson that simple rules are not always optimal, and argue that there is a role for judgment when instrument rules are used, since rules are not mechanically applied. The difficulty here is that central banks appear to operate in line with the models economists propose to describe their behaviour, but none of them explicitly states their optimisation function or policy rule. Clearly the reality of monetary policymaking involves more complexity than targeting or instrument rules can capture.

Monetary Policy and Asset Prices

One important issue that arose for inflation targeting, both in the internet boom of the late 1990s and the house price boom of the mid-2000s, was the extent to which asset prices should influence monetary policymakers, and in particular whether policy decisions should pay explicit attention to asset prices. One view was that asset prices only mattered in so far as they influenced final demand and thus consumer price inflation. However, the 'credit crunch' of 2007–8 seems to have changed the views of central bankers on the extent to which asset-price bubbles can be ignored. Authors who have discussed this issue from various angles include Bernanke and Gertler (Chapter 1, Volume II), Goodhart (Chapter 2, Volume II), and Bean (Chapter 3, Volume II), and it is worth noting that three of these four have been directly involved in the setting of monetary policy and they are clearly setting out thoughts on a troublesome issue. Bernanke and Gertler argue that asset prices should matter only to the extent that they affect inflation – in an exercise using a calibrated model they confirm central bankers should not make strong moves to deal with asset price booms. Goodhart suggests that while there is a strong argument for not changing the status quo by altering inflation targets to include asset prices, their forward-looking content may be useful to a central bank, and where they can be shown to be economically connected to indicators that matter such as output and inflation, some response to information in asset prices may be worth considering. Bean offers a reappraisal of the arguments in the light of the dotcom bubble in 2001 and growing international imbalances in saving and debt accumulation, but the analysis he develops seems relevant to assess the response to the equity market correction during the 2007–9 credit crunch. He argues that a flexible New Keynesian model will be able to take into account the abrupt unwinding of asset price misalignments or financial imbalances as they impact on the macroeconomy because the model specifies the objective function for the central bank as opposed to an instrument rule. When the objective is appropriately defined the central bank may need to be prepared to look further into the future, but by determining the goals, not the means for achieving them, the technology should deliver price and financial stability even when financial ratios and asset prices are misaligned or corrected.

Low Inflation and Zero Bounds

The gradual adoption of price stability mandates around the world, without disruption to steady economic growth, has brought about broad agreement that low inflation is desirable, and need not have high costs in terms of lost output and employment. However, the experience of Japan in the 1990s provided an example of a situation where the inflation rate became so low that the fear of deflation (a falling price level) was a serious threat to the economy. The Bank of Japan decided to lower short-term rates to near zero in February 1999 as part of their policy to counter these deflationary pressures. As a result, they could no longer cut short-term nominal interest rates further, as they had reached their zero lower bound. They could, however, alter long-term interest rates by making announcements about future short-term rates that influenced expectations. Thus the Bank of Japan made an 'unprecedented' commitment in 2001 not to increase short-term interest rates so long as the deflation continued. It also increased liquidity in the money markets to counter deflationary pressures, known as 'quantitative easing'. These measures have since been adopted in the USA and UK in response to the financial crisis.

The identification of this unusual set of circumstances as a liquidity trap by Krugman (Chapter 4, Volume II) spurred several papers that analysed the behaviour of an economy when interest rates reach zero and a central bank must resort to alternative instruments of policy to address inflation (or deflation). In the presence of the zero bound policymakers should be inclined to be more responsive to inflation as inflation falls. Their explanation is that the forward-looking policymaker should properly recognize the costs of implementing policy under the zero bound and take precautionary measures to reduce the probability of deflation, thereby responding aggressively at the low level of the interest rate.

Goodfriend (Chapter 6, Volume II) and McCallum (Chapter 5, Volume II) analyse the policy options under the Japanese experience. Goodfriend proposes three solutions: a carry tax on money balances, monetary operations at the long end of the bond market, and monetary transfers that inject liquidity to the economy. McCallum documents the likely effects of sustained low inflation on real interest rates, the validity of working with models without money, and the limits of a Taylor rule at the zero lower bound before arguing that the central bank can always use the exchange rate to conduct policy even if short-term nominal rates reach zero.

The Role of Money in Monetary Policy

The recent debate about the importance or otherwise of money has been between the New Keynesians and others who have monetarist leanings. The New Keynesians argue that money is unnecessary for us to learn the lessons of the Great Inflation of the 1960s and 1970s, it has an undistinguished record for predicting inflation and, although present in their models, is redundant. New Keynesian models rest on forward-looking versions of the IS curve, a Phillips curve with both backward- and forward-looking relationships to inflation, and a policy rule often based on a Taylor rule. These are sufficient to determine the variables of interest namely output, inflation and interest rates. Woodford (2006) has proposed a non-monetary theory of inflation in the fiscal theory of the price level, and proposes that central banks need not look at monetary data to read the inflation signals. He argues against twin-pillar Phillips curves that include monetary aggregates in the determination of inflation. In Chapter 9 (Volume II)

McCallum argues strongly that a model that excludes money does not provide a 'non-monetary' theory of inflation, rather the models may be mis-specified. Further, he argues that results based on 'indeterminacy' due to Woodford have dubious merit. In practice, references to money growth in policy circles dwindled in the 1990s, and some central banks ceased reporting the numbers. However, more recently there has been greater reference to money growth, such as at the European Central Bank, Bank of England and other central banks, as money has grown relatively fast in the last few years and been acknowledged by policymakers as a worrying sign of inflationary pressure.

Uncertainty and Policy

In 1967, well before the papers in this volume of recent developments in monetary policy were written, William Brainard[3] had offered an analysis of monetary policymaking under uncertainty. That paper enjoyed a revival of interest in the late 1990s as policymakers including Goodhart (Chapter 10, Volume II) discussed the difficulties of operating in an uncertain environment, where the model and the data are not known perfectly and may be subject to updating and revision. The nature of the uncertainty and the desire to avoid reputation damaging reversals of recent decisions should lead policymakers to adjust policy instruments gradually.

In Chapter 11 (Volume II) a model simulation by Orphanides indicates that there are pitfalls for the policymaker other than losing credibility when working with information that is uncertain. The problem comes when the policymaker acts as if it were certain. Orphanides compares decisions made in real time, where the policymaker takes into account the noise in the data, versus the results of supposedly optimal policies when the data are treated as certain. The latter would have delivered worse outcomes than actually occurred because the policies ignored the noisiness of the data. The caution encouraged by Orphanides is different from the gradualism proposed by Brainard (1967) in the face of multiplicative uncertainty, and results from the real time nature of the data which presents an imperfect picture of the state of the economy.

Lessons and Challenges

The final papers in the volume reflect the lessons learnt from the experiences of the past 25 years and the challenges for the future. The lessons are spelled out in Volume II by Goodfriend (Chapter 12) and Bernanke, Blinder and McCallum (Chapter 13) taken from a Federal Reserve Bank of St Louis conference. Goodfriend reviews the theoretical framework of 1979 and the lessons in practice and theory that have emerged since then. He concludes that both theory and practice have been revolutionised by the forward-looking analysis that has been adopted with the development of rational expectations. Bernanke reviews the landmark papers, many of which are included in this volume, that encouraged policymakers to tackle inflation. Blinder lists a number of surprising and, at the time, unconventional conclusions that were drawn from the disinflation experience in the United States. McCallum reflects that academics and central bankers are much closer than they were in 1979, and policymakers are more focused on keeping inflation low. King (Chapter 14, Volume II) presents some challenges for central bankers

concerning the practice of policymaking in the future. These include the choice of the optimal inflation rate, allowing for the impact of nominal rigidities, evaluation of measurement biases, and the reality of a zero lower bound on interest rates as a constraint on conventional policy instruments. There is the need to recognise lags in the monetary transmission process and uncertainty in the data in real time. Issues such as whether to target prices or inflation, and how to coordinate policies internationally, need to be addressed by central banks that are, relatively speaking, young institutions. Other reviews of the monetary policy progress and challenges are provided by Blinder (Chapter 15, Volume II) and Taylor (Chapter 16, Volume II).

Blinder suggests that there are three areas for future discussion – the objective function of central banks, the operating procedures that affect their methods, and our understanding of the transmission mechanism. In the first, the issue is the degree of transparency, the role of individuals versus committees, and the need for explicit inflation targeting. The second concerns the requirement to avoid reversals, opt for gradualism, the desirability of fine tuning, and the degree to which central banks follow or lead financial and foreign exchange markets. Finally, our understanding of the transmission mechanism in interest rates, exchange rates, and asset prices matters greatly; the importance of unusual (zero lower bound) and global events has a great impact on central bank practice.

Taylor discusses the development of sticky price and wage models from foundations in Lucas (1973 and 1976).[4] The importance of these features is no longer questioned by monetary economists, but 35 years ago it was a debatable point. Both forward looking behaviour and sticky prices and wages have altered models a great deal, and are now 'standard' components of models such as those used in Michael Woodford's influential book *Interest and Prices* and can be found even in the workhorse three equation versions of the New Keynesian model.

Some of these challenges will continue to dominate the thinking of the profession for many years to come – and there are others that will emerge. What should the central bank do if money is effectively eliminated as a transactions medium in the economy? How should policymakers best communicate their actions to the public? Is inflation targeting the best model for central banks and therefore should the non-inflation targeters join them, or has inflation targeting been a golden age more by luck than judgment? How should policymakers respond to globalisation, financial market innovations and crises in an ever more interconnected world? These questions may be answered in a future collection of papers on monetary policy.

The Taylor paper discussed earlier illustrates that – depending on your perspective – there are many papers that could be regarded as the most important recent developments in monetary policy, but it is not contentious to argue that 'economic research is most exciting and productive when it is policy driven' and all of our papers in these two volumes satisfy that condition.

Notes

1. See K.A. Chrystal (ed.) (1990) *Monetarism*, Schools of Thought in Economics Series 11, in Mark Blaug (ed.), Aldershot and Brookfield VT, Edward Elgar, and T. Congdon (2007), *Keynes, the Keynesians and Monetarism*, Cheltenham and Northampton MA: Edward Elgar.
2. Thomas J. Sargent and Neil Wallace (1975), '"Rational" Expectations, the Optimal Monetary Instrument, and the Optimal Money Supply Rule', *The Journal of Political Economy*, **83** (2) Apr, 241–54.