Introduction: what were (and are) the debates all about?

Sharp public debates about money, banking and the business cycle have been a feature of the leading industrial nations for over 200 years. One debate – that between Keynesianism and monetarism – has good claims to be the most protracted and intense of all. It started quietly in the USA in the late 1950s, with the publication of influential academic papers arguing that the quantity of money played an important role in the determination of national income. Its period of most extensive public influence, and also perhaps its greatest notoriety, was in the UK in the late 1970s and early 1980s. A set of ideas widely labelled 'Thatcherite monetarism' was adopted by key figures in the Conservative Party and incorporated in the party's economic policy documents, notably *The Right Approach*. The application of these ideas from the general election of 1979 radically changed not just the direction of British macroeconomic policy, but also the pattern of wider interactions between the state and the economy.

It may be too early to seek a perspective on or even to summarize what was at stake. If the Keynesian–monetarist quarrel were to be compared to a volcano, it would certainly not be an extinct volcano. Instead it would be better described as at the border zone between dormancy and activity, and liable to nasty flare-ups at any time. The purpose of this collection of papers is to present a view of what the debates were about and how they seem to have ended. The phrase 'how they seem to have ended' is more appropriate than 'how they ended', because of the many continuing tensions and uncertainties. In preparing the collection it has sometimes been difficult to decide whether to use the past or present tense. Both Keynesianism and monetarism, or what remains of them, are still evolving.

I

When the debates started, Keynesianism was the incumbent and monetarism the challenger. Policy-makers in the English-speaking world thought that they were practising 'Keynesian macroeconomics', while economists in university departments regarded themselves as predominantly

'Keynesian' in their views. Keynesianism originated in the macroeconomic thought of John Maynard Keynes, an economist from Cambridge, England, who lived through the financial instability and economic turbulence of the inter-war period. His book on *The General Theory of Employment, Interest and Money*, published in 1936, had immense influence on economic thought on both sides of the Atlantic. Its theory of national income determination – in which total spending is a multiple of autonomous demand (or the sum of investment and government spending) – remains standard in macroeconomics textbooks to this day.

Keynes had an extraordinarily wide range of intellectual involvements, and agile, ever-changing responses to the economic and political developments in which he was interested. No summary of either his beliefs or the main tenets of Keynesianism can be altogether definitive. However, in the 1960s and early 1970s Keynesianism was associated in Britain with certain well-defined policy themes. The first, implied by his theory of national income determination, was that government spending and taxation could and should be varied to affect the level of demand in the economy. The second was that demand ought to be maintained by these means (that is, by 'fiscal fine-tuning') at a high level in order to promote 'full employment'. The centrality of full employment as a policy goal could be explained by a strong memory among the policy-making elite of the heavy unemployment of the 1930s. The third was that, if high demand led to inflation, the correct response was direct official control over individual wages and prices or, for short, 'an incomes policy'.[1]

The emphasis on fiscal policy as the best method to sustain full employment and on incomes policy as the correct antidote to inflation left monetary policy with little to do.[2] Keynes's *General Theory* provided some justification for the neglect of monetary policy, as it explored the circumstances in which action by the monetary authorities could not further reduce 'the rate of interest'.[3] If these circumstances applied (that is, in the celebrated 'liquidity trap'), monetary policy could not be used to stimulate demand and reliance had instead to be placed on fiscal measures. Before his death, in 1946, Keynes was unable to identify any real-world example of the liquidity trap. Nevertheless, in the 1950s and 1960s the Keynesians gave the liquidity trap a prominent role in their macroeconomic theorizing. They further argued that – even if the authorities could vary interest rates easily – investment was not particularly responsive to interest rates.[4]

These claims about the 'interest-inelasticity of investment' were part of a wider pessimism (so-called 'elasticity pessimism') about the ability of relative price movements to motivate changes in quantities, including the quantities of demand and output that were relevant to the determination of employment. In general, the Keynesians were sceptical about the efficiency of market mechanisms. Following Keynes's recommendation of 'a somewhat comprehensive socialisation of investment' in *The General Theory*, they supported state ownership of the 'commanding heights' of the economy (meaning, in practice, the energy and transport utilities) and hankered after more state intervention. They thought that changes in public sector investment, if appropriately timed and correctly calibrated, were a better way of keeping the economy on track than variations in interest rates by the Bank of England.[5]

In the first two decades after the Second World War rapid economic growth, low unemployment and moderate inflation were enjoyed in all the industrial nations. The low level of unemployment was widely attributed in the English-speaking countries to the successful deployment of fiscal policy along Keynesian lines. In both the USA and the UK some economists dissented from the mainstream enthusiasm for Keynesian ideas, and the late 1950s even saw an attempt in the UK to control incipient inflation by monetary methods. But the Radcliffe Report of 1959 represented majority opinion among British economists when it repudiated a straightforward link between money growth and inflation. The apogee of Keynesian influence on UK policy-making came in the 1960s and early 1970s, with the Wilson government of 1964–70 appointing many academic economists with Keynesian leanings to official positions in the Treasury and the Department of Economic Affairs. (Nevertheless, it is far from clear that UK fiscal policy was conducted on Keynesian lines over any extended period of years. See Essay 4, pp. 81–111, on 'Did Britain have a "Keynesian revolution"?', for more discussion.)

Ironically, it was at about this time that the good performance of the post-war economy started to break down. The inflation rate touched a post-war low of virtually nil in 1959 and 1960 after squeezes on the growth of bank credit and deposits in the mid-1950s, but it edged up during the 1960s. Each cyclical peak in inflation was higher than the preceding one. A big boom in 1972 and 1973 was accompanied by extreme asset price buoyancy, and was widely attributed to annual growth of the money supply of well over 20 per cent. It was followed in mid-1975 by an inflation rate of above 25 per cent, the highest in Britain's peacetime history. Policy-induced recessions were needed in the late 1960s and mid-1970s to keep inflation under some sort of control, but they led to significant rises in unemployment. Even full employment seemed to be at risk.[6] A further humiliation came in 1976, when the British government sought the help of the International Monetary Fund to deal with a collapse in the pound's exchange rate and an acute lack of foreign confidence in its financial policies. Whereas in the 1950s and 1960s the Keynesians could claim that that their prescriptions had delivered full employment with low inflation, such boasts seemed hollow by the late 1970s.

II

The changed policy environment led to a questioning of Keynesian orthodoxy and the articulation of an alternative set of beliefs about the functioning of the economy. An important part of the original intellectual impetus to monetarism in the UK came from the work of economists in the American Mid-West, notably Professor Milton Friedman of the University of Chicago and a number of less well-known figures at the Federal Reserve Bank of St Louis. Using (what were then) the latest statistical techniques, they demonstrated a long-run link between money supply growth and inflation. This was a vital input to the international macroeconomic debate. But Friedman's papers and the St Louis research findings were mostly directed towards the USA, and in the mid-1970s Friedman had written comparatively little about the UK.[7] British economists with monetarist inclinations therefore had to analyse by themselves the obvious mess in their own country's macroeconomic policies, and to devise answers which respected the UK's own policy traditions and institutions. A 'British monetarism' developed which was different in key respects from 'American monetarism' (or from 'standard monetarism', if there is such a thing). This collection of essays is largely about 'British monetarism', and the debates with which it deals are mostly – although not exclusively – those that occurred in the UK between this type of monetarism and a similarly 'British' Keynesianism. (The distinction between American and British monetarism is made in as Essay 7, 'British and American monetarism compared', pp. 146–72.)

One area of contention was far more prominent in the UK than in the USA.[8] As already noted, the Keynesians gave incomes policy a pole position in their strategy for controlling inflation. Throughout the twentieth century the UK's workforce was more unionized than the USA's, while trade union leaders had great political salience because the Labour Party relied on them for financial support. It was precisely because of these features of the UK's labour market and society that the British Keynesians tended to attribute wage and price increases to 'cost–push' factors such as trade union greed. Quite logically, they downplayed the monetary causes of inflation, refused to see inflation as a purely economic problem and advocated incomes policies as the appropriate, largely political response. Monetarists in the UK had inevitably to devote more critical attention to incomes policies than their counterparts in the USA. To a far greater degree than in the USA an important undercurrent in British monetarism was that the government should reduce the political power of the trade union movement. Controlling the money supply had less direct relevance to wage and price setting in the nationalized industries than in the private sector. When Mrs Margaret (later Lady) Thatcher scrapped the machinery of incomes policy in 1979 and prepared for showdowns with the large public sector trade unions, she knew that money supply control was not a complete prescription for economic policy.[9] (In *Monetarism: An Essay in Definition* – published by the Centre for Policy Studies in 1978 – I said, 'The strength of the correlation between monetarist sympathies and a liberal or conservative approach to political problems is not an accident'. Essay 6, 'The political economy of monetarism', on pp. 127–45, is based on a chapter in the CPS pamphlet.)

Even apparently technical beliefs about the determination of national income had a more political tinge in the UK than in the USA. All monetarist economists agree that the equilibrium level of nominal national income is related to the quantity of money, and that the rates of increase in nominal national income and prices are affected by the rate of increase in the quantity of money.[10] It follows that – if a government is pursuing a money supply target in order to influence the rate of inflation – a key policy question is the interaction between fiscal and monetary policy. Suppose that a government is simultaneously receiving advice from Keynesian economists (who think that national income is a multiple of investment and government spending, and believe in the primacy of fiscal policy) and monetarist economists (who think that national income is determined by the quantity of money and believe in the primacy of monetary policy). Suppose that – as a muddled response to the advice received – the government increases the budget deficit in order to stimulate demand and raise employment, and at the same time reduces the rate of money supply growth in order to combat inflation. Will the expansionary budget deficit or the restrictive money supply target dominate the future path of national income? Which will win, fiscal policy or monetary policy?

In the 1970s this issue was of considerably greater importance in the UK than in the USA. Under the Labour government from 1974 to 1979, the budget deficit (as measured by the public sector borrowing requirement [PSBR]) averaged almost 7 per cent of gross domestic product (GDP), the highest figure for such an extended period since the Second World War. Although the USA had its budget deficit problems, these were not on the same scale. (In evidence to a House of Commons committee in 1980 Friedman repudiated the notion of a relationship between the PSBR/GDP ratio and the rate of money supply growth. Later, in 1984 Friedman even expressed complacency about the USA's own budget deficits, when they had moved out to almost 4 per cent of gross national product.)[11] British Keynesians thought that reductions in the budget deficit would lower demand and raise unemployment, but a money supply target had been introduced for anti-inflationary reasons in July 1976. The monetarist view was that the growth rate of the money supply would dominate the effect of fiscal policy on demand and inflation, and that expansionary fiscal policy was futile once the money supply target was in place. Extra government spending would not add to demand, but merely crowd out private spending. (I wrote an article in *The Times* on 23 October 1975, which is reprinted as Essay 8 on pp. 177–80, setting out this argument. The article set me on a train of thought that led to the advocacy of medium-term fiscal rules. I realized when writing it how shocking it must have seemed to most university-based economists, since it implicitly endorsed the anti-Keynesian 'Treasury view' of the inter-war period. It was described as 'not convincing' by Kathleen Burk and Sir Alec Cairncross in their study '*Goodbye, Great Britain*'*: The 1976 IMF Crisis* more than 15 years later.)[12]

If the monetarists were right, fiscal policy should not be used to manage demand. Rather, because large budget deficits might be financed to some extent from the banking system and so create new money balances, the existence of a money supply target argued that the budget deficit should be kept under control. A case could be made for gradual reductions in the ratio of the budget deficit to GDP, in order to facilitate declines in the growth rate of the money supply.[13] The Medium-Term Financial Strategy (or MTFS) announced in the 1980 Budget set out a path for reductions in both the money supply growth rate and the PSBR/GDP ratio over the next four years, in accordance with this thinking. In consequence, fiscal policy was demoted from its long-standing position as the most revered (and allegedly most powerful) weapon in the official macroeconomic armoury. Instead it was to have a subordinate status as an adjunct of monetary policy. The need to integrate medium-term budgetary planning with monetary control was basic to British monetarism, but scarcely figured in the American academic literature.

The UK debate was now to move out of the scholarly journals and seminar rooms, and briefly to hold a central role in the political stage. Large numbers of Keynesian economists in British universities were upset by the announcement of the MTFS, as it signalled the end of fiscal fine-tuning. The 1981 Budget caused disquiet to turn into outrage. Despite sliding demand and rising unemployment in 1980, the Thatcher government, with Sir Geoffrey (now Lord) Howe as Chancellor of the Exchequer, decided to *reduce* the deficit by an increase in taxes amounting to 2 per cent of GDP. To the Keynesians, who believed that the budget deficit should be *increased* in a recession to bolster demand, the tax increases were folly. In their view, the tax increases would intensify the downturn and raise unemployment, and the 1981 Budget was an exercise in macroeconomic illiteracy.

Three hundred and sixty-four economists in British universities signed a letter of protest to *The Times*. The initiative in drafting the letter had been taken by two leading Cambridge economists, Professors Frank Hahn and Robert Neild. In a covering letter requesting that signatures be confined to 'present and past teaching officers and equivalent staff' Hahn and Neild said: 'We believe that a large number of economists in British universities, whatever their politics, think the Government's present economic policies to be wrong and that, for the sake of the country – and of the profession – it is time we all spoke up.' The letter itself warned that 'present policies will deepen the depression, erode the industrial base of our economy, and threaten its social and political stability'.[14] This was the Keynesians' most public attack on the monetarist direction of government policy at that time. In effect, 'the 364 threw down the gauntlet and invited the monetarists (who were far fewer in numbers) to a duel of ideas'. (The last sentence appears in Essay 12, 'Criticizing the critics of monetarism', where the context of the 1981 Budget is discussed on p. 250. Essay 9 presents a theoretical critique of the income-expenditure model which was the conceptual basis of the letter from the 364 economists.)

Since the government refused to change its policies in response to the letter, the duel of ideas would implicitly be decided by a subsequent passage of events. Did the depression deepen, was the industrial base eroded, and were Britain's social and political stability at risk? While any debate about the real world is coloured by the participants' biases and cannot avoid some selectivity in its appeal to fact, the consensus view is that the 364 were wrong. Despite the tax increases, demand and output started to grow again shortly after the 1981 Budget, and from early 1983 growth was at an above-trend rate for six years. Productivity growth in manufacturing was particularly rapid in the 1980s, while such indicators of instability as inflation and strike activity behaved better in the 10 and 20 years after the 1981 Budget than in the previous 10 and 20 years. (The controversy about the sequel to the 1981 Budget is covered in Essay 10, pp. 206–29, which includes an exchange between the author and Professor Stephen Nickell, the Warden of Nuffield College, Oxford.)

By the mid-1980s the revival of the economy seemed to validate the claims that 'money matters' and 'monetary policy matters more than fiscal policy'. Fiscal fine-tuning had been dropped in 1980 and 1981, and it has not returned. The 1980 Budget has been followed by over 25 years of medium-term financial rules, even though their original rationale – that excessive budget deficits would risk high money supply growth and inflation – has faded from view. (Essay 5, pp. 112–22, asks 'Is anything left of the "Keynesian revolution"?' and notes that since the late 1980s the conduct of fiscal policy has largely ceased to seek a rationale in theoretical macroeconomics.) In this respect a fair conclusion is that monetarism defeated the Keynesians in the battle of ideas and its recommendations replaced theirs in actual policy-making. Similarly, no government since 1979 – including the Labour government in power since 1997 – has seen fit to reintroduce incomes policy or to restore the political influence of the trade union movement. Indeed, it is not going too far to say that public discussion of incomes policy as a means of inflation control has stopped altogether.[15] The monetarists have won that argument too. (As noted in Essay 11, 'Assessing the Conservatives' record' on pp. 235–44, inflation was lower in the final five years of Conservative rule from 1992 to 1997 than in the last five years of the preceding Labour government from 1974 to 1979, although no incomes policy was in force from 1979 whereas it had been applied for most of the 1960s and 1970s.)

But other debates were not settled by the economy's behaviour in the 1980s. Having apparently defeated the Keynesians on fiscal fine-tuning and incomes policy, and having established among the chattering classes the principle that 'money matters', the monetarists became embroiled in a civil war among themselves about the exact ways in which money affects the economy. One dispute was about how the quantity of money is determined. Several economists thought that the quantity of money is best interpreted as a multiple of the monetary base and proposed that the Bank of England should vary the monetary base in order to control the quantity of money.[16] Another quarrel was about the relative significance of different monetary aggregates in macroeconomic analysis. The main view in the late 1970s had been that a broadly defined measure, including virtually all bank deposits, was the most useful and important, but in the early 1980s a counter-argument developed that narrow money – or even the monetary base by itself – was the key aggregate.[17] Leading officials and economists at the Treasury were persuaded by the narrow-money school, which was associated with Sir Alan Walters and Professor Patrick Minford, two of Thatcher's favourite economists. Mr Nigel (now Lord) Lawson, the Chancellor of the Exchequer, became an enthusiast for a particularly narrow measure of money, M0, and dropped broad money targets in October 1985.

The annual growth rate of broad money quickly accelerated to almost 20 per cent, not far from what it had been in the crazy boom of 1972 and 1973. The economy's reaction was similar, with surges in asset prices followed by buoyant spending by both households and companies. By mid-1988 the balance of payment's deficit had widened alarmingly. With signs of rising inflation increasingly apparent, interest rates were raised abruptly. By late

1989 clearing bank base rates were up to 15 per cent. One interpretation of these events is that they confirmed, yet again, the validity of the monetary approach to macroeconomic fluctuations and the monetary theory of inflation. The Conservatives had been vocal in the late 1970s and early 1980s about the need to restrict money supply growth in order to limit inflation, and from 1979 the Prime Minister herself had emphasized that there would be no 'turning back' on this central part of their strategy. Given these commitments, the Lawson boom between 1986 and 1989 has to be described as an episode of 'shocking incompetence'. (I used this phrase in commentary on the 2004 Wincott Lecture given by Sir Alan Budd, in which Budd defended macroeconomic policy in the late 1980s and early 1990s. I was amazed by the turn of events from 1985 and criticized government policy in a sequence of articles and papers, many of them in *The Times*. Some of the articles were brought together and republished in my 1992 collection, *Reflections on Monetarism*.)[18]

But that was not how the overwhelming majority of British economists saw it. Their Keynesian sympathies and their antipathy to the use of monetary policy to control inflation were unchanged. Hardly anyone viewed the connection between high money growth and inflation in those years as justification for the restoration of money supply targets expressed in terms of broad money.[19] Instead key opinion-formers – notably Mr Samuel (now Sir Samuel) Brittan of the *Financial Times* – were attracted by the low inflation and apparent macroeconomic stability being achieved by members of the European Monetary System (EMS). The EMS imposed a fixed exchange rate on the nations who belonged to it, while monetary policy was orchestrated by West Germany's Bundesbank. The Bundesbank – which had persevered with broad money targets since the mid-1970s – had the best anti-inflation credentials of any major European central bank. A fierce debate developed between supporters and opponents of EMS membership, which required a two-year period of qualification in the so-called 'exchange rate mechanism' (ERM) before full entry.

Since most economists in British universities were self-proclaimed Keynesians and since the majority of them in the late 1980s supported EMS membership via the ERM route, it might seem that a commitment to a fixed-exchange rate is one aspect of 'British Keynesianism'. In fact, a wide diversity of views is held by different Keynesians on this topic. For most of his life Keynes preferred a floating exchange rate and 'a managed currency' to a fixed exchange rate and the acceptance to an external monetary discipline.[20] But here, as in other areas of economics, the Keynesians had by the 1980s moved quite a long distance from Keynes himself. For the many academic Keynesians who favoured EMS membership in the late 1980s it had the important virtue that interest rates could be set by reference to the exchange rate and not the behaviour of the money supply. Membership of the EMS was an alternative to monetarism and its 'mumbo-jumbo'.[21] (The contrast between Keynes's views on the exchange rate regime and those of most British Keynesians is discussed in Essay 3 on 'Keynes, the Keynesians and the exchange rate', pp. 55–76.)

As inflation increased towards a double-digit annual rate in the autumn of 1990, leading opinion-formers decided that the UK suffered from a chronic inability to run its own economy properly. All the main newspapers – backed up by most academic advice – welcomed the decision to join the EMS announced on 5 October 1990. The outcome was a disaster. Because of reunification between West and East Germany, and subsequent heavy government expenditure, the Bundesbank was forced to raise interest rates and pursue a tight monetary policy in 1991 and 1992. The higher interest rates affected all other members of the EMS, including the new applicant, the UK, which had started out with a clearing bank base rate of 14 per cent. The UK's housing and commercial property markets were crippled by dear money, and its economy suffered a severe downturn in demand and output. On Wednesday, 16 September 1992, a speculative attack on the pound in the foreign exchanges led to the UK's exit from the ERM. The boom–bust cycle of the years between 1986 and 1992, under a government which had initially espoused 'monetarism', had proved just as bad as the boom–bust cycle between 1971 and 1975, which had gone far to discredit Keynesianism.

The sequel to the fiascos of the ERM and Black Wednesday (as 16 September 1992 became known) was highly pragmatic. Ideology, rhetoric and 'isms' were out. The Chancellor of the Exchequer, Mr Norman (now Lord) Lamont, dispensed with intermediate targets altogether and introduced a target for the ultimate policy goal, inflation. The annual increase in the RPIX index (that is, the retail price index excluding mortgage interest payments) was to lie towards the lower end of a 1 to 4 per cent band 'by the end of the current parliament' (which was expected to be in 1996 or 1997). The minutes of the monthly meetings between the Chancellor of the Exchequer and the Governor of the Bank of England were to be published, making the Bank of England more openly involved in interest rate decisions. Ministers were to receive the advice of a Treasury Panel of Independent Forecasters (or so-called 'wise men') as well as that of Treasury officials.[22] The Treasury announced that it would monitor a wide range of variables, including both the exchange rate and broad money, in its macroeconomic assessments.

No one could have forecast in late 1992 the virtual miracle that was about to happen.[23] After the 20-year sequence of blunders and mishaps in policy-making, and of booms and busts in the economy itself, the new system of inflation targets has proved a total success. At the time of writing (mid-2006) inflation targets have been in force for almost 15 years. The target – slightly changed with a move to the consumer price index in December 2003 – has been met in every year, while the economy has not just avoided boom–bust cycles, but achieved an unprecedented degree of stability in output and employment. The Conservative government was not targeting high employment in 1992 when the system started and no formal pledge about 'full employment' has been made under the Labour government since 1997. Nevertheless, employment levels – measured as the proportion of men and women of working age actually in jobs – have been higher over the last decade than in the so-called 'era of full employment' in the 1950s.

III

A debate about the intellectual ownership of this extraordinary period has not yet really started, but sooner or later it seems inevitable. (Perhaps this book will help to start the ball rolling.) It is clear that Old Keynesianism – the Keynesianism of fiscal expansionism and incomes policies – cannot take any credit. As explained here, the Thatcher government abandoned incomes policy in 1979 and dropped fiscal activism in the 1980 Budget, and neither has come back. But money-supply-target monetarism – the monetarism of the early years of the Thatcher government – also receives no prizes. Sure enough, in 1992 Lamont included broad money in his long list of variables that were worth monitoring and the Bank of England's *Inflation Report* contains analyses of money supply developments. However, interest rate decisions are rarely related to the money supply and, if they are, it is because the money supply is thought to affect more directly important macroeconomic variables (such as asset prices).

The heart of the current system is that the Bank of England varies short-term interest rates in order to influence the rate of growth of demand and to keep the level of output roughly at trend.[24] The rationale for keeping output at its trend level can be described in more formal terms. The difference between the actual and trend levels of output can be defined as 'the output gap', and expressed as a percentage of the trend level. The empirical evidence is that the change in inflation is a function of the output gap, being positive when output is above trend (that is, the output gap is positive) and negative when output is beneath trend. It follows that – if the inflation target is being met at present and if output is at trend (that is, the output gap is zero) – the inflation target will continue to be met while the output gap remains at zero. This system is subject to various kinds of shock (such as big movements in commodity prices, because of international developments beyond UK control), but – once the inflation target has been met over an extended period – expected inflation ought to be very close to target inflation. All being well, the presumed inertia of expectations should stabilize the rate of nominal wage growth and so prevent external shocks upsetting the system.[25]

Inflation targets have now been introduced in a large number of countries.[26] In influential academic circles the associated system of macroeconomic control has come to be labelled 'New Keynesianism'. The explanation for this terminology is to be sought in journal articles and academic seminars remote from the original debates over Keynesianism and monetarism in the UK. While British policy-makers were grappling with such down-to-earth matters as monetary base control, distortions to sterling M3 and the cyclical behaviour of the PSBR, a number of (almost exclusively) American economists extended the monetarist critique of the effectiveness of fiscal policy. The argument was developed into a wider claim that – if rational agents expected a macroeconomic policy change – they would be able to anticipate its impact and so render it ineffective. One of their favourite accompanying arguments was that the two sides of a balance sheet cancel out, so that the behaviour of organizations (such as banks) with balance sheets could not affect anything important in the economy.[27] Paradoxically, the effect of this argument was to demolish traditional monetary economics, since most money nowadays takes the form of bank deposits and is predominantly a liability of the banking system.[28] (Essays 14 and 15, on pp. 281–315 and pp. 316–29 respectively, present a practitioner's view of relationships between money and the economy, in which bank deposits are extremely important to agents' expenditure decisions.)

The exponents of this rather nihilist type of thinking became known as the New Classical School. For many people New Classical Economics went much too far. A counter-argument developed, among again (almost exclusively) American economists, that the wide range of price and wage rigidities found in the real world preserved the macroeconomic potency of monetary policy. The phrase 'monetary policy' was understood here as the variation of the money market rate (which is one, but only one, measure of 'the rate of interest') by the central bank to influence the growth of aggregate demand. This theoretical viewpoint was married with the idea of basing interest rates on the output gap to engender 'New Keynesian macroeconomic policy'.[29]

Once a label has been attached to a body of ideas – particularly a quite influential body of ideas – that label tends to stick. However, it has to be said that 'New Keynesianism' has almost nothing to do with Old Keynesianism of the British sort (that is, the Keynesianism of the 364, with fiscal fine-tuning, incomes policies and enthusiasm for state investment). As noted earlier, the Keynesians of the 1960s and 1970s insisted on the unimportance of monetary policy, basing their view on the supposed interest-inelasticity of investment spending and, indeed, of aggregate demand as a whole. The Old British Keynesians were particularly dismissive of the Bank of England and 'the Bank rate tradition'. But New Keynesianism regards central-bank decisions on interest rates as the virtual factotum of macroeconomic policy. Obviously, this makes sense only if aggregate demand is responsive to interest rates. Meanwhile New Keynesianism is almost completely silent on fiscal policy and its devotees have little to say on the merits of public ownership.[30]

Further, New Keynesianism has only the slightest of connections with the Keynes of *The General Theory*. In *The General Theory* the key 'rate of interest' was the yield on long-dated bonds, which Keynes saw as being determined by the interaction of the demand to hold a broad measure of money (dominated by bank deposits) with the quantity of money created by the banking system (that is, mostly by the commercial banks). By contrast, in New Keynesianism the vital interest rate is the money market rate set by the central bank. But the money market rate and the long-bond yield are distinct phenomena, with their movements often being of very different amounts and sometimes in opposite directions. There are dozens of statements in *The General Theory* and other works by Keynes in which he criticized an exclusive focus on the short-term rate in the money market and urged the much greater importance of the long-term rates set in the bond market.

Why, then, do members of the New Keynesian school call themselves 'Keynesian'? Part of the answer is to be sought in an attitude shared with the New Classical School. This is an aversion to any kind of macroeconomic theorizing in which the commercial banks, and the broadly defined money aggregates, play a significant role. The New Keynesians are agreed that the interest rate under central bank control should not be geared to the meeting of money supply targets. In line with their theoretical commitments, they instead advocate that the central bank rate should be set by 'looking at everything', although with a particular focus on the output gap. They criticized the Bundesbank for following broad money targets in 1990s and now they criticize the European Central Bank (ECB) for following the same approach.[31] The denigration of money supply targets helps with the marketing of their ideas, as it lets other people know that they are not 'monetarist'. And does it not follow, if monetarism and Keynesianism are taken to define the entire stage of macroeconomics, that economists who are not the monetarist must be Keynesian? Indeed, if the economists concerned are very trendy and know all about quadratic loss functions, should not they be allowed to call themselves 'New Keynesian'?[32]

Ironically, the New Keynesians have adopted – as a central tenet in their creed – an idea which is undoubtedly monetarist in origin. They believe that monetary policy should be organized to deliver price stability (or, at any rate, the low inflation rate specified in an inflation target). A compelling argument for a wholehearted commitment to price stability was made by Friedman in his 1967 presidential address to the American Economic Association, when he proposed that there is no long-run trade-off between unemployment and inflation. Friedman's related proposition – that a so-called 'natural rate of unemployment' is associated with a stable rate of price change – lies at the core of New Keynesianism. An implication of Friedman's thinking is that an artificially defined 'full-employment rate of unemployment' lower than the natural rate is accompanied by an ever-accelerating rate of inflation and, hence, that the pursuit of full employment by macroeconomic means is a mistake. As this accelerationist hypothesis was the knockdown argument against old-fashioned Keynesianism, its adoption by the New Keynesians is remarkable. Whereas in Old Keynesianism full employment was the main policy goal and fiscal policy was the principal means to achieve it, New Keynesians concentrate on inflation and regard monetary policy as virtually omni-competent in their favoured inflation-targeting regime.

IV

For participants in the debates between Keynesianism and monetarism in the 1960s and 1970s, and indeed for people who are interested in those debates for their wider message about politics and society, the rotation of labels may be bewildering.[33] Part of the trouble here is the iconic status of Keynes in economics. Whatever its weaknesses, his *General Theory* did provoke a rethinking of the causes of business fluctuations and determined the contents of macroeconomics courses in universities for at least the next 70 years. Keynes was also the principal intellectual influence on the financing pattern of Britain's war effort between 1939 and 1945, making him – by association – the Churchill of economics. It is hardly surprising that any school of thought should try to capture his name as part of the branding exercise. But – to repeat – New Keynesianism has little to do with the Old Keynesianism, largely UK originated and UK based, which is the type of Keynesianism mostly under review in this collection of essays.

Indeed, a case can be made that the best way to characterize the policy-making framework now dominant across the industrial world is 'output-gap monetarism'. As explained in the last few paragraphs, two notions – of *a trend level of output* (that is, of a zero 'output gap') associated with unemployment at its natural rate (and, magically, with a rate of price change which neither accelerates nor decelerates), and of *a trend rate of output growth* which keeps the output gap at zero – are basic to New Keynesianism.

But these notions are derived from Friedman's accelerationist hypothesis, even if Friedman himself never spelt it out.[34] In the 1970s and 1980s they would have been regarded as a specifically monetarist. To the extent that (virtually) all economists now accept both the absence of a long-run trade-off between unemployment and inflation and the primacy of monetary policy over fiscal policy, they are 'monetarists' in the sense that would have been understood in Britain in the late 1970s and early 1980s. They have become monetarists, whether they like it or not. (The phrase 'output-gap monetarism' is used in Essay 13, 'Has macroeconomic stability since 1992 been due to Keynesianism, monetarism or what?'; see pp. 262–76).

Readers may wonder about my own position in the various debates. I have been an advocate of the ideas called 'British monetarism' in this book since the mid-1970s and remain so. It will be clear from the following collection that I believe these ideas have been largely responsible for the dramatic improvement in macroeconomic policy-making in the period. I expect that most British economists – particularly the self-styled 'Keynesians' in British universities – will disagree. So be it. But I would be grateful if – when they disagree – they rely on logic and fact, and not rhetoric and authority, to pursue the debate. The Hahn–Neild campaign to organize the 1981 letter to *The Times* rested on two assumptions, that 'the profession' could be defined as the group of economists teaching in universities and that the latter had authority because it expressed 'the profession's' view. But 'the truth' of a statement depends on its logical integrity and empirical verifiability (or falsifiability, if one prefers Popper's way of putting it), not on the job held by the person making it. The notion that only people who teach in universities can propound 'the truth' was wrong then and it is wrong now.

I should make clear, finally, that I regard Keynes as the greatest ever economist, even though I am far from agreeing with everything he said and wrote. If my views on the British Keynesians of the immediate post-war generation are much more negative, I do not wish to deny the continuing relevance of Keynes's work to contemporary economic problems. (I wish more people would read what Keynes actually said! That is one message of Essays 1 and 2, pp. 33–45 and pp. 46–54 respectively.) Part of Keynes's greatness was that his theoretical work was motivated by practical problems and intended to have a real-world application; its real-world relevance was therefore of greater importance than its technical rigour. As noted by John Kay in a recent obituary notice on Kenneth Galbraith: 'Economists are learning again, as Keynes knew and Galbraith never forgot, that economics derives value from its contribution to public affairs and to everyday life.'[35] For all their faults, I hope these essays derive some value from having made a contribution of that kind.

NOTES

1. Attitudes towards macroeconomic policy have changed radically in the last 20 years. Some readers may be bemused that the views summarized under 'Keynesianism' in this paragraph were ever held by a large and influential group of economists. However, the problem with substantiating the thumbnail sketch of Keynesianism (which is of course 'Old British Keynesianism' of the kind which flourished in the 1960s and 1970s) given here is not the lack of references, but the profusion. On, first, the efficiency of fiscal policy in managing demand, see as an example the remarks on p. 45 of R.J. Ball, *Money and Employment* (London: Macmillan, 1982). A vast number of references could be given on, secondly, the commitment to full employment and the validity of fiscal policy as a means of achieving it, but – for a flavour of the literature – see chapters 13 and 14 of D. Winch, *Economics and Policy: a Historical Study* (London: Hodder and Stoughton, 1969). Finally, for a relatively early advocacy of incomes policy, see chapter 10, 'The way forward', of A. Shonfield, *British Economic Policy Since the War* (Harmondsworth: Penguin, 1958), which included the remark 'the success or failure of the trade unions in controlling their members will determine the level of prices – and nothing else' (p. 278).
2. As with note 1, a vast number of references are potentially available, but see – for a recent illustration – the opening remarks at the start of the paper on 'The case against the case against discretionary fiscal policy' by A. Blinder, pp. 24–61, in R.W. Kopcke, E.M.B. Tootell and R.K. Triest (eds), *The Macroeconomics of Fiscal Policy* (Cambridge, MA: MIT Press, 2006. 'Times change. When I was introduced to macroeconomics as a Princeton University freshman in 1963, fiscal policy – and by that I mean I *discretionary* fiscal *stabilization* policy – was all the rage . . . In those days, discussions of monetary policy often fell into the "Oh, by the way" category, with a number of serious economists and others apparently believing that monetary policy was not a particularly useful tool for stabilization policy' (ibid.)
3. By 'the rate of interest' Keynes meant 'the yield on long-dated bonds'. He did not mean 'the rate set by the central bank by open market operations in the short-term money market'. However, the discussions on the subject in *The General Theory* are muddled and inconsistent. This has subsequently been the source of great confusion in monetary economics and the theory of macroeconomic policy-making.
4. A. Leijonhufvud's *On Keynesian Economics and the Economics of Keynes* is particularly good on the place of investment interest-inelasticity in Old British Keynesianism. See Leijonhufvud, *On Keynesian Economics and the Economics of Keynes* (New York: Oxford University Press, 1968), p. 405. The subject is picked up below on pp. 64–5, in Essay 3 on 'Keynes, the Keynesians and the exchange rate'.
5. See E.D.N. Worswick and P.H. Ady (eds), *The British Economy in the Nineteen-Fifties* (Oxford: Clarendon Press, 1962), p. 419. A book on *The Labour Government's Economic Record: 1964–70*, edited by an Oxford economist, W. Beckerman, and published in 1972 (London: Duckworth), contained chapters on 'Fiscal policy for stabilization', 'Policy towards nationalised industries', 'Labour market policies' and 'Economic planning and growth', and not a single index reference to interest rates, the money supply or the quantity of money. Beckerman himself, and the authors of the chapters on fiscal policy and labour market policies, were among the 364 economists who signed the letter to *The Times* in 1981 condemning 'monetarist policies'.
6. The economics and television journalist, Peter Jay, noticed the deterioration in the macroeconomic outcomes from the late 1950s, proposing in his 1975 Wincott Lecture 'the dilemma hypothesis' that – unless the commitment to full employment were abandoned – inflation would accelerate from one cyclical peak to the next. 'The problem is only beginning to be noticed very late in the day because it operates transcyclically rather than intracyclically'. See. P. Jay, *The Crisis for Western Political Economy* (London: Andre Deutsch, 1984), p. 42.
7. Friedman did publish at length on the UK in *Monetary Trends in the United States and the United Kingdom* (Chicago and London: University of Chicago Press, 1982), but that

was after 'British monetarism' (as it is understood in this volume) was already up and running. Friedman's influence in the UK in the 1970s owed much to the work of the London think tank, the Institute of Economic Affairs, and the writings of Peter Jay on *The Times* and Samuel Brittan on the *Financial Times*.

8. The USA did have an incomes policy during the Nixon administration of the early 1970s, but this was exceptional.
9. See, for an example of the Conservative government's attitude towards the public sector unions, M. Thatcher, *The Downing Street Years* (London: HarperCollins, 1993), p. 143. The relationship between belief in the importance of money to the economy and support for market mechanisms is clear from surveys of economists' attitudes and is almost an empirical regularity in itself. See J. Aschheim and G.S. Tavlas, 'On monetarism and ideology', *Banca Nazionale del Lavoro Quarterly Review*, June 1979, pp. 167–86.
10. Note that this proposition is considerably more troublesome than it seems, because some monetarist economists believe that a narrow money measure (or even the monetary base itself) is the key one for monetary analysis, whereas others favour broadly defined money measures. A much cited theoretical critique of the significance of broad money measures (dominated by bank deposits and so influenced in size by the behaviour of the banking system) was given by Fama in his 1980 paper on 'Banking in a theory of finance'. (E. Fama, 'Banking in a theory of finance', *Journal of Monetary Economics*, vol. 6, 1980, pp. 39–57.) I have argued consistently that broad money is of far greater importance than narrow money in the determination of asset prices and national income. See, for example, 'Credit, broad money and economic activity', pp. 171–90, in T. Congdon, *Reflections on Monetarism* (Aldershot, UK and Brookfield, USA: Edward Elgar, 1992), as well as T. Congdon, *Money and Asset Prices in Boom and Bust* (London: Institute of Economic Affairs, 2005) and T. Congdon, 'Broad money vs. narrow money: a discussion following the Federal Reserve's decision to discontinue publication of M3 data', *London School of Economics Financial Markets Group Special Paper Series*, no. 166, May 2006.
11. Friedman's precise words were 'There is no necessary relation between the size of the PSBR and monetary growth' in *Memoranda on Monetary Policy* (London: Her Majesty's Stationery Office, 1980), p. 56. In my opinion Friedman was largely wrong about this. The relationship between big budget deficits and rapid monetary growth is very clear in hyperinflations, and is also evident (although perhaps less obvious) in milder situations. It is easy to show that, when steady states are being compared, the rate of money supply growth is a positive function of the ratio of the budget deficit to national income if two ratios – the ratio of public debt in non-bank hands to national income and the ratio of the banking system's claims on the private sector to its total assets – are given. (See my paper 'The analytical foundations of the medium-term financial strategy' in the May 1984 issue of the Institute for Fiscal Studies' journal, *Fiscal Studies*, reprinted in pp. 65–77 of Congdon, *Reflections on Monetarism*.) A key item on the agenda of the Thatcher government in 1979 was the liberalization of the financial system, which implied – almost inevitably – a *rise* in the ratio of the banks' claims on the private sector to their total assets. The prospect of rapidly growing bank credit to the private sector reinforced the case for budgetary restraint. As far as I am concerned, strong public finances are an essential element in any framework of macroeconomic stability.
12. K. Burk and A. Cairncross, *'Goodbye, Great Britain': The 1976 IMF Crisis* (New Haven, CT and London: Yale University Press, 1992), pp. 146–7. As noted, my argument had the effect of reinstating 'the Treasury view' of the 1920s and 1930s. The Treasury view was associated with Keynes's contemporary and sometime antagonist Sir Ralph Hawtrey, who has been described as 'the Treasury's in-house economist in the inter-war period'. (G.C. Peden, *Keynes and His Critics: Treasury Responses to the Keynesian Revolution 1925–46* [Oxford: Oxford University Press for the British Academy, 2004], p. 16.) Hawtrey's analysis was used by the Treasury in the 1920s to resist demands for extra public works expenditure. (The definitive paper was R. Hawtrey, 'Public expenditure and the demand for labour', *Economica*, vol. 5, 1925, pp. 38–48.) According to Hawtrey, extra public works spending 'can only increase employment if accompanied by

the appropriate monetary or credit expansion, and this latter would in any case increase employment whether accompanied by increased public spending or not'. (Peden, *Keynes and His Critics*, p. 62.)

13. I made this case in the late 1970s in a number of newspaper articles and stockbroker research papers, and in evidence to the House of Commons Expenditure Committee. Some of the material is reprinted in T. Congdon, *Reflections on Monetarism* (Aldershot, UK and Brookfield, USA: Edward Elgar for the Institute of Economic Affairs, 1992), part 1, section 3, 'The rationale of the medium-term financial strategy', pp. 36–77.
14. The organization of the campaign to collect signatures for the letter is described in an appendix to P. Booth (ed.), *Were 364 Economists All Wrong?* (London: Institute of Economic Affairs, 2006). For the full wording of the letter, see p. 176.
15. But see pp. 484–90 of R. Layard, S. Nickell and R. Jackman, *Unemployment: Macroeconomic Performance and the Labour Market* (Oxford: Oxford University Press, 2nd edition, 2005) for continued advocacy of incomes policies.
16. Variants of 'monetary base control' were proposed in the early 1980s by, for example, Brian Griffiths of the City University Business School (who became head of the Policy Unit at No. 10 Downing Street in1985) and Gordon Pepper of the stockbroking firm, W. Greenwell & Co. The Bank of England quietly, but effectively, resisted the proposal. (See C.A.E. Goodhart, M.D.K.W. Foot and A.C. Hotson, 'Monetary base control', *Bank of England Quarterly Bulletin*, June 1979, pp. 149–59, for a review of the arguments.) I opposed monetary base control in a number of pieces, such as 'First principles of central banking', *The Banker*, April 1981, pp. 57–62. My 1982 book on *Monetary Control in Britain* argued that there was a trade-off between the precision of a system of money supply targets on the one hand and the freedom and efficiency of the banking system on the other. (T. Congdon, *Monetary Control in Britain* [London: Macmillan, 1982].) In the 15 years from 1992 it has been possible – without monetary base control – to reconcile a liberalized and largely deregulated banking system with an almost constant annual inflation rate of 2 to 2.5 per cent. The monetary base debate is dead.
17. See note 10 for an introduction to this debate. Useful comments on the debate are to be found, for example, in G. Pepper, *Restoring Credibility: Monetary Policy Now* (London: Institute of Economic Affairs, 1992), pp. 10–17, and P. Temperton, *UK Monetary Policy: The Challenge for the 1990s* (London: Macmillan, 1991), pp. 23–98.
18. For the commentary on Budd's lecture, see pp. 43–55 of A. Budd, *Black Wednesday* (London: Institute of Economic Affairs, 2005). (The phrase 'shocking incompetence' appeared on p. 55.) For my pieces in *The Times*, see *Reflections on Monetarism*, pp. 115–94.
19. I dissented from the majority position. In *Monetarism Lost: And Why It Must Be Regained* (London: Centre for Policy Studies, 1989) I argued that a system of broad money targets – like that which had been in existence from 1976 to 1985 – should be reintroduced. Is it fair to ask – so many years later – 'could the continuation of the 1976–85 arrangements have had a worse outcome than the disastrous boom–bust cycle that was actually experienced in the 1986–92 period?'?
20. By a 'managed currency' Keynes meant – essentially – the variation of interest rates to keep the growth of bank credit and deposits at a low, stable, non-inflationary rate, without regard to the effect of interest rates on the exchange rate. See J.M. Keynes, *A Tract on Monetary Reform* (1923), reprinted in *The Collected Writings of John Maynard Keynes*, vol. 4, D. Moggridge and E. Johnson (eds) (London: Macmillan for the Royal Economic Society, 1971), pp. 141–54. Lord Skidelsky has pointed out to me that, by promoting the Bretton Woods system of fixed exchange rates in his negotiations with the USA at the end of the Second World War, Keynes may have changed his mind. For the larger good of a liberal world economy, he was prepared to accept that UK monetary policy ought to be subordinated to external influences. For Keynes's defence of his own position in a celebrated speech to the House of Lords on 18 December 1945, see R. Skidelsky, *John Maynard Keynes 1883–1946: Economist, Philosopher, Statesman* (London: Macmillan, 2003), pp. 819–20.

21. In the early 1990s the phrase 'monetarist mumbo-jumbo' was often used by Samuel Brittan in his columns in the *Financial Times*.
22. I was appointed to the Treasury Panel in December 1992 and remained a member until the general election in May 1997. Mr Gordon Brown, the Chancellor of the Exchequer in the new Labour government, brought the Panel to an end. By giving operational independence for interest rate decisions to the Bank of England, Brown ended both the central position of the Treasury in the conduct of macroeconomic policy and Treasury ministers' need for a high volume of macroeconomic advice.
23. I forecast favourable medium-term combinations of inflation and output growth in 'Better economic prospects in the mid-1990s: why the growth/inflation trade-off will improve in coming years', pp. 1–17, *The State of the Economy* (London: Institute of Economic Affairs, 1993). However, I thought that the improvement would be cyclical and further episodes of incompetent macroeconomic management would happen in due course. Happily, that surmise has been wrong so far (summer 2006). The depoliticization of interest rate decisions – combined with the neutralization of fiscal policy by medium-term rules – has been vital here, as noted by Budd in his 2002 Julian Hodge lecture. (See note 24.)
24. The Bank of England sometimes says that its decisions are based on 'a suite of models'. On other occasions it highlights its quarterly macro-econometric model. ('The new Bank of England quarterly model', *Bank of England Quarterly Bulletin*, vol. 44, no. 2, summer 2004, pp. 188–95.) For the prominence of the output gap in the thinking of members of the Monetary Policy Committee and in interest-rate setting, see Sir Alan Budd, 'The quest for stability', Julian Hodge Institute of Applied Macroeconomics annual lecture, Cardiff, given on 25 April 2002, republished in autumn 2002 issue of *World Economics* (Oxford: NTC Economic and Financial Publishing), vol. 3, no. 3.
25. Notice, in the way that the argument is presented, that expectations – not money supply growth – seem to determine inflation. Mervyn King, as Governor of the Bank of England, has written: 'Because inflation expectations matter to the behaviour of households and firms, the critical aspect of monetary policy is how the decisions of the central bank influence expectations . . . The precise "rule" which central banks follow is less important than their ability to condition expectations.' (See M. King, 'Monetary policy: practice ahead of theory', pp. 9–24, in K. Matthews and P. Booth [eds], *Issues in Monetary Policy* [Chichester: John Wiley and Sons, 2006].) The quotation is from pp. 13–14. But would an expected inflation rate of 2 per cent a year remain realized and 'expected' if the central bank consistently presided over a double-digit annual rate of money supply growth? The expectations-determine-outcomes doctrine – which is a by-product of New Classical Economics and has become quite fashionable in some academic circles – seems to me another of the many misunderstandings under which monetary economics has laboured over the decades. How many times does it have to be reiterated that inflation is caused by faster growth of the quantity of money than the quantity of output? In qualification, on 10 May 2006 King did say, 'in the long run, if you have rapid growth of broad money, you are going to get inflation'. (Quoted in *The Economist*, 13 May 2006, p. 35.)
26. Inflation targets were first introduced in New Zealand, when Donald Brash was governor of the Reserve Bank (that is, the central bank).
27. The elimination of the banking system from monetary economics can be rationalized by the application of the Modigliani–Miller theorem to banks, as in Eugene Fama's article 'Banking in a theory of finance', *Journal of Monetary Economics*, vol. 6, no. 1, pp. 39–57.
28. 'Fama's attack on the problem of integrating monetary theory and value theory is radical: he simply abolishes monetary theory.' K.D. Hoover, *The New Classical Macroeconomics: A Sceptical Inquiry* (Oxford and Cambridge, MA: Basil Blackwell, 1988), p. 95.
29. The key reference is R. Clarida, J. Galí and M. Gertler, 'The science of monetary policy: a New Keynesian perspective', *Journal of Economic Literature*, vol. 37, no. 2, 1999, pp. 1661–707. For a sympathetic appraisal of New Keynesian macroeconomics, see G. Zimmermann, 'Optimal monetary policy: a New Keynesian view', *The Quarterly Journal of Austrian Economics*, vol. 6, no. 4, winter 2003, pp. 61–72.

30. The 'Bank rate tradition' was the practice of varying Bank rate in order to influence the exchange rate and the economy. Bank rate was first used as a means of protecting the Bank of England's gold reserve in the 1830s and fluctuated widely over the next 100 years. It stayed at 2 per cent – apart from a few weeks in 1939 – from 1932 to 1951. These were the years – including the Second World War and the post-1945 nationalizations, and accompanied by extensive quotas, rationing and controls – when the Keynesian doctrine of the interest-inelasticity of demand became established. Hawtrey defended the Bank rate tradition in his *A Century of Bank Rate* (London: Frank Cass, 1962, first published in 1938). On p. 263 he referred to 'the deplorably prevalent tendency to disparage, distrust or ignore the Bank rate tradition' and on p. 264 he denounced proposals to manage demand by fiscal action. But Hawtrey's confidence in a high interest-rate elasticity of demand had become unusual by the late 1930s.
31. In the early years of the new single European currency the ECB defended its adherence to broad money targets in a number of articles, with the research led by its first chief economist, Otmar Issing. See, for example, a short article on 'Inflation forecasts derived from monetary indicators', pp. 22–4, in the June 2006 issue of the ECB's *Monthly Bulletin*.
32. The idea of using a quadratic loss function to derive 'optimal monetary policy' (which would enable the fluctuations of the output gap to be minimized) was proposed by Svensson in papers for academic conferences in 1998 and 1999. See L. Svensson, 'Inflation targeting as a monetary policy rule', *Journal of Monetary Economics*, vol. 43, 1999, pp. 607–54. Clarida, Galí and Gertler said, on p. 1662 of their 1999 *Journal of Economic Literature* article: 'we adopt the Keynesian approach of stressing nominal price rigidities, but at the same time base our analysis on frameworks that incorporate the recent methodological advances in econometric modelling (hence the term "New").' As should be clear from the text, I regard the notion of attaching the New Keynesian label to the sort of macroeconomics propounded in the Clarida, Gali and Gertler paper as rather silly. I am not alone in protesting against the extraordinary flexibility of the contents of 'New Keynesianism'. See, for example, the entry on 'Bastard Keynesianism' by J. Lodewijks, pp. 24–9, in J.E. King (ed.), *The Elgar Companion to Post Keynesian Economics* (Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 2003). It also seems to me that the technical complexity of the concepts put into play by Svensson and others is disproportionate to their empirical verifiability and practical usefulness.
33. Another school of thought is Post-Keynesianism. The main themes of Post-Keynesianism are the importance of money and financial markets to macroeconomic outcomes, but with an insistence that – in accordance with Keynes's own work – money and financial markets are not neutral in their effects on the economy. Post-Keynesians also hold that money is created 'endogenously' (that is, within the economy by the banking system rather than outside the economy by central banks). Because banks and the financial system affect demand and output in Post-Keynesian theory, Post-Keynesianism is quite distinct from New Keynesianism of the Clarida, Gali and Gertler variety, as well as from the New Classical Economics. It has its own journals, a large literature and a conference subculture. The *Elgar Companion* by King, mentioned in note 32, gives a good sample of the Post-Keynesians' interests.
34. See the Appendix to this Introduction for further discussion.
35. J. Kay, 'Goodbye Galbraith', *Prospect*, June 2006, p. 12.

APPENDIX: THE ORIGINS OF THE CONCEPT OF 'THE OUTPUT GAP'

The origins of the phrase, 'the output gap', when used in a Friedmanite, natural-rate-of-unemployment setting, are obscure. I seem to have been one of the first economists to use it in presentations to investment clients in the mid and late 1980s. However, researchers at the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) – now almost completely unsung heroes – probably 'got there first'.

A quotation from a paper I wrote for the March 1991 issue (which reviewed the forecast made in an earlier exercise on the same lines in September 1989) of my firm's *Monthly Economic Review* is very clear:

> A number of concepts will define the analytical approach . . . [T]he first is the idea of 'potential output'. This is the level of output at which the pressure of demand is in line with the economy's capacity to supply, at which – in consequence – inflation is stable. Associated with potential output are certain levels of unemployment and capacity utilization. [Secondly,] the level of unemployment at which pay settlements (and so inflation) are stable is known among economists as the 'natural rate of unemployment'. When actual output is equal to potential output, the actual rate of unemployment is likely to be equal or close to the natural rate of unemployment. There is no specific name for the degree of capacity utilization which keeps the inflation rate stable, but this concept also hovers in the background of the discussion. The third idea is the rate at which potential output grows over time, which may be called the underlying or 'trend' growth rate. If the economy were continuously to grow in line with its trend rate, and if actual output were continuously in line with potential output, inflation would be stable. It should be emphasized – since people are sometimes sloppy in their use of words – that this does not mean that the price level would be stable. To reduce inflation it is necessary to have actual output beneath potential output. This introduces our fourth concept, the 'output gap'. When actual output is above potential output, there is a 'positive output gap'; when it is beneath potential output, the output gap is 'negative'. A positive output gap is accompanied by rising inflation, a negative output gap by falling inflation. A positive output gap is usually the result of a boom, after an extended period of growth above its trend rate; a negative output gap, by contrast, is the sequel to recession.

However, I had been using the idea of the output gap in client presentations for several years before this. The key proposition was that the change in inflation depended on the level of the gap. It followed – since every well-patterned business cycle has four phases (phase one, of above-trend growth while the level of output is beneath trend; phase two, of above-trend growth while the level of output is above trend; phase three, of beneath-trend growth [or falling output] while the level of output is still above trend; and phase four, of beneath-trend growth [or falling output] while the level of output is beneath trend) – that two phases have counter-intuitive, 'unexpected' outcomes. These phases are the first, when growth is above trend and yet (because the output gap is negative) inflation is falling or at least not rising, and the third, when growth is poor (or output is even going down) and is accompanied (because the output gap is positive) by rising inflation and/or a failure of inflation to decline. To generalize rather boldly, the first phase sees high positive returns for stock market investors, whereas the third phase is bad news. Investors should be geared up in phase one, but be liquid in phase three. (I am aware that academic exponents of 'rational expectations' view recurrent patterns in stock market cycles as impossible. That is their problem.)

As noted above, the structure of the analysis in the March 1991 paper replicated that in a *Monthly Economic Review* of September 1989. But I had been using the framework well before 1989. In a note to clients of 2 August 1988 I wrote:

> The point is that inflation increases because the economy is operating with an inadequate margin of spare resources. Unemployment is beneath the rate (the so-called 'natural rate') consistent with stable wage settlements, while capacity utilisation is excessive. *To dampen inflation it is necessary to restore an appropriately high margin of spare resources. A slowdown from strongly above-trend growth to trend growth is not enough to do the trick. Instead at least two or three quarters of beneath-trend growth are needed* . . . We doubt that beneath-trend growth will be recorded before early 1989 or that inflation will moderate before early 1990.

(The italics were in the original. In the event, beneath-trend growth started in the third quarter 1989, while the peak in the 12-month rate of retail price inflation came in the third quarter of 1990.)

When the 'output gap' is mentioned in academic literature, the usual reference is to a paper by Taylor in 1993. His 1993 paper proposed that central bank behaviour could be described by rules ('Taylor rules') in which the money market rate is based on the inflation rate and the output gap. But it neither contained the phrase 'the output gap' nor made large statements about the relationship between the output gap and inflation. I have found an OECD Working Paper of May 1989, by Raymond Torres and John Martin, with a clear statement of the principles of later output gap estimation.

> The particular concept of potential output which is currently being used by the OECD Secretariat refers to the level of output that is consistent over the medium-term with stable inflation. As such, this concept is clearly different from the maximum attainable level of output in an engineering sense that could be produced with given factors of production.

Torres and Martin refer to a 1987 IMF research paper (by C. Adams, P.R. Fenton and F. Larsen) and express thanks to the authors 'for supplying us with the IMF data on output gaps'.[1] (The Adams, Fenton and Larsen paper may include the phrase 'output gap', but I do not know, as I have so far been unable to track it down on the IMF website. If it did include the phrase and related passages with its rationale, the three authors deserve a Nobel Prize, because this is where the now dominant and very successful style of macroeconomic policy-making began.)

When I first used the phrase the 'output gap' in a natural-rate setting, I did not know of the OECD's work. (My 1991 paper did make any footnote reference to a 1990 IMF paper, which also appears in the notes to Essay 4 in this collection. I acknowledged a debt to Friedman for the idea of the natural rate of unemployment and, hence, of an output level associated with the natural rate.) I just found the concept of the gap useful for answering questions in which my clients were interested. It is indeed ideal for handling such questions as 'how long will growth have to run at a beneath-trend rate?' and 'what will inflation be two years from now?', the answers to which have a major bearing on share prices and bond yields. In the late 1980s I was not aware of the existence of earlier papers, academic or otherwise, in which the output gap had been mentioned. I was aware of the 'Okun gap' idea, which originated in a 1962 paper on 'Potential GDP: its measurement and significance', published by the American Statistical Association in its *Proceedings* (which is mentioned by Torres and Martin in their 1989 paper). But in neither this 1962 paper nor others did Okun use the phrase 'the output gap'.[2]

More fundamentally, Okun's gap is quite different from the 'output gap' notion conceived in the late 1980s. Okun took full employment as the policy goal, and his gap was the difference between actual output and potential output where potential output was output *at full employment*. In my 1991 paper I was – self-consciously – following Friedman. I took low, stable inflation as the policy goal. My output gap – like that of Torres and Martin – was therefore the difference between actual output and potential output where potential output was the output level associated *with the natural rate of unemployment*. This may sound like a quibble, but it is not.

Okun's gap between actual and potential gross national product (GNP) is zero at full employment. Otherwise – in Okun's own writings – the gap always takes a positive value, which increases with unemployment. So the higher is unemployment, the higher is the value of Okun's gap. Whether inflation is stable or not at full employment was not Okun's principal concern, but – as a self-proclaimed and articulate Keynesian – he certainly did not like the possibility that full employment might imply accelerating, or even high, inflation. Other writers – such as Samuelson's textbook on

Economics in its treatment of the subject – noted the possibility of over-full employment, which would be associated in the Okun way of thinking with a negative output gap. As a result, the output gap in the Okun sense becomes more negative, the *lower* is the unemployment rate and the stronger are the *upward* pressures on inflation.

By contrast, the gap in my 1991 paper is zero at the natural rate of unemployment. The gap takes a positive value when unemployment is beneath the natural rate and a negative value when it is above the natural rate. The output gap in my sense becomes more negative, the *higher* is the unemployment rate and the stronger are the *downward* pressures on inflation. The Okun notion of the gap is a product of Keynesian macroeconomics, in which the policy priority was high employment. My notion of the gap was derived from Friedman and – since it helps to formulate policy rules in an environment where low inflation is the key target for policy-makers – it is plainly part of the monetarist toolkit. (The Torres and Martin paper made no reference to Friedman, although – in my opinion – it should have done. It proposed a 'non-accelerating wages rate of unemployment', or NAWRU, which is virtually the same thing as the natural rate of unemployment apart from being clumsier in expression. They might be differentiated on the grounds that NAWRU is associated with stability of the rate of *nominal* wage change, whereas the natural rate is associated with stability of the rate of *real* wage change, but in practice movements in real and nominal wages are closely correlated.)

At any rate, the monetarist concept of the gap had virtually replaced Okun's by the mid-1990s and is now standard. How did this happen? My guess is that the output gap framework started in investment circulars and the international agencies, particularly the OECD and the IMF, and spread to the academic profession via the quality financial press and the centres of policy-making praxis (that is, finance ministries, central banks and again the international agencies). The output gap notion was certainly understood in the IMF and the OECD well *before* the Taylor 1993 paper. (For a comparison of the monetarist and Keynesian concepts of the output gap, see Table I.1 on pp. 25–6.)

When I joined the Treasury Panel in early 1993 one of my first inputs was a piece of work in which I showed that the *change* in inflation was better explained by the *level* of the output gap than by *the rate of change* of the output gap. It was on the basis of this relationship that I produced a medium-term forecast that was markedly more optimistic for the UK economy than that of other Panel members. (The economy was in phase one of the four-phase cycle. I had been similarly optimistic about the medium-term outlook in 1983 in the same circumstances, for the same reasons *and using the same analytical framework*, although not at that

Table I.1 Two concepts of the output gap

	Keynesian concept of gap	Monetarist concept of gap
Concept of output relative to which the gap is measured	Full employment level of output	Level of output associated with natural rate of unemployment, or 'natural rate of output'
Scale of numbers by which gap is measured	Only positive values, taking value of zero at full employment and rising with unemployment	Positive and negative values, taking value of zero at natural rate of output and positive with output above natural rate
Seminal paper(s)	Okun in 1962 American Statistical Association *Proceedings*/Paish in the 1950s, in association with Phillips, although both Paish and Phillips may have been sceptical about 'full employment' as goal	Friedman 1967 AEA presidential address, published in 1968, and Phelps 1967,* if from an otherwise Keynesian perspective/Paish in the 1950s in association with Phillips
View on the inflation process	Level of inflation a function of level of gap, and change in inflation a function of change in gap	Change in inflation a function of the level of the gap**
Name of associated hypothesis on wage formation	Phillips curve	Accelerationist hypothesis
View on output as a policy objective	To be maximized (implicitly at lowest previously attained unemployment rate), as any shortfall is very expensive because of Okun's Law	Output to be kept at natural rate, even if this is less than the maximum 'in an engineering sense'
View on inflation as a policy objective	Old 'Keynesian', that is, to be controlled by incomes policy, and control of inflation is secondary to achieving full employment, although with many variations	Meeting inflation target is paramount objective of policy and takes precedence over full employment
View on money and inflation	Monetary policy (for example, behaviour of bank deposits) not relevant	Output gap most reliable guide to direction of inflation in short run, but

Table I.1 (continued)

	Keynesian concept of gap	Monetarist concept of gap
	to inflation; labour market critical instead	relationship between money and prices holds in the long run, and short-run fluctuations in real money affect asset prices, demand and employment
Terminology	Initially 'GNP gap', following Okun; now 'output gap' in so-called 'New Keynesian' policy framework, with Taylor rules and so on, but 1993 Taylor paper did not use output gap phrase or refer to link with inflation	First use of 'output gap' phrase in monetarist sense uncertain, but probably in IMF/OECD and/or City circles (that is, practitioners) in the mid-1980s; Congdon gave very clear statement in 1991 and phrase appears in UK official documents at about same time
Implied position of macro decision-taking in the wider polity	Political, government to decide on right mix of inflation and unemployment	Technical, decision on interest rates can be delegated to committee of experts

Notes:
* E.S. Phelps 'Phillips curves, expectations of inflation and optimal unemployment over time', *Economica*, vol. 34, August 1967.
** In Friedman's 1967 presidential address the rate of change of real wages is a function of the divergence of unemployment from its natural rate, but in practice changes in real and nominal wages are closely correlated.

stage the output gap terminology.)[3] Paul Turnbull – who had worked with me at the stockbrokers L. Messel & Co. in the early 1980s and become chief London economist at Merrill Lynch in the late 1980s – and Gavyn Davies, chief international economist of Goldman Sachs, had already adopted the output gap idea. Mr Davies was also appointed to the Treasury Panel, and was interested in the work I submitted on the relationship between the gap and inflation. His team started to carry out analyses of the relationship between the output gap (in a natural-rate, monetarist setting) and inflation rates in the UK and indeed other countries. The Goldman Sachs research was (and is) very widely circulated, and is sometimes cited in John Taylor's papers.

Whatever the precise channels and mechanisms at work in the transmission of ideas, I am confident that the essentials of the output gap framework were common knowledge in the economics community in the City of London, and among research teams at the OECD and IMF, at least five years before it was absorbed into the so-called 'New Keynesianism' of technical academic articles. Indeed, within two or three years from the announcement of the UK's inflation target in late 1992 the notion of basing interest rate decisions on the monetarist, natural-rate concept of the output gap had taken hold. I am not claiming any originality for the underlying ideas which – in my opinion and as I have always said – come from Friedman. But I am protesting against the labelling of the now dominant policy-making framework as 'New Keynesian'. To use this label seems to me a radical departure from the traditional meaning of Keynesianism, a misrepresentation of how policy-making praxis developed in the late 1980s and 1990s, and a travesty of how thought on policy-making should have been characterized as it responded to that praxis. (The phrase 'output-gap monetarism' – mentioned above – again comes to mind and seems more accurate. Some economists have suggested that the framework should be called 'the New Normative Economics' or the 'the New Consensus Monetary Policy'. This is less eye-catching, but far less objectionable.)

Addendum: Since writing this Appendix, I have read further around the subject and need to add some points. The 1987 Adams, Fenton and Larsen paper did indeed include the phrase 'the output gap', where the gap was measured relative to the natural rate of output and was therefore the monetarist concept, as I have defined it. Adams, Fenton and Larsen said in a footnote that their gap concept originated in a paper by Jeffrey Perloff and Michael Wachter at the April 1978 Carnegie-Rochester conference on public policy. (The conference volume, edited by Karl Brunner and Allan Meltzer, was published by North Holland in 1983 as *Three Aspects of Policy and Policy-making*.) Perloff and Wachter said that their paper was in the Okun tradition, claiming that Okun had been worried in his 1962 paper that demand management policy should be consistent with non-accelerating inflation. In his comment Robert Gordon praised Perloff and Wachter's work in 'an innovative paper', but denied that the accelerationist hypothesis had been formulated in the early 1960s. By implication, Gordon disputed Perloff and Wachter's attempt to place themselves in the Okun/Keynesian tradition. Gordon nevertheless emphasized that what Perloff and Wachter had done – by generalizing the analysis of the labour market in Friedman's 1967 presidential address to the whole economy – was important. (He proposed the phrase 'the natural rate of output', probably for the first time. Friedman had not used it in 1967.) But in their contributions to *Three*

Aspects of Policy and Policy-making neither Perloff and Wachter nor Gordon referred explicitly to the Friedman 1967 address or used the phrase 'the output gap'. The phrase was used by Charles Plosser and G. Schwert in their comment. Further, in one brief but perceptive paragraph Plosser and Schwert noted that the gap notion was ambiguous, because it could be calculated relative to a full-employment level of output or the natural rate of output.

Since the early 1990s macroeconomic outcomes have improved to a remarkable extent across the industrial world. Do some of the economists mentioned in this addendum – the economists who pioneered the output gap framework – deserve the Nobel prize? Well, someone does.

Notes

1. See J.B. Taylor, 'Discretion vs. policy rules in practice' *Carnegie-Rochester Conference Series on Public Policy*, vol. 39, 1993, pp. 195–214, and R. Torres and J.P. Martin, 'Potential output in the seven major OECD countries', *OECD Department of Economics and Statistics Working Papers*, no. 66 (Paris: OECD, May 1989).
2. See J.A. Pechman (ed.), *Economics for Policy-making: Selected Essays of Arthur M. Okun* (Cambridge, MA : MIT Press, 1983). In qualification, Okun used the words 'the GNP gap' several times. Other writers may then have used the phrase 'the output gap' in the 1970s and 1980s when they meant Okun's 'GNP gap', although – I confess – my reading at the time was not wide enough to notice this. See p. 19 of John A. Tatom, 'Economic growth and unemployment: a reappraisal of the conventional view', *Federal Reserve Bank of St. Louis Review*, October 1978, pp. 16–22, for an isolated use of the phrase 'output gap' in the late 1970s. (Tatom's gap was the same as Okun's, but he differed from Okun in believing that employment was less responsive to output.) In the 1950s the British economist, Frank Paish, used notions of 'productive potential' and 'the margin of unused potential' in an account of the business cycle, *including the effect of 'the margin of unused potential' on inflation and the balance of payments*. See, particularly, the sixth and seventh chapters of F.W. Paish, *How the Economy Works* (London: Macmillan, 1970). But Paish – worried particularly by the UK's external payments deficits – did not make the crucial step of stating that one, and only one, level of output would be associated with a stable wage and price inflation.
3. For my optimism in 1983, see 'A confident forecast of prosperity in the mid-1980s', pp. 107–11, in Tim Congdon, *Reflections on Monetarism* (Aldershot, UK and Bookfield, USA: Edward Elgar, 1992), based on an article in *The Spectator* of 28 May 1983. The point was that – if inflation accelerated without limit while unemployment was beneath the natural rate – it ought, symmetrically, to decelerate without limit (and eventually be replaced by falling prices) while unemployment was above the natural rate. So an economy with unemployment well above the natural rate could enjoy both above-trend trend and falling inflation for a period. 'The [UK] economy can look forward to the happy combination of lower unemployment and lower inflation' (p. 109). The generalization of these ideas – resulting in the propositions that potential output would be associated with no change in inflation, a situation with output beneath potential (that is, a negative output gap) with falling inflation and a situation with output above potential (that is, a positive output gap) with rising inflation, and finally that the change in inflation depended on the level of the gap – was obvious. For my optimism in 1993, see 'Submission by Professor Tim Congdon', pp. 25–31, in *Report by the Panel of Independent Forecasters* (London: H.M. Treasury, February 1993), and note 23 to the Introduction in this volume.