British Monetary Targets, 1976 to 1987: A view from the fourth floor of the bank of England

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BRITISH MONETARY TARGETS, 1976 TO 1987: A VIEW FROM THE FOURTH FLOOR OF THE BANK OF ENGLAND

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Abstract

Broad money and its credit counterparts played a key role in the conduct of British monetary policy in the period 1976 to 1987. This paper examines the Labour Government's introduction of published targets for M3 and then £M3 in 1976, their impact on policy until the election of 1979, the Conservative Government's retention of £M3 as the centrepiece of its Medium-Term Financial Strategy (MTFS), the evolution of the MTFS and the move to shadowing the Deutschmark in 1987. There is already a vast literature on the conduct of monetary policy in the 1970s and 1980s, encompassing decision making in the upper echelons of government and the more prosaic debates of economists on the rationale for intermediate targets and the stability, or otherwise, of the demand for money. This is an account of the debates which took place between officials at the time from the perspective of a then junior economist working at the Bank of England.

BRITISH MONETARY TARGETS, 1976 TO 1987: A VIEW FROM THE FOURTH FLOOR OF THE BANK OF ENGLAND $^{\rm 1}$

1. Prologue

The British Government began publishing monetary targets in 1976 when the Labour Chancellor, Denis Healey, made a succession of statements about monetary and fiscal discipline in an attempt to stem weakening financial confidence and downward pressure on sterling.² In July 1976, a target rate of growth for M3 was announced and, when a letter of intent was signed with the International Monetary Fund (IMF) in December, a target range for £M3 was announced alongside the IMF imposed limit on domestic credit expansion (DCE).³ The target range for £M3 was renewed each year until Labour lost the election in 1979. (Definitions of UK monetary aggregates and their credit counterparts are set out in Appendix 1).

Mrs. Thatcher's election as Prime Minister in May 1979 is now regarded as a watershed, but it was not so clear at the time. Heath's U-turns in the early 1970s were in the forefront of people's minds and it was commonplace to think that Mrs. Thatcher's bold rhetoric would be tempered by experience of government.⁴ It was in this context that the newly elected Government set about demonstrating its commitment to monetary discipline by raising Minimum Lending Rate (MLR) from 12% to 14% in June 1979 and thence to a record 17% in November of the same year. ⁵ In his April 1980 Budget, Sir Geoffrey Howe unveiled the Conservative Government's Medium-Term Financial Strategy (MTFS) which included multiyear targets for money.⁶ However, the MTFS's denouement came a mere three months later when MLR was cut by 1% point, even though the targeted monetary aggregate was continuing to overshoot its range. MLR was cut by a further 2% points in November 1980.⁷ The Government accepted that its policy had been sufficiently restrictive and conceded that the money supply had proved to be a "wayward mistress", at least on this occasion. 8 Critics of the policy were guick to point out that it had contributed to economic recession, near industrial collapse in some parts of the country and, for some, an abiding hatred of Mrs. Thatcher which still influences voting behaviour. In the Budget of the following year, the MTFS was recast ex post facto to recognize a more interpretive mode of operation. Following the Government's re-election in 1983, Nigel Lawson replaced Geoffrey Howe as Chancellor. The MTFS went through further makeovers and lasted until 1987 when the Government switched to a policy of "shadowing" the Deutschmark and monetary targets ceased to be published. 10

Thirty years on, there is already a vast literature on British macroeconomic policy in the 1970s and 1980s. Much of this literature focuses on the Thatcher Government's supposed attempt to apply monetarist policy prescriptions to the control of inflation and the extent to which the exchange rate overshoot was avoidable or not. In addition, there is an ever growing body of econometric work on the problematic relationship between money, prices and interest rates.¹¹

This paper considers the debates that took place within the UK's "macroeconomic executive", a term used by John Fforde, Bank of England director at the time, to describe:

"[the body through which] macroeconomic policy is decided and carried out by a unified executive branch. This includes...both the Treasury and the Bank of England. The latter is institutionally and operationally separate from the Treasury but is best regarded as the central banking arm of a centralised macroeconomic executive." ¹²

John Fforde did not elaborate, but the macroeconomic executive combined a relatively stable group of career officials in the Bank of England (Bank) and H.M. Treasury (HMT), and a more transient group including the Chancellor of Exchequer, other Treasury Ministers, the Prime Minister and sometimes other Ministers, such as Harold Lever, appointed Chancellor of the Duchy of Lancaster by Harold Wilson with an office in No. 10. ¹³ A clutch of special advisers at No. 10 and the Treasury also played a role in the macroeconomic executive, notably Alan Walters and Brian Griffiths in the Thatcher Governments.

No permanent official of the macroeconomic executive advocated a Friedmanite (Chicagoan) monetary rule in the mid-1970s or later, but there was interest in the experience of countries that were pioneering the use of published monetary targets, starting with West Germany in late 1974, followed by the United States, Switzerland and Canada in 1975. 14 This quartet of countries had successful economies and their example encouraged a form of central bankers' (non-Chicagoan) monetarism with an emphasis on devising a framework for setting interest rates in an inflationary environment. 15 The quartet's example was quickly followed by the UK, France and Italy, but there were important differences between each country in the manner of its implementation. ¹⁶ In the UK, the targets announced by Healey during 1976 were not part of a plan to cede interest rate setting to an operationally independent Bank, following the examples of the US Federal Reserve Bank and the Deutsche Bundesbank. Nor did the UK authorities seek to set interest rates using narrowly defined money (M0 or M1) as an indicator, following the examples of the Swiss National Bank and the Bank of Canada. 17 Instead, Britain set targets for broad money which had a fiscal dimension through £M3's credit counterparts; the targets were an exercise in "the 'political economy' of money supply strategy" whereby an "overriding constraint" was placed on the Government's deficit and its funding. 18

It was clear from the start (in the mid-1970s) that there was no econometrically based model of M3 or £M3 that could be used for policy purposes. The UK authorities controlled £M3 via its counterparts: the public sector borrowing requirement (PSBR), less gilt sales to non-banks, plus sterling bank lending, plus external flows. In the April 1976 Budget, the Government announced a 'cash limits' budgeting system for central government expenditures with a view to improving its control over the PSBR. The targets also meant that HMT would be under greater pressure to raise MLR more promptly and more aggressively to contain credit expansion and create favourable rate expectations for gilt sales. Essentially, Britain's monetary regime was not built on the back of a stable equation or model of money, but on a conceit intended to shackle the state's spending bureaucracies.

2. Sources and evidence

This paper seeks to explain how the UK's rather unusual approach to monetary targeting actually worked between 1976 and 1987 and why the macroeconomic executive gravitated

towards this particular solution and not others. The paper draws on official Government papers which have been declassified under the Freedom of Information Act or the 30-year rule. Records of the Conservative Opposition before 1979 have been drawn from the Thatcher Archive. Reference is made to autobiographies of Ministers and other accounts by members of the macroeconomic executive. Considerable emphasis is placed on analysing the text and sub-text of the *Bank of England Quarterly Bulletin (BEQB)* which, it is argued, provides important insights into debates that took place within the macroeconomic executive.

Official papers remain an important primary source since macroeconomic policy was still decided largely through official channels during this period: we were still in the era of 'Yes, Minister' and had yet to move to government in the style of the more recent television satire, 'The Thick of It'. However, official records focus on agreed positions, rather than disagreements between the personalities, and the mix of motives behind some decisions is not necessarily revealed. To a degree, political biographies can give some insights on motivations and personalities, but biographies are not intended to provide a disinterested view. As we shall see, the Permanent Secretary to the Treasury, Sir Douglas Wass has since written in detail about the 1976 sterling crisis and its aftermath, but he has given few insights into the relationship between the Chancellor, Denis Healey, and Wass's rival, Gordon Richardson, Governor of the Bank. Sir Geoffrey Howe's biography gives an account of the troublesome Alan Walters, economic adviser at No. 10, but this account is contested.

By convention, Governors and Deputy Governors do not write autobiographies; a mistaken practice since many of them would provide another perspective to compare with those of politicians and their political advisers. Economists employed in the macroeconomic executive do not normally presume to write autobiographies, preferring to write as desiccated professionals observing a self-denying ordinance not to challenge the views, or gossip about, their colleagues. This is mannerly behaviour but does not necessarily help future generations understand the past. Instead a vast body of econometric literature has been spawned from the monetary targeting era and most of it is inspired by a desire to prove or disprove Chicagoan monetarist propositions. You have to keep pinching yourself to remember that Britain's monetary targets were *never* operated, or based on an econometric equation or model. Some economists retort that rational policymakers must have had an implicit model in their minds and this issue is addressed subsequently.

More generally, this paper seeks to demonstrate the value of examining the macroeconomic executive in a Namierite manner; to understand the roles of individuals, their personalities, careers, economic beliefs, affiliations and disagreements. The paper draws on the author's experience as an employee of the Bank during most of the period under consideration and on more recent discussions with ex-colleagues. Attempting to mix autobiographical elements in an historical study is a hazardous pursuit, but to ignore relevant personal experience in the interests of purist historiography would be churlish. In any case, there is a gap in our understanding that a view from the macroeconomic shop-floor might help to fill.

3. The Bank as a Renaissance palace

Whereas the upper echelons of most organizations commandeer the higher floors of buildings, the offices of the Bank seem to have been modelled on a Renaissance palace. The offices of the Governors are at ground level and can be seen across the garden courtyard as you enter the front of the building. Directors and valued advisers are granted offices on either side of the Governors' with views over the courtyard, an inner sanctum known as the Parlours. The traditional operating arms of the Bank - Chief Cashier's office, Banking Department and Issue Office - were housed close to the Parlours and at ground level, providing easy access for market practitioners. The second floor, more accurately the piano nobile, was taken up with the Court room, other key meeting rooms and the Governors' dining room. Thereafter status traditionally declined with distance from the Parlours. The third floor was shared between International Division (ID) and Financial Statistics Division ID was responsible for relations with other central banks and a plethora of international committees, including those held under the aegis of the International Monetary Fund (IMF), the World Bank and the Bank for International Settlements (BIS). A savvy careerist in ID could orchestrate a working life of international travel and secondments to agreeable locations; at least that is what we economists thought. FSD sounded mundane but it was responsible for the preparation of financial data published by the Bank and its statisticians had pretensions to play a key part in the analysis of their data. Economics Division (ED), a relative newcomer, was housed on the fourth floor, a route march away from the Bank's leadership on the ground floor and only one lift stop away from Premises Division in its fifth floor garret.

4. Economics Division and Monetary Policy Group

Within ED, massed ranks of professional economists worked on 'The Model', the Bank's forecasting model of the UK economy. Aspiring econometricians could use unlimited computer time – a scarce resource in those days - to estimate equations and publish their findings in the Bank's discussion paper series. For some, the possibility of publishing learned articles and being paid a banking salary for doing so came close to nirvana, at least for a while. In other cases, a two-year stint on the model and its data feeds served as a finishing school in applied economics before launching into a career as a City analyst.

However, I was destined for Monetary Policy Group (MPG), not mainstream ED.³⁰ I joined a group of seven managed by Corinna Balfour, a classicist from ID, and Michael Foot, who eventually became an FSA grandee.³¹ Bill Allen subsequently took over from Michael Foot on his return from the BIS. Our ultimate bosses were the Governor's special adviser on monetary policy, Charles Goodhart, and, at one further remove, the Bank's Home (as opposed to Overseas) Director, John Fforde. The MPG's role was to draft sections in the Bank of England Quarterly Bulletin (BEQB) on monetary developments, prepare monthly forecasts of the monetary aggregates and respond to Charles's steady stream of research ideas.

The 'Economic commentary' in the *BEQB* included a section on 'Monetary developments', the drafting of which had been relatively straightforward until the move towards monetary targeting in the late 1970s. The *BEQB* had a tradition, which survives, of using well

prepared graphics and, in the late 1970s, the 'Monetary objectives' chart, placed alongside the 'Monetary developments' section, provided a succinct summary of the monetary targeting position (Appendix 2). Watching Corinna and Michael agonize over the chart and how it should be configured to best effect, but without stretching readers' credulity too much, provided an early lesson in the presentation of monetary policy.

On the research front, Lionel Price, Graham Hacche, Andrew Crockett and others had cut their teeth in MPG studying the demand for money and credit.³² Lionel subsequently served as alternate director at the IMF, Graham became a permanent member of the IMF and Andrew became General Manager of the BIS. In the late 1970s, Richard Coghlan and Lesley Smith updated these studies and included data from the early 1970s when institutional changes, known as 'Competition and Credit Control', had affected the monetary aggregates.³³ Richard's work on the transactions demand for money was published in the *BEQB* in March 1978 and showed that reasonably stable relationships for narrow money (M1) had been sustained during the 1970s.³⁴ Richard and Lesley's work on broad money equations (M3) was not published, but in a note circulated internally in 1977 they reported that: "The result of this exercise is the negative conclusion that there is no obvious simple, single equation, demand for M3 balances."

Charles asked Richard Coghlan to work on a structural model of money - rather than a single equation - and it was hoped that this work would provide a behavioural underpinning for the management of broadly defined money. ³⁶ Richard was joined by Brian Hilliard and later by Jon Hoffman in an exercise to build what became known as the Small Monetary Model (as distinct from ED's large 'Keynesian' macroeconomic model). ³⁷ In the event, the deregulation and re-intermediation which took place in the early 1980s disrupted the forecasting performance of both the Small Monetary Model and solo demand for broad money equations. Perhaps we should have been more wary of the possibility of equation breakdowns, given our experience of Competition Credit Control ten years previously. At the time, we had a touching faith that improved econometric techniques would save the day. Ironically, the most robust demand-for-money equation was managed by the statisticians and related the demand for Bank notes to consumer expenditure. The equation was used to forecast note demand for the Bank's printing works in Debden, Essex. ³⁸

5. Flow-of-funds forecasting

In practice, monetary conditions were analysed using a flow-of-funds identity relating monthly changes in £M3 (defined in Appendix 1) to its credit counterparts.³⁹ Changes in one counterpart (e.g., the PSBR) tended to be partially offset by movements in others (e.g., bank credit) and the forecasting process involved extended discussions with David Reid, Michael Wright and others in FSD on matters relating to offsets and a multitude of special factors.⁴⁰ In behavioural terms, the counterparts approach attempted to capture an aspect of banking that had developed in the previous decade, when the UK banks had become asset-driven, firstly, determining their lending and, secondly, managing the supply of their wholesale liabilities accordingly.⁴¹ £M3 included wholesale deposits that served as a balancing item enabling banks to meet their lending commitments.⁴² In contrast, the banking component of M1 was restricted to sight (demand) deposits – wholesale funds

were mostly excluded - and these transaction balances were largely demand-determined by banks' customers.

The counterparts' analysis of £M3 was part of a more elaborate flow-of-funds approach to financial forecasting, used by the Bank and HMT, and described in Mike Hewitt's paper in the June 1977 *BEQB*. ⁴³ 'Flow-of-funds' was largely non-econometric and deeply unfashionable among economists trained in the 1970s, many of whom aspired to develop large macro-models with behavioural equations. ⁴⁴ The Small Monetary Model was an attempt to develop an econometrically based counterparts approach, but in the meantime we had to rely on judgemental forecasting. In due course, many of the flow-of-funds identities found their way into large macro-models, but flow-of-funds lost some of its gloss as data limitations became more apparent. ⁴⁵

A student of banking might ask whether banks' balance sheets could or should have been constrained by their cash or reserve balances. This issue subsequently arose as a matter of policy in the guise of monetary base control (MBC). For the moment, suffice it to say that no one in the macroeconomic executive used bank multipliers as an operational tool for forecasting the money supply, despite the continued prevalence bank and money multipliers in textbooks. 46

Back on the shop floor, David Sheppard was brought over from FSD to MPG to prepare the monthly counterparts analysis and forecast. When it became clear that the Conservatives would place greater emphasis on monetary targeting, David Green was brought in from ID to oversee the monthly forecasting exercise. In many respects, MPG worked more closely with FSD and the Bank's statisticians than with the mainstream modellers of ED. The Bank's statisticians, led by J. P. (Peter) Burman, formed a semi-autonomous fiefdom with a network of fellow statisticians that straddled the Bank and Whitehall, and included luminaries such as Sir Claus Moser, Director of the Central Statistical Office (CSO) until 1978 and now Baron Moser. The statisticians were the high priests of estimating seasonal adjustments for financial, including monetary, data and fitting interest rate yield curves. Seasonal adjustments (including prior adjustments for calendar effects) formed an important part in the analysis of monetary data, together with a consistent set of seasonals for the monetary counterparts. As monetary targeting became a more high-profile sport, revisions to published seasonals became a matter of comment and had an unnerving habit of pushing £M3 outside its target range.

6. Role of the Bank of England Quarterly Bulletin

Another special economic adviser to the Governor, Christopher Dow, presided over the non-MPG parts of ED and prepared the *BEQB*'s all-important quarterly 'Assessment' of the economy for consideration by Governors and HMT. Dow was a figure of considerable standing in the macroeconomic executive and had authored a classic book on the management of the British economy from 1945 to 1960. The then Governor, Gordon Richardson, adhered to the principle that the Bank's views should be promulgated publicly in the *BEQB* and by Governors' speeches, rather than by on-the-record interviews or briefings. The Bank's dicta were written with extreme care and Dow's role as the Governor's speechwriter seemed to be modelled on Schlesinger's role as speechwriter and

adviser to President J.F. Kennedy. The scale and number of Dow's rewrites were legendary and most divisional economists ran a mile at the prospect of being dragged into the process. For my own part, I saw that speechwriting was a way into the elusive world of policy and willingly became involved when I subsequently became personal assistant to the Deputy Governor, Kit McMahon.

7. Rules versus discretion

Before the onset of monetary targeting, senior officials in HMT and the Bank had taken it for granted that macroeconomic policy should be conducted on a discretionary basis. This mindset had been endorsed and charmingly described at the start of the decade by Paul Samuelson in an article on Federal Reserve policy that sought to rebut Milton Friedman's proposal for a fixed money rule:

"...for my philosophy does not pre-suppose that correct policy must be set in one direction and adhered to for a considerable period of time. I believe in reversals and over-shoots and tentative heading on a new tack according to the accumulating pattern of information and evidence." ⁵¹

In the UK, Treasury officials would come to a 'Budget judgement', the Bank would come to an assessment of the conjuncture (to use a favourite Dow-ism) and there would be liaison between the two on their respective positions. The modellers in each organization would provide a framework for discussion, using a consistent set of national income data, but it would be for the senior figures to come to a final view. The princes of the macroeconomic executive would then advise Ministers of how the instruments of policy (government spending, taxes and interest rates) should evolve to achieve the Government's goals for output, employment and inflation. It was recognized that the large macro-models were far from perfect so an iterative game would be played in which incremental changes would be made to instruments of policy, the consequences would then be assessed and further adjustments made. Sa

8. From proto-monetary targets to actual ones during 1976

In the mid-1970s, Treasury officials were baffled by, and unfamiliar with, the language of monetary aggregates. Sir Douglas Wass, Permanent Secretary to the Treasury, has noted that their focus had been on fiscal policy, the balance of payments and the exchange rate. The traditional view in Whitehall was largely Radcliffian, namely that the quantity of money did not matter. Most senior economists at the Bank were no different from their Treasury counterparts: Kit McMahon, Christopher Dow and John Fforde have been labelled Keynesians and Dow was famous for upholding his unreconstructed Keynesian views. At a meeting in August 1975, Wass recalled that the Deputy Governor, Jasper Hollom, told the Chancellor that twas not really worthwhile to have monetary targets. Healey recalls a more colourful warning from the Deputy Governor, namely "You would simply be redesigning your cross." However, the Governor, Gordon Richardson, thought otherwise and, as we shall see, he had a good working relationship with the Chancellor, who "never detected any Party prejudice in him."

Despite the scepticism of most of the macroeconomic executive, the March 1976 sterling crisis was followed by moves towards monetary targeting. The Chancellor of the Exchequer, Denis Healey, made a series of relatively simple statements in an attempt to stem a crisis of confidence in the gilt-edged and foreign exchange markets that eventually led to a 25% depreciation of sterling's effective exchange rate by the end of 1976. In his memoires, Healey explained that his decision to disclose monetary targets was a pragmatic response to market problems rather than a conversion to monetarist principles:

"My years at the Treasury had taught me that the neo-Keynesians were wrong in paying so little attention to the monetary dimension of economic policy, though both the Bank and Treasury had been working to undisclosed monetary targets since 1973. In 1976, before the IMF negotiations, I decided to publish these monetary targets, largely to placate the financial markets. But I never accepted Friedman's theories. Nor did I ever meet any private or central banker who took them seriously." ⁶²

An extract from an HMT minute, prepared in November 1977 describing the evolution of the target during 1976, is worthy of quotation because there is still disagreement over the interpretation of the proto-monetary target:

"In the April 1976 Budget Statement, the Chancellor made clear his intention that the money supply should not be allowed to grow more rapidly than nominal GDP because of the danger that this would generate fresh inflationary pressures. By July 1976, in the Public Expenditure Statement, the Chancellor hardened this to a commitment that the money supply should grow by about 12% during the year 1976-77 and stated that: "If inflation and output move as now forecast I would expect the growth in the money supply to be lower next year than this." In a statement on the Economic Situation in December 1976 the Chancellor gave a forecast that £M3 was likely to grow by between 9-13% in the financial year 1976-77 and made no forecast of monetary growth for the following year. In the Budget Statement, April 1977, the Chancellor forecast a range of 9-13% for the current financial year [1977/78]". 63

Although the HMT minute (written in 1977) describes the April 1976 Budget announcement (and subsequent ones) as being prescriptive about monetary growth, Sir Douglas Wass (writing in 2008 and citing his notes) suggests that the Budget announcement was "without any normative connotation." ⁶⁴ Wass was right to believe that the authorities had no rule-of-thumb response if the monetary aggregate strayed from its target, but it was odd to suggest that there was no normative connotation.

At the outset, the 12% monetary target did not appear to be particularly aggressive, when compared to 13% growth in the retail price index (RPI) in the year to July 1976. However, in his Mansion House speech in October 1976, Healey reiterated his commitment to the M3 target as a means of providing an "overriding constraint" and in the same month, MLR was raised by 2% points to what became a peak level of 15%. To secure agreement to the 15% interest rate, Healey had had a standoff with the Prime Minister, James Callaghan, but his resolve had been hardened by the need to "recover control of our money supply".

9. £M3 target and DCE ceiling for 1977/78

In December 1976, Healey gave a 9-13% forecast for £M3 in 1977/78 which was intended to be consistent with the DCE ceiling that had just been agreed with the IMF. ⁶⁸ By this time, RPI growth was around 15% and it peaked at 18% in June 1977, as a result of sterling depreciation and a number of other factors. ⁶⁹ Market confidence recovered rapidly following the IMF agreement and it soon became clear that DCE would undershoot its ceiling, but emphasis continued to be placed on £M3. As a Treasury minute recorded:

"In the event, the reversal in the external flows in 1977 has made the DCE target inappropriate and far greater weight has been given to the behaviour of £M3. DCE is unlikely to be given much prominence as a monetary target unless external flows begin to flow out again on a large scale." ⁷⁰

Peter Middleton, the Treasury's press officer, wistfully remarked in a note circulated in April 1977 that "It was interesting to hear the Chancellor saying on the radio this morning in the aftermath of the USDAW [trade union] conference that the monetary targets were not negotiable." ⁷¹ Here was a Chancellor who could speak his mind and develop a non-accommodating monetary policy without a briefing note from officials. ⁷²

Sir Douglas Wass chaired a meeting of his officials in November 1977 to discuss monetary policy and an extract of the minute reveals his concerns about the direction of policy. The minute also reveals that the main proponent of monetary targets had been the Governor, Gordon Richardson:

"Summing up this part of the discussion, Sir Douglas Wass said that...Since July 1976, the Governor had pushed the Chancellor further and further towards the acceptance of a target for M3 growth. The Chancellor would go further in this direction unless the dangers were pointed out to him. At the end of the day, it was quite likely that the Chancellor would accept such a target for 1978/79, but he should only do so in full awareness of the costs thereby incurred. Sir Douglas therefore asked Mr. Bridgeman to prepare a paper on the advantages and disadvantages of adopting publicly-announced monetary targets. He himself did accept that there were advantages to be had, but was anxious to avoid the elevation of monetary guidelines above all other policy objectives." ⁷³

In short, Wass wanted to avoid a situation where the Healey-Richardson monetary targets became the overriding constraint on the Government's macroeconomic policy. Wass was concerned not just about the direction of policy, but also about the *policy process*: he was "anxious to avoid the elevation of monetary guidelines above all other policy objectives" because a monetary rule would curtail discretionary macroeconomic policy. ⁷⁴ It must have been disconcerting to find a Chancellor contemplating the use of a semi-automatic pilot rather than relying on the judgement of his macroeconomic princes.

10. Richardson and Goodhart on the uses of monetary targets

Although Richardson was a proponent of monetary targets, he was no Chicagoan monetarist. With his background in law and merchant banking, he was careful to present himself as a cautious banker, rather than as an economic dogmatist. In a speech given in January 1977, Richardson declared that:

"In general, I do not take the view that monetary targets can sensibly be fixed for all time in accordance with a predetermined formula." 75

Instead, he argued that:

"monetary targets are useful in providing checkpoints against which current developments can be compared and monitored." ⁷⁶

Whatever his private views, the Governor did not publicly question the Labour Government's corporatist approach to the management of the British economy. The Labour Government's 'social contract' with the Trades Union Congress (TUC) had established a process of national pay norms that bore some resemblance to the German approach to pay bargaining. In July 1975, a non-statutory limit on pay increases of £6 per week had been announced for the (August to July) 1975/76 pay round, known as Phase I. In May 1976, a £2.50 to £4 per week pay range was agreed for the 1976/77 pay round (Phase II) and further phases were expected. In his speeches, Richardson urged pay restraint and endorsed the role of national incomes policies. Speaking in January 1977, he presented the monetary target as complementary to incomes policy:

"Monetary policy should therefore aim to act in concert with other branches of policy, including incomes policy, in slowing down inflation." 79

Richardson's colleagues at the Bank were largely hostile to monetary targets, Charles Goodhart being the only senior official who consistently challenged the presumption in favour of discretion rather than rules. One of Charles's mantras at the time was the need to counteract an institutional bias against raising interest rates: politicians almost always wanted to delay rate rises to manage the news agenda around the political calendar of party conference, the Queen's Speech, Parliament, you name it. The Bank was sometimes hesitant to move rates in either direction for fear of (extrapolative expectations) unnerving gilt buyers (on the way up) and currency traders (on the way down). He argued that monetary targets, but not long-run Friedmanite targets, might help counteract this institutional bias.

Charles Goodhart was no typical Bank salaryman. Whereas other senior officials operated in an introverted world and under a cloak of secrecy, Charles served as a Samuel Johnson (or perhaps a Boris Johnson) of monetary policy, maintaining a semi-open dialogue with academics and market practitioners. When the BIS and other international organizations wanted to discuss the new-fangled monetary targets, it was Charles who was invited in preference to the usual representative from ID armed with a briefing note. 81

11. Exchange rate and international competitiveness in 1977/78

The December 1976 agreement with the IMF proved to be a turning point for confidence and external inflows supported a recovery in sterling during the 1977/78 target period. The authorities intervened heavily in an attempt to dampen sterling's upswing and this policy was criticised by some monetarists who argued for a freely floating currency. In the September 1977 *BEQB*, the Economic Commentary included a section on 'Exchange rate and inflation' which argued against an aggressive appreciation of sterling:

"For, in the transitional period, the harmful effects on exporting and import-competing industries would persist and be important. The evidence seems to suggest that market conditions are in fact somewhat inflexible, in the sense that it takes a number of years before most of the reaction to a change in the exchange rate works through the system...this means that it would require a very large appreciation to obtain any large effect on domestic prices within any short time, such as a year...[This suggests] that an appreciating exchange rate might exert a smaller breaking effect on inflation, and have a greater impact on the balance of the economy, than some recent discussion has allowed." ⁸²

In the first half of 1977/78, the impact of external flows on money was partially offset by lower bank lending, but the external position did increase monetary growth by the end of the year and the authorities were faced with a choice between the monetary target and intervention to moderate sterling's appreciation. Wass argued for accommodating monetary growth and there was some debate between the Chancellor and Prime Minister, but Healey prevailed and decided to curb official intervention and stand by the monetary objective. Healey prevailed and decided to curb official intervention and stand by the monetary objective.

The UK's international competitiveness (both relative export prices and relative normalised unit labour costs) had improved as sterling depreciated in 1976 and the process went into reverse with the sterling appreciation of 1977. In the fourth quarter of 1977, UK competiveness was not significantly out-of-line with competiveness levels experienced during the first half of the decade and, as a result, the Government was able to stand by its 1977/78 monetary target without the need for an exceptional deterioration in competiveness.⁸⁵

12. HMT vs. the Bank over the 1978/79 target

In the year before I joined the Bank there had been a classic fight between the two arms of the macroeconomic executive – HMT and the Bank - over the design of the 1978/79 monetary target. On the Treasury side, Wass had charged J. M. (Michael) Bridgeman and his committee (the so called Bridgeman Committee) to devise ways of tempering the monetary target. Drawing on what it saw as US experience, the Bridgeman Committee busied itself with proposals for a 'rolling target' that would be rebased every six months. Rhe Prime Minister, James Callaghan, seemed to be on the side of more flexibility, sending a personal minute to the Chancellor to that effect on the same day that Wass had chaired his meeting on monetary policy. No. 10 subsequently asked for a paper on rolling targets and thence involvement in the decision. On the Bank side, the Governor supported by Charles

Goodhart and a cadre of 'unbelieving monetarists' argued for sustaining the disciplines provided by an annually set monetary target. The Bridgeman Committee provided a means of dissipating the Bank's case before it reached Ministers, but the Governor had direct access to the Chancellor and could speak publicly and communicate through the BEQB.

The role of monetary targets was discussed in a section added to the Assessment in the June 1977 *BEQB*. Its inclusion in the Assessment, rather than as a note placed later in the Bulletin, indicated that this was an authoritative statement rather than a think-piece cooked up on the fourth floor. Various options were canvassed in the piece, including the possibility of rolling targets, and those in the know realized that the text had been agreed with HMT without saying so explicitly. Richardson spoke about monetary targets in a speech delivered in February 1978 in which he concluded with a carefully worded endorsement of "practical monetarism", a term used by Paul Volcker, Chairman of the Federal Reserve. 93

13. Bank's pitch for an M1 target as well as £M3

In an interesting sub-plot of the battle over the 1978/79 target, the Bank submitted a paper in November 1977 arguing for the targeting of M1 as well as £M3.⁹⁴ The paper accepted that the two aggregates could give conflicting signals, but suggested that they would assist the cause of an interpretational, medium-term approach. It is noteworthy that the Bank's chart on monetary objectives in the *BEQB* traditionally included M1 as a secondary indicator alongside M3/£M3 (see Appendix 2). Moreover, the discussion of monetary targets in the June 1977 *BEQB* included a reference to the possibly of targeting more than one aggregate.⁹⁵ Bridgeman's response to the Bank's internal paper of November 1977 was, however, strongly critical, noting (with underlining) that:

"one of the main attractions to the Governor of having M1 as a target in (sic) that it will give the Bank a much stronger say in interest rate policy." ⁹⁶

It would appear that HMT's willingness to give up control over interest rates was as likely as the fall of the Berlin Wall. By way of some compensation, the Bank did eventually win the targeting battle when an 8%-12% annual target range was set for £M3 from a mid-April 1978 base (at which point RPI growth stood at around 8%). 97

14. Dr. Jeremy Bray M.P. and control theory

Before moving on to consider the economic inheritance of the incoming Conservative Government and its policy responses, the intervention of Dr. Jeremy Bray M.P. and his engagement with the macroeconomic executive should be considered. Dr. Bray was an incongruous member of the British political class. He had a PhD in Mathematics, he had had a proper job in industry, working for ICI, before being elected to Parliament in the Labour interest, and he was a technocrat with experience in the application of mathematical control theory to chemical plants. He also had the quiet confidence and imperviousness of being a lay preacher. ⁹⁸

Bray had made his mark with the macroeconomic executive by securing an amendment to the Industry Act 1975 requiring HMT to publish the technical details of its forecasts. Officials reacted warily to what became known as the Bray Amendment but in the end it set in motion a more constructive debate between economic modellers. Bray had read the discussion on monetary targets in the June 1977 BEQB and wrote a note 'The Pursuit of Monetary Targets' and sent it, along with other correspondence, to the Bank and the Chancellor. 99 Bray argued that stochastic control theory could be used to guide policy based on a target. An equation could be estimated relating the instruments of policy to the intermediate target (£M3) and the speed of adjustment of £M3 to its desired path could be specified in an equation. Control theory would provide Government with a glide path for interest rates (and other instruments) so as to achieve the target. Control theory and policy optimisation had been the subject of an official report by Jim Ball in 1978, but Bray's impassioned commitment to it did not go down well and his mathematics did not convince officials trained in classics and the humanities. 100 It was felt that a backbench MP should not trouble himself with the details of targets and, after much exchanging of correspondence, he was fobbed off. 101

15. Implicit model behind the Healey-Richardson targets

Bray's questions provided an opportunity to articulate the implicit model behind the Healey-Richardson targeting regime. The M3/£M3 growth targets had aimed at "a rate of monetary expansion below the increase in money national income." The targets were intended to be modestly non-accommodating and implied that the velocity of money should be not far from unity in an equation with variables expressed in terms of rates of change. (There had been an epic econometric debate on whether the Bank should use first difference equations to estimate the demand for money but this has no direct relevance to the issues being discussed here.) The authorities had no implicit rule (policy reaction function) that required MLR (or some combination of instruments) to be raised by x% if £M3 overshot its target by y%: there was no predetermined glide path for interest rates which would bring the straying monetary aggregate back to its target.

The absence of a clearly articulated reaction function for interest rates did not arise because the authorities lacked econometric sophistication, but because they lacked a useable model of the impact of monetary conditions on output and inflation. In the UK, the exchange rate acted as a key transmission mechanism and there was no operationally effective model of the impact of monetary policy (or anything else) on the exchange rate. At the Bank, Graham Hacche and John Townend had researched exchange rate equations for some years and concluded that no sound equation could be estimated. One explanation for this was that changes in policy regime disrupted the relationship. As a result, the Treasury and Bank macro-forecasting models simply made assumptions about the exchange rate path.

In view of the uncertain impact of monetary policy on the exchange rate, there were no fixed rules-of-thumb on the interest rate response required to offset deviations from a monetary target. An over- or undershoot was viewed as a signal that the authorities had to adjust interest rates (and other instruments), or come up with a credible reason why no action was required. In practice, the *BEQB's* commentary on monetary developments might include an analysis of various forms of re-intermediation and cross-checks against other

monetary indicators, including the exchange rate. If market practitioners judged the authorities' response and explanations to be credible, it should not matter – at least during the 1976-9 period - that £M3 remained outside its target. At the end of the year, the target would be reset on a new base and there would be some ex post discussion of whether the overshoot should be accommodated, or whether it should be clawed back in subsequent years. ¹⁰⁶

One reason for not beating the drum about the implicit model behind the Healey-Richardson targeting regime was that the Labour Government was under fire for not taking monetary targeting seriously enough. The Conservative Opposition had monetarist pretensions and might win the next election. The Conservatives seemed to be intent on adjusting interest rates more aggressively and more single-mindedly to keep money supply within target.

16. Conservative policy on money, 1975 to 1979

The Conservatives' approach to monetary policy was developed while they were in Opposition. Margaret Thatcher had asked her policy mentor, Sir Keith Joseph, to initiate a review of policy after her election as party leader in February 1975. Keith Joseph had a vision of dismantling Britain's corporatist economy and establishing a social market economy, a theme which coincided well with Mrs. Thatcher's convictions. He canvassed the opinions of a large number of academics, business leaders and City folk, and wrote a series of discussion papers that set out the tenets of Thatcherism, including fiscal rectitude, monetary discipline, a limited state, lower taxes, markets rather than controls, and homeownership. He wrote a speech, 'Against Incomes Policy', in which he conceded his view was probably a minority one among the political elite. Professor Alan Walters, then at the London School of Economics (LSE) and a critic of Heath's U-turns, is reputed to have been a key influence behind Keith Joseph's strong stance against incomes policies and in favour of monetary policy as an anchor for controlling inflation.

Despite the support of his leader, Keith Joseph's views were not well received by many in the shadow cabinet, as was made plain in a meeting held in April 1975 to discuss one of his early papers. Dissenters from Keith Joseph's vision of dismantling the corporatist economy ranged from those who saw some virtues in it, for example, incomes policy, to those that agreed with many of his conclusions, but believed that such a wide-ranging attack on the status quo might unnerve the voters and the City. There was also a need to develop tactical positions on topical issues, with which to attack the Government. In the light of shadow cabinet discussions, Mrs. Thatcher decided that the review of economic policy should be developed under the aegis of the Economic Reconstruction Group (ERG) which held its first meeting in June 1975. It was chaired by Sir Geoffrey Howe with Keith Joseph playing a key role and half a dozen other MPs, including John Nott, Sally Oppenheim, Ian Gilmore, Jim Prior, David Howell and John Biffen. Brian Griffiths, a colleague of Alan Walters, was the sole non-Parliamentary member of the ERG. 112

Much of the ERG's time was spent on current issues of debate with the Government and its chairman, Geoffrey Howe, encouraged a cautious approach on future policy. In July 1975, Howe reported on the direction of the ERG's initial thinking. On monetary policy, he

reported that his committee saw a number of problems with a 'gradualist' monetary approach:

"As proposed by Professors Friedman, Parkin, Laidler and others, one would follow for four or five years a programme of steady reduction in the rate of growth of the money supply. The target for monetary growth would be consistently set at a lower rate of increase than that of prices. The policy would thus bear down on rather than accommodate wage and price increases. The Group tended to the view that there would be several serious problems involved in this course of action. A very high level of unemployment would probably be required for four or five years. In the private sector capital expenditure, confidence and growth would be damaged. The need to sustain the policy throughout the life of a parliament would raise obvious political difficulties." ¹¹³

Howe's paper went on to rule out dramatic monetary tightening (instantaneous monetarism) and indexation (living with inflation). The paper alighted on an 'ideal' programme that combined firm monetary and fiscal disciplines with pay policy.

In December 1975, the ERG considered a paper prepared by Brian Griffiths and discussed various options for monetary control including:

- i. Continuing with the existing system of direct controls on the banks;
- ii. Reverting back to the 'Competition and Credit Control' regime and relying on interest rates;
- iii. Moving to monetary base control (MBC) by introducing a cash reserve system for the banks.

The ERG did not conclude on this issue and asked for more research. 114

In May 1976, there was a discussion of methods of implementing monetary policies, including the first recorded discussion of monetary targets. The minutes recorded rather airily:

"It was thought that monetary targets could be useful. The mechanics for controlling money supply already existed." 115

A month later, the monetary policy sub-group, which included Brian Griffiths, reported to the ERG and recommended that "there should be monetary guidelines", "monetary indicators should be reformed", outsiders should be inserted into the Treasury and Bank who "were not dogmatically antagonistic to monetary objectives to enable the switch in emphasis to monetary policy to take place efficiently." ¹¹⁶ Keith Joseph also harboured fears about the Bank's unreconstructed Keynesianism and he took extreme exception to the non-monetary explanation of price inflation in the Assessment of the June 1978 BEQB. ¹¹⁷

Although the Keynesian reputation of the macroeconomic executive exercised some minds in Conservative circles, the ERG and the shadow cabinet were hardly hotbeds of monetarist radicalism: Howe devoted much of the ERG's time in 1977 to "concerted action", a

Conservative variant of the social contract based on German experience. Mrs. Thatcher was not impressed, but a majority of the shadow cabinet appeared to be unwilling to repudiate incomes policy completely. There seemed to be very little difference between the position of Howe's majority group in the shadow cabinet and Governor Richardson's views on the duality of incomes policy and monetary targets: "Monetary policy should therefore aim to act in concert with other branches of policy, including incomes policy, in slowing down inflation." Viewed from the spring and summer of 1977 one might have discerned an emerging cross-party consensus based on the German model in which a national pay norm was run in parallel with monetary targets. However, national pay policies in Britain were to suffer a catastrophic loss of confidence.

17. Collapse of pay policy, 1978/79

In July 1977, Healey had announced that the pay norm for Phase II would continue in the 1977/78 pay round (Phase III), and that this would foreshadow a phased return to free collective bargaining. However, in July 1978, Healey set a '5% limit' for 1978/79 (Phase IV). The 5% limit was not statutory but the Government sought to impose it on public sector workers and threatened sanctions on government contractors who broke it. The limit was breached by the Ford workers and others in a series of increasingly disruptive strikes by oil tanker drivers, train drivers, health service staff and local authority workers - a period that became known as the Winter of Discontent. Voter confidence in Labour and its incomes policies dropped significantly between November 1978 and January 1979 and the Conservatives won an absolute majority in the May 1979 election. In his memoires, Healey argued that a less aggressive pay limit in "single figures", might have saved the day. T¹²³ Others argued that the 1978/79 pay round might have been saved by tighter monetary restraint during 1977/78 and continued fiscal restraint in 1978.

18. Conservative short Budget of June 1979

A month after the election, the new Chancellor, Sir Geoffrey Howe, introduced his short Budget which is primarily remembered for its increases in Value Added Tax. Labour's last £M3 target range of 8% to 12% was reduced by 1% point to 7%-11% for the year starting in June 1979. It was argued that allowance should be made for overshooting in the previous year. The Government sought to move interest rates pre-emptively to choke off excessive growth and MLR reached a record 17% in November 1979. 126

In February 1979, there had been an exchange of correspondence between key members of the Shadow Finance Team about resetting the 1979/80 growth target for £M3 after the election. One member of the team, John Nott had expressed concern about the potential squeeze on business profitability and suggested a higher rate of monetary growth might be appropriate until public borrowing had been brought under control. Keith Joseph and Nigel Lawson argued that this would damage the new Government's credibility. Lawson argued that inflation was likely to be around 12% and that a no-higher-than-before target would result in a firm exchange rate, less inflation, lower interest rates and less of a squeeze on the corporate sector. In the event, RPI growth peaked at 22% in the year to May 1980, the exchange rate rose and the UK's competitiveness deteriorated by an unprecedented 40%. The surprise was not that Lawson's personal forecast proved to be so wrong — no

one can forecast the exchange rate – but that the new Ministerial team at the Treasury was so ill-prepared for these uncertainties.

Almost immediately a gap opened up between Ministers' expectations about the controllability of £M3 and the Bank's ability to deliver. Monetary base control (MBC) had been touted as an alternative to the Bank's existing arrangements, and Charles Goodhart asked Michael Foot and me to draft a paper indicating why MBC should not be the route to follow. The resulting article published in the *BEQB* in June 1979 served as a shot across the bows of the incoming Government, but the argument did not go away (on which more later). The resulting article published in the argument did not go away (on which more later).

Of the permanent Treasury civil servants, Peter Middleton had been involved with Labour's targets as Treasury press officer and he became increasingly involved in the operational details of monetary policy as the problems mounted. Middleton had been highly regarded by Healey and excelled under the Conservatives as well. Another Treasury official, Rachel Lomax also became involved and established good links with the Bank. She subsequently became Permanent Secretary at the Welsh Office, and the departments of Work and Pensions and Transport before returning to her old policy stomping ground as Deputy Governor of the Bank. It took a while before HMT built up its own team of administrators and economists, reporting on monetary matters and seeking to micromanage the Bank.

During this period, monetary targets were the topic of choice at international meetings of central bankers. The Canadians and Swiss argued with some justification that reasonably stable demand equations had been estimated for narrow money, whereas stable equations for broad money remained elusive. 133 For this reason, they argued in favour of using narrow money targets as a guide for interest rate policy. At this time, I was much enthused about an M1 target, having listened at the BIS to the favourable experiences of other central banks. I was also aware of the Bank's own research which, at the time, suggested that M1 was more predictable and controllable than £M3. Charles had to remind me that, following the internal debate over the UK Government's 1978/79 target (just before my arrival), HMT had banned protestations of affection for M1 targets. There was also an argument, favoured by HMT, which recalled that the authorities – in their eyes the Bank - had been lulled into a false sense of security by the slow growth of M1 during the Heath-Barber boom. 134 In the event, structural changes, including the payment of interest on current accounts, led to breakdowns in the M1 and non-interest bearing (nib) M1 equations. 135 John Trundle (a member of MPG) updated the M1 equations again in 1982. 136 John's conclusion, expressed at the time and more recently to me, was that the M1 and nib M1 equations had become "useless for policy". 137

19. Control of money and the abolition of exchange controls

The Bank's party line on targeting of £M3 was that, over a reasonable period, control could be achieved via the counterparts. ¹³⁸ In addition, the Bank had powers to exercise direct control over the growth of banks' balance sheets and this instrument was used from time-to-time to steady the monetary boat. But direct controls on banks' balance sheet growth were about to be undermined as a result of the Government's decision, announced in

October 1979, to abolish exchange controls. The steady tightening of monetary policy since 1976 and the rising price of North Sea oil had led to an appreciation in sterling and a dramatic loss of the UK's international competitiveness. Abolition of exchange controls was one means of mitigating the appreciation of sterling, but Bank and HMT officials did not want to advocate abolition only to suffer major egg-on-face at the next sterling crisis. The mandarins' way forward was the surreptitious relaxation of the controls and the retention of control powers in readiness for the next exchange rate crisis.

The Conservative Shadow Economic Team had discussed abolition shortly before the election with Nigel Lawson advocating radical dismantling rather than the officials' halfway house. To the surprise of officialdom and against mainstream advice, the newly elected Conservative Government decided to go for full-scale abolition with monumental implications for the conduct of monetary policy and the wider development of the economy. Abolition meant that direct controls on bank lending became ineffective because they could be avoided by way of offshore disintermediation. The Supplementary Special Deposits (SSD) scheme, not to mention my investment in mastering its operation, was blown away almost overnight. The authorities were left with two levers to influence broad money growth: funding (and indeed overfunding) the PSBR by way of gilt sales, and raising interest rates in the hope of choking off credit demand.

20. Launch of the MTFS, March 1980

The Conservative Government's re-spray of Labour's monetary regime was announced by Sir Geoffrey Howe with great fanfare in his second Budget of March 1980 and called the Medium-Term Financial Strategy (MTFS). The MTFS is said to have been the brainchild of Nigel Lawson, then a junior Treasury Minister, and Peter Middleton. The annual target for £M3 remained at 7%-11% growth from a base that had massively overshot the previous year's target, but emphasis was placed on the n-1 reduction in successive targets over the following three years to 4%-8% in 1983/4. At the time, the sequence of n-1 targets was viewed as an exercise in "gradual monetarism", an option which had been rejected by Howe's ERG in July 1975. Strictly speaking, gradual monetarism would have involved setting the initial target slightly lower than the rate of increase of money income, but the gap was considerable; a 7-11% initial target versus RPI growth close to 20% in the year to the target's base date and peak RPI growth of 22% in the year to May 1980. The initial Thatcher-Howe targets were therefore set much more aggressively than the Healey-Richardson targets.

The regular reporting of £M3 relative to its target remained much as before with the target range represented as a cone in the 'Monetary objectives' chart in the 'Monetary developments' section of the 'Economic commentary' in the *BEQB* (the targets are summarised in Appendix 2). The difference was not in the manner of its reporting, but its audience. Before the 1980 Budget, a small number of market cognoscenti – mainly analysts in the money, gilts and foreign exchange markets and the odd specialist journalist - took the trouble to analyse the monetary data and form their own views. Their views and judgements rippled through the market in somewhat more simplified form and thence into the general press. The cognoscenti listened attentively to the Bank's explanations of distortions and special effects and came to their own views. They did not always agree with

the authorities – Lawson famously described them as "teenage scribblers" when he was Chancellor – but they played a key role in the system. After March 1980, all sorts of journalists started to report on the figures and the monetary announcements became an exercise in political point scoring. The authorities were caught in a trap, on the one hand saying that they had a medium-term perspective and wanted to reduce long-term expectations of inflation, and on the other hand, they appeared to be saying that they needed to respond mechanically to deviations of £M3 from its diabolical cone. The latter put the markets into a frenzy of expectation and counter-expectation before each monthly announcement.

It soon became clear that the levers of control were not quick enough, or sufficiently well calibrated to keep monthly changes in broad money within its target. Separate studies undertaken by Tim Shepheard-Walwyn (a member of MPG) and me testified to the low interest elasticity of demand for credit in the UK, at least in the short run, when raised interest rates might increase the need to borrow. 150 (Tim subsequently worked in risk management for UBS AG and as Group Risk Director, Barclays PLC. 151) commentators were quick to point out the implications for monetary targeting. Indeed, Lord Kaldor and others suggested the main domestic transmission mechanism might be by way of tight fiscal policy reducing aggregate demand (our goal variable), which in turn reduced the demand for credit, a determinant of the money supply (supposedly our intermediate variable). 152 Here again, there was a potentially perverse short-run effect whereby reduced demand in a recession might lead to involuntary stock building and an increase in credit demand. 153 Given the problematic short-term effects of interest rates, the authorities resorted to over-funding the PSBR (i.e., gilt sales exceeded the PSBR). There were some within the Bank who questioned the efficacy of over-funding and it was alleged more widely that it provided opportunities for round-tripping, where savvy treasurers made a turn on funds financed by bill issuance. 154 An immense amount of time was spent in MPG seeking to assess the impact of round-tripping on credit. 155

21. Monetary base control, part I

In the face of these difficulties, the head of the Prime Minister's Policy Unit, Brian Griffiths (later Lord Griffiths), resuscitated his proposal for the adoption of monetary base control (MBC) and the targeting of M0 (defined in Appendix 1). Griffiths had been a member of Sir Geoffrey Howe's Economic Reconstruction Group and had presented a paper in December 1975 which considered MBC along the lines of arrangements in the United States and Germany. Griffiths was supported by the market practitioner, Gordon T. Pepper, a partner of the stock broking firm, W. Greenwell & Co, and doyen of gilt-market commentators. Pepper had also advised the Conservatives in Opposition, for example on the March 1976 sterling crisis. Griffiths and Pepper saw themselves as proper monetarists and remained suspicious that the Bank and HMT were not putting their hearts and souls into the great experiment. We thought that Pepper was overblown, but his opinions were influential in the market and, for a time, with the Prime Minister, and we had to humour him as best we could. I found Tim Congdon's monetary commentaries more interesting and instructive; he had worked as a journalist and was employed by the stockbroker, L. Messel & Co. 161

Charles argued strongly against MBC, suggesting that the proposal would result in either cosmetic control of the targeted monetary aggregate, or unacceptably violent fluctuations in interest rates. Our article on MBC in the June 1979 BEQB had irritated the powers that be at HMT who felt that they should be controlling the discussion. ¹⁶² A public debate over the technicalities ensued with Charles on one side, Griffiths and the pro-MBC gang on the other, and a bemused clutch of Treasury officials in the middle. My tutor at Nuffield College, the late John Flemming, had joined the Bank as head of ED (and he subsequently succeeded Dow). It fell to John to chair one of the semi-public discussions on MBC where the arguments were repeated for the hundredth time and John berated us all for spending our time "playing the same record". In many ways it was surprising that the MBC proposals did not gain more traction in the UK; it had powerful supporters, including Milton Friedman who presented the case in favour to the Treasury and Civil Service Select Committee. 163 Most significantly, in October 1979, Paul Volcker, Chairman of the Federal Reserve Board, unveiled a modified form of MBC for controlling the money supply in the United States. 164 Peter Middleton nevertheless managed to keep the MBC proposals on hold by way of a Green paper, which was published in March 1980, with the promise of a follow-up seminar to include a wide range of interested parties in September 1980. 165

22. Denouement of the 1980/81 MTFS

Although £M3 was overshooting its target by a mile, RPI growth peaked at 22% in May 1980 and started to fall rapidly (and, in the event, it fell to 13% by January 1981). It was evident that the counter-inflation policy was beginning to work, albeit at the price of a recession, and once it became clear that retail price inflation had peaked, it was decided that MLR should be reduced by 1% point to 16% in July. As reported to me at the time, Gordon Richardson used the analogy of looking out of a window at parkland (a vista from his country house, I like to assume). If you saw frost on the ground and in the trees, you knew that the temperature was low and if your garden thermometer suggested otherwise, you surmised it was broken. Likewise, if various indicators suggested the economy was contracting, you might suspect that your monetary indicator was faulty if it continued to grow over target. 167

Alongside the Chancellor's Autumn Statement on 24th November 1980, MLR was cut by a further 2% points to 14%. This relaxation of monetary stance was justified as being part of a package of measures that involved some fiscal tightening. Also, the exchange rate remained firm and inflation was on a downward track. In effect, the authorities were reverting to a more 'interpretational' mode of targeting using a multiplicity of indicators. Ironically, the supposedly monetarist Conservatives were responding to the exchange rate, whereas the supposedly anti-monetarist Labour Government had stood by its monetary objectives.

23. Monetary base control, part II

During the summer of 1980 there had been a policy hiatus when the Prime Minister revived the MBC proposal. It was Mrs. Thatcher's habit to take a week's 'holiday' in Switzerland and, during her summer respite, she became greatly exercised by the ritual humiliation of yet another monthly overshoot of the £M3 target. No lesser personages than Fritz

Leutwiler, head of the Swiss National Bank (the Swiss central bank), and Professor Karl Brunner, US monetary economist of Rochester University, were on hand to offer advice. The Prime Minister returned and summoned the Governors to No. 10, the Chancellor being on a proper three-week holiday in the Greek islands. Neither Governor was available which was embarrassing because one of them was supposed to be available for consultations in the event of a crisis, or an eventuality such as this. John Fforde and Eddie George therefore had to face the music at No. 10 and Eddie George won his spurs by telling the irate Prime Minister that interest rates had to decline at this juncture. Further 'seminars' (aka Prime Ministerial interrogations) were arranged and Mrs Thatcher's soon-to-be-appointed economic adviser, Alan Walters, commissioned a paper from Professor Niehans, a colleague at John Hopkins, on MBC. Despite some lively meetings, the Prime Minister's search for the holy grail of stricter monetary control without higher interest rates was not realized. 173

As part of the Chancellor's Autumn Statement on 24th November 1980, Howe announced that the Bank would abolish the reserve asset ratio, move to a system of unpublished bands for short-term money market intervention and potentially cease announcing MLR, an objective that was subsequently met on 25th August 1981. A statistical note clarifying the measurement of the monetary base since 1919 was published in the March 1981 *BEQB*. These initiatives were nods in the direction of a MBC regime but, in the end, they did not lead to major changes in the money markets. These

24. Flexible MTFS, 1981/2 and 1982/3

The Budget of March 1981 is remembered for its deflationary fiscal policy in the midst of a recession and 364 university economists signed a statement criticising it. ¹⁷⁶ By now Alan Walters was ensconced at No. 10 and one of his claims to fame (during this stint in government) is to have hardened Mrs. Thatcher's resolve to stick to a deflationary fiscal policy in the 1981 Budget. ¹⁷⁷ In his memoire, Howe suggests that Walters merely reinforced what was already in train. ¹⁷⁸ MLR was cut by 2% points to 12%.

Although Sir Ian Gilmore was able to jest that monetary policy had become "the uncontrollable in pursuit of the indefinable", the MTFS had been recast in a more flexible format with a bewildering array of targets for a number of broad and narrow monetary aggregates. ¹⁷⁹ In addition, a number of indicators (as distinct from targets) were mentioned, including the course of the exchange rate, apparent real interest rates, the state of certain asset markets, and the concurrent course of nominal GDP: everyone could focus on what they liked best. ¹⁸⁰ We were moving back towards a policy process where a group of wise folk (including a few economists) look at everything and decide what is best. The experiment with strict monetary targeting had come to an end. ¹⁸¹

The move to a more interpretational mode of monetary management did not avoid two base rate hikes each of 2% points in the autumn of 1981, in response to a rapid decline in sterling, leaving rates at 16%. In his memoires, Howe describes how interest rate decisions would usually involve a two-stage process; firstly, his own meeting at No. 11 with Richardson and Wass and then "a second, more tense meeting next door" with the Prime Minister: "Almost always she argued against an increase in the rate, the politics ever at the top of her mind." ¹⁸² Charles Goodhart's mantra about the institutional bias against interest

rate changes was based on his experience of the 1970s, but here we had the Iron Lady exhibiting similar tendencies, even if she allowed them to be overcome.

In the Budget of April 1982, the target rate for £M3 was raised to 8%-12% for 1982/3 (with some drift in the base of the target) and 7%-11% for 1983/4. Sterling remained reasonably steady and interest rates were allowed to follow a downward course to a trough of 9% in November 1982. The authorities sought to restrain monetary growth by over-funding rather than by seeking to use interest rates to choke off bank lending. ¹⁸³

25. Conservative Government's second term, 1983 to 1987

After the election in June 1983, Nigel Lawson replaced Howe as Chancellor; a new Governor, Robin Leigh-Pemberton (later Baron Kingsdown), succeeded Richardson (soon to be Baron Richardson of Duntisbourne); and Peter Middleton became Permanent Secretary and a knight. 184

It is sometimes thought that Lawson's first Budget marked the main break with the rigid targeting of Howe's MTFS, but Howe's third Budget in March 1981 had already pulled the plug on rigid targeting, a regime that had lasted for less than a year. In his first Budget of April 1984, Lawson excised the targets for M1 and PSL2 which happened to be overshooting and, just to confuse everyone, adopted a target for broad monetary base (M0), definitions of monetary aggregates in Appendix 1. Lawson seemed to be endorsing the symbolism of MBC, but this was no MBC-regime as envisaged by Griffiths and Pepper.

In his Zurich speech of January 1981, Lawson had advanced the argument that broad money tended to grow excessively while interest rates were high and inflation was being squeezed out of the system. He suggested that this would be a temporary phenomenon and that broad money growth would settle down after a period of time. This did not happen during his early years as Chancellor and Lawson's enthusiasm for targeting £M3 was severely tested. In practice, Lawson continued the approach, established in Howe's later years, of adjusting interest rates in the light of exchange rate developments. Sterling's weakness in the summer of 1984 and in the first quarter of 1985 led the Government to raise base rates to 14% and tighten fiscal policy. In the Budget of April 1985, the Chancellor announced that overfunding would cease and be replaced by a policy of full funding. £M3 started to overshoot its target, but the authorities allowed base rates to decline in view of the strength of sterling and, in October 1985, the target for £M3 was suspended. In the Budget of March 1987, a £M3 target of 11%-15% was set but even this was overshot by the banks expanding their mortgage lending, a sector that had hitherto been the preserve of building societies. No target was set for broad money in the Budget of March 1987.

Journalists and historians can be forgiven for focusing on the MTFS documents published annually in the years 1980/81 to 1986/87, because they remain a primary source of information on the Thatcher Government's monetary policy during its first and second terms. However, they are lagging indicators of policy, providing ex post rationalizations of what had happened and allowances have to be made for a strong dose of political spin. The 'Monetary objectives' chart in the *BEQB*, provides a contemporaneous and less easily distorted indicator of policy as seen from the Bank (see Appendix 2).

26. Exchange rate overshooting and the OEP critique

An early critique of the Healey-Richardson and Thatcher-Howe targeting regimes came from the Editors of *Oxford Economic Papers* (OEP) who called for papers for a symposium on *The Money Supply and the Exchange Rate* in March 1980 and the book of the proceedings went to press (in what must be record time) in February 1981. Artis and Currie, among other contributors to the symposium, examined whether the application of practical monetarism in Britain since 1976 had led to an unnecessarily costly appreciation of the real exchange rate (i.e., loss of UK competitiveness) in 1977 and 1979-80. They concluded that:

"...for a small open economy in which cost-mark-up dominates, stabilisation of the nominal exchange rate (by means of suitable changes in domestic monetary policy) offers better prospects for price stabilisation than do monetary targets...In circumstances in which adherence to monetary targets requires large and unexpected movements in the exchange rate, it is likely to be sensible to modify the monetary target in the light of the exchange rate movement, either by switching to an exchange rate target or by modifying the monetary target by some proportion of the unexpected deviation of the exchange rate." ¹⁹¹

Richardson's reference to the frosted ground of recession and £M3 as a dodgy thermometer tacitly accepted the case for an exchange rate override for the monetary target. Perhaps the counter-inflationary success of the Howe chancellorship could have been achieved at lower cost to output and employment, but not everyone agreed with this view. In a retirement interview in *The Times* on 31st March 1983, Sir Douglas Wass, our antimonetarist head of HMT noted:

"What has emerged in shop-floor behaviour through fear and anxiety is much greater than I think could have been done by more co-operative methods [no doubt a reference to incomes policy]. That is a surprise to me. There is a potential for productivity growth on a scale we have not had in this country." ¹⁹³

At Charles Goodhart's behest, Paul Temperton (a member of MPG, later at Merrill Lynch) worked on various exchange rate 'overshooting' models and tests of the relative impact of monetary policy and the oil price on sterling. This study suggested that monetary policy might have been more important than the oil price during the 1979-81 period. ¹⁹⁴

At a pre-secondment courtesy meeting with the Governor in 1986, I asked Robin Leigh-Pemberton for his view on the overshooting critique. It was not really appropriate to talk shop at such audiences and, if the meeting took place now, we would probably talk about a shared interest in gardening. However, the Governor humoured me by rising to my bait and suggested that the economy, and in particular the trade unions, needed a shock and it had worked. The debate on whether counter-inflation policy could have been implemented more efficiently in the 1976-82 period will probably rumble on for some time. ¹⁹⁵

27. Role of market practitioners

The passions raised in the debate over macroeconomic policy in the period 1979 to 1982 were most unusual, perhaps because they called into question the modus operandi of the macroeconomic executive. In his obituary of Dow, published in *The Independent* on 4th December 1998, McMahon wrote:

"[Dow's] deep fastidiousness of mind, combined with a somewhat reticent and understated manner probably meant that his contributions to economic policy and understanding were not widely recognized as they should have been, especially by those of a dogmatic and superficial turn of mind. A horde of such people stormed the citadels of economic power in the late Seventies and early Eighties under the banner of monetarism – a theory that held that all one had to do to cure inflation was to control the growth of the quantity of money. Those who, like Dow, believed that it was much more difficult and complicated than that, were apt to be dismissed as fuddy duddy and obstructionist. But he had the last laugh. His book, written jointly with lain Saville, A Critique of Monetary Policy: theory and British experience (1988) was devastating in its reasoned demolition of monetarism."

McMahon's disdain for the superficial hordes storming the citadels of the Bank and Whitehall is palpable, but were the views of the Dow School in the macroeconomic executive vindicated? Dow and Saville's book provides an elegant critique of monetary policy in the Thatcher Government's first term and the failures of the MTFS. 196 The incoming Conservative Government would have been well advised not to sex up the presentation of the Healey-Richardson targeting regime as they did. The targeting system might have survived the re-intermediation of the early 1980s, if the new Government had stuck to annual targets with scope for base drift, and not replaced the interpretive role of the market cognoscenti with a formulaic response to targets. However, Dow's book suggests to me that he never fully appreciated the role of publicly announced targets as a means of framing an intricate dance between the monetary authorities and market practitioners. 197 Self-imposed targets put pressure on the authorities to adjust policy in a timely manner, but there were instances where the authorities could plead with some credibility that they had done enough. In these cases, the markets might forgive the authorities for a wayward aggregate continuing to stray outside its cone (prescribed range), because sufficiently resolute action had already been taken (e.g., interest rates had been raised), or there was some other mitigating factor (e.g., the exchange rate had risen unexpectedly). When setting the target for the following year, the authorities would need to make a judgement on the stance of policy required to retain market confidence (e.g., the degree to which base drift should be clawed back or accommodated). Perhaps Dow thought there was no need for, or benefits to be gained from, an intricate dance with the markets. His co-author, Iain Saville, remains sceptical of the counterparts approach. 198

28. Targeting options

It is certainly true that the move back to interpretational (and in a sense less transparent) monetary policy in March 1981 was greeted with sighs of relief all round and the

reformulated regime lasted until March 1987, after which no formal target was published for money. Thereafter there were a series of dalliances with exchange rate targeting, culminating in the debacle of Britain's exit from the Exchange Rate Mechanism (ERM) in 1992. In 1997, eight years after the fall of the Berlin Wall, Gordon Brown gave the Bank's Monetary Policy Committee (MPC) operational independence to set interest rates within the framework of an inflation target. There followed the boringly successful decade of central banking before the global credit crisis broke the peace in 2008.

Since the un-pegging of sterling from the US dollar in June 1972, the UK has experienced seven policy regimes: freestyle policy between 1972 and 1976, Healey-Richardson-style monetary targeting from 1976 to 1979, Thatcher-Howe-style rigid monetary targeting from 1979 to 1980, Howe-Lawson-style multiple targeting from 1981 to 1987, Lawson-Lamont-style exchange rate targeting from 1987 to 1992, a reversion to freestyle policy between 1992 and 1997, and, from 1997, Brown-George-style inflation targeting, followed by more of the same under Darling and King. In the last four decades, the British economy has operated without an intermediate target in the four years between 1972 and 1976 and in the five-year period between our exit from the ERM in 1992 and the foundation of the MPC and the inflation target in 1997. A key lesson of UK macroeconomic policy is that we have been drawn inexorably towards the use of publicly announced targets of one sort or another. The kernel of the problem is how to manage a target and reactions to it.

29. Evaluation

So how did the macroeconomic executive and its academic advisers perform in the late 1970s and early 1980s? Not brilliantly, I would suggest:

- Treasury officials freely admitted that the politicization of interest rates was dysfunctional, but they did not look for a solution. Decades later, it took a coup d'état by another Labour heavyweight Chancellor (Gordon Brown) and his apprentice (Ed Balls) to wrest interest rate policy out of HMT.
- 2. The majority school in the macroeconomic executive Sir Douglas Wass and most of his officials, and Christopher Dow and the Bank's unbelieving monetarists did not re-evaluate the policy making process of the 1972-76 period with sufficient vigour. They were persons of integrity who sought to make judgements in the best interests of the country, but they seemed to be mightily complacent about the efficacy of the discretionary policy process after the economic dislocation of the early and mid-1970s. It was taken as read that the princes of the macroeconomic executive should be left free to opine on Budget judgements and the conjuncture. If the political system then mangled up their recommendations, that was just our bad luck.
- 3. It is arguable that some incumbents in the macroeconomic executive remained impervious to new thinking in the universities. The younger generation sometimes suggested this. There was a disjunction between the training of the old guard and the more intensive use of applied mathematics in economics courses from the 1970s. Of the senior cadre in the Bank, only John Flemming and Charles Goodhart bridged the divide and John whose flexible thinking would frequently give me

- pause for thought sometimes found it difficult to get his senior colleagues to think about problems in new ways.
- 4. For me, the main failure of the macroeconomic executive during the 1970s was not so much that they missed a new trick, but rather that they discarded an old verity. They ceased to believe that inflation could or should be controlled. There was much wringing of hands about it, but the bottom line was that incomes policy was regarded as the *deus ex machina* for controlling inflation, and if the trade unions would not play ball, we all had to live with it. When inflation spiralled towards hyperinflation and incomes policy collapsed spectacularly under the Callaghan Government, it began to dawn on some that we had a problem on our hands.
- 5. Eminent economists of all persuasions flocked to advise the Government and pontificate to the Treasury and Civil Service Committee (TCSC) of the House of Commons. Their submissions are an historical goldmine, but their advice did not help much at the time, in part because they and their adherents did not focus sufficiently on the institutional changes required for their grand schemes to work. The now roundly criticised MTFS was partly inspired by prevailing economic theories about rational expectations and we have seen how this particular silver bullet missed its target. ²⁰¹
- 6. There should have been greater clarity on what econometric models could and could not do. The large macro-models provided a useful framework for discussing the conjuncture, but key economic drivers, most notably the exchange rate path, were imposed by assumption, not forecast by the model. There was no econometric means of predicting the effect of government policy on the exchange rate, or longdated interest rates.
- 7. More specifically, it was quite clear in 1976 that there was no econometric means of forecasting broad money. This did not invalidate the £M3 target and the counterparts approach to its forecasting and control, but it required a nuanced approach.
- 8. The politicians did not help much. Labour and Conservative Governments were elected and came to office with grand ideas and '-isms'. There seems to have been a serious disconnect between new Governments, their ideas and their implementation. Of course, Treasury and Bank officials were resigned to dealing with politicians armed with crazy ideas it goes with the territory and the ability of HMT and the Bank to block new thinking is sometimes a great benefit to the country. However, it is an odd way to run a country.
- 9. Healey and Richardson did at least come up with a heroic plan monetary targets to bolster or take the place of incomes policy. They deployed their plan with deft technical skill within the confines of a corporatist approach to government that was losing support. Their monetary targets were not a low-cost route to price stability as envisaged by the MBC crowd, nor a means of depoliticizing interest rates, but a conceit to constrain government deficits and maintain a non-accommodating monetary stance. The conceit was a useful one, but it did not engage the hearts and minds of the majority school of the macroeconomic executive.

- 10. However, the Healey-Richardson targets were not a home grown achievement on a par with Konrad Adenauer's stabilisation of the Deutschmark in post-war West Germany. The re-imposition of monetary discipline in the UK was predicated on the intervention of an external agency the IMF and its DCE ceilings. There was no part of Britain's macroeconomic executive dedicated to the defence of 'sound money'.
- 11. The Thatcher Government achieved its break with corporatism and whether you like it or hate it its strategy was reasonably coherent, even if its implementation was less assured. It brought more monetarist rhetoric to the table and an MTFS that ended up being more about presentation than a harbinger of major changes to the operation of monetary policy. The Government was more radical in its fiscal policy, but was seriously wrong-footed by the extent to which sterling appreciated.

30. Conclusion

In the 1970s and 1980s the permanent officials of the macroeconomic executive comprised a relatively stable group of professionals whose careers straddled the Bank, HM Treasury, National Institute of Economic and Social Research (NIESR), the universities and international organizations, including the IMF, World Bank and the OECD. The macroeconomic executive had its own political dynamic and was not merely a passive group of experts, blindly following the instructions of its Ministerial masters. Forecasting played a key role and contributed to its mystique, but the importance of econometrically estimated relationships in UK financial forecasting should not be overplayed. The macroeconomic executive has evolved since the 1970s and 1980s, but it would be wise of any new Government to study its mores and foibles.

31. Postscript on unfinished business

Before my time at the Bank ended, I worked in the Money Markets Division (MMD) of the Bank for Tony Coleby and Eddie George. I also went on secondment as Assistant Commissioner at the newly reorganized Building Societies Commission (BSC) led by Michael Bridgeman (yes, he of the Bridgeman Committee) and Gerald Watson. (And yes, I know Assistant Commissioner sounds like a policeman, but on the upside it was in the West End and the shopping was better.) One noticeable development, which started in the late 1980s, was the transformation of the sterling interbank market from a mechanism for equalising short-term imbalances between UK banks to being a cross-border source of wholesale funds for a vast array of banks, non-banks and special purpose vehicles. Building societies were allowed to use the wholesale market more extensively from 1988 and many wholesale funders rolled-over short-term placements and lent the funds for longer periods. The scale of the maturity transformation being undertaken was not fully recognized until the credit crunch hit the markets in September 2008 and there remains a suspicion that improved liquidity had accentuated asset bubbles in housing and other sectors.

In the heated debates of 1979-83, the proponents of MBC argued that more volatile interbank rates would act as a supply-side deterrent to excessive bank lending. If above-target lending led to money market shortages and a hike in interbank rates, wholesale-funded lenders would be penalised and excessive lending choked off. They also argued that there should be a clear feedback mechanism - a well-articulated policy reaction function - so that the market would know in advance that excessive growth would be penalised with higher funding rates. At the time, the stock answer to advocates of a 'crunchier' interest rate regime was that Britain's monetary institutions would have to undergo radical change. Since then a series of incremental changes have been made, culminating in the creation of the gilt repo market which started in January 1996, and the UK now has an institutional structure where short-term interbank rates could fluctuate more. More volatile interbank rates would not be a total answer to excessive liquidity creation and asset bubbles, but this particular tool of monetary policy is worthy of reappraisal. It would certainly be worth considering whether the authorities should vary the volatility as well as the level of short-term sterling rates.

And finally, I should come clean on how it felt to be in one's first job and be pitched into a team on mission impossible. It was great and I would not have missed it for the world.

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Appendix 1 - UK monetary aggregates and their credit counterparts

- Monetary base, high-powered money or the monetary authorities' monetary liabilities comprise the monetary liabilities of the Bank of England, coin issued by the Royal Mint and the fiduciary note issue of the Scottish and Northern Irish banks. Components of the monetary base include currency outstanding with the public (including non-UK residents), UK banks' till money (vault cash), and UK banks' deposits with the central bank (bankers' deposits). Other Bank of England liabilities are probably excluded from the monetary base but there are not hard-and-fast rules. Excluded liabilities include banks' Special Deposits, deposits of Government, other public sector bodies and overseas central banks, the Bank of England's capital and reserves and internal accounts. Till money/vault cash is net of Bank of England notes held as backing for issuance of notes by Scottish and Northern Irish banks in excess of their fiduciary issue. 1981 definition.
- M1 Currency in circulation with the public and UK private sector residents' sterling sight deposits with UK banks. Pre-1975, M1 deposits were defined as current accounts against which cheques could be drawn. Public sector deposits were excluded. The 1970 definition was subject to relatively minor revisions in 1975. 206
- NibM1 M1 excluding interest bearing sterling sight deposits of UK private sector residents with the UK banking sector (including discount houses). The nibM1 series was created at the same time as the 1975 statistical reforms were implemented. 207
- M1 + UK private sector sterling time deposits (mostly on seven days' notice but usually callable on demand) with UK deposit banks (clearing banks, Giro, Banking department of the Bank of England and the discount houses). 1970 definition. ²⁰⁸
- Currency (notes and coin) in circulation with the public (excluding cash in banks' vaults but including non-UK residents' currency holdings) and (sterling and foreign currency) deposits (including time deposits and CDs) of UK (public and private) residents with UK banks. 1970 definition with minor revisions in 1975.
- £M3 Currency in circulation with the public and *sterling* deposits of UK residents with UK banks, i.e., M3 less foreign currency deposits of UK residents with UK banks. 1970 definition with minor revisions in 1975. ²¹⁰
- DCE Domestic credit expansion = Public sector borrowing requirement (PSBR) less sales of public sector debt to the non-bank private sector plus bank lending to the private sector. 1969 definition revised in 1975. 211
- PSL 1 Private sector Liquidity, Definition 1 M1 plus private sector time deposits with a maturity of up to two years, private sector holdings of sterling certificates of deposit and private sector holdings of monetary instruments (bank bills, Treasury bills, local authority deposits, certificates of tax deposit). 1982 definition. 212
- PSL 2 Private sector Liquidity, Definition 2 PSL1 plus private sector holdings of building society deposits (excluding term shares and SAYE), plus National savings (excluding saving certificates, SAYE and other long-term deposits), minus building society holdings of money market instruments and bank deposits. 1982 definition.²¹³

Appendix 2 – Summary of 'Monetary objectives' chart in 'Monetary developments' section of 'Economic commentary' in the *Bank of England Quarterly Bulletin*, 1976-1981

BEQB edition	Page no.	Monetary aggregates (seasonally adjusted)	Scale / growth	Target base date	Growth rate or range (cone or line)	Announcements and outturn
1976 Mar	13	M3 (bold) M1 (light)	Index - mid Jan 1975 = 100 Log scale	No target	n/a	-
June	164	M3 (bold) M1 (light)	Index - mid Jan 1975 = 100 Log scale	No target	n/a	-
Sept	296	M3 (bold) M1 (light)	Index - mid Jan 1975 = 100 Log scale	No target shown	n/a	12% annual target announced on 12/7/76 with a base date of mid- April 1976
Dec	417	M3 (bold) M1 (light)	% increase since base date	Mid-April 1976	12% growth dotted line	Outturn for half of FY 1996-7
1977 Mar	14	£M3 (continuous) M3 (bold dashed)	% increase since base date	Mid-April 1976	12% bold line and 9%-13% conical range	9%-13% growth of £M3 consistent with DCE commitment announced in December 1976
June	147	£M3 (continuous) M3 (light dashed)	% increase since base date	Mid-April 1976	12% bold line and 9%-13% conical range	Outturn for whole of FY 1996-7
Sep	295	£M3 (bold) M1 (light)	% change in latest month from three months earlier	No target shown	-	Early in target period starting mid- April 1977
Dec	426	£M3 (bold continuous)	% increase since base date	Mid-April 1977	9%-13% conical range	Outturn for half of FY 1997-8

BEQB edition	Page no.	Monetary aggregates (seasonally adjusted)	Scale / growth	Target base date	Growth rate or range (cone or line)	Announcements and outturn
1978 Mar	18	£M3 (bold), M1 (light)	% change in latest month from three months earlier	No target shown	-	-
Jun	166	£M3 new seasonal (bold) £M3 old seasonal (dashed)	% increase since base date	Mid-April 1977	9%-13% conical range	Outturn for whole of FY 1977-78
Sep	344	£M3 (bold), M1 (light)	% change in latest month from three months earlier	-	-	Early in target period starting mid- April 1978
Dec	499	£M3 (bold), M1 (dashed)	% increase since base date	Mid-April 1978 Mid-Oct 1978	8%-12% conical range 8%-12% conical range	Outturn for half of FY 1998-9
1979 Mar	16	£M3 (bold), M1 (dotted)	% increase since base dates	Mid-April 1978 Mid-Oct 1978	8%-12% conical range 8%-12% conical range	-
Jun	123	£M3 (bold), M1 (dotted)	% increase since base dates	Mid-April 1978 Mid-Oct 1978	8%-12% conical range 8%-12% conical range	Outturn for FY 1978-79
Sep	261	£M3 (bold), M1 (dotted)	% increase since base dates	Mid-Oct 1978 Mid-June 1979	8%-12% conical range 7%-11% conical range	New target after 9 months with base drift/overshoot
Dec	372	£M3 (bold), M1 (dotted)	% increase since base dates	Mid-Oct 1978 Mid-June 1979	8%-12% conical range 7%-11% conical range	Outturn for year to 10/1979

	EQB dition	Page no.	Monetary aggregates (seasonally adjusted)	Scale / growth	Target base date	Growth rate or range (cone or line)	Announcements and outturn
	.980 Mar	14	M1 (bold) £M3 (dotte d) ²¹⁴	% increase since base date	Mid-June 1979	7%-11% conical range	-
J	Jun	(119)	No chart of money against target	-	-	-	-
S	Sep	(263)	No chart of money against target	-	-	-	-
]	Dec	390	Top panel: £M3 (bold) Lower panel: PSL2 (bold), M1 (dashed), PSL1 (dotted)	Index mid-April 1978 = 100 Log scale	-	4 cones: April 1978- Oct 1978 Oct 1978- Oct 1979 June 1979- Feb 1980 Feb 1980- April 1981	-
	.981 Mar	3	Top panel: £M3 (bold) Lower panel: PSL2 (bold), M1 (dashed), PSL1 (dotted)	Index mid-April 1978 = 100 Log scale	-	3 cones: Oct 1978- Oct 1979 June 1979- Feb 1980 Feb 1980- April 1981	-

¹ I am grateful for comments on earlier drafts of the paper from Harry Bush, Nicholas Dimsdale, Michael Foot, Charles Goodhart and John Trundle. None of the above should be held responsible for any lapses in memory or misconceptions on my part

² M.D.K.W. Foot, 'Monetary Targets: Their Nature and Record in the Major Economies', in Brian Griffiths and Geoffrey E. Wood, eds., *Monetary Targets*, Macmillan, London, 1981, p. 14

³ N.H. Dimsdale, 'British Monetary Policy since 1945', in N.F.R. Crufts and N.W.C. Woodwood, eds., *The British Economy since 1945*, Oxford: Clarendon Press, 1991, pp. 126

⁴ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 488

⁵ Nicholas H. Dimsdale, 'The Treasury and Civil Service Committee and the British Monetarist Experiment', in Mauro Baranzini (ed.), *Advances in Economic Theory*, Blackwell, Oxford, 1982, p. 186

⁶ N.H. Dimsdale, *ibid.*, 1991, pp. 131-137

⁷ C.A.E. Goodhart, 'The conduct of monetary policy, *The Economic Journal*, volume 99, June 1989, p. 302-3

⁸ John Biffin, Treasury Minister and a monetarist, was subsequently reported as calling £M3 a "wayward mistress", *The Times*, 22nd October 1981

⁹ Peter Riddell, *The Thatcher Government*, Martin Robertson, Oxford, 1983, p. 50

¹⁰ C.A.E. Goodhart, *ibid.*, 1989, p. 310

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¹² John Fforde, 'Setting Monetary Objectives', *Bank of England Quarterly Bulletin*, 23, volume 23, no. 2, June 1983, pp. 200; also reprinted in *The Development and Operation of Monetary Policy 1960-1983, A selection of material from the Quarterly Bulletin of the Bank of England*, Clarendon Press, Oxford, 1984

¹³ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, pp. 388-9

¹⁴ M.D.K.W. Foot, *ibid.*, 1981, p. 15; C.A.E. Goodhart, *ibid.*, 1989, p. 300

¹⁵ M.D.K.W. Foot, *ibid.*, 1981, p. 19

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¹⁷ M.D.K.W. Foot, C.A.E. Goodhart and A.C. Hotson, 'Monetary base control', *Bank of England Quarterly Bulletin*, volume 19, number 2, June 1979, pp. 157-9

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¹⁹ M.E. Hewitt, 'Financial forecasts in the United Kingdom', *Bank of England Quarterly Bulletin*, volume 17, no. 2, June 1977, pp. 188-95

²⁰ M3 comprises UK residents' deposits with UK banks. £M3 excludes foreign currency deposits

²¹ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 401

²² John Fforde, *ibid.*, June 1983, pp. 201

²³ Rupert Pennant-Rea subsequently set out a rationale for explicit public sector borrowing rules in his paper, 'Public Choice and Public Policy', pp. 7-19, in K. Alec Chrystal and Rupert Pennant-Rea (eds.) *Public Choice Analysis of Economic Policy*, Macmillan, 2000, especially p. 16

²⁴ http://www.margaretthatcher.org/archive/

²⁵ Douglas Wass, Decline to Fall: The Making of British Macro-economic Policy and the 1976 IMF Crisis, OUP, 2008

²⁶ Sir Geoffrey Howe, *Conflict of Loyalty*, first edition 1994, Macmillan paperback 1995, p. 203-4

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²⁹ The author was employed at the Bank of England from 1978 to 1988; Economics Division 1978-83, Governor's Office and Deputy Governor's Personal Assistant 1983-85, Money Markets Division 1985-86, secondment to Building Societies Commission 1986-88.

³⁰ Monetary Policy Group had been called Group 7/2, a numbering system that I never deciphered

³¹ M.D.K.W. Foot, 'Monetary Targets: Their Nature and Record in the Major Economies', in Brian Griffiths and Geoffrey E. Wood, eds, *Monetary Targets*, Macmillan, London, 1981, pp. 13-40

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³⁴ 'A transactions demand for money', *Bank of England Quarterly Bulletin*, volume 18, no. 1, March 1978, pp. 48-60

³⁵ R.T. Coghlan and L.M. Smith, 'A Preliminary Note on the Demand for M3', internal Bank of England note dated 15th September 1977. Do not be fooled by the use of 'preliminary' in the title; it was a common affectation at the time for internal research notes to be called preliminary, nothing was final. It did fool the Bank's archivists who sometimes destroyed so called preliminary notes. The Coghlan-Smith note was declassified under H.M. Treasury's Freedom of Information (HMT FoI) disclosures, 'Monetary policy in the late 1970s and in the 1981 Budget', released 9th November 2006. http://www.hm-treasury.gov.uk/foi money7081 2006.htm The Coghlan-Smith note is in PDF file 1, page 24-25 (the pages themselves are not numbered)

³⁶ R. Coghlan, *Money, Credit and the Economy*, Oxford, 1981

³⁷ B. C. Hilliard, 'The Bank of England small monetary model: recent developments and simulation properties', *Bank of England Discussion Papers*, No. 13; J.M. Hoffman, 'A quarterly small monetary model of the UK economy: preliminary estimation and simulation results', *Bank of England Discussion Papers*, No. 14

³⁸ Bank of England Quarterly Bulletin, volume 18, no. 3, September 1978, pp. 359-364, especially appendix, pp. 363-4

³⁹ C.A.E. Goodhart, *Money, Information and Uncertainty*, Macmillan, 1975, pp. 167-9; revised 2nd edition 1989

⁴⁰ A text that provides an example of the language of 'offsets and special factors' can be found in *Bank of England Quarterly Bulletin*, volume 19, No. 2, June 1979, p. 123; John Fforde, 'Setting Monetary Objectives', *Bank of England Quarterly Bulletin*, 23, volume 23, no. 2, June 1983, pp. 205

⁴¹ C.A.E. Goodhart, *Monetary Theory and Practice: the UK Experience*, Macmillan, London, 1984, pp. 146-181

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⁴⁵ Email from Michael Foot to the author dated 18th January 2010

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- ⁵² Samuel Brittan, *Steering the economy: the role of the Treasury*, Harmondsworth: Penguin, 1971 rev. edition (1971 edition included some arguments against the fine-tuning of fiscal policy)
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- ⁵⁴ Douglas Wass, *Decline to Fall: The Making of British Macro-economic Policy and the 1976 IMF Crisis*, OUP, 2008, pp.1-6; Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 378
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- ⁵⁷ Douglas Wass, *ibid.*, 2008, p. 211
- ⁵⁸ Denis Healey. *The Time of My Life*. Michael Joseph. 1989. p. 376. also p. 434
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- ⁶⁰ Peter Jay suggested a Currency Commission, *The Times*, 15th April 1976
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- ⁷¹ Postscript to note by P.E. Middleton dated 25th April 1977, HMT Fol disclosures, *ibid.*, PDF file 1, p. 13
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⁴⁸ 'Seasonal adjustment of monthly money statistics', *Bank of England Quarterly Bulletin*, volume 18, no. 2, June 1978, pp. 196-203

⁷³ Note of meeting held in Sir Douglas Wass's room on 9th November 1977, p. 6, HMT Fol disclosures, *ibid.*, PDF file 3

⁷⁴ Note of meeting held in Sir Douglas Wass's room on 9th November 1977, p. 6, HMT Fol disclosures, *ibid.*, PDF file 3

⁷⁵ Governor's speech given on 17th January 1977 and published in the *Bank of England Quarterly Bulletin*, volume 17, no. 1, March 1977, p. 49

⁷⁶ Governor's speech given on 17th January 1977, *ibid.*, p. 48

⁷⁷ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 394-397

⁷⁸ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 397-400

⁷⁹ Governor's speech given on 17th January 1977, *ibid.*, p. 49

⁸⁰ Ben Friedman refers reverentially to Charles Goodhart as "...the Samuel Johnson of monetary policy." In B.M. Friedman, 'The use and meaning of words in central banking: inflation targeting, credibility and transparency' in Paul Mizen (ed.) *Central Banking, Monetary Theory and Practice: Essays in Honour of Charles Goodhart*, volume 1, 2003; Denis Healey, *The Time of My Life*, Michael Joseph, 1989, p. 413

⁸¹ Alexandre Lamfalussy, 'Rules versus discretion: an essay on monetary policy in an inflationary environment', Bank for International Settlements Economic Paper, No. 3, April 1981

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⁸⁴ Denis Healey, *The Time of My Life*, Michael Joseph, 1989, pp. 435 & 450; Governor's Mais lecture, 'Reflections on the conduct of monetary policy', given on 9th February 1978 and published in the *Bank of England Quarterly Bulletin*, March 1978, p. 35

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