

## Chapter 8 Monetarism & the British Monetarist Experiment

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I intend to outline, in this article, the most crucial tenets of monetarism and to discuss the main issues which have arisen when monetarist ideas have been put into practice, particularly with regard to the U.K. monetarist experiment of 1979-85.

The central tenet of monetarism is quite simple - it is that changes in the nominal stock of money are the dominant cause of changes in money income. Monetarists believe that the largest effect of money supply changes is on inflation rather than real macro variables. As Friedman put it: "The central fact is that inflation is always and everywhere a monetary phenomenon. Historically, substantial changes in prices have always occurred together with substantial changes in the quantity of money relative to output. I know of no exception to this generalization". Monetarists believe that macroeconomic policy can have little effect on real variables such as output and employment, that its main effect is on the inflation rate.

The cornerstone of monetarist theory is the quantity theory of money as restated by Friedman. The traditional quantity theory was encapsulated into the identity  $mv = py$  where  $m$  is the money supply,  $v$  is the velocity of circulation,  $p$  is the price level, and  $y$  is the real national income. It was assumed that the velocity of circulation was affected by institutional factors which, by their nature, were very slow to change. Therefore the velocity of circulation was assumed to be relatively constant and the money supply to be directly related to the nominal national income. Keynes practically destroyed the quantity theory when he introduced the idea of an interest-elastic speculative demand for money. If the demand for money was to vary with something as volatile as the interest rate then it, and by implication the velocity of circulation, could not be assumed to be constant. Friedman set out to rehabilitate the quantity theory by showing that the demand for money was interest inelastic. He succeeded by treating money as an asset which could be regarded as on a par with bonds, equities and consumer durables. The individual could have a choice between money and bonds but the choice could also be between money and a whole range of consumer durables. Thus the rate of interest becomes comparatively insignificant. The revived quantity theory yields a transmissions mechanism which stresses a broad and direct impact of expenditure. Individuals will seek to dispose of excess money balances by paying out a larger sum for the purchase of securities, goods and services than they are receiving. This attempt raises the price level right across the entire menu of assets in the revised Quantity Theory. The process continues until desired real cash balances and actual real cash balances are equalized. This results in a higher level of nominal national income. Friedman even suggests that there may be some overshooting in this process leading to a cyclical adjustment of real cash balances about their desired level. This transmission mechanism takes a far wider range of assets into account than does its counterpart in Keynesian liquidity preference analysis, although for many this extension only

adds to the complexity of the mechanism without providing us with any further theoretical insight into it.

Friedman has placed great reliance on econometric research. His greatest work, co-written with Anna Schwarz, "A Monetary History of the United States" aimed to test the relationship between the money supply and other economic variables for the period 1867-1960. Three main conclusions were reached:

(i) Changes in the money stock were associated with changes in money income and prices over a long period.

(ii) There was a stable relationship between monetary changes and economic changes.

(iii) Changes in the money stock often occurred independently and were not the result of changes in economic activity.

Furthermore the velocity of circulation was found to be relatively constant and there was a steady fall in the velocity of circulation over the period studied. These results enabled a monetarist policy prescription to be put forward. The money supply should be controlled and allowed to increase in line with proposed national income growth. In this way inflation would be reduced to minimal proportions. However both the results of Friedman's research and the monetary policy prescriptions were to come under increasing attack once attempts were made to implement monetarism.

Margaret Thatcher and the British Conservative party gained power in June 1979 on an obviously monetarist ticket. Inflation was over 10% in 1979 and was to reach 22% the following year. Sterling M3 was chosen as the monetary target and in 1980 the medium term financial strategy set target levels of M3 growth through to 1983-84. The targets were overshot, the economy plunged into recession as sterling proved to be crisis-prone. Strict monetarist policy was replaced by a more discretionary policy in March 1982, more attention was paid to exchange rates and monetary targets were loosened. This more pragmatic form of monetarism survived until October 1985 when monetary targets were suspended. This period served however to show that monetarist assumptions about the transmission mechanism, the controllability of money supply and of monetary aggregates, the velocity of circulation and the role of exchange rates were flawed and naively optimistic. It is these issues which I shall now address.

Firstly, consider the transmission mechanism between money stock and nominal income. Friedman postulated that changes in the money supply caused changes in money income. Critics have argued that the causal link runs in the opposite direction, i.e. from nominal income to money supply. Friedman found in his "Monetary History" that on average peaks in the growth rate of the money stock were found to precede peaks in economic activity by sixteen months. Troughs in monetary growth preceded cyclical low points for the economy by an average of twelve months. In both cases the lag was found to vary considerably, from about four months to twenty nine months. Therefore he accepted that money stock growth was a poor predictor of inflation in the short term. It can also be accepted that when one considers the existence of cycles in economic activity, the peak monetary growth now recorded could as well be the response to the last high point in activity as the forerunner to the next one. Various studies have been carried out in order to determine the direction of causality but these have proved largely inconclusive. Sims used U.S. data for a twenty year period and concluded that the money supply is exogenous (i.e. it is independently determined) and that it determines nominal income. Williams, Goodhart and Gowland found, using

U.K. data, the money supply to be endogenous. Tobin reworked the results obtained by Friedman in the "Monetary History" assuming that the money supply was endogenously determined. He found an almost perfect statistical fit to explain the evidence that money changes always preceded changes elsewhere in the economy. The lags which Friedman had discovered emerged just as well when the money supply was assumed to be endogenous. Friedman later accepted that there would be feedback effects on monetary growth from changes in economic activity, but claimed that far stronger effects ran in the other direction.

Kaldor, in contrast to Friedman, argued that in a credit money economy the supply of money can never be in excess of the amount individuals wish to hold. He contended that the level of expenditure on goods and services cannot be said to rise in consequence of an increase in the amount of bank money held by the public. Rather it is a rise in the level of expenditure which calls forth an increase in the amount of bank money. It is on these lines that the transmission mechanism during the U.K. experiment shall be outlined, and the plausibility of the argument discussed.

There is little doubt that the tight monetary policies implemented in the U.K. in the early 1980's exerted some downward pressure on inflation. However the real effect of monetary policy could be linked to a shrinkage of effective demand brought about by high interest rates, a strong pound, and tight fiscal policies. Interest rates are the main tool of the Bank of England to control monetary variables. The raising of interest rates for this purpose leads to an overvalued exchange rate and this combination undermines the competitiveness of British industry. The result is factory closures and jumps in unemployment. The existence of high unemployment reduces the bargaining strength of labour, depresses wage settlements and thus exerts downward pressure on inflation. In this way the transmission mechanism is unambiguously from income to money. The U.K. experience would appear to support this view, Britain's real GDP fell by 2.2% in 1980 and 1.6% in 1981 but even these figures conceal the severity of the recession. North Sea Oil was booming in this period and giving the economy a badly-needed boost. However manufacturing output fell by 17.5% between the second quarter of 1979 and the first quarter of 1981. Unemployment rose by 1.8 million in the space of two years. Parts of the North of England were devastated. During the period both interest rates and the value of sterling were at extremely high levels. However Alan Walters has argued that high exchange rates had little effect on the exporting sector, that manufacturing exports were higher in 1981-83 than 1974-76 and that huge productivity increases occurred when they were required to protect the exporting sector. A counter-argument is that productivity increases merely reflect an increase in the capital labour ratio brought about by huge unemployment. Furthermore one wonders if productivity increases would always save industry from dangerously high exchange rates. Walters further argued that the British recession was only slightly more severe than that suffered by its main trading partners. However one must remember that the 1979 oil shock meant a huge balance of payments problems for most Western governments in the early 'eighties. The U.K., with its booming oil production, had no such worries. In short it appears that monetarist policies ensured that pain of inflation reduction was far greater in the U.K. than elsewhere because monetarism could only succeed through a transmission mechanism of falling output. It seems to echo Keynes's statement about monetary policy in the U.K. in the 1930's. It was "simply a campaign against the standard of living of the working classes" operating

through the "deliberate intensification of unemployment".

One assumption implicit in monetarist theory is that the money supply is exogenous and that it can be controlled by the monetary authorities. There are several measures of the amount of money existing in the economy at any one time. In the U.K. they range from very narrow definitions such as the monetary base (MO) to very wide definitions such as sterling M3 and PSI2. The basic monetarist position was that any of these magnitudes could be targeted successfully. The important point was that one magnitude be chosen and that monetary policy would concentrate on keeping it within its target range. Implicit here were two assumptions:

(i) The monetary aggregate chosen could be maintained within its target range.

(ii) All monetary measures would experience similar movements.

Both these assumptions were to break down.

Monetarists believed that achieving a steady rate of growth in the money stock was in the power of the Bank of England. The money supply measure chosen and targeted by the Conservatives in 1979 was sterling M3. The initial experience was that major hikes in interest rates were required to keep sterling M3 within its target range. During the second half of 1979 the government succeeded in targeting sterling M3 but this achievement was at considerable cost. The minimum lending rate had been pushed to 17% in November 1979, a level at which it was to remain for eight months. Even so success was temporary. "The Medium Term Financial Strategy", published in 1980, outlined targets for sterling M3 through to 1983/84. In spite of record interest rate levels every single target was overshot. Professor Charles Goodhart, the Bank of England's specialist advisor on monetary economics from 1968 to 1985, has explained why sterling M3 was so difficult to control. The two main components of sterling M3 are bank lending and the PSBR. The Bank of England exerted tight control over the PSBR part by ensuring that it was fully funded, i.e. enough government stock had been sold to cover it. The problems arose in controlling bank lending. In the absence of direct controls, interest rates are the only tools of policy here. However interest rates can be crude tools with unpredictable effects. Higher interest rates, even real rates of seven percent, failed to restrain borrowing during the 1980's. In fact during the 1979-81 recession higher interest rates actually boosted bank lending by increasing the amount of distress borrowing by troubled firms already burdened with debt. Higher interest rates merely squeezed them even further and the money supply proved impossible to control.

Monetarists further believed that all monetary magnitudes would move in similar ways. As David Laidler expounded, "The consensus belief was that, if the growth of one aggregate was pinned down by policy, then that of the others would be brought into line by the stable portfolio behaviour of the private sector and all would be well". It was not to be. In 1981 M1, a narrow money measure, marked time while sterling M3 grew at 18%. The discrepancy in growth rates was in some way due to record interest rates which encouraged people to reduce their cash holdings in favour of interest-bearing deposits. The government followed its monetary rule and ignored the performance of M1 with the result that what appeared to be a loose monetary policy was, in fact, dangerously tight. The economy was suffering the consequences in terms of output and employment. Almost a decade before this, the Heath government had been lulled by low M1 growth into believing that monetary policy was tight when it was not. The point is the difficulty governments face in assessing which indicator, if any, can tell the

'true story'. If none can, monetarist rules cause havoc.

Another essential element of monetarist theory is the claim by Friedman that the velocity of circulation is relatively constant and predictable. David Hendry and Neil Ericsson subjected Friedman's research conclusions to test in 1983. Hendry was not impressed. He commented "A wide range of claims concerning the behaviour of monetary economies was made by Friedman and Schwarz and they asserted that these claims were consistent with the long-run historical evidence. A remarkable feature of the book is that none of the claims was actually subjected to test. Rather, equations were reported which did not manifestly contradict their theories and this non-contradiction was taken for corroboration". Hendry used their data to show that there was no evidence of a stable demand for money. Even more interesting is Hendry's 1985 study of the velocity of circulation in the U.K. since 1979. He found that there had been sharp shifts in the velocity of circulation and that these had been mainly due to financial innovation. He commented that money demand models would only remain useful if it is known that financial innovation will not occur or if innovations do occur that their quantitative effects can be anticipated. The sharpest movements in velocity have occurred in those measures of the money stock most actively targeted. For example the velocity of circulation of sterling M3 rose on average by 1% a year throughout the sixties and seventies but has fallen on average by 2.5% a year since 1980. This type of scenario is in keeping with Goodhart's law: "any observed statistical regularity will tend to collapse once pressure is placed on it for control purposes". The difficulty with shifts in velocity is that they only become apparent long after remedial action can be taken. Therefore it is difficult to judge whether any figure for the money supply growth implies tight or loose monetary policy.

Monetarist models have largely ignored exchange rates. In those models where exchange rates have featured prominently, it has been assumed that currencies would follow a smooth adjustment path in line with relative rates of monetary growth. However since the breakdown of the Bretton Woods system in 1973, large movements of short-term capital between countries have ensured that the currency market has not been a stable market tending towards equilibrium. In practice exchange rates have tended to move in line with interest rates. Therefore monetary targeting in effect demotes the exchange rate to being a residual variable of economic policy. The monetarist experiment in the U.K. showed this polity to be impractical as adjustment of interest rates often proved necessary to protect sterling irrespective of the growth in the money supply. Twice the government was forced to raise interest rates to prevent a sterling freefall which would have had large inflationary consequences. This policy made sense but it was not monetarism in that money targets were considered to be less important than the value of the pound. If sterling falls threatened inflation, sterling rises were responsible for making British industry less competitive. It all underlines the importance of maintaining some degree of control over exchange rates in a very volatile market. It should be noted that not only the U.K. but also Canada and Switzerland have been forced to effectively abandon monetarist policies in order to maintain reasonable control over their currencies.

One other monetarist tenet is the advocacy of monetary rules and their denial of any positive role for discretionary monetary policy. Friedman advocated that if necessary governments should be required by law to publish and abide by a monetary rule. Even if a non-discretionary monetary policy did make economic sense, which it doesn't, this proposal shows a level of political naivety that is

disquieting. On an economic level monetary policy must continuously take into account such factors as exchange rates and velocity shifts. Politically, it is absurd to suggest that politicians would transfer power to some other authority, e.g. the Central Bank. Elections will always cause shifts in economic policy and monetary policy will feel the effects. Rules will never replace the discretion of politicians.

Was monetary policy responsible for the decline in inflation in the U.K. until the mid-1980's? David Laidler wrote in 1985 "Monetarism's most basic claim was that, in order to slow down inflation, money growth needed to be curbed. Over the last five years, on average, money growth has been more restrictive than it was in the 1970's and inflation has fallen markedly". Two factors would indicate that this monetarist claim is overstated. Firstly inflation rates fell significantly throughout the OECD during the same period. Britain was no exception to the trend. Secondly several non-money explanations were relevant to explaining the fall. Oil prices fell quickly after reaching a peak in 1981. Fiscal policies had also been very tight in the early eighties. A true statement of the budget position can be arrived at by adjusting the public sector's financial balance for inflation and cyclical factors. The result is either a structural deficit or surplus. From 1973-79 the government ran structural deficits every year except 1977. From 1980-84 there were structural surpluses every year. Although it would be unreasonable not to ascribe some of the fall in inflation to monetary policy, monetary policy only achieved this through throwing the economy into deep recession. It is not coincidental that the big rise in unemployment occurred from 1979-81 when monetary policy was very tight. It was this huge rise in unemployment which restrained inflation.

The final point I would like to address is whether the U.K. experiment has been a fair trial of monetarist theory. Monetarists claim that it has not, they have many criticisms of the actions of the U.K. government in implementing monetarist policies. These criticisms are twofold. Firstly they argue that sterling M3 was an inappropriate monetary target and that instead the monetary base (MO) should have been targeted. Recent evidence does indicate that the response of MO to interest rates is reasonably stable and significant. Johnson suggests that a one percentage point rise in interest rates reduces MO by 1.7% (with an average response lag of 11 months). This would indicate that MO could be controlled by interest rates. However previous seemingly stable relationships between monetary aggregates and macro variables have proved to be very fragile and it is likely that Goodhart's law will again apply if MO is ever targeted. The second claim is that the Bank of England did not display the level of competence that was expected of them in their attempts to control the money supply. This argument is somewhat devalued in that Friedman made the same claim about the Federal Reserve Board in the U.S.. As Kaldor points out "It was nowhere stated in the writings of Friedman or any of his followers that the quantity theory of money only holds in countries where the monetary authorities are sufficiently 'competent' to regulate the money supply". Although there is, perhaps, some truth in the claims that errors of policy were made, laboratory experiments in economics can never take place in the real world. We must consider the experiences we have.

My conclusion is that monetarism has proved to be a failure when implemented in practice. It is based on untenable assumptions and can cause unnecessary pain to society and the economy as a whole.

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