"Fallacies of Monetarism*"

By Nicholas Kaldor, Cambridge

I think I had best begin by making my own position clear — I regard monetarism' as a terrible curse, a visitation of evil spirits, with particularly unfortunate, one could almost say devasting, effects on my own country, Britain. The biological process of natural selection should make for the development of favourable traits in the human character — and that includes the acceptance of ideas and beliefs that promote progress and the rejection of ideas that have the opposite effect. As we all know this is not, unfortunately, either a smooth or a continuous process — it proceeds by fits and starts. The religion of most societies contains the basic dualism between good and evil spirits, between angels and devils, between the purveyors of good advice and the purveyors of bad advice. The choice between them is often represented as a moral issue whereas it is more truly a matter of flair and intuition which sometimes works and sometimes does not. Decadence, according to Nietzsche, is a state in which the individual intuitively goes for the bad solutions for getting out of difficult situations, and fails to pick out the good ones.

The alarming thing is not that some people should hold crackpot ideas — the alarming thing is when crackpot ideas sweep the board — when they capture the minds of a wide selection of important and influential people. This has been the case with the rapid spread of monetarism among academics, journalists, bankers and politicians in the last five to ten years.

The purpose of my lecture today is to inquire how it came about that after the intellectual breakthrough which *Keynes* induced in the final years of the Great Depression of the 1930s in our understanding of how capitalist market economies work and why they are liable to periodic breakdowns in the normal processes of production, distribution, growth and accumulation, and which served as a guide or a rulebook for the conduct of macro-economic policies of Western countries

^{*} A Lecture delivered at the University of Basle on February 16, 1981.

for 25 years after World War II, his ideas should have been brushed aside and in a remarkably brief period largely forgotten — with the result that our opinion-formers and our policy-makers returned to the concepts and the modes of thought which proved so barren and futile when they last dominated the minds of economists in the 1920s and the early 30s. The monetary economists of that period proved completely useless in anticipating or in counteracting the great contradictionary process between 1930 and 1932 — a contraction which almost halved production and employment in countries like the United States and Germany, and would have done a similar devastation in Britain but for the fortunate occurrence that our institutions proved too weak to carry into effect the universally accepted policy objective of maintaining the gold standard.

The rise of the new monetarism is mainly associated with the work of a single pioneer economist, *Milton Friedman* starting in the 1950's, a man of unusual ingenuity and powers of persuasion, but also an impish character of whom one can never be sure whether he is serious or just kidding — how far he is genuinely convinced of the things he says and how far he just enjoys the spectacle of parrying the intellectual blows of his opponents by a rich variety of counter-thrusts in unexpected directions — so that he need never acknowledge defeat.

Friedman's work as an economist can be mainly characterized as a counterreformation — the reaction against the new economics of the 1930s and the return to 19th century orthodoxies. This involved both a denial of the theories of imperfect competition which were destructive of the neo-classical Walrasian general equilibrium value theory and of Keynesian macroeconomics which replaced the orthodox ideas on money and inflation.

More specifically modern monetarism is characterized by three distinguishing beliefs — all of which characterize the Chicago School.

(1) Prices in all markets are completely flexible — they rise in response to excess demand and fall in response to excess supply. Since prices in an atomistic perfect market must settle at the point where supply and demand are equal neither commodities nor services can be in a state of "excess supply" more than momentarily. (This comes to the same as the assumption that a market economy, left to itself, is self-regulating — it functions so as to ensure the full and efficient distribution of resources.)

- (2) There are no important differences between a (pure) commodity money economy (where money consists of gold or silver, or oxen) and a credit-money economy where money consists of negotiable debt certificates promises to pay of financial intermediaries which are convertible only in the sense that they can be exchanged into other forms of debt. (A bank cheque can be converted into bank notes; a bank note into other bank notes and so on.)
- (3) Effective control over the "money supply" will have a direct influence on the level of demand, and hence of prices; successful control of the money supply is both a necessary and a sufficient condition for moderating the rate of inflation and indeed bringing it to an end, if the control is maintained long enough.

All three of these propositions are based on false premises and are the main sources of error in monetarist thinking.

(1) The first assumption leads to a failure to recognize the all important difference between a demand-inflation and a cost-inflation. In the 'Walrasian' model of the economy which is at the bottom of all Friedmanite thinking, a rise in prices can occur only as a result of excess demand in some or all the markets. Costs (or incomes generated in the process of production) in that model of the economy are derived from prices, hence they cannot exert an autonomous influence on prices. In the real world however except in the special circumstances where there is an excessive pressure on resources (this generally happens as a result of a major war or its aftermath) prices of goods and services rise in consequence of a rise in costs — whether material, fuel, or labour costs — and each cost-induced rise in prices tends to generate further price and cost increases in circumstances in which there is an excess supply both of labour and of productive capacity. Thus the strict monetarist view denies that trade unions can bring about a rise in the prices of commodities. They may have the power to raise wages, but in the absence of an expansion of the money supply this cannot cause any rise in the prices of the goods which they produce. (This was Mrs. Thatcher's view in the first year of office when she frequently said that all labour can do is to price itself out of the market — it cannot cause inflation; in her second year however she changed her position and admitted that a reduction of price-inflation pre-supposes a reduction in the size of wage settlements. Following this the Government introduced a rigid pay restraint for the public sector. This of course was a serious departure from the pure monetarist doctrine though not perhaps a U turn).

- (2) The second assumption carries the implication that money has an 'exogeneous' supply schedule in a credit money economy which determines the quantity available independently of the demand for it it denies the basic difference in the relationship of money and prices as between a commodity-money system and a credit money system.
- (3) The third assumption implies that the quantity of money and the velocity of circulation are mutually invariant, whereas in reality, controls which succeed in reducing the stock of money (or cause it to rise at a lower rate) may be negated by a compensating change in the velocity of circulation. Indeed the very distinction between changes in the quantity of money and changes in the velocity of circulation comprises an arbitrary element of definition what appears as a rise in the velocity of circulation under a narrow definition, may appear as a change in the quantity of money, on a broader definition. (This is linked to the arbitrary element in the definition of money.)

Of these three assumption I propose to concentrate on the second, differences between a commodity-money economy and a credit money economy, just because I regard this as the essential element of the problem which has been largely neglected by Keynesian economists as well as by the monetarists.

It is the essence of the quantity theory of money that the supply of money is "exogeneous" — that is to say it is determined independently of the demand. This will be the case in all circumstances in which the quantity of the money-commodity (strictly speaking this involves a closed economy not trading with the outside world) — the quantity of precious metals — is given.

It is also the case when the money commodity can be varied through production, but the changes in supply that can be brought about in this way directly generate incomes, and are definite functions of the value of money in terms of goods. (Ricardo assumed for purposes of his theory that gold is produced under conditions of constant cost — i.e. that the value of gold in terms of commodities is fully determined by its labour costs relative to that of other commodities.) But in the case of paper money or credit money in its numerous forms (bank money) there is no such independent supply function. Bank money comes into existence as a result of bank lending and it is extinguished through

the repayment of bank loans. At any one time the volume of bank lending and its rate of expansion is limited only by the availability of credit-worthy borrowers. When trade prospects are good or when the money value of the borrower' assets (their collateral) rises as a result of a rise in prices, the demand for bank credit rises but by the same token, the credit worthiness of potential borrowers also improves, so that both the demand and the supply of credit move simultaneously in the same direction.

In the case of a purely metallic currency, it is possible to suppose that the supply of the money commodity increases relatively to the demand — say, as a result of the discovery of new gold mines or the conquest of new Continents like the Spaniards of the 16th Century — in which case the value of gold must fall relative to other commodities in order to find a "home" for all the gold that seeks a "home". A change in the price level — in the value of the money commodity thus forms the adjustment mechanism which brings desired money balances (Walras "encaisse desirée") into conformity with actual balances.

But there is no analogue to this in the case of credit money. The "supply" of bank money cannot be assumed to vary relatively to demand; the two must always change together. It is impossible to imagine that the prevailing amount of bank money should be in excess of the amount which individuals collectively desire to hold — if there was such an excess it would be extinguished through the repayment of bank loans.

In other words, in a credit money economy the money supply is necessarily endogeneous, not exogeneous. (This was Wicksell's position.) This proposition is of course contradictory to the beliefs of the many adherents of the quantity theory of money who think that the exogeneity of the money supply in a credit money economy is ensured either through the numerical dependence (or strict proportionality) of bank money to the underlying "real" money (this was Walras' and Marshall's view) — paper money is in strict proportion to gold — or simply through the reserve requirements imposed on commercial banks by the Central Bank. However there is no such one way causation from the "monetary base" determined by the Central Bank and the size of the credit pyramid which is built on it. This is partly because the Central Bank can only determine the total of "base money" issued (including the notes and coins circulating with the public) and not the size of the commercial bank's reserves as such. It is partly also because

the Central Bank's function of "lender of last resort" (which is considered indispensable for maintaining the liquidity of the banking system) makes it impossible for the Central Bank to set rigid limits to the amount of cash which it is willing to put at the disposal of commercial banks through re-discounts. The 'discount window' cannot be closed.

The traditional method by which a central bank exerts its regulating function is by setting its own re-discount rate, and keeping the market rates in certain relationship to this through open market operations. Historically, the central bank's policies were mainly motivated by the desire to protect ist own reserves (consisting of gold and reserve currency holdings); it lowered the discount rate in terms of rising reserves and vice versa. This policy is perfectly compatible with the "money supply" being a passive element varying automatically with the demand for credit (or the availability of credit-worthy borrowers).

However in the new monetarists view all this is wrong. To stabilize the economy and to avoid inflation what is needed first of all is to secure a steady growth in the money supply, not a steady rate of interest. Hence the "new" policy of the Federal Reserve (under Mr. Volcker) is to stabilize the rate of growth of the reserves of the banking system — this is not the same as stabilizing the 'monetary base' which includes currency — notes and coins in the hands of the public — and allows the commercial banks to bid for the available reserves, at whatever cost in terms of fluctuating interest rates. This policy also involves a floating rate regime for the exchange rate in order to avoid the monetary policy being interfered with by capital inflows or outflows.

All this is the very opposite of the analysis and prescription of the *Radcliffe* Committee's report in 1958 according to which central banks should not be concerned with the money supply as such — it is the regulation of short term interest rates, and not the quantity of money "which is the centre-piece of monetary action".

In Britain, when Mrs. Thatcher came to power in May 1979, her Government officially pronounced the formal adoption of the monetarist creed with almost the same solemness as the Emperor Constantine when he embraced Christianity as the state religion. However in the circumstances of British institutions this proved far from easy as subsequent events have shown. The Bank of England was incapable of fixing the "monetary base" let alone the size of mandatory bank reserves, or to leave interest rates to be freely determined by the market.

Instead they fixed a four-year target for the growth of the money supply (on its broad definition £M3, including interest-bearing bank deposits) on a gradually shrinking basis — 7-11 per cent increase in the first year, 6-10 per cent in the second year and 4-8 per cent in the fourth year; and they relied, for holding the money supply within the target range, on the steadily falling public sector deficit (as a percentage of the national income) and on varying the short term interest upwards or downwards according as the money supply moved relative to the target. (They were convinced, quite wrongly, that the public sector deficit is the major cause of changes in the money supply.)

But the whole plan came unstuck in their first year and disasterously so in the second year. The money supply continually exceeded the target range from the beginning and it rose at an almost unprecedented rate of 21 per cent in the second financial year. At the same time the deficit of the public sector exceeded the target by 15 per cent in the first year and by £ 3.5 billions or 40 per cent in the second year — despite cuts in public expenditure and heavy increases in the burden of taxation.

The Government has thus singularly failed to carry out its stated objectives in terms of either the growth of the money supply or of the rise in the public sector deficit. But they have nevertheless succeeded (if "success" is the appropriate term) in creating a deep economic recession — a recession that goes far beyond that experienced by any other Western industrialised country. Manufacturing output fell by 13.5 per cent in 1980 — a greater fall than in any year of the Great Depression of the 1930s. It is too early to tell how they succeeded in this when in terms of their own chosen criteria they should have failed. But there can be little doubt that the unprecedented rise in effective exchange rate of the £ (which reduced industrial competiveness by some 40 per cent in comparison with 1978) must have played a major role in this, causing a large fall in new orders both in the home market and abroad and an exceptionally large reduction in stocks. The rise in unemployment from 1.2 to 2.2 millions — by 1 million or 4 per cent of the labour force in twelve months — together with the numerous closures of factories, actual or threatened, has undoubtedly greatly weakened trade union power and thus contributed to a slowing down in the rate of increase in wages in recent settlements. This, however is clearly a consequence of mass unemployment due to the recession;

it cannot be due to anything which has happened, or is happening, on the side of the money supply. The "achievements" on the wage front in the inflation rate do not provide any support for the validity of "monetarism" — quite the contrary — which does not stop Government spokesmen from claiming credit, like Mr. Lawson did in Zurich the other day.

The Thatcher experiment has thus left Friedman and the monetarists in an intellectually highly embarrassing position. Friedman has admitted that as far as the United Kingdom is concerned, the money supply is not exogeneously determined by the monetary auttorities but he attributed this to the "gross incompetence" of the Bank of England. However, this puts an entirely new complexion on monetarism. It was nowhere stated in the writings of Friedman or any of his followers that the quantity theory of money only applies when the monetary authorities are sufficiently "competent" to regulate the money supply. If the Bank of England is so incompetent that it cannot do so, how can we be sure that the Bank of Chile or of Argentine or Mexico — to take only the highly inflationary countries — are so competent, or rather so competently incompetent, as to make it possible to assert that the inflation of these countries was the consequence of the deliberate action of their Central banks in flooding these countries with money? How indeed can we be sure that any Central bank — not excluding the best, such as the Federal Reserve or the Bundesbank or the Swiss bank are sufficiently competent to be able to treat their money supplies as exogeneously determined? And what happens if they are not? Surely we need a theory of money and prices to cover the cases of countries with incompetent Central banks, such as Britain?

The acceptance of monetarist theories was largely the consequence of the glittering empirical and econometric evidence which Friedman and his followers were able to assemble concerning the close correlation between changes in the money supply and of the level of money transactions (the money GNP) which *Friedman* believed was incompatible with, and thus refuted, Keynesian theory. However he always admitted that this is only true on the supposition that the change in the money supply is the cause of the change in the level of prices (or of total expenditure) and not the other way round. In other words, that the money supply is exogeneously determined by the monetary authorities. If it is now conceded that this would not be true in all cases —

it would not be true in cases of countries with incompetent monetary authorities — how can we be sure that his findings have any relevance to countries like President *Reagan's* America or Mrs. *Thatcher's* Britain which deliberately aim to make the money supply follow an exogeneous wath whether successfully or not?

¹ Keynes unwittingly contributed to the post-war revival of monetarism by his "liquidity preference" equation, M = L(Y,r) where the demand for money was assumed to vary with the rate of interest, whereas the supply of money, M was taken as an exogeneous constant. This formulation puts the whole burden of monetary adjustment on the elasticity of demand for money balances — the elasticity of the liquidity preference function, which meant that he assumed that variations of economic activity will be correlated with corresponding variations in the velocity of circulation. Starting from these premises Friedman was justified in thinking that strong empirical evidence concerning the stability of the velocity of circulation — in other words, a strong empirical correlation between changes in M and changes in Y — is sufficient to "refute" the Keynesian hypothesis. However it did not immediately occur to him that the explanation of his findings may lie somewhere else — in the variability of M with the volume of borrowing which postulates a high degree of elasticity in the supply of money with respect to the rate of interest (or simply of income) and not (or not necessarily) on the demand. At a later stage, Friedman and his followers investigated the matter and came up with a remarkably ambiguous answer: "the alternatives contrasted are not mutually exclusive. Undoubtedly there can be and are influences running both ways". He then cites "five kinds of evidence" for the view that the "money series is dominated by positive conformity" (The Monetary Studies of the National Bureau, New York, 1964, reprinted in The Optimum Quantity of Money and other Essays, Macmillan, 1969). I found most of his "evidence" (particularly that of his book, The Monetary History of the United States) largely worthless or irrelevant. (See Lloyds Bank Review, 1970. Further Essays on Applied Economics, Duckworth 1978 pp. 25 - 27.) Moreover I found that contrary to Friedman's frequent assertions the demand for money as a proportion of incomes (i.e. the reciprocal of the velocity of circulation) is neither "stable" between countries nor stable over time in any one country except in a few cases. For example, in Switzerland, Italy and Japan the money supply has been rising over the last twenty years (in relation to incomes), whilst in the U.S. and the U.K. it has been falling, with the result that in 1978 M3 (broad money) was over three and a half times as great as a proportion of the GNP in Switzerland as in the U.K. Even on the narrow definition, M1, the money supply in Switzerland was nearly three times as great as in the U.K. or the U.S. Yet noone would regard Switzerland as an "inflation prone" country (let alone more inflation prone) than the U.S. or the U.K. (Cf. my paper Monetarism and U.K. Monetary Policy, Cambridge Journal of Economics, December 1980, p. 299, Tables 1 und 2.)

Zusammenfassung

Irrtümer des Monetarismus

Der moderne Monetarismus baut auf drei irrtümlichen Annahmen auf. Die erste ist, daß in einer kapitalistischen Wirtschaft Märkte in einer perfekten walrasianischen Weise reagieren, d. h., Preise sind vollständig flexibel und reagieren sofort auf jede Änderung im Angebots- und Nachfrageverhältnis.

Der zweite Irrtum besteht darin, daß eine Kredit-Geldwirtschaft (in der Geld aus Schuldscheinen besteht und infolge von Bankgeschäften entsteht) dieselbe ist, wie eine Güter-Geldwirtschaft, in der das gesamte Volumen an Gold, Silber oder Ochsen zu jedem Zeitpunkt exogen vorgegeben ist.

Die dritte irrige Annahme ist, daß eine Änderung im Geldangebot direkten Einfluß auf die Güternachfrage hat und daß das Geldangebot voll unter staatlicher Kontrolle steht.

Die erste Annahme führt zu einer Verneinung der Möglichkeit, daß Inflation infolge von Kostensteigerungen entstehen kann, sogar in Zeiten ungenügender Nachfrage. Sie schreibt fest, daß Marktreaktionen und Änderungen in der Angebot-Nachfrage-Relation zu Mengen- und nicht zu Preiseffekten führen.

Die zweite Annahme erlaubt es den Monetaristen, die Menge des Papiergeldes (wie immer definiert), so zu behandeln, wie sie exogen vorgegeben ist. Aber wenn anerkannt wird, daß die gesamte sich im Umlauf befindliche Geldmenge durch Änderungen in der Nachfrage nach Geld bestimmt ist und sich mit ihnen ändert, dann verlieren die vorgelegten empirischen Beweise für die Quantitätstheorie ihre Gültigkeit. Eine Geldmengenzunahme ist dann immer eine Folge und nicht die Ursache von steigenden Einkommen und Preisen.

Auch für das heute gegebene moderne Banksystem mit Mindestreservepflichten der Banken kommt man zu keinem anderen Ergebnis.

Daß "monetaristische" Regierungen (wie solche von Frau Thatcher und Präsident Reagan) ihre gesteckten Ziele nicht erreichen, ist einfach zu erklären, wenn man diese Grundirrtümer ihres Denkens versteht. Insbesondere hat die Regierung Thatcher gezeigt (wie sogar der "Chef-Monetarist" Milton Friedman, zugibt), daß die Regierung mit den heute existierenden Geldund Bankinstitutionen (z.B. in England) nicht die Geldmenge kontrollieren kann.

Summary

Fallacies of Monetarism

Modern monetarism is built on threnn fallacious assumptions. The first is that in a capitalist economy, markets operate in a perfect Walrasian manner, with prices being completely flexible and changing immediately in response to any change in the relation of supply and demand.

The second is that a credit-money economy (where money consists of certificates of debt, and comes into existence as a result of bank directing) is the same as that of a commodity money economy, where the total amount of gold, silver or oxen outstanding at any one time is exogeneously given.

The third assumption is that a change in the "money supply" has a direct influence in the demand for commodities and that the "money supply" is under the control of the Government.

The first assumption leads to a denial of the possibility of an inflation occurring as a result of a rise in costs, even in times of deficient demand. It decrees that market responses to changes in the supply/demand relation can take the form of quantity responses and not price responses.

The second assumption allows the monetarists to treat the quantity of paper money (however defined) as exogeneously determined. Once it is recognised that the amount of money in circulation is determined by, and changes with, changes in the public's demand for money, the empirical proofs produced in support of the quantity theory of money lose their validity. The rise in the money supply is always a consequence of, not a cause of, a rise in incomes and prices.

Given a modern banking system with fractional reserve requirements, it could not be otherwise.

The failure of 'monetarist' Governments (such as those of Mrs. Thatcher and President Reagan) to attain their stated objectives is easily explained once the basic fallacies in their reasoning are understood. In particular, the Thatcher Government has demonstrated (and the chief monetarist, Milton Friedman, admitted) that with the type of monetary and banking institutions that exist, e.g., in England, the Government cannot control the "money supply".

Résumé

Erreurs du monétarisme

Le monétarisme moderne part de trois premisses fausses. Selon la première les marchés réagissent dans une économie capitaliste à la Walras parfaite, c.à.d. que les prix sont totalement flexibles et réagissent immédiatement à toute modificaion des relations entre l'offre et la demande.

Selon la deuxième, une économie monétaire de crédit (où la monnaie n'existe que sous forme scripturale et naît d'opérations bancaires) est identique à une économie monétaire de biens, où le volume global d'or, d'argent et de boeufs est à tout moment présenté comme exogène.

Selon la troisième une modification dans l'offre monétaire exerce une influence directe sur la demande de biens et l'offre monétaire se trouve entièrement sous le contrôle de l'Etat.

La première prémisse conduit à nier la possibilité que l'inflation naisse par suite de l'augmentation des coûts, même en période de demande insuffisante. Elle établit une fois pour toutes que des réactions et modifications de marché dans la relation de l'offre et la demande entrainent des effects quantitatifs et non de prix.

La deuxième permet aux monétaristes, de traiter la masse de la monnaie scripturale (quelle qu'en soit la définition) de manière exogène comme présentée. Mais si l'on reconnait que l'ensemble de la masse monétaire en circulation est déterminée et se modifie par les changements de la demande de monnaie, dès lors les preuves empirique présentées pour la théorie quantitative perdent leur valeur. Un accroissement de la masse monétaire est alors toujours une conséquence et non la cause de revenus et de prix en augmentation.

Pour le système bancaire moderne actuel avec les obligations de réserves minimales des banques on n'arrive pas non plus à d'autre résultat.

Le fait que les gouvernements "monétaristes" (comme ceux de Mme *Thatcher* et du Président *Reagan*) n'atteignent pas leurs objectifs fixés s'explique simplement lorsque l'on comprend l'erreur fondamentale de sa pensée. Le gouvernement *Thatcher* en particulier a démontré (comme le concède même le chef du monétarisme *Milton Friedman*) que le gouvernement ne peut plus contrôler la masse monétaire avec les institutions monétaires et bancaires actuellement exitantes (par ex. en Grande-Bretagne).