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# An Evaluation of Recent U.S. Monetary Policy - II: Monetary Control and Economic Stability

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# An Evaluation of Recent US Monetary Policy

*Continuing his evaluation of US monetary policy* Professor Minsky of Washington University examines the relationship between monetary control and economic stability.*

## II Monetary Control and Economic Stability

United States monetary experience since 1960 constitutes a test of the validity of standard economic theory as a guide to economic policy. One controversy that followed from standard monetary analysis was whether the major if not sole weapon of aggregate economic policy should be control of the money supply. In the first article in this series it was argued that once it is recognized that money in a modern economy is a very sophisticated concept, it becomes evident that the Central Bank cannot really control the relevant money supply. In addition it was argued that once the vital support functions of the Central Bank are recognized it becomes evident that the Central Bank should not use its powers solely to control the path of the money supply.

However, the significance of the support functions depend upon recognizing the existence and importance of contingencies which do not appear in standard economic theory, i.e., the difference between those who argue that controlling the money supply is sufficient for economic policy and those who argue on business cycle grounds that it is a poor policy posture and in substance a difference in economic theory. In this part the contours of standard economic theory and a cyclical alternative will be sketched.

### THE STANDARD THEORY

The standard macro-economic model, in the Hicks-Patinkin-Modigliani tradition, is the format used by both the fiscalists and the monetarists[1] in explaining how the economy functions and as a basis for their policy recommendations. This model is based upon the apparatus introduced by Keynes, but in the modern exposition, this apparatus, when combined with other ingredients is used to demonstrate that the economy if unconstrained would seek out full employment. That is the Keynesian apparatus is used to obtain a very unKeynesian theory. The non-Keynesian ingredients are: an effect in the consumption relation operating through the money supply and prices to shift the consumption function to a position appropriate for full employment, and a labour market formulation which both defines full employment equilibrium and sets up price and wage changes that tend to achieve this full employment.

This standard model views the world as having two possible states: a less than full employment state in which all of the conditions except those in the labour market are satisfied and a full employment state in which all of the conditions are satisfied. In the less than full employment state it is accepted that the dynamics are such that a tendency to move toward full employment is set off. On one tack endogenously induced changes – primarily operating by way of wealth effects, induced by falling wages and prices, that affect consumption – set off a movement from less than full employment to full employment. On another tack, these endogenous changes are blocked by barriers to the required price changes, so that the economy tends to be frozen at less than full employment. On this second tack, policy, either monetary, fiscal, or some apt combination of the two, can overcome the barriers so that full employment is achieved.

Within this standard framework, at full employment, there are no endogenous forces tending to induce change. Full employment is not a transitory state en route, by however a roundabout path, to less than full employment. Thus if instability exists, if unemployment and depressions succeed full employment, the only explanation available within the standard framework is by way of some exogenously determined, i.e., imposed, change.

*The first part of Professor Minsky's analysis is published in *The Bankers' Magazine*, October, 1972.

[1] Professor M. Friedman of the University of Chicago, a leading American monetarist, now explicitly accepts the validity of this framework. See M. Friedman, 'A Theoretical Framework for Monetary Analysis,' *Journal of Political Economy*, March/April 1970, pp. 193-238.



### AN INHERENT WEAKNESS?

Both the labour and investment demand functions of the standard model are based upon an aggregate production function. Exogenously determined changes in these functions are 'available' by appealing to technological change. However technological change is a slow, steady process and is really not adequate as a basis for an explanation for the marked observed changes in investment and employment such as take place. Similarly accumulations that 'exhaust' investment opportunities do not stand up as an explanation of the instability of investment.

The labour supply and consumption functions are based upon preference systems that are assumed to be stable; thus they are not good candidates for an explanation of exogenous changes that induce a transition from full employment to less than full employment.

Within the standard model the only serious candidate for exogenous changes that induce a transition from full employment to less than full employment are the policy related variables: money and the government's fiscal posture.

The use of remarks as reported in the press – even the usually reliable *New York Times* and *Wall Street Journal* – as the basis for a comment on the views of a professional is often unfair, but, because it is such a fine illustration of the point at issue, the following should be noted. Professor Alan Meltzer a leading American monetary specialist is cited in the *New York Times* and the *Wall Street Journal* of April 7, 1972 as accusing the Federal Reserve of having been a prime cause of the very unstable financial and economic conditions in the nation since 1966. Professor Meltzer's views are an advance over those of President Francis of the St. Louis Federal Reserve Bank. At least Professor Meltzer realizes that unstable financial conditions can exist and are important. However his position is that financial and the related economic instability are due to policy; that instability is due to human error and not to any characteristic of capitalism. Obviously Meltzer overlooks the evidence from history: financial instability was a recurring characteristic of American capitalism before the establishment of the Federal Reserve System.

### THE FRIEDMAN VIEW

A kinder view can be taken of Professor Milton Friedman's view.[2] In Friedman's view there is a 'natural' equilibrium of the economy[3] and this carries with it a 'natural' unemployment rate. There is no reason to believe that this 'natural' unemployment rate or income level is 'good enough'; conceivably the 'natural' rate of unemployment could be at a politically unpalatable measured rate. By increasing the rate of growth of the money supply (or by fiscal stimulus) the measured unemployment rate can be lowered below the 'natural' rate. To sustain this lower unemployment rate ever increasing monetary doses are required. This accelerated pace of the economy leads to both capital shortages and inflationary expectations, so that investment booms and liability experimentations are induced. In time unsustainable inflation and untenable debt positions result. Either endogenously or because the authorities attempt to constrain the inflationary boom by slowing down the rate of growth of money, the accelerated expansion results in either an orderly liquidation or a financial crisis. In both cases a debt-deflation induced recession or depression results.

In Friedman's view the original sin is the attempt to do better than nature allows. The effort to do better than the natural unemployment rate leads first to an overexpansion and inflation and secondly to a depression. Once again, financial instability and business cycles existed before the development of active 'stabilization' policy. Simons' view, implicit in the earlier citation, is that the supply of money and near monies may be the proximate cause of the observed cycles and instability, but that the basic causes are those investment demand relations and profit opportunities in business and in finance that induce accelerated increases in the rate of growth of money and near monies. This view, which holds that instability is endogenously generated, seems better suited to our situation than Friedman's view.

### THE FISCALIST VIEW

For the fiscalists, the movement from full employment to unemployment can be rationalized by fiscal drag; that is, the tendency for taxes to outrun expenditures in a growing economy. The fiscalists favour large scale econometric models as the basis for their analysis and forecasting. These complicated models are naive in their descriptions of monetary and financial relations. Thus an investment boom and the conditions conducive to financial crises cannot be captured within their formal structure. As the models are very complex, it is well nigh impossible to integrate knowledge of the evolving institutional characteristics of the economy with the formal results. At best an allowance

for changing financial relations can be added after events occur.

Fiscal drag is quite easy to introduce into formal large scale models. Fiscal drag requires institutional arrangements which lead to income elastic tax and income inelastic government expenditure schedules. In the fiscalists' view appropriate adjustment of tax and spending schedules can keep the economy on track. If these models are our view of the world then why business cycles occurred prior to the development of big government is still a mystery.

## AN ALTERNATIVE VIEW

To this point neither the monetarists nor the fiscalists have been labelled as Keynesians. The standard view is to identify the fiscalists with Keynes. This identification rests upon a misinterpretation of Keynes. Keynes' basic vision is that the economy is intensely financial and endogenously generates trade cycles, a vision which is foreign to both the monetarists and fiscalists of the neo-classical synthesis. That Keynes' vision differed from that embodied in the standard theories is not of great importance. What is important is that the vision and the analysis that follows from Keynes are relevant to an understanding of, and to the formation of policy for, today's unstable economy.

The Keynesian analytical apparatus, part of which enters into the standard models as the IS-LM framework, was used by Keynes to analyse the business cycle state of the economy. This IS-LM framework was embedded by Keynes in an apparatus designed to capture how decisions are made in the face of uncertainty. Uncertainty is of greatest significance in wealth holding, for it is here that the intertemporal nature of decisions is most evident. Keynes[4] (in his neglected rebuttal to Viner)[5] summarized his theory of wealth valuation in the presence of uncertainty as showing that the scale of investment will fluctuate for '. . . reasons quite distinct (a) from those which determine the propensity of the individual to save out of a given income and (b) from those physical conditions of technical capacity to aid production which have usually been supposed hitherto to be the chief influence governing the marginal efficiency of capital.'[6] i.e., production function and static preference system changes are not the cause of fluctuations.

An essential result, within this theory, is that in a world with uncertainty, stability is in itself destabilizing. As a result full employment is a transitory state. Full employment sets up a 'disequilibrium' that will lead – by way of intermediate states – to a less than full employment state. The disequilibrium set up by full employment has two aspects: the valuation of the capital stock and the appropriate liability structure to finance both additions to and positions in the capital stock.

## THE EFFECT OF LIABILITY STRUCTURES

Economic analysis that is relevant for the study of an economy with cycles cannot start from '. . . an Elysian state of moving equilibrium in which real income per capita, the stock of money and the price level are all changing at constant annual rates.'[7] It must start with an economy which may now be at 'full employment' but which has a remembered past of less than full employment and financial trauma. The past leaves a legacy not only in the form of physical and human capital but also in the form of a structure of financial liabilities. The economy has a complex layered financial system in which units exist whose assets are other units' liabilities.

In this economy firms – and households for that matter – finance positions in the assets they hold for their activities by various liabilities. These liabilities set up cash flow commitments both to repay principal and as interest or dividends. A paying unit can obtain such cash as a result of operations – gross profits after taxes but inclusive of interest paid would be a measure of corporate cash flow from operations, or by contract – as from a mortgage – by selling assets, or by borrowing. For example banks expect to meet almost all of their clearing losses over a period by clearing gains. Banks in this manner expect to refinance their position in their assets.

[3] M. Friedman, 'The Role of Monetary Policy', *American Economic Review*, March 1968. op. cit. *Journal of Political Economy* (1970, 1971).
[4] F. H. Hahn, 'Professor Friedman's Views on Money,' *Economica*, February 1971, argues that Friedman's appeal to a moving economic equilibrium is illegitimate for an economy that contains money.
[4] J. M. Keynes, 'The General Theory of Employment,' *Quarterly Journal of Economics*, February 1937, pp. 209-223.
[5] J. Viner, 'Mr. Keynes on the Causes of Unemployment', *Quarterly Journal of Economics*, November 1936.
[6] Op, cit., *QJE* p. 218.
[7] M. Friedman and A. J. Schwartz, 'Money and Business Cycles,' Chapter 10 in M. Friedman, *The Optimum Quantity of Money and Other Essays*, Chicago 1969, p. 229.

There are no hard and fast technical considerations or rules that determine the appropriate liability structure for any set of assets – or the appropriate assets to hold with any set of liabilities. A mere glance at the changes in the liability structure of corporations and banks in the United States between 1960 and 1970 is evidence for the proposition that the debt structures can change markedly. The relation between internal funds – gross profits after taxes – and fixed investment by the non-financial corporate sector has fluctuated, as is evidenced by Table I. In particular the corporate investment financing position went from a surplus that was 9.3 per cent of fixed investment in 1964 to a deficit that was 24.6 per cent of fixed investment in 1970.

**Table 1**

*Fixed Investment and Gross Internal Funds*
*Non-Financial Corporate Business*
1946-1971
(Billions of Dollars)

| | *Gross Internal Funds* | *Fixed Investment* | *Surplus (+) or Deficit (—)* | *Surplus (+) or Deficit (—) as a % of Fixed Investment* |
|---|---|---|---|---|
| 1946 | 7·8 | 12·0 | — 4·2 | —35·0 |
| 1947 | 12·6 | 16·0 | — 3·4 | —21·7 |
| 1948 | 18·7 | 18·2 | + 0·5 | + 2·8 |
| 1949 | 19·1 | 17·0 | + 2·1 | +12·3 |
| 1950 | 17·9 | 19·3 | — 1·4 | — 7·2 |
| 1951 | 19·9 | 21·4 | — 1·5 | — 7·0 |
| 1952 | 21·2 | 22·2 | — 1·0 | — 4·5 |
| 1953 | 21·1 | 23·8 | — 2·7 | —11·3 |
| 1954 | 23·3 | 23·6 | — 0·3 | — 1·2 |
| 1955 | 29·2 | 26·6 | + 2·6 | + 9·3 |
| 1956 | 28·9 | 31·0 | — 2·1 | — 6·7 |
| 1957 | 30·6 | 34·1 | — 3·5 | —10·2 |
| 1958 | 29·5 | 29·8 | — 0·3 | — 1·0 |
| 1959 | 35·0 | 32·8 | + 2·2 | + 6·7 |
| 1960 | 34·4 | 36·0 | — 1·6 | — 4·4 |
| 1961 | 35·6 | 35·1 | + 0·5 | + 1·4 |
| 1962 | 41·8 | 39·3 | + 2·5 | + 6·3 |
| 1963 | 43·9 | 41·2 | + 2·7 | + 6·8 |
| 1964 | 50·5 | 46·2 | + 4·3 | + 9·3 |
| 1965 | 56·6 | 54·9 | + 1·7 | + 3·1 |
| 1966 | 61·2 | 62·7 | — 1·5 | — 2·2 |
| 1967 | 61·2 | 66·0 | — 4·8 | — 7·2 |
| 1968 | 61·7 | 69·7 | — 8·0 | —11·5 |
| 1969 | 59·5 | 78·4 | —18·9 | —23·9 |
| 1970 | 61·5 | 81·6 | —20·1 | —24·6 |
| 1971 | 71·4 | 86·7 | —15·3 | —17·6 |

*Source:* Board of Governors of the Federal Reserve System, Flow of Funds Accounts

## EXPECTATIONS REVISITED

A willingness to increase the ratio of debt financing to investment is the result of three factors: a rise in the expected cash flows from investment, a decrease in the expected variance – especially downside deviations – of corporate gross profits, and a decrease in the aversion to risk in the preference systems of both investors and financiers. These changes take place as a result of the success of the economy. A period such as the early through middle nineteen sixties will induce 'euphoria' into businessmen's decisions: asset prices, including common stock prices, will rise relative to the price of current output. In this way, by the market price of the stock of real assets rising relative to their costs of production, sustained stability induces instability in the guise of an investment boom.

Keynes argued that investment depends upon animal spirits. Success of the economy breeds optimistic views as to the likelihood of success and downgrades the likelihood of failure. Endogenously generated euphoria breeds an investment boom financed to an ever increasing extent by debt. This debt financing, in time, leads to financial difficulties.

Both new investment and positions in the 'inherited' stock of capital need to be financed. In a period of euphoria, the view grows that positions in the stock of assets have been financed too conservatively. The use of debt to free financial resources and to take over existing firms and production capacity also takes place.

## THE SELF-DESTRUCTION OF BOOMS IN A CAPITALIST SYSTEM

In 1965 and again in 1969 the euphoric mood resulted in a burst of corporate investment. This burst in corporate investment resulted in a substantial rise in interest rates. In both instances the substantial rise in interest rates led to financial difficulties. Just as sustained full employment leads to a boom, so a boom carries the seeds of its own destruction. This destruction takes place because there are either feedbacks from rising interest rates that affect asset values, so that unstable solvency situations result, or the short-term financing of long term positions becomes so great that widespread panic type repercussions follow upon liquidity difficulties of a particular unit.

A boom broken by means of a crisis leads to a period of debt-deflation with its associated recession and unemployment. After debt-deflation and liability restructuring ends, revival of the spirit of enterprise together with an adjustment of financing terms will lead to a recovery and a movement toward full employment. Once full employment is achieved and sustained the ground is ready for another euphoric boom.

This sketch of the cyclical behaviour of a capitalist economy has as its central point the endogenous generation of conditions conducive to financial instability. Financial

instability occurred in 1966 and 1970. In addition in 1971 the United States was hit by a classic international crisis – a flight from the dollar.

### WOULD APPROPRIATE CONTROL OF THE MONEY SUPPLY YIELD STABILITY?

In the light of the endogenous determinations of liability and asset structures and the 'broad' nature of money, it is clear that any rule for the control of a precisely defined money supply will not be adequate to yield stability. If one wants to use control of the money supply by rule then it is necessary to implement revolutionary changes in the financial structure such as those advocated by Simons in the 1930's.[8] An implementation of Simons' views would involve the virtual elimination of both short term private debt and the creation of demand liabilities by banks. However Simons' view encompasses the need for continuing discretionary intervention in order to assure that institutional arrangements do not evolve so as to reintroduce instability: money and short term debt forbidden in one form may return in a different institutional form.

[8] Rules *vs* Authorities—op. cit.



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# An Evaluation of Recent US Monetary Policy

*In the final part of his analysis of recent US monetary policy*, Professor Minsky of Washington University makes certain proposals for reforming the structure of financial markets in the US and for improving the operating techniques of the Federal Reserve.*

## III Central Banking and Financial Instability

In the previous articles of this series questions as to whether the central bank can and should control the money supply and whether standard economic theory was an adequate guide to policy were examined. The conclusions in the first article were that for a sophisticated capitalist economy such as the United States the monetary authorities – the Federal Reserve – cannot control the relevant money supply and should not unconditionally control the narrow money supply. In the second article it was argued that the standard economic theory could not adequately explain what happened in the United States over the post war decades and that a model which embodies the endogenous generation of changing financial circumstances is necessary. In this alternative model financial instability is the result of sustained growth. It was also pointed out that the stabilization of any narrow money supply would not be effective, but that perhaps radical reform might work.

### FINANCIAL INSTABILITY IN THE USA

In this the concluding article of the series the three episodes of financial instability in the United States in the past decade are examined and suggestions for reforming both the structure of financial markets and the operating techniques of the Federal Reserve are proposed. The objective of the reforms is not to eliminate instability but to constrain the tendency for the financial system to amplify instability.

Irving Fisher, in 1933, described financial instability as follows:

> 'There may be an equilibrium, which, though stable, is so delicately poised that, after departure from it beyond certain limits, instability ensues, just as at first a stick may bend under strain, ready at all times to bend back, until a certain point is reached, when it breaks. This simile probably applies when a debtor goes "broke" or when the breaking of many debtors constitutes a "crash", after which there is no coming back to the original equilibrium.'[1]

At the end of World War II the structure of household and business debts relative to household and firm incomes, and the nature of financial assets owned by households, firms and financial institutions, were such that the financial system was stable. In 1966 the first serious postwar episode of financial instability took place. The rules for monetary policy developed as a result of observations made between 1946 and 1966 are of questionable validity as guides to Federal Reserve actions in the new situation. How in fact did the Federal Reserve react, and how should it have reacted?

In the recent past three episodes of financial instability took place. In all three cases serious debt-deflations were avoided, although the 1970 episode did lead to a mild recession followed by protracted sluggishness. All in all, by the standard of the support functions, the Federal Reserve did well in these episodes.

### THE CRISIS OF 1966

In 1966 the crisis centred around the impact of sharply rising interest rates upon the viability of financial institutions and the use by the Federal Reserve of ceilings on interest rates that commercial banks could pay on Certificates of Deposit and time deposits.

As a result of rising interest rates the market value of the portfolio of mortgages[2] held by savings intermediaries was substantially below book value. Simultaneously rising interest rates adversely affected the value of ongoing

*The first two parts of Professor Minsky's article appeared in the October and November issues of *The Bankers' Magazine*.

[1] I. Fisher, 'The Debt Inflation Theory of Great Depressions,' *Econometrica*, October 1933, p. 239.

[2] In the United States the standard home market is a fully amortized fixed interest rate instrument. As a result the market value will fall below the face value when interest rates rise above the contract rate.