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An Evaluation of Recent U.S. Monetary Policy - III: Central Banking and Financial Instability

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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.

projects that savings institutions financed. Savings banks thus were affected by an unusually large ratio of scheduled items (assets for which the contract terms are not being fulfilled) and a low cash flow from, and a depressed market value of, assets. In a world where short term interest rates were rising, the savings banks were not in a good position to hold their deposits by meeting rate competition.

The second focus of the crunch, the interest rate ceiling on Certificates of Deposit, was rationalized in part by the need to protect the savings institutions. As the interest rates on marketed short term instruments rose above the ceiling rate on certificates of deposit, a run down of these certificates took place. Some commercial banks, with large scale loan commitments, when confronted by a run down in resources were forced into the use of municipal securities to make position; i.e. acquire the cash needed to finance their holdings of other assets. A sharp break in this market resulted. Some banks that were compelled to sell these assets took substantial losses.

The 'crunch' was dissipated when the Federal Reserve eased access to the discount window for banks which otherwise would have used municipal securities for position making and announced that discounting was available to savings institutions. Furthermore, legislation was passed quickly which enabled the authorities to set ceiling rates on certificates of deposit which discriminate by size, thus partially insulating the savings banks from commercial bank competition for funds.

The crunch shocked banks and borrowers sufficiently so that there was a 'pause' in the expansion; in particular the rate of increase of investment was decreased.

After the crunch the Federal Reserve expanded the reserve base quite rapidly. In part it was a standard behaviour of the Federal Reserve in the face of a large government deficit. In addition, it may well have been motivated by a desire to keep interest rates low to ease pressure on the savings intermediaries. The combination of monetary ease and the expansion of government expenditures due to the escalation in Vietnam, meant that the pause was quickly followed by a resumption of the investment boom: corporate fixed investment increased by 12 per cent in 1969 over 1968. This was associated with sharply rising interest rates as well as rising prices.

In retrospect the Federal Reserve might well have over-reacted to the crunch. However, the monetary-fiscal policy adopted had the correct thrust once the events of 1966 are interpreted as an incipient financial crisis.

THE 'SQUEEZE' OF 1970

In 1969 the new administration was determined to avoid what it believed to be the stop-go monetary-fiscal policies of the previous administration. It initially programmed a budget surplus and a constrained growth in the money supply.

The economy it inherited was buoyant – investment plans in dimensions running from chicken stands to airline seats were based upon 'euphoric' expectations. The constrained growth in the money supply meant that growth of bank financing was restricted. As is shown in Table I, in 1969–70 corporate fixed investment was in the 80 billion dollar range and corporate internal funds were in the 60 billion dollar range: external finance measured about 25 per cent of fixed investment. As a result of this huge need to finance externally, yields on bonds rose and the price of equities was driven down. As long term interest rates rose, pressure on corporate finance officers to speculate by financing both investments and positions through short term loans increased. Bank loan demand increased and with it bank interest rates.

Table I

Fixed Investment and Gross Internal Funds

Non-Financial Corporate Business

1969-III – 1971-IV

Seasonally Adjusted Annual Rates
(Billions of Dollars)

Quarter		Gross Internal Funds	Fixed Investment	Deficit	Deficit (—) as a % of Fixed Investment
1969	III	64·1	81·0	—16·9	—20·9
	IV	60·6	82·2	—21·6	—26·2
1970	I	59·7	79·8	—20·1	—25·2
	II	61·3	81·3	—19·5	—23·9
	III	62·1	84·1	—22·0	—26·2
	IV	62·4	81·2	—18·8	—23·1
1971	I	67·4	83·2	—15·8	—18·9
	II	71·2	86·8	—15·6	—17·9
	III	71·4	87·4	—16·0	—18·9
	IV	76·7	89·4	—12·7	—14·2
1972	I	79·0	95·0	—16·0	—16·8

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

Once again the Federal Reserve allowed a ceiling on interest rates on certificates of deposit to become effective. The Federal Reserve apparently had been impressed with the power of this tool in 1966 and they used it again.

In 1966 the 'dip' or 'pause' was short lived. As a result, in 1969 promoters of both chicken stands and airline capacity were not going to allow themselves to be easily affected by the assumed transitory financial pressures. This was so because recent (1966) experience had 'demonstrated' that the Federal Reserve and the government were both willing and able to turn pauses around and to ameliorate the consequences of financial stringency. Under these circumstances banks and businesses made plans on the basis of prospects 'after the valley' and took whatever steps necessary to evade the financing constraints due to the 'tightness' of bank credit. The roster of financial devices used in the 1969–70 period is impressive. Of particular importance was the growth of commercial paper and the recourse to the Euro-dollar market for bank reserves. Of lesser importance in 1969–70, but perhaps a foretaste of what might be expected in a future period of constraint, was the rise of the ineligible acceptance.

The rapid run up in short term paper outside of 'normal' banking channels was accompanied by a shortening of maturities on such paper. To an ever increasing extent positions in assets and new investment were financed by rolling over debt. In both the fourth quarter of 1969 and the second quarter of 1970 in excess of twenty-six per cent of fixed investment was financed by external funds.

A LIQUIDITY CRISIS

In mid-year 1970 the speculative bubble burst with the Penn-Central failure. The focus of the crisis was the commercial paper market. The Federal Reserve quickly increased the lending ability of the banks so that floating debt could be refinanced by borrowing from banks – i.e. firms threatened with runs on their commercial paper could refinance their positions by borrowing from banks. Furthermore the Federal Reserve system actively intervened so that particular threatened organizations were refinanced.

Once again the liquidity crisis led to a slowing down of activity. This time the result was an acknowledged recession and a period of protracted slack. During 1970 and 1971 a large scale refinancing and funding of short term debts into long term debts took place. In spite of increasing government spending and reducing tax burdens, the economy did not respond as quickly as after the crunch of 1966.

One reason for the sluggishness is quite clear: As a result of both the conglomerate movement and investment demand financed by debt, corporations had built debt structures during the 1960's which in the light of the events of the squeeze and the recession, were now (in the early 1970's) deemed to be too great. Thus debt funding and a slow-down in the rate of increase of investment spending took place. As is evident in Table I, the various tax policies as well as the recovery gave rise to an increase in excess of 20 per cent in annual rate corporate gross internal funds between 1970–IV and 1971–IV. This rise in internal funds relative to investment is an indicator that pressure has relaxed and perhaps a harbinger of renewed expansion: 1972–I witnessed a rise in the ratio of external funds to investment.

The financial squeeze of 1970 was more of a crisis and posed more serious dangers for the financial system than the crunch of 1966. Coming quickly after the crunch it made it quite apparent to all that uncertainty had not been banished by the skills of sophisticated economists. Firms once again realized that their liability structure and asset holding combination determine in which casinos and for what stakes they play.

Although a recession and sluggishness were not avoided in 1970–71, the Federal Reserve did prevent what could otherwise have been a classical debt-deflation process, initially centering around the commercial paper market, from taking place. In order to do this, the Federal Reserve once again used discount and open market operations to support the market.

Both 1966 and 1970 were exercises in economic brinkmanship. In both cases the Federal Reserve fostered runs on commercial banks by the enforcement of ceiling interest rates. Whereas the 1966 crunch might have been inadvertent, the question which cannot be answered is whether 1970 was deliberate.

THE DOLLAR CRISIS OF 1971

A run on the dollar came quickly after the Penn-Central crisis. In part this was a repatriation of Euro-dollars borrowed when an euphoric economy was confronted by monetary constraint, in part this was a response to a deteriorating balance of trade. This crisis, by again emphasizing the fragility of the financial structure, reinforced the thrust toward more conservative liability structures for firms and financial institutions that had been set off by the squeeze of 1970.

A special anomaly arises in 1970–71 because of the huge balance of payments deficit in those years. In 1970 the rest of the world acquired $10·3 billion of US government securities; in 1971, $28·3 billion. In calendar 1970, the Federal Government issued $12·8 billion of US government securities, in 1971, $25·5 billion. Over the two year period, US government securities outstanding rose by $33·6 billion and foreign holdings of US government securities rose by $38·3 billion. In a closed economy deficits of the size the United States enjoyed over these two years would be associated with a large scale pumping of protected, liquid, and default-free assets into the portfolio of the Federal Reserve System, Commercial Banks, other financial institutions, as well as the portfolios of the non-financial sectors. Such a 'pumping' of government debt into these portfolios would tend to increase the robustness of the financial system – thus setting the stage for a renewed burst of private spending financed by private portfolio adjustments.

Although large deficits were achieved in 1970, and again in 1971, the expansionary effect of the deficit was attenuated by inept fiscal policy (the reliance on tax reductions and increases in transfer payments rather than government purchases) and the fact that the deficit was not associated with an equivalent increase in the holdings of government debt by banks, financial institutions and private portfolios. Aside from a transitory immediate impact, the major impact of the international crisis of 1971 has been to reinforce the move towards more conservative liability structures set off by the events of 1966 and 1970.

There are two aspects of monetary reform. The structure of the financial system or the way in which the Federal Reserve operates within the given structure can be changed.

REFORM OF STRUCTURE

A simple, necessary and immediately attainable reform is to modify the standard American mortgage from the present fully amortized fixed interest rate instrument to a fully amortized variable interest rate mortgage. Ever since operation twist of the early 1960's gave way to a sharp rise in mortgage rates, it has been obvious that, if the Federal Reserve is to use the quantity of money as a guide to policy, the standard mortgage must be modified so as to increase its compatibility with fluctuating interest rates. Arguments can be advanced that with risk averters as lenders, the average rate over time will be higher with fixed interest rate mortgages than the average of the fluctuating rates with variable interest rate mortgages. With variable interest rates the cash flow to savings intermediaries from mortgages will always be able to finance competitive interest rates on deposits.

If support responsibilities mean that the Federal Reserve stands ready to intervene in any one of a broad range of markets, then a further reform calls for the Federal Reserve to have points of regular contact with these markets. For this to happen secondary markets in a variety of instruments need be developed. The Federal Reserve can encourage such secondary markets by financing some of the position of the market makers at a favourable rate by way of an extended discount window. Such a market subsidy does not preclude truly penal financing terms for an excess of borrowing over some predetermined amount for each market participant.

Such a shift of emphasis to the support of secondary markets will make the discount window much more significant as a source of reserves than at present. A penal rate at a discount window to a market maker in a secondary market is always a transitory phenomena. Lending rates and bid-asked differentials will tend to adjust so that quite quickly the penal rate no longer embodies a penalty. The significance of the penal discount rate – open discount window technique is that, to the protected markets, funds are always available in virtually unlimitedquantity at the price determined by the Reserve banks: the adjustment of reserves and of positions is in response to rising prices and changing profitability – not to an administered all or none availability variable.

REFORM OF POLICY TECHNIQUES

The Federal Reserve should give up its flirtation with ceiling interest rates on time deposits and certificates of deposits. The power to induce a run on market is a dangerous control technique, as it reinforces the inherent instability of finance. Once used it then requires more extreme actions to offset the resultant pressures than would have been necessary in its absence.

Once a broad generalized set of secondary markets with access to the discount window is developed, then open market operations will no longer be the 'prime' weapon of the Federal Reserve. Open market operations should be engaged in to determine the volume of banking system owned reserves – but any moment's total volume of reserves will be determined by the combination of market reactions to posted terms and open market operations. By always having reserves available at a 'known' price, one source of the observed instability is removed.

Once reserve money is fully available at posted rates to a wide set of market makers operating in various secondary markets, then open market operations are not the source of funds for evening out reserve needs and need not be engaged in for purposes of stabilizing money markets. Under these circumstances open market operations can be engaged in solely to determine the volume of owned reserves in the banking system. In an effort to remove what has been an exacerbating factor in recent financial instability – the behaviour of the owned reserve base of banks – it seems advisable that open market operations should have as their aim a steady growth of the owned reserves of the banking system.

The view underlying these suggestions is *not* that money calls the tune, rather the view is that, broadly conceived, the supply of money is endogenous and determined rather than determining. However it seems evident that stop and go behaviour of the reserve base can amplify disturbances. Inasmuch as the reserve base with an open discount window is always flexible (at a price), the major impact of variations in open market operations is to vary the ratio of owned to borrowed reserves.

By the standard monetary policy rules, monetary constraint is called for just at those times when financial market conditions are tending toward increased instability. Under these circumstances monetary constraint may either trigger or amplify a debt deflation process. The above monetary management techniques will have the owned reserve base grow at a steady pace while the tightening or easing of credit takes the form of higher or lower interest rates at the discount window. Though the monetary policy operating techniques suggested here will not eliminate instability, they might well eliminate factors which have tended to amplify instability.

SUPPORT FUNCTIONS AND INDIVIDUAL UNITS

There is a special warning note that has to be added with respect to the lender of last resort or support functions of the Federal Reserve. They can be used by a fearful administration as a rationalization for bailing out and thus institutionalizing inefficiency and incompetence in the economy. It is not evident whether they are bragging or apologizing, but in the Annual Report of The Federal Reserve Bank of New York for 1971 the following paragraph appears (page 51):

> 'Early in the year (1971) this Bank *initiated* (my emphasis) studies of the financial condition of the Lockheed Aircraft Corporation in view of the difficulties that company was experiencing and as part of the Banks *normal* (my emphasis) responsibilities in appraising the quality of paper presented by member banks at the discount window. Then, as the possibility emerged that Government Aid to Lockheed might be forthcoming in the form of loan guaranties, this bank assisted Treasury officials during their negotiations with Lockheed and several commercial banks in anticipation of the enactment of legislation. In August the Emergency Loan Guarantee Act created the Emergency Loan guarantee Board which formally designated the Federal Reserve Bank of New York as its fiscal agent in the administration of the loan guarantee to the Lockheed Aircraft Corporation.'

In the theory of central bank support functions the central bank does *not* support individual organizations – it supports markets. The markets for municipal securities, savings bank deposits, and commercial paper were under pressure in 1966 and 1970. The Federal Reserve rightly intervened to support these markets. In principle central bank support functions do *not* encompass the sustaining of particular enterprises; support functions exist to make sure that financial markets are robust enough to absorb shocks due to the failure or the embarrassment of any particular enterprise, no matter how large. Support functions exist not to prevent shocks but to prevent cumulative debt deflation processes following upon shocks.

CONCLUSION

To say that the business cycle has been eliminated – as was asserted by economists of the Kennedy-Johnson era – is to assert that the fundamental destablizing influences of finance in a capitalist economy have been eliminated. However recent experience shows that the business cycle has not been eliminated, capitalist economies still tend to explode, and such explosions are followed by crashes and recessions. Nevertheless a strong fiscal posture – primarily a Federal Government whose purchases are significant with respect to the size of the economy – combined with an alert central bank can transform the shape of the business cycle.

On the whole in both 1966 and 1970, when financial instability threatened, the Federal Reserve acted promptly and in an appropriate manner. The pause and the recession were as mild as they were because no debt deflation process took place and for this the Federal Reserve can claim credit. However there are questions as to whether the Federal Reserve's acts prior to the mini-crises tended to increase unnecessarily the likelihood of a crisis and whether the post-crisis behavior in 1966 carried monetary ease too far.

The suggested structural reforms and the policy proposals – particularly the shift of emphasis from open market operations to the ever open discount window for secondary market operators – are aimed at making the instability inherent in capitalism as painless as possible by minimizing the amplifying powers of monetary policy.