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A Perspective on "Money"

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by

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The fundamental question of monetary economics is whether the historical and continuing instabilities of capitalist economies (i.e. business cycle) are due to the monetary and financial characteristics of the economy. A further question, which follows if the cyclical flaw of capitalism is in all or in part imputed to the monetary and financial mechanism, is whether the features of the monetary and financial institutions which are held responsible for the flaw are essential or non-essential to capitalism. If the flaw is mainly due to non-essential characteristics then it is either due to human error or institutional weaknesses which can be eliminated by reform. In this "no-flaw" view there exists a "financial good society" and a handbook of policy rules for central bankers which will forever more banish cyclical instability.

Therefore the issue that must be faced in monetary economics is whether the flaw revealed by the business cycles of experience is intractable or whether it can be removed by some combination of institutional reform consistent with capitalism and wise policy. If the view that financial instability is due to essential features of capitalism is valid, then the best that can be achieved by reform and policy, within the framework of a capitalist economy, is to change the shape of the business cycle - hopefully to extend the good times and moderate the troughs - rather than to eliminate the business cycle.

The theme of this paper is that financial instability is a consequence of essential capitalist financial institutions and that this financial instability is sufficient to induce real output, employment, and price level instability. Furthermore at times the interactions between the monetary/financial and "the real" facets of a capitalist economy are such as to reinforce both real income and financial instability.

One can read almost all of the textbooks and most of the current journal literature without being made aware that the overriding issue in monetary economics is whether capitalism is flawed in that it is inherently subject to booms and busts.

True the monetarists, and especially Friedman and Schwartz, argue that the business cycles of experience can be explained by variations in the rate of growth of the money supply. In this doctrine, these responsible variations in the rate of growth of the money supply are due either to the poorly conceived, designed, or executed policy with respect to the money supply or to correctable institutional flaws in the public and private mechanisms that determines the path of the money supply. In point of fact the current crop of monetarist economists are not advancing any serious program of institutional reform - such as the 100% money proposals of the "Chicago" school in the 1930's. Thus their policy recommendation - that the authorities can and should set and maintain a rate of growth of money supply at approximately the same rate as the trend rate of growth of gross national product - is based upon an implicit view that the present institutions, while not necessarily perfect, are good enough.

The monetarist view is based upon a quite unwarranted assertion as to the content of price theory. They seemingly believe that price theory, in its "Walrasian General Equilibrium" theory form, demonstrates that a monetary economy, if undisturbed by outside shocks,

will generate a moving general equilibrium characterized by steady, sustainable growth. In fact no such proposition has been demonstrated. The theoretic models upon which the claim is based treat time - with its resultant uncertainty - finance, and money by making truly heroic assumptions. Thus it is a large leap of quite blind faith to go from the propositions derived in the theory - which even so are not quite what is needed to validate the assumptions of the monetarists - to statements about how any particular real world economy operates. To put the above in a general way modern general equilibrium theory is a series of propositions about an abstract economy, monetary economics, especially in its policy - prescriptive aspects, makes statements about some particular actual economy - i.e. this economy.

In particular the Walrasian model that the monetarists refer to does not allow for speculative decisions of the nature that are essential to the financing of investment and of holdings of real capital assets in a modern capitalist economy.

F.H. Hahn, "Professor Friedman's Views on Money," Econometrica, November, 1971, pp. 61-80.

The Nature of Money

In a modern capitalist economy money is mainly the liability of profit maximizing privately owned and managed commercial banks. In the United States in mid-year 1972 the money stock (demand deposits and currency) as defined by the Federal Reserve System totaled $235 billions. Of this total $55 billions was currency, which is a liability of the Treasury and the Federal Reserve System, and $180 billions was demand deposits, which is a liability of the commercial banks. More than 75% of the money supply consists of bank demand deposits.

Some analysts argue that the appropriate money supply consists of time and savings deposits at commercial banks in addition to demand deposits and currency. In mid-year 1972, these deposits totaled $290 billions, so that the extended money supply totaled $525 billions. Of this amount almost 90% was a liability of commercial banks.

(Data from Federal Reserve Bulletin: Table titled Components of Money Stock Measures and Related Items.)

To get a better view of the money supply process it is necessary to look at the behavior of commercial banks. The total resources for all insured banks in the United States at the end of June 1972 - there were 13,669 such institutions - was $662 billions:

of this amount $550 billions were demand and time deposits, $33 billions were other borrowings and $50 billions were the capital accounts. The capital accounts give us the book value of the owners investment.

The owners investment, other borrowings, and deposits finance the banks ownership of assets. As is evident, with $662 billions of total assets and $50 billions of owners equity, banks are highly levered organizations: banks borrow $12 for every $1 of capital. At the end of June 1972 banks assets were as follows: $368 billions of loans, $60 billions of U.S. Treasury Debt, $111 billions of securities other than U.S. Treasury (of which $87 billions were State and Local Government debt) $98 billions of cash assets, and some $25 billions of other assets.

Banks are profitable because the interest and fees they get from lending, owning securities, and the services they render exceeds the interest banks pay on time deposits and the costs of operations (which includes the costs of processing checks drawn on demand deposits). If for example a bank makes 1% net income after taxes on its total assets, and if it is levered to the extent the average indicates, then it would make 13.2% on its book value. Banks usually have a conservative dividend policy, so that a representative bank might pay about 1/3 of their earnings as dividends. This means that the book value of a representative bank would grow at 8.8% per year by way of retained earnings.

If the banks that retain earnings are to do as well on their new capital as they have done on their old capital, they will need to lever their retained earnings by the same factor of 13 through borrowings. Thus banks in their profit seeking activities, will endeavor to have their deposits and other debts grow at the same rate as their book value: only in this way can their total assets grow at the same rate as their owners' investment.

The observed 13 to 1 asset/book value ratio is the result of offsetting pressures upon the banks. The regulatory authorities, mainly by way of their examination procedure, press banks to have "adequate capital": i.e. to hold the ratio of assets to book value down. The drive for profits makes banks work at evading this constraint: i.e. banks want to increase this leverage ratio.

In addition to the growth in capital accounts due to retained earnings, bank capital accounts can grow by way of new issues of bank stock - either by existing banks or by new banks. (In spite of bank mergers in branch banking states, the number of banks has shown a moderate increase during the post-war years.) When bank capital is increased by means of either retained earnings or new issues, the funds invested in the banks are available to finance non-bank activity. Thus the growth of banking capital does not "absorb" capital (ignoring bank facilities and bank equipment) - it merely determines the channels through which activity is financed.

In addition to the constraint upon the growth of banking imposed by the authorities in the form of an administrated maximum acceptable leverage upon banker's capital, banks are constrained by regulations which require cash reserves to be held against deposits. Whereas the capital requirement sets a ceiling on total assets based upon the "liability" owners equity, this sets a ceiling on time and demand deposits based upon the cash assets available to banks.

The American banking system is a dual banking system in that there are both "member" and "non-member" banks. Member banks of the Federal Reserve System keep their cash assets, which function as reserves, in the Federal Reserve Banks. The amount of these member bank deposits in the Federal Reserve Banks are affected by Federal Reserve actions, either in the open market or at the discount window. It is a contention of the monetarists - and even of most of the non-monetarist economists - that the Federal Reserve can control the amount of high powered money in existence and by such control effectively control the money supply's size.

Non-member banks mainly use deposits at the member banks as their cash. Even though the authorities might control and restrict the size of Federal Reserve Deposits available as reserves, the total deposits at member banks is far greater than the amount used by non-member banks as deposits. Thus in mid-year 1972 insured

non-member banks had $132 billions of total assets, some 20% of total insured bank assets. Insured non-member banks had cash assets of $12 billions, which was less than 3% of the total deposits in member banks.

Potentially non-member banks have a virtually infinitely elastic supply of reserves. As it is non-member banks have grown relative to member banks. At the end of 1945 the resources of non-member banks were $19 billions out of toal insured bank resources of $158 billions; non-member banks were a bit more than 12% of the total banking system. In mid-year 1972 non-member banks had 20% of total bank resources. Non-member banks have grown faster than member banks in the post-war period.

Banks therefore are constrained by both capital requirements and the need to hold cash. For one class of banks - non-member banks - the available reserve base is infinitely elastic. For another class - member banks - reserves are, within limits, controlled by the central bank. Whenever member bank capital grows more rapidly than member bank reserves, then there will be pressures, from the need to lever ~~the~~ capital to maintain profit rates, for banks to try to get around the constraints upon growth imposed by the growth of reserves. This pressure will be especially marked at those times where the economy is doing well, so that the business and household demand for bank financing is strong.

For the banking systems the repayment of bank loans involves a decrease in their debts outstanding, the increase in bank loan involves an increase in bank debts outstanding. Repayment of bank debt and the payment of interest and fees to banks results in the destruction of the immediately affected bank liability - demand deposits - whereas the acquisition of bank earning assets results in the creation of demand deposits. The stability of the volume of demand deposits outstanding therefore depends upon banks remaining 'fully invested', so that whenever the repayment of debt to banks decreases the amount of demand deposits banks acquire new assets - make new loans and buy securities - money destruction and money creation are dynamic flow processes which normally are in proximate balance or exhibit a growth trend. When demand deposits and bank loans exhibit a growth trend then over the period banks feed more power over resources into private hands than the resources command destroyed in the process of repaying debt.