The Supply of Money in the United States

Part I — The Institutional Development

"The primary purpose of the Federal Reserve Act . . .," wrote Harvard economist O. M. W. Sprague in 1914, "is to make certain that there will always be an available supply of money and credit in this country with which to meet unusual banking requirements." An article of encyclopedic length could be written in an attempt to answer the questions prompted by this statement. For example: What is an "available supply"? Why money *and* credit? What are "unusual" banking requirements? Did a source of supply exist before the Federal Reserve System? If so, what happened to it that a new institution was called for?

Sprague gave answers to some of these questions in the long article he wrote (41 pages) for the *Quarterly Journal of Economics* (February 1914) in elaboration of the original topic sentence cited above. Other economists, as well as bankers and central bankers, also have tried their hands at these questions. The product has been an extensive literature.

Paradoxically enough, the Federal Reserve has not emphasized strict control over the money supply during most of its 50-odd-year history. It has put more emphasis on the cost and availability of *credit*. Only in recent years has the supply of money proper come into its own as a matter for critical discussion, analysis, and investigation.

From Metallic Standards to Central Banking Inattention to the money supply is more than a central bank oversight; it has roots and precedent in monetary history. Through most of the late 18th and early 19th centuries, when central banking was in its formative stages, the basic money commonly in use was primarily metallic. The earth supplies such money at a cost, and anyone willing to give up the necessary resources can get as much of it out of the earth as he wishes. Precious metals are scarce commodities, and the decision to prospect for them is not fundamentally different from the decision to acquire them by engaging in some other kind of business venture. Like other business activities, prospecting and mining activities are equilibrated by forces of demand and supply working through markets. In metallic monetary systems, therefore, the quantity of standard money in existence at any given time is determined by market forces.

The use of metallic money, however, involves real costs to society, and these costs could be and were economized—but not eliminated—by the substitution of paper money for coin. Then, both paper and metallic currency were economized by checkbook banking; and the prediction is now that checkbook banking probably will be replaced by electronic machinery and credit cards.

The development of paper currency and checkbook money provoked the first social concern over control of the quantity of money. Banks that issued or created demand obligations were constrained to redeem these notes or checks in metal—gold or silver; so bank paper simply extended or economized the existing quantity of precious metal. Governments also issued paper money; but this kind of act required political license, which was given neither easily nor often. Effective constraints were the political checks-and-balances between factions or branches of the government and constitutional proscriptions.

Central bank machinery took the separation of money and metal even further. Central banks were bankers' banks, and ordinary commercial banks were encouraged to deposit their metallic reserves in the central bank. This deposit served as a base on which the banks could extend credit and create deposits. The separation of media of exchange and metal was by this time almost a full estrangement; and while a final decree has yet to be granted, the divorce is all but complete. However, money still exists; in fact, it is more important to the functioning of economic society than ever before.

At times in the past, the link between the quantity of gold and the quantity of money has been broken

temporarily. (One example is the period in the United States between 1862 and 1879.) Always this phenomenon called forth principles from governing bodies—Congress and the Executive—on how the quantity of money should and could be regulated until the metallic connection was reestablished. Now that the relationship is forever gone, principles for regulating the quantity of money are even more compelling. Economists have responded with intensified research on various aspects of the linkages and lags of money creation, and on the question of whether the creation of money begins with the central bank or by indirect stimulus from the commercial banking system and the private economy.

The Definition of Money In recent years, monetary thought and research has examined at length the demand for money and, as a corollary, the definition of what to include in the category of "money." While all the returns on these issues are not in, two principles have been fairly well established: (1) Changes in the stock of money have been established empirically as a fundamental factor initiating changes in general spending; and (2) The definition of money must include currency and demand deposits subject to check, and it may include as well time deposits in commercial banks. Other principles describing and defining the behavior of money have been conjectured and still others are being formed—for example, the demand for money in the framework of inflation; but the provisional conclusions summarized above bring the status and knowledge of the demand-for-money function to the point where similar knowledge and principles for the supply function are necessary and pertinent.

Discussions of the supply of money necessarily presume a definition of money. For the sake of simplicity if nothing else, the classification adopted here rests on a narrow definition of money, one that includes: (a) currency outside commercial banks, the central bank, and the federal government, and (b) private demand deposits subject to check, exclusive of interbank deposits. The principles governing the supply of this stock can be applied without much qualification to "wider" stocks of money that include some amount of time deposits.

Central Bank Control Any specification of the supply of money must be circumscribed by principles governing the creation of money. Money cannot be supplied in an institutional vacuum. A gold or bimetallic standard is such a set of principles. It is in the first place a formal framework that operates automatically. When such systems are abandoned, some other arrangement must be made. Central banks are one such alternative arrangement.

The function of a central bank in today's world is to supply money to the economy even though the original purpose of such institutions was largely to make the money stock more responsive to seasonal variations in the demand for money. Once a central bank is in a position to supply new money without reference to the rules of a gold standard, some other rules should be established to govern its operations.

That the supply of money should be under the general control of government is specified in Section 8 of the Constitution (Powers of Congress) where it states: "The Congress shall have power . . . to coin money [and] regulate the value thereof. . . ." This principle was established further by Supreme Court decisions, and was made even more explicit in the great debates on monetary affairs in Congress during the 19th century. John C. Calhoun, whose ability as a monetary policy theorist has been overshadowed by the drama of other social issues in which he took part, stated authoritatively in 1834:

> Whatever the Government receives and treats as money, is money; and if it be money, then they have the right, under the constitution, to regulate it. Nay, they are bound, by a high obligation, to adopt the most efficient means, according to the nature of that which they have recognized as money, to give to it the utmost stability and uniformity of value.

No present day economist or jurist could state the matter more clearly or more logically.

Early Central Banking Institutions A great deal of controversy developed in Congress over the constitutionality of chartering the First and Second Banks of the United States—the first institutions that came to have some central banking characteristics. The Whig view, which was generally favorable to the creation of these Banks, was that Congress could commission other institutions to assist it with specific duties, such as, in this case, regulation of the monetary system. The opposing view, espoused by the Jacksonian Democrats during the sensational struggle between Jackson and the Second Bank, was nowhere better given than in Jackson's veto message on the bill to recharter the Second

Bank in 1832. The constitutional power of Congress, he held, could not be delegated. "It was conferred to be exercised [by Congress]," he concluded, "and not to be transferred to a corporation." While the charters of the First and the Second Banks were allowed to lapse, subsequent Congresses have never shown much eagerness to exercise direct responsibility over the supply and value of money. As a practical matter, Congress has been content to specify rules for policymaking agencies to follow and goals for them to aspire to.

Soon after the demise of the Second Bank, Congress created the Independent Treasury. This institution was supposed to be what its name implied—independent of banks and the monetary system. It could not remain aloof for long, however, and ultimately grew into central banking clothes of an advanced order. It was the Treasury Department extended to include enough sub-Treasury offices to carry out all the fiscal affairs of the federal government without recourse to commercial banks or a central bank. It was under the direction of the Secretary of the Treasury who, in effect, became a policymaking central banker. But the Secretary was and is an Executive appointee. His intervention into monetary affairs, was regarded as exceeding the prerogatives of his office.

Some 25 years after the Treasury was declared to be "independent" of banks and the monetary system, Congress attempted to reform the banking system by passing the National Bank Act. This Act was begun as a Civil War measure by the federal government but did not become fully operational until after the War ended. It was designed to bring all banks under federal charter so that the currency they issued would have uniform appearance and value. Since not even half of all commercial banks came into this system, a prohibitive tax on state bank note issues was added to the original Act. The state banks thereupon eschewed note issues, but they continued to operate outside the national banking system by issuing demand deposits for all of their commercial lending activities.

The national banks thereafter exclusively issued currency (National Bank notes). They also served as depository banks for the Treasury thus reintroducing some interdependence between the commercial banking system and the government. Finally, the national banks in the larger commercial centers came to act as seasonal depositories for their "country" correspondents. Collectively, these larger national banks thus had some of the characteristics of a central bank. However, they were fundamentally commercial enterprises and had neither the facility nor the responsibility to behave as a central banking system.

Contemporary Central Banking The formation of the Federal Reserve System was both a reaction to Treasury intervention in the money market and an attempt to develop a monetary system that would operate less erratically than it was currently operating with a national system of commercial banks. Stability was to be achieved through the Federal Reserve Banks' manipulation of the discount rate. Such policy was supposed to synchronize seasonal variations of the money supply with fluctuating seasonal demands.

The explicit charge of the Act itself only called for the Federal Reserve Banks "to furnish an elastic currency, to afford means of rediscounting commercial paper, [and] to establish a more effective supervision of banking in the United States." The means of furnishing an elastic currency was through Reserve Bank discounting of "notes, drafts, and bills of exchange arising out of actual commercial transactions." Discount rates charged by the Reserve Banks were to be set "with a view of accommodating commerce and business." Under the original Federal Reserve Act, the rules of the gold standard, together with the commercial credit doctrine for discounting bank paper, were assumed to fix limits to the scope of central bank policy.

The early 1930's saw the end of the gold standard as an operational constraint on Federal Reserve policy. By the Banking Acts of 1933 and 1935, the technical controls of the Federal Reserve System over the quantity of money were greatly extended. These acts formally established open market operations in government securities and discretion over reserve requirements for member banks (in addition to discounting) as the legitimate province of Federal Reserve action. However, precise specifications for the use of this machinery were still lacking. Without rules or directions, the Federal Reserve System was extremely vulnerable to Treasury and Executive domination.

The general deemphasis of monetary policy in the 1930's, in conjunction with the inattention to general rules for its policies, saw Federal Reserve

policies subordinated to the Treasury's debt-management policies. This relationship continued through the war years and was only ended by a Congressional resolution of 1950.

By this resolution, both the Federal Reserve System and the Treasury were charged with carrying out policies that "shall be consistent with and shall promote the purpose of the Employment Act of 1946." This resolution also led in 1951 to the famous Accord. During the remainder of the decade, the Federal Reserve System was allowed relative autonomy in using its technical powers to further the provisions of the Employment Act.

Another phase of central bank development became discernible in the 1960's. The quantity of money, which had been relegated to a passive role by academic analysts, was reappraised both theoretically and empirically. Federal Reserve research and policies, as well as Congressional discussion, reflect this new prominence of money. Another resolution of the Joint Economic Committee made in June 1968 states:

> The Congress should advise the Federal Reserve System that variations in the rate of increase of the [narrow] money stock ought not to be great or too sharp. In normal times, for the present, the desirable range of variation appears to be within the limits of 2 to 6 per cent per annum, measured on a quarter-by-quarter basis—a range that centers on the rate of long-run increase in the potential gross national product in constant dollars.

Renewed interest in control over the quantity of money has raised empirical questions for research with regard to the supply of money. What basically determines the quantity of money? How is it measured? What are the tolerances of measurement? What are the operational problems of control? Central to these questions is the framework in which the genesis of money takes place. Such a framework will be presented as Part II of this article in the next issue of the *Monthly Review*.

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