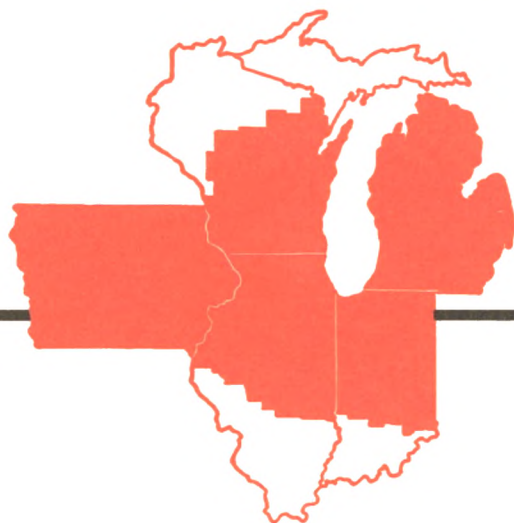


Business Conditions

June 1971



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Food programs— increased emphasis

Food programs to improve diets of low income families, greatly expanded in recent years, will be expanded further by new legislation. Although federal food programs started in the 1930s, the objectives and orientation of such programs have been changed markedly through the years.

Initially, U.S. Government-sponsored food programs had two purposes: one, more efficient use of “surplus” farm commodities accumulated under federal government price support programs; two, to help feed the hungry—the mounting numbers of Depression-connected low income families and families receiving welfare payments. Improving the diets of undernourished people was not the primary consideration of the early planners. Over the years, however, the aims of these programs have been redirected to emphasize human welfare. During the 1960s, evidence of widespread malnutrition among relatively large segments of the population became a rallying point for many who thought federal food programs should be expanded—especially in view of the general affluence provided by rapid economic growth, rising consumer incomes, and low unemployment.

Food programs currently in operation fall into two broad areas—those designed to improve the nutrition of children and those designed to assist low income families. Total federal expenditures on food programs during fiscal 1971 were about \$3 billion. This

compares with total food outlays of about \$110 billion for the entire nation. Roughly one-third of federal food expenditures are for child nutrition programs, and about two-thirds are for family assistance programs.

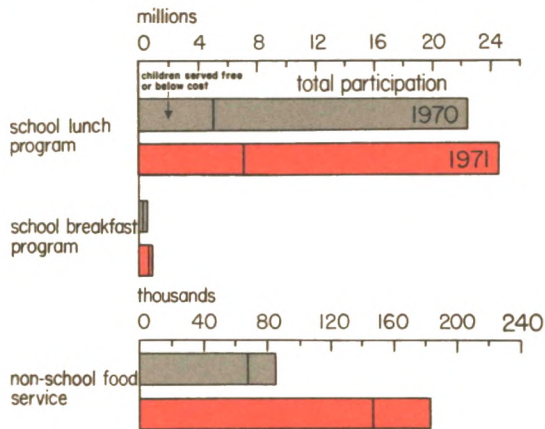
Feeding the children

Most federal food programs designed for children are operated through school systems. School food programs date back to before the turn of the century when several major cities offered “penny lunch programs.” The federal government began to provide assistance to schools to implement lunch programs in the early 1930s. This assistance was gradually broadened, and in 1946 Congress provided for the National School Lunch Program. Since then, this program has been greatly expanded.

Federal support for the program has consisted of limited cash support for each lunch provided, plus a variety of donated foods to help the schools hold the line on prices and to meet nutritional needs. Such support has averaged around one-fifth of the total cost of preparing and serving a lunch. The balance of the cost is met by state and local governments with most of the balance actually met by children's payments.

During the 1960s, increased emphasis was placed on extending the National School Lunch Program into low income school districts. Additional special federal assistance

School food programs include more children from low income families



Note: Data plotted from March figures.

now goes to school districts with an enrollment of children from families with incomes under \$4,000—about 30 cents per meal in fiscal 1971, compared with an average federal reimbursement of around 5 cents per meal under the regular program.

About 25 million children—slightly less than half of the daily school attendance—in around three-fourths of the nation's schools are participating in the program. About 20 million children were included in 1969. Lunches served free or below cost to children from low income families account for most of the increase in participation under the program. In March 1971, more than seven million children, or about 29 percent of the total participating, were receiving lunches free or below cost. This is up from 3.5 million children, or 16 percent, in 1969.

Other child feeding programs were instituted in the late 1960s, and increased funds have been made available under these pro-

grams to provide meals for needy children, either free or at subsidized prices.

A federally-sponsored breakfast program for school children was initiated in 1966 on a pilot basis. Extended in 1968, the program operates in economically-depressed areas and provides breakfast for almost 900 thousand children, triple the number of children participating in the program in 1969. Nearly four-fifths of the breakfasts served are free.

A special food service program designed to provide meals for school children during vacations, and for pre-school children on a year-round basis, was initiated in 1968. In March 1971, nearly 200 thousand pre-school children were receiving meals through this program. Summer participation would likely be about triple the March level based on summer participation rates in recent years. As in the breakfast program, most of the meals under the special program are provided free.

Federal payments under the various food-for-children programs are expected to total well over \$700 million in fiscal 1971—more than double year-earlier outlays. In addition, over one billion pounds of food worth \$250 million will be distributed directly to schools—about the same as last year.

Family assistance programs

The Commodity Distribution Program is the oldest (and until recently the primary) governmental food assistance program. Under this program, food commodities are shipped by the U. S. Department of Agriculture to various distribution centers throughout the nation for redistribution to low income families and to institutions.

In the 1930s, Commodity Distribution was an adjunct to the general farm program. Foods supplied were those acquired under price support programs and surplus removal purchases. In the mid-Sixties, the nutritional

content of the donated food was enriched by including such items as canned fruits and vegetables, regardless of whether these were "surplus" commodities under old definitions.

The variety and quantity of commodities has varied significantly from year to year, depending in large degree on the price support activities of the Department of Agriculture. Because of these variations in the kinds and amounts of commodities purchased by the government, there also have been variations in the federal cost of the program, the dietary adequacy of the commodities received by participating families, and the number of families participating in the program.

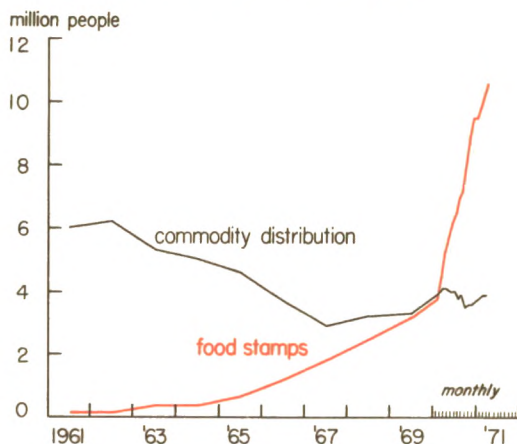
Participation in the Commodity Distribution Program was highest in its early years—averaging around 12 million persons annually during the latter half of the 1930s. As food surpluses diminished and economic conditions improved during World War II, the program was sharply curtailed. It expanded after the war, especially during the late 1950s when farm surpluses mounted and unemployment levels rose. The number of persons receiving food assistance through the direct distribution program reached a postwar peak of about 7.4 million persons in 1962. Related expenditures were around \$227 million in that year.

With improved economic conditions, participation in the direct distribution program declined to today's 3.9 million people. Even with reduced participation, costs of the program are up sharply, reflecting the increased variety and quantity of foods made available per person in recent years.

The Food Stamp Program

The predecessor of today's food stamp program was launched in the late 1930s. Under the earlier plan, relief families could purchase between \$1 and \$1.50 worth of

Participation in Food Stamp Program increases sharply



orange-colored stamps weekly for each family member. For each dollar's worth of orange stamps purchased, 50 cents worth of blue stamps were given free. The orange stamps could be used to purchase almost any food item, but the blue stamps could be used only for food items declared to be in surplus. This first food stamp program was terminated in the early 1940s.

A new food stamp program was inaugurated on a pilot basis in 1961. From its beginning in eight areas where large proportions of population were known to be receiving public assistance, the program gradually was expanded to additional areas, until in 1964 the Food Stamp Act placed the program on a permanent basis and authorized expansion to any county which desired to participate. In late 1969, participation requirements were significantly reduced, and program benefits were increased. Further broadening of program benefits was authorized with the passage of legislation in early 1971.

Through the stamp plan, participants are able to increase their food purchasing power by exchanging a small amount of money for an allotment of food stamps of a higher value. Most foods in a typical grocery store can be purchased with food stamps. Alcoholic beverages, tobacco, soaps, cosmetics, and pet foods, or any product which is clearly identified on the package as being from a foreign country, are excluded.

Food stores may become eligible to participate in the program by applying and receiving authorization from the agricultural marketing service. Well over 100 thousand stores participate in the plan. Merchants can transfer the food stamps to suppliers or redeem them at banks. From the banks the stamps move back along regular banking channels to Federal Reserve banks, where they are finally redeemed and destroyed.

Eligibility

Income level is the main criterion for participation in the Food Stamp Program. State and local welfare agencies currently determine which families can qualify to participate. Included are families that receive public assistance (qualifying because of dependent children or elderly or handicapped persons) and families that have less than specified levels of income and liquid assets. Under the 1971 amendments, which are expected to be implemented shortly, uniform national income standards will be used to determine eligibility. Maximum income allowed for stamp purchases under the new regulations range from \$160 a month for an individual to \$600 a month for a family of eight.

There were other amendments passed in 1971 which were directed at abuses under the earlier program. One excluded from eligibility unrelated individuals under the age of 60 living as an economic unit who are not

residents of an institution. Another excluded households with an able-bodied adult between 18 and 65 (except mothers or students) who will not accept employment at the state or federal minimum wage.

The maximum value of food stamps that may be received by a family of four, currently \$106 a month, will be raised to \$108 upon implementation of the new guidelines. This is roughly equivalent to the Department of Agriculture's estimates of the amount of money that would have to be spent on an "economy food plan" for a family of four. Currently, half of the food stamps issued, on average, are free or bonus stamps. The proportion of stamps required to be purchased, and those received free or as a bonus, varies by individual case depending upon the level of income and family size. In no case, however, can the cost of stamps equal more than 30 percent of a family's income.

Purchase requirement rises with income

Monthly income	Required purchases	Bonus stamps	Total stamp allotment	Proportion of stamps purchased (percent)
	(dollars)			
20	0	108	108	0
100	25	83	108	23
200	53	55	108	49
300	83	25	108	76
360	99	9	108	91

Note: Example based on a family of four residing within the continental United States.

Prior to 1970, families participating in the food stamp program were required to purchase food coupons in amounts that reflected their "normal" level of food expenditures in

order to receive free stamps. The purpose behind this provision was an attempt to insure that food purchased under the program did not merely replace normal expenditures for food without boosting the nutritional level of the diet of the participating families. The program has been modified to reduce the amount of money required to purchase stamps, but this feature is still important.

Under the new rules, a family of four with monthly earnings of \$100 would be required to purchase \$25 worth of stamps to receive \$83 worth of bonus stamps free. With monthly earnings of \$360 (maximum for a family of four), a family would have to purchase \$99 worth of stamps to receive \$9 worth of bonus stamps. Currently, all recipients must make some payment—50 cents per person—in order to receive food stamps. Under the new regulations, participants with little or no income—under \$20 per month—will receive stamps free.

Increased participation in the Food Stamp Program has been stimulated by the more liberal bonus or free stamp allowances made available in late 1969. From the start of 1970 to March 1, 1971, participation in the program increased from less than four million to about 11 million persons.

The value of food stamps issued jumped from \$68 million in January 1970 to \$250 million in March 1971. Bonus stamps, those provided free because of the broadened benefits, increased even more rapidly—from about \$27 million to \$142 million over the same period. This is at an annual rate close to the \$1.75 billion appropriation authorized for the entire program for fiscal 1971.

Effect of the programs

The precise effects of food programs are not easily measurable owing to recent sharp expansion of the program, as well as to the

inherent difficulties in attempts to evaluate programs so greatly entwined in social issues. Nevertheless, some inferences as to the possible effects the present programs might be having on the overall demand for food and in upgrading diets of the poor can be drawn from the information compiled over several years of food program operations.

Numerous studies have been conducted in past years on the impact of food programs on the demand for farm products. Most of the findings indicate the effect is minimal. These findings probably still hold, although the substantial increase in the scale of operations and the increased importance of the Food Stamp Program have obviously added to food demand. The increase in the demand for food stemming from food programs hinges essentially on the degree to which such programs increase consumption over and above what it would have been without the programs.

Studies on the demand effect of the Commodity Distribution Program suggest that donated commodities are much like a small increase in income to which recipients respond by spending slightly more for food and considerably more for nonfood items. One such study indicated that food expenditures increase about 10 cents for each \$1 worth of commodities donated. This would imply a net increase in food expenditures of around \$29 million based on the current \$290 million level of the Commodity Distribution Program operation. The actual effect on farm prices may, in fact, be slightly greater than indicated since government purchases of the donated commodities frequently are made at times when supplies are large and prices are depressed. This tends to reduce the amount of price fluctuation and thereby results in a higher average price over the longer run.

The Food Stamp program probably has a much greater impact on the demand for food

per dollar of federal expenditure than does the Commodity Distribution Program or the child feeding programs. The amount of additional spending for food would be equal to the value of the bonus stamps minus the portion spent on nonfood items. Since participants are required to purchase a portion of their total stamp allotment as a condition for receiving bonus stamps, the degree to which expenditures can be made for other than food items is limited, and total food expenditures likely are increased for most if not all program participants.

Additional food expenditures would depend largely upon the level of incomes and pre-program food expenditures of those families participating in the program. This stems from the varying portion of stamps required to be purchased by income level—ranging

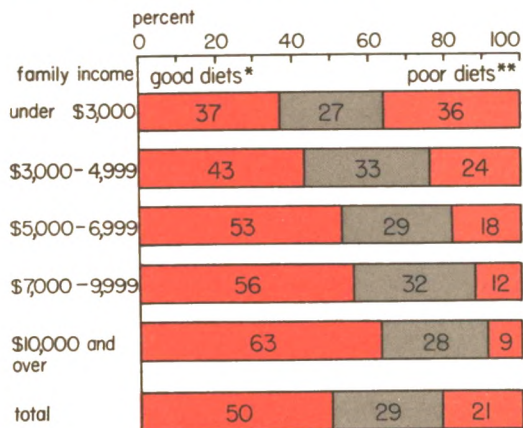
from zero for families with little or no income to around 75 percent of the allotment for families with maximum eligible incomes. The actual effect is difficult to determine since characteristics of participating families are not readily available.

Also, some of the increased expenditures for food represent an upgrading in the diet level rather than increased purchases of food. Surveys of stamp participants' consumption patterns indicate that the largest increases are for fresh produce and meat. While increases in consumption of both food categories are generally indicative of higher nutritional levels, they also tend to be more expensive. Thus, although federal expenditures on food programs are currently at an annual rate of around \$3 billion, their actual stimulus to food demand is much less.

Determining the adequacy of diet is more difficult than appears at first glance. There is the problem of determining what constitutes nutritional and esthetic adequacy. The widely-used standards of nutritional adequacy set forth by the National Research Council are based on daily needs of seven nutrients. However, data from the 1965 National Food Consumption Survey indicate that about half of the households were failing to meet this nutritional standard. In fact, diets of more than one-fifth of U. S. households did not contain even two-thirds of the recommended allowances for all seven nutrients.

Meals served under the school lunch programs are required to meet one-third or more of the daily dietary allowances recommended by the National Research Council. A diet provided by foods donated under the Commodity Distribution Program comes very close to meeting full nutritional needs if accepted and used as recommended by the Department of Agriculture. Donated foods meet about four-fifths of the National Research

Many families with high income have poor diets



*Met recommended dietary allowances for seven nutrients.

**Met less than two-thirds allowance for one to seven nutrients.

SOURCE: 1965 Food Consumption Survey.

Council's allowances for calories, and supply more than adequate amounts of the other recommended daily adult requirements of vitamins except vitamin A.

Stamp allotments under the Food Stamp Program are estimated by the Department of Agriculture to be sufficient to obtain an adequately nutritional diet. Because of personal choice, lack of complete information, and variations in personal needs not adequately reflected in recommended nutritional standards, many families participating in the Food Stamp Program probably have diets that fall below the full recommended allowances although still much improved over diets before participating in the program.

Several studies were conducted in the earlier 1960s in an attempt to measure the effect that the Food Stamp Program had on nutritional levels. Prior to the program, slightly more than one-fourth of the families who later participated in the food stamp programs had diets meeting the standards established by the National Research Council. After the program had been in operation for about six months, 48 percent of those who were using food stamps in Michigan, and 39 percent in Pennsylvania, had diets meeting the nutritional standards. Of those who qualified for the program but did not take part, the proportion with diets meeting the standards remained at about one-fourth.

If a similar study were to be conducted today, the improvement in diets of participants over eligible nonparticipants likely would be even more striking, reflecting the increased stamp allotments.

Food versus cash

Although food programs have rapidly ex-

panded in recent years, numerous proposals are being considered which would substantially alter, if not eliminate, such programs. Many of the proposals feature income supplements as an alternative to food stamps or direct distribution. Such programs would permit a greater choice between purchases of clothing and shelter, as well as food and other things depending on individual desires and needs. Because of the high priority placed on upgrading nutritional levels, proponents of food programs generally consider income supplements a poor alternative to food programs. Providing the means for an adequate diet does not guarantee a nutritious diet. For example, in the 1965 Food Consumption Survey 18 percent of the households with incomes between \$5,000 and \$7,000 failed to obtain diets that met two-thirds of the recommended allowance for seven important nutrients; 9 percent of the households with incomes over \$10,000 failed to meet this standard.

People with poor diets may lack knowledge of the benefits of adequate nutrition or may not know how to achieve good diets. Another obstacle to obtaining an adequate diet is the lure of nonfood consumption goods. After certain minimum food needs are met, most of any additional income is typically spent on other things. Data from the 1965 Food Consumption Survey indicate that only 1 to 2 percent of each additional 10 percent of income can be expected to be spent on food.

Because of these obstacles to obtaining a high level of nutrition, food programs of some type, complete with an educational effort, are likely to be more efficient and less expensive than cash income grants in improving the nutritional level.

What is money?

To the man in the street, money is the paper currency in his wallet and the coins in his pocket. On a moment's further reflection, he names the balance in his checking account also; checks drawn on it work as well as currency or coin when he has payments to make. What about the savings account he keeps at his bank, or a certificate of deposit that he holds? For that matter, how about the savings account he maintains at the savings and loan? Are these money, too? This is a harder question.

From money to near-money

Unlike the more "obvious" forms of money, savings accounts or certificates cannot be immediately and directly used to make payments. First, they have to be converted into one of the kinds of money that can be directly spent. Still, in another sense, they seem to be all but indistinguishable from money. While checks cannot be written on savings accounts, sums on deposit are almost as readily accessible as checking account balances. Withdrawals in practice can be made at any time and without advance notice to the bank or the savings association. Certificates are somewhat less easy to turn into cash, as they carry specific maturity dates. Yet even these instruments can be cashed on the holder's demand, with some sacrifice in interest yield. Savings deposits and certificates, therefore, are less "liquid" than de-

mand deposits (checking accounts), or coins and currency, but not much. The distinction is slight. And the interest yield that savings or other time accounts produce may more than compensate for their lesser relative liquidity. Obviously, it does—or depositors would refuse to keep funds in such forms. Clearly, savings accounts and other time deposits at banks and thrift institutions look a lot like money and may well deserve to be encompassed by the definition of money.

Nor does this end the matter. What about credit union shares? U. S. savings bonds? Treasury bills and notes? Corporate bonds and stocks? Is the list endless? Clearly it cannot be if the definition of money is to be a useful one. The recitation of asset forms that need to be considered for inclusion in the definition of money serves to suggest that "money" is a matter of degree. If this is so, if assets of all kinds—and even "non-financial" assets—may be thought of as having money or liquidity to some extent, it still seems important to draw a line that will separate money from all other assets. But where should this line be drawn?

Three definitions

Perhaps the best answer to this question is that there may be no one best place to draw the line. Thus, the monthly **Federal Reserve Bulletin** carries a tabulation entitled "Measures of the Money Stock," in which three

such measures are presented. These are separately labeled and defined as follows:

- M_1 : currency (including coin) and demand deposits (checking accounts).
- M_2 : M_1 plus savings and other time deposits of commercial banks, excepting negotiable certificates of deposit of \$100,000 and more at major commercial banks.
- M_3 : M_2 plus deposits of mutual savings banks and accounts at savings and loan associations.

The first of these measures, M_1 , defines money quite narrowly; indeed, M_1 is often termed narrow money. Broad money usually refers to M_2 , which includes an asset category, time deposits, that is slightly less moneylike than M_1 . Similarly, M_3 extends the definition a little further still—further away from the purest of moneyness.

It may be noted that the **Bulletin** tabulation labels no one of these as *the* money stock or money supply. The three are simply offered as alternative possible measures. The user or

the analyst may take his pick. Or, he may wish to devise a definition of his own, offering it not necessarily as a definition of money as such, but rather as the definition of a financial or monetary magnitude he deems to be significant. Commercial bank reserves and the monetary base—two measures of the foundation that bank deposits and bank credit rest upon—are regarded by some as more useful than any of the money concepts above. Other analysts, however, prefer to move out the other way, to a measure even broader than M_3 , to which they add such other financial asset forms as credit union shares, Treasury bills, and so on.¹

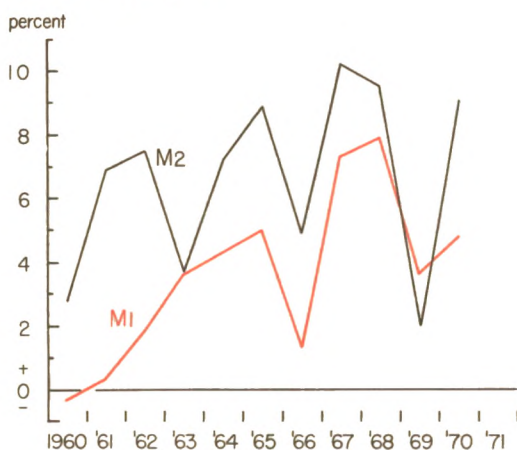
Money in the marketplace

An analyst who views money primarily in terms of its role as a medium of exchange usually will be most comfortable with the narrow M_1 definition of money, including as it does those financial assets that may be used directly in the marketplace. Coin, currency, and checks drawn on demand deposits all fit this description. Although certain other holdings may be so used—a negotiable certificate of deposit or travelers' check might be an example—their importance as media of exchange is negligible, and little harm is done if only those assets encompassed by the M_1 definition are treated as bona fide exchange media.

Money as liquidity

Money is more than a medium of exchange, though, as the textbooks point out. Beyond its usefulness as a unit of account or standard of deferred payments is its asset

Annual growth rates of M_1 and M_2



¹Some of the technicalities involved in the derivation of money supply measures are dealt with in the accompanying boxed statement, which also illustrates the interrelations among alternative definitions of money.

role. As the ultimate in liquid assets, money is ideal to hold for protection against contingencies, such as unexpected interruptions in income or needs to cover emergency outlays. In addition, money balances enable holders to move quickly to take advantage of investment or speculative opportunities. In short, every economic entity is motivated to hold money not only in order to carry on its routine activities in the marketplace, but also to afford it some leeway in the management of its earning assets and to provide it a cushion against unforeseeable occurrences.

The analyst who assigns priority to the financial-asset role of money in the economy is apt to prefer a broader to a narrower definition of money. In good part, this reflects uncertainty over just where the line around money is to be drawn. Thus, the difference between currency and demand deposits, both of which are within *any* definition of money, may appear greater than the difference between, say, savings and loan accounts, which are components of M_3 and Treasury bills, which are not. Yet the exclusion of bills may not be bothersome if they tend to behave much as the elements within the money measure. But in any event, the money-as-asset analyst regards money as something considerably more than only the coins and pieces of paper that people use to pay their bills and settle their debts.

What's in a definition?

Defining money, then, is a tricky business. But it is a necessary first step that has to be taken before any serious study can be made of money's role in economic affairs. With a definition in hand, whichever one it may be, the analyst may proceed to measure the size of the money supply and to monitor changes in it that take place over time.

Professional opinion remains divided on

the nature of the connection between money and economic activity, and particularly on the direction of causation. This is despite the close attention that economists and others have devoted to monetary matters over the past 150 years and the voluminous masses of empirical evidence that they have examined. One view (the monetarist) emphasizes the importance of money in determining economic activity and contends that changes in the existing stock of money motivates changes in spending and income, given the pattern of money use.

Critics assert that this view assumes away the problem by positing an unchanged pattern of money use. The critics believe that any given change in the money supply—as by a Federal Reserve System move inducing banks to increase loans and deposits—often will be offset by a change in velocity. Many among this group, indeed, question the efficacy of monetary actions in general, contending instead that fiscal policy measures, such as changes in the rate of federal spending or changes in tax rates that affect the level of disposable income, have far greater impact on economic activity than do monetary policy actions. Holders of this view are quick to agree that monetary policy is not wholly impotent, conceding that changes in the money supply affect interest rates, which, in turn, influence business investment spending—and even consumer spending through their impact on capital values or “wealth.”

Despite major differences on the importance of monetary matters and the relationship between money and economic activity, there is all but universal agreement that some sort of connection exists and, moreover, that some influence runs from money *to* economic activity. (Unless this were so, there would be little for monetary policy, and central banks, to do!) But how strong this relationship is,

Money supply measures and their derivation

The accompanying table illustrates relationships among three widely used measures of the money supply, as well as showing the several adjustments that must first be made in the important demand deposit component. The estimates given are averages for four weeks ending January 27, 1971.

	Billions of dollars
Gross demand deposits at all commercial banks.....	\$ 242.9
—Cash items in process of collection.....	— 31.6
—Interbank deposits	— 28.6
—U. S. Government deposits	— 6.5
—Federal Reserve float	— 3.8
+Foreign deposits at Federal Reserve banks.....	+ 0.4
=Demand deposits in money supply.....	\$ 172.9
+Currency in hands of the public.....	+ 49.2
= M_1	<u>\$ 222.1</u>
+Commercial bank time deposits (excluding CDs of \$100,000 and more at major banks).....	+207.2
= M_2	<u>\$ 429.3</u>
+Deposits at nonbank thrift institutions (mutual savings banks, savings and loan associations).....	+217.9
= M_3	<u>\$ 647.2</u>

SOURCE: Federal Reserve Bulletin and Federal Reserve System data.

The adjustments made in gross demand deposits may be explained as follows:

Interbank deposits are liabilities owed by one bank to another. They are excluded from the money supply because the computation of total demand deposits requires consolidating balance sheets of the individual banks. Such aggregation results in the canceling out of all deposits owed by one commercial bank to another. Not included in the interbank

category are deposits at mutual savings banks and foreign commercial banks, and M_1 -type deposits at Edge Act corporations and branches and agencies of foreign banks.

Cash items in the process of collection (CIPC) and Federal Reserve float—often combined as “bank float”—are accounts that have much in common. Both are temporary accounts measuring the double-counting of demand deposits arising from inherent lags in the check clearing process. If check clearing were instantaneous, these accounts would be unnecessary.

Cash items in the process of collection accounts for checks that the bank has collected but for which it has not yet received credit from the Federal Reserve bank. Federal Reserve float occurs when two banks are given credit for the same reserves.

For example, assume a father sends a check for \$100 drawn on a Springfield bank to his son in Chicago. When his son deposits the check in his Chicago bank, the bank credits his deposit and debits CIPC. Thus, the Chicago bank registers an increase in demand deposits. But no corresponding reduction has taken place yet in the Springfield bank's deposits. This temporary double-counting of the \$100 is called “float,” which the deduc-

tion of CIPC from gross demand deposits is designed to eliminate.

When the Chicago bank forwards the check to the Federal Reserve bank, the Fed makes the proper bookkeeping entries and then sends the check to the Springfield bank. The Chicago bank must wait a certain time (corresponding to the interval judged necessary for the Springfield bank to notify the Fed that it has received the check) before it is credited with the reserves. When this period passes, the Chicago bank records an increase of \$100 in reserves and a reduction of \$100 in CIPC.

If processing the check between the Fed and the Springfield bank is delayed, the Springfield bank will not have drawn down its reserves and deposits at the end of the prearranged period. As a result, both banks will be credited with the reserves corresponding to the check. This type of double-counting of reserves is called Federal Reserve float. To correct the money supply for such double-counting, it is necessary to subtract Federal Reserve float from gross demand deposits. When the Springfield bank eventually does notify the Fed of receipt of the check, its deposits and reserves are drawn down, eliminating float.

The rationale for excluding U. S. Government deposits from the money supply is that such deposits probably have little influence upon government expenditures. Nevertheless, some economists, believing that these deposits should be included, argue that U. S. Government deposits are qualitatively no different than state and local government deposits, which are included.*

*See Paul S. Anderson and Frank E. Morris, "Defining the Money Supply: The Case of Government Deposits," *New England Economic Review*, March/April 1969, pp. 21-31. For the official view, see Board of Governors of the Federal Reserve System, *Supplement to Money*

The inclusion of foreign deposits at Federal Reserve banks also has been questioned. It has been argued that they are primarily for foreign exchange transactions rather than for the purchases of U. S. goods and services and, therefore, should be excluded from the money supply.

Recently, adjustments have been made in the money supply to correct a considerable understatement, resulting from the rapid increase in Eurodollar transactions. Eurodollar transactions often have resulted in checks being deposited with U. S. commercial banks from their foreign branches, thereby increasing U. S. bank assets (CIPC) and liabilities (demand deposits).

As mentioned previously, the purpose of the CIPC account is to prevent double-counting. Yet, until quite recently, foreign agency demand deposits have not been included as a component of demand deposits. Therefore, the subtraction of CIPC from gross demand deposits would result in an understatement of the money supply. This error has become more serious in recent years as the volume of Eurodollar transactions has increased.

To correct for this, the demand deposit component in money supply measures now includes those deposits associated with Eurodollar transactions.

Inclusion of these deposits offsets the CIPC items associated with Eurodollars, thereby eliminating the understatement in the money supply.

and Monetary Statistics, Section I, Banks and the Monetary System, October 1962, p. 7.

Note: For a more thorough discussion, see Irving Auerbach, "International Banking Institutions and the Understatement of the Money Supply," *Monthly Review*, Federal Reserve Bank of New York, May 1971, pp. 109-18. Also, see Joseph G. Kvasnicka, "Eurodollars—An Important Source of Funds for American Banks," *Business Conditions*, Federal Reserve Bank of Chicago, June 1969, pp. 9-20.

and how it compares with influences on activity from other quarters—and influences running from activity to money—are questions that have yet to be fully answered.

Now, granted that money matters, what concept or definition of the money supply provides the best measure of monetary influences upon economic activity? Opinion on this, not surprisingly, is divided. At least three points of view may be identified.

The claim for narrow money

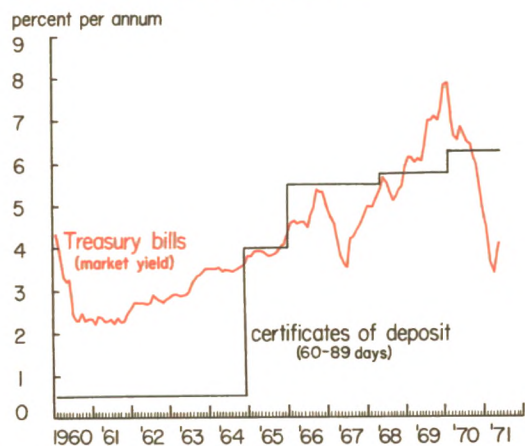
On one hand is the belief that it is money in the narrowest sense, or M_1 , that has the most analytical usefulness. This follows from the notion that M_1 is made up solely of monies that are directly spendable. Spending, which is just another way of looking at income, entails the transfer of money (M_1 -type money) from buyers to sellers; therefore, it seems to follow that changes in M_1 play an important role in determining expenditures. This defini-

tion or *a priori* approach sidesteps the necessity for any empirical testing.

The opposite extreme

Those critical of the monetarist doctrine believe that what really matters is the economy's total liquidity or moneyiness. According to this view, the oncoming course of economic activity is foreshadowed by today's liquidity position of consumers, businesses, and governmental agencies. Holdings of M_1 -type money constitute a part of an aspect of liquidity—a rather nebulous and slippery term—but no more than that. But clearly, non- M_1 moneylike assets, such as time deposits, savings certificates, credit union shares, readily saleable securities, and perhaps also certain financial assets that are not readily saleable, also need to be taken into account. Furthermore, a significant further aspect of liquidity is the readiness with which funds may be realized by borrowing, the "availability" (and price) of credit. Liquidity to those who subscribe to this position appears to be little less than the *potential* behind spending and, therefore, interest rates are believed to provide a better reading of monetary conditions than any of the definitions of the money supply. Money, even by the broadest definition, may be a big part of total liquidity, but there are other components, further into the spectrum of financial assets (and credit), that enter also. Adherents to this view often define money as the sum of those financial assets found through empirical research to be the closest substitutes for M_1 and M_2 . Hence, if Treasury bills were found to be close substitutes for M_1 , money would be defined to include them.

Treasury bill rates and maximum rates payable on certificates of deposit



Money is what money does

Finally, there is the stand among those who emphasize the importance of monetary ac-

tions that money is appropriately defined as that magnitude whose behavior best predicts the course of economic activity. If, in the past, changes in M_1 have been a better indicator of contemporaneous or subsequent changes in, say, total income (GNP) than have M_2 or M_3 (or other measures), then M_1 defines money. The task of defining money, therefore, reduces itself to an exercise in regression analysis, by which the measure that best explains changes in economic activity is identified.

Work that has been done on the problem appears to suggest that M_1 and M_2 fit about equally well, so that either, or an average of the two, could serve satisfactorily as *the* definition of money. But the correspondence of these two measures has been severely strained at times.

M_1 , M_2 , and Regulation Q

In much of past experience, M_1 and M_2 have grown at comparable rates and thus provided similar readings of monetary conditions. But recently, the aggregates have grown at distinctly different rates. In 1968 and 1969, market interest rates rose above the maximum rates payable on bank deposits as

established by Regulation Q. This induced investors to withdraw their funds from time deposits and to purchase high-yielding securities. The decline of time deposits caused M_2 to grow at a much slower rate than M_1 . Since 1970, however, falling rates in the market have reversed the flow, and funds have moved back into time deposits from securities. In this time, therefore, M_2 has grown at a considerably faster rate than M_1 , and the two measures continue to give considerably different impressions of monetary conditions.²

The effects of Regulation Q, therefore, appear to illustrate the point that the appropriateness of a definition of money depends on the use to which it is to be put. Thus, determining what constitutes money is a challenging task that is heavily dependent upon both economic theory and empirical research and, until economists resolve their differences on how money influences economic activity, this issue promises to remain a controversial one.

²Professor Milton Friedman, the U. S.'s foremost monetarist, has argued that neither measure is reliable when M_1 and M_2 diverge and that the answer lies somewhere in between. His solution would be to eliminate the cause of the divergence; i.e., abolish Regulation Q.

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