People who have ended up believing or who have believed all along, that money plays a decisive role, have been increasingly justified, up till now. Paul Samuelson spoke of a bank in New York that gets better forecasts looking at money six months ago than one can get by a computer model. That bank employs a student of mine from whom I have learned how they do this. It is quite remarkable how close the relationship between money and income has been over the last six years. Money has, undoubtedly, led the economy very closely. There is, however, one small qualifying detail that, I think, is worth examining. The student I mentioned finds that there was a change in the structure of the relationship between money and income which showed a break roughly at the time when the economy came to full employment. I repeat, the structure changed, but the quality of the prediction did not much change, before 1964 and after. Nevertheless, one feels intuitively that, at full employment, there would likely be a different relationship of money and income than there would be below full employment. Perhaps it is worth looking at some of the factors that make for the extraordinarily good predictive value of the money supply in the last few years.

**Factors That Make the Money Supply Important**

In the kind of economy we had in the last three or four years, it is fair to say that we probably had at most times a strong unsatisfied demand for loans. At such a time, it is relatively easy for the banking system, if it has excess reserves, to expand the money supply by meeting loan demand rather than by buying and monetizing existing assets such as short-term governments. That kind of process, where money is created by loans, is more likely to be expansive than the other, where existing liquid assets are monetized. This has been the kind of a process I think we have had in the last few years. This may explain why, at the time when the surcharge went in while the Fed simultaneously began to expand the money supply, the expansion of money became a pretty good substitute for the expenditures that

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were eliminated by the surcharge. Hence, we got no visible effect from the surcharge. In conditions of unemployment, that might not have worked.

By the same token, with the banking system in the position it is, there is very little difference between money, broadly defined, and credit. That is, the volume of bank loans is very roughly the same as that of deposits because investments are small. As long as the banking system had a substantial volume of assets that they could liquidate, it was possible to increase loans without increasing the money supply. One would expect, at such a time, a less-close link between money and income. This situation has largely, if not completely, disappeared. Hence, money and credit being almost identical, the linkage between either one of them and income is likely to be closer than it would be if bank credit, in the narrow sense, could vary independently of the money supply.

One last reason why I think it is increasingly obvious today—and I stress today—that we must look at money and not at interest rates is that inflation has made interest rates almost meaningless. Allan Meltzer has pretty much covered this point, but perhaps it bears repetition. The real interest rate is unknown—it is unknowable—because it depends on peoples' price expectations and has little to do with past inflation. Under those conditions, it is very difficult for the central bank to be guided by interest rates. Using money as a guide creates problems of that sort too, because what is happening to the real money supply isn't what is happening to the nominal supply. Nevertheless, my first impression is that these difficulties are less serious. So, in times of inflation, I would say, we should definitely look more to money and less to interest rates. But that says nothing of what is appropriate in times of stable prices.

**Definitions**

This gets me to the subject of definitions. It is a lowly occupation; but, since nobody has touched on it, perhaps I should. At the historic breakfast this morning I was able to double the number of definitions of the money supply. My count prior to breakfast stood at 10, it now stands at 20. Just to give them to you briefly: $M_1$, including or excluding government deposits—as you know, in April, government deposits made rather a blip and confused the picture of money growth; $M_2$, which you can define not only as including or excluding government deposits, but also including or excluding CD's—and I have the Master's verdict that CD's ought to be excluded;
then $M_3$, as some people call it, adds to $M_2$ things like savings and loan and credit union shares. $M_3$ can be defined with any of the four $M_2$'s. That makes ten definitions. You can multiply these ten by two by taking in banks’ cash items for collection on foreign branches—which I understand amount to $3 billion at the present time and which by decision of the Board, are hereafter to be included in the money supply—so that they become subject to reserve requirements. The best you can do really with the money supply, I think, is to run a diffusion index and see which way it goes.

I would like to add one other point on money supply. We speak of the demand for money and its relation to income, and that is how I have always seen it. That isn’t at all, I am sorry to say, how corporate treasurers regard it. Should you ask a corporate treasurer, “Why do you keep such and such balance?” He would not say, “Because our transactions are such and such.” He would say, “Because we have got to compensate the bank for its promise to make a loan to us,” or, “To compensate our bank for the expense of running our account”—all of which relates to transactions, but rather indirectly. So some large part of the total money supply is only very tenuously related to income. Perhaps we had better do some research, maybe of an institutional kind, to see what really determines the holdings of these balances.

Changes in the Budget

For people who believe in fiscal policy, I also have some good news. We talk about the budget surplus and the full employment surplus as though their magnitudes were clearly definable. We had hoped that after we went through the exercise of consolidating the three budgets into one, we would know what the surplus was. The Treasury recently went through a little exercise of throwing back into the budget various types of expenditures and quasi-expenditures that had been de-budgeted since fiscal 1968 or otherwise left out. These are mainly government loans, guarantees and insurance of private loans, and similar federal credit programs that have burgeoned very rapidly in recent years. Some of these loans have been altogether privatized, for instance Fanny Mae was privatized. Some of them have been stepped up in their original form. Some of them certainly do not deserve to be thrown into the budget in their entirety because they do not clearly lead to incremental expenditures. FHA guarantees are of that type. Nevertheless, when you take them all for what they are worth, there is $21 billion that has been
de-budgeted in this broad sense. Instead of having a $6 billion surplus in a unified budget for fiscal 1970, we have a $15 billion deficit. What is more, instead of swinging from a small surplus in fiscal 1969 to a sizable surplus in fiscal 1970, we are moving to a larger deficit. The deficit increases, by this count, by $3 billion. So take your choice. Is fiscal policy moving toward restraint, or is it moving toward expansion? Until we have examined these aspects of fiscal policy, we are in a weak position to say whether fiscal or monetary policy is the chief operative force.

**International Aspects**

One area that has not been discussed by anybody is the international. When we look at what we are doing to the international community by our present monetary policies, some very interesting observations arise. For instance, with respect to renewal of the surcharge, Frank Morris said at our breakfast session, “Good God, they may not renew the surcharge.” And David Meiselman said, “So what.” This is obviously the difference between the fiscal and monetarist positions. Well now, how about the kind of monetary policy that the “so what” positions implies for other countries? If we want to keep Euro-dollars at 10 percent, we may be able to offset any consequences of not renewing the surcharge—there is some monetary policy that will have the same domestic implications as a softer policy plus surcharge. But it will mean, of course, that we drain foreign countries of their official dollar reserves. Our official settlements balance becomes very good when a central bank loses dollars. Our liquidity balance is not affected. Meanwhile, countries losing dollars find themselves compelled to tighten interest rates, to take direct action in their markets, and restrict mobility of capital. Not only their balances of payments, but their domestic conditions may be interfered with. In other words, all the adverse consequences of the wrong kind of policy-mix in the United States become evident. It has long been commonly thought that the proper mix of policy direction is to use monetary policy against the balance of payments and fiscal policy against domestic inflation. We have no domestic conflict at the moment. In other words, the Mundell assignment problem does not affect us domestically because both fiscal and monetary policy are oriented toward restraining inflation. But internationally, heavy reliance on monetary policy is the wrong thing, in terms of the kind of cooperation that we should have in the use of policies. Three or four years ago, we used to tell the
Europeans they ought to use fiscal, not monetary policy, to restrain their inflation. They did not pay attention to us. Now we are reciprocating.

Need for Rules in the International Area

At this point, it becomes germane to say a word about rules. I am very skeptical of rules for reasons that have been so well expressed in the good paper by Warren Smith, which I am supposed to discuss later. In the international area, however, rules are very much needed for lack of a better, available alternative. There is no discipline from above. If there are no rules, such as the gold standard rules of the game, or rules as to assignment of monetary and fiscal policy, or rules, if you will, as to nonintervention in flexible rates—it takes much longer to reach equilibrium. Quicker adjustment becomes possible if countries cooperate in setting their policies; and cooperation, essentially, I think, means rules. It is doubtful to me that policymakers can always get together and decide things ad hoc. But rules as to international conduct have existed in the past, and I think they would be useful for the future.

In concluding, let me say a couple of words about the problem that troubles me about the whole debate of Monetarists versus Keynesians. Everybody, of course, is entitled to his hypothesis. And, until the hypothesis is refuted, he is entitled to believe in it. Is one also entitled to give advice on that basis? After all, bad advice can be very costly. All the professor does is go back to his drawing board and to his computer if his advice proves wrong. The Federal Reserve cannot go back to the old drawing board. This leads me to think that in the face of these unresolved questions, one ought to be very careful as to what one advocates. Obviously, policy must be made. No policy is a policy too; and, therefore, some advice must be given. It is the firmness, the conviction with which advice tends to be given, that bothers me. By the same token, I am a little troubled by what seems to be a partisanship evolving in these matters. I am sure we are all inspired by a passion for truth, but there is increasing emphasis on passion—I wouldn’t say less emphasis on truth—and I think the effort to run regressions to prove the other guy wrong is something that could lead us into serious trouble.

The Federal Reserve itself must appraise all this conflicting advice. Since they can’t avoid responsibility, they must find the best possible compromise. I always thought that the time would come when, as a result of certain changes in Washington, the Fed would become the
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most liberal agency in town. And I thought that, at that time, those of us who had previously argued for independence would now come out for coordination, and those who had been against independence would see its virtues. The time for the Fed to be the most liberal agency in town, that is the most Keynesian, has probably arrived. But I would like to say that I have not yet switched to demanding coordination. Thank you.