

PANEL

*The Role of Money in  
National Economic Policy*

PAUL SAMUELSON

The central issue that is debated these days in connection with macro-economics is the doctrine of monetarism.

Let me define monetarism. It's not my particular title. Monetarism is the belief that the primary determinant of the state of macro-economic aggregate demand—whether there will be unemployment, whether there will be inflation—is money,  $M_1$  or  $M_2$ , and more specifically, perhaps, its various rates of change.

I'm going to borrow a method of exposition that I understand Jim Tobin used at an ABA meeting some years ago, when *A Monetary History of the United States* of Mrs. Schwartz and Mr. Friedman was being discussed. I wasn't present, but I was told that Jim wrote three sentences on the blackboard: "Money doesn't matter," "Money matters," and "Money alone matters." And he then said that Professor Friedman, having established to everybody's satisfaction the untruth of the first statement, went on as if it were a *sequitur* to think that he had established the third statement.

Well now, I wasn't provided with a blackboard, and I can't lapse into my academic mannerisms, but I have written down a spectrum of remarks from "Money doesn't matter," to "Money matters," to "Money matters much," to "Money matters most," and to "Money alone matters." Now, monetarism is certainly at the right of this spectrum. There is nobody, I think, worth our notice on the American scene who is at the left end of that spectrum, although there still do exist in England men whose minds were formed in 1939, and who haven't changed a thought since that time, and who do belong at the left of that spectrum and say money doesn't matter. They've embalmed their views in the Radcliffe Committee, one of the most sterile operations of all time. And so, monetarism, which is a correction to that extreme view—and, I think, an excess on the

Mr. Samuelson is Institute Professor and Professor of Economics at the Massachusetts Institute of Technology, Cambridge, Massachusetts.

other side—is very much an item for export to the British Isles. For so many years they exported wisdom and knowledge to us, it's only proper that we requite that past with export. I would argue that the right view, the extreme view, is not the most persuasive view, but monetarism is that.

Now, you may think that's a straw man that I'm setting up—that there is nobody who believes in monetarism as I've defined it. But I believe that I'm correct in saying that there is at least one person in this country who does believe in it, and he is a person of no small stature. I'm not referring to John Kenneth Galbraith, in saying this, but to one who has not graced our assembly with his presence here today, and that is Dr. Friedman.

I've an advantage probably not vouchsafed to all of you. Once a week I am privileged for 28 1/2 minutes to listen to the voice of Dr. Friedman—and his view, as expressed repeatedly in those tapes, is this: that as far as macro-economic aggregate state of demand is concerned, money alone matters. Now, this doesn't mean that money alone determines everything. It will not cure flat feet, or dandruff, or marital fidelity. It is not true, for example, that fiscal policy has no role: For example, how big the Galbraithian public sector is is very much determined by fiscal policy; and what the composition of any state of aggregate demand is, in terms of consumption goods and capital formation, does depend upon a fiscal policy. But as for the general issues—of whether you are going to have more inflation or deflation, or whether you are going to have unemployment—we know a very little bit about it. About something like half of the squared variation in the state of aggregate demand can be explained by the money factor; the rest is noise. There are no systematic predictable elements.

Now, I think that that is an extreme view, and it is not a persuasive view if you look at all of the evidence. There was a great debate at NYU between Professor Friedman and Walter Heller. I wasn't privileged to be there. I talked to various people in New York who were there and, generally speaking, those who were in favor of one view when they came in, went out thinking that their man had won the debate. I talked to one Wall Street character who alleged to be neutral, and he said, "Well, Heller had the better wisecracks, but Friedman had mountains of evidence. He didn't have time to give those mountains of evidence there at that time, but, you can't laugh off the evidence."

I have reviewed these mountains of evidence, and I think that there is a great amount of evidence—much of it is due to the efforts of Professor Friedman at the National Bureau, much of it is due to workshop students working with him, and much of it to colleagues—but most of that evidence is not, in the sense of the statistician, a powerful test of monetarism as I've defined it. Most of that evidence is conclusive with respect to a Radcliffe Committee stupid view that money doesn't matter, but as to the view that money matters and that fiscal policy, just to take an example, does not have a systematic influence, there is very little of the mountain of evidence that is germane to that.

### *Types of Evidence*

Now, since other speakers have to speak, I can't review all these mountains of evidence, but let me just mention what some of the types of evidence are. First—and I've heard several tapes dealing with this—take particular incidents in American history. In 1919, for example, we came out of World War I; there was a much-underbalanced budget; the Federal Reserve was under the thumb of the Treasury; and then, on a certain day, it can be established, just as a diplomatic historian can establish facts, that the Federal Reserve was given its freedom from the Treasury. On that certain day, it took certain acts, so you have almost a controlled experiment in which something happened to the money supply and then—within six months or seven months or nine months, whatever the lag period is—something happened to the business conditions. Now, I think that is good evidence that money matters. That does not tell you what its role is with respect to the importance of fiscal policy or other matters. But we have a lot of evidence like that.

There is another kind of evidence. Namely, that people who use monetarism deliver the goods. Don't ask me why money matters; it's as if it matters, but we don't know what the exact connections are.

There's somebody in a Chicago bank who gets better forecasts using this method than anybody else in that part of the country; there's somebody in a New York bank which shall be nameless, who gets better estimates; and, in the academic community, there are a few people who are armed with this knowledge of monetarism and—why, we don't know—they deliver the goods.

We had a crucial experiment in 1966 in which the monetarists said certain things with which the other people—I'll call them neo-

Keynesians or post-Keynesians, since nobody can quite stand to be called a Keynesian in this country—differed. There was a joust between these different forecasters, and who do you think won on that occasion? It was the monetarists.

The same thing happened again after the middle of last year.

Now, this is a very complicated story, but let me say that, if you are going to use that kind of evidence, you have to use all of it, and you have to be quantitative.

I keep a little black book, and I find there is a great overlap in estimates between different users, different methods, and at one time one of the groups seems, in its meaning, to differ from that of the other groups. Much of the time they, in fact, coincide. . . as, for example, I think right now the kind of forecasts I hear myself making on those tapes are not very different from that a monetarist makes. But occasionally you find a difference and, occasionally, the monetarist's view is the more accurate one. Occasionally the opposite happens.

Suffice it to say that since the middle of last year I have a collection of estimates from people of both schools that cross each other.

I have more pessimistic estimates for the first quarter of the year from monetarists, in some cases, than from the other method. In the middle of 1966, the monetarists tended to be right with respect to a slowing down ahead. By year's end they tended to be wrong in prophesying that recession of 1967—whose existence, by the way, is not a semantic problem. Anyone in this game who speaks of recession knows exactly what the National Bureau's definition of recession is.

### *Magic and Forecasting*

And so I say, based upon this and much other evidence, that the people who call themselves monetarists do not have a magic way of making a better forecast. I simply assert that I have hills of evidence bearing upon that point. And I add something—namely, a man who believes he's a monetarist, who makes forecasts, does not himself know *what* his forecasts are based upon. Some of those whom I have observed most closely, who do make good forecasts, I find combine witchcraft and arsenic in killing their neighbors' sheep. If their flair for forecasting tells them *not* to follow monetarism to its logical conclusion, they don't; and they are amply rewarded.

In fact, the biggest jackasses are those who follow *only* the monetarism, and some of the biggest mean-squared errors—and when you square an error of \$10-15-20 billion, it's in the hundreds of billions—came, in 1967, from monetarists' forecasts.

I'm going to pass over the evidence of timing and turning points, which is a very mixed kind of evidence, is consistent with many different theories, and also is not a powerful test of where you are on this spectrum that I spoke of. . . at the extreme right or something less than the extreme right.

It's important to decide whether monetarism is true, because whether, for example, the tax bill goes through and the surcharge is extended—which is now something that is in doubt—to a monetarist doesn't matter. It really doesn't matter; the Fed just does its business and keeps that money supply growing in the proper range at the proper rate. It couldn't matter less as far as aggregate demand is concerned. And that's point number one.

Another example. We had a big surprise. The SEC survey showed 14 percent intentions of increase in plant and equipment. What's the effect of that to a monetarist? Nothing. It's of absolutely no importance and—you might think I'm making this up, but I heard it right from the tape, itself—it's of absolutely no importance that investment is stronger than people had thought, because there is no systematic relationship. If there is no systematic relationship between government expenditures in the income accounts, and taxes in the income accounts, when you bracket this with autonomous changes in private investment, there is also no systematic thing.

Now, you might say it takes a stern man to follow his logic down to that extreme. Well, we've got a hero in this country who follows his logic all the way, and this is his assertion.

I think that's very unpersuasive in terms of all we know about economic history, and I think it's wrong.

Now, I want to conclude on a more academic note. What is it that makes one who doesn't even follow the year-to-year and month-to-month business cycle situation skeptical about monetarism in the extreme—and I think hard to defend—form that I have defined?

If you actually examine the logic of economics—and I now am going into the neo-classical economics on which I was brought up in the pre-Keynesian period—there is no reason in the world why, in an equation like  $MV = PQ$ , the  $V$  should be thought to be independent

of the rate of interest. There is every plausible reason in terms of experience, in terms of rarified neo-classical theory, for the velocity of circulation to be a systematic and increasing function of the rate of interest; and the minute you believe that, you have moved from the right of the spectrum—that of monetarism—to that noble eclectic position which I hold, the post-Keynesian position.

Now, if you will, examine, for example, the new Encyclopedia of Social Sciences article by Professor Friedman on money—as I read that article which goes on for, I suppose, 100 paragraphs.

The first 98 paragraphs of that, I could agree with completely. The demand for money is a complicated thing. It depends upon many things, including the rate of interest and all the plausible things, etc.

The last two paragraphs assert, quite strongly, the literary equivalent of the following equation: that the change in the level of money income with respect to government expenditures, or with respect to taxation, or with respect to the difference between them ( $M = \bar{M}$ , holding the supply of money constant) is zero. On the tapes, I hear the exact equivalent of that. That is a *non sequitur*. It does not follow from the previous analysis.

Finally—and this, again, is the important thing that interests me as an academic—if you actually analyze different wealth assets in the differing degrees of liquidity, there is no reason in the world, that I can see, why an ordinary open market operation, in which you swap one kind of used asset for another kind of used asset, should be expected, when it gives rise to the increase in what the Federal Reserve Bank of St. Louis reports to me every-hour-on-the-hour as a change in the supply of money, to have the same effect and be in the same invariant relationship to a different kind of increase in money, let's say an increase in money due to gold mining, where income is created along the way, or an increase in money due to deficit financing.

So I've tried to make a thought experiment—to redo the period from February 1961, to, let's say early 1965, leaving out the war, and taking that wonderful Camelot period when the GNP grew mightily. Let us redo the experiment in which the money supply grows exactly as it did in that period but the budget is kept at a balance—at a low balance level—such as the outgoing Eisenhower Administration had promised and had looked to.

According to, let's say, a reduced form estimate of the November Federal Reserve Bank of St. Louis, you can even plug the variables

into that problem, and you would get about the same development in this hypothetical history as you got in actual history.

I think all reason is against that.

I think that what would have happened was that if you had to create the same amount of money by that method with an entirely different kind of fiscal policy, you would have had, in the short run, to have depressed interest rates.

I forget, for example, about the international exchange problem, because of course the exchange rate can float; there is no restraint on domestic policy in a rational world. I don't, by the way, want to cast any scorn on that view. The biggest problem that we face in the world today is how to get from here to there. The "here" is rigid exchange rates and the "there" is exchange rates with some kind of flexibility.

But I think there is every theoretical reason for expecting there to have been a different effect and so, as I look over the evidence, I say, "Money, yes; but monetarism, no."