

The Nature of the Theoretical Debate about Monetarism*

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Thomas Mayer [1978] recently provided an excellent discussion of the issues separating “monetarists” and “Keynesians”. In a comment on that article, *Benjamin Friedman* [1978] claims that the debate over monetarism is only a disagreement over empirical issues¹. There is no theoretical debate.

... once monetarists and Keynesians specify clearly the “transmission mechanism” by which monetary policy has its effect in their respective theoretical models, these alternative mechanisms are by and large identical. On this key issue, which is the essence of the theoretical dimension of the monetarist debate, it is hard to find significant disagreement.

The transmission mechanism is a key issue, but there is significant disagreement. The reason it is hard to find this disagreement is because the important theoretical issues are excluded by standard macro models that assume all explicit markets clear continually.

The next section develops a simple description of bond and money “markets” when these markets do not clear continuously. The following section uses this framework to demonstrate fundamental differences in views about the transmission mechanism and to relate these views to the appropriate price for money and the old debate over liquidity preference and loanable funds. The final section summarizes the conclusions.

I. Framework

The belief that there are no important theoretical issues separating monetarists and Keynesians is widespread, and for good reason. Almost all models used by both sides assume that money demand and supply

* I would like to thank both *Thomas Mayer* and *Benjamin Friedman* for their comments.

¹ Both articles originally appeared in this journal and were later reprinted in *The Structure of Monetarism* edited by *Thomas Mayer*. All references are to the book.

are continuously equilibrated. Such an assumption effectively buries the theoretical issues separating the two sides.

Consider a situation in which the public's actual and desired holdings of money are not equal. Following *Clower* [1965], the planned change in money holdings must reflect a planned purchase or sale. This planned purchase or sale could be in any market. For example, excess holdings of money could reflect a decision to supply less labor while maintaining all other sales and purchases. In that case, the attempt to reduce money holdings would be carried out by reducing money income while maintaining expenditures. In this discussion, for simplicity, the decision to alter money holdings is assumed to affect only bond or commodity markets.

1. Bonds

Equation (1) explicitly states that interest rates $r(t)$ clear the bond market.

$$(1) \quad Dr(t) = \lambda_0 \{I(t) - S(t) + \alpha_0 [M^D(t) - M(t)]\}; \lambda_0, \alpha_0 > 0$$

where $Dx(t)$ equals $dx(t)/dt$, $I(t)$ is investment, $S(t)$ is saving, and $[M^D(t) - M(t)]$ is excess nominal balances. Equation (1) contains three conceptually similar sources of flow demand or supply for bonds. The first is investment $I(t)$. The supply of new bonds reflects firms' decisions to increase inventories or other physical capital and, therefore, is a reflection of an underlying stock disequilibrium.

Saving $S(t)$ generates a demand for bonds. The decision to save could reflect a planned increase in the supply of labor or some other factor, but by convention it is assumed to reflect a reduced purchase of commodities by households out of a given income. In either case, saving is a reflection of a stock disequilibrium in the sense that households plan to increase holdings of claims on future goods and services.

The term $\alpha_0 [M^D(t) - M(t)]$ is conceptually equivalent to $I(t)$ and $S(t)$. Like them, it reflects a flow demand for or supply of bonds generated by a stock disequilibrium. When the public plans to alter money holdings, $\alpha_0 [M^D(t) - M(t)]$ describes how that planned alteration influences the bond market. All three "flows" can be viewed as equilibrium transient responses to stock disequilibria.

2. Goods

In conventional models the disequilibria underlying saving and investment influence aggregate demand, but any influence from monetary disequilibrium is excluded because monetary disequilibrium is not permitted. In equation (2), some proportion α_1 of a planned alteration in money holdings takes the form of an increase or decrease in purchases of commodities out of current income. Since ideas associated with equation (2) are closely related to the debate over the real balance effect, unlike equation (1), equation (2) is expressed in real rather than nominal terms.

$$(2) \quad Y(t)/P(t) = C(t)/P(t) + I(t)/P(t) + \alpha_1 \{ [M(t)/P(t)] - [M^D(t)/P(t)] \}; \alpha_1 > 0$$

where $Y(t)$ is nominal income, $C(t)$ nominal consumption demand, and $P(t)$ is an appropriate price index.

Equation (2) contains the real balance effect advocated by *Archibald* and *Lipse*y [1958]. The essence of their position is that classical and neo-classical economists viewed money as neutral with respect to alternative steady state equilibria, but not neutral during a transition from one steady state to another. This was the view of early monetarists such as *Thornton*, *Ricardo* and *Hume* and is the view of many modern monetarists. The position, unfortunately, is seldom made explicit.

The framework described by equation (1) and (2) is highly simplified. That is deliberate. The objective is not to describe how disequilibrium should be modeled, but to point out the fundamental role of “disequilibrium” in the debate over the transmission mechanism.

II. Transmission Mechanism

In standard macro models, the debate over the nature of the transmission mechanism is restricted to the range of interest rates influenced by monetary policy. Where all markets clear continuously, the typical monetarist reference by *Mayer* [1978, 7] to excess balances spilling over into consumption makes little sense. Given monetary disequilibrium, however, there is no reason to restrict the spillover to only bond or short-term credit markets.

Within the context of equations (1) and (2), monetary policy can have a *direct* influence on all components of aggregate demand. Indeed, in

order for policy not to have an effect over and above that transmitted by interest rates, planned alterations in money holdings must impinge on only the bond market. That is, α_1 must be zero.

Equations (1) and (2) also illustrate the close relationship between the current debate over the transmission mechanism and the much older debate over liquidity preference versus loanable funds. The two issues are not identical, but they are closely related.

In a pure loanable funds model, interest rates would be determined by the demand for and supply of credit (loanable funds). In that case α_0 is zero and the Keynesian transmission mechanism is bypassed.

Pure loanable funds yields a polar monetarist transmission mechanism. All excess balances spill over directly in to commodity markets. Monetarists would not argue that α_0 is zero, they simply believe that α_1 is important. This position implies that monetarists have adopted an eclectic position with regard to liquidity preference and loanable funds. In the short-run at least, both influence interest rates. (In the long-run, monetarists tend to be Fisherians. Steady state interest rates are dominated by time preference and the productivity of capital.)

Under pure liquidity preference, interest rates are driven by the demand for and supply of money. We cannot obtain that result by setting α_1 equal to zero. Excess money balances can influence interest rates without dominating them. A reasonable interpretation of pure liquidity preference is to let α_0 go to infinity. In that case interest rates clear the "money market" and equation (1) implies monetary equilibrium.

The Keynesian transmission mechanism, however, does not require pure liquidity preference. As long as α_1 is small enough to be ignored, disturbances in the monetary sector influence aggregate demand only by altering interest rates. Pure liquidity preference and the Keynesian transmission mechanism are not identical, but they are closely related.

Dropping the assumption of monetary equilibrium clarifies more than the debate over the transmission mechanism and liquidity preference versus loanable funds. It also illustrates why monetarists and Keynesians have different views about the price of money.

A major reason monetarists view the reciprocal of the price level as the price of money is because they view steady state interest rates as being determined primarily by time preference and the productivity of capital. Even in the short-run, they are more likely to accept this view

of the price of money because they generally believe that an important component of excess balances spills over directly into the demand for output.

Keynesian thought, however, is dominated by pure liquidity preference. Since, in that view, interest rates clear the demand for and supply of money, it is only natural to interpret interest rates as the price of money.

III. Conclusion

Although the issues are not identical, there is a strong theoretical link between alternative views about liquidity preference versus loanable funds, the appropriate price for money, and the nature of the transmission mechanism.

The disagreement between monetarists and Keynesians on these issues does not depend on the value of certain parameters in some commonly accepted general model. There is a fundamental theoretical misunderstanding. Keynesians think within the context of a short-run model in which explicit markets are in continuous equilibrium. Although it is seldom explicit in their formal models, monetarists tend to think within the context of a framework where money demand and supply are not necessarily equal.

Bibliography

Archibald, G. C., and R. G. Lipsey: "Monetary and Value Theory: A critique of Lange and Patinkin", *Review of Economic Studies* (October 1958). — Clower, R.: "The Keynesian Counter-Revolution: A Theoretical Appraisal", in: *The Theory of Interest Rates* edited by F. H. Hahn and F. Brechling (London: Macmillan, 1965). — Mayer, T., *The Structure of Monetarism*, (New York: W. W. Norton, 1978).

Zusammenfassung

Die Hintergründe der theoretischen Debatte über Monetarismus

Es ist allgemeine Überzeugung — wie dies von *Benjamin Friedman* 1978 mit Nachdruck erklärt wird —, daß es keine theoretische Debatte über Monetarismus gibt. Die Probleme, die die Monetaristen und Keynesianer trennen, sind eher empirischer als theoretischer Natur. In dem nun vorliegenden Artikel soll gezeigt werden, daß es doch eine theoretische Debatte gibt, jedoch wurden die wichtigsten theoretischen Probleme durch standardisierte Makromodelle ausgeklammert, da sie ein ständiges monetäres Gleichgewicht annehmen.

Summary

The Nature of the Theoretical Debate about Monetarism

There is a widespread belief, clearly stated by *Benjamin Friedman* [1978], that there is no theoretical debate over monetarism. The issues separating monetarists and Keynesians are empirical rather than theoretical. The position taken here is that there is a theoretical debate, but the important theoretical issues are excluded by standard macro models because they assume continuous monetary equilibrium.

Résumé

L'arrière-plan des débats théoriques sur le monétarisme

Il est de conviction générale — comme l'a souligné avec instance en 1978 *Benjamin Friedman* — qu'il n'existe pas de débat théorique sur le monétarisme. Les problèmes qui séparent les monétaristes et les keynesiens sont de nature davantage empirique que théorique. Dans l'article ici présenté, l'on veut démontrer que ce débat théorique ne fait pas défaut, mais l'on a écarté les principaux problèmes théoriques par des macromodèles standardisés, parce qu'ils supposent un équilibre monétaire permanent.