

**Recent Monetary Policy and the Fiscal Theory of the Price Level**

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The policy actions taken by the Federal Reserve over the past six years have left the United States in an unusual condition that has led some prominent economists to suggest that the messages provided by the “Fiscal Theory of the Price Level” (henceforth, FTPL) will be of crucial importance in the near future. The most prominent of these writings, arguably, has been a major piece by Christopher Sims in the April 2013 issue of the American Economic Review. [Sims has, of course, long been a leading promoter of the FTPL; others include Neil Wallace, Eric Leeper (1991), Michael Woodford (1995), and John Cochrane (2005).] Objections to this doctrine have been provided over the years by Milton Friedman (1987), Karl Brunner and Allan Meltzer (1975), Willem Buiter (2002), McCallum (1999), (2003), and McCallum with Edward Nelson (2005), among others. In the present paper I wish to bring up to date the position that seems to me to be correct. It basically agrees with a summary statement of Friedman’s, namely: “I don’t think monetary policy has to be backed up by fiscal policy at all. I think monetary policy can curb inflation.”<sup>1</sup> Therefore it also agrees with the position articulated by the SOMC in 1980—then including Brunner, Meltzer, Levy, and Schwartz—to the effect that “monetary policy can end inflation without a supporting fiscal policy” (SOMC, 1980, p.384).

It is a characteristic of any well-formulated FTPL position that it does not rely upon extreme special cases involving either (i) absolute liquidity preference or (ii) departures from Ricardian Equivalence. That is, writers who have promoted the FTPL have formulated it so as to be applicable rather widely and in a manner that would be acceptable to standard monetarist *assumptions*, so that their FTPL results, when obtained, will be considered as dramatically unexpected. How then can there be strong disagreement between the two groups?

Although not explicitly recognized, a major reason for disagreement in practice has arisen from the use of different criteria for deciding which outcomes are predicted by the models

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<sup>1</sup> Quoted in Larsen (1981).

being used. How that can be? Well, both groups normally adopt the assumption of rational expectations in solving their dynamic models, and in these models the standard assumption of rational expectations typically gives rise to a multiplicity of solutions, such that some methodological principle must be adopted to specify which solution is the one actually predicted by the model. Then, in this context, the FTPL adherents have typically relied on “determinacy” as the criterion for the relevant solution—with the word taken to mean “a single dynamically-stable solution.” The present writer would argue, however, that this is a highly inappropriate criterion. Violation of a transversality condition would be a valid reason for ruling out a solution path, but a large and very important class of specifications—namely, basic “New-Keynesian” models in which monetary policy is conducted by an interest rate rule that satisfies the Taylor Principle—provides a multiplicity of explosive solutions all of which fail to violate any transversality condition, thereby implying that the model fails to select any single solution. This fact has been emphasized by Cochrane (2007).

In such cases, I have argued, there is nevertheless an appropriate criterion for solution selection, namely, “least-squares learnability,” a criterion developed and promoted by Evans and Honkapohja (2001). If this criterion is accepted, it transpires that the single stable solution that satisfies the Taylor Principle is implied to be relevant, but on the basis of learnability, not “determinacy.”<sup>2</sup>

The point of this digression is that, in a wide class of standard models—of the type usually accepted by both sides of the FTPL debate—the learnability criterion leads to rejection of the FTPL solution and acceptance of the monetarist solution. Results of this type are obtained in McCallum (2003) and, more definitively, by Evans and Honkapohja (2004).

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<sup>2</sup> See McCallum (2009).

The latter is the punch line, i.e., the point of my paper. But since the notion of “learnability” is not a part of everyone’s tool box, I should continue for a bit to describe its nature and justification. Basically, learnability is a type of *information feasibility* condition. It is concerned with the ruling out of outcomes that are not possible because of informational inadequacies, in addition to the usual feasibility requirements involving outputs that are not physically producible because of the scarcity of labor and capital.

All parties to the present debate seem to be concerned with rational-expectation solutions so we need to have a justification for the assumption that individual agents have enough knowledge about the economy such that their expectations will be formed so as to avoid systematic forecasting errors. Of course this requires *quantitative* information about the workings of the economy. How then can the individual agents acquire such knowledge? It cannot plausibly be provided by introspection, magic, or divine revelation; instead, it must come from observation of the workings of the economy itself. What is then assumed in this regard is that individual agents in each period form their expectations of variable values in the future so as to equal the values predicted by linear vector-autoregression models estimated on data from the economy from “all” previous periods. Then, given the specification of the system at hand, Evans and Honkapohja (2001) have developed a set of usable analytical conditions that, for a very general form of a linear system, indicates whether the specified system is or is not such that, as the sample grows, the implied quantitative forecasting rules converge to a specification that satisfies the requirements for rational expectations. If so, the solution is learnable—and if not, it is not. Then the point relevant for the present discussion is that in a very broad class of (linear) models the RE solution that is relevant according to the FTPL does not satisfy the learnability conditions whereas with the more standard “monetarist” solution it does. This information

feasibility criterion implies, therefore, that it is the monetarist solution that is consistent with RE outcomes when such informational feasibility is taken into consideration.

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