## The fallacy of the fiscal theory of the price level, again Working Paper No. 141

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In most macroeconomic models, the real equilibrium is determined in the long run by real factors such as the capital stock, the available labour force and technical progress. The nominal anchor, ie the determinant of the general price level, is usually provided by the money stock, a monetary policy rule, or the exchange rate regime. A recent literature has attempted to show that fiscal policy could provide the nominal anchor, and hence this approach is known as the fiscal theory of the price level (FTPL).

The purpose of this paper is to show that the FTPL is erroneous. It is based upon a fallacy that involves an economic misspecification. The proponents of the fiscal theory of the price level do not accept the fundamental proposition that the government's intertemporal budget constraint is a constraint on the government's instruments that must be satisfied for all admissible values of the economy-wide endogenous variables. Instead they require it to be satisfied only in equilibrium. This economic misspecification has implications for the mathematical or logical properties of the equilibria supported by models purporting to demonstrate the properties of the fiscal approach. These include: overdetermined (internally inconsistent) equilibria; anomalies like the apparent ability to price things that do not exist; the need for arbitrary restrictions on the exogenous and predetermined variables in the government's budget constraint; and anomalous behaviour of the 'equilibrium' price sequences, including behaviour that may ultimately violate physical resource constraints.

The FTPL is based on the distinction between two kinds of fiscal rule. A Ricardian fiscal rule requires that the government's solvency constraint holds for all admissible sequences of the endogenous variables. A non-Ricardian rule requires the government's solvency constraint to hold only for equilibrium sequences.

There are two ways of refuting the FTPL. The first is based on *a priori* economic considerations. It is taken

as axiomatic that only those models of a market economy are well-posed, in which, if default is ruled out, budget constraints (including the government budget constraint) must be satisfied for all admissible values of the economy-wide endogenous variables. It does not matter whether the government (or the private agents) are small (price-taking) or large (monopolistic or monopsonistic). It does not matter whether the government optimises (or what it optimises), satisfices or acts according to *ad hoc* decision rules.

According to this Ricardian postulate about the proper specification of budget constraints, a non-Ricardian fiscal rule that rules out default is ill-posed. Any model that incorporates a non-Ricardian fiscal rule, yet assumes that all contractual debt obligations are met, does not make *economic* sense.

The second way to refute the FTPL applies even if one does not accept the *a priori* assertion that, if default is ruled out, budget constraints must be satisfied always, not only in equilibrium, and that, consequently, a non-Ricardian fiscal rule only makes sense if we explicitly introduce an endogenous default discount factor on the public debt. This second approach involves the demonstration of a number of mathematical (or logical) and conceptual anomalies that characterise equilibria purported to be supported by non-Ricardian fiscal rules without default.

The issue is not just of academic interest. The FTPL implies that a government can exogenously fix its real spending, revenue and seigniorage plans, and that the general price level will take on the value required to adjust the real value of its contractual nominal debt obligations to ensure government solvency. If some misguided government were to take this seriously and acted upon it, the result, when reality dawns, could be painful fiscal tightening, government default or excessive recourse to the inflation tax.