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Keynesian Economics Without the Phillips Curve

By Roger E.A. Farmer and Giovanni Nicolò*

We extend Farmer's (2012b) Monetary (FM) model in three ways. First, we derive an analog of the Taylor Principle and we show that it fails in U.S. data. Second, we use the fact that the model displays dynamic indeterminacy to explain the real effects of nominal shocks. Third, we use the fact the model displays steady-state indeterminacy to explain the persistence of unemployment. We show that the FM model outperforms the New-Keynesian model and we argue that its superior performance arises from the fact that the reduced form of the FM model is a VECM as opposed to a VAR.

United States macroeconomic data are well described by co-integrated non-stationary time series (Nelson and Plosser, 1982). This is true, not just of data that are growing such as GDP, consumption and investment. It is also true of data that are predicted by economic theory to be stationary such as the unemployment rate, the output gap, the inflation rate and the money interest rate, (King et al., 1991; Beyer and Farmer, 2007).[1]

The dominant New Keynesian paradigm is a three-equation model that explains persistent high unemployment by positing that wages and prices are 'sticky' (Galí, 2008; Woodford, 2003). Sticky-price models have difficulty generating enough persistence to understand the near unit root in unemployment data, as do models of the monetary transmission mechanism that assume sticky information (Mankiw and Reis, 2007) or rational inattention, (Sims, 2003).[2]

Farmer (2012b) provides an alternative explanation of persistent high unemployment that we refer to as the Farmer Monetary (FM) model.[3] The FM model

[1] A bounded random variable, such as the unemployment rate, cannot be a random walk over its entire domain. We view the I(1) assumption to be an approximation that is valid for finite periods of time.

[2] We prefer to avoid the assumption of menu costs (Mankiw, 1985) or price rigidity (Christiano et al., 2005; Smets and Wouters, 2007), because our reading of the evidence as surveyed by Klenow and Malin (2011), is that prices at the micro level are not sticky enough to explain the properties of monetary shocks in aggregate data. The approach we follow here generates *permanent* equilibrium movements in the unemployment rate that are consistent with a unit root, or near unit root, in U.S. unemployment data.

[3] Farmer and Konstantin Platonov (Farmer and Platonov, 2016) build on this idea to explain the relationship between the FM model and alternative interpretations of the textbook IS-LM model (Mankiw,