

Review of *Monetary Economics: An Integrated Approach to Credit, Money, Income, Production, and Wealth* by Wynne Godley and Marc Lavoie (Palgrave Macmillan, Basingstoke, 2007; 576 pp.)

By Célia Firmin, Centre d'Économie de la Sorbonne, University of Paris 1

The work of Wynne Godley and Marc Lavoie offers a novel approach, based on a consistent accounting methodology relating stocks and flows, and making use of Post-Keynesian behavioural assumptions that tie the analysis to a monetary economics perspective. The authors' objective is to provide an analytical framework that could provide an alternative to the standard approach, by taking into account comprehensively the interrelations between real and financial variables.

Post-Keynesian assumptions and conclusions in a coherent accounting framework

At the theoretical level, the work of Lavoie and Godley puts at the forefront of the analysis a number of Post-Keynesian assumptions. Thus, the financial system plays an essential role for growth and employment, production takes time, all decisions are taken under conditions of uncertainty, and balance sheets are interrelated.

In all the models developed in the book, the behavioral functions of the various institutional sectors are not based on profit maximization or utility maximization but on partial adjustment functions that react to imbalances and disequilibria, bringing about a process of adjustment toward the steady state. In addition, all models are demand-driven, and the only market where prices bring about an equilibrium is the financial market. For other markets, adjustments are done through quantities and therefore depend on the level of demand.

The first two chapters outline the methodology and present the accounting matrices constituting the backbone of "stock-flow consistent" models. Applying this methodology to the monetary circuit helps to show that money cannot but be endogenous, a claim that constitutes a major breakpoint between standard analysis and Post-Keynesian analysis.

The model proposed in the third chapter outlines the principles of the Keynesian multiplier. An important conclusion follows from this chapter: the public deficit and the public debt are endogenous variables that are not really under the realm of government, as they depend *ultimately* on the saving decisions of the private sector. The fourth chapter develops a model of portfolio choice. Holdings of money balances depend on the standard Keynesian motives (transaction, precaution, and speculation), while arbitrage between assets is based on rates of return, income, wealth, and liquidity preference. The money supply is endogenous by nature – it is driven by demand – while interest rates are exogenous variables.

Subsequent chapters include new material or specify some key points (the preference for liquidity, the role of time, the decomposition of profits, cost-plus or markup pricing procedures, the open economy...). Chapter 11 provides a growth model in which fiscal policy and monetary policy are introduced.

One of the main results of this work concerns precisely the effectiveness of fiscal policy in an economy where financial variables play an important role. Indeed, the simulations that are conducted conclude that proactive fiscal policies are effective in bringing the economy toward full employment without inflation speeding up. Monetary policy, without an appropriate fiscal policy, is insufficient to ensure full employment and stable inflation. Moreover, the government deficit is predetermined by the level of saving of private agents, firms, and households. The state cannot seek a balanced budget without giving up the fight against unemployment, which calls into question the criteria of the European stability pact.

Moreover, another interesting result coming out from the simulations is the inability of household debt to drive growth in the long run. Instead, the servicing cost of household debt eventually reduces consumption. The amounts previously borrowed by households lead to a decline in consumer demand, thus disabling the growth regime driven by household debt.

The models presented here therefore provide an explanation of the current economic crisis – an explanation that goes beyond the role of financial variables, linking these to “real” and structural causes, and showing that recovery cannot be envisaged without a proactive fiscal policy.

The SFC methodology and model resolution

The methodology used throughout the book is based on the development of accounting matrices that track the flows and stocks between institutional sectors. The form of these matrices depends on the institutional structure of the economy being studied. A major contribution of this methodology is its ability to model consistently the relationships between the real and financial spheres.

The accounting consistency upon which the models are built quickly leads to a proliferation of equations and to time lags when new institutional sectors are integrated into the model. Thus, models of the last chapters are particularly complex (more than 90 equations). As a result, the properties of the models are analyzed by numerical simulations, carried out by introducing a shock to one of the exogenous variables or parameters, starting out from a stationary or a steady state. This method can accurately describe short-run dynamics, and it allows the analysis of some structural aspects of the economy. It is possible to develop models that more adequately represent some chosen specific institutional features.

A critical analysis of the SFC methodology

Rather than quantifying the effects obtained, this method tends to give a qualitative narrative vision of the observed sequences of events, which may be a limit to the analysis. Moreover, the complexity of the models sometimes leads to difficulties in interpreting the results; in particular, in understanding the causality between variables. Such a method only allows the analysis of a local equilibrium, casting doubt on its uniqueness and leaving open the possibility of other regimes linked to different parameter values. It is possible to solve this problem by trial and error, by testing for different parameter values in an attempt to determine the properties of other steady states of the model. Thus, the stability conditions are not rigorously defined. It is not

possible to ensure that all configurations of the model, all regimes, have been found and analyzed. For example, in the model in Chapter 11, a higher rate of interest produces a paradoxical effect, bringing about a positive impact on output and employment in the long run. Interest payments are treated like a public expenditure, generating a positive multiplier effect, despite the negative short-run impact on business investment. Is this result robust to changes in the parameter values? Is it possible to identify a regime where the negative effect on investment outweighs the long-run positive effect on aggregate demand arising from the higher cost of servicing the public debt? Doubts about the possible existence of other regimes based on different parameter values are certainly the main limitation of model resolution by numerical simulation.

Moreover, were there several regimes, it would be difficult to find the precise conditions of transition from one regime to another. Finally, it is not possible to integrate several shocks within a single simulation, because it would then be impossible to know what comes from one shock rather than from another. Effects that contradict one another would also be hard to identify in this type of analysis.

The book written by Marc Lavoie and Wynne Godley has an innovative methodology and offers a true alternative to standard models. One of the strengths of this book, and of its analytical framework, is to give an accurate and consistent presentation of the assumptions and elements that are at the heart of Post-Keynesian economics. Within this framework – and this is one of the main results – the money supply can only be endogenous, it comes from the financing needs of the economy (investment, consumption, etc.), the real and financial variables are fully embedded, there are several assets and rates of return, and financial and monetary policy operations are fully modelled. All this provides an analytical key that is highly useful for our understanding of the functioning of contemporary economies. The integrated inclusion of financial and monetary variables does not change the usual Keynesian claims with regard to the major role played by fiscal policy in reducing unemployment and boosting economic growth. These conclusions, submitted before the eruption of the current global crisis, should be brought back to center stage, and they clearly show, if it ever was in need of being demonstrated, the analytical relevance of Post-Keynesian models.

This book review first appeared in French in the Revue Française de Socio-Économie (2nd Semester, 2009): 226-28.