Modern Theories of Money

The Nature and Role of Money in Capitalist Economies

EDITED BY
Louis-Philippe Rochon
and Sergio Rossi

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L.-P.R.
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Introduction

Louis-Philippe Rochon and Sergio Rossi

Since Keynes, Kalecki and Sraffa, the progress of macroeconomics and of monetary theory in particular has not been overwhelmingly positive. While some aspects of new Keynesian economics offer glimmer of hope, with their emphasis on banks and the credit channel, macroeconomics has generally returned to pre-Keynesian economics.

Most macroeconomic models today are market-clearing equilibrium models or models that mimic exchange/barter economies where the price mechanism guarantees convergence to a steady position of equilibrium. Scarcity plays a central role, and prices and quantities are determined within existing markets. Economics is defined as the 'efficient allocation of scarce resources'. In all cases, money is neutral in the long run. In the short run money is allowed to play a role, but this is usually attributed to the existence of some imperfections, such as sticky wages and prices, asymmetric information, unanticipated shocks, or credit rationing. In the short run, therefore, the economy can deviate from its long-run position, which is usually associated with a non-accelerating inflation rate of unemployment (NAIRU). The real and monetary sides of the economy are assumed largely independent from one another. Further, rules of conduct for (homogeneous) households and entrepreneurs (atomistic agents) are dictated by principles outlined by marginalism mostly within perfectly competitive markets. Economic agents are maximisers of their respective objectives (utility and profit). Aggregation of these agents constitutes the macroeconomic worldview of neoclassical theory. Macroeconomics is thus rooted in microeconomic foundations. The causality runs from microeconomic to macroeconomic phenomena, while never acknowledging the possibility of reverse causality.

These models, however, stand in stark contrast with models of production that take into consideration institutions, time, history, income distribution, class relations and hierarchy, and technological change. Realism is at the root of these latter models, which attempt to explain the real world from observations and stylised facts. Such models are inherently dynamic, and do not gravitate toward any specific position of equilibrium. Many would claim that such models are anti-equilibrium or without equilibrium. Kaldor (1985, p. 12) in particular sees 'the economy as a continually evolving system whose path cannot be predicted any more than the evolution of an ecological system in biology'.

In this second group of models, unemployment is the normal state of the economy and is not caused by imperfections, but rather by the lack of aggregate demand (with or without the existence of uncertainty), which affect production and investment decisions, bank lending decisions, productivity, and hence employment. An activist government sector is therefore a requirement for full employment and economic growth. Further, money matters, in both short-run and long-run analysis. It is neither because money creation may be inflationary, nor because increases in the money supply are anticipated or not. Rather, money matters because production cannot take place without it. In pure exchange models, the wheels of production turn; money is simply the grease that allows for smoother motion. By contrast, for post Keynesian and circuit writers the wheels of production cannot turn without money.

In these models money matters for another important reason. The purpose of production is to sell goods against the expectation of future revenues. In an entrepreneurial economy, production is undertaken to make monetary profits. Money is thus both the starting and ending points of the analysis. This raises the question of the role of the rate of interest. While the interest rate is a purely exogenous variable in the sense that it is controlled by the central bank, its role is not always properly assessed. In this sense, it has a dual role, both important for the production process. Firstly, interest enters into the costs of production. While the rate of interest may not have a direct influence on investment, as postulated by the downward-sloping investment demand curve, it is an important determinant of the costs of production. Secondly, the rate of interest may also have an indirect effect on output via its distributional effects. As interest rates rise and effective demand is affected, this may have a negative effect on sales and production, and possibly on employment levels.

Production economies are thus monetary and credit-based economies, and imply a specific sequence of irreversible events. The real and monetary sides of the economy are not independent, hence the explanation for the endogenous nature of money. The possibility of full employment without inflation is accepted, as long as it is understood within a class-based model.

Heterogeneous households and firms are not maximisers, but rather satisfiers, and meet economic needs (a hierarchy of needs; see Robinson, 1956) rather than wants in a lexicographic fashion. Because of uncertainty, they follow rules of bounded rationality (Lavoie, 1992).

With the publication of the works of Keynes, Kalecki and Sraffa, macroeconomics was off to a good start. Macroeconomics was independent of microeconomic behaviour and emphasised the role of aggregate demand in determining output and growth. Together, their works offered a critical analysis of neoclassical theory while also offering a clear alternative to mainstream thought, based on institutions, time, uncertainty, social classes and imperfect markets. Unfortunately, none of these three economists worked together to present a coherent whole. Hence the Keynesian – or Kaleckian – revolution was aborted. Attention seemed to have focused on Keynes's *General Theory*, ignoring the more heterodox-grounded work of Kalecki. As for Sraffa, his publications were too few to have had much impact on the profession at large. Had the work of Kalecki or Sraffa been at the centre of the debate, the revolution may have taken on a very different nature.

Focusing on the *General Theory* led to some problems, which begin with the book itself. While Keynes presented it as a 'struggle to escape', it still owed too much to neoclassical theory. Keynes still accepted the labour supply curve, the exogeneity of money, and perfectly competitive markets, to name a few. In this sense, the *General Theory* may best be described as an unfinished work. This is consistent with Keynes's own assessment. For example, in the German edition of the *General Theory*, Keynes described it as a 'transition', thereby implying that much still had to be done (see Rochon, 1999a). Hence Keynes's first mistake was to retain too much of the neoclassical edifice.

Irrespective of the reasons for which Keynes borrowed elements of neoclassical theory (see Robinson, 1970; Dow and Dow, 1989), the fact remains that while his story of aggregate demand and the multiplier got across, it paved the way for what came afterwards, namely, Hicks (1937) and his IS–LM interpretation of Keynes's *General Theory*. While Keynes was arguing against neoclassical theory (at least in principle), Hicks was trying to reconcile it with Keynes's theory of effective demand, thereby paving the way for the elaboration of the so-called neoclassical synthesis. Although Hicks (1980–81) would later recant his approach, the damage was done, thereby aborting the Keynesian revolution. Since then, macroeconomics has continued to develop along pre-Keynesian lines, and the IS–LM model remains a central component of Keynesian macroeconomics. Needless to say, the blame cannot be laid entirely at Hicks's feet. After all, Keynes did treat the money supply as exogenous in the *General Theory*, and never repudiated Hicks's model although he was given the opportunity to do so when Hicks solicited Keynes's comments on his 1937 paper. One may wonder how different macroeconomics may have turned out had Keynes forcefully denounced the Hicks model, both before and after it was published. This was Keynes's second mistake.

The IS–LM model had a tremendous impact on the profession and on policy makers. It proposed a synthesis of Keynes and neoclassical ideas, but unfortunately had little to do with Keynes's objective of replacing neoclassical theory, made explicitly clear in the preface to the *General Theory*. After all, Hicks's model was conceived before Keynes's most famous book. Hicks had modelled first the Walrasian framework, and only after the publication of the *General Theory* he sought to see whether it was compatible with Keynes. As Hicks (1980–81, pp. 141–2) tells us, 'the idea of the IS–LM diagram came to me as a result of the work I had been doing on three-way exchange, conceived in a Walrasian manner. . . . So it was natural for me to think that a similar device could be used for the Keynes theory'.

The IS–LM model became synonymous with Keynesian economics. After all, it did emphasise aggregate demand and argued that fiscal policy could have a multiplier effect on output. But Keynesians argued in terms of a liquidity trap and of sticky nominal wages. This did not sit well with Keynes's model. To be sure, Keynes admitted the possibility of a liquidity trap but made clear that he could think of no period when a liquidity trap actually occurred. Keynes also let nominal wages float in Chapter 19 of the *General Theory* and showed that we could still have unemployment. Somehow, these elements did not find their way into Hicks's and the Keynesians' interpretation (and later on in Modigliani's model).

Monetarists responded to Hicks, not to Keynes. Monetarists also emphasised aggregate demand, but placed the emphasis on money supply. In this sense, they were very much Keynesian, accepting the IS–LM model and the exogenous nature of money. Rational expectationists searched for microfoundations of macroeconomics and developed models devoid of any institutional structure. Rational agents choose to optimise. In this respect new Keynesians fare better, emphasising the importance of effective demand and the role of credit and banks, but still fall back on a theoretical model that is essentially neoclassical while at the same time accepting the need for microfoundations. Credit rationing still implies the scarcity of bank loans, and banks are still financial intermediaries channelling savings to investment according to the loanable funds view (deposits make loans).

Two overall themes run among all these models. Firstly, aggregate demand is essentially assigned a passive or short-run role, if present at all. Indeed, the IS–LM model is only a short-run model. Aggregate demand only explains temporary deviations from long-run levels of output, as well as demand-pulled inflation. The supply side of the model dictates the equilibrium or natural levels of employment and output, that is, the NAIRU. Growth is explained by changes on the supply side of the model. Either way, demand is a passive player adjusting itself to the supply conditions of the model. Secondly, these models essentially consider the money supply as set by the central bank. Money is exogenous. If there is an excess demand for money, then the existing supply must be rationed, as in new Keynesian models. The rate of interest is endogenous and determined within the money market, that is, it is dictated by supply of and demand for money.

This is hardly comforting for those economists who regard aggregate demand as pivotal, both in the short and long run, and who consider that money is endogenous at all times. The theory of effective demand needs to be reconstructed along lines more consistent with Keynes's and Kalecki's models, and the endogeneity of money needs to be carefully explained. In fact, for many economists these two elements are one and the same. A proper theory of effective demand, based on a monetary theory of production, must rely on a theory of endogenous money. In this setting, money cannot be exogenous. Hence the IS–LM model that artificially separates the real sector from the monetary sector cannot be accepted, even if one makes the LM curve dependent on the IS curve, as in Davidson (1972/1978).

A number of economists remained therefore faithful to the works of Keynes and Kalecki. Advocating the need to incorporate institutional elements and some realism into the theory of money and effective demand, they largely rejected the IS–LM framework, and continued to develop Keynesian and Kaleckian models on firmer, more heterodox grounds. As Deleplace and Nell (1996, p. 5) write, '[t]he "Monetary Theory of Production" . . . has finally to be developed without compromises'.

The purpose of this volume is twofold. Firstly, it is to continue to offer insights into this heterodox tradition by developing views consistent with the principles of effective demand and endogenous money. To do this, we must rebuild Keynes, using Kalecki and Sraffa, and therefore 'complete the unfinished Keynesian revolution' (Arestis, 1992, p. 88). Secondly, as the focus of the book is on money and monetary theory, it also aims at continuing the tradition of reconciliation. Since the early publication of the 'Monnaie et Production' series in *Économie et Sociétés*, it became evident, in fact, that there were two distinct groups of economists who shared a similar interpretation of Keynes's and Kalecki's theory of a monetary economy of