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1

Introduction

Philip Arestis and Gennaro Zezza

In September 2005 we organized a conference at the University of Cassino, Italy, the aim of which was to explore ‘The Keynesian Legacy in Macroeconomic Modelling’. In the postwar period, macroeconomic modelling of developed economies was mainly rooted in Keynesian theory up to the 1970s, when the failure of applied models to deal with stagflation led to a shift in economic theory towards supply-side models, rational expectations, optimizing behaviour etc., and since that time attention to applied macroeconomic models as we knew it has diminished considerably among economists. However, existing empirical models based on Keynesian and Post Keynesian principles are sometimes more successful than models based on optimizing behaviour in tracking real economies. Moreover, theoretical macroeconomic models are still developed and discussed among economists of a Keynesian persuasion. The ultimate goal of the conference was to collect state-of-the-art results in what one may broadly label as Keynesian macroeconomic modelling, on both theoretical and empirical grounds.

The papers presented at the conference provided a rich collection on the main theme of the conference. We felt actually that there was enough material to warrant publication of a book on the theme of *Advances in Monetary Policy and Macroeconomics*. There are 14 such chapters and in what follows we try to provide a short summary of each one.

The first five chapters fall within the area of New Monetary Policy. In the opening chapter Giuliana Passamani and Roberto Tamborini deal with monetary policy, firms’ bank dependence and default risk. Among Keynes’s undeveloped, or underground, ideas that are being resurrected under new clothes are those of ‘monetary theory of production’ (1933) and firms’ ‘finance motive’ in the demand for money (1937) in imperfect financial markets. The most important source of imperfection is now seen to be asymmetric information which generates agency problems between the firm and its external financial suppliers. This chapter presents a model that clarifies the *supply-side* responsiveness of the economy to these financial factors, and, therefore, to monetary policy to the extent that it drives inter-bank rates

vis-à-vis default risk. Then the chapter moves to an empirical assessment of the model on the basis of Italian data. As expected theoretically, the inter-bank rate and the default risk premium are co-determinants of the equilibrium path of output and inflation.

Olivier Musy and Sébastien Pommier, in their contribution, attempt to analyse the performance of alternative expectational assumptions for the empirical evaluation of the New Keynesian Phillips Curve. They replace the standard Rational Expectations Hypothesis by several less restrictive assumptions on expectations formation. The difference between each of these hypotheses relies on the agents' information content in forming their forecasts. The authors find that assuming myopic forecasts gives support to the New Keynesian Phillips Curve, while the assumption of pure rational expectations performs badly. Naïve expectations do not produce a worse performance than any of the other alternatives considered. Their method also allows them to evaluate the relative performance of a variety of New Keynesian models.

The contribution by Chiara Oldani, 'The Taylor Rule and Financial Derivatives: The Case of Options', begins with the thesis that financial innovation is a variable that can be considered to be responsible for money demand instability and also for affecting the stability of financial markets. The aim of the monetary policy rule in New Keynesian models is not to control money supply, but to direct attention onto inflation and financial stability. Financial innovations should then be considered in the operation of monetary policy if it were able to alter the ability of the monetary authorities to reach the desired goal of price stability. Options are one of the most fastest-growing and attractive financial instruments in modern financial markets. Monetary policy rule (i.e. of the Taylor rule type) is based on the interest rate setting and, given that it is possible to verify that a positive relationship exists between the implied volatility of option contracts and the (risk-free) interest rate, it is meaningful to introduce the implied volatility into the Taylor rule, as an explanatory variable. This is precisely the aim of this contribution.

In chapter 5, entitled 'Credit Risk Management Rationing vs Credit Derivatives and Consequences for Financial Stability', Stefania Vanacore discusses the credit cycle in a theoretical context of inside money, which implies, of course, endogenous money supply, referring to a system reminiscent of the Keynesian finance motive. In a framework where the agents are distinguished by their capability to raise money (central bank money or commercial bank liabilities), the author analyses how credit supply changes when banks take advantage of the existence of a derivatives market for credit risk, and for hedging purposes. It is found that when credit derivatives exist, a rationing strategy is not always optimal for a bank. Hence, markets can positively influence credit quantity. At the same time, banks are less able to react to an increase of the systematic risk. Consequently, central banks must pay

attention to market price volatility if they really mean to control financial instability.

In their contribution, Dominique Torre, Elise Tosi and Muriel Dal-Pont Legrand discuss the ways in which an independent Central Bank can operate monetary policy when it is committed to a medium-term achievement of a mixed set of objectives. Imperfect and asymmetric information between a bank responding *à la* Stackelberg and agents reacting to its initiatives is assumed. Agents are heterogeneous according to their inflationary expectations and their aversion to inflation. Monetary policy is not independent of the nature and the transformation of the opinions of agents. This policy can be of the type that suggests that the Central Bank, through its actions, has to convince agents that there is an inverse relationship between inflation and growth. Under such circumstances agents consider that, even in a world where time inconsistencies are not costless, an adequate level of inflation does not preclude growth.

The two chapters that follow fall squarely within the confines of the European Union (EU) experience. In the first of these, Philip Arestis, Georgios Chortareas and Theodore Pelagidis, in the chapter entitled 'Asymmetries as Sources of Conflict in a Monetary Union', turn their attention to the case of the Economic and Monetary Union (EMU) and some of the challenges that lie ahead. The authors attempt to identify the potential sources of economic conflict within the EMU. The greater the difference in the structure of production, the greater the incidence and magnitude of the demand shocks experienced by individual countries. The euro area mechanisms may be unable to face demand disturbances under a single currency regime, which could also debilitate production systems and, thus, diminish trade in regions that are lagging behind. Under the euro area institutional architecture, the erosion of fiscal policy and the inability to handle successfully asymmetric shocks may reflect negatively on the sociopolitical stability and legitimacy of the EMU regime.

In the second of these two chapters, entitled 'Alternative Fiscal Policy Rules and the Stabilization Problem in EMU: Theory and Simulations', Jorge Uxó and M. Jesús Arroyo deal with the EMU, which is supposed to have redefined the stabilization policy's main instruments for the European countries. A more active fiscal policy is propounded through a model of the European monetary union. In this model economies experience specific supply and demand shocks and have different instruments to carry out stabilization policies. The main objective of the exercise is to examine the conditions under which a larger stabilization capacity is put in place. This implies that economic policy should be able to offer some alternative mechanism that allows national authorities to recover their stabilization capacity. The formal analysis of the model is subjected to empirical investigation through simulating the proposed model with different sets of parameters. The main conclusion is that active fiscal policy improves stabilization, The fiscal policy rule proposed is based on both the output gap and on inflation.

The next two chapters can be thought of as sitting comfortably under the more general theme of 'Money, Credit and the Business Cycle'. The first of the two chapters, by Korkut Erturk, entitled 'On the Minskyan Business Cycle', attempts to link Keynes' *Treatise on Money* to the Minskyan financial fragility to show how a business cycle expansion comes to an end. The author suggests that Keynes' views on the sequence of the 'bull' and 'bear' sentiment and asset price speculation over the business cycle, can explain two of Minsky's central propositions in relation to business cycle turning points. These being that financial fragility increases gradually over the expansion, and that the eventual increase in the interest rate sets off a downward spiral, thereby bringing the expansion to an end. In both Minsky and Keynes' *Treatise*, the account of the expansion begins with optimistic expectations enabling firms to capitalize their expected earnings in financial markets and to finance their investment expenditures. Ultimately, though, the ability of the banking system to accommodate a rising level of economic activity falters.

Elisabetta De Antoni takes a different approach to that of Korkut Erturk, contrasting the Minskyan financial instability hypothesis with Keynes's General Theory, in the second of the two chapters, entitled 'Minsky's Vision and its Relationship with *The General Theory*'. The author's suggestion is that the former cannot be treated as an interpretation of the latter. Minsky deals with a vibrant economy with upward instability, naturally inclined to overinvestment and overindebtedness. The General Theory, by contrast, is concerned with a depressed economy, tending to chronic underinvestment and thus to high and long-lasting levels of unemployment. Despite these differences, the basic vision of the two cases is the same. The financial instability hypothesis and The General Theory may be considered as being two faces of the same coin; however, they are two faces that look in opposite directions. From this perspective, Minsky may be considered to have extended the economics of The General Theory to a vibrant and euphoric economy, making it even more general and modern.

The rest of the book contains five chapters on the general theme of 'Issues for Spatial and Open Macroeconomies'. In the first of these, entitled 'Towards a Spatial Keynesian Macroeconomics', William Mitchell and James Juniper begin by providing a clarification of the goals of a Post Keynesian macroeconomic governance structure. The authors further develop the concept of a Spatial Keynesian approach to macroeconomics. Two approaches to Post Keynesian macroeconomic policy are considered and compared. One, which is characterized as generalized expansion and leverage on private multipliers, and the other, represented by a Job Guarantee. The importance of taking a spatial dimension to the principle of effective demand is emphasized. It is also argued that the first of the approaches is flawed in this respect. The role played by spatial networks in distributing macroeconomic activity across the regional surface is also highlighted.

Daniela Federici and Sergio Santoro in the chapter that follows, entitled 'Monetary Shocks and Real Exchange Rate Dynamics', investigate the real exchange rate dynamics in the context of a general equilibrium approach based on microfoundation principles. This is integrated with nominal rigidities and imperfect competition. It is true to suggest that few empirical studies have been carried out to test the consistency of this approach with the data. This contribution develops a theoretical model based on the assumptions referred to above, which is subsequently tested. A Full Information Maximum Likelihood procedure is adopted to estimate the structural parameters in order to analyze the reactions of the real exchange rate to monetary shocks. The overall conclusion of the empirical part of the chapter are very encouraging in terms of validating its theoretical premise.

Carolina Pagliacci and Elizabeth Ochoa, in the chapter entitled 'Macroeconomic Risk: Evaluation of International Reserves in Venezuela', present a methodology that allows decision makers to synthesize and analyse information related to the management of international reserves, in an environment of high uncertainty. In particular, four dynamic indicators (the forecasted path of both international reserves and inflation, the likelihood of a currency crisis, and an indicator of optimality of reserves) are proposed over which risk is measured. Probability distributions of these variables are obtained by stochastic simulations of shocks in a Venezuelan external sector model. The model describes the behaviour of the main components of the balance of payments and the path of the nominal exchange rate. The definition of the exchange market pressure is used throughout, along with an account of the presence of exchange rate controls. An application of the methodology illustrates the different types of risks and tradeoffs involved in reserve performance.

In the penultimate chapter, entitled 'World Bank Trade Models and the Doha Debate', Rudi von Arnim and Lance Taylor propose a 2-region SAM with trade and aid flows tied together in a social accounting matrix format suggested by Wynne Godley, and a model structure heavy on CES-aggregates, in order to construct a stylized replica of the World Bank's LINKAGE model. The authors' goal is to critique standard approaches to measuring 'welfare gains' from the Doha Development Agenda. The contribution finds that the World Bank's simulation results are not only lopsided, but also biased due to an interaction between the government's accounts and LINKAGE's 'Armington' specification of foreign trade under imperfect competition.

Finally, in chapter 15, Marcelo Curado, Gabriel Porcile and Ricardo Viana present a model that is based on a North-South technology gap, which shapes international competitiveness. The model comprises a demand curve for foreign exchange, based on the Keynesian balance-of-payments-constrained growth theory, and a supply curve of foreign capital based on the principle of increasing risk, formalized as a nonlinear function of the Southern interest rate. The dynamics of the model generates external fragility in economies in

which a large technology gap reduces international competitiveness. External disequilibrium recurrently gives rise to a downward pressure on the rate of economic growth, and to the possibility of severe exchange rate crises in the Southern economy.

We would very much like to thank all of the contributors for being unselfishly prepared to revise their contributions time and time again in order to satisfy our demands and those of the publishers. We would also like to thank participants to the conference for their useful comments. We are indeed grateful to the Italian Central Bank, and in particular to Dr Salvatore Rossi at the Bank, for generous financial support. The Department of Economics, Faculty of Law, University of Cassino, were also extremely courteous in hosting the event and also for providing generous financial support. Amanda Hamilton from Palgrave Macmillan and her staff have been extremely supportive throughout the life of this project. We are extremely grateful to all these people and their institutions for making this book possible.

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