The new open economy macroeconomics: a survey

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Abstract

Since the 1995 publication of Obsteld and Rogoff's *Redux* model, there has been an outpouring of research on open-economy dynamic general equilibrium models that incorporate imperfect competition and nominal rigidities. This paper offers an interim survey of this recent literature.   © 2001 Elsevier Science B.V. All rights reserved.

Keywords: New open economy macroeconomics; Nominal rigidities; Imperfect competition

JEL classification: F3; F4

1. Introduction

This article surveys some recent efforts to develop a new workhorse model for open-economy macroeconomic analysis.[1] The unifying feature of this emerging literature is the introduction of nominal rigidities and market imperfections into a dynamic general equilibrium model with well-specified microfoundations.

Imperfect competition – whether in product or factor markets – is a key ingredient in the new models. One reason is that, in contrast to perfect competition (under which agents are price-takers), monopoly power permits the explicit analysis of pricing decisions. Second, equilibrium prices set above marginal cost rationalize demand-determined output in the short run, since firms are not losing

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[1]For electronic links to many of the papers cited in this survey, see the New Open Economy Macroeconomics internet site maintained by Brian Doyle: http://www.princeton.edu/~bmdoyle/open.html.

money on the additional production.[2] Third, monopoly power means that equilibrium production falls below the social optimum, which is a distortion that can potentially be corrected by activist monetary policy intervention.

This approach offers several attractions. The presentation of explicit utility and profit maximization problems provides welcome clarity and analytical rigor. Moreover, it allows the researcher to conduct welfare analysis, thereby laying the groundwork for credible policy evaluation. Allowing for nominal rigidities and market imperfections alters the transmission mechanism for shocks and also provides a more potent role for monetary policy. In this way, by addressing issues of concern to policymakers, one goal of this new strand of research is to provide an analytical framework that is relevant for policy analysis and offers a superior alternative to the Mundell–Fleming model that is still widely employed in policy circles as a theoretical reference point.

In describing the findings of this research program, I focus almost exclusively on the analysis of monetary shocks. This reflects the emphasis in the literature, for the role of nominal rigidities is most starkly illustrated in the case of monetary shocks and it is this kind of disturbance that flexible-price models are least well-equipped to handle.

Obstfeld and Rogoff (1995a) is commonly recognized as the contribution that launched this new wave of research and this paper is reviewed in Section 2 below. An important precursor was the paper by Svensson and van Wijnbergen (1989). This paper is a manifesto for sticky-price models that have solid microfoundations and are firmly embedded in an intertemporal setting and much of the analytic structure of that paper has been adopted in the more recent literature. However, these authors modelled home and foreign outputs as stochastic endowments and the subsequent literature has devoted much more attention to endogenizing the production side of the economy. Krugman (1995) also signalled many of the research issues which have received attention in this new literature.

Finally, it should be noted that the research program described here is very much linked to developments in closed-economy macroeconomics. There is a sense that macroeconomists are converging on a common modelling framework that integrates imperfect competition and nominal rigidities into dynamic general equilibrium models. This recent development has been labelled 'neomonetarism' by Kimball (1995) and the 'new neoclassical synthesis' by Goodfriend and King (1997).

The rest of the paper is organized as follows. The Obstfeld–Rogoff *Redux* model is briefly outlined in Section 2. Section 3 reviews alternative approaches to modelling nominal rigidity. The impact of market segmentation and pricing to market behavior is discussed in Section 4. We turn to the specification of preferences and technology in Section 5. Section 6 introduces variation in financial

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[2]As is discussed below, this is only true if the shock is not so large as to drive marginal costs above marginal revenues.