

## Buchbesprechungen

*Paul de Grauwe* (ed.): *Exchange Rate Economics: Where Do We Stand?*, The MIT Press, CESifo Seminar Series, Cambridge, MA 2005, 347 p.

This book consists of a collection of papers dealing with various aspects of exchange rate economics. The starting point of the book is the – as De Grauwe calls it – “intellectual crash” of the early 1980s. The economics of exchange rates was challenged by the disastrous empirical results of the well known paper by Meese and Rogoff (1983). The book under review shows that these results have initiated fruitful research once the initial shock had been overcome. Although exchange rates still seem to be a miracle, we can see a vast progress. This progress has led to a couple of new directions in exchange rate economics which are now presented in De Grauwe’s book. There are mainly three keywords that accompany the reader throughout the book: microstructure, micro-based macro models, and nonlinearity.

The book starts with two papers from the growing field of research on the microstructure of the foreign exchange market. *Martin Evans* and *Richard Lyons* (chapter 1) exploit the view of recently available transaction data on the Deutsche mark/US dollar market for analyzing imperfect substitutability of assets denominated in different currencies. They do this by applying a microstructural portfolio balance model in which dealers may trade with the central bank and public. Their results are strongly in favor of portfolio balance theory and show that there are economically significant price effects from imperfect substitutability. However, the size of this price-impact depends heavily on the flow of macroeconomic news, i.e. it is most pronounced during periods with a strong flow of news. *Geir Bjørnnes*, *Dagfinn Rime* and *Haakon Solheim* in the second chapter study the relation between volume and volatility in the Swedish crown/Euro market. As an interesting feature their data covers almost the complete Swedish foreign exchange market. They find that the trading volumes of the large banks show the strongest relation to exchange rate volatility. This relation is also stronger for Swedish banks than for foreign banks. Finally volatility is mainly related to conditions of the Swedish economy. The authors trace these results back to the fact that large and Swedish banks are well informed about the Swedish economy compared to smaller market participants. The results stress the importance of heterogeneity in the foreign exchange market and information advantages of some traders.

The next chapters (3 to 6) turn to micro-founded macro models. In chapter 3 *Michael Moore* and *Maurice Roche* present a model for exchange rate volatility. They use a neoclassical model, in which the source of exchange rate volatility is the variability of the marginal rate of substitution between domestic and foreign goods. The application to the US dollar/pound sterling exchange rate shows that especially for longer forecast horizons the model performs remarkably well.

Chapter 4 (*Mark Taylor*) provides a comprehensive survey on the PPP debate and non-linearities in the real exchange rate, confirming the view that PPP holds as a (very) long-run relation for the exchange rates between major industrial countries. He explicitly highlights recent empirical work, allowing the exchange rate to return in a nonlinear manner back to PPP, thus allowing for much faster adjustment speed than linear models do. This chapter has the nonlinearity of the model in common with the following chapter 5 by *Paul de Grauwe* and *Marianna Grimaldi*. They introduce nonlinearity due to transaction costs in the goods market and due to heterogeneous agents – fundamentalists and chartists – in a simple exchange rate model, in which agents build their expectations upon a set of fundamentals, but form their expectations in different ways. The model is then able to reproduce effects like the disconnection puzzle, the excess volatility puzzle, distributional properties, volatility clusters and a tight relation between exchange rates and fundamentals in periods with high volatility of the fundamental exchange rate. Chapter 6 by *Volker Böhm* and *Tomoo Kikuchi* motivates also the non-linearity in exchange rate data. Similar to the previous chapter expectations play a fundamental role and lead to a close relation between real and asset markets. Interestingly the results do not require market imperfections nor do they need random disturbances.

*Hans-Werner Sinn* and *Frank Westermann* (chapter 7) enlighten the role of black money in the framework of a portfolio balance approach. They argue that the demand for shares does not necessarily translate to the exchange rate and that the value of the currency is rather based on the stock of currency in circulation than on interest bearing assets. They find this consideration confirmed by a number of empirical tests. As the traditional portfolio theory does not consider the particular role of a currency as a black market, they conclude that major movements of the Deutsche mark (i.e. the appreciation up to 1992, depreciation after 1997) and the Euro (its depreciation after its introduction and its following appreciation during the last years) can be explained by the demand for Deutsche mark and Euro as a currency substitute particularly in Eastern Europe.

The chapters 8 (*Yin-Wong Cheung*, *Menzie D. Chinn* and *Antonio Garcia Pascal*) and 9 (*Mariam Camarero*, *Javier Ordóñez* and *Cecilio Tamarit*) analyze the relation between the exchange rate and fundamentals. The chapter by Cheung et al. is directly linked to Meese and Rogoff's seminal work. They compare a couple of models' forecast ability with a random walk. These models are Dornbusch's and Frankel's sticky price monetary model, a model including productivity differentials – therefore referring to the Balassa-Samuelson-effect – and a behavioral equilibrium exchange rate (BEER) model incorporating a broader set of relations between fundamentals and the exchange rate. The latter ones have been less extensively investigated in the empirical literature yet. Applying these models to quarterly exchange rates of five currencies of major industrial countries (Canada, Germany, Japan, Switzerland and the UK) versus the US dollar, they do not find estimates consistent with theory. Furthermore the forecasting results are hardly encouraging. However, there seems to be a stable relation between the exchange rate and interest rate differentials. In contrast, Camarero et al. for the US dollar-Euro rate rely on one single model, including a broad set of fundamentals. They estimate the model as a panel as well as a single equation approach. As a main

result they find that in the long run American fiscal policy seems to be the most important single determinant. Expansionary fiscal policy will depreciate the dollar, whereas the other fundamentals (productivity growth, real interest differentials and accumulated net assets) work to the opposite direction.

In the final chapter 10 *Phornchanok J. Cumperayot* extends the monetary exchange rate model by incorporating a non-linear expectation formation. The sources of this non-linearity are additional risk factors, which are based on the volatility of fundamentals and add to the conventional macroeconomic variables such as money supply and real income. Estimations for six OECD countries suggest that risk from macroeconomic variables plays an important role in exchange rate determination. Finally, the results finally indicate that the monetary approach to exchange rates may be not “one of the most dismal failures in modern economics” as which it is often seen.

Where do we stand? The book claims to cover the most recent developments in exchange rate economics. It does, however, not embed them in a common, new approach of exchange rate modeling, and this is indeed far beyond De Grauwe’s aim. The book is worth reading and provides a comprehensive state of the arts overview on recent developments in exchange rate economics. Its value is high for those who want to follow current research in exchange rate economics, mainly (advanced) students, researchers and policy-makers.

Michael Frömmel, Gent/Belgium