

## **CHAPTER 1**

### **INTRODUCTION**

Macroeconomic policy debates inevitably revolve around discussion of fluctuations in key aggregate measures, notably national income, interest rates, inflation, unemployment, trade imbalances, exchange rates and various wealth series, such as house price and stock-market indices. Sharp swings in these aggregates most keenly interest economists engaged in analyzing their implications for the real sector, the financial sector and for macroeconomic policy.

Yet most contemporary theoretical research, particularly in the field of international macroeconomics and finance, appears far removed from this reality. Invariably based on microeconomic foundations that assume optimising representative agents, it underemphasises standard national accounting aggregates that form the basis of macroeconomic policy analysis.

A major theme of this book is that the dominant prevailing paradigm, known as the representative agent, dynamic stochastic general equilibrium approach, overemphasizes the importance of micro precepts as a necessary prerequisite for macro model building. As a result, the international macroeconomics and finance field has become overly complex and its lessons for policymakers obscure.

## PROBLEMS WITH THE PREVAILING PARADIGM

The prevailing paradigm (sometimes referred to as the 'new open economy macroeconomics') contrasts sharply with the use of aggregative methods and tools that have been long used to great effect in mainstream macroeconomics and international economics textbooks where microeconomic foundations are simply not deemed necessary to convey key linkages between the important variables in the field.

A sharp divide has therefore emerged between the prevailing research template of international macroeconomics and finance, as characterised in Obstfeld and Rogoff's (1996) monumental text, and the aggregative and behavioural methods used in standard undergraduate pedagogy of the field.

Basing international macroeconomic theory exclusively on micro-foundations to the neglect of aggregative and behavioural approaches is unsatisfactory for several reasons. First, proponents of the ruling paradigm assert its superiority over other approaches on the grounds that traditional methods are too *ad hoc* without micro-foundations.

Yet, as has been persuasively argued by Gandolfo (2001) and Van Hoose (2004), standard macroeconomic tools, such as the consumption function, are just as empirically verifiable, more realistic, and in principle involve no more *ad hocery*, than the selection of a particular utility function form. Moreover, conventional aggregative methods used in macroeconomics-related areas remain strongly defensible on pedagogical grounds (Romer's 2000).

Colander (2007) has also strongly criticized the utility of micro-founded macroeconomics as taught at graduate level on the basis that it fails to explain how economies actually function and neglects to equip graduates with the necessary skills for future employment as applied economists.

Due to excessive reliance on microeconomic underpinnings, fiscal and monetary policy prescriptions arising from representative agent, stochastic general equilibrium models are highly sensitive to underlying assumptions, such as utility function choice, which makes them ambiguous and hence impractical for policy purposes.

Second, as a related point, models founded on microeconomic precepts and optimising representative agents have become overly complex compared to earlier generation models, such as the Mundell-Fleming (MF) model, with its clear policy prescriptions. Models in the spirit of the MF approach continue to be the mainstay of textbook international macroeconomics and remain the most widely used means of analysing the impact of fiscal and monetary policy on exchange rates, the balance of payments and national income.

For instance, the MF model predicts that, if capital mobility is perfect, fiscal consolidation should either have no impact under floating rates, or a contractionary effect on national income under fixed exchange rates.

Yet unfortunately, the MF paradigm yields numerous results at odds with a growing body of empirical evidence. This is because aggregate models of the short run invariably start from the assumption of aggregate demand side dominance. Apart

from emphasising aggregates over microeconomic foundations, a subtle assumption underlying numerous models of this book concerns the relationship between aggregate supply and demand.

Consistent with the precepts of standard long run analysis, many models in this book start from the alternative assumption of aggregate supply side dominance. Often, domestic goods and services are treated as originating on the production side via a macroeconomic production function. Within the period, these goods are then made available for sale along with imported foreign goods and services which, in use, are treated as either consumption or investment expenditure.

Hence, the sequencing of macroeconomic activity can be perceived as running from aggregate supply to aggregate demand in the first instance, rather than the other way around, although production by firms is obviously undertaken with prospects of aggregate demand in mind. This has important implications for macroeconomic policy, especially for the effectiveness of fiscal policy.

In this way the book presents an alternative approach both to the representative agent-stochastic general equilibrium models of the ruling open economy macroeconomics paradigm with its overly elaborate microeconomic foundations, as well as to the older aggregative approaches. It also relies heavily on much-neglected economy-wide precepts, especially the distinction between aggregate output and expenditure in the absorption sense and the principles of traditional flow-of-funds analysis, to derive a range of new analytical frameworks and results.

In sum, by addressing deficiencies in extant models, the aggregate supply side oriented frameworks developed in the book provide new perspectives on the determination of global imbalances, the role of capital flows in the growth process, as well as new results about the effectiveness of macroeconomic policy under both fixed and floating exchange rate regimes.

These new results are contrasted throughout with those of extant approaches. Hence, by departing on methodological grounds from the prevailing research paradigm, the book's innovative frameworks respond to Krugman's (1995) call for practicable guides to address unresolved questions in international macroeconomics and finance.

## CHAPTER PREVIEW

This chapter has introduced the key methodological points of difference between the approaches outlined in this book and those of the prevailing research paradigm. Chapter 2 discusses key developments in the world economy since 1980, emphasizing international macroeconomic developments from the Asian financial crisis of 1997-98 to the global financial crisis of 2007-08 with a focus on the growth and significance of 'global imbalances'. The term global imbalances has become synonymous with the simultaneous widening of the current account deficit of the United States and counterpart rise in the current account surpluses of East Asian (most notably China's) and the oil exporting economies.

Chapter 3 develops straightforward two region frameworks for interpreting the effect of exchange rate policy on an economy's trade balance and that of its trading partners in the context of limited capital mobility and discrepant economic growth rates.

Recognizing that external imbalances reflect divergent national production and expenditure growth, it reveals that exchange rates remain central to any explanation of global imbalances.

Using the case of China and its trading partners, it reveals how exchange rate misalignment can artificially assist China's output growth and limit its household consumption, thereby slowing the rise in China's living standards. Meanwhile, due to currency misalignment, China's Western trading partners, most notably the United States and the European Union, simultaneously experience larger external deficits, lower output, lower saving and higher investment than otherwise.

Chapter 4 presents an alternative short to medium term framework for analyzing the simultaneous determination of current account imbalances and the path of national income. Using standard macroeconomic behavioral relationships, it first examines how and why current account deficits matter by investigating links between domestic consumption, government spending, output, saving, investment, interest rates and capital flows. This rendered Keynesian cross framework yields results relevant to the 'twin deficits' hypothesis that are contrary to those of standard models. In particular, it shows that increased public expenditure lowers not raises potential national income over the medium term.

Next it proposes methods for assessing the proximity of current account deficits and the associated foreign debt to their upper bounds based on the principle that productive investment fundamentally sets the feasible limit for current account

deficits, whereas the capital to output ratio ultimately sets the foreign debt to GDP limit.

Chapter 5 centres on the contribution of foreign saving to national income, both in the long and short runs. Using extended loanable funds analysis, it demonstrates how perfect capital mobility contributes to economic development, contrary to a prevalent view that international borrowing is inimical to the economic welfare of developing economies. As a corollary, the analysis shows that capital controls, irrespective of form, generally reduce development potential and economic welfare by widening real cross-border interest differentials. Using growth accounting precepts and treating Australia as a case study, the chapter also demonstrates how foreign borrowing can contribute significantly to raising an economy's national income.

Chapter 6 introduces new frameworks for analysing the relationship between exchange rates, domestic saving, investment, international borrowing and lending, and domestic and foreign interest rates. It establishes how a range of domestic and international shocks simultaneously determine these key international macroeconomic variables over any given time and derives some general propositions. It then suggests that foreign factors, most notably the rise in net saving in East Asia, have mainly been responsible for the rise in the large current account deficits of the United States and other borrower economies, such as Australia and New Zealand.

Chapter 7 proposes an alternative monetary model for examining the effects of domestic monetary shocks on the exchange rate and the balance of payments that is consistent with the macroeconomic framework introduced in Chapter 3. Contrary to

previous monetary approaches, the approach suggests a new chain of causality that runs from domestic money to the exchange rate to the price level, rather than from money to the price level to the exchange rate. It also shows that under fixed rates external adjustment is consistent with money market equilibrium and price level stability and that under floating exchange rates monetary policy in open economies works in the short to medium runs via its impact on exchange rates and aggregate expenditure.

Chapter 8 presents an alternative international macroeconomic model for evaluating the effectiveness of fiscal and monetary policy in stabilising national income under fixed and floating exchange rates. It encompasses national output and income, money and capital flows and linkages between the exchange rate, price levels and real interest rates consistent with international parity conditions.

This output-oriented approach, consistent with the modelling of Chapter 4, demonstrates that the nature of government spending is pivotal to the effectiveness of fiscal policy. It reveals that, *ceteris paribus*, higher public consumption expenditure contracts national income and depreciates the exchange rate, whereas higher productive public investment spending has opposite effects. The framework also shows that the effectiveness of fiscal and monetary policy as macroeconomic policy instruments is not ultimately dependent on the exchange rate regime in the long run due to pass-through effects.

Chapter 9 presents an alternative international macroeconomic framework for analysing the impact of domestic and foreign monetary and real shocks on nominal

and real exchange rates, the current account balance and price levels in financially globalized economies. Combining standard macroeconomic relations with precepts from international finance, this distinct approach provides further insights on a range of international monetary issues.

These include an alternative perspective on the monetary transmission mechanism under floating exchange rates, whether restrictive monetary policy can narrow trade deficits, the importance of ensuring low inflation expectations, the domestic repercussions of changes in monetary conditions abroad and the impact of productivity and investment surges on competitiveness, external imbalances and national income.

It also reconsiders the issue of exchange rate choice revealing that in the short run pegged exchange rates facilitate real income growth for emerging economies while lowering its variability when exports and productivity are improving and monetary shocks predominate. Meanwhile, floating exchange rates may best suit less open advanced economies with relatively stable monetary sectors that frequently experience negative real shocks.

Chapter 10 canvasses two issues of importance to stabilization policy. The first, of particular relevance to the conduct of monetary policy, examines how unexpected inflation or disinflation arbitrarily redistributes income between domestic savers and borrowers in the economy. Using a loanable funds framework, it reveals that, in theory, borrowers benefit at the expense of savers whenever inflation rises unexpectedly and how the opposite occurs during disinflation episodes.

The chapter also analyses the sustainability of public debt and its international macroeconomic significance by deriving key formulae and presenting new graphical techniques that indicate how central government fiscal authorities can reduce public debt levels over time by targeting primary budget imbalances. It also canvasses issues related to fiscal consolidation emphasizing the importance of the distinction between government consumption and investment.

An Epilogue concludes the book by critically evaluating the economic significance of 'global imbalances.' It canvasses the benefits of increased international trade in saving and addresses fallacies about external imbalances. It then examines key factors that raise the risk of global financial crises, including the role of public debt. The book concludes by highlighting lessons of the book for economic policymakers. Most notably, it suggests extra public spending intended to provide fiscal 'stimulus' is only effective in raising national income if in the form of productive public investment.

## References

Colander, D. (2007) *The Making of an Economist, Redux*, Princeton University Press, Princeton, NJ.

Fleming, J. "Domestic Financial Policies Under Fixed and Under Floating Exchange Rates", *IMF Staff Papers*, 12, 1962, 369-80.

Gandolfo, G. (2001) *International Finance and Open Economy Macroeconomics*, Springer-Verlag, Berlin.

Krugman, P. (1995) "What Do We Need to Know About the International Monetary System?" in P. Kenen (ed) *Understanding Interdependence : The Macroeconomics of the Open Economy*, Princeton University Press, Princeton.

Mundell, R. (1963), "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates", *Canadian Journal of Economics and Political Science*, 29, 475-85.

Obstfeld, M. & Rogoff, K. (1996), *Foundations of International Macroeconomics*, Cambridge: MIT Press.

Romer, D. (2000) "Keynesian Macroeconomics without the LM Curve" *Journal of Economic Perspectives*, 14(2), 149-169.

Van Hoose, D. (2004) "The New Open Economy Macroeconomics: A Critical Appraisal" *Open Economies Review*, 15, 193-215.