

## A History of Macroeconomics from Keynes to Lucas and Beyond

This book retraces the history of macroeconomics from Keynes's *General Theory* to the present. Central to it is the contrast between a Keynesian era and a Lucasian – or dynamic stochastic general equilibrium (DSGE) – era, each ruled by distinct methodological standards. In the Keynesian era, the book studies the following theories: Keynesian macroeconomics, monetarism, disequilibrium macroeconomics (Patinkin, Leijonhufvud, and Clower) non-Walrasian equilibrium models, and first-generation new Keynesian models. Three stages are identified in the DSGE era: new classical macroeconomics (Lucas), RBC modelling, and second-generation new Keynesian modelling. The book also examines a few selected works aimed at presenting alternatives to the Lucasian macroeconomics. While not eschewing analytical content, Michel De Vroey focuses on substantive assessments, and the models studied are presented in a pedagogical and vivid yet critical way.

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*To Jean Cartelier, Marie-Paule Donsimoni, Franco Donzelli, and  
Laurent d'Ursel, who helped me shape my vision of economic theory*

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## Preface

To know who we are, we need to know where we come from.

The aim of this book is to trace the evolution of modern macroeconomics from its inception to the present. A sufficient justification for this enterprise is that modern macroeconomics, which originated with the publication of John Maynard Keynes's *The General Theory of Employment, Interest, and Money* (Keynes 1936), has now existed long enough to make it worth assessing what has happened over the past seventy years. An additional justification is that during this period macroeconomics has undergone a radical change with the dethroning of Keynesian macroeconomics and its replacement by dynamic stochastic macroeconomics initiated by Robert Lucas. This revolution begs to be assessed. In Axel Leijonhufvud's words:

The main task for the history of economic thought of the second half of the twentieth century must surely be to explain this 180-degree turn in the worldview of the representative [macro] economist. (Leijonhufvud 2006a: 35)

My book is primarily addressed to those macroeconomists, be they teachers or students, who feel the need to go beyond the technicalities that provide their daily bread and butter, and wish to ponder the origin of the kind of modeling with which they are familiar. My wish is that it might be especially useful to graduate students and young academics. Their training is often purely technical and centered on the models of the day, as if there had been no useful past, and as if no conceptual or methodological problems inherited from the past still had an influence today. Of course, this book is also addressed to historians of economics, be they doing internal history, as I do, or working from an external history perspective. Finally, I hope that it will be useful to economists working in other branches of the discipline who are curious to learn what has happened in their neighbors' yards.

My essay originated from a teaching experience. For more than twenty years, I have been teaching a graduate course on the history of macroeconomics mainly at my own university (the University of Louvain in Belgium) but also, in the past, at the Sorbonne in Paris and at Duke University. In this seminar-like course, I require students to read a series of seminal works spanning the history of macroeconomics from Keynes to the present.<sup>1</sup> Usually students enjoy reading these texts for the simple reason that they represent a refreshing change from their normal curriculum. At each reading, they tend to be convinced by the author's arguments before often realizing these authors' shortcomings and blind spots at the next reading. I genuinely relish helping them discover that macroeconomics is full of disagreements bearing both on argumentation and policy conclusions. This approach is more congenial to me than the conventional view of monotonic progress. Of course, students change every year, but I repeat the course – so I have read some of these texts about twenty times! Surprisingly enough, I have not become bored with them, a sure testimony to their profundity. Actually, for some authors, in particular Lucas and his followers, returning to them frequently has been a good thing: due to my own prejudices and the counterintuitive nature of their thinking, it took me a long time to fully appreciate their contributions.

The history of modern macroeconomics has been witness to two important breaches. The first relates to the transition from what Keynes wrote in *The General Theory* to what it became in the hands of Keynesian economists – in Leijonhufvud's terms, the transition from the 'Economics of Keynes' into 'Keynesian Economics' (1968).<sup>2</sup> The second one was the 'Lucasian revolution,' which swept away Keynesian macroeconomics. Thus, leaving aside Keynes's *General Theory* proper, the history of macroeconomics can be divided into two eras, the first one, roughly extending from the 1940s to the 1970s, during which "Keynesian macroeconomics" held sway, and the era of "DSGE macroeconomics" – DSGE standing for dynamic-stochastic general equilibrium – that started in the mid-1970s and is still the dominant paradigm.

To give a more detailed account, Keynes's aim in *The General Theory* was to demonstrate the existence of involuntary unemployment under the assumption that wage rigidity was not responsible for it. The first generation of Keynesian economists, led by John Hicks, Franco Modigliani, and Lawrence Klein, admitted to all intents and purposes that Keynes had failed in his enterprise

<sup>1</sup> These include a few chapters of the *General Theory*; Hicks's IS-LM paper; chapters XIII and XIV of Patinkin's *Money, Interest and Prices*; Clower's 1965 article; Barro and Grossman's 1971 article; Friedman's 1968 Presidential Address; Lucas's "Understanding Business Cycle" and "Problems and Methods in Business Cycle Theory" articles; one or two new Keynesian pieces; Prescott's Nobel Prize lecture; and a few more recent pieces.

<sup>2</sup> Leijonhufvud contended that there was a significant discrepancy between the content of the *General Theory* (the Economics of Keynes) and what it became in the hands of Keynesian economists.

TABLE 0.1 *The Main Episodes in the History of Macroeconomics*

Episodes	Main Characters
Keynes’s <i>General Theory</i>	Keynes
Keynesian (or IS-LM) macroeconomics	Hicks, Modigliani, Klein
Monetarism	Friedman
The invention of the natural rate of unemployment	Phelps, Friedman
Disequilibrium theory	Patinkin, Clower, and Leijonhufvud
Non-Walrasian equilibrium models	Barro and Grossman, Benassy, Drèze, Malinvaud
DSGE I: Lucasian macroeconomics (or ‘new classical macroeconomics’ or ‘rational expectations revolution’)	Lucas, Sargent, Wallace, Barro
First generation of new Keynesian modeling	Akerlof, Azariadis, Ball, Blanchard, Fischer, Mankiw, Romer, Shapiro and Stiglitz, Solow, Taylor
Alternative research lines	Carlin and Soskice, Diamond, Hart, Roberts,
DSGE II: RBC modeling	Kydland and Prescott
DSGE III: second generation of new Keynesian modeling	Blanchard, Christiano, Eichenbaum and Evans, Gali, Taylor, Rotemberg, Smets and Wouters, Woodford

and argued that involuntary unemployment was due to wage rigidity. This proposition is the cornerstone of Keynesian macroeconomics, centered on the IS-LM model. In the late 1960s and 1970s, Leijonhufvud and non-Walrasian equilibrium economists (following Don Patinkin’s footsteps), on the one hand, and Edmund Phelps and Milton Friedman, on the other, started to question Keynesian macroeconomics in different ways and for different reasons. Treading in Friedman’s and Phelps’s footsteps, Robert Lucas launched a more radical attack against Keynesian macroeconomics. It led to a new approach, DSGE macroeconomics. An occurrence that had all the trappings of a Kuhnian scientific revolution, it sealed the fate of Keynesian macroeconomics. However, the ascent of the DSGE program did not occur without resistance. Defenders of Keynesian macroeconomics dismissed it on the grounds that it amounted to replacing “messy truth by precise error” (Lipsey 2000: 76). Other economists, who rallied under the ‘new Keynesian’ banner, tried to rescue some Keynesian insights, while espousing the new equilibrium standard Lucas had imposed. The new research program inaugurated by Lucas came to fruition with the emergence of real business cycle (RBC) modeling initiated by Finn Kydland and Edward Prescott. Bringing macroeconomics to the computer, it became the be-all and end-all of the young researchers entering the profession in the mid-1980s. Successive modifications of the inaugural RBC model brought

about the realization that a breach had imperceptibly occurred and that a distinct new way of pursuing the Lucasian program had emerged. For reasons that will become clear in the course of the book, I call it ‘second-generation new Keynesian’ modeling. Although they are built on the methodological principles of the DSGE program, these models depart from RBC modeling by bringing back a few central Keynesian assumptions and resorting to other empirical techniques than those of RBC modelers. Second-generation new Keynesian modeling was the state of the art in macroeconomics at the onset of the 2008 recession. Table 0.1 and Box 0.1 complement this summary.

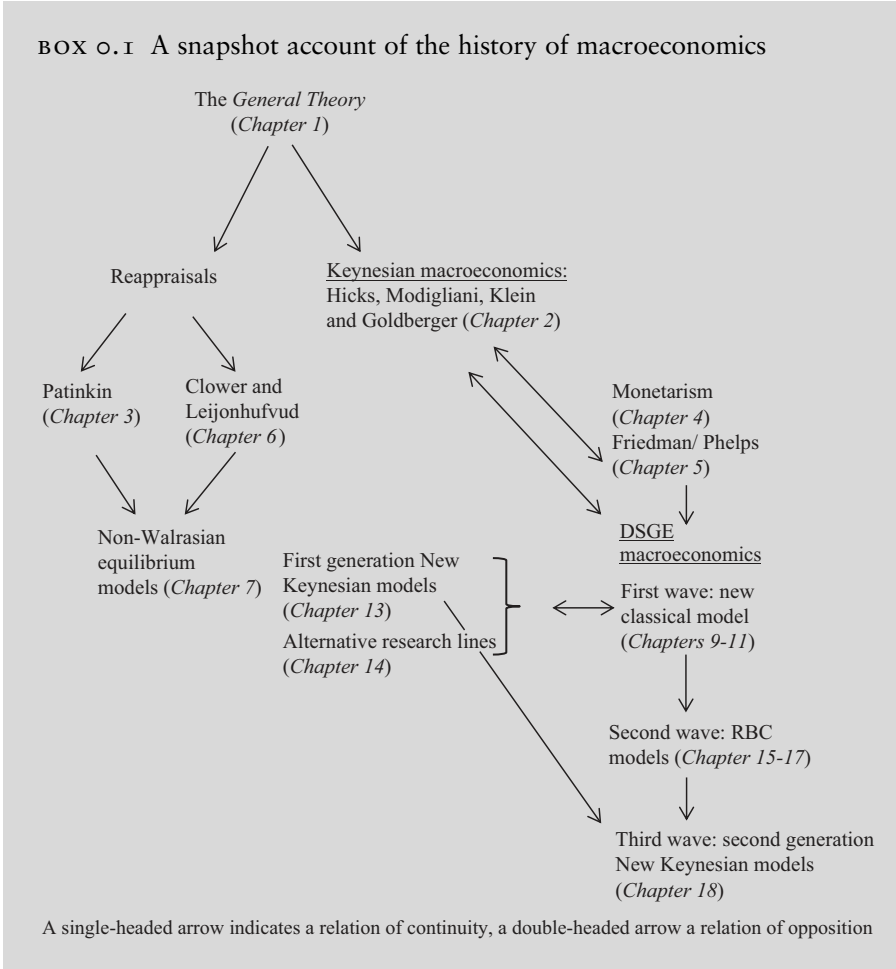
Box 0.1 hints at what will be a guiding thread in my analysis, Leijonhufvud’s decision-tree metaphor for the history of macroeconomics:

Major economists force their contemporaries to face choices – the choice of what to ask, what to assume, what to regard as evidence and what methods and models to employ – and persuade the profession or some fraction of it to follow the choice they make. The path that any particular school has followed traces a sequence of such decisions. Many of the choices faced in such a sequence were not anticipated by the founder to which we trace the development in question but were created by subsequent contributors; some of the decisions made we may judge to have been wrong in hindsight. (Leijonhufvud 1994: 148)

Any major bifurcation on the tree, that is, a new research line, starts as an original contribution, which in the beginning is like a thin new branch on a tree. Its success hinges on the attention it receives. The original work must be considered sufficiently interesting to be elaborated on, and the ensuing chain of contributions building on each other is what makes the branch sturdy. Once mature, a research track may gradually lose its momentum: puzzles arise, objections are leveled, and doubt about its validity sets in. Leijonhufvud calls what occurs then ‘backtracking,’ that is, traveling back down the decision tree to an earlier bifurcation that at the time was neglected but now seems a viable and appealing alternative. When this backtracking process goes back all the way to a distant decisional node, as happened with Lucas, it is tantamount to a scientific revolution.

My study focuses on what I view as the most salient episodes in the history of macroeconomics. I do not claim that it is exhaustive. I have chosen to give more emphasis to theoretical aspects than to empirical ones. My work is internal history and leaves aside most of the contextual dimension. I deal neither with pre-Keynesian macroeconomics nor with heterodox theory.<sup>3</sup> Moreover, although macroeconomics as it is understood at present encompasses both growth and business fluctuations, I will say nothing about the former for the simple reason that writing its history would require a book of

<sup>3</sup> For a study of pre-Keynesian macroeconomics, see Laidler (1999) and Dimand (2008b). For a study of heterodox macroeconomics, see King (2002) and Fine and Milonakis (2008).



its own. I apologize to growth theorists for using the macroeconomics generic term for designating only one of its components, namely the study of business fluctuations.

It is not the role of a historian of economics to decree what the research agenda should be. Nonetheless, I will not refrain from expressing my personal critical judgments about the various economists I study. This should not be taken as a sign of arrogance. It is merely that the history of economic analysis is a *via negativa* – engaging in it amounts to a large extent to critiquing past authors. I am, of course, aware that the older a theory, the easier it is to detect its blind spots. It bears repeating that that my paramount feeling about the authors I study is one of admiration, even when I am critiquing them.

Several excellent surveys of the history of macroeconomics are available, but they are mainly articles, with the ensuing limitations.<sup>4</sup> There are also a few books: Hoover (1988), Snowdon, and Vane (2005) and its precursor, Snowdon, Vane, and Wynarczyk (1994), and, more recently, Backhouse and Boianovski (2013). Still, much remains to be said, and I hope that this book, the result of about a decade of research, will open new perspectives.

<sup>4</sup> E.g., Blanchard (1990, 2000a, 2008), Colander (2006), Hoover (2003), Leijonhufvud (2006a) Mankiw (1990, 1992a, 1992b, 2006), Woodford (1999, 2009).



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