

# Economic Thought since **Keynes**

A History and Dictionary of Major Economists

Michel Beaud and Gilles Dostaler



**Also available as a printed book  
see title verso for ISBN details**

# ECONOMIC THOUGHT SINCE KEYNES

*To Calliope*

*To Marielle*

# Economic Thought Since Keynes

A History and Dictionary of Major Economists

Michel Beaud

*Professor of Economics  
University of Paris 7-Jussieu  
France*

*and*

Gilles Dostaler

*Professor of Economics  
University of Quebec at Montreal  
Canada*

Translated from French by Valérie Cauchemez  
with the participation of Eric Litwack



London and New York

Originally published in French as *La pensée économique depuis Keynes: Historique et dictionnaire des principaux auteurs* by Seuil, Paris, 1993

First published 1995 by  
Edward Elgar Publishing Limited  
This edition published in the Taylor & Francis e-Library, 2005.

To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to [www.eBookstore.tandf.co.uk](http://www.eBookstore.tandf.co.uk).

First published in paperback 1997  
by Routledge  
11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada  
by Routledge  
29 West 35th Street, New York, NY 10001

English edition © Michel Beaud, Gilles Dostaler 1995

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*British Library Cataloguing in Publication Data*

Beaud, Michel  
Economic Thought Since Keynes: A History  
and Dictionary of Major Economists  
I. Title II. Dostaler, Gilles  
330.0922

*Library of Congress Cataloguing in Publication Data*

Beaud, Michel.  
[Pensée économique depuis Keynes. English]  
Economic thought since Keynes: a history and dictionary of major  
economists/Michel Beaud and Gilles Dostaler.

p. cm.

Includes bibliographical references.

1. Economics—History—20th century. 2. Economists—Biography—  
—Dictionaries. I. Dostaler, Gilles. II. Title.

HB87.B4313 1994

330'.092'2—dc20

93—50629

ISBN 0-203-98179-0 Master e-book ISBN

ISBN 0-415-16454-0 (Print Edition)

# Contents

<b>Introduction</b>	<b>1</b>
PART I OUTLINE OF A HISTORY OF ECONOMIC THOUGHT SINCE KEYNES	9
<b>1 Keynes and <i>The General Theory of Employment, Interest and Money</i></b>	<b>15</b>
<b>2 The Keynesian revolution</b>	<b>29</b>
<b>3 The triumph of interventionism</b>	<b>43</b>
<b>4 Axiomatization, formalization, mathematicization</b>	<b>58</b>
<b>5 A new orthodoxy: the neoclassical synthesis</b>	<b>73</b>
<b>6 Heterodoxies: permanence and renewal</b>	<b>88</b>
<b>7 The liberal resurgence</b>	<b>103</b>
<b>8 New macroeconomics</b>	<b>117</b>
<b>9 On Babel and three figures of present-day economic thought</b>	<b>130</b>
PART II DICTIONARY OF MAJOR CONTEMPORARY ECONOMISTS	149
Bibliography	447
Name index	455
Subject index	486

# Introduction

This book is concerned with the evolution of economic ideas since Keynes's *The General Theory of Employment, Interest and Money*. It is addressed to all those who wish to acquaint themselves with the complex evolution of contemporary economic thought. One has in mind here students and teachers of economics and social sciences, in particular, but also specialists, professional economists, whether academics or not, who, while familiar with the authors and debates in their domain of specialization, will find here a working tool, a reference for other fields of research.

Nearly all histories of economic thought stop at Keynes or the Keynesian revolution. They devote at most a chapter, conclusion or epilogue to subsequent developments. Since *The General Theory*, a half century has passed, one rich in developments and debates, with marked transformations of the landscape of economic theory: first, based on interventionism, the consolidation and spread of Keynesianism, then, after a form of apotheosis, a retreat corresponding to the rise of liberalism and new schools of thought. Also witnessed throughout this period was the growing formalization and mathematicization of economic theory.

During the last half century, the total production of books and articles in economics has greatly surpassed the sum of publications from the beginning of economic thought to the publication of Keynes's book.<sup>1</sup> Old tendencies and schools have been renewed, new ones have appeared, while regroupings, fusions and separations have occurred. The fields of specialization—the elaboration and deepening of theory or applications to particular areas—have multiplied. With the movement towards formalization and mathematicization, the very nature of the theoretical literature has been transformed.

Whilst it was relatively easy to find one's way amidst the diversity of doctrines and theories up to the Second World War and the immediate postwar period, this became increasingly difficult in the 1960s. Obviously, there are many books and articles dealing with one or another aspect of the development of contemporary economic thought.<sup>2</sup> There also exist, in diverse forms, presentations of the ideas of important authors of this period. This book aims to present the various trends which have marked the evolution of economic thought since the Keynesian revolution. Concerned mainly with the central corpus of contemporary economics, the analyses, themes and fundamental questions, it strives to present a thorough, systematic account with a view to making the material accessible to the general public, providing specialists with rigorously verified information and describing new approaches to the comprehension of economics.

Among the difficulties raised by a work of this type, the following elements dictated the choice of form which we adopted: the period studied is characterized by the diversity of schools of thought, but also by convergence, overlap and shift—sometimes partial, sometimes temporary—which make the borders fuzzy or mobile. In addition, authors evolve in the 30, 40 or 50 years during which they are active: many authors have followed very special itineraries, some not belonging to any school, others following

paths which lead them successively to a variety of different schools. As for those whose tendencies have linked them to a single school, their place on the economic scene and the manner in which they are perceived have also changed.

The same applies to the cleavage, as old as economic thought itself, between liberals and interventionists.<sup>3</sup> Here, simple reductionism must be avoided. On the one hand, while many economists hold the same doctrinal position as long as they live, others have been able to change, in some cases, as with Hansen or Robbins, from liberalism to interventionism, or, inversely, like the former young Keynesians converting to liberalism in the 1980s. On the other hand, this doctrinal opposition overlaps many groups: that of formalist and mathematical economists as well as those of a literary bent, those inclined to pure theory and economists working on more concrete realities.

To present the evolution of contemporary economic thought, it is imperative to put in perspective the various schools of thought, their evolution and the debates between them, along with the authors, their specificity and their evolution. This book will offer: (1) a historical account, indicating the major advances and shifts, the schools and trends, the debates involved in economics, and the authors who played significant roles; (2) a dictionary of 150 authors, for each of whom are given biographical details, a list of major published works, an analysis of contributions to economic thought and a selection of studies devoted to the author; and (3) a bibliography and a comprehensive index of subjects and of all the names mentioned in the historical account and the dictionary.<sup>4</sup>

### **Historical account**

There is no reading of facts and there is no research without a framework. One such framework, long predominant, may be summarized in the following manner. With the publication of *The General Theory of Employment, Interest and Money*, Keynes marked the beginning of a major mutation of economics. Keynesianism and interventionism attained their peak in the 1960s but then the first signs and generalization of economic crisis facilitated the onset of a liberal counter-offensive, which benefited from diverse theoretical support.

This framework appears somewhat inadequate. First of all, *The General Theory* includes intuitions, analyses and interpretations which other authors had produced, sometimes independently of Keynes, during the 1920s and 1930s. Very different systems of analysis and thought, sometimes divergent, were developed under the same rubric of Keynesianism with interference and sometimes very diverse combinations involving other currents and schools. In the background of the Keynesian mutation, another one developed: the mathematicization of economics with the development of econometric research and modelling, and with the reinforcement of axiomatization and formalization. Also a bipolarization took on major importance: on the one hand, a corpus devoted to theoretical elaboration, at the heart of which the pole of general equilibrium and neoclassical theory—rationality and equilibrium—occupies a crucial place; and on the other, an approach devoted to understanding and interpreting economic phenomena and dynamics largely focused on Keynes's vision and on Keynesian macroeconomics.

Our reading of the evolution of contemporary economic thought can, therefore, be



schematized as follows. Despite its ambiguities, the importance of *The General Theory* is twofold: as a theoretical construction claiming to replace the old English classical approach, and as a theoretical justification of interventionism (Chapter 1). At least as much as the work of a man and the group surrounding him, it was the expression of the dominant ideas and research in the period of its publication, in the context of the Great Depression (Chapter 2). Very quickly, made concrete by the renewal of approaches, tools of analysis and economic policies, one saw a victory for Keynesianism, although it was mainly interventionism which triumphed (Chapter 3).

Parallel to this mutation, another shift, perhaps a more fundamental one, was produced with the development of econometrics and new techniques of mathematical analysis, the mathematicization of economics and the reformulation of general equilibrium theory (Chapter 4). This mathematicization affected the nature of economic thought. It contributed to the recasting of Keynesian macroeconomics in terms of equilibrium, the ‘neoclassical synthesis’, and to the construction of large macroeconomic models which left no place for some of Keynes’s essential intuitions and hypotheses (Chapter 5).

In the postwar period, with the development of general equilibrium theory and pre-eminence of the neoclassical synthesis, there was a resurgence of heterodoxy, often aimed at a better accounting for actual contemporary economies in accord with the post-Keynesian, institutionalist and Marxist traditions, and with other novel approaches (Chapter 6). Soon recession and inflation revealed the limits of an interventionism regarded as Keynesian and liberal traditions re-emerged. The critics of the state and of active economic policy multiplied, with various forms of theoretical support, most notably from the work of Milton Friedman and the monetarists (Chapter 7) and from the ‘new classical’ macroeconomics, which claimed to succeed several types of macroeconomics of Keynesian inspiration, itself challenged by disequilibrium theories and new Keynesian economics (Chapter 8). Today, whilst the neoclassical approach has, once again, asserted itself as the unavoidable point of reference in economic theory, new avenues of escape from its lack of realism are open: new reflections on the market, the firm, organization and rationality, and new attempts to construct approaches to economics with historical, social and ethical dimensions (Chapter 9).

### **The dictionary of authors**

As sufficient distance is necessary to take into account the reaction of the profession to published work, we have considered for the dictionary those economists who produced their essential ideas, or at least published an important work, between the publication of Keynes’s *General Theory* in 1936 and 1980.<sup>5</sup>

With respect to economists who were active both before and after 1936, we distinguished those who produced their key work before that date and those who wrote their most important work after the publication of *The General Theory*. The former are absent from the dictionary and include, for example, Hawtrey, Knight, Lindahl, Mises, Robertson, Rueff, Schumpeter, Simons and Viner. For the economists corresponding to the chosen period, 1936–1980, we had to decide which should be included. The criterion used was the publication of at least one important work between 1936 and 1980; that is to

say a book or an article which constituted a major contribution to theory, analysis or an important debate in the field of economics. Thus are excluded teachers who played a crucial role in training generations of students, authors who published very successful works of popularization, and the political and public figures who contributed to economic thought and action. Problems arise in the case of specialists in adjacent areas overlapping the field of economics, such as demographers, sociologists, historians, anthropologists or philosophers, for example Fernand Braudel, Karl Polanyi or Alfred Sauvy. We chose not to open this door, for fear that we might not be able to close it.

Our choices reflect the localization of the profession at the present time. At one time or other Spanish, Italian, French and English, political economy has now become in large part American, so it is reasonable that American economists should be amply represented in our selection. Nonetheless, more than a third of those American economists are of foreign origin, coming in particular from Eastern Europe. Many contemporary economists fled totalitarianism in Germany or the Soviet Union, which led to an impoverishment of economic thought in the countries concerned. After the United States, Western Europe is best represented and, at the forefront, Great Britain, which continued to play a dominant role at the beginning of the period that concerns us. Clearly we will have forgotten some of our eminent colleagues. That is inevitable in such an undertaking as the present work.

### Questions of method

The history of thought is an undertaking both complex and riddled with difficulties. Can one judge past works in the light of present truth? Should one emphasize the coherence of schools and currents of thought, or focus on the works of authors? Should we try to understand why an author produced a particular work by reconstructing its historical genesis, or rather should we evaluate its logical and rational coherence? Should this coherence be evaluated on the basis of world views prevalent at the moment of its production, or of theories accepted at the present time? This issue is linked to essential questions concerning the relationships between the psychological bases of individual creation and the evolution of ideas, and those between this evolution and history, which have haunted philosophical thought since its beginnings.

The problems are certainly aggravated in the area of economic thought by the nature of the subject, concerned with money, power and conflicts between individuals and social groups. This is a question of the relationship between theory and politics, sometimes a question of violence and war. Therefore, it is not surprising that, from its beginnings, political economy should have been an area of intense debate, in which rational discussion often turns to fierce fighting. We do not claim to have surmounted these difficulties or to have escaped the effects of our own intellectual positions, but we tried to minimize their influence by adopting certain guiding principles. First, we refused to judge the material in the light of any orthodoxy. Then we used a combination of the history of thought and the history of ideas, best expressed by the German term *Geistesgeschichte*, 'history of the spirit'.<sup>6</sup> We tried to identify the central questions and logical coherence of the theoretical landscape throughout the various periods studied.

We were careful to present the authors studied in their specificity and to situate them relative to the main axes and lines of development of economic thought, which led us to adopt the method of ‘historical reconstruction’. This led us to observe how the multiple classifications and taxonomies used in the contemporary period are fragile, uncertain and open to debate. It is exceptional for an author to identify himself strictly and unequivocally with one school of thought.

### **Semantic questions**

One difficulty we encountered in writing this book was a semantic one. The words required to speak about contemporary economic thought are used in diverse ways, to such an extent that confusion often reigns supreme in discussion. Such is the case, for example, with the term ‘Keynesian’, which is used in at least three very different ways: to describe the work and thought of Keynes, to characterize that which refers to the central corpus of the Keynesian revolution and (most frequently, by political scientists, sociologists and other analysts, as well as by economists) to refer to every theoretical development, every economic policy or measure, bearing even a very weak relationship to this or that contribution of Keynes or of the Keynesian revolution. But, as we will show, Keynes’s work has been interpreted very diversely, and the Keynesian revolution covers multiple, sometimes disparate, ideas.

The same difficulties emerge with the term ‘neoclassical’. For some, it is associated with the marginalist revolution, seen by its authors as breaking with classical thought; but the term was coined, on the contrary, to mark the continuity between classical thought and the marginalist revolution. More generally, ‘neoclassical theory’ is a vast, eclectic corpus containing the theory of price determination by supply and demand, the quantity theory of money, and Say’s Law. Keynes attacked the last two elements, which he described as ‘classical’. Also described as the ‘neoclassical synthesis’ was the reconciliation between the marginalist microeconomic tradition and Keynesian macroeconomics. For some, the term neoclassical is used as a ‘catch-all’ reflecting all that is more liberal than interventionist, which leads, for example, to the inclusion of such authors as Friedrich Hayek, who rejects several of the basic assumptions of neoclassical theory. For others, it implies particular assumptions such as the rationality of agents and market equilibrium. In the latter sense, the Walrasian general equilibrium model, perfected by Arrow and Debreu, constitutes the quintessence of the neoclassical approach; but Walras, no more than Arrow or Debreu, never claimed to draw from the model any political conclusion justifying liberalism rather than interventionism. The term ‘liberal’ itself takes different meanings, often being used in the sense of interventionist in the United States, contrary to the European tradition where liberal is opposed to social-democrat. Keynes is himself sometimes described as a social liberal, or as a liberal socialist.

In the following pages we take into account the different uses that various authors make of these words, and the manner in which they describe themselves or in which they are described by their peers, their critics and historians of thought. When an expression is crucial, we seek to determine a precise meaning and to specify, whenever possible, how it

is used: in the current meaning, the sense in which the authors considered used it, or in the precise sense which we will have defined.

### Bibliographies

Bibliographical details obviously constitute an essential element of this work. It was our aim to create a useful tool and we tried to be coherent, clear and as complete as possible, without claiming to be exhaustive. At the end of the book we provide a bibliography of the main works of reference, dictionaries, encyclopaedias, textbooks, monographs and main issues of journals devoted to the period studied, in its entirety or on some special topic. Also, for each author treated in the dictionary, there is a bibliographical selection of his main books and articles and a selection of relevant publications about him. Among the latter, some are given with complete references and others in abbreviated form directing the reader to a reference work mentioned in the final bibliography. When the author has published an autobiographical work, we mention it in this section with an abridged reference. When the author has received the Nobel Memorial Prize in Economics, we cite the issue of the *Swedish* (from 1976 *Scandinavian*) *Journal of Economics* containing the jury's proclamation, one or more articles concerning him, and a bibliography.

Other works and articles of lesser importance or by authors not featured in the dictionary are cited only at the point in the text where we mention them, with complete references. For yet others, cited in the text, we give just the name of the author and date of publication.<sup>7</sup> The complete reference may be found either by turning to the bibliography of the author or by consulting the bibliography at the end of the book.

### Acknowledgements

We thank the Social Science and Humanities Research Council of Canada, the Programme d'aide financière aux chercheurs et créateurs (PAFACC) of Université du Québec à Montréal and the Comité d'aide à la publication of Université du Québec à Montréal for financial support which helped us to carry out our work and made the publication of this book possible. A grant from the PAFACC covered part of the cost of translating our manuscript from French to English.

We are grateful to the Royal Economic Society, Macmillan and Cambridge University Press for permission to quote from *The Collected Writings of John Maynard Keynes*, edited by Austin Robinson and Donald Moggridge, and Keynes's *The General Theory of Employment, Interest and Money*; to the Econometric Society for permission to reprint a graph published in the February 1937 issue of *Econometrica*; to Basil Blackwell for permission to reproduce two tables published by *Economica*. We thank Professor Paul A. Samuelson who kindly granted us the permission to reproduce a figure from his *Economics*, and Professors Samuelson and Robert Solow for permission to reproduce a figure from their *American Economic Review* (1960) paper.

Many authors provided us with biographical and bibliographical information which

was very useful to us. Some of them pointed out mistakes in the French version of this book. For their collaboration we thank Irma Adelman, Armen Alchian, Maurice Allais, Samir Amin, Kenneth Arrow, Athanasios Asimakopulos, Joe S.Bain, Bela Balassa, Alain Barrère, Robert Barro, William Baumol, Gary Becker, Abram Bergson, Charles Bettelheim, Mark Blaug, Marcel Boiteux, Kenneth Boulding, Sam Bowles, Andras Brody, Martin Bronfenbrenner, Suzanne de Brunhoff, James Buchanan, Hollis B.Chenery, Robert Clower, Ronald Coase, Paul Davidson, Gérard Debreu, Harold Demsetz, Edward F.Denison, Evsey Domar, Anthony Downs, John Eatwell, Robert Eisner, Robert Fogel, André Gunder Frank, Milton Friedman, Celso Furtado, John Kenneth Galbraith, Pierangelo Garegnani, Nicholas Georgescu-Roegen, Richard M.Goodwin, Claude Gruson, Trygve Haavelmo, Gottfried Haberler, Frank Hahn, Geoffrey Harcourt, Friedrich A.Hayek, Robert Charles Kindleberger, Lawrence Klein, Janos Kornai, Jan Kregel, Harvey Heilbroner, Albert Hirschman, Terence Hutchison, Walter Isard, Dale Jorgenson, Leibenstein, Axel Leijonhufvud, Wassily Leontief, William Arthur Lēwis, Richard Lipsey, Ian M.Little, Robert Lucas, Edmond Malinvaud, Ernest Mandel, Thomas Mayer, Donald McCloskey, James Meade, Jacob Mincer, Hyman P. Minsky, Franco Modigliani, Michio Morishima, Douglass C.North, Alec Nove, Luigi Pasinetti, Don Patinkin, Edmund Phelps, Henry Phelps Brown, Richard A.Posner, Walt Rostow, Paul A.Samuelson, Thomas Sargent, Anna Schwartz, Tibor Scitovsky, Amartya Sen, Herbert Simon, Hans Singer, Robert Solow, Michael A.Spence, George Stigler, Joseph Stiglitz, Paul M.Sweezy, Lorie Tarshis, James Tobin, Robert Triffin, Shigeto Tsuru, Gordon Tullock, Jaroslav Vanek, Raymond Vernon, Oliver E.Williamson and Arnold Zellner.

We thank those who read, either wholly or in part, our manuscript in its several stages of preparation, who suggested corrections or offered advice as to how to bring the whole effort to fruition: Edmond Blanc, Mark Blaug, Gilles Bourque, Marielle Cauchy, Antoine del Busso, Edward Elgar, Robert Leonard and Robin Rowley. We are obviously solely responsible for the final product. At the final stage of the preparation of the manuscript, we benefited from the research assistance of Ianik Marcil, and we thank him for his efficient work. We also thank Isabelle Bruston and François Plourde for their assistance in the first stages of our research. Valérie Cauchemez carried out the major part of the translation of this book, the French version of which was published as *La Pensée économique depuis Keynes: historique et dictionnaire des principaux auteurs* by Les Éditions du Seuil (Paris, 1993). Eric Litwack translated 60 dictionary entries. Marielle Cauchy and Marguerite Mendell also translated some entries. We are very grateful to Venant Cauchy, Robert Leonard and Robin Rowley, who extensively revised the translation. We would finally like to thank Julie Leppard and the staff of Edward Elgar Publishing for the courteous efficiency with which they helped bring the manuscript to publication. The preparation of the English version of this work was supervised by Gilles Dostaler.

## Notes

1. Some estimate that this period's production represents 14 times the stock of existing works in economics in 1936. See G.Stigler, 'The Literature of Economics: The Case of the Kinked Oligopoly Demand Curve', *Economic Inquiry*, vol. 16, 1978, 185–204.
2. See the Bibliography at the end of the book.
3. We use here and throughout the term 'liberal' in its traditional, European sense of partisan of laissez-faire, instead of its usual American sense of partisan of state intervention.
4. When there is an entry on the author in the dictionary, the corresponding pages are printed in bold characters.
5. Obviously, in the historical section, it was, at various points, necessary for us to recall previous developments.
6. See M.Blaug, 'On the Historiography of Economics', *Journal of the History of Economic Thought*, vol. 12, 1990, 27–37. Adopting the categories proposed by Richard Rorty ('The Historiography of Philosophy: Four Genres', in *Philosophy in History: Essays on the Historiography of Philosophy*, edited by R.Rorty, J.B.Schneewind and Q.Skinner, Cambridge, England, Cambridge University Press, 1984, 49–75), Blaug distinguishes four reconstruction, rational reconstruction and doxography. *Geistesgeschichte* seeks to identify characteristic approaches to the history of economic thought: *Geistesgeschichte*, historical the central questions posed by thinkers of the past, so as to situate them in the context of their own thought worlds. Historical reconstruction seeks to take account of the thinking of these authors, in the terms in which they formulated them and in ways they would find acceptable. As for rational reconstruction, it attempts to present the ideas of authors in modern idiom, with a view to showing their errors, contributions and lacunae relative to the contemporary state of knowledge. Finally, doxography reformulates the thought of past authors with the aim of evaluating them in the light of modern orthodoxy.
7. When there is more than one publication for a given date, the latter is followed by the indication of the book's title or the journal in abridged form. When a quote is taken from a later reprint, the original date is given in square brackets before the date of the quotation's source, as for example: Hayek [1937] 1948.

PART I  
OUTLINE OF A HISTORY OF  
ECONOMIC THOUGHT  
SINCE KEYNES

## Prologue

*The General Theory of Employment, Interest and Money* by John Maynard Keynes was published in 1936, a little over a century and a half after Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations*.<sup>1</sup> In his well known book, Smith offers a synthesis of several earlier currents of thought, including French physiocracy, and this new comprehensive theoretical system constitutes the point of departure of classical political economy. Criticizing what he called mercantilism, which, dominating economic thought during the two previous centuries, advocated protectionism as well as an active intervention, as much economic as military, by the newly constituted Nation States, Adam Smith expressed the well known allegory in which the individual is 'led by an invisible hand to promote an end which was no part of his intention... By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it'.<sup>2</sup> For Smith, the 'expences of the sovereign or commonwealth'<sup>3</sup> must be limited to those necessitated by defence and justice, and to 'erecting and maintaining those public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature, that the profit could never repay the expence to any individual or small number of individuals, and which it therefore cannot be expected that any individual or small number of individuals should erect or maintain'.<sup>4</sup> Smith's work played an essential role in the development of the economic liberalism, emergent with the triumph of nineteenth-century capitalism, in an England which had become a dominant world power. Codified by David Ricardo<sup>5</sup> and John Stuart Mill,<sup>6</sup> political economy became, for the most part, an English science. But it was a French economist, Jean-Baptiste Say, who enunciated in 1803 the law of markets,<sup>7</sup> according to which, considering the neutrality of money in the economy, supply creates its own demand, and, therefore, there could be no question of having general gluts in a free market economy and thus no chance of the phenomenon which Keynes would call involuntary unemployment. Economic reality, with its regular succession of crises generating simultaneously masses of unsold commodities and misery, contradicted the theory, as was stressed by, among others, Malthus,<sup>8</sup> Sismondi<sup>9</sup> and then Marx.<sup>10</sup> Paradoxically, it was by constructing his system from Ricardian political economy that Marx, in his major work, *Capital*, attempted to give a theoretical foundation to what he believed to be the ineluctable fate of the capitalist societies, namely their transformation into socialist societies.

In the last quarter of the nineteenth century, while Marxism imposed itself on the European workers' organizations and came to dominate a socialist movement which had, of course, preceded it, political economy underwent an important transformation under what is now called the marginalist revolution. Linked to the names of Jevons,<sup>11</sup> Menger<sup>12</sup> and Walras,<sup>13</sup> it made a clean sweep of the classical, and especially Ricardian, vision of value and distribution. The new theory of prices, primarily based on the principle of decreasing marginal utility, found its development and codification in Walras's system of



general equilibrium, which subsequently dominated economic thought. There, society is perceived as a natural mechanism, similar in nature to the solar system or a biological organism, in which the interaction of free agents ensures the best allocation of resources and economic optimum.

Critical in some respects of classical theory, the marginalist revolution improved Smith's parable of the invisible hand, giving it a mathematical formulation. Its upholders remained faithful to Say's law of markets, developing under the form of Walras's law the dichotomy between real data and monetary data. The quantity theory of money, whose history goes back to at least the sixteenth century, links the general level of price to the quantity of money in circulation. The expression of neoclassical theory was soon forged to express continuity, rather than rupture, between the classical vision and that which succeeded it in the twentieth century. The *Principles of Political Economy* by Alfred Marshall (whose first edition dates back to 1890<sup>14</sup> and which would dominate the teaching of economics, at least in the English-speaking world, for several decades) symbolizes this continuity, illustrated moreover by the phrase in the epigraph on the title page: '*Natura non facit saltum*'. Economic science, which is, according to Marshall, 'of slow and continuous growth',<sup>15</sup> constitutes 'a study of mankind in the ordinary business of life'.<sup>16</sup> Born in 1842, dying in 1924, Alfred Marshall supported his economic vision with the political and ethical conceptions which characterized the Victorian era in England.

Throughout these various developments, reality never stopped contradicting the vision, shared by several classical and neoclassical economists, according to which the free play of markets is enough to ensure the full employment of resources and their optimal allocation. The economic crises succeeded one another during the entire nineteenth century and up to the great war of 1914–18. The workers' uprisings in the nineteenth century (in particular the events of 1848 and the Paris Commune of 1871), the Russian revolution in 1917, and then the workers' insurrections experienced by several European capitals as the war drew to a close seemed to confirm, for several, the vision of Marx and his disciples. The crises went on after the war. The stock market euphoria, evident in particular in the United States in the second half of the 1920s, may be compared to a maniacal upsurge, the prelude to a depressive episode which, triggered one day in October 1929, became increasingly severe. The entire world was then ravaged by the Great Depression, which manifested itself in plummeting economic activity, rising unemployment and the broadening of poverty and misery. For some, especially in the labour movement in Europe, the USSR appeared to be a country bearing immense hope: the construction of socialism was under way. For others, nationalism, isolationism or national expansion constituted the principal factors of cohesion and strength. Developing, in particular, the second of these in the form of rearmament, the assertion of national greatness and military expansion, Hitler made National Socialism triumph in Germany.

The world of economists was affected in several ways by this situation. First, the crisis deeply marked the consciences and the lives of those born at the beginning of the century. Numerous were those who, enrolled in courses in literature, law or mathematics, became economists in an attempt to understand the causes of the ills they observed around them, and to look for solutions to contribute towards fighting them. Then, at the beginning of the 1930s, many economists (as did so many intellectuals and artists, especially Jews) left

Hitler's Germany and the European countries where his ideas flourished. This migration followed that which occurred from the USSR, after the October revolution; it would be prolonged by that from the countries of Eastern Europe after the Yalta agreements. Western Europe often ensured the first reception, but it was almost always the United States which ultimately received these emigrants. Grants, subsidies and support from diverse institutions helped cope with the more urgent cases; then, very rapidly, positions were offered in universities, research institutes and, from the beginning of the Second World War, in administration and in bodies devoted to military activity. Finally, the crisis accentuated the uneasiness in economic theory by stirring up the debate which brought into opposition those who believed that a market economy had at its disposal the mechanisms necessary to adjust automatically to exogenous shocks and those, descended from very diverse currents of thought, who believed on the contrary that liberal capitalism was suffering from serious illnesses, that it had to be overturned or profoundly transformed, or that, at least, an active and even massive intervention by public authorities was necessary in order to avoid its collapse, and to ease the sufferings of those who were the casualties of growth.

Well before the publication, in 1936, of *The General Theory* by Keynes, a very broad range of critiques and counter-positions was heard, defying the liberal orthodoxy, which came down, in several cases, to advocating monetary rigour and price flexibility, particularly that of wages, as the only means to boost employment. Often of pragmatic inspiration, with both national and social concerns, these critiques and counter-positions put forward the ideas of large public projects and employment programmes, of anticyclical budgets; one immediately thinks of Schacht in Germany, the proposals of the founders of the Stockholm School<sup>17</sup> which inspired the Swedish Social Democratic politicians, the ideas of the English Fabian socialists, the work of Frisch in Norway on economies depressed by a lack of effective demand, that of Tinbergen in Holland which defined the basis of a full employment policy, of the research in France of the 'X-crise' group, and the great debate which arose in the United States during the 1930s.<sup>18</sup>

In this context, *The General Theory* constituted a crucial contribution. Indeed, on the double basis of its author's reputation and of a text of great intellectual ambition, it appeared as both a critique of classical thought, which for Keynes included neoclassical thought, and a new theoretical construction attacking (itself in the name of political liberalism) the liberal economists' dogmatism, justifying active economic policies and suggesting some essential levers for action. And it is not diminishing its merit to note that, for example, with the package of new policies called the New Deal, President Roosevelt of the United States, elected on 8 November 1932, at the height of the Depression, and assuming office on 4 March 1933, had largely opened the way for those modern economic policies which would, later on, often be labelled Keynesian.<sup>19</sup> In this general movement, the publication of *The General Theory* played a major role. This is why we devote to it the first chapter of this text.

## Notes

1. London, W. Straham and T. Cadell, 1776.
2. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Homewood, Illinois, Richard D. Irwin, 1963, vol. 2, p. 23.
3. *Ibid.*, p. 215.
4. *Ibid.*, p. 239.
5. *On the Principles of Political Economy and Taxation*, London, John Murray, 1817.
6. *Principles of Political Economy, with Some of their Applications to Social Philosophy*, London, John W. Parker, 1848.
7. *Traité d'économie politique*, Paris, Deterville, 1803; Engl. transl., *Treatise on Political Economy*, Philadelphia, Claxton, Remsen and Haggelsinder, 1880.
8. *Principles of Political Economy: Considered with a View to Their Practical Application*, London, John Murray, 1820.
9. *Nouveaux principes d'économie politique ou De la richesse dans ses rapports avec la population*, Paris, Delaunay, 1819.
10. *Das Kapital: Kritik der politischen Ökonomie*, Hamburg, Otto Meissner, vol. 1, 1867, vol. 2, 1885, vol. 3, 1894; Engl. transl., *Capital: A Critique of Political Economy*, Chicago, Charles H. Kerr, 1887, 1907, 1909.
11. *The Theory of Political Economy*, London, Macmillan, 1871.
12. *Grundsätze der Volkswirtschaftslehre*, Vienna, Wilhelm Braumüller, 1871; Engl. transl., *Principles of Economics*, Glencoe, Illinois, Free Press, 1950.
13. *Éléments d'économie politique pure ou théorie de la richesse sociale*, Lausanne, Imprimerie L. Corbaz, 1874–7; Engl. transl., *Elements of Pure Economics or the Theory of Social Wealth*, Homewood, Illinois, Richard D. Irwin; London, Allen & Unwin, 1954.
14. *Principles of Economics: An Introductory Volume*, London, Macmillan; 8th edn, 1920.
15. *Ibid.*, p. v.
16. *Ibid.*, p. 1.
17. See below, Chapter 2.
18. See below, Chapter 3.
19. Keynes, who met President Roosevelt in 1934, had written an 'Open Letter to the President', published in the *New York Times* on 31 December 1933: 'You have made yourself the trustee for those in every country who seek to mend the evils of our condition by reasoned experiment within the framework of the existing social system. If you fail, rational change will be gravely prejudiced throughout the world, leaving orthodoxy and revolution to fight it out. But if you succeed, new and bolder methods will be tried everywhere, and we may date the first chapter of a new economic era from your accession to office' (*The Collected Writings of John Maynard Keynes*, edited by Sir Austin Robinson and Donald Moggridge, London, Macmillan and New York, Cambridge University Press, for the Royal Economic Society, vol. XXI, p. 289; hereafter we will refer to this edition of Keynes's works, published in 30 volumes between 1971 and 1989, as *JMK*, followed by the volume's

number).

# Keynes and *The General Theory of Employment, Interest and Money*

## From ethics to politics

John Maynard Keynes was born in Cambridge on 5 June 1883.<sup>1</sup> His father, John Neville, was an academic there and taught logic and political economy. He was also the author of one of the first books devoted to the methodology of economics, a volume which remains an important reference and a useful synthesis. By trying to define a median path between political economy conceived as a ‘positive, abstract and deductive science’ and his own vision based on an ‘ethical, realistic, and inductive method’,<sup>2</sup> John Neville Keynes expressed the distinction between positive and normative science, in terms still referred to by Milton Friedman at the beginning of his well known text on ‘The Methodology of Positive Economics’ (Friedman 1953). He was a conservative, adhering, like his friend Alfred Marshall, to the ideals of Victorian England.<sup>3</sup> John Maynard, who early revealed exceptional intellectual faculties, soon departed from these ideals, especially under the intellectual influence of the milieu in which he was educated: first Eton (1897–1902) and then Cambridge (1902–6).

In February 1903, Keynes was admitted, at the suggestion of Lytton Strachey and Leonard Woolf, to the Cambridge Conversazione Society, also known as the Apostles, a secret society founded in 1820, devoted, in the words of one of its well known members, Henry Sidgwick, to ‘the pursuit of truth with absolute devotion and unreserve by a group of intimate friends’.<sup>4</sup> The Apostles included the philosopher George Edward Moore, who in the autumn of 1903 published his *Principia Ethica*, a book which had a deep and lasting influence on Keynes. The ethical conceptions and the political philosophy which would remain with Keynes until the end of his life took shape at this time, as revealed for example by ‘My Early Beliefs’, a paper read by Keynes to his friends at the Bloomsbury Memoir Club in 1938 and published post-humously, according to his wishes, in 1949 (*JMK*, X, 433–50).<sup>5</sup> In this memoir, Keynes writes that Moore’s philosophy helped him to escape from the Benthamite tradition and from Victorian morality, while contributing ‘to protect the whole lot of us from the final *reductio ad absurdum* of Benthamism known as Marxism’ (ibid., p. 446). For Keynes and his friends, who proclaimed themselves to be nonconformists and even ‘immoralists’,<sup>6</sup> the pursuit of beauty and truth, and the relationships of friendship and love, constituted the ultimate goals of human existence. Political and economic organization, Keynes always believed, should be subordinate to these ends: aims which technical progress appeared to have rendered accessible to the greater part of society, for the first time in the history of humanity.<sup>7</sup>

The convictions acquired at Eton and Cambridge would subsequently strengthen in the Bloomsbury group,<sup>8</sup> an informal community with which Keynes would remain closely

associated until the end of his life. In a certain sense, Keynes always led a double life, the private and artistic dimension being associated with Bloomsbury and the public one linked to his activities as an economist and political adviser. Consisting of artists and writers, the Bloomsbury group played an important part in the transformation of the Victorian world view. This revolution was reflected in the challenges to prevailing thinking launched by Roger Fry, Virginia Woolf and Lytton Strachey in the areas of art criticism, the novel and biography, and by Keynes himself in the area of economics. All shared the conviction that deterministic logic had little to do with human action, propelled as it was for the most part by irrational motives. Freud's influence was also then making itself felt, and his work was translated and published by Lytton Strachey's brother, James. This Keynes himself read attentively and referred to on several occasions, particularly in his criticism of the gold standard system, a fundamental element of Great Britain's economic and monetary dominance during the nineteenth century.<sup>9</sup> More generally, it was a condemnation of enrichment seen as an end unto itself, the 'chrematistics' condemned by Aristotle that was, ironically, penned by a man who would later acquire considerable wealth through speculation. About 'love of money as a possession—as distinguished from the love of money as a means to the enjoyments and realities of life' Keynes indeed claimed it was 'one of those semi-criminal, semi-pathological propensities which one hands over with a shudder to the specialists in mental disease' (*JMK*, IX, p. 329).<sup>10</sup>

From the beginning of his career, Keynes engaged in intense reflection on the bases of human action and, in particular, on its links with imperfect and uncertain knowledge. For two years from 1906, his reflections centred upon the preparation of a dissertation on the foundations of probability, written while working as a civil servant in the India Office. This work earned him in 1909 a fellowship at King's College, where he began his academic career. Until 1911, a great part of Keynes's time was devoted to revising this dissertation, which was finally published in 1921 with the title *A Treatise on Probability* (*JMK*, VIII). In this book, which is an important contribution to the analysis of the logical foundations of the theory of probability, Keynes appeals to an intellectual tradition which, beginning with Leibniz and Pascal, passes through Locke, Berkeley and Hume to W.E. Johnson, Moore and Bertrand Russell. In one section, dealing with 'some philosophical applications of probability', he further elaborates upon his scepticism towards Benthamite utilitarianism, claiming that the theory of mathematical expectation, developed for the study of games, was not suitable in the field of probability as applied to human conduct. The degrees of probability were not subject to the laws of arithmetic:

The hope, which sustained many investigators in the course of the nineteenth century, of gradually bringing the moral sciences under the sway of mathematical reasoning, steadily recedes—if we mean, as they meant, by mathematics the introduction of precise numerical method.... I, at any rate, have not the same lively hope as Concorcet, or even as Edgeworth, 'éclairer les Sciences morales et politiques par le flambeau de l'algèbre'. (*JMK*, VIII, p. 349; quotation in French in the original)

Keynes was 30 years old when the First World War broke out. Hired by the British

Treasury, he became an important figure in the negotiations which marked the end of that war. Disagreeing with the nature of the reparations imposed on Germany as part of the Treaty of Versailles, he resigned from the British delegation and wrote *The Economic Consequences of the Peace*<sup>11</sup> in three months. Rapidly translated into several languages, this book achieved great success and instantaneously won international notoriety for its author. Bearing witness to the end of an era, Keynes's report sketched the outline for a new liberalism, of which he would thereafter become a tireless advocate, both as a member of the English Liberal Party and through other activities.<sup>12</sup> In a 1926 pamphlet entitled *The End of Laissez-Faire*,<sup>13</sup> originating in lectures given in Oxford in 1924 and in Berlin in 1926, Keynes strongly denounced what he called elsewhere the 'principle of diffusion' (*JMK*, XIX, p. 440), the belief in the myth of the automatic adjustment of prices and quantities: 'It is *not* a correct deduction from the principles of economics that enlightened self-interest always operates in the public interest' (*JMK*, IX, p. 288).

Hence Keynes did not believe in Adam Smith's parable of the invisible He rejected this vision not only because it was based on an intellectual hand, and even less in the mathematical formalization of it given by Walras. mistake, but also because it constituted a dangerous illusion when it informed one's political vision. Indeed, the inaction it implied regarding the economic problems of the times entailed the risk of a collapse of the system, which could give rise to Bolshevism or Fascism. Although sympathetic towards certain ideals expressed by the Russian Revolution, and particularly its attempt to displace the goal of enrichment as life's primary aim, Keynes was nonetheless very critical of totalitarianism, and especially opposed to the sometimes violent methods of radical transformation advocated by some of its supporters.<sup>14</sup> He thus felt a most profound repugnance for the systems established in Mussolini's Italy or Hitler's Germany. Besides, the rise of Nazism could be linked to the worsening of economic difficulties, which itself was one of the consequences of the Treaty condemned by Keynes in *The Economic Consequences of the Peace*.

For Keynes, 'the political problem of mankind is to combine three things: economic efficiency, social justice, and individual liberty' (*JMK*, IX, p. 311). Only thorough reforms would allow the accomplishment of these objectives. The pursuit of conservative policies, based on the illusion of laissez-faire, constituted the seedbed of revolution. Keynes's bitter struggle against the return of the gold standard to prewar parity in Great Britain well illustrated this preoccupation.<sup>15</sup> After this decision was announced by Churchill in April 1925, Keynes wrote *The Economic Consequences of Mr Churchill*,<sup>16</sup> a virulent pamphlet against classical liberalism.<sup>17</sup> The coal miners' strike and the general strike of May 1926 were some of these consequences.

It was largely in the 1920s that Keynes developed the collection of propositions later called Keynesian policies in a form which, furthermore, was more radical than the form that would prevail after the war (insisting, for example, on the importance of public investment). A presentation of these policies can be found in a document published by the English Liberal Party in 1928, entitled *Britain's Industrial Future*, to which Keynes was one of the principal contributors. These ideas were elaborated during the electoral campaign of 1929 in *We Can Conquer Unemployment* and in a pamphlet that Keynes wrote with Hubert Henderson, *Can Lloyd George Do It?* (*JMK*, IX, 86–125). Recommending a substantial programme of public spending to fight unemployment,

Keynes and Henderson led a vigorous attack against the policy of inaction of the Conservatives in power. The Liberal Party sustained a painful setback in this election that swept the Labour Party to power. In November 1929, the new government named Keynes as a member of the Committee on Finance and Industry (the Macmillan Committee) that was set up by the Chancellor of the Exchequer to study the economic situation. There, Keynes continued his crusade in favour of active state intervention in the economy, as he did as a member of an Economic Advisory Council set up to advise the government in 1930.

### Assault on the citadel

The problem Keynes had to confront was that his economic analysis, based in part on an orthodox tradition which he had helped develop in his early writings, lagged behind his own political vision. Between the propositions of reform suggested in *Can Lloyd George Do It?* and the analysis developed in *A Treatise on Money*, published in 1930 (*JMK*, V and VI) there was a distance that led Keynes to begin, as soon as the book was published, a thorough reappraisal of his economic conceptions. This would result, six years later, in *The General Theory*, whose objective he described in a letter to his friend George Bernard Shaw, who was more sympathetic than Keynes towards both the Labour Party and Marxism:

To understand *my* state of mind, however, you have to know that I believe myself to be writing a book on economic theory which will largely revolutionise—not, I suppose, at once but in the course of the next ten years—the way the world thinks about economic problems. When my new theory has been duly assimilated and mixed with politics and feelings and passions, I can't predict what the final upshot will be in its effect on action and affairs. But there will be a great change, and, in particular, the Ricardian foundations of Marxism will be knocked away.

I can't expect you, or anyone else, to believe this at the present stage. But for myself I don't merely hope what I say, in my own mind I'm quite sure. (Keynes, letter to George Bernard Shaw, 1 January 1935, *JMK*, XIII, pp. 492–3)

The elaboration of this new theory constituted a long and complex process, as one can note by reading the documents in the thirteenth volume of Keynes's *Collected Writings*.<sup>18</sup> Keynes described this process to Roy Harrod, who received the proofs of *The General Theory* and with whom Keynes corresponded regularly during the elaboration of his work:

I have been much pre-occupied with the causation, so to speak, of my own progress of mind from the classical position to my present views,—with the order in which the problem developed in my mind. What some people treat as an unnecessarily controversial tone is really due to the importance in my own mind of what I used to believe, and of the moments of transitions which were for me personally moments of illumination. You don't feel the weight of the



past as I do. One cannot shake off a pack one has never properly worn.... The portholes of light seen in escaping from a tunnel are interesting neither to those who mean to stay there nor to those who have never been there! (Keynes, letter to R.F.Harrod, 30 August 1936, in *JMK*, XIV, pp. 84–5)

Keynes's words illustrate well the process which, beginning with *Indian Currency and Finance* (1913; *JMK*, I), passing through *A Tract on Monetary Reform* (1923; *JMK*, IV) and *A Treatise on Money* (1930; *JMK*, V and VI), leads to *The General Theory* (1936, *JMK*, VII) and the articles succeeding it. Keynes began his career as an economist under Marshall's guidance as a 'classical' economist. Indeed, in *The General Theory*, he claims to include not only Ricardo and his immediate successors in the classical school, but also 'those, that it so say, who adopted and perfected the theory of the Ricardian economics, including (for example) J.S.Mill, Marshall, Edgeworth and Prof. Pigou'.<sup>19</sup> In doing this, Keynes chose to differ from a tradition which held there to be a rupture between the classical school, ending with Mill, and the neoclassical school, beginning with Jevons, Menger and Walras. But obviously, as far as Keynes was concerned, there was a continuity between these authors. In particular, they unanimously accepted Say's Law, the determination of investment by saving, the dichotomy between monetary and real sectors, and the quantity theory of money.

These are precisely the conceptions from which Keynes gradually freed himself in order to develop the analysis revealed in *The General Theory*. This process of liberation, which appears to have been difficult, was at its most intense between 1932 and 1934. Keynes understood his task as the destruction of a citadel, a task made even more difficult by the fact that the demolition had to be done from within. It was on the occasion of a radio broadcast in 1934, later published, that he expressed himself most clearly on the subject.<sup>20</sup> Here he distinguished among economists two groups, between which the gulf was greater than was typically assumed. The first group, in the majority by and large, included those who 'believe that it [the existing economic system] has an inherent tendency towards self-adjustment, if it is not interfered with and if the action of change and chance is not too rapid' (*JMK*, XIII, p. 487). Keynes described this as the orthodox view, according to which there could not be any general overproduction or involuntary unemployment. The orthodox theory was thus unable to explain the most significant contemporary economic problems: unemployment and business cycles. Keynes added that the essential elements of orthodoxy were accepted by the Marxists in such a way that the laissez-faire school and Marxism had to be considered the twin offspring of Say and Ricardo. They were in the same citadel. On the other side of the gulf were 'those who reject the idea that the existing economic system is, in any significant sense, self-adjusting. They believe that the failure of effective demand to reach the full potentialities of supply, in spite of human psychological demand being immensely far from satisfied for the vast majority of individuals, is due to much more fundamental causes' (*JMK*, XIII, p. 487). These economists had diverse opinions as to these causes. Keynes called them heretics and stressed the fact that there was a long line of heretics in the history of economic thought. But, since the eighteenth century, the dominant orthodoxy was Ricardianism, which had the support of the economic elite and, in turn, upheld established economic interests.

Keynes regarded himself as one of the heretics: 'Now I range myself with the heretics' (ibid., p. 489). His problem, however, came from the fact that he had been raised in the citadel whose strength and power he recognized. His evolution, since the beginning of his career as an economist, consisted of gradually extricating himself from the influence of orthodoxy, and successively discovering its shortcomings. This long effort did not result in a perfect achievement in *The General Theory*, because the rupture with the classical and orthodox tradition involved maintaining a number of elements of this theory. Undoubtedly, Keynes was aware of this himself: as soon as his book was published, he began considering a revision of his theory, as he did with *A Treatise on Money*. In the preface to the French translation of *The General Theory* he wrote:

For a hundred years or longer English Political Economy has been dominated by an orthodoxy.... In that orthodoxy, in that continuous transition, I was brought up. I learned it, I taught it, I wrote it. To those looking from outside I probably still belong to it. Subsequent historians of doctrine will regard this book as in essentially the same tradition. But I myself in writing it, and in other recent work which has led up to it, I felt myself to be breaking away from this orthodoxy, to be in strong reaction against it, to be escaping from something, to be gaining an emancipation. (*JMK*, VII, p. xxxi)

### **Breaking away**

The points of rupture with orthodoxy, the cracks in the citadel, are the elements of Keynes's vision which cannot be reconciled with the classical view. They are not necessarily explicitly formulated in *The General Theory*, for which, nonetheless, they constitute the keys to interpretation. It is often in later articles, in particular the answer to his critics entitled 'The General Theory of Employment',<sup>21</sup> that Keynes is most clear on the subject.

The first fissure concerns method. Several critics, underlining the difficulties of interpretation involved in Keynes's book, blame its author for not using a mathematical language that perhaps he had not mastered. Others go further and describe him as a less than meticulous theoretician, more inclined towards intuition than rigour. It is obvious that Keynes granted intuition an important role in the process of economic analysis. On several occasions he also wrote that the economist should be endowed with good sense, and base his analysis on a thorough knowledge of real processes as well as institutions. Such was precisely his own case. Among economic theorists, Keynes was one of those who had the most concrete knowledge of the matters with which he dealt. When he describes speculation or the evolution of the price of raw materials or currencies, he deals with a subject he knows at first hand. The fact that from the beginning of his career he met decision makers in all fields, whether it be in politics, trades unions, banking or business, led him to describe what he himself knew. And Keynes considered that economic theory should describe reality. He criticized classical theory not for its lack of rigour, but for the fact that 'the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live' (*GT*, p.

3), the classical economists being ‘as Candides, who, having left this world for the cultivation of their gardens, teach that all is for the best in the best of all possible worlds provided we will let well alone... It may well be that the classical theory represents the way in which we should like our Economy to behave’ (*GT*, pp. 33–4). It is thus clear that Keynes could not view economic theory as a general theory of optimization, the way Robbins or Samuelson did, nor accept Friedman’s thesis, widely accepted by today’s economists, concerning the unimportance of the realism of hypotheses.

As to the use of mathematics, it is certainly hazardous to make the hypothesis that the author of *A Treatise on Probability* lacked competence. Moreover, it is in the light of this book that one can understand Keynes’s deliberate will not to use mathematical formalization in *The General Theory*, and his negative reaction to Tinbergen’s attempt to make a statistical testing of business cycle theories.<sup>22</sup> In his *Treatise on Probability*, Keynes explained the reasons why, according to him, social sciences could not be dealt with using the same quantitative methods used for natural sciences. In this book, he deals with the ‘atomic’ character of natural law, to which is opposed an approach labelled ‘organic’ (*JMK*, VIII, pp. 276–8).<sup>23</sup>

Following a tradition dating back to Aristotle and the Scholastics and which was reaffirmed by Sidgwick, Marshall and his own father John Neville Keynes, Keynes considered economics a moral science. On 4 July 1938, he wrote to Harrod that ‘economics is essentially a moral science and not a natural science. That is to say, it employs introspection and judgments of value’ (*JMK*, XIV, p. 297). In his criticism of Tinbergen, and referring explicitly to his *Treatise on Probability*, Keynes showed his scepticism as to the use of statistics in a field, that of business cycles, in which time and uncertainty play such an important role. Tinbergen’s method, Keynes suggests, supposes that all factors are measurable, which renders it inapplicable for ‘all those economic problems where political, social and psychological factors, including such things as government policy, the progress of invention and the state of expectation, may be significant. In particular, it is inapplicable to the problem of the business cycle’ (*JMK*, XIV, p. 309). Thus, for Keynes, economics is not a mathematical science closed unto itself. It must open up to other disciplines. Nonetheless, the statistical modelling that Keynes rejected would later develop on the basis provided by his theory. More generally, contemporary economics has developed in a direction entirely different from the one envisaged by Keynes.<sup>24</sup>

The role of time in the analysis might be regarded as a second point of rupture. For his disciple and colleague, Joan Robinson, it is the main break with orthodoxy: ‘Thirdly, Keynes brought back *time* into economic theory. He woke the Sleeping Princess from the long oblivion to which “equilibrium” and “perfect foresight” had condemned her and led her out into the world here and just any time. It is historic and irreversible time which is opposed to the logical now’ (Robinson 1962 *Economic Philosophy*, p. 73). But this is not a matter of time of general equilibrium models and neoclassical theory.

However, it is from the Marshallian tradition that Keynes borrowed the distinction between short run and long run, although he gives it a direction and meaning different from those found in Marshall’s analysis. It is in *A Tract on Monetary Reform* of Keynes that can be found the oft-quoted passage according to which ‘*In the long run we are all dead.*’ This is not a jest. This sentence was pronounced on the occasion of an analysis of

the quantity theory of money, which Keynes accepted at the time but later rejected in *The General Theory*. By 1923, this acceptance was already much qualified. Indeed, it is only in the long run that this theory is valid, which eventually renders it useless to understand current problems: ‘But this *long run* is a misleading guide to current affairs. *In the long run* we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again’ (*JMK*, III, p. 65). It was precisely during a turbulent period that Keynes elaborated *The General Theory*. In the short run, in which he places his analysis, there is a past gone by, which constitutes a point of departure and which is indicated, in particular, by a stock and composition of capital, inventories, labour with its diverse qualifications, income distribution, and also political and social institutions, diverse events, moods and values. There is also an unknown future. The treatment of expectations in the context of uncertainty is one of the major elements of Keynes’s rupture with orthodoxy. It seemed to be in Keynes’s mind since it was his principal theme in his article in the February 1937 issue of the *Quarterly Journal of Economics*. For Keynes, uncertain and more or less probable should not be confused. A number, the expression of a probability, cannot be assigned to a future event. Uncertainty cannot be calculated. In economics there is no scientific basis on which a mathematical probability could be established. Such is one of the principal faults of the theory he combats: ‘I accuse the classical economic theory of being itself one of these pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future’ (*JMK*, XIV, p. 115).

To the perception of time and uncertainty is closely linked a conception of money, by means of which Keynes, once more, dissociates himself from orthodoxy. The orthodox conception distinguishes a real sector in which relative prices are set, and a monetary sector in which the general level of price is determined according to the mechanism of the quantity theory of money. The abandonment of this theory by Keynes runs parallel with that of Say’s Law. The words ‘money’ or ‘monetary’ are mentioned in the titles of all of his main theoretical books. The path to *The General Theory* consists of integrating the real and the monetary. In a text published in 1933, Keynes explains himself clearly.<sup>25</sup> In it he announces that he is writing a ‘monetary theory of production’, the title of some of the first drafts of his forthcoming book. He writes that the classical theory is a theory which deals with a real exchange economy. Elsewhere, he speaks of a cooperative economy or else of a barter economy to which he opposes a monetary economy or an economy of entrepreneurs. In Keynes’s view, money is intimately linked to uncertainty and in this way to unemployment. Keynes says in *The General Theory* that money is a bridge between past and future:

This book, on the other hand, has evolved into what is primarily a study of the forces which determine changes in the scale of output and employment as a whole; and, whilst it is found that money enters into the economic scheme in an essential and peculiar manner, technical monetary detail falls into the background. A monetary economy, we shall find, is essentially one in which changing views about the future are capable of influencing the quantity of employment and not merely its direction. (*GT*, p. vii)

Keynes blamed classical theory for not having an explanation of what determines the aggregate level of employment, production and income. Or indeed, if they have, it is one according to which the equilibrium between supply and demand on the labour market sets, simultaneously, the equilibrium real wage and an employment level which can then only be that of full employment. And the latter is defined by the fact that all those who wish to work at such a real wage, in view of their preference function for leisure, find employment. In a similar manner, the real interest rate and level of investment are determined in the capital market, with equilibrium represented by the intersection of the investment demand and supply schedules. The latter corresponds to saving, which itself is linked to the intertemporal preferences of agents. In *A Treatise on Money*, Keynes already broke with the conception which had prevailed in classical thought since Smith, who borrowed it himself from Turgot before him, and according to which the investment is limited by the fund of preliminary savings.

Like all economists, Keynes considers that saving, defined as the difference between income and consumption spending, always equals investment. But this is an accounting identity that one notices *ex post*. Indeed, saving is a residue while investment is the motor of economic activity. More precisely, the decision to invest is the main determinant of production, employment and income. In no way is this decision limited by preliminary saving. Investment ensues from the expectations of entrepreneurs, whose decisions, as with any human decision, 'can only be taken as a result of animal spirits—of a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.... In estimating the prospects of investment, we must have regard, therefore, to the nerves and hysteria and even the digestions and reactions to the weather of those upon whose spontaneous activity it largely depends' (*GT*, pp. 161–2).

Not only is investment not limited by a preliminary saving fund, it induces saving equivalent to itself through the variations of production it provokes. This idea is sometimes presented as the central paradox of *The General Theory*: when all the individuals decide to save more, effective demand, investment, income and therefore final aggregate saving are reduced.<sup>26</sup> Such is one of the principal results of the construction that Keynes substitutes for classical analysis. This approach is based on what he calls 'the three fundamental psychological factors, namely, the psychological propensity to consume, the psychological attitude to liquidity and the psychological expectation of future yield from capital-assets' (*GT*, pp. 246–7). He thus describes the way these concepts appeared to him, allowing him to reconstruct his own theory of employment in place of the citadel he has dismantled:

You don't mention *effective demand* or, more precisely, the demand schedule for output as a whole, except in so far as it is implicit in the multiplier. To me, regarded historically, the most extraordinary thing is the complete disappearance of the theory of the demand and supply for output as a whole, i.e. the theory of employment, *after* it had been for a quarter of a century the most discussed thing in economics. One of the most important transitions for me, after my *Treatise on Money* had been published, was suddenly realising this. It only came after I had enunciated to myself the psychological law that, when

income increases, the gap between income and consumption will increase,—a conclusion of vast importance to my own thinking but not apparently, expressed just like that, to anyone else's. Then, appreciably later, came the notion of interest as being the measure of liquidity preference, which became quite clear in my mind the moment I thought of it. And last of all, after an immense lot of muddling and many drafts, the proper definition of the marginal efficiency of capital linked up one thing with another. (Keynes, letter to R.F.Harrod, 30 August 1936, JMK, XIV, p. 85)<sup>27</sup>

A detailed description of these concepts and of Keynes's theoretical construction would be out of place here. We refer the reader to Keynes's book and the countless interpretations it has been given. But we may say that these presentations are numerous and contradictory, and this ensues in part from Keynes's exposition, for reasons we will now briefly evoke as a conclusion to this chapter.

### **Continuity**

Although attacking it, Keynes nonetheless used elements from the classical theory for his own reconstruction. Here lies the origin of innumerable subsequent debates and exegetical quarrels. Keynes's text, because of its multifaceted and ambiguous nature, can be read through in the light of the orthodoxy that Keynes himself condemned. This is to say that it can be read without taking into consideration, or erasing, the points of rupture examined earlier.

The first and principal ambiguity of Keynes's work has to do with the role assigned to the classical theory. According to Keynes, the main fault with the latter lies in its incapacity to determine the aggregate level of employment and production. It supposes that market forces naturally push the economy towards full employment. For Keynes, classical theory only applies when full employment is achieved. More generally, this theory is valid when it is a matter of studying the allocation of determined resources. This leads him to accept the classical theory of prices and distribution. Having criticized the classical theory of the determination of real wage and employment, he nonetheless accepted the idea according to which, employment being given, the real wage equals the marginal productivity of labour. It is this position that subsequently permitted an attempted synthesis between what would henceforth be called macroeconomics (Keynesian) and microeconomics (neoclassical).

Another ambiguity concerns macroeconomics itself. Keynes wants to avoid what he calls the crystallization of his system. But some of his developments lend themselves to it, in particular the multiplier, as well as the concept of marginal efficiency of capital. It is not the formalization in itself that poses a problem, but the possibility of carrying it out, while forgetting about uncertainty and the irreversibility of time. The complex causal links, brought to light by Keynes, can be transformed into functional relationships between variables which can be dealt with in a manner that Keynes had, in fact, criticized in his debate with Tinbergen. Moreover, the fact that the analysis is anchored in the short run and the absence of a theory of growth constitute for several interpreters another

limitation, if not indeed a major weakness, of *The General Theory*. Besides, it is significant to note that Keynes would subsequently be very critical of Harrod's attempt to dynamize his theory and extend it to the long run (*JMK*, XIV, p. 320). Yet Harrod's growth theory would be one of the fundamental underpinnings of post-Keynesian theory.

A final ambiguity relates to the status of money, an ambiguity which is all the more important given the fundamental role played by money in the Keynesian analysis. While the idea that the quantity of money is determined by the monetary authorities suggests a conception of the money supply as exogenous, Keynes implies (elsewhere) that the money supply might be considered as endogenous, determined by the needs of the economy. In the end, it is the banking and financial system that creates money according to the enterprises's needs. Keynes would later develop this vision in some articles, subsequent to the publication of *The General Theory*, especially when he adds what he calls the 'finance motive' to the motives for the demand for liquidity listed in his book. When theorists of a post-Keynesian persuasion would subsequently insist on the latter interpretation, neoclassical theorists would retain the conception of an exogenous money supply, compatible with the quantity theory of money. Later, one would see Friedman, the leader of monetarism, assert that Keynes, resolutely quantity theorist in his *Tract on Monetary Reform*, had remained so for the most part in *The General Theory*!

### Notes

1. On the life of Keynes, see Harrod 1951; C.H.Hession, *John Maynard Keynes: A Personal Biography of the Man who Revolutionized Capitalism and the Way we Lived*, New York, Macmillan, 1984; M.Keynes (ed.), *Essays on John Maynard Keynes*, Cambridge, England, Cambridge University Press, 1975; D.E. Moggridge, *Maynard Keynes: An Economist's Biography*, London and New York, Routledge, 1992; E.A.G.Robinson, 'John Maynard Keynes 1883–1946', *Economic Journal*, vol. 57, 1947, 1–68; R.Skidelsky, *John Maynard Keynes*, vol. 1, *Hopes Betrayed, 1883–1920*, London, Macmillan, 1983, New York, Viking, 1986; vol. 2, *The Economist as Saviour 1920–37*, London, Macmillan, 1992.
2. *The Scope and Method of Political Economy*, London, Macmillan, 1891, pp. 9, 20.
3. More progressist than her husband, socially and politically very active, the mother of John Maynard, Florence Ada, was mayor of Cambridge in 1932–3. Keynes's parents, his sister Margaret and his brother Geoffrey, respectively born in 1885 and 1887, survived him. In 1925, John Maynard married Lydia Lopokova, a ballerina of Russian origin and member of the renowned Diaghilev company.
4. A.Sidgwick and E.M.Sidgwick, *Henry Sidgwick: A Memoir*, London, Macmillan, 1906, pp. 34–5, quoted by D.E.Moggridge, *Maynard Keynes*, op. cit., p. 66.
5. A number of recent works emphasized the primordial importance of Keynes's philosophical views and their relations with his political vision and his economic theory. In particular, see: B.W.Bateman and J.B.Davis (eds), *Keynes and Philosophy: Essays on the Origin of Keynes's Thought*, Aldershot, Hants, Edward Elgar, 1991; A.M.Carabelli, *On Keynes's Method*, London, Macmillan and New York, St Martin's Press, 1988; J.B.Davis, *Keynes's Philosophical Development*,

- Cambridge, England, Cambridge University Press, 1994; A.Fitzgibbons, *Keynes's Vision: A New Political Economy*, Oxford, Clarendon Press, 1988; B.Gerrard and J.Hillard (eds), *The Philosophy and Economics of J.M. Keynes*, Aldershot, Hants, Edward Elgar, 1992; T.Lawson and H.Pesaran (eds), *Keynes's Economics: Methodological Issues*, London and New York, Routledge, 1985; R.O'Donnell, *Keynes: Philosophy, Economics and Politics. The Philosophical Foundations of Keynes's Thought and their Influence on his Economics and Politics*, London, Macmillan, 1989; id. (ed.), *Keynes as Philosopher-Economist*, London, Macmillan, 1991. From these volumes there emerges a picture of a radical thinker, who once wrote: 'The republic of my imagination lies on the extreme left of celestial space' (*JMK*, IX, p. 309).
6. 'Yet so far as I am concerned, it is too late to change. I remain and always will remain, an immoralist' (*JMK*, X, p. 447). Hayek, among others, sees in Keynes's self-proclaimed immoralism one source of the perversity of his economic vision (see, for example, Hayek 1978, p. 16; 1988, pp. 57–8).
  7. Nevertheless, Keynes always professed a Platonic form of elitism which led him to believe that some social categories perhaps lacked the qualities necessary for an appreciation of the most subtle refinements of civilization.
  8. Named after a district in London where, among others, Vanessa and Clive Bell, Leonard and Virginia Woolf, Duncan Grant, Roger Fry and Lytton Strachey lived and met. See, among others: Q.Bell, *Bloomsbury*, New York, Basic Books, 1969; D.Crabtree and A.P. Thirwall (eds), *Keynes and the Bloomsbury Group*, London, Macmillan and New York, Holmes and Meier, 1980; D.Gadd, *The Loving Friends: A Portrait of Bloomsbury*, New York, Harcourt Brace Jovanovich, 1975; P.V.Mini, *Keynes, Bloomsbury and The General Theory*, New York, St Martin's Press, 1991; S.P.Rosenbaum (ed.), *The Bloomsbury Group: A Collection of Memoirs, Commentary and Criticism*, University of Toronto Press, 1975.
  9. See P.Meisel and W.Rendick (eds), *Bloomsbury-Freud: The Letters of James and Alix Strachey, 1924–25*, New York, Basic Books, 1985. The following is what Keynes wrote about Freud in the August 29 1925 issue of *The Nation & the Athenaeum*, a weekly publication of which he had been chairman of the board of directors since 1923: 'Professor Freud seems to me to be endowed, to the degree of genius, with the scientific imagination which can body forth an abundance of innovating ideas, shattering possibilities, working hypotheses, which have sufficient foundation in intuition and common experience to deserve the most patient and unprejudiced examination, and which contain, in all probability, both theories which will have to be discarded or altered out of recognition and also theories of great and permanent significance' ('Freudian Psycho Analysis', *The Nation & the Athenaeum*, 29 August 1925, p. 643).
  10. This is extracted from an essay entitled 'Economic Possibilities for our Grandchildren', first read in 1928 and published in *The Nation & the Athenaeum* on 11 and 18 October 1930, subsequently included in *Essays in Persuasion*, formed of excerpts from books and articles published between 1919 and 1931 and collected by Keynes in 1931 (London, Macmillan; augmented version, *JMK*, IX). These texts, which are very accessible, constitute an excellent introduction to Keynes's economic



and political thought, and an illustration of his art of convincing, such as it is used in very diverse communicative forms, from the abstract treatise to speaking on radio. Here is how Keynes himself presented them: 'Here are collected the croakings of twelve years—the croakings of a Cassandra who could never influence the course of events in time.... But it was in a spirit of persuasion that most of these essays were written, in an attempt to influence opinion' (*JMK*, IX, p. xvii).

11. London, Macmillan, 1919; *JMK*, II.
12. From his years of studies at Cambridge, where he was member of the Liberal Club, to the end of his life, when he sat on the Liberal benches of the House of Lords, Keynes was always closely linked to the English Liberal Party, for which, for example, he gave speeches during electoral campaigns. Nevertheless, he was also close to the Labour Party and on several occasions tried to establish bridges between the two parties (see the first editorial of *The Nation & the Athenaeum*, 5 May 1923). Among other things, he reproached the Labour Party for both tolerating within its ranks partisans of the violent revolution and not taking monetary problems seriously. To some extent, he considered himself to be to the left of the Labour Party, but what prevented him from joining the 'great party of the proletariat' (*JMK*, IX, p. 311) was the fact that it was 'a class party, and the class is not my class... but the class war will find me on the side of the educated *bourgeoisie*' (*JMK*, IX, p. 297). Having said that, all of Keynes's political action aimed at creating the conditions which would ensure that this war did not break out. On Keynes's political adherence, see 'Am I a Liberal?' (1925, in *JMK*, IX, 295–306) and 'Liberalism and Labour' (1926, *ibid.*, 307–11).
13. London, Hogarth; *JMK*, IX, 272–94.
14. See, in particular 'A Short View of Russia' (London, Hogarth, 1925; in *JMK*, IX, 253–71), where he defined Leninism as being 'a combination of two things which Europeans have kept for some centuries in different compartments of the soul—religion and business. We are shocked because the religion is new, and contemptuous because the business, being subordinated to the religion instead of the other way round, is highly inefficient' (*JMK*, IX, p. 256). At the end of a conference delivered in the USSR in 1925, Keynes had written: 'We in the West will watch what you do with sympathy and lively attention, in the hope that we may find something which we can learn from you' (*JMK*, XIX, p. 441–2).
15. On this subject, see D.Moggridge, *British Monetary Policy 1924–1931*, Cambridge, England, Cambridge University Press, 1972. See also G.Dostaler, 'Le Retour à l'étalonor en Grande-Bretagne: une fâcheuse illusion', in F.Poulon (ed.), *Les Écrits de Keynes*, Paris, Dunod, 1985, 176–94.
16. London, Hogarth, 1925; first published as 'Unemployment and Monetary Policy', *Evening Standard*, 22, 23 and 24 July 1925; condensed version prepared by Keynes for his *Essays in Persuasion* (*JMK*, IX, 207–30). See also *JMK*, XIX, 357–453.
17. In 1983, Nicholas Kaldor would publish a book with the same title, replacing the name of Churchill with that of Mrs Thatcher.
18. On the evolution of Keynes's economic thought, see in particular P.Clark, *The Keynesian Revolution in the Making, 1924–1936*, Oxford, Clarendon Press and New York, Oxford University Press, 1988; Robert W.Dimand, *The Origins of the*

- Keynesian Revolution: The Development of Keynes' Theory of Employment and Output*, Aldershot, Hants, Edward Elgar, 1988; D.Moggridge, *John Maynard Keynes*, London, Macmillan, 1976; R.F.Kahn, *The Making of Keynes' General Theory*, Cambridge, England, Cambridge University Press, 1984; Patinkin 1976, 1978, 1982; T.K.Rymes (ed.), *Keynes' Lectures 1932–35: Notes of a Representative Student*, London, Macmillan and Ann Arbor, University of Michigan Press, 1989.
19. J.M.Keynes, *The General Theory of Employment, Interest and Money* [hereafter *GT*], London, Macmillan, 1936, p. 3.
  20. 'Poverty in Plenty: Is the Economic System Self-Adjusting?', *The Listener*, 21 November 1934; in *JMK*, XIII, 485–92.
  21. *Quarterly Journal of Economics*, vol. 51, 1937, 209–23; *JMK*, XIV, 109–23.
  22. 'Professor Tinbergen's Method', *Economic Journal*, vol. 49, 1939, 558–70, taken up with other documents regarding this controversy in *JMK*, XIV, 285–320.
  23. We can find the analysis of this atomic-organic dichotomy in some of Keynes's papers read to the Apostles, such as 'Ethics in Relation to Conduct' (1904), 'Miscellanea Ethica' (1905), 'On the Principle of Organic Unity' (1910). They shed light on the Keynesian vision of a macroeconomics, irreducible to the sum of its individual elements. On this, see R.X.Chase, 'Keynes's Dichotomy: A Methodological Escape for a Theoretic Revolution', *Methodus*, vol. 3, no. 2, 1991, 79–85.
  24. On the debate between Keynes and Tinbergen, see T.Lawson, 'Keynes, Prediction and Econometrics', and H.Pesaran and R.Smith, 'Keynes on Econometrics', both in T. Lawson and H.Pesaran (eds), *Keynes' Economics: Methodological Issues*, London and New York, Routledge, 1985, 116–33 and 134–50, as well as Stone 1978 *PBA* and Zellner 1984.
  25. 'A Monetary Theory of Production', in G.Clausing (ed.), *Der Stand und die nächste Zukunft der Konjunkturforschung. Festschrift für Arthur Spiethoff*, Munich, Duncker & Humblot; *JMK*, XIII, 408–11.
  26. This well illustrates the methodological conception specific to Keynesian macroeconomics, according to which the global processes are not the additive resultant of all the elementary processes.
  27. Also see the letter to Abba Lerner, 16 June 1936, in *JMK*, XXIX, 214–16.

## The Keynesian revolution

### Keynes and the Keynesian revolution

When *The General Theory of Employment, Interest and Money* was published on 4 February 1936, its author, John Maynard Keynes, then 52 years old, was Britain's most famous and influential economist. This book would secure his rise to the first rank among twentieth-century economists, and ultimately his eminence among the other great names in the history of political economy such as Smith, Ricardo and Marx. Ten years after the publication of his book, on Easter Sunday 21 April 1946, Keynes died, laid low by the last of a series of heart attacks which had first struck him in 1937. He lived to see the partial achievement of the prophecy made to his friend George Bernard Shaw on 1 January 1935. Indeed, in 1946, *The General Theory* had already made an impression as a book 'which will largely revolutionise—not, I suppose, at once but in the course of the next ten years—the way the world thinks about economic problems' (*JMK*, XIII, p. 492). Thus Keynes used the expression 'revolutionise' to characterize the impact of his work. The 'Keynesian revolution' formula would appear in the title of a book by Lawrence Klein (1947) which played an important role in the diffusion of Keynesian ideas in the United States.

However, what one calls the Keynesian revolution is a phenomenon whose extent goes beyond the publication and impact of *The General Theory*. In the course of his life, Keynes witnessed important transformations at political, social, economic and cultural levels. In a significant book published in 1944, Karl Polanyi labelled as 'the great transformation' the collapse between 1900 and 1940 of an international system which had triumphed in the nineteenth century, based on four institutions: the balance of powers, the international gold standard, the self-regulating market and the liberal state. This system was based on a Utopia, on the idea of a self-regulating market, including gold, land and labour: 'the origins of the cataclysm lay in the Utopian endeavor of economic liberalism to set up a self-regulating market system'.<sup>1</sup> The rise of socialism, Nazism and Fascism, and also the search for a 'third way' in the capitalist countries, are consequences of this cataclysm: 'Its landmarks were the abandonment of the gold standard by Great Britain; the Five-Year Plans in Russia; the launching of the New Deal; the National Socialist Revolution in Germany; the collapse of the League in favour of autarchist empires.'<sup>2</sup> The path was narrow for a reform of the system that would emerge neither as authoritarianism nor as barbarity. The search for this path was the direction given by Keynes to his struggle, a fight he led with a fierceness that was no doubt partly responsible for his premature death.<sup>3</sup>

What we call Keynesian revolution was one moment in this great transformation. The expression, however, is ambiguous. The word 'revolution', in the first place, needs to be handled with care. In the world of ideas (as much as in the social, political and economic

domains) what appears to be an abrupt rupture is often the fruit of a long evolution. Furthermore, history often repeats itself. Moreover, revolutions, in the primary meaning of the term, leave us at our point of departure. So the Keynesian theory takes up again certain currents that classical theory was believed to have eliminated. It even planted its roots in a remote past, to which the author himself refers in *The General Theory*.<sup>4</sup> Thus he speaks highly of the true intuition of the Scholastics in their condemnation of usurious lending, specifying that the first steps towards a distinction between interest rate and the marginal efficiency of capital were already to be found there. He rehabilitates the mercantilists who had understood the problem of employment much better than the classical economists. He indicates that Malthus, to whom he had already devoted a significant study,<sup>5</sup> had well perceived the faults of the Ricardian theory. For the French readers of his book he underlines the fact that, regarding the theory of interest, he comes back to the doctrine of Montesquieu, ‘who was the real French equivalent of Adam Smith, the greatest of your economists, head and shoulders above the physiocrats in penetration, clear headedness and good sense (which are the qualities an economist should have)’ (*JMK*, VII, p. xxxiv).

Nor is the word ‘Keynesian’ without some ambiguity. Indeed, it could lead us to believe that Keynes was the sole author of this revolution, a revolution for which his work served as a catalyst. This is not the case. Keynes was, of course, the principal architect of the Keynesian revolution but, as we will see, others also developed, at the same time or even before, some significant elements of what is now known as ‘Keynesian’ theory. In 1948, Joan Robinson presented what she termed the ‘General Theory’ as the collective product of a theoretical transformation of which Keynes’s book only represented one part among others:

But by general theory, I do not mean the celebrated book of that author [Keynes]. Of course, that work is very important, but it is neither complete nor definitive. It constituted, when it was published, a sort of provisional account of a movement of ideas in the course of its development.... What I mean by general theory is rather a method of analysis. It is a living body of ideas that is developing and producing quite different results when it is applied in different circumstances by such or such person. (Robinson 1948, p. 185; translated from French)

But it is fair that Keynes’s name be ranked first. If the revolution referred to is called Keynesian, it is indeed due to John Maynard Keynes’s personal qualities, as well as a complex combination of circumstances. Keynes was an exceptional person and, besides, he wrote at the right time, in the right place and in the right language. Polish, Swedish, Norwegian and Dutch were not as effective vehicles as English, the long dominant language in the field of political economy. Finally, Keynes always knew how to publish his works at key moments and to ensure that, when they did appear, they were eagerly awaited. It is difficult to know the respective parts played by chance and calculation in all of this, but it is undeniable that each publication by Keynes, at least since *The Economic Consequences of the Peace*, constituted a public event. In any case, what was a matter of calculation was the effective post-publication campaigns designed to publicize and

discuss the works. For Keynes was a man of power. An influential adviser and a dreaded critic of governmental policies, he played important roles at different levels of the state apparatus until the end of his life. As we have seen, he was an influential and active member of the Liberal Party, while being carefully listened to by the Labour Party. Within the economic profession, Keynes, at the age of 28, took control of *The Economic Journal* in 1911, thus occupying a central position. He also knew how to surround himself with loyal and dedicated disciples.

A powerful figure, Keynes was also an intellectual endowed with great qualities. His intelligence, culture and working capacities were exceptional. He was a prolific writer whose style was much livelier than that of most of his colleagues. And far from confining himself to economics, he became involved in numerous areas. His reputation went far beyond the restricted circle of the economic profession or of the political world. Furthermore, it included the area of the arts, in which Keynes played an important role. Even the ambiguities of his writings and teachings contributed to Keynes's success. Many could read in them what they wanted. It is beyond doubt that Keynes revelled in the role of provocateur and card shuffler, which allowed him to remain in the foreground. The force of his convictions did not prevent him, on several occasions, from showing an opportunism that was at times surprising. Keynes was not one to hesitate before difficult turns in the road nor to flinch before challenges to his sincerely held beliefs. This was the struggle in which Keynes was involved throughout his career, a fight in which, however, he preferred the pen to the sword. In this combat, he had tough opponents who occasionally admired him and would in some cases even rally round him, and had committed, at times almost cumbersome, disciples. Let us look first at his principal opponents.

### From Vienna to London<sup>6</sup>

For Keynes and his friends, all that counted, on a scientific level, was taking place within a triangle whose vertices were Cambridge, Oxford and London —Cambridge of course being the most important one. There was indeed a so-called 'continental' economic literature to which one sometimes alluded, but it was relatively unknown, especially in Cambridge. In London, on the other hand, scholars at the London School of Economics,<sup>7</sup> which published *Economica*, rival of the *Economic Journal*, the journal of the Royal Economic Society and controlled with an iron fist by Keynes,<sup>8</sup> were more open to these foreign influences. It was through London that both the Walras-Pareto school and the Austrian school entered the English-speaking world. The first was finally to lead to the neoclassical synthesis of which we will speak later. The second, due to Hayek in particular, would engender one of the sharpest poles of resistance to interventionism and Keynesianism.

In relation to the two other branches of the marginalist revolution, the Austrian School, initiated by Carl Menger, always constituted an autonomous stream of thought. Today, it has even undergone a vigorous rebirth under the name of the neo-Austrian School.<sup>9</sup> While the traditions stemming from Walras and Jevons led to the emergence of neoclassical theory, the Austrian School distinguished itself by rather specific

methodological positions, which it made explicit.<sup>10</sup> As opposed to a general equilibrium view of the world, the Austrian approach prefers a causal vision which leads, for example to the reduction of capital to time and labour. The ultimate cause in social and economic fields lies, for this approach, in the economic subject. Indeed, the perceptions of the subject constitute the prime reality on which one needs to base economic theory. For the Austrian School, it is through introspection that one elaborates the hypotheses of economic theory. Methodological individualism, subjectivism and even a radical apriorism are among the expressions used to characterize this approach. By insisting on the importance of time and uncertainty in human affairs, the Austrian School critically distrusts the hypnotizing effect on economists of the natural sciences and mathematics.

Analogies exist between the Austrian vision and that of Keynes. Hayek developed a critique of the Walras-Pareto vision of general equilibrium, which is not unlike Keynes's critique of classical theory. As early as his first works, in the 1920s, he blamed economists for neglecting time in their analysis and questioned the possibility of constructing an economic theory, formal and mathematical in character, along the lines of the natural sciences. His 'Economics and Knowledge' (Hayek 1937) includes a critique of equilibrium analysis which resembles the article published by Keynes that same year in the *Quarterly Journal of Economics*. It is possible to imagine that, on the occasion of his controversy with Hayek, Keynes might have been partly influenced by the latter. Despite these parental links, the Austrian school is characterized by a radical liberalism which was to lead to one of the most vigorous criticisms of Keynesianism. This liberalism does not come from the founders. On the political plane, Menger, Böhm-Bawerk and Wieser espoused rather progressive ideas, as did Jevons and Walras. It was with Ludwig von Mises and Friedrich Hayek that an intransigent liberalism became one of the principal characteristics of the Austrian School. While Pareto or Barone claimed that the Walrasian general equilibrium could constitute the rational foundation of socialist planning, Mises claimed to demonstrate that such planning is impossible. This impossibility is based on methodological and epistemological arguments. Planning is impossible because no human brain could hold all the knowledge necessary to secure the optimal organization of production. For Hayek, Keynesian interventionism shares the same illusion. It has its roots in an intellectual tradition that includes, among others, Marx, Comte, Rousseau, Voltaire and Descartes, arguably going as far back as Plato, and is based on the belief that it is possible to organize society rationally. For Hayek, on the contrary, society constitutes a spontaneous order, the fruit of a long evolution.

Parallel to Keynes, in the 1920s, Hayek developed a theory of the business cycle which gives a theoretical foundation to his rejection of interventionism.<sup>11</sup> He wrote under the influences of Wicksell, founder of the Swedish tradition,<sup>12</sup> and of Böhm-Bawerk.<sup>13</sup> From the first, he borrowed the idea of the disequilibrium between the natural rate of interest, linked to the productivity of capital and to agents' temporal preferences, and the monetary rate determined by the banking system, disequilibrium beginning a cumulative process of rising or falling prices. From the second, he took the conception of investment as the lengthening of the production process, whose basic factors are labour and natural resources. In both cases, the conception of time is fundamental. Money also plays a significant role, for Hayek considered, as did Keynes, that a monetary economy is different from a real-exchange economy. Far from acting solely on the general level of

prices, as the traditional quantity theory of money explains it, the variation of the quantity of money has an impact on the structure of relative prices. Thus an increase in the money supply, for example through increased credit facilities, lowers the monetary rate of interest below the natural rate. This provokes a lengthening of the production process and a disequilibrium between investment and the saving intended by agents. A subsequent increase of the consumer goods prices releases the supplementary saving, called 'forced saving', necessary to finance the overinvestment. From then on, there begins a shortening of the production process, a cause of increased unemployment in the sector producing consumer goods and then gradually throughout the whole economy. Thus, for Hayek, the 1929 crisis was provoked by overinvestment stemming from an easy monetary policy, based on the illusion of stimulating the economy through inflation. From this point, he criticized the underconsumptionist illusions propagated by such authors as Foster and Catchings and, in a more sophisticated manner, by Keynes.<sup>14</sup>

Such are the theses developed by Hayek, on the occasion of a series of lectures presented in February 1931 at the London School of Economics, at the invitation of Lionel Robbins, just a few months after the publication of Keynes's *Treatise on Money*. Hayek's lectures, published in September 1931 and entitled *Prices and Production*, aroused enthusiasm and earned their author a professorial position at the London School of Economics, where he soon established himself as the leader of the opposition to Keynes and his disciples. Then a young lecturer at the London School of Economics, Hicks described years later, in 'The Hayek Story', how the conflict between the ideas of Keynes and Hayek put several young economists of the time in a difficult position.

When the definitive history of economic analysis during the nineteen-thirties comes to be written, a leading character in the drama (it was quite a drama) will be Professor Hayek...it is hardly remembered that there was a time when the new theories of Hayek were the principal rival of the new theories of Keynes. Which was right, Keynes or Hayek? There are many still living teachers of economics, and practical economists, who have passed through a time when they had to make up their minds on that question; and there are many of them (including the present writer) who took quite a time to make up their mind. (Hicks 1967, p. 203)

This difficulty was further accentuated by political differences among some of them. While for Keynes and his disciples the collapse of investment was the ultimate cause of the Great Depression, for Hayek, Robbins and their colleagues, on the contrary, it was overinvestment provoked by an easy monetary policy. While some called for vigorous public intervention to stimulate consumption and investment, others spoke for the 'Treasury View', according to which public intervention simply diverted funds destined for private use. For one, it was necessary to raise wages in order to stimulate consumption. For another, only a drop in wages could re-establish full employment.<sup>15</sup>

Besides Hicks, the London School of Economics assembled within its walls other young economists who were to have a significant role in the development of economic thought after Keynes, including Kaldor, Lerner and Shackle. Led to distance themselves from Robbins and Hayek for political reasons, these authors would nonetheless be

significantly affected by the London School. It is here that we can find the roots of a certain *rapprochement*, odd at first glance, between the Austrian world and that of Keynes's radical disciples, who would later be named post-Keynesians. As for Hicks, besides the Austrian influence and that of Walras and Pareto, he met along the way the Swedes, independent explorers, whom we will discuss in the next section. Then lecturer at the London School, Kaldor made contact with Keynes in 1931 and offered to bridge the gap between Cambridge and the London School of Economics, like Lerner, who would later become one of the principal initiators of the Keynesian revolution in the United States. Kaldor, Hayek's translator, would become, after moving to Cambridge, one of his most severe critics.<sup>16</sup> Himself a new disciple of Keynes, Shackle, for his part, would nonetheless remain close to Hayek, his first thesis adviser. In one of his first published texts (Shackle 1933), he tried to achieve a synthesis between the approaches of Keynes and Hayek. Drawing attention to the similarities found in Keynes's article published in 1937 in the *Quarterly Journal of Economics* and that of Hayek published the same year in *Economica*, he has since devoted his career to deepening what he considers to be their common contributions, namely the taking into account of uncertainty and expectations and placing the analysis in time. Shackle is also one of the first to have drawn attention to the Swedish contribution, and particularly that of Myrdal. He considers Myrdal and Kalecki independent explorers who arrived, before Keynes, at the same conclusions as the latter (Shackle 1967).

### **Precursors and independent explorers**

In his *Monetary Equilibrium*, the first version of which (in Swedish) was released in 1932,<sup>17</sup> Gunnar Myrdal wrote: 'J.M.Keynes' new, brilliant, though not always clear, work, *A Treatise on Money*, is completely permeated by Wicksell's influence. Nevertheless Keynes' work, too, suffers somewhat from the attractive Anglo-Saxon kind of unnecessary originality, which has its roots in certain systematic gaps in the knowledge of the German language on the part of the majority of English economists' (Myrdal [1931] 1939, pp. 8–9). Beginning with neoclassical theory, of which he was one of the principal theoreticians,<sup>18</sup> Wicksell tried to integrate the real and the monetary, which he did with his well-known distinction between the natural and the monetary rate of interest. The disequilibrium between these two rates generates a cumulative process of either a rise or a fall in prices. Not only do we find in Wicksell the idea of the necessity of aggregate monetary demand for stimulating production, but also that of a disequilibrium between saving and investment, which result from independent decisions. In fact, Keynes acknowledged the relationship between some of his theses and those of Wicksell, even claiming in *A Treatise on Money* to be close to a German and a neo-Austrian/neo-Wicksellian school to which Hayek belonged. Besides, Myrdal himself wrote, in his *Monetary Equilibrium* (presented as an 'immanent criticism' of Wicksell's theory): 'I hope, however, to complement the present positive presentation later in another connection by a criticism, particularly of Keynes and Hayek, whose works are naturally nearest to mine' (Myrdal [1931] 1939, p. 32). In *The General Theory*, however, Keynes only made a brief allusion to the fact that he had developed, at the time of the



*Treatise*, the concept of Wicksell's natural rate, but that this concept now appeared to be erroneous.

As for the Swedish, they would see little new in *The General Theory* and more generally, in the so-called revolution that Keynes claimed to have led against the classical theory, compared to the theses that first Wicksell and then his young disciples (ranking first among whom were Erik Lindahl, Gunnar Myrdal and Bertil Ohlin) had developed in the 1920s and 1930s. Lindahl,<sup>19</sup> the eldest of this group, not only elaborated ideas very close to Keynes's theory of effective demand, describing, at the end of the 1920s, the possibility of an underemployment equilibrium or clarifying the paradox of saving, but he also started to develop, at the same time, a dynamic analysis which constitutes one of the characteristics of the Swedish approach, an analysis which moreover exerted an important influence on the Hicks of *Value and Capital* (Hicks 1939). The approach in terms of *ex ante* and *ex post* put forward by Myrdal in the German version of his *Monetary Equilibrium*, published in 1933, constitutes, from this point of view, one of the outstanding contributions of the Swedish School. Furthermore, Lindahl and, especially, Myrdal in his doctoral dissertation published in 1927, explicitly introduced the role of expectations in economic analysis, and in particular in the analysis of price formation. Some economists see here one of the intellectual origins of the present approach in terms of rational expectations, while others see in the most recent developments of general equilibrium a return to the concept of temporary equilibrium first put forward by Lindahl.

In the 1920s and 1930s, Ohlin developed analyses designed to underpin state intervention against unemployment. A resident in Cambridge in the 1920s, he met Keynes with whom he remained in contact thereafter. In 1929, in a controversy with him over the matter of transfers, he developed positions more 'Keynesian' than those defended by Keynes at that time. It was Ohlin who, in two articles published in the 1937 issue of *The Economic Journal*, coined the term 'Stockholm School' and revealed its theses for the first time to an English-speaking public. In the same year there appeared *Studies in the Theory of Economic Expansion* by Erik Lundberg, a member of the second generation of the Stockholm School, along with Dag Hammarskjöld<sup>20</sup> and Bent Hansen.<sup>21</sup> It was only two years later that the major contributions of Myrdal and Lindahl would finally come out in English. Among the authors of a report of Sweden's 1927 Committee on Unemployment, published in 1934, along with Myrdal, Ohlin and Hammarskjöld one also finds Gösta Bagge, a more conservative economist. It is clear that the members of the Stockholm School played an important role in the setting up, by the Social-Democrat government elected in 1932, of stimulative policies which one can *ex post* call Keynesian.<sup>22</sup> Having said that, the desire to ascertain the extent to which the Stockholm School anticipated the Keynesian revolution, as well as the degree of convergence between their theses and those developed in *The General Theory*, has since 1937 been the object of a debate which does not seem to be near a conclusion.<sup>23</sup>

There are similar features in the links between Keynes and Kalecki. It is not a matter this time of a school but of an individual, and an isolated one. While Myrdal and his Swedish colleagues began with Wicksell, Michal Kalecki found his inspiration in Marx and Rosa Luxemburg, to elaborate the first of a series of models in which he integrated a theory of effective demand comparable to Keynes's, an analysis of distribution of classical type, a theory of prices integrating monopolies and, finally, a theory of growth.

As Klein, Joan Robinson and several others underlined, Kalecki's model—first published in Polish in 1933—appeared to be more general than Keynes's. In October 1933, it was also the subject of a presentation at the meeting of the Econometric Society at Leyden, and the text presented on this occasion was published in the society's journal, *Econometrica*, in 1935. The same year, Kalecki also made his ideas known to a French public in the *Revue d'économie politique*. The very succinct style of these texts, characteristic of Kalecki, and their mathematical character meant that they went almost unnoticed. Some economists who were to play a major role in the evolution of twentieth-century economic thought nonetheless saw their importance from the beginning. In particular, there were Ragnar Frisch and Jan Tinbergen. In a long survey of business cycle theory published in the same *Econometrica* issue as Kalecki's article, Tinbergen contrasted Keynes's and Hayek's 'non and semi-mathematical' theories to the mathematical ones of Kalecki and Frisch (Tinbergen 1933). The same year, Frisch created the expression 'macrodynamics'. Frisch and Tinbergen, who would be the first recipients of the Nobel Memorial Prize in Economics in 1969, must be included, in the same way as Kalecki or the Swedes, among the independent explorers of what would later be called the Keynesian revolution. The creators of econometrics, they are also among the major initiators of the movement to mathematize economics, which began in the 1930s, independently of the Keynesian revolution, and of which we will speak again in Chapter 4.

These independent explorers thus made contact with the others. In 1936, having a grant from the Rockefeller Foundation at his disposal, Kalecki went to Stockholm where he met the Swedish economists. This is where he read *The General Theory*. He then went to Cambridge, where Keynes's disciples were amazed at Kalecki's speed and facility in assimilating and then explaining the theory of their mentor! From then on, Kalecki was to exert a determinant influence on Keynes's disciples, especially on Joan Robinson and Kaldor, which made him one of the initiators of the post-Keynesian school. It was Kalecki who introduced Joan Robinson to Marx's work. The author of the first book favourable to Marx in the English-speaking academic world (Robinson 1942), Joan Robinson then discovered that Kahn, in order to explain the operation of the multiplier, had simply rediscovered Marx's reproduction schemas. But this leads us to Keynes's Cambridge disciples.

### **Disciples and fellow-travellers**

The attack against the orthodox citadel was a collective work. Keynes was helped by students and faithful disciples who, younger than himself, did not have to endure so intensely the weight of the past. The critique of *A Treatise on Money*, then the development of the central theses of *The General Theory*, was not the work of Keynes alone, as is clearly shown in the documents included in volumes XIII and XXIX of Keynes's *Collected Writings*. Kahn, Keynes's student, friend and finally executor, was certainly his closest collaborator. Schumpeter considered he should be recognized as virtual co-author of *The General Theory*, as he corrected and discussed all of Keynes's drafts.<sup>24</sup> Kahn himself developed the concept of the multiplier.<sup>25</sup> He was also the

messenger who linked Keynes with the ‘Circus’ which met in Cambridge in 1931. The group in question was formed by Keynes’s young disciples. Their initial objective, the discussion of *A Treatise on Money*, soon turned into a critique, then into the elaboration of theoretical propositions that Kahn passed on to Keynes, and that the latter integrated, after transforming them in his lectures and preparatory works, into what was to become *The General Theory*. The core of the Circus comprised, besides Kahn, several economists who would subsequently play an important role in the development of economic thought after Keynes: James Meade, Austin and Joan Robinson, and Piero Sraffa.<sup>26</sup>

These authors were also associated with another significant transformation of economic theory in the inter-war period, independent of the Keynesian revolution and resulting in the emergence of the theory of monopolistic competition. Arriving at Cambridge from Italy in the mid-1920s, Sraffa can be considered one of this movement’s first initiators through his severe critique of the Marshallian theory of supply and demand (1925, 1926). However, it was not he, but Chamberlin, Harrod, Kahn and Joan Robinson, who would attempt in the late 1920s and early 1930s to reconcile orthodox theory with the existence of monopolies. Later very critical of this first work (Robinson 1933 *The Economics*), Joan Robinson and more generally the post-Keynesian theorists would adopt the positions already articulated by Kalecki in the mid-1930s, according to which one must consider monetary prices as being determined by the addition of a margin (depending on the degree of monopoly of the firm or industry in question) to average variable cost, whose most important component is the money wage, itself resulting from the balance of power between employers and employees. Sraffa, for his part, would advocate a return to the classical vision of value, which he would formulate again in a later book (Sraffa 1960), giving birth to a school of thought subsequently called neo-Ricardian. It was with the encouragement of Keynes himself that Sraffa, in the 1930s, began the lengthy task of publishing the complete works and correspondence of Ricardo (Sraffa 1951–73).

Keynes had disciples outside Cambridge too. Besides his supporters at the London School of Economics, some of his intellectual allies were to be found at Oxford. A member of the Circus following a stay at Cambridge, Meade was attached to Oxford. Another ally was Roy Harrod, who had been sent to Cambridge in the early 1920s to be initiated into political economy by Keynes in order to teach this subject at Oxford. Harrod became a friend and collaborator to whom Keynes sent the proofs of *The General Theory*. Harrod attempted, in vain, to tone down the harshness of Keynes’s attacks upon the classical economists and would play an essential part in making the Keynesian analysis dynamic and in the birth of modern growth theory (Harrod 1939, 1948). He was also asked by Keynes’s family to write his first biography (Harrod 1951). Those just named belong to the group which, to borrow Keynes’s imagery, never really had to ‘feel the weight of the past’ or dwell in the dark tunnel of classicism. This explains the more radical version of Keynesianism which they would develop. Others, including Hawtrey<sup>27</sup> and Robertson,<sup>28</sup> had to undergo an exorcism, like Keynes. Not only did Keynes not consider them as classical but indeed he was heard to say that it was they who showed him the way to salvation in the mid-1920s. However, the relationships between them were to be more and more difficult the closer Keynes came to finalizing his ideas. Neither Hawtrey nor Robertson were able to follow him to the end. Acrimonious controversy was

to separate Keynes and Robertson after the publication of *The General Theory*.<sup>29</sup>

### From theory to politics

For Keynes, as for the authors to whom we have just referred, the links between economic theory and policy are very complex. It is too simple to consider an economic policy as resulting automatically from a particular theory. One might even reverse the traditional causal link and assert, for example, that *The General Theory* was written to give a theoretical foundation to the policy proposals which Keynes and several other economists had formulated in the 1920s. The political vision often precedes the theoretical one. On the other hand, there is no strict linkage between political position and choice of theory. Thus several of the economists whom Keynes considered classical supported, as early as the 1920s, positions in economic policy very close to Keynes's. Such is the case with Pigou, in particular, himself the main target of *The General Theory*. It is also the case, as we have seen, with several economists of the London School of Economics, considered nonetheless the bastion of conservatism.

Finally, Keynes himself opened up several perspectives. His diagnosis is clear. The two major faults of capitalism, 'its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes' (*GT*, p. 372) could destroy social cohesion and favour sedition and revolution, resulting in Fascism or Bolshevism. The persistence of high unemployment and cyclical fluctuations of the economy are not inevitable economic phenomena, but rather the unavoidable results of laissez-faire capitalism. They result from the combination of a marginal propensity to consume which is too low and instability of investment, itself the consequence of excessive liquidity preference and insufficient marginal efficiency of capital. The latter two phenomena result from the expectations of the agents facing an uncertain future. *The General Theory* offers a diagnosis of this complex and dangerous illness, but this diagnosis can lead to several types of cure:

This that I offer is, therefore, a theory of why output and employment are so liable to fluctuation. It does not offer a ready-made remedy as to how to avoid these fluctuations and to maintain output at a steady optimum level. But it is, properly speaking, a theory of employment because it explains *why*, in any given circumstances, employment is what it is. Naturally I am interested not only in the diagnosis, but also in the cure; and many pages of my book are devoted to the latter. But I consider that my suggestions for a cure, which, avowedly, are not worked out completely, are on a different plane from the diagnosis. They are not meant to be definitive; they are subject to all sorts of special assumptions and are necessarily related to the particular conditions of the time. (Keynes, 'The General Theory of Employment', *Quarterly Journal of Economics*, vol. 51, 1937; *JMK*, XIV, pp. 121–2)

The options for economic policy thus remain open. Between herbal medicine and outright surgery, there are several possible remedies! While Keynes himself in the last chapter of his book describes the implications of his theory as 'moderately conservative' (*GT*, p.

377), since it implies the maintenance of a system of private enterprise with income inequality which one should not aim to remove entirely, the interventionism he promotes throughout his career has some very radical characteristics. Thus does he sometimes assert that only the state is capable of undertaking necessary investment, not only to stimulate effective demand, but also to ensure its social utility. Besides the socialization of investment, planning and even the 'semi-socialism' or 'liberal socialism' implied by this vision, Keynes also appealed for a radical social transformation when he evoked the necessary euthanasia of the rentier, to which a gradual decline in the interest rate can contribute. It is remarkable to see Keynes attack the same parasitical social class, non-productive and living on rentier income, that Ricardo had attacked in his own time.

At the time when the Soviet system appeared to many as an alternative to capitalism—hope for some, threat for others; when some showed confidence in central planning (Bettleheim 1939; Dobb 1928) and others, such as Lerner (1934–5) and Lange (1936–7) asserted, in opposition to Mises, the theoretical possibility of socialism; when Hansen (1938, 1939) considered stagnation an enduring feature of capitalism; when Schumpeter expressed his pessimistic views on the future of capitalism,<sup>30</sup> and when Colin Clark analysed the sources of economic progress, Keynes, on the basis of his diagnosis, sketched out several types of policy which should allow capitalism to overcome its own contradictions and thus safeguard liberal society. And in the postwar period, it was to an extremely diverse range of economic policies that the term 'Keynesian' could be applied.

### Notes

1. K. Polanyi, *The Great Transformation*, New York, Rinehart, 1944, p. 29.
2. *Ibid.*, p. 23.
3. It was indeed against all caution and despite his doctors' opinions that, during and immediately after the Second World War, Keynes was one of the principal architects of complex negotiations aimed at ensuring the economic and political conditions of a pacified world, in which one could at last devote oneself to the quest of beauty, knowledge, love and friendship. Besides his exhausting functions as a negotiator, which led him to cross the Atlantic many times, Keynes, from 1942, devoted much energy to the activities of the Committee for the Encouragement of Music and the Arts (CEMA, which after the war would become the Arts Council), which he chaired and whose activities he oversaw constantly, even during his stays in the United States, requiring that the minutes of the meetings be sent to him.
4. See in particular Chapter 23, 'Notes on Mercantilism, the Usury Laws, Stamped Money and Theories of Under-consumption'. On the theory of effective demand before Adam Smith, consult in particular H. Brems, *Pioneering Economic Theory, 1630–1980—A Mathematical Restatement*, Baltimore, Johns Hopkins Press, 1986 and Hutchison 1988.
5. Sketched out in 1914, developed in 1922 and 1924 on the occasion of several presentations, this study was completed in 1933, to be integrated in *Essays in Biography*, published by Keynes that same year (London, Macmillan); see *JMK*, X, 71–108.

6. Some elements in this section are taken from G.Dostaler, 'The Debate Between Hayek and Keynes', in W.Barber (ed.), *Perspectives on the History of Economic Thought*, vol. 6, *Themes in Keynesian Criticism and Supplementary Modern Topics*, Aldershot, Hants, Edward Elgar, 1991, 77–101.
7. On the London School of Economics in the 1930s, see A.W.Coats, 'The L.S.E.Ethos in the Inter-War Years', *Atlantic Economic Journal*, vol. 10, 1982, 18–30; J.R.Hicks, 'LSE and the Robbins Circle', in *Money, Interest and Wages, Collected Essays on Economic Theory*, vol. 2, Oxford, Basil Blackwell, 1982, 3–10; C.Ménard, 'Le keynésianisme: naissance d'une illusion', *Economies et sociétés*, vol. 19, série *Oeconomia*, no. 3, 1985, 3–27; L.C.Robbins, *Autobiography of An Economist*, London, Macmillan, 1971.
8. In 1933, a group of young economists from Cambridge and London set up the *Review of Economic Studies* with the aim, *inter alia*, of going beyond the divisions between rival schools. Their elder colleagues called it the 'Children's Journal'!
9. See below, Chapter 9.
10. This can no doubt be explained by the fact that it was the Austrian founders of marginalism who crossed swords both with the German historical school, in the context of the *Methodenstreit* [war of methods] and with a Marxist movement strongly established in Germany and Austria. Menger, Böhm-Bawerk and Wieser thus had to oppose these streams of thought with a coherent alternative vision.
11. See the texts, then published in German, translated and collected in Hayek 1984 (*Money, Capital*), as well as Hayek 1929, 1931 and 1939. On this, see M.Colonna, H.Hagemann and O.Hamouda (eds), *The Economics of F.A.Hayek*, vol. 1, *Money and Business Cycles*, Aldershot, Hants, Edward Elgar, 1994.
12. See following section.
13. To which it is certainly necessary to add those American institutionalist economists Hayek met during his trip to the United States in 1923 and 1924.
14. In a series of books, generally ignored by economists, but which have been widely circulated (*Money*, Boston, Houghton Mifflin, 1923; *Profits*, Boston, Houghton Mifflin, 1925; *Business Without a Buyer*, Boston, Houghton Mifflin, 1927; *The Road to Plenty*, Boston, Houghton Mifflin, 1928, which in fact is a novel!), William Trufant Foster and Waddill Catchings developed the thesis according to which insufficient demand, provoked by excessive saving, constitutes one of the major causes of economic difficulties. See Hayek, 'The "Paradox" of Saving', *Economica*, vol. 11, 1931, 125–69.
15. For example, see the letter in which Keynes, Pigou and other economists denounced the orthodoxy, in the 17 October 1932 issue of *The Times*, and the response of Hayek, Robbins and their friends, on 19 October.
16. See his 'Professor Hayek and the Concertina-Effect', *Economica*, vol. 9, 1942, 359–82.
17. The *Ekonomisk Tidskrift* issue in which the first version of Myrdal's text was published was dated 1931, but was in fact released in the summer of 1932.
18. This fact, among others, illustrates well the idea according to which there is no necessary congruence between the adhesion to neoclassical theory and faith in liberalism. Wicksell was a proponent of state intervention to correct an equilibrium

- unfavourable to workers. Born in 1851, dying in 1926, Wicksell is the author of, among others: *Value, Capital and Rent*, London, George Allen & Unwin, 1954; 1st German edn, 1893; *Interest and Prices: A Study of the Causes Regulating the Value of Money*, London, Macmillan, 1936; 1st German edn, 1898 and *Lectures on Political Economy*, 2 vols, London, Macmillan, 1934–5; 1st Swedish edn, 1901–6.
19. Born in 1891, dying in 1960, Erik Lindahl wrote most of his major contributions before the publication of *The General Theory*, although they would only be revealed to an English-speaking readership in 1939, with the publication of *Studies in the Theory of Money and Capital*, London, George Allen & Unwin.
20. See, for example, ‘The Swedish Discussion on the Aims of Monetary Policy’, *International Economic Papers*, no. 5, 1955, 145–54.
21. *A Study in the Theory of Inflation*, London, George Allen & Unwin, 1951; *The Economic Theory of Fiscal Policy*, London, Allen & Unwin, 1958; 1st Swedish edn, 1955.
22. Written by Myrdal, the annex to the budget speech delivered by the Social-Democratic Minister of finance Ernst Wigforss, on 2 January 1933, includes the theoretical justification of an expansionary policy which one could call Keynesian. As early as 1912, Wigforss and the leaders of the Swedish Social-Democratic Party had started to propose policies of this type.
23. On this subject, see among others: B.J.Hansson, *The Stockholm School and the Development of Dynamic Method*, London, Groom Helm, 1982 (by the same author, see also the entry ‘Stockholm School’ in the *New Palgrave*, vol. 4, 503–7); L.Jonung (ed.), *The Stockholm School of Economics Revisited*, Cambridge, England, Cambridge University Press, 1991; K.-G.Landgren, *Economics in Modern Sweden*, Washington, Library of Congress, Reference Department, 1957; id., *Den ‘nya ekonomien’ i Sverige. J.M.Keynes, E.Wigforss, B.Ohlin och utvecklingen 1927–39* [The ‘new economics’ in Sweden: J.M. Keynes, E.Wigforss, B.Ohlin and developments 1927–39], Stockholm, Almqvist & Wiksell, 1960; O.Steiger, *Studien zur Entstehung der Neuen Wirtschaftslehre in Schweden: Eine Anti-Kritik* [Studies in the development of the new economics in Sweden: A counter-critique], Berlin, Duncker und Humblot, 1971.
24. ‘Next, we must record Keynes’s acknowledgments of indebtedness, which in all cases can be independently established, to Mrs. Joan Robinson, Mr. R.G.Hawtrey, Mr. R.F.Harrod, but especially to Mr. R.F.Kahn, whose share in the historic achievement cannot have fallen very far short of co-authorship’ (Schumpeter 1954, p. 1172).
25. ‘The Relation of Home Investment to Unemployment’, *Economic Journal*, vol. 41, 1931, 173–98. One can find Kahn’s principal theoretical contributions gathered in *Selected Essays on Employment and Growth*, Cambridge, England, Cambridge University Press, 1972. Defended in 1929, his doctoral thesis was published 60 years later (*The Economics of the Short Period*, London, Macmillan, 1989). One may read, first hand, his testimony on the genesis of *The General Theory* in *The Making of Keynes’ General Theory* Cambridge, England, Cambridge University Press, 1984. On Kahn (1905–1989), see G.C. Harcourt, ‘R.F.Kahn: A Tribute’, *Quarterly Review, Banca Nazionale del Lavoro*, no. 176, 1991, pp. 15–30.

26. On the Circus, see the editor's notes in Keynes, *JMK*, XIII, 202–11 and 337–43; and especially the accounts of Richard Kahn and Austin Robinson in Harcourt 1985.
27. See his *Good and Bad Trade: An Inquiry into the Causes of Trade Fluctuations*, London, Macmillan, 1913; *Currency and Credit*, London, Macmillan, 1919; *The Art of Central Banking*, London, Macmillan, 1932.
28. Robertson's dissertation (*A Study of Industrial Fluctuations*, London, P.S.King & Sons, 1915) was written in Cambridge where Keynes was his tutor. The latter was influenced by this work as well as by Robertson's *Banking Policy and the Price Level* (London, P.S. King & Sons, 1926). Keynes once wrote him: 'I certainly date all my emancipation from the discussions between us which preceded your *Banking Policy and the Price Level*. The last thing I should accuse you of is being classical or orthodox' (letter to Robertson, 13 December 1936, *JMK*, XIV, p. 94). On Robertson's work, see J.R.Presley, *Robertsonian Economics. An Examination of the Work of Sir D.H. Robertson on Industrial Fluctuations*, London, Macmillan, 1979.
29. On the critique of Keynes's theory by Robertson, see his *Essays in Monetary Theory*, London, Staple Press, 1940; see also *Essays in Money and Interest*, edited by J.R.Hicks, Manchester, Collins, 1966.
30. *Capitalism, Socialism and Democracy*, New York, Harper & Brothers; London, George Allen & Unwin, 1942. Joseph Schumpeter, born the same year as Keynes, 1883, dying in 1950, leaving unfinished his monumental *History of Economic Analysis* (1954), is one of the twentieth century's greatest economists (see below, Chapters 6 and 9). Born in Vienna, he was finance minister of the Austrian government in 1919–20. He left Hitler's Germany in 1932 and took a position at Harvard, where he had a profound influence on many of the economists that we mention in this work. His major work, *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*, 2 vols, New York and London, McGraw-Hill, 1939, in which he tried to integrate in a coherent ensemble analyses of cyclical fluctuations of various durations, growth and long-term development, was unfortunately published at a time when discussion was dominated by *The General Theory*. Very far away from Marx ideologically and politically, Schumpeter nonetheless accepted some essential elements of the former's vision of the dynamics of capitalism, in which crises play an essential role. He first presented his theses, in particular his theory of innovations, in *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Cambridge, Massachusetts, Harvard University Press, 1934; 1st German edn, 1912. Overshadowed for a long time, Schumpeter's thought is now more and more referred to. On Schumpeter, see, among many works: R.V.Clemence and F.S. Doody, *The Schumpeterian System*, New York, A.M.Kelley, 1950; E.Marz, *Joseph Schumpeter. Scholar, Teacher, and Politician*, New Haven and London, Connecticut, Yale University Press, 1991; A.Oakley, *Schumpeter's Theory of Capitalist Motion: A Critical Exposition and Reassessment*, Aldershot, Hants, Edward Elgar, 1990; R.Swedberg, *Schumpeter: His Life and Work*, Princeton University Press; Oxford, Polity Press, 1991.



## The triumph of interventionism

From 1936 onward, Keynesianism developed in a more and more autonomous way, independent of its founder. However, for a further ten years, Keynes continued to play an important role in its evolution. His views, with their variations and, sometimes, contradictions, helped shed light on the ambiguities characterizing the development of that body of doctrine and theory subsequently labelled ‘Keynesian’.

### Keynes’s views after 1936

As was predictable, the publication of *The General Theory* gave rise to lively debate.<sup>1</sup> Keynes took part in this, through articles and conferences, correspondence and discussions, evidence of which can be found in various places.<sup>2</sup> What emerges from them is that Keynes shifted on the subject of the interpretation his work should be given. The article published in the February 1937 issue of the *Quarterly Journal of Economics*, to which we have already referred, obviously aimed at a total rupture with orthodoxy. But when Hicks sent him the manuscript of the article, ‘Mr Keynes and the “Classics”: A Suggested Interpretation’ (Hicks 1937), which proposed a common grid, the IS-LL scheme, for reading both the classical theory and *The General Theory*—thereby opening the way to the neoclassical synthesis—Keynes replied on 31 March 1937: ‘I found it very interesting and really have next to nothing to say by way of criticism’ (*JMK*, XIV, p. 79). To Joan Robinson, who offered to write a ‘children’s version of *The General Theory*’, Keynes had written on 2 December 1936:

So far as I myself am concerned, I am trying to prevent my mind from crystallising too much on the precise lines of the *General Theory*. I am attentive to criticisms and to what raises difficulties and catches people’s attention—in which there are a good many surprises. I think that the best popular version may have to be approached along lines of its own. I think about it all a good deal, but I do not feel ready. There is a considerable difference between more or less formal theory, which my existing book purports to be, and something which is meant to be applied to current events without too much qualification by people who do not fully comprehend the theory. So I am against hurry and in favour of gestation. (*JMK*, XXIX, pp. 185–6)

On 20 April 1937, he wrote to her: ‘I am gradually getting myself into an outside position towards the book, and am feeling my way to new lines of exposition’ (*JMK*, XIV, p. 150). Incidentally, Keynes also revealed his intention of publishing explanatory notes to his book. On another occasion, in the context of a critical discussion of the Swedish

economists' conception of the interest rate, he announced his intention of examining the relations between his concepts and the *ex ante* and *ex post* analysis of the Stockholm School.<sup>3</sup>

As to the place of classical theory in *The General Theory*, we also note an evolution on Keynes's part. To a letter from Gerald Shove, a professor at Cambridge who agreed with his critique of the classics but was critical of Keynes's generosity towards this theory in its application to individual industry and firm, Keynes answered on 15 April 1936: 'What you say about the classical analysis as applied to the individual industry and firm is probably right. I have been concentrating on the other problem, and have not, like you, thought very much about the elements of the system' (*JMK*, XIV, p. 2). Then, in an article published three years later, Keynes reconsidered his acceptance of the first postulate of the classical theory, that of the equality of the real wage and the marginal physical product of labour.<sup>4</sup>

Also noticeable are variations in Keynes's position concerning economic policy. For example, at times, he warned against taking a full employment policy too far.<sup>5</sup> While Beveridge chose 3 per cent unemployment as the level below which an active policy of full employment was likely to induce an inflationary process, Keynes set it at around 4.5 per cent. But, during the war, Keynes took the clearest positions in favour of the socialization of investment and of significant state control of economic activity. He had even proposed precise mechanisms for the public management of investment. After the publication in 1944 of *The Road to Serfdom*, Hayek's virulent denunciation of socialism, in which he affirmed that any form of planning could ultimately only lead to totalitarianism, Keynes had written to him to tell him that he totally agreed, morally and philosophically, in his condemnation of totalitarianism and his praise of freedom. Nevertheless, he broke with this critique on the matter of economic policy: it was not less but more planning that was needed to avoid the shift towards totalitarianism. At the end of his letter, Keynes said that he feared the consequences of the application of extreme versions of theses such as Hayek's in a country such as the United States (*JMK*, XXVII, p. 382). But, according to Hayek's testimony, during the last conversation they had, shortly before Keynes's death, the latter indicated he was ready to set out on a policy pilgrimage to encourage governments to fight inflation first and foremost, if it emerged that this was becoming the main danger (Hayek 1978, pp. 286–7).

Thus Keynes's views varied between the publication of *The General Theory* in 1936 and his death in 1946. His books and articles were the object of diverse readings and interpretations. Whatever their importance, his contributions are inscribed in a broad intellectual transformation taking place in the 1930s and 1940s. That is to say, if what was called the Keynesian revolution constituted a profound reconstitution of the intellectual world of the economists and policy makers, this transformation is not easily reduced to the simplistic form that it has all too often been given.

### **The ambiguous Keynesian tidal wave**

In his review of Harrod's book, *The Life of John Maynard Keynes*, published in the 26 January 1951 issue of *The Times*, Lionel Robbins wrote: 'The future historian of social

thought may well call this period the period of John Maynard Keynes. Yet it is not at all easy to find any simple formula to describe wherein this ascendancy consisted' (Robbins 1970, p. 244). This account is perfectly applicable to the developments of economic thought and to the economic policies of the postwar period. Almost everybody agrees in emphasizing its Keynesian nature, but one is forced to recognize that, more often, the Keynesian character is related less to a deep coherence with the hard core of Keynes's theory than to continuities or convergences in relation to different aspects of his thinking.

The success of *The General Theory* was affirmed in several stages. First, some of Keynes's intimates and followers adopted this book as a 'warhorse'. American economists, notably Hansen in his Harvard seminar, found in it a theoretical coherence, which at that time appealed to a number of students and young researchers, including Samuelson, Galbraith and Tobin. In France, while Pierre Mendès-France was acquainted with Keynes's ideas as early as 1938, F.Perroux, C.Gruson, P.Uri and A.Barrère discovered *The General Theory* during the Second World War,<sup>6</sup> as did R.Prebisch in Argentina. Then, in the changing intellectual world which came with the end of the war, simple ideas were imposed which were not unrelated to *The General Theory* but went beyond it, and may be linked to many other sources of inspiration: the duty of governments to ensure full employment (and later growth); a renewed and, at the same time, simple reading of national economies, with the large macroeconomic aggregates and the functional relations which linked them, which the national accounts would subsequently provide with a coherent structure and increasingly reliable data; and finally, on these bases, an improved understanding of economic policies.

After the war, these ideas were equally embraced by English-speaking liberals and radicals, by British Labour Party members, European socialdemocrats and socialist reformers, and also Christian democrats, social reformers, supporters of national economic development, heirs of Colbert, List or Carey. That is to say, these ideas were widely spread among the milieux which came to power at the end of the Second World War; and it is only in a very broad sense that they can be described as Keynesian. But Keynesianism had other, different aspects. Parallel to the publication of *The General Theory* and the circulation of its ideas, a radical mutation was taking place: the mathematicization and formalization of economics, which we shall deal with in the next chapter. Like other theories, Keynes's was rewritten in mathematical language, appropriate to some simple functional relations between macroeconomic magnitudes; this formalization was often carried out at the expense of simplifications, which erased insights or essential aspects of Keynes's thinking. Thus was facilitated the development of a descriptive macroeconomics, commonly described as Keynesian and nourished by the increased postwar availability of data, especially from the national accounts.

These simplifications also rendered possible the development, begun as we have seen by Hicks in 1937, of the combination of tools of analysis suggested by Keynes with other tools offered by approaches to which he himself had been opposed. This syncretism received the name of 'neoclassical synthesis'. It became predominant in the 1950s and 1960s and provided the theoretical basis on which the large econometric models, themselves rendered operational by the progress of computer science and data bases, were conceived and constructed. Economists thus had at their disposal the possibility of establishing the theoretical foundations of economic policies, as well as the powerful