

A photograph of a lighthouse lantern with a glowing lens, viewed through a window overlooking the ocean at dusk. The lantern is on the left, and the window is on the right, showing the sea and a dark sky.

Second Edition

**ECONOMICS  
OF THE PUBLIC  
SECTOR**

Joseph E. Stiglitz

# **ECONOMICS** of the **PUBLIC** **SECTOR**

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**Second Edition**

**JOSEPH E. STIGLITZ**

Princeton University



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# Preface

In one sense, fortune was not kind to the First Edition of this book: no sooner had it appeared than Congress enacted the Tax Reform Act of 1986. In another sense, fortune was kind: the enthusiastic response accorded the First Edition more than compensated for the long hours of writing and rewriting that went into it. For the response, I am grateful. As for the Tax Reform Act, let's just say that—from my perspective as textbook author—I am thankful that, even though it was hailed by politicians as the most sweeping tax reform since the enactment of the income tax, the act did not really represent a radical departure in tax policy. Thus, the concepts and even much of the institutional detail that I described in the First Edition have remained relevant. Still, the Tax Reform Act was of sufficient import to necessitate an immediate and thorough revision of Part Five of the book, which analyzes the U.S. tax structure.

There is a tendency of textbooks to grow in size with each successive edition. I have been wary of falling into this trap—yet it seemed wrong not to include some discussion of two of the central issues facing the United States public sector in the late 1980s: the causes and consequences of the huge federal deficits, and the design of policies to stimulate the economy's growth and productivity. Chapters 2 and 28 provide an introduction to these questions.

Those familiar with the First Edition will note a few other major changes. The discussion of the (Pareto) efficiency of the market economy (Chapter 3) now precedes the introduction to welfare economics (Chapter 4), which focuses on the trade-offs between efficiency and distribution. I have, moreover, added an appendix to Chapter 3 explaining

in more detail the conditions required for the Pareto efficiency, and why competitive economies, in the absence of market failures, are Pareto efficient.

Later, in Part Four, on the theory of taxation, I have divided the discussion of the effects of taxation on economic efficiency into two chapters, one dealing with general principles, and one dealing in particular with the effects on labor supply (Chapter 19). I use that occasion to familiarize students with some of the important empirical work in that area, including the results of income maintenance experiments, econometric studies, and surveys.

As part of the thorough revision of Part Five, I discuss a broad range of issues related to capital taxation (Chapter 22), such as depreciation and capital gains, before I present the specific issues related to the taxation of corporate income (Chapter 23).

Though there have been no changes in expenditure programs quite as dramatic as the Tax Reform Act, the chapters discussing specific expenditure programs have all been updated, not only to reflect the latest data, but also to include issues of current policy concern. Thus, the chapter on health (Chapter 11) includes a discussion of the impact of the new system of reimbursements for Medicare, and the chapter on Welfare Programs (Chapter 14) includes a discussion of recent proposals for reform of the welfare system.

My major aims in writing this book remain the same, however. I wrote it in the belief that an understanding of the issues it addressed was central to any democratic society. Among the most important of these issues are the appropriate balance between the public and private sectors, and how governments can more effectively meet their objectives, whatever those objectives are. Issues in public-sector economics often become highly charged politically, but I tried to present the analysis in an impartial manner, with a clear delineation between the analysis of the consequences of any policy and the value judgments associated with assessing the desirability of the policy. The favorable reception of the First Edition by instructors of a wide variety of political persuasions suggests that I succeeded.

An unexpected bonus was the international enthusiasm for the book. Though I had focused my attention on issues facing the United States, similar issues confront countries around the world, where it has become widely adopted. Most exciting from my perspective is that I seemed to have provided a useful framework within which those in a number of other countries could address the particular policy issues which they faced; adaptations of the book to the economies of Japan, Germany, and Italy are presently under way.

Had this text been written twenty-five years ago, it would have been entitled *Public Finance*, and its focus would have been on sources of revenues. The title *Economics of the Public Sector* and the broader coverage it implies is, however, no accident. In recent years, government spending has reached record levels, and it now accounts for more than a third

of gross national product. The accompanying federal budget deficits have alarmed economists of all political and intellectual persuasions. It is no longer enough to know where the money comes from; one must give equal time to how it is spent.

Meanwhile, the economic theory of the public sector has burgeoned. Some of this recent literature is devoted to analyzing government expenditures. From cost-benefit analysis to public choice theory, economists now have much to say about how government spends its funds. Much of the recent literature in public economics reflects the development of new and more sophisticated models, such as the theory of optimal taxation. I have chosen to present the modern view of public-sector economics in a simple and intuitive way, to relate the most important contributions of this fast-growing literature to undergraduates taking a first course in public finance.

Public-sector issues include some of the most exciting in all of economics. Health, defense, education, social security, welfare programs, and tax reform all receive steady attention in the news media. Economic analysis brings special insights to the debates. Should education be publicly provided? What is the long-term outlook for our social security program? How do current proposals for tax reform match our knowledge of incidence, efficiency, and equity? These kinds of questions breathe life into the course, which is why I give them careful attention.

Examining specific tax and expenditure programs offers an additional benefit: it underscores the importance of design features. One of the lessons we have learned in the past decade is that good intentions are not enough. Urban renewal programs, intended to revitalize our cities, had the unintended consequence of reducing the supply of housing to the poor. One of the major objectives of the tax reform of 1986 was to simplify the tax code, but it seems, instead, to have made it even more complex. I use examples like these, of unintended consequences, not only to enliven the course but also to instill in students the important habit of testing theory against the complex environment in which public-sector decisions are enacted and implemented.

The organization of this book is based on the principle of flexibility. The sequence I follow is, first, to introduce in Part One the fundamental questions, institutional details, and a review of the microeconomic theory underlying the role of the public sector. Part Two develops the theory of public expenditures, including public goods, public choice, and bureaucracy, while Part Three applies the theory to the five largest areas of public expenditure in the United States: health, defense, education, social security, and welfare programs. Parts Four and Five repeat this pattern, presenting the theory of taxation and its analysis, respectively. Part Six takes up two further topics: issues concerning state and local taxation and expenditure and fiscal federalism; and issues concerning stabilization and growth, with particular emphasis on the relation between microeconomic analysis and macroeconomic performance.

A perfectly workable alternative to this sequence would be to cover

taxation before expenditures. Parts Four and Five have been carefully developed so that the teacher wishing to go straight to taxation after Part One can do so without loss of continuity. Further tips on how courses can be organized, as well as lecture notes, test questions, and coverage of advanced topics that some teachers may wish to include in their lectures, are contained in the *Instructor's Manual*, for which Eleanor Brown of Pomona College has done the lion's share of the work for this edition. Another ancillary, the new *Study Guide and Readings*, by Edward C. Kienzle of Stonehill College, helps students to review the material in this book at the same time that it puts accessible portions of the literature in their hands.

The list of those to whom I am indebted is a long one. I owe a special acknowledgment to Karla Hoff, who was more than just a graduate research assistant. She not only updated the figures, she uncovered unpublished data and checked the accuracy of the entire text. More than that, she served as my harshest critic. In writing any textbook at this level, one often has to make simplifications to make the ideas accessible. The problem is how to make those simplifications, while at the same time doing full justice to the complexity of the subject. Karla insisted that there be no compromises on either account: that each passage be clearly accessible to a student with no background in economics, but at the same time that it not oversimplify the subject.

My teachers at Amherst College, James Nelson and Arnold Coltery, not only stimulated my interest in economics, and in the particular subject of this course, but laid the foundations for my later studies. They also showed me, by example, what good teaching meant; I hope that some of what I learned from them is reflected in this book. At M.I.T. Dan Holland (currently editor of the *National Tax Journal*) and E. Cary Brown introduced me to the formal study of public economics. Again, I hope some of the blend of policy, theory, and institutional detail that marked their work is reflected here. The insights of my colleagues and collaborators at the institutions at which I have worked (M.I.T., Yale University, Stanford University, Princeton University, Oxford University, Cambridge University, and the National Bureau of Economic Research) and the government agencies (Treasury, Labor, Interior, Energy, Agency for International Development, State of Louisiana, State of Texas) and international organizations (World Bank, Interamerican Development Bank, Organization of Economic Cooperation and Development) for which I have consulted have also proved invaluable. I should mention Henry Aaron (Brookings Institution), Alan J. Auerbach (University of Pennsylvania), Greg Ballantine (former Assistant Secretary of the Treasury for Tax Policy), William J. Baumol (Princeton University), Charles T. Clotfelter (Duke University), Partha Dasgupta (Cambridge University), Peter A. Diamond (M.I.T.), Avinash Dixit (Princeton University), Martin Feldstein (Harvard University), Harvey Galper (Brookings Institution), Robert E. Hall (Stanford University), John Hamilton (University of Florida), Arnold C. Harberger (University

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My indebtedness to Jane Hannaway is more than that customarily owed to a spouse, for her insights into the behavior of governments in general, and bureaucratic behavior in particular, have been instrumental in shaping my own views, although I am afraid I have had less influence on her than she has had on me.

As in the First Edition, I am deeply indebted to Drake McFeely, my editor at Norton, for his thoughtful and insightful editorial comments that greatly improved the book and for the care and attention he paid in shepherding the book through the various stages of production. The final thanks are due to his colleague, Sandra Lifland, who also helped shape the Second Edition.

Princeton, N.J.  
March 1988

J.E.S.



# PART ONE

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# INTRODUCTION

How does the government affect the economy? Why are some economic activities undertaken in the public sector, some in the private? How has the government grown over the past fifty years? These are some of the basic questions addressed in Part I of this book.

The first two chapters describe the scope of the book and of the public sector in the United States. The United States has a mixed economy, with some economic activities undertaken in the public sector, some in the private.

Chapter 3 delineates those circumstances in which private markets may not work well, so that some form of government action may be required.

Alternative government actions often present trade-offs between efficiency and equity. Chapter 4 presents the framework within which economists make judgments concerning the desirability of different government programs and policies.

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