

Cambridge University Press
978-1-108-47968-4 — Prospects for Economic Growth in the United States
Edited by John W. Diamond , George R. Zodrow
Frontmatter
[More Information](#)

PROSPECTS FOR ECONOMIC GROWTH IN THE UNITED STATES

Although economic growth has historically been an engine of prosperity in the United States, recent trends have generated uncertainty regarding the prospects for sustaining such growth. Economists disagree about the relative importance of many factors affecting future growth, including rapid technological advances, immigration, the growth of the financial sector, problems with the educational system, increasing income inequality, an aging population, and large fiscal imbalances that have not been addressed by the political system. This collection of chapters, authored by many of today's leading economists, addresses the prospects for economic growth in the United States over the next few decades. During a time of great economic uncertainty, this book engages with both sides in the debate over economic growth, focusing on policy options that increase the prospects for vigorous economic growth in the future.

John W. Diamond is the Director of the Center for Public Finance and the Edward A. and Hermena Hancock Kelly Fellow in Public Finance at Rice University's Baker Institute.

George R. Zodrow is the Allyn R. and Gladys M. Cline Professor of Economics and Economics Department Chair at Rice University, and a Faculty Scholar at the Center for Public Finance at Rice University's Baker Institute.

Cambridge University Press
978-1-108-47968-4 — Prospects for Economic Growth in the United States
Edited by John W. Diamond , George R. Zodrow
Frontmatter
[More Information](#)

Cambridge University Press

978-1-108-47968-4 — Prospects for Economic Growth in the United States

Edited by John W. Diamond , George R. Zodrow

Frontmatter

[More Information](#)

Prospects for Economic Growth in the United States

Edited by

JOHN W. DIAMOND

Rice University

GEORGE R. ZODROW

Rice University



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
 978-1-108-47968-4 — Prospects for Economic Growth in the United States
 Edited by John W. Diamond, George R. Zodrow
 Frontmatter
[More Information](#)

CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
 New Delhi – 110025, India

79 Anson Road, #06–04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108479684

DOI: 10.1017/9781108856089

© Cambridge University Press 2021

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2021

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Diamond, John W., editor. | Zodrow, George R., editor.

Title: Prospects for economic growth in the United States / edited by John W. Diamond, Rice University, Houston, George R. Zodrow, Rice University, Houston.

Description: New York, NY : Cambridge University Press, 2021. | Includes index.

Identifiers: LCCN 2021024994 (print) | LCCN 2021024995 (ebook) | ISBN 9781108479684 (hardback) | ISBN 9781108856089 (ebook)

Subjects: LCSH: Economic development – United States. | United States – Economic conditions – 21st century. | United States – Economic policy – 21st century. | United States – Social policy – 21st century. | Fiscal policy – United States. | Income distribution – United States. | BISAC: BUSINESS & ECONOMICS / Economics / Macroeconomics | BUSINESS & ECONOMICS / Economics / Macroeconomics

Classification: LCC HC106.84 .P76 2021(print) | LCC HC106.84 (ebook) | DDC 338.973–dc23

LC record available at <https://lcn.loc.gov/2021024994>

LC ebook record available at <https://lcn.loc.gov/2021024995>

ISBN 978-1-108-47968-4 Hardback

ISBN 978-1-108-79050-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Cambridge University Press
978-1-108-47968-4 — Prospects for Economic Growth in the United States
Edited by John W. Diamond , George R. Zodrow
Frontmatter
[More Information](#)

To Martin Feldstein, whose pathbreaking contributions and profound insights into the theory and practice of public finance established the standard for the profession and inspired a generation of scholars

Cambridge University Press
978-1-108-47968-4 — Prospects for Economic Growth in the United States
Edited by John W. Diamond , George R. Zodrow
Frontmatter
[More Information](#)

Contents

<i>List of Figures</i>	<i>page ix</i>
<i>List of Tables</i>	xi
<i>Notes on Contributors</i>	xiii
<i>Foreword by James A. Baker III</i>	xix
<i>Preface</i>	xxi
<i>Acknowledgments</i>	xxv

PART I OVERVIEW

1 Introduction	3
<i>John W. Diamond and George R. Zodrow</i>	
2 The Future of Economic Growth in the United States	22
<i>Martin Feldstein</i>	

PART II LABOR AND ECONOMIC GROWTH

3 Human Capital and Long-Run Economic Growth	41
<i>Flávio Cunha</i>	
4 Immigration and Economic Growth	78
<i>George J. Borjas</i>	

PART III IMPLICATIONS OF TECHNOLOGY FOR GROWTH

5 “The \$64,000 Question”: Living in the Age of Technological Possibility or Showing Possibility’s Age?	115
<i>Glenn Hubbard</i>	

viii	<i>Contents</i>	
6	Artificial Intelligence Technologies and Aggregate Growth Prospects <i>Timothy Bresnahan</i>	132
	PART IV THE EFFECTS OF FISCAL POLICY ON GROWTH	
7	Taxes and Economic Growth <i>Robert J. Barro</i>	173
8	Carbon Taxes: Macroeconomic and Distributional Effects <i>John W. Diamond and George R. Zodrow</i>	195
	PART V SPECIAL TOPICS ON ECONOMIC GROWTH	
9	Banking on Prosperity <i>Ross Levine</i>	247
10	Economic Growth and Income Inequality: Insights from the Representative Consumer Theory of Distribution <i>Stephen J. Turnovsky</i>	263
	PART VI A CONCLUDING PERSPECTIVE	
11	A Perspective on the Prospects for Economic Growth in the United States <i>John W. Diamond and George R. Zodrow</i>	321
	<i>Index</i>	334

Figures

3.1	Labor productivity growth in the United States, 1948–2016	<i>page</i> 42
3.2	Top 10 percent national income shares in the United States, 1948–2014	43
3.3	Percentage of younger and older adults with tertiary education	44
4.1	Immigration and economic growth in decadal data, 1850–2017	85
	(a) GDP	
	(b) Per-capita GDP	
4.2	Immigration surplus	89
4.3	Immigration surplus and human capital externalities	92
4.4	Mariel and the wage of high-school dropouts	95
	(a) Non-Hispanic men aged twenty-five to fifty-nine	
	(b) Non-Cuban workers aged sixteen to sixty-one	
4.5	Scatter relating wages and immigrant share across skill groups and over time, 1960–2010	96
4.6	Economic assimilation of immigrants, 1970–2010	103
	(a) Relative wage profiles	
	(b) English proficiency profiles	
4.7	Economic assimilation and education	104
4.8	Trends in welfare participation rates, 1994–2018	106
	(a) Households	
	(b) Persons	
7.1	Probability density for gamma distribution	184
7.2	Tax rate wedge and productivity	184
7.3	Marginal effect of tax wedge on productivity	185
7.4	Corporate share of output	185
7.5	Marginal effect of tax wedge on corporate output share	186
7.6	C-corporate shares of economic activity	187
7.7	Corporate shares of business investment and capital stock	188

x *List of Figures*

7.8	Federal C-corporate and individual tax rates	189
8.1	Distributional effects of carbon tax with uniform per-household rebates	223
8.2	Distributional effects of carbon tax with payroll tax reductions	226
8.3	Distributional effects of carbon tax with wage tax reductions	231
8.4	Distributional effects of carbon tax with elimination of dividend and capital gains taxes and per-household rebates	234
8.5	Distributional effects of carbon tax with ten-year debt reduction followed by uniform per-household rebates	236
10.1	Aggregate dynamics	283
10.2	Distributional dynamics	285
10.3	Increase in g	295

Tables

4.1	Immigration and GSP across US states, 1960–2017	<i>page</i> 87
4.2	Short-run immigration surplus (\$ billion), 2017	90
4.3	Representative estimates of the wage elasticity in recent studies, as chosen by the NAS	97
4.4	Simulated percent wage effects of 1990–2010 immigrant supply shock on native workers	99
4.5	Long-run fiscal impact of immigration	108
6.1	AIT-based matching system results	140
6.2	Incidence of and algorithmic effectiveness against inappropriate content on Facebook	146
7.1	C-corporate user costs and responses to the TCJA	178
7.2	Pass-through and overall responses to the 2017 tax reform	179
7.3	Regressions for C-corporate share of business gross assets, 1968–2013	190
7.4	Estimated productivity effects from major historical US tax changes	193
8.1	GDP effects of carbon tax in various models	208
8.2	Macroeconomic effects of carbon tax with uniform per- household rebates	221
8.3	Macroeconomic effects of carbon tax with payroll tax reductions	224
8.4	Macroeconomic effects of carbon tax with wage tax reductions	229
8.5	Macroeconomic effects of carbon tax with elimination of dividend and capital gains taxes coupled with per-household rebates	232
8.6	Macroeconomic effects of carbon tax with ten-year debt reduction followed by uniform per-household rebates	236

xii *List of Tables*

10.1 Basic model and benchmark parameters	282
10.2 Fiscal model and benchmark parameters	291
10.3 Increase in government expenditure (US economy) (increase in g by 5 percentage points from 0.15 to 0.20)	293

Notes on Contributors

Robert J. Barro is Paul M. Warburg Professor of Economics at Harvard University, a visiting scholar at the American Enterprise Institute, and a research associate of the National Bureau of Economic Research. He has a PhD in economics from Harvard University and a BS in physics from Caltech. Barro is coeditor of Harvard's *Quarterly Journal of Economics* and was previously president of the Western Economic Association, vice president of the American Economic Association, a viewpoint columnist for *Business Week*, and a contributing editor of *The Wall Street Journal*. Noteworthy research includes empirical determinants of economic growth, economic effects of public debt and budget deficits, and the economics of religion. Current research focuses on the impact of rare disasters on asset markets and macroeconomic activity, with recent applications to environmental protection, quantities of safe assets, and pricing of stock options. Books include *The Wealth of Religions: The Political Economy of Believing and Belonging* (with Rachel M. McCleary; Princeton University Press, 2019); *Economic Growth* (with Xavier Sala-i-Martin; 2nd ed., MIT Press, 2004); *Education Matters: Global Schooling Gains from the 19th to the 21st Century* (with Jong-Wha Lee; Oxford University Press, 2015); *Macroeconomics: A Modern Approach* (Cengage Learning, 1980); *Nothing Is Sacred: Economic Ideas for the New Millennium* (MIT Press, 2003); *Determinants of Economic Growth: A Cross-Country Empirical Study* (MIT Press, 1997); and *Getting It Right: Markets and Choices in a Free Society* (MIT Press, 1996).

George J. Borjas is the Robert W. Scrivner Professor of Economics and Social Policy at the Harvard Kennedy School. He was awarded the IZA Prize in Labor Economics in 2011. Borjas is a research associate at the National Bureau of Economic Research and a research fellow at IZA. He

has authored several books, including *Immigration Economics* (Harvard University Press, 2014), *Heaven's Door: Immigration Policy and the American Economy* (Princeton University Press, 1999), the widely used textbook *Labor Economics* (7th ed., McGraw-Hill, 2016), and his latest, *We Wanted Workers: Unraveling the Immigration Narrative* (W. W. Norton, 2016). He has also published over 150 articles in books and scholarly journals, and has citations in *Who's Who in the World* and *Who's Who in America*. Borjas was elected a fellow of the Econometric Society in 1998 and a fellow of the Society of Labor Economists in 2004. In 2016, Politico ranked Borjas seventeenth in its list of the fifty “thinkers, doers and visionaries transforming American politics ... For telling it like it really is on immigration.” He received his PhD in economics from Columbia University in 1975.

Timothy Bresnahan is Landau Professor of Technology and the Economy, Emeritus, Stanford University. His research focuses on industrial organization, applied econometrics, and the economics of technology. His current research focuses on competition and returns to innovation in technology industries, application of information and communications technology in the economy, economic organization for high social return to technical progress, and the economic history of mass market computing. Bresnahan has served as director of undergraduate studies, vice chair, and chair in the economics department; head of the Employment and Economic Growth Center in SIEPR; and chief economist of the Antitrust Division of the US Department of Justice. He is a fellow of both the Econometric Society and the American Academy of Arts and Sciences, and a 2017 laureate of the BBVA Foundation Frontiers of Knowledge Award.

Flávio Cunha is Professor of Economics at Rice University. He studies human capital formation and its link to long-run economic growth, inequality, and poverty. In his research, Cunha develops economic theory and statistical methods to study human capital formation from birth to adulthood. In partnership with the World Bank and the State of Ceara in Brazil, he developed, implemented, and evaluated a new home visitation program targeted to low-income families living in isolated rural areas in Brazil. In research funded by the National Institute of Health, he has shown that well-developed parenting programs foster human capital formation by improving the quality of the environment children have in their early years. He is a founding faculty affiliate of the Texas Policy Lab –

a new initiative of the Rice University School of Social Sciences – which provides scientific expertise in designing, implementing, and evaluating public policies conducted by state or local government agencies.

John W. Diamond is the Edward A. and Hermena Hancock Kelly Fellow in Public Finance and director of the Center for Public Finance at Rice University's Baker Institute, an adjunct professor of economics at Rice University, and CEO of Tax Policy Advisers, LLC. His research interests are federal tax and expenditure policy, state and local public finance, and the construction and simulation of computable general equilibrium models. His current research focuses on economic effects of corporate tax reform, economic and distributional effects of fundamental tax reform, taxation and housing values, public sector pensions, and various other tax and expenditure policy issues. Diamond is coeditor of *Pathways to Fiscal Reform in the United States* (with George R. Zodrow; MIT Press, 2015) and *Fundamental Tax Reform: Issues, Choices and Implications* (with George R. Zodrow; MIT Press, 2008). He has testified before the US House Ways and Means Committee, the US House Budget Committee, the Senate Finance Committee, the Joint Economic Committee, and other federal and state committees on issues related to tax policy and the US economy. He served as forum editor for the *National Tax Journal* (2009–17) and on the staff of the Joint Committee on Taxation, US Congress (2000–4). He has also served as a consultant for the World Bank on the efficacy of structural adjustment programs. He received his PhD in economics from Rice University in 2000.

Martin Feldstein passed away on June 11, 2019. He was the George F. Baker Professor of Economics at Harvard University and President Emeritus of the National Bureau of Economic Research. From 1977 to 1982 and from 1984 to 2008, he served as president and CEO of the NBER, a private, nonprofit research organization that has specialized for more than eighty years in producing nonpartisan studies of the American economy. From 1982 through 1984, Feldstein was chairman of the Council of Economic Advisers and President Reagan's chief economic adviser. He served as president of the American Economic Association in 2004. In 2006, President Bush appointed him a member of his Foreign Intelligence Advisory Board, and in 2009, President Obama appointed him a member of his Economic Recovery Advisory Board. Feldstein was a member of the American Philosophical Society, a corresponding fellow of the British Academy, a fellow of the Econometric Society, and a fellow of

the National Association of Business Economics. He was a trustee of the Council on Foreign Relations and a member of the Trilateral Commission, the Group of 30, the American Academy of Arts and Sciences, and the Council of Academic Advisors of the American Enterprise Institute. Feldstein received honorary doctorates from several universities and was an honorary fellow of Nuffield College, Oxford. In 1977, he received the John Bates Clark Medal of the American Economic Association, a prize awarded every two years to the economist under the age of forty who is judged to have made the greatest contribution to economic science. He was the author of more than 300 research articles on economics. Feldstein was a director of several public corporations and an economic adviser to several businesses and government organizations in the United States and abroad. He was a regular contributor to *The Wall Street Journal* and other publications. Feldstein was a graduate of Harvard College and Oxford University.

Glenn Hubbard is dean emeritus of Columbia Business School. A Columbia faculty member since 1988, he is also the Russell L. Carson Professor of Finance and Economics. Hubbard received his BA and BS degrees summa cum laude from the University of Central Florida. He also holds AM and PhD degrees in economics from Harvard University. In addition to writing more than 100 scholarly articles in economics and finance, Hubbard is the author of three popular textbooks, as well as co-author of *The Aid Trap: Hard Truths About Ending Poverty* (with William Duggan; Columbia Business School Publishing, 2009); *Balance: The Economics of Great Powers from Ancient Rome to Modern America* (with Tim Kane; Simon and Schuster, 2013); and *Healthy, Wealthy, and Wise: Five Steps to a Better Health Care System* (with John F. Cogan and Daniel P. Kessler; 2nd ed., Hoover Institution Press, 2011). His commentaries appear on television and radio. In government, Hubbard served as deputy assistant secretary for tax policy at the US Treasury Department from 1991 to 1993. From February 2001 until March 2003, he was chairman of the US Council of Economic Advisers (CEA) under President George W. Bush. While serving as CEA chairman, he also chaired the economic policy committee of the OECD. In the corporate sector, he is a director of ADP, BlackRock Fixed-Income Funds, and MetLife. Hubbard is co-chair of the Committee on Capital Markets Regulation; he is a past chair of the Economic Club of New York and a past co-chair of the Study Group on Corporate Boards.

Ross Levine is the Willis H. Booth Chair in Banking and Finance at the Haas School of Business, University of California, Berkeley. He is also a research associate at the National Bureau of Economic Research and a member of the Council on Foreign Relations. He completed his undergraduate studies at Cornell University in 1982 and received his PhD in economics from UCLA in 1987. Before moving to academia, he worked at the Board of Governors of the Federal Reserve System and the World Bank, where he conducted and managed research and operational programs. His work focuses on how financial sector policies and the operation of financial systems shape economic growth, entrepreneurship, and economic prosperity. Two of his co-written books, *Rethinking Bank Regulation: Till Angels Govern* (with James R. Barth and Gerard Caprio Jr.; Cambridge University Press, 2006) and *Guardians of Finance: Making Regulators Work for Us* (with James R. Barth and Gerard Caprio Jr.; MIT Press, 2012), stress that regulatory policies often stymie competition and encourage excessive risk-taking, with deleterious effects on living standards.

Stephen J. Turnovsky received his PhD from Harvard University in 1968 and currently holds the Van Voorhis Professorship of Economics at the University of Washington. He was previously a member of the faculties of the University of Pennsylvania, the University of Toronto, the Australian National University, and the University of Illinois at Urbana-Champaign, where he was IBE Distinguished Professor of Economics. In 2005, he received a Doctorat honoris causa from the University of Aix-Marseille, France, and in 2009, he was awarded an honorary Doctor of Literature from Victoria University of Wellington, New Zealand. He was elected fellow of the Econometric Society in 1981 and was president of the Society of Economic Dynamics and Control from 1982 to 1984 and of the Society for Computational Economics from 2004 to 2006. He was co-chair of the Program Committee of the Eighth World Congress of the Econometric Society in 2000. He served on several editorial boards including the *Journal of Economic Dynamics and Control* (editor, 1981–7, 1995–2001; advisory editor (2002–)), the *Journal of Money, Credit, and Banking* (1977–2010), the *Journal of Public Economic Theory* (2000–), *Macroeconomic Dynamics* (2001–), the *Journal of Human Capital* (2006–), the *International Economic Review* (1972–93), the *Journal of Public Economics* (1982–7), and the *Journal of International Economics* (1995–8). His main area of research is in the general area of macroeconomic dynamics and growth. Within this area, his interests are

quite far-ranging, with particular focus on fiscal policy issues and optimal policy, extending to both closed and open economies.

George R. Zodrow is Allyn R. and Gladys M. Cline Professor of Economics and Faculty Scholar at the Center for Public Finance, Baker Institute for Public Policy, at Rice University. He is also an international research fellow at the Centre on Business Taxation at Oxford University. Zodrow is the recipient of the 2009 Steven D. Gold Award, presented by the National Tax Association to recognize significant contributions to state and local fiscal policy and a capacity to cross the boundaries between academic research and public policy-making. Zodrow's research interests are tax reform in the United States and in developing countries, state and local public finance, and computable general equilibrium models of the effects of tax reforms. His articles have appeared in numerous scholarly publications and collective volumes on taxation, and he is the author or editor of several books on the topic. Zodrow recently served for ten years as editor of the *National Tax Journal* and has also been an editor of the "Policy Watch" section of *International Tax and Public Finance*. He was a visiting economist at the US Treasury Office of Tax Analysis in 1984–5 during the preparation of Treasury I, the precursor to the Tax Reform Act of 1986, and has been involved in tax reform projects in numerous countries.

Foreword

James A. Baker III

President Ronald Reagan understood the importance of economic growth in creating prosperity and a higher standard of living for successive generations. At the time he took office in 1981, however, the prospects for economic growth in the United States were uncertain. The country faced a number of critical challenges, including rapid inflation, high unemployment, stagnant income growth, and increasing trade conflicts, not to mention military threats from abroad. As President Reagan's White House Chief of Staff in the early 1980s and his Secretary of the Treasury starting in 1985, I was deeply involved in the administration's efforts to enact sweeping economic reforms, including major reform of individual and corporate income tax policy, market deregulation, and working with the monetary authorities to create sound monetary policies to contain inflation. As is well known, Reagan's policies resulted in one of the longest uninterrupted non-inflationary economic expansions in American history.

Today, the level of uncertainty and the challenges facing the US economy are similar. But the nature of the problems we face are very different. In particular, the challenges that confront us today include rapid technological change, slow economic growth, an aging and slowly growing population, unsustainable fiscal policies, increasing inequality, and low interest rates that leave little room for effective monetary policy. Given the considerable level of uncertainty facing the US economy, it is essential to enact sound economic policies that allow economic growth to continue to provide prosperity to future generations.

This volume lays out in detail the economic issues that are fundamental to understanding how to maintain vigorous economic growth of the US economy. The various chapters discuss a range of subjects – including

issues related to demographics, social insurance programs, technological progress, human capital accumulation, immigration, income inequality, the importance of financial institutions, and fiscal policy – that are critical inputs in determining the future level of economic growth in the United States. The contributors to the volume represent a “who’s who” of renowned economists in the United States.

Baker Institute fellows John Diamond and George Zodrow deserve great credit for organizing both this volume and the conference at which these chapters were originally presented as papers. I am delighted that they dedicated this book to the memory of Martin Feldstein. Marty had a huge impact on public policy and his profound insights and wise council will be sorely missed. Their conference, which was entitled “Prospects for Economic Growth in the United States,” was one of a series of events celebrating the twenty-fifth anniversary of Rice University’s Baker Institute for Public Policy. Their understanding and exploration of the country’s complex economic challenges play a critical role in keeping our nation the strong one that President Reagan desired, promoted, and achieved.

Preface

Robust economic growth has long been the engine of prosperity in the United States, and has resulted in a sustained increase in living standards that has made the US economy the envy of much of the modern world. Prospects for future economic growth in the United States, however, are uncertain. For example, some researchers argue that technological advances, especially in the area of artificial intelligence, are likely to result in rapid automation-related increases in future growth – indeed, to the point that serious shortages in labor demand may result. In marked contrast, other observers believe that recent economic, demographic, and political trends, including an educational system that is ineffective in many dimensions, increasing income inequality, an aging population coupled with a lower labor force participation rate, and the absence of the political will to address large-scale fiscal imbalances, have created pervasive headwinds that will seriously limit future US economic growth.

This volume brings together a distinguished group of world-renowned economists to explore the challenges of maintaining vigorous economic growth in the United States, including issues related to demographics, social insurance programs, technological progress, human capital accumulation, immigration, income inequality, financial institutions, and fiscal policy. The volume consists of a set of chapters that were presented as papers at a conference on “Prospects for Economic Growth in the United States,” which was one of a series of events celebrating the twenty-fifth anniversary of Rice University’s Baker Institute for Public Policy. The conference was sponsored by the Baker Institute’s Center for Public Finance and held at Rice on December 6–7, 2018.

Given the timing of the conference and the subsequent paper revisions, the chapters in this volume were essentially complete before the onset of the COVID-19 pandemic. As a result, none of the papers discuss the

implications of the pandemic for the prospects for economic growth in the United States. Although this is clearly a subject that could be adequately treated only with a second book, we offer several brief observations as follows.

There is no question that the short run implications of the pandemic have been dire with large declines in output and employment. For example, in July 2020, the Congressional Budget Office (CBO)¹ estimated that over the period 2020–2030 annual real GDP will on average be 3.4 percent lower than it projected in January 2020, and that the unemployment rate will average 6.1 percent relative to an earlier prediction of 4.2 percent. We note that the accuracy of these economic projections will naturally depend on the course of pandemic – especially the extent to which the development of vaccines and more effective treatments is successful, and the extent to which the prospects for the success of efforts to continue reopening the economy are enhanced by effective procedures to ensure the wearing of masks, the maintenance of social distancing, widespread cleaning and disinfecting, and effective protocols for testing and health monitoring, contact tracing, and quarantining of those infected with or exposed to COVID-19.

From a medium run and longer run perspective, it is clear that the pandemic has the potential to accentuate all four of the “pervasive headwinds that will seriously limit future U.S. economic growth” noted above. First, from an educational standpoint, the learning lost due to school shutdowns and difficulties with remote learning will have a negative impact on the affected students. For example, Hanushek and Woessmann (2020)² estimate students in grades in 1–12 might suffer a decline of 3 percent in their lifetime incomes and annual GDP might be an average of 1.5 percent lower for the rest of the century as a result of the pandemic. They note that these effects can be ameliorated only with more effective instruction going forward, perhaps with more individualized instruction and if new and effective pedagogical techniques learned by coping with the pandemic, especially in the areas of remote teaching and technological innovation in teaching, are successfully implemented.

Second, the pandemic is likely to increase income inequality. Hanushek and Woessmann stress that educational losses will be concentrated among

¹ Congressional Budget Office, July 2020, “An Update to the Budget Outlook: 2020–2030,” Congressional Budget Office, Washington, DC.

² Hanushek, Eric A., and Ludger Woessmann, 2020, “The Economic Impacts of Learning Losses,” OECD, Paris.

disadvantaged students. More generally, numerous commentators have described the likelihood of a “K-shaped” recovery under which the poor bear a disproportionate share of the burden of the costs of the pandemic due to the collapse of the labor market, especially for relatively low paying jobs that cannot be done remotely, and reductions in pandemic relief packages, while higher income individuals are largely insulated from the effects of the pandemic, especially to the extent that the recovery in the nation’s financial assets continues.

Third, declines in the labor force participation rate may be accelerated as individuals, especially those in the later stages of their life cycles, lose their jobs and have difficulty finding re-employment even as the pandemic subsides, especially in light of the increase in unemployment predicted by CBO. In addition, from a longer run perspective, Spence (2020)³ notes that the pandemic has accelerated trends toward the increasing economic importance of relatively low labor-intensity firms with high levels of intangible assets per employee, partly due to increased adoption of digital technologies during the pandemic and partly because economic difficulties have been concentrated among relatively labor-intensive business sectors.

Finally, although the massive fiscal and monetary responses of governments in the United States and around the world are appropriate in light of the economic threat posed by the worldwide spread of COVID-19, there is no question that the fiscal situation of the United States has deteriorated as a result of the pandemic. For example, in September 2020, the CBO (2020)⁴ projected a federal budget deficit of \$3.3 trillion in 2020, more than three times the 2019 deficit, and that privately held federal debt will increase to a historical record of 109 percent of GDP by 2030, relative to its January 2020 projection of a debt of 98 percent of GDP. However, we should note that historically low interest rates – and the prospect that they may continue for an extended period of time, especially if Federal Reserve policy continues to be accommodating, global savings continue to be large relative to investment needs (the “savings glut”), and debt issued by the U.S. Treasury continues to be perceived to be an international investment safe haven – are of course one reason that high levels of debt may have less of an impact on future economic growth rates than they otherwise might.

³ Spence, Michael, 2020, “Winners and Losers of the Pandemic Economy,” Project Syndicate, Prague.

⁴ Congressional Budget Office, September 2020, “An Update to the Budget Outlook: 2020–2030,” Congressional Budget Office, Washington, DC; Congressional Budget Office, January 2020, “The Budget and Economic Outlook: 2020–2030,” Congressional Budget Office, Washington, DC.

Despite concerns about such increases in these four headwinds facing future economic growth, we close on a more optimistic note. The effects of the pandemic on the four headwinds are largely medium term rather than long term factors. Indeed, it may be true, as suggested by former Federal Reserve Board Chair Ben Bernanke, that – as long as public health efforts to contain the pandemic are successful – the effect of the coronavirus pandemic on the economy will be akin to an extended “major snowstorm” that will have relatively little impact on long run growth. Moreover, the acceleration of trends toward increasing digitization noted above may have a positive effect on growth, along the lines suggested by those who are optimistic about the long run growth effects of ongoing advances in technology and artificial intelligence. Finally, some of the trends forced by the COVID-19 pandemic may have positive effects on long run productivity and thus long run growth, including increased use of telemedicine and greater business flexibility in allowing remote work when effective and the resulting reduction in congestion. Given all of these uncertainties, the net effect of the pandemic on long run growth is far from clear.

Acknowledgments

This volume and the conference that preceded it would not have been possible without the financial support of the Charles Koch Foundation. We are very thankful to Jonathan Reck of the Charles Koch Foundation for supporting our efforts to obtain funding and for continually encouraging us to produce unbiased research that brings about a healthy national debate on important issues of our time. We would also like to thank Baker Institute Founding Director Edward Djerejian for his enthusiastic support of the conference and this volume, our colleagues at the Baker Institute's Center for Public Finance, Jorge Barro, Joyce Beebe, and Thomas Hogan for their wise counsel on numerous issues in developing the idea and planning for this conference, Anne Dayton and Laura Livingston for excellent administrative assistance, and the Baker Institute staff, especially Regina Dennis, Lianne Hart, Laura Hotze, Jason Lyons, Giovanna Marciano, Andrew Murillo, Shawn O'Neill, Daniel Padilla, Christine Pfeffer, Ben Stevenson, Macy Stewart, and Kevin Young, for their assistance throughout the project. Finally, we would like to thank Anna Kucera, Allison Price, and Varun Cidambi, whose cheerful yet painstaking editorial assistance was essential to the preparation of this volume.

Cambridge University Press
978-1-108-47968-4 — Prospects for Economic Growth in the United States
Edited by John W. Diamond , George R. Zodrow
Frontmatter
[More Information](#)
