Preface

Kaushik Basu, David Rosenblatt, and Claudia Sepúlveda

Origin

We live in troubled times. Over the past decade, the world economy has been wracked by financial crises, sovereign debt problems, backlash from political conflict and migrant crises, and, recently, a rise in xenophobia and protectionism. These issues raise major questions about the state of the world and also about the ability of economics to take on such challenges. Are these many economic and political crises and flare-ups symptoms of some deeper, underlying issues? Is economics as a discipline failing us at this time of soul searching? These are the questions that many are asking and that prompted the conference at the World Bank on which this book is based. We decided to bring in some of the finest minds in the profession—economists who have shaped modern economics—to ponder the state of the field and the state of the world in a series of papers. The conference consisted of 2 days of deliberation: The papers were presented, a distinguished group of economists commented on the presentations, and a large audience engaged with them in conversation and debate. This book is the outcome of these 2 days of deliberation.

In the 1950s through the 1970s, neoclassical economics reached a reasonable consensus in the economics profession, at least in the "West." The United States and Western Europe experienced postwar rapid economic growth. Asia was still a sleeping giant in economic terms, the Soviet Union—with its particular economic system—was very much intact, and African countries were only beginning a wave of independence from colonial rule. Development economics focused on structural transformation along the lines laid out by Sir Arthur Lewis, and dependency theories also emerged that asserted that the global capitalist system was essentially rigged against the developing world. Despite the neoclassical consensus, some economists believed that advanced mathematical and engineering techniques could allow social planners to optimally set the path of economic growth and development.

Fast forward in history and one sees a very different evolution of the global economy over the past 25 years. The latest wave of globalization has led to the intensification of global value chains. Asia is now home to some of the most advanced economies on earth. It began with Japan, which was soon followed by Singapore, South Korea, Taiwan, and Hong Kong. By the mid-1980s, China was a growth leader, and in recent times, India and Vietnam are growing at exemplary rates. The Soviet Union no longer exists. Many middle-income countries—including those in Latin America—have achieved social progress, but dramatic income inequality persists, as do challenges to compete in the new global context. Africa has emerged from debt relief to achieve growth and reduced poverty rates, albeit at a variable and erratic pace. Rapid technological change provides both opportunities for technological leapfrogging as well as challenges to adapt.

As we see in this volume, the economics profession has adapted to the changing state of the world by learning from practical experience, challenging traditional assumptions, and developing new techniques and the use of big data. A predominant view in Western universities in the 1980s was that all economies were alike and that all developing countries needed to do was to “get prices right.” Development economics languished as a field of study. Since then, as developing economies have gained more prominence on the global stage, development economics has become one of the most dynamic fields in economics—particularly in terms of new statistical techniques and the ability to blend economic theory with empirical methods.

Despite all these changes and adaptations, the financial crisis that started in 2008 and caused a protracted recession has left scars on the world economy that linger even today. These scars show that the economics profession still faces major intellectual and research challenges. Addressing such challenges was one of the motivations for our conference.

With time, the societal goals of economics and the normative presumptions underlying the profession have also shifted. From a narrow focus on gross domestic product, economists have come to recognize the need for a broader conception of human welfare and capability. Even the World Bank decided to broaden its mission goals from development and poverty reduction to a more direct targeting of inequality mitigation, which it refers to as the promotion of "shared prosperity." This book is an assessment of our discipline at the crossroad of all these changes.

We regret that Kenneth Arrow did not live to see the publication of this book. Kenneth Arrow was one of the greatest minds of our time, an economist who straddled like a colossus the second half of the past century and the opening years of this one, and who opened the conference with a presentation of enormous sweep. Ken Arrow passed away at the age of 95 on February 21, 2017, while he was working on completing his paper for this volume. He was in touch with us in our capacity as the volume editors until the last weeks of his life. After some deliberation, we decided to include his paper, despite it being an unfinished work. We did not want to put words into his mouth, nor leave out this final statement from him. We are grateful to Larry Summers for helping us edit the paper lightly; we also worked on it to make obvious corrections but took care not to change any of the original meanings. As a result, some parts of the paper are obviously incomplete. We hope that this chapter from an economist who helped shape so much of modern economics will be of value to all readers. Indeed, we believe that part I of this book—the three sweeping essays by Kenneth Arrow, Amartya Sen, and Joseph Stiglitz—will be viewed as a short summary of the theoretical foundations of modern economics.

Road Map

The Introduction that follows this Preface recounts the intellectual underpinnings that preceded the neoclassical consensus of the mid-twentieth century. This historical perspective reminds us of the role of theory and intuition in guiding our understanding of economics—even in the current age of more abundant data and more evolved statistical analysis. The Introduction makes the case that both theory and empirics are essential to closing key knowledge gaps and crafting policy that can enhance human well-being.

Thereafter, the book is organized in three parts. Part I deals with Foundations. Twentieth-century economic theory—or neoclassical economics—reached a pinnacle in the middle of the past century based on two pillars:

general equilibrium theory and welfare economics. Part I includes chapters by three Nobel laureates. Ken Arrow and Amartya Sen each provide a recounting of the two pillars of equilibrium and welfare. Chapter 1, Professor Arrow's contribution, is poignant, being published posthumously. It takes us through the origins of some of the key ideas of economic theory, going back to John Stuart Mill and Augustin Cournot and to the birth of the "demand curve," which would be such a central idea for so much of economics. Professor Arrow tells the history of economic thought that led to the formal characterization of general equilibrium and to a proof of existence and its optimality properties, which are enshrined in the two fundamental theorems of welfare economics. It was a monumental breakthrough for economics when he and Gerard Debreu published their 1954 paper in *Econometrica*.[1] In chapter 1 in this book, Ken Arrow points out how we need to be careful when jumping from these abstract ideas to policy decisions. He reminds us that economics is different from a science like astronomy: In economics, we are ourselves participants in the system that we are trying to understand. Thus, we are too close to the subject of our analysis. As a consequence, we might not see the whole picture, or our views might be biased.

Amartya Sen has done pioneering work on individual choice and social welfare, with fundamental research that lies at the intersection of economics and philosophy, a pointed example being his celebrated "liberty paradox," which has spawned a large literature in both disciplines. In chapter 2 of this book, Sen provides a history of the theory of rational decision-making and social welfare. He notes that the early theorists of the late eighteenth century were preoccupied with two concerns: avoiding authoritarianism and avoiding arbitrariness. Sen's chapter is a natural sequel to chapter 1 by Arrow. Just as Professor Arrow was a key figure in general equilibrium theory, he also provided the initial impetus for social choice theory, with his famous "impossibility theorem." Professor Sen, arguably the leading social choice theorist in the world, relates the work of Arrow to research going back to the work of John Stuart Mill in the nineteenth century. Turning to welfare economics, Sen starts with Pigou's classic 1920 book on the subject.[2] Unlike social choice theory, welfare economics' philosophical ori-

1. Arrow and Debreu (1954).
2. Pigou (1920).

gin lies in Bentham's utilitarian approach, and consequently, it focuses on the sum of the utilities of the individuals in the community. Sen notes that the disregard for the distribution of those utilities reflects "a partial blindness of considerable ethical and political import" and goes on to elaborate on how this neglect can be remedied. This major recounting of rational choice and welfare economics will be useful both for students of economics and philosophy, and for researchers trying to break new ground.

In chapter 3, Joseph Stiglitz summarizes the evolution of the economics of information and the role of information asymmetry in market failures, fields in which he himself has made seminal contributions. Much of early economics was based on the assumption of perfect information. The consumer knew what kind of good she was buying, the creditor knew exactly what the risks of lending to a person or a firm were, and the employer knew how good a worker he was hiring and also had full information on what the worker was doing when on the job. All these assumptions are of course wrong. But economists persisted with them, often in the belief that they were innocuous assumptions that made it easier to build models and make progress, but at times out of cussedness. In a series of papers, Joe Stiglitz showed that, first, the assumptions were not innocuous—they led to serious policy mistakes—and second, with patience and ingenuity, we could make room for imperfect and asymmetric information and still build formal models of analysis.

Some critical features of traditional economics (such as wage rigidities, excess supply of labor, and excess demand for credit), which in the works of Keynes and Arthur Lewis were assumptions, could now be explained endogenously. Thanks to Professor Stiglitz's early publications, this work is now part of the mainstream, and chapter 3 of this book provides a bird's-eye view of the background for this field.

Part II of the book consists of three chapters that deal with macroeconomic stabilization and growth. Developing countries have suffered multiple macroeconomic crises over the past three-quarters of a century. But the 2008–2009 global financial crisis that started in the United States, pummeled many rich countries, and then swept through developing economies has resulted in some deep soul searching in the profession of economics. One issue that has become clear to the economics profession, based on experience, is the close link between macroeconomic policies and the regulation and evolution of the financial system. In part II, Guillermo Calvo (chapter 4) and Hyun Song Shin (chapter 5) discuss new thinking on inflation and financial stability, respectively. Moving from short-run stabilization to long-run growth, theory has evolved beyond the original Solow model to endogenize Solow's careful accounting of the role of total factor productivity. Part II closes with chapter 6 by Philippe Aghion, which brings the reader up on the latest thinking on endogenous growth theory.

Guillermo Calvo's focus in chapter 4 is on more chronic but equally compelling matters. His concern is with two key macroeconomic phenomena that have occurred since the middle of the past century: chronic inflation and more recently, chronic deflation. From the perspective of the history of economic thought, Calvo draws on the role of rational expectations in macroeconomic theory and its role in helping us understand these phenomena. Although some rich countries experienced unusually high inflation in the 1970s, emerging markets suffered much more severe inflationary episodes, accompanied by debt crises. Macroeconomists initially attributed the emerging market crises purely to policy mistakes that affected the fundamentals for investing in those markets. However, the persistence and systemic nature of these crises led economists to think about the role of expectations in generating "sudden stops" of access to foreign capital. Guillermo Calvo, who pioneered this literature, is clearly in a special position to review it. In keeping with a recurring theme of this book, Calvo points to "intellectual inertia," triggered by traditional models working well to explain macroeconomic performance in high-income countries, as a probable cause of some our discipline's failings.

More than ever, financial market developments—including exchange rate movements—are impacting the real economy. As Hyun Song Shin puts it in "Global Liquidity and Procyclicality" (chapter 5), "the financial tail appears to be wagging the real economy dog." More specifically, exchange rates do not seem to adjust in the required direction to help eliminate external imbalances in key economies. Global financial markets have become highly integrated, implying that policy makers everywhere are focused on the next move of the US Federal Reserve Board. Anomalies in interest rates across currencies, the rise of the dollar in global transactions, and cyclical instabilities have been a focus of a lot of our attention, especially since the 2008–2009 financial crisis. Shin, a world authority on international finance, dissects and analyzes these concerns in a chapter that is of special interest in today's world, especially since the financial sector crisis of a decade ago.

Philippe Aghion has contributed to many areas of economic theory. One of his works that attracted an enormous amount of attention with an abundance of follow-up research is the "Schumpeterian theory of economic growth." Although nations strive to fulfill many different objectives, growth is a central concern of development economics, if for no other reason than as an enabler of some of our other aims and objectives. In chapter 6, Aghion starts from the Solow model, "the true template in growth economics," and goes on to use the Schumpeterian growth paradigm to shed light on a host of topics of contemporary interest. Thus, his chapter analyzes the relationship between competition and innovation-led growth; the possible causes of secular stagnation; and the recent rise in inequality, especially the gap between the super-rich and the rest.

Part III of the book is a set of four chapters brought together under the heading "New Areas of Research and Inquiry." These four chapters represent branches of economics that are relatively new. They are based largely on challenging the traditional assumptions of neoclassical economic theory and traditional approaches to empirical economics, as well as on the application of economics to emerging global concerns.

Chapter 7 is based on the lecture at the conference given by Nick Stern, the world's leading authority on environmental economics and the economics of climate change. The chapter provides an overview of the economics of climate change—perhaps the most pressing—and the most fractious—issue of our times, concerning all nations. Written jointly with Sam Fankhauser, chapter 7 provides a thorough overview of the unique threat to global prosperity that is posed by climate change. The authors review the history of environmental and natural resource economics. They then make the case for a "radical deepening of economics analysis" to accommodate sustainability concerns and guide the policy response to climate change. It is unfortunate that development policy traditionally did not focus on environmental issues, despite work on environment and natural resources dating back to the eighteenth and nineteenth centuries. The risks posed by climate change are staggering, and the options that we have are laid out with care in this chapter.

No stocktaking of modern economics is complete without an account of behavioral economics. Cass Sunstein is a leading authority on law and economics and on behavioral economics, with original works in both these fields. In chapter 8, Professor Sunstein provides an overview of behavioral economics, where the traditional approach of a rational *Homo economicus* is challenged by our understanding of human psychology and human behavior in the real world. It seems natural to presume that a nation's economic well-being depends on economic policy. It therefore took time for us to realize that many drivers of an economy lie outside economics, in social norms, cultural mores, and psychology. Behavioral economics, the subject of a recent *World Development Report* of the World Bank,[3] sensitized economists to these important influences that lie outside the discipline but are key determinants of development. Behavioral economics, including important contributions by Cass Sunstein, alert us to the fact that human beings are often irrational, and more importantly, that these irrationalities are often systematic. Understanding them can enable us to promote development more effectively.

Professor Sunstein's chapter is followed by another one dealing with a relatively new field of inquiry, the evolutionary prospects of economies and societies. Although the origins of evolutionary game theory go back to the early 1970s, the entry of this discipline into mainstream economics is more recent. One of the most prominent contributors to this field of research is Jorgen Weibull. In chapter 9, he and Ingela Alger discuss the role of morality and the evolutionary foundations of human motivation, showing that unqualified selfishness may be good for the individual in an immediate sense, but if acquired by all in a society, it sets that society on a course toward extinction. Morality, in the sense of Kant, is evolutionarily stable. That is, if all of us are prepared to forgo a little bit of our self-interest to uphold some of our collective interests in the Kantian sense, our society will be more robust in terms of surviving natural selection. Even apart from this reasoning, the ideas of evolution, once a preserve of biology, have now come into economics in a big way. Chapter 9 summarizes some of the most important ideas in this discipline for the wider community of economists and students of social science.

One of the most important advances in modern development economics is the use of randomized control trials (RCTs) to get at causal explanations of various policy interventions and alternative economic outcomes. Did the election of women as leaders of village councils play a role in the

3. World Bank (2015).

better provision of local public goods in India? Did deworming help schoolchildren in Kenya attend school more regularly and do better in their studies? By bringing the method of RCTs from epidemiology to development economics, we can now hope to answer such questions with a clarity that we did not have earlier. The RCT has been a source of celebration, criticism, and controversy, but as a method in the toolkit of development economics, its value is undeniable. Chapter 10, which closes the book, is by Esther Duflo, written jointly with Abhijit Banerjee and Michael Kremer. Duflo's own research and publications played a critical role in the development of this field of research. She gives a detailed account of the rise of the field, its achievements, and some of its pitfalls.

Acknowledgments

We as editors thank a large group of individuals who helped carry out this megaproject, including the organization of the conference on June 8–9, 2016, at World Bank headquarters. Over and above the authors of the chapters, who presented papers at the conference and whose work we commented on above, there was a stellar cast of discussants, who read and commented on those papers and whose comments are included in this volume. Here is the list of discussants, in alphabetical order (to minimize discontent) to whom we are extremely grateful: Larry Blume, Francesco Caselli, Shanta Devarajan, James Foster, Varun Gauri, Xavier Gine, Gäel Giraud, Gita Gopinath, Robert Hockett, Karla Hoff, Ravi Kanbur, Aart Kraay, Aslı Demirgüç-Kunt, David McKenzie, Célestin Monga, Maurice Obstfeld, Hamid Rashid, Martin Ravallion, Luis Servén, and Mike Toman.

The chairs of the conference sessions were Augusto Lopez Claros, Makhtar Diop, Felipe Jaramillo, Ayhan Kose, Bill Maloney, Kyle Peters, Martin Rama, Ana Revenga, and Augusto de la Torre. We are grateful to them for conducting the sessions and also for their comments and ideas during the session.

We also thank Gabriela Calderón for her help in organizing a superb conference and the Development Economics Communication team for their help with disseminating information about the conference. We are also grateful to Gabriela Calderón and Trang Huyen Hoang for preparing the manuscript for submission to the MIT Press, as well as our references "police," Woori Lee and Ruth Llovet Montañes.

Finally, we take this opportunity to express our gratitude to our editor at the MIT Press, Emily Taber, for her help and cooperation at every stage and also her patience, as we crossed over some of our own deadlines in bringing this large project to a close.

References

Arrow, Kenneth J., and Gerard Debreu. 1954. "Existence of an Equilibrium for a Competitive Economy." *Econometrica* 22 (3): 265–290.

Pigou, Arthur C. 1920. *The Economics of Welfare*. London: MacMillan.

World Bank. 2015. *World Development Report 2015: Mind, Society, and Behavior*. Washington DC: World Bank.

This is a section of doi:10.7551/mitpress/11130.001.0001

The State of Economics, the State of the World

Edited by: Kaushik Basu, David Rosenblatt, Claudia Sepúlveda

Citation:

The State of Economics, the State of the World
Edited by: Kaushik Basu, David Rosenblatt, Claudia Sepúlveda
DOI: 10.7551/mitpress/11130.001.0001
ISBN (electronic): 9780262353472
Publisher: The MIT Press
Published: 2020

The MIT Press

This book was set in Stone Serif and Stone Sans by Westchester Publishing Services. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Names: Basu, Kaushik, editor. | Sepúlveda, Claudia Paz, 1969– editor. | Rosenblatt, David, editor.
Title: The state of economics, the state of the world / edited by Kaushik Basu, Claudia Sepulveda, and David Rosenblatt.
Description: Cambridge, MA : MIT Press, [2019] | Includes bibliographical references and index.
Identifiers: LCCN 2018046336 | ISBN 9780262039994 (hardcover : alk. paper)
Subjects: LCSH: Economic development. | Information technology—Economic aspects. | Monetary policy. | Social change.
Classification: LCC HD82 .S8223 2019 | DDC 330.1—dc23
LC record available at https://lccn.loc.gov/2018046336

10 9 8 7 6 5 4 3 2 1