

About the Contributors and Discussants

ADRIEN AUCLERT is a macroeconomist whose research focuses on inequality, consumption, monetary and fiscal policy, and international economics. His recent work explores the interactions between macroeconomics and inequality as well as the redistributive effects of monetary and fiscal policy. He received his PhD in economics from MIT in 2015 and was a postdoctoral fellow at Princeton University from 2015–16. He teaches macroeconomics and international economics at Stanford, where he is a faculty member of the Stanford Institute for Economic Policy Research (SIEPR), and is a faculty research fellow at the National Bureau of Economic Research.

RAPHAEL BOSTIC became the fifteenth president of the Federal Reserve Bank of Atlanta on June 5, 2017. Before coming to the Bank, he was a professor of public policy at the University of Southern California in Los Angeles. He brings a wealth of experience from an outstanding career in academia, government, and research. Bostic served as assistant secretary for policy development and research at the Department of Housing and Urban Development. He also spent several years as an economist at the Board of Governors. He has a passion for understanding the housing sector and how credit markets, financing, and public policy work together to help people achieve the American dream. He has published extensively in academic journals. He earned a PhD in economics from Stanford University and earned his undergraduate degree at Harvard. Since joining the Atlanta Fed as president and CEO, he has spent much of his time on public outreach, sharing his deep knowledge of business and financial conditions. He is also a voting member this year on the Federal Open Market Committee, the Fed's policy-making group.

JOHN H. COCHRANE is an economist. He is the Rose-Marie and Jack Anderson Senior Fellow of the Hoover Institution at Stanford University. His academic writing focuses on monetary economics and finance. He writes op-eds in the *Wall Street Journal* and blogs as “the Grumpy Economist.” Cochrane earned a bachelor’s degree in physics at MIT and earned his PhD at the University of California–Berkeley. He was a professor of economics and then of finance at the University of Chicago Economics Department and then Booth School of Business before coming to Hoover.

SEBASTIAN EDWARDS is the Henry Ford II Professor of International Economics at the University of California–Los Angeles. From 1993 to 1996, he was chief economist for Latin America at the World Bank. He has published fifteen books and more than two hundred scholarly articles. He was the codirector of the National Bureau of Economic Research’s Africa Project. Edwards has been an adviser to numerous governments, financial institutions, and multinational companies. He is a frequent commentator on economic matters on CNN and other cable outlets. His op-ed pieces have been published in the *Wall Street Journal*, the *Financial Times*, the *Los Angeles Times*, *El País* (Spain), *La Vanguardia* (Spain), *Clarín* (Argentina), *El Mercurio* (Chile), and other newspapers around the world. His latest book is *American Default: The Untold Story of FDR, the Supreme Court and the Battle for Gold* (Princeton University Press, 2018). Other books include *Toxic Aid: Economic Collapse and Recovery in Tanzania* (Oxford University Press, 2014), *Left Behind: Latin America and the False Promise of Populism* (University of Chicago Press, 2011), and *Crisis and Reform in Latin America: From Despair to Hope* (Oxford University Press, 1995). He has been president of the Latin American and Caribbean Economic Association and was a member of the Scientific Advisory Council of the Kiel Institute for the World Economy in Kiel, Germany. He was also a member of former California governor Arnold Schwarzenegger’s Council of Economic Advisers. In 2013, he was awarded the Carlos Díaz-Alejandro Prize in recognition of his research on Latin American economies. He was educated at the Universidad Católica de Chile. He received an MA in economics in 1978 and a PhD in economics in 1981, both from the University of Chicago.

PETER R. FISHER is senior fellow at the Center for Business, Government & Society at the Tuck School of Business at Dartmouth, where he

also serves as a clinical professor. He is a director of the John F. Kennedy Library Foundation and of the Peterson Institute for International Economics. He is a member of the Advisory Committee on Systemic Resolution of the Federal Deposit Insurance Corporation and of the advisory board of the MIT Golub Center for Finance and Policy. From 2004 to 2013, Fisher worked at BlackRock, where he served in several capacities, including head of fixed income portfolio management and chairman of BlackRock Asia. From 2001 to 2003, he served as undersecretary of the US Treasury for domestic finance. From 1985 to 2001, he worked at the Federal Reserve Bank of New York, concluding his service as an executive vice president and manager of the Federal Reserve System Open Market Account. Fisher has previously served as a member of the Strategic Advisory Committee of the Agence France Trésor, as a nonexecutive director of the Financial Services Authority of the United Kingdom, and as an independent director of AIG. He received a JD degree from Harvard Law School and a BA in history from Harvard College.

ESTHER L. GEORGE is president and chief executive officer of the Federal Reserve Bank of Kansas City. She is a member of the Federal Open Market Committee, which sets US monetary policy. She has more than thirty years of experience in the Federal Reserve, with her early career primarily focused on regulatory oversight of banks and financial holding companies in seven states. She was directly involved in the banking supervision and discount window lending activities during the banking crisis of the 1980s and post-9/11. During the most recent financial crisis, she served as the acting director of the Federal Reserve Board's Division of Banking Supervision and Regulation in Washington, DC. She has served as president of the Bank since October 2011 and currently leads the Federal Reserve's efforts to modernize the US payments system. She hosts the Federal Reserve Bank of Kansas City's International Economic Policy Symposium in Jackson Hole, Wyoming. She is a native of Missouri.

GITA GOPINATH is the John Zwaanstra Professor of International Studies and of Economics at Harvard University. Her research focuses on international finance and macroeconomics. She is codirector of the International Finance and Macroeconomics program at the National Bureau of Economic Research, a visiting scholar at the Federal Reserve Bank of Boston, a member of the economic advisory panel of the Federal Reserve Bank of New York, economic adviser to the chief minister of

Kerala state in India, a coeditor at the *American Economic Review*, and coeditor of the current *Handbook of International Economics*. She was managing editor of the *Review of Economic Studies*. She also served as a member of the Eminent Persons Advisory Group on G-20 Matters for India's Ministry of Finance. In 2011, she was chosen as a Young Global Leader by the World Economic Forum. In 2014, she was named one of the top twenty-five economists under age forty-five by the IMF. Before going to Harvard, she was an assistant professor of economics at the University of Chicago's Graduate School of Business.

OLEG ITSKHOKI is professor of economics and international affairs at Princeton University. His research interests are in the fields of macroeconomics and international economics. One line of his research focuses on the effects of globalization on labor markets, in particular unemployment and income inequality. Another line of his research studies the pricing policies of firms in international transactions, in particular focusing on currency choice by importing and exporting firms and its implication for macroeconomic policies. He also explores the role of large firms in international transmission of shocks. His most recent research is centered around the issue of optimal macroeconomic policies in currency unions and optimal development and industrial policies in economies with financial frictions. He was a participant in the Review of Economic Studies tour, a Sloan Research Fellow, and a recipient of the Excellence Award in Global Economic Affairs from the Kiel Institute for the World Economy. His research was supported by a National Science Foundation grant and his work is published in the *American Economic Review*, *Econometrica*, *Quarterly Journal of Economics*, and *Review of Economic Studies*. He is a research associate at the National Bureau of Economic Research and a research affiliate at the Centre for Economic and Policy Research. He earned his BA at Moscow State University, MA at the New Economics School (Moscow), and PhD at Harvard University.

ROBERT S. KAPLAN has served as the thirteenth president and CEO of the Federal Reserve Bank of Dallas since September 8, 2015. He represents the Eleventh Federal Reserve District on the Federal Open Market Committee in the formulation of US monetary policy and oversees the 1,200 employees of the Dallas Fed. Kaplan was previously the Martin Marshall Professor of Management Practice and a senior associate dean

at the Harvard Business School. Before joining Harvard in 2006, Kaplan was vice chairman of the Goldman Sachs Group, with global responsibility for the firm's Investment Banking and Investment Management divisions. Previously, he served as global co-head of the Investment Banking Division. He was also a member of the firm's Management Committee and served as cochairman of the firm's Partnership Committee and chairman of the Goldman Sachs Pine Street Leadership Program. During his twenty-three-year career at Goldman Sachs, Kaplan served in various other capacities, including head of the Corporate Finance Department, the Asia-Pacific Investment Banking, and the high-yield department in Investment Banking. He became a partner in 1990. On leaving the firm in 2006, he was given the honorary title of senior director. He serves as cochairman of Project ALS and cochairman of the Draper Richards Kaplan Foundation, a global venture philanthropy firm that invests in developing nonprofit enterprises dedicated to addressing social issues. He is also a board member of Harvard Medical School. Kaplan received a bachelor's degree in business administration from the University of Kansas and a master's degree in business administration from Harvard Business School.

MICKEY D. LEVY is the chief economist for Berenberg Capital Markets, LLC. From 1998 to 2013, he was chief economist at Bank of America Corporation. He is a long-standing member of the Shadow Open Market Committee. Levy conducts research on US and global economic and fiscal policies and the influences of policies on economic and financial market performance. He testifies frequently before the US Congress on monetary policy and banking regulation, credit conditions, and fiscal and budget policies.

LORIE K. LOGAN is a senior vice president in the Markets Group of the Federal Reserve Bank of New York where she is head of Market Operations Monitoring and Analysis (MOMA). This is the area responsible for execution of monetary policy at the direction of the FOMC, provision of fiscal agent services to the Treasury in support of debt issuance and foreign exchange operations, market analysis of financial market developments to inform the policy-making process, sponsorship of the Treasury Market Practices Group (TMPG) and the Foreign Exchange Committee (FXC), and the production of the FRBNY's reference rates, including SOFR.

She is also the deputy manager of the System Open Market Account for the FOMC. Logan joined the Bank in June 1999 as a financial analyst in the bank analysis department. In 2000, she was assigned to the Markets Group. She held successive assignments in the Treasury markets directorate, and from June 2009 to March 2012 she served as the chief of staff for the Markets Group. She has held her current position since then. She played a prominent role in the development and implementation of the Federal Reserve's crisis-related activities, including the expansion of the Federal Reserve's balance sheet, the creation of several liquidity facilities to mitigate systemic risks to the financial system, and the development of the Federal Reserve's policy normalization tools. She holds a bachelor's degree from Davidson College and a master's degree in public administration from Columbia University.

PRACHI MISHRA is deputy division chief and mission chief in the Western Hemisphere Department of the IMF. Prior to this, she was specialist adviser and head of Strategic Research Unit at the Reserve Bank of India, and Senior Economist at the Ministry of Finance, Government of India. She holds a PhD in economics from Columbia University, and masters from the Delhi School of Economics.

WILLIAM NELSON is an executive vice president and chief economist at the Bank Policy Institute. Previously, he served as executive managing director, chief economist, and head of research for The Clearing House Association and chief economist of The Clearing House Payments Company. He contributed to and oversaw research and analysis to support the advocacy of the association on behalf of TCH's owner banks. Prior to joining The Clearing House in 2016, Nelson was a deputy director of the Division of Monetary Affairs at the Federal Reserve Board, where his responsibilities included monetary policy analysis, discount window policy analysis, and financial institution supervision. He attended Federal Open Market Committee meetings and regularly briefed the Board and FOMC. He was a member of the Large Institution Supervision Coordinating Committee (LISCC) and the steering committee for Comprehensive Liquidity Analysis and Review (CLAR). He has chaired and participated in several Bank for International Settlements (BIS) working groups on the design of liquidity regulations and most

recently chaired the CGFS-Markets Committee working group on regulatory change and monetary policy. He joined the Board in 1993 as an economist in the banking section of Monetary Affairs. In 2004, he was the founding chief of the new Monetary and Financial Stability section of Monetary Affairs. In 2007 and 2008, he visited BIS in Basel, Switzerland, where his responsibilities included analyzing central banks' responses to the financial crisis and researching the use of forward guidance by central banks. He returned to the Board in the fall of 2008, where he helped design and manage several of the Federal Reserve's emergency liquidity facilities. Nelson earned a PhD, an MS, and an MA in economics from Yale University and a BA from the University of Virginia. He has published research on a wide range of topics, including monetary policy rules; monetary policy communications; and the intersection of monetary policy, lender-of-last-resort policy, financial stability, and bank supervision and regulation.

JONATHAN D. OSTRY is deputy director of the Research Department at the International Monetary Fund and a research fellow at the Center for Economic Policy Research. His recent responsibilities include leading staff teams on IMF-FSB early warning exercises on global systemic macro-financial risks; multilateral exchange rate surveillance; international financial architecture and reform of the IMF's lending toolkit; capital account management and financial globalization issues; fiscal sustainability issues; and the nexus between income inequality and economic growth. Past positions include leading the division that produces the IMF's flagship publication, the *World Economic Outlook*, and leading country teams on G-3, advanced and emerging market economies. Ostry is a member of the World Economic Forum's global agenda council on inclusive growth and its risk advisory board. He is the author of a number of books on international macro policy issues, including *Taming the Tide of Capital Flows* (MIT Press, 2017) and *Confronting Inequality* (Columbia University Press, 2018), and numerous articles in scholarly journals. His work has been widely cited in print and electronic media, including the BBC, the *Economist*, the *Financial Times*, the *Wall Street Journal*, the *New York Times*, the *Washington Post*, *Business Week*, and National Public Radio. His work on inequality and unsustainable growth has also been cited in remarks made by President Barack Obama. He earned his BA

(with distinction) from Queen's University (Canada) at age eighteen and went on to earn a BA and MA from Oxford University (Balliol College) and graduate degrees from the London School of Economics (MSc, 1984) and the University of Chicago (PhD, 1988). He is listed in *Who's Who in Economics* (2003).

KYLE PALERMO is marketing communications manager at the Hoover Institution where he reports on conferences, publications, and other institutional activities. He is a graduate of San Jose State University, where he studied political science and economics.

MONIKA PIAZZESI is the Joan Kenney Professor of Economics at Stanford University and a research associate at the National Bureau of Economic Research, where she is also director of the asset pricing program. She is a fellow of the Academy of Arts and Sciences, the Econometric Society, and the Society of Financial Econometrics. Her research is on finance and macroeconomics with an emphasis on fixed income, housing, and monetary policy. She received her undergraduate degree from the University of Bonn and her PhD in economics from Stanford in 2000. Prior to joining the faculty at Stanford, she taught at the University of Chicago Booth School of Business and UCLA Anderson School of Business. She also served as monetary adviser at the Federal Reserve Bank of Minneapolis and as coeditor of the *Journal of Political Economy*. She has received the Elaine Bennett Research Prize, the Bernácer Prize, the Zellner Award, and research fellowships from the Alfred P. Sloan Foundation and the Guggenheim Foundation.

CHARLES I. PLOSSER served as president and CEO of the Federal Reserve Bank of Philadelphia from 2006 to his retirement in 2015. He has been a longtime advocate of the Federal Reserve adopting an explicit inflation target, which the Federal Open Market Committee did in January 2012. Before joining the Philadelphia Fed in 2006, Plosser served as dean from 1993 to 2003 at the University of Rochester's Simon School of Business. He is a research associate of the National Bureau of Economic Research as well as a visiting scholar at the Hoover Institution. Plosser served as coeditor of the *Journal of Monetary Economics* for two decades and cochaired the Shadow Open Market Committee with Anna Schwartz.

His research and teaching interests include monetary and fiscal policy, long-term economic growth, and banking and financial markets. Plosser earned PhD and MBA degrees from the University of Chicago.

RANDAL K. QUARLES took office as a member of the Board of Governors of the Federal Reserve System and was sworn in as vice chairman for supervision on October 13, 2017. His term as vice chairman for supervision ends on October 13, 2021. Prior to his appointment to the Board, Quarles was founder and managing director of the Cynosure Group, a Utah-based investment firm. Before founding the Cynosure Group, he was a partner at The Carlyle Group, a private equity firm based in Washington, DC. From April 2002 until November 2006, Quarles served in several positions at the Treasury Department, including undersecretary of the Treasury for domestic finance and assistant secretary of the Treasury for international affairs. He also served as policy chair of the Committee on Foreign Investment in the United States and he was the US executive director of the International Monetary Fund from August 2001 to April 2002. From January 1991 to January 1993, he served in the Treasury Department as a special assistant to the secretary of the Treasury for banking legislation and as deputy assistant secretary of the Treasury for financial institutions. Prior to, and in between, his service at the Department of the Treasury, he was a partner at Davis Polk & Wardwell, serving in the New York and London offices. He received an AB in philosophy and economics, *summa cum laude*, from Columbia in 1981 and earned a law degree from the Yale Law School in 1984.

RAGHURAM RAJAN is the Katherine Dusak Miller Distinguished Service Professor of Finance at the University of Chicago's Booth School. Prior to that, he was the twenty-third governor of the Reserve Bank of India from 2013 to 2016, as well as the vice chairman of the board of the Bank for International Settlements from 2015 to 2016. He was the chief economist and director of research at the International Monetary Fund from 2003 to 2006. Rajan's research interests are in banking, corporate finance, and economic development, especially the role finance plays in it. He coauthored *Saving Capitalism from the Capitalists* with Luigi Zingales in 2003. He then wrote *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, for which he was awarded the Financial Times-Goldman Sachs prize for best business book in 2010. Rajan was

the president of the American Finance Association in 2011 and is a member of the American Academy of Arts and Sciences and the Group of Thirty. In January 2003, the American Finance Association awarded him the inaugural Fischer Black Prize for the best finance researcher under the age of forty. The other awards he has received include the global Indian of the year award from NASSCOM in 2011, the Infosys prize for the Economic Sciences in 2012, the Deutsche Bank Prize for Financial Economics in 2013, and *Euromoney* magazine's Central Banker of the Year Award in 2014.

THOMAS J. SARGENT, a macroeconomist, joined New York University as the first W. R. Berkley Professor in September 2002, a joint appointment by the Economics Department at NYU's Faculty of Arts and Sciences and the Stern School of Business. He was awarded the 2011 Nobel Prize in Economics, shared with Princeton University's Christopher Sims, for his empirical research on cause and effect in the macroeconomy. Sargent was a professor of economics at the University of Minnesota from 1975 to 1987, the David Rockefeller Professor at the University of Chicago from 1992 to 1998, and the Donald Lucas Professor of Economics at Stanford University from 1998 to 2002. He has been a senior fellow at the Hoover Institution since 1987. He earned his PhD from Harvard University in 1968 and was a first lieutenant and captain in the US Army. He was a university medalist as Most Distinguished Scholar in the Class of 1964 and won the Nemmers Prize in Economics in 1997. He was elected a fellow of the National Academy of Sciences and a fellow of the American Academy of Arts and Sciences, both in 1983. He is past president of the Econometric Society, the American Economic Association, and the Society for Economic Dynamics.

MARTIN SCHNEIDER is a professor of economics at Stanford University. He is also a research associate at the National Bureau of Economic Research (NBER) and a research fellow at the Center for Economic and Policy Research (CEPR). He has published widely on topics in macroeconomics, monetary policy, and financial markets. From 2005 to 2008, he served as a senior economist at the Federal Reserve Bank of Minneapolis. He has also taught at the University of Rochester, UCLA, and New York University. He holds a PhD in economics from Stanford University and a diploma in economics from the University of Bonn.

GEORGE P. SHULTZ is the Thomas W. and Susan B. Ford Distinguished Fellow at the Hoover Institution. He served as secretary of labor in 1969–70, director of the Office of Management and Budget from 1970–1972, and secretary of the Treasury from 1972 to 1974. He was sworn in on July 16, 1982, as the sixtieth US secretary of state and served until January 20, 1989. In January 1989, he was awarded the Medal of Freedom, the nation's highest civilian honor. Shultz rejoined Stanford University in 1989 as the Jack Steele Parker Professor of International Economics at the Graduate School of Business and as a distinguished fellow at the Hoover Institution. Shultz is the chair of the Precourt Institute for Energy Advisory Council at Stanford, chair of the MIT Energy Initiative External Advisory Board, and chair of the Hoover Institution's Shultz-Stephenson Task Force on Energy Policy. He is a distinguished fellow of the American Economic Association.

JOHN B. TAYLOR is the Mary and Robert Raymond Professor of Economics at Stanford University, the George P. Shultz Senior Fellow in Economics at the Hoover Institution, and the director of Stanford's Introductory Economics Center. He served as senior economist (1976–77) and member (1989–91) on the President's Council of Economic Advisers. From 2001 to 2005, he served as undersecretary of the Treasury for international affairs. He received the Adam Smith Award from the Association of Private Enterprise Education, the Truman Medal for Economic Policy for extraordinary contribution to the formation and conduct of economic policy, the Hayek Prize for his book *First Principles*, the Bradley Prize for his economic research and policy achievements, the Adam Smith Award from the National Association for Business Economics, the Alexander Hamilton Award and the Treasury Distinguished Service Award for his policy contributions at the US Treasury, and the Medal of the Republic of Uruguay for his work in resolving the 2002 financial crisis. He currently is a member of the Eminent Persons Group on Global Financial Governance. Taylor received a BA from Princeton and a PhD in economics from Stanford.

SIR PAUL TUCKER is chair of the Systemic Risk Council and a fellow at Harvard Kennedy School. His book *Unelected Power: The Quest for Legitimacy in Central Banking and the Regulatory State* was published by Princeton University Press in spring 2018. His other activities include

being a director at Swiss Re, a senior fellow at the Harvard Center for European Studies, a visiting fellow of Nuffield College Oxford, a member of the Advisory Board of the Yale Program on Financial Stability, and a governor of the Ditchley Foundation. Previously, he was deputy governor at the Bank of England, sitting on its monetary policy, financial stability, and prudential policy committees. Internationally, he was a member of the G20 Financial Stability Board, chairing its group on “too big to fail,” and a director of the Bank for International Settlements, chairing its Committee on Payment and Settlement Systems.

KEVIN WARSH serves as the Shepard Family Distinguished Visiting Fellow in Economics at the Hoover Institution and as lecturer at the Stanford Graduate School of Business. He advises several private and public companies, including serving on the board of directors of United Parcel Service (UPS). Warsh is a member of the Group of Thirty (G-30) and the Panel of Economic Advisers of the Congressional Budget Office (CBO). Warsh conducts extensive research in the field of economics and finance. He issued an independent report to the Bank of England proposing reforms in the conduct of monetary policy in the United Kingdom. Parliament adopted the report’s recommendations. Governor Warsh served as a member of the Board of Governors of the Federal Reserve System from 2006 until 2011. Warsh served as the Federal Reserve’s representative to the Group of Twenty (G-20) and as the Board’s emissary to the emerging and advanced economies in Asia. In addition, he was administrative governor, managing and overseeing the Board’s operations, personnel, and financial performance. Prior to his appointment to the Board, from 2002 until 2006 Warsh served as special assistant to the president for economic policy and as executive secretary of the White House National Economic Council. Previously, Warsh was a member of the Mergers & Acquisitions department at Morgan Stanley & Co. in New York, serving as vice president and executive director. Warsh received his BA from Stanford University and JD from Harvard Law School.

JOHN C. WILLIAMS is the president and chief executive officer of the Federal Reserve Bank of New York, having served in the same capacity at the Federal Reserve Bank of San Francisco from 2011 to mid-June 2018. In this role, he serves on the Federal Open Market Committee, bringing

the Fed's Twelfth District's perspective to monetary policy discussions in Washington. Williams was previously the executive vice president and director of research for the San Francisco Bank, which he joined in 2002. He began his career in 1994 as an economist at the Board of Governors of the Federal Reserve System, following the completion of his PhD in economics at Stanford University. Prior to that, he earned a master of science degree from the London School of Economics and an AB from the University of California–Berkeley. His research focuses on topics including monetary policy under uncertainty, innovation, and business cycles. Additionally, he served as senior economist at the White House Council of Economic Advisers and as a lecturer at Stanford University's Graduate School of Business.