

Sveriges Riksbank,
De Nederlandsche Bank, and
Deutsche Bundesbank

Annual Macroprudential Conference

15-16 June 2018
Stockholm, Sweden

Speakers' notes



Stefan Ingves

Governor
Sveriges Riksbank

STEFAN INGVES took up the post of Governor of the Riksbank and Chairman of the Executive Board on 1 January 2006 with a term of office of six years. Mr Ingves' term of office has been extended twice until 31 December 2022.

Mr Ingves has previously been Director of the Monetary and Financial Systems Department at the International Monetary Fund, Deputy Governor of the Riksbank and Director General of the Swedish Bank Support Authority. Prior to that he was Under-Secretary and Head of the Financial Markets Department at the Ministry of Finance.

International assignments include Chairman of the Basel Committee, Chairman of the BIS Banking and Risk Management Committee (BRC) and member of the Board of Directors of the BIS, Member of the General Board of the European Systemic Risk Board (ESRB), Member of the General Council of the ECB, Governor for Sweden in the IMF, and Chairman of the Nordic-Baltic Macroprudential Forum (NBMF).

Stefan Ingves holds a PhD in economics from the Stockholm School of Economics.



Bengt Holmström

Professor of Economics
Massachusetts Institute of Technology

Chair

BENGT HOLMSTRÖM is the Paul A. Samuelson Professor of Economics at Massachusetts Institute of Technology, where he was head of the Economics Department from 2003-2006. He holds a joint appointment with MIT's Sloan School of Management.

Holmström received his doctoral degree from Stanford University in 1978. Before joining MIT in 1994, he was the Edwin J. Beinecke Professor of Management at Yale University's School of Management (1983-94) and associate professor at the Kellogg Graduate School of Management at Northwestern University (1979-82).

Holmström is a microeconomic theorist, best known for his research on the theory of contracting and incentives especially as applied to the theory of the firm, to corporate governance and to liquidity problems in financial crises. He was awarded the 2016 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. Holmström is a member of the board of Aalto University (Finland) and the Finnish Business and Policy Forum (EVA). He was a board member of the Nokia Corporation 1999-2012.



Patrick Bolton

Professor of Business
Columbia University

Discussant

PATRICK BOLTON is the Barbara and David Zalaznick Professor of Business at Columbia University. He is a Co-Director of the *Center for Contracts and Economic Organization* at the Columbia Law School, a past President of the American Finance Association, a Fellow of the Econometric Society (elected 1993), the American Academy of Arts and Sciences (elected 2009), and a Corresponding Fellow of the British Academy (elected 2013). He is also a Research Associate of the National Bureau of Economic Research, a Research Fellow of the Center for Economic Policy Research, and a Fellow of the European Corporate Governance Institute. His areas of interest are in Contract Theory, Corporate Finance, Corporate Governance, Banking, Sovereign Debt, Political Economy, Law and Economics and Sustainable Investing. He has written a leading graduate textbook on *Contract Theory* with Mathias Dewatripont, MIT Press (2005); edited *The Economics of Contracts*, Edward Elgar Publishing Inc. (2008); co-edited, *Credit Markets for the Poor* with Howard Rosenthal, Russell Sage Foundation (2005); and *Sovereign Wealth Funds and Long-Term Investing*, with Frederic Samama and Joseph E. Stiglitz, Columbia University Press (2011).



Thomas Philippon

Professor of Finance
New York University

Author

THOMAS PHILIPPON is Professor of Finance at New York University, Stern School of Business. Philippon was named one of the "top 25 economists under 45" by the IMF in 2014. He also won the 2013 Bernácer Prize for Best European Economist under 40, the 2010 Michael Brennan & BlackRock Award, the 2009 Prize for Best Young French Economist, and the 2008 Brattle Prize for the best paper in Corporate Finance. He was elected Global Economic Fellow in 2009 by the Kiel Institute for the World Economy.

Philippon has studied various topics in macroeconomics and finance: systemic risk, crisis resolution mechanisms, the dynamics of corporate investment and household debt, and the size of the finance industry. His recent work has focused on the Eurozone crisis and on financial regulation. He currently serves on the Monetary Policy Advisory Panel of the Federal Reserve Bank of New York, and as a board member and director of the scientific committee of ACPR, the French prudential regulator of banks and insurance companies. From 2012 to 2013, he was the Senior Economic Advisor to the French Finance Minister.

Philippon graduated from Ecole Polytechnique, received a PhD in Economics from MIT, and joined New York University in 2003.



Philip Lane

Governor
Central Bank of Ireland

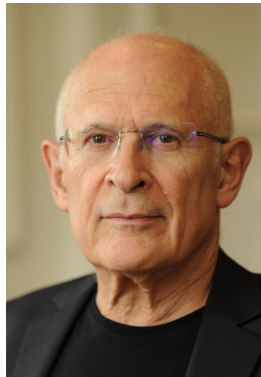
Discussant

PHILIP R. LANE is the Governor of the Central Bank of Ireland since November 2015. He is also a member of the European Central Bank's (ECB) Governing Council and chair of the European Systemic Risk Board's (ESRB) Advisory Technical Committee.

During 1997-2015, he was on the academic staff at Trinity College Dublin and he remains affiliated with the university as Whately Professor of Political Economy (on leave). He has also chaired the Advisory Scientific Committee of the ESRB and was Director of the International Macroeconomics and Finance Programme at the Centre for Economic Policy Research (CEPR).

Lane received his PhD in Economics from Harvard University in 1995 and was Assistant Professor of Economics and International Affairs at Columbia University during 1995-1997. His research interests include financial globalisation, macroeconomics of exchange rates and capital flows, macroeconomic policy design and European monetary integration. His work has been published in a variety of leading academic journals.

In 2001, he was the inaugural recipient of the German Bernacer Award in Monetary Economics for outstanding contributions to European monetary economics; in 2010, he was co-recipient of the Bhagwati Prize from the Journal of International Economics. He has also acted as an academic consultant for the ECB, European Commission, International Monetary Fund, World Bank, OECD, Asian Development Bank and a number of national central banks. He is a former managing editor of *Economic Policy*.



Richard Portes

Professor of Economics
London Business School

Chair

RICHARD PORTES, Professor of Economics at London Business School, is Founder and Honorary President of the Centre for Economic Policy Research (CEPR). He was inaugural holder (2014-17) of the Tommaso Padoa-Schioppa Chair at the European University Institute (part-time), and Co-Chair of the Board (1985-2017) of *Economic Policy*, of which he was a co-founder. He is an elected Fellow of the Econometric Society and of the British Academy. He is a member of the General Board of the European Systemic Risk Board, Chair of the ESRB's Advisory Scientific Committee, and Co-Chair of the ESRB's Joint Expert Group on Shadow Banking. He is also a member of the Steering Committee of the Euro50 Group and of the Bellagio Group on the International Economy. He is an Academic Director of the AQR Asset Management Institute at LBS.

Professor Portes was a Rhodes Scholar, then a Fellow of Balliol College, Oxford (of which he is now an Honorary Fellow). He holds three honorary doctorates. Professor Portes was decorated CBE in the 2003 New Year's Honours.



Annette Vissing-Jørgensen

Professor of Finance and Management
University of California, Berkeley

Author

ANNETTE VISSING-JØRGENSEN is a professor at the Haas School of Business at University of California Berkeley. Before joining Haas she was on the faculty at Northwestern University and University of Chicago.

Her research focuses on empirical asset pricing, monetary policy, household finance and entrepreneurship. Her work is published in leading economics and finance journals (*Journal of Political Economy*, *American Economic Review*, *Quarterly Journal of Economics*, *Journal of Finance*, *Journal of Financial Economics* and *Review of Financial Studies*). She has been a director of both the American Finance Association and the European Finance Association.

She holds a B.A. from University of Aarhus, an M.Sc. from Warwick University and a Ph.D. from MIT.



Ulrich Bindseil

Director General, General Market Operations
European Central Bank

Discussant

ULRICH BINDSEIL is the Director General of the ECB's Directorate General Market Operations since May 2012, after having been Deputy Director General of the same Directorate General since September 2009. Previously, he has been head of the ECB's Risk Management Division and the ECB's Liquidity Management Section. The ECB's DG Market Operations is responsible for implementing monetary policy (Eurosystem credit operations, collateral framework, outright purchase programmes, etc.) and for the management of the ECB's foreign reserves and investment portfolios.

Ulrich has joined central banking in 1994, namely in the Economics Department of the Deutsche Bundesbank, after his economics studies. His publications include: *Monetary policy implementation* (Oxford University Press, 2004); *Risk Management for Central Banks and Other Public Investors* (editor, together with F. González and E. Tabakis, Cambridge University Press, 2009), *Monetary Policy Operations and the Financial System* (Oxford University Press, 2014). He is a member of the BIS Markets Committee and Committee on the Global Financial System.



Tano Santos

Professor of Finance
Columbia Business School

Discussant

TANO SANTOS is the David L. and Elsie M. Dodd Professor of Finance at Columbia Business School, which he joined in 2003. He received his Ph. D. in Economics, from the Department of Economics of the University of Chicago, in 1996.

Before joining Columbia, professor Santos was at The University of Chicago Booth School of Business. He is a Faculty Research Fellow at the National Bureau of Economic Research (NBER) and a researcher at the Centre for Economic Policy Research (CEPR). His research focuses in the areas of asset pricing, financial intermediation and organizational economics.



Fritz Zurbrugg

Vice Chairman
Swiss National Bank

Chair

FRITZ ZURBRÜGG joined the Swiss National Bank's Governing Board in 2012. Since 2015, he is Vice Chairman of the Governing Board and manages Department II. He is responsible for the areas Financial Stability, Cash, Finance and Risk management.

Before joining the Swiss National Bank, Fritz Zurbrugg worked at the International Monetary Fund and held several positions at the Federal Department of Finance in Berne. In his last position from 2010 to 2012, he was the director of the Federal Finance Administration.

Fritz Zurbrugg studied economics at the University of Berne, completing his degree in 1985 and his doctorate in 1989.



Deborah Lucas

Professor of Finance
Massachusetts Institute of Technology

Discussant

DEBORAH LUCAS is the Sloan Professor of Finance at the MIT Sloan School of Management and Director of the MIT Golub Center for Finance and Policy. Her current research focuses on government financial institutions and on valuation and accounting in the public sector. She serves on advisory boards for the Federal Reserve Bank of New York, the Urban Institute, and the Census Bureau, and is a board member of the Chicago Mercantile Exchange. Previous appointments include chief economist, assistant and associate director at the Congressional Budget Office.

Deborah Lucas received her BA, MA, and a PhD in economics from the University of Chicago.



Joshua Rauh

Professor of Finance
Stanford University

Author

JOSHUA D. RAUH is a Senior Fellow and Director of Research at the Hoover Institution and the Ormond Family Professor of Finance at Stanford's Graduate School of Business.

Rauh studies corporate investment, business taxation, government pension liabilities, and investment management. His work has appeared in the *Journal of Political Economy*, *Quarterly Journal of Economics*, *Review of Financial Studies*, and *Journal of Financial Economics*. He received the 2006 Brattle Price (First Prize) and 2011 Smith Breeden Prize (First Prize).

Rauh's research on state and local pension systems in the United States has received international media coverage in outlets such as the *Wall Street Journal*, the *New York Times*, the *Financial Times*, and *The Economist*.

Rauh received a BA degree in economics, magna cum laude with distinction, from Yale University and a PhD in economics from the Massachusetts Institute of Technology.



Michala Marcussen

Group Chief Economist
Société Générale

Discussant

MICHALA MARCUSSEN assumed the role of Societe Generale's Group Chief Economist in September 2017 and leads a team of over 30 economists and sector engineer's in her role as Head of Economic and Sector Research in the Risk Division. She is a member of Societe Generale's Group Management Committee and has been with the Group since 1994.

With over 30 years of experience in the financial industry, she is a frequent commentator in the economic debate. Michala Marcussen holds a Master of Science in Economics from the University of Copenhagen and is a CFA charterholder. Michala Marcussen is also Vice President of the SUERF (European Money and Finance Forum) Council of Management.



Elke König

Chair
Single Resolution Board

DR ELKE KÖNIG is Chair of the Single Resolution Board (SRB), being responsible for the management of the organisation, the work of the Board, the budget, all staff, and the Executive and Plenary sessions of the Board. The General Counsel, the Policy Coordination and International Relations Unit, the Communications office and the Internal Audit function report directly to her.

She was President of the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) from 2012 until 2015. After qualifying in business administration and obtaining a doctorate, Dr König spent many years working for companies in the financial and insurance sector. From 1980 to 1990, she worked for KPMG Deutsche Treuhandgesellschaft in Cologne, auditing and advising insurance undertakings, from 1986 as a holder of a special statutory authority (Prokuristin) and from 1988 as a director and partner. From 1990 to 2002, Dr König was a member of the senior management of the Munich Re Group (Head of Accounting); she then moved to Hannover Rückversicherung AG as Chief Financial Officer. From 2010 to the end of 2011, Dr König was a member of the International Accounting Standards Board (IASB) in London. Dr König was also a representative of the Supervisory Board of the Single Supervisory Mechanism.



Kerstin af Jochnick

First Deputy Governor
Sveriges riksbank

KERSTIN af JOCHNICK, First Deputy Governor, took up the post of Deputy Governor of the Riksbank on 1 January 2012 with a term of office of six years. Ms af Jochnick's term of office has been extended with six years until 31 December 2023.

After positions at Sveriges Riksbank 1977–1991 Ms af Jochnick joined Finansinspektionen (the Swedish Financial Supervisory Authority), where she was Head of Department 1995–2007. Ms af Jochnick chaired the Committee of European Banking Supervisors 2008–2009. Between 2009 and 2011 Ms af Jochnick was Managing Director of the Swedish Bankers Association.



Carolyn Wilkins

Senior Deputy Governor
Bank of Canada

Chair

CAROLYN WILKINS was appointed as the Bank of Canada’s Senior Deputy Governor in 2014, for a seven-year term.

As Senior Deputy Governor, Ms. Wilkins oversees the strategic planning and economic and financial research of the Bank. She also shares responsibility for the conduct of monetary policy with the other members of Governing Council, and she is a member of the Bank’s Board of Directors.

Ms. Wilkins represents the Bank on the Financial Stability Board (FSB), and is a member of the FSB’s Standing Committee on Assessment of Vulnerabilities. She is a member of the IMF’s high-level advisory group on Fintech, and chaired the FSB’s FinTech Issues Group.



James McAndrews

Senior Fellow
Wharton Financial Institutions Center

Discussant

JAMES J. McANDREWS is an economist specializing in the economics of money and banking. From 2010 to 2016 he was executive vice president and head of the Research and Statistics Group at the Federal Reserve Bank of New York. In that role he led in the formation of economic and financial policy analysis for the Bank and in the collection of data for regulatory, supervisory, and monetary purposes. Mr. McAndrews served on the Bank’s Management Committee and its subcommittees. Since 2016 Mr. McAndrews has worked to start an uninsured bank in the state of Connecticut.

Mr. McAndrews has written extensively on topics in monetary policy implementation, the liquidity of banks and markets, and monetary arrangements in U.S. history. Mr. McAndrews holds a bachelor’s degree and doctorate degree in economics from the University of Iowa.



Robert Townsend

Professor of Economics
Massachusetts Institute of Technology

Author

ROBERT M. TOWNSEND is the Elizabeth and James Killian Professor of Economics in the Department of Economics at MIT. He is a theorist, macroeconomist, and development economist who analyzes the role and impact of economic organization and financial systems through applied general equilibrium models, contract theory and the use of micro data.

He has written several books including *Financial Structure and Economic Organization* (1990), *Households as Corporate Firms* (2010), *Financial Systems in Developing Economies* (2011) and numerous articles in top Economics journals. Townsend is an Elected Member of the National Academy of Sciences, and is twice the recipient of the Frisch Medal, first in 1998 and then in 2012, and received the Jean-Jacques Laffont Prize in 2011.

Townsend received his Ph.D. in Economics from the University of Minnesota and his B.A. from Duke University.



Ernst-Ludwig von Thadden

Professor of Economics and Finance
University of Mannheim

Discussant

ERNST-LUDWIG von THADDEN is Professor of Economics and Finance at the University of Mannheim (Germany). He holds a PhD in economics from the University of Bonn and an MPhil from the London School of Economics. He was professor of economics at the University of Lausanne (Switzerland) from 1995-2004 and has held visiting faculty positions at Stanford University (CA), Università Tor Vergate (Rome), and the London School of Economics.

Ernst-Ludwig von Thadden was Resident Fellow of the Center for Advanced Study in the Behavioral Sciences in Stanford (CA), council member of the European Economic Association, and has held the Bertil Danielsson Distinguished Visiting Chair at the Stockholm School of Economics (Sweden). He is a member of the Heidelberg Academy of Arts and Sciences and fellow of the European Economic Association. From 2005 to 2010 he was the founding director of the Mannheim Graduate School in the Economic and Social Sciences and lead manager of the Graduate School’s research grant in the German “Initiative of Excellence”. Since October 2012 he has been president of the University of Mannheim.



Randall Kroszner

Professor of Economics
University of Chicago

Chair

RANDALL S. KROSZNER is the Norman R. Bobins Professor of Economics at the University of Chicago's Booth School of Business. From 2006 to 2009, he served as a Governor of the U.S. Federal Reserve System, where he took a leading role in developing responses to the financial crisis. He represented the Fed on the Financial Stability Board, the Basel Committee on Banking Supervision, and chaired the OECD Working Party 3 on international macro policy.

From 2001 to 2003, Professor Kroszner was a member of the U.S. President's Council of Economic Advisers. He currently serves as the Vice Chair of the Financial Research Advisory Committee in the Office of Financial Research at the U.S. Treasury. Professor Kroszner has more than 100 publications, including his book with Nobel laureate Robert J. Shiller, *Reforming U.S. Financial Markets*.

Professor Kroszner received a Sc.B. from Brown University and a Ph.D. from Harvard University.



Dennis McLaughlin

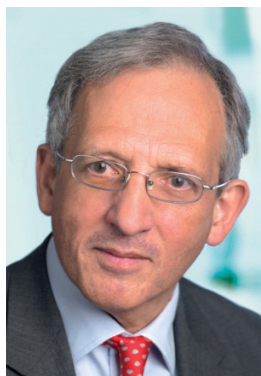
Chief Risk Officer
LCH Group Ltd

Panellist

DENNIS McLAUGHLIN is Chief Risk Officer, LCH Group Limited. Dennis has over 20 years experience in risk management and finance. He joined LCH from AON where he was the CEO for Innovation and Analytics. Previous to that he was a Managing Director in Finance & Treasury and Risk at Merrill Lynch and was Director of Capital, Global Consumer Group at Citigroup.

Dennis started his finance career as a consultant in the Global Risk Management practice at McKinsey where he focused on the risk management of Traded Products and the development of risk systems and analytical algorithms. Prior to that Dennis was a professor at Princeton University where he taught mathematics and quantitative finance.

Dennis has an MBA from Wharton School, University of Pennsylvania, a Ph.D. in Mathematics from Brown University and a MA in Mathematical Science from University College Dublin.



Jon Cunliffe

Deputy Governor for Financial Stability
Bank of England

Panellist

SIR JON CUNLIFFE became Deputy Governor for Financial Stability at the Bank of England on 1 November 2013. He is a member of the Bank's Financial Policy and Monetary Policy Committees, the Bank's Court of Directors and the Prudential Regulatory Committee.

Jon Cunliffe has specific responsibility within the Bank for financial stability, for the supervision and oversight of Financial Market Infrastructures, Resolution policy and implementation, and shared responsibility for the Bank's International macroeconomic analysis, strategy and engagement. He is a member of the G20 Financial Stability Board Steering Committee, the Bank for International Settlements' Board of Directors and the European Systemic Risk Board.



Susan O'Flynn

Global Head of Clearing and Collateral Strategy and Optimization
Morgan Stanley

Panellist

SUSAN O'FLYNN is Global Head of Clearing and Collateral Strategy and Optimization and recently was also appointed European Head of Bank Resource Management for Morgan Stanley. She is responsible for strategy and optimization of the firm's global risk exposure to CCPs and associated resource usage across all products, including listed and OTC derivatives and securities finance transactions ("SFTs") as well as collateral optimization of all other derivatives exposures. She has held this optimization position since September 2017. From 2012 to 2017, Susan has held a number of roles including Global Head of CCP Strategy and Optimization and Global Head of Firm Secured Funding. Prior to that, she ran the Firm Cross-asset Structured Funding business.

Before joining Morgan Stanley in 2008, Susan worked in the Structured Funding business at Goldman Sachs for three years, predominantly focusing on fixed income financing. Susan previously practiced as a debt capital markets lawyer for two years at White & Case LLC, focusing primarily on emerging markets. Susan holds a Masters degree in Intellectual Property Law (LLM) and a Bachelors degree in Law (LLB).

Susan has been a member of the board of LCH Limited since early 2016. She is also a member of the CFTC Market Risk Advisory Committee.



Isabel Schnabel

Professor of Financial Economics
University of Bonn

Chair

ISABEL SCHNABEL has been a Professor of Financial Economics at the University of Bonn since 2015. In 2014, she became a Member of the German Council of Economic Experts, an independent advisory body to the German government. She is Research Fellow at CEPR and CESifo, and Research Affiliate at the Max Planck Institute for Research on Collective Goods in Bonn. Moreover, she is a member of the Administrative and Advisory Councils of the German Federal Financial Supervisory Authority (BaFin) and of the Advisory Scientific Committee of the European Systemic Risk Board. Her research focuses on financial stability, banking regulation, and international capital flows.



Guillaume Plantin

Professor of Economics
Sciences Po

Discussant

GUILLAUME PLANTIN is a Professor of Economics at Sciences Po and an associated researcher with the Toulouse School of Economics. His research consists in applying information economics to the study of financial institutions, financial stability, and central banking. His recent research interests include accounting standards, banking and shadow-banking regulation, monetary spillovers and capital flows, and non-cooperative interactions between fiscal and monetary authorities.



Javier Suarez

Professor of Finance
Centre for Monetary and Financial Studies, Madrid

Author

JAVIER SUAREZ is a Professor of Finance at CEMFI, Madrid. He is also a Research Fellow of the CEPR and a Research Associate of the ECGI. He earned a PhD in Economics at Universidad Carlos III, Madrid, in 1994. His research and teaching activities cover mainly the areas of corporate finance and banking, with a special focus on the analysis of bank regulation, the linkages between macroeconomics and banking, and macro-prudential policies. He has numerous publications in top economics and finance journals. In 2013-2014 he served as an academic advisor to the Macro-prudential Research Network (MaRs) of the European System of Central Banks. Since March 2018 he is Chair of the Advisory Scientific Committee of the European Systemic Risk Board (ESRB), of which he was a Vice-chair since March 2015.



Frank Smets

Director General Economics
European Central Bank

Discussant

FRANK SMETS is Director General Economics at the European Central Bank since February 2017. Previously he was Adviser to the President of the European Central Bank since December 2013 and Director General of the Directorate General Research from September 2008. He is professor of economics at UGent and an honorary professor in the Duisenberg chair at the Faculty of Economics and Business of the University of Groningen. He is a Research Fellow of the Centre for Economic Policy Research in London and CESifo in Munich. He has written and published extensively on monetary, macroeconomic, financial and international issues mostly related to central banking in top academic journals such as the *Journal of the European Economic Association*, *the American Economic Review*, *the Journal of Political Economy* and *the Journal of Monetary Economics*. He has been managing editor of the *International Journal of Central Banking* from 2008 till 2010. Before joining the European Central Bank in 1998, he was a research economist at the Bank for International Settlements in Basel, Switzerland. He holds a PhD in Economics from Yale University.



Claudia Buch

Vice President
Deutsche Bundesbank

Chair

Professor **CLAUDIA M BUCH** is the Vice-President of the Deutsche Bundesbank. She is responsible for Financial Stability, Statistics and Internal Audit. Professor Buch is the accompanying person of the President of the Bundesbank on the ECB Governing Council and a member of the German Financial Stability Committee (FSC). Prior to joining the Bundesbank in May 2014, she was the President of the Institute for Economic Research (IWH) in Halle (2013-2014), Professor of Economics at the Otto von Guericke University Magdeburg (2013-2014), and Professor of Economics for “International Finance and Macroeconomics” at the University of Tübingen (2004-2013). From 2012 to 2014, she was a member of the German Council of Economic Experts. She was Scientific Director at the Institute for Applied Economic Research (IAW) in Tübingen (2005-2013), and worked at the Institute for World Economics in Kiel (IfW) from 1992 until 2013.

Dr Buch habilitated at the University of Kiel (2002) after receiving her doctorate there in 1996. Between 1985 and 1991, she studied Economics at the University of Bonn and she graduated from the University of Wisconsin (Eau Claire) with a Master of Business Administration degree in 1988. Her fields of specialisation are financial stability, international banking, international finance and macroeconomics, and financial integration.



Martin Hellwig

Director Emeritus
Max Planck Institute for Research on Collective Goods

Author

MARTIN HELLWIG is Director emeritus at the Max Planck Institute for Research on Collective Goods in Bonn. He holds a diploma in economics from the University of Heidelberg (1970) and a doctorate from the Massachusetts Institute of Technology (1973). His previous academic career has included positions at Stanford, Princeton, Bonn, Basel, Harvard and Mannheim Universities.

In addition to teaching and research, he has been active in professional associations and in policy advisory committees. He was the first Chair of the Advisory Scientific Committee of the European Systemic Risk Board. With Anat Admati from Stanford University, he has published the book *The Bankers’ New Clothes: What’s Wrong with Banking and What to Do about It*, Princeton University Press 2013.



Ludger Schuknecht

Chief Economist and Director General
Germany Federal Ministry of Finance

Discussant

LUDGER SCHUKNECHT is Chief Economist and G20 Deputy of the German Federal Ministry of Finance. He heads the Economics and International Economy Directorate General, advising the Minister on fiscal and economic policy issues in the domestic and international sphere.

He was formerly Senior Adviser in the Directorate General Economics of the European Central Bank, where he contributed to the preparation of monetary policy decision-making and ECB positions in European policy coordination. This was after developing the ECB’s fiscal analysis framework and previous assignments at the World Trade Organization and the International Monetary Fund.

His recent research focuses on public expenditure policies and reform, European integration and the analysis of economic boom-bust episodes. He wrote *Public Spending in the 20th Century: A Global Perspective* together with Vito Tanzi.



Luigi Zingales

Professor of Entrepreneurship and Finance
University of Chicago

Discussant

LUIGI ZINGALES is the McCormack Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business. In 2014 he was President of the American Finance Association. In July 2015 he became the Director of the Stigler Center at the University of Chicago. His research interests span from corporate governance to financial development, from political economy to the economic effects of culture. He has published extensively in the major economics and financial journals. He also wrote two best-selling books: *Saving Capitalism from the Capitalists* (2003) with Raghu Rajan and *A Capitalism for the People* (2012).



Viral Acharya

Deputy Governor
Reserve Bank of India

VIRAL V. ACHARYA is a Deputy Governor at the Reserve Bank of India (RBI) in charge of Monetary Policy, Financial Stability, Financial Markets Operations and Regulation, Research and Statistics, and Human Resource Management. Prior to joining the RBI, he was the CV Starr Professor of Economics at the Department of Finance at New York University Stern School of Business. His primary research interest is in theoretical and empirical analysis of systemic risk of the financial sector, its regulation and its genesis in government-induced distortions.

He has co-edited the books *Restoring Financial Stability: How to Repair a Failed System*, John Wiley & Sons, March 2009, *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, John Wiley & Sons, November 2010, and *Dodd-Frank: One Year On*, NYU-Stern and CEPR (released on vox.eu.org), July 2011. He is also the co-author of the book *Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance*, Princeton University Press, March 2011 and Harper Collins (India), June 2011.

He is the recipient of the inaugural Banque de France – Toulouse School of Economics Junior Prize in Monetary Economics and Finance in 2011, and the 2017 Alexandre Lamfalussy Senior Research Fellowship of the Bank for International Settlements (BIS).



Darrell Duffie

Professor of Finance
Stanford University

DARRELL DUFFIE is the Dean Witter Distinguished Professor of Finance at Stanford University's Graduate School of Business, and Professor (by courtesy) in the Department of Economics, Stanford University.

Duffie is a Fellow of the Econometric Society, a Research Fellow of the National Bureau of Economic Research, a Fellow of the American Academy of Arts and Sciences, and a member of the board of directors of Moody's Corporation. He was the 2009 president of the American Finance Association. From 2013-2017, he chaired the Financial Stability Board's Market Participants Group on Reference Rate Reform.

Duffie's recent work focuses on capital markets and financial stability. His research is published in *Econometrica*, *Journal of Political Economy*, and *Journal of Finance*, among other journals. His most recent books are *How Big Banks Fail* (Princeton University Press, 2010), *Measuring Corporate Default Risk* (Oxford University Press, 2011), and *Dark Markets* (Princeton University Press, 2012).



Anil Kashyap

Professor of Economics and Finance
University of Chicago

ANIL KASHYAP is the Edward Eagle Brown Professor of Economics and Finance at the University of Chicago's Booth School of Business and an external member of the Bank of England's Financial Policy Committee. He co-founded the U.S. Monetary Policy Forum, serves as a consultant for the Federal Reserve Bank of Chicago, a research associate for the National Bureau of Economic Research, and a research fellow for the Centre for Economic Policy Research. Among the various awards he has received is the "The Order of the Rising Sun, Gold Rays with Neck Ribbon" from the Emperor of Japan.



Nobuhiro Kiyotaki

Professor of Economics and Banking
Princeton University

NOBUHIRO KIYOTAKI is the Harold H. Helm '20 Professor of Economics and Banking at Princeton University. He received his Ph.D. from Harvard University in 1985. He has published widely in macroeconomics and monetary economics, including *Monopolistic Competition and the Effects of Aggregate Demand*, with Olivier Blanchard in 1987, *On Money as a Medium of Exchange*, with Randall Wright in 1989, "Credit Cycles," with John Moore in 1997, and *Banking, Liquidity and Bank Runs in an Infinite Horizon Economy*, with Mark Gertler in 2015.

Kiyotaki also worked at the University of Wisconsin-Madison, the University of Minnesota and the London School of Economics and Political Science before Princeton. Among professional honors, Kiyotaki received the 1999 EEA Yrjo Jahansson Award and the 2010 Stephen A. Ross Prize in Financial Economics, together with John Moore, and also the 2014 Banque de France-TSE Senior Prize in Monetary Economics and Finance.



Rafael Repullo

Professor of Economics and Director
Centre for Monetary and Financial Studies, Madrid

RAFAEL REPULLO is Professor of Economics and Director of the Centre for Monetary and Financial Studies (CEMFI) in Madrid, Spain. He holds a PhD in Economics from the London School of Economics (LSE), and has worked in the Department of Economics of the LSE and the Research Department of the Bank of Spain. He is Fellow of the Econometric Society and of the European Economic Association and Research Fellow of the Centre for Economic Policy Research (CEPR).

He has been President of the Spanish Economic Association, Executive Vice-President of the Econometric Society, member of the Executive Committee of the European Economic Association, and Co-Editor of the *International Journal of Central Banking*.



H el ene Rey

Professor of Economics
London Business School

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The Riksbank 350 years old

In 1668, the Riksdag, Sweden's parliament, decided to found Riksens Ständers Bank (the Estates of the Realm Bank), which in 1867 received the name Sveriges Riksbank. The Riksbank is thus the world's oldest central bank. In 2018, the Riksbank will celebrate its 350th anniversary.



Sveriges Riksbank, De Nederlandsche Bank, and Deutsche Bundesbank