

Conference

Investment, Technological Transformation and Skills

Luxembourg, 28 - 29 November 2018

European Investment Bank

98-100, boulevard Konrad Adenauer L-2950 Luxembourg

See map on back cover

Session I

Nearly five years into the recovery, economic growth in Europe continues to be less dynamic than in the US and China. With challenges to competitiveness in Europe persisting, it is time for a shift in European policy focus. Weak productivity growth, inefficient allocation of resources, unexploited synergies, diverging economic dynamics and long-term prospects call for a stronger emphasis on policies that will enhance the competitiveness of European firms. Reviewing the evidence on recent investment activity in Europe, this panel will discuss the driving forces, constraints, critical gaps, and the available options to address them.

Will recovery and market forces be enough to address the gaps? Should governments step up their policies to support competitiveness and investment efforts? What strategies are needed? Should they target the regional, country or EU level? Can the focus on strengthening the competitiveness of European firms become a new pulling force for Europe?

Wednesday, 28 November 2018 FKI/Fast Entrance - Salle Belvédère

13.30 - 14.00	Registration and Welcome Coffee
14.00 - 14.30	Opening Remarks
	Werner Hoyer, President, European Investment Bank
	Luis de Guindos, Vice-President, European Central Bank
14.30 - 16.00	Panel Session I - Investment in Europe: policies to support competitiveness as a new pulling factor
	Chair & Presentation of the key results of the 2018-2019 Investment Report by Debora Revoltella , <i>Director of the Economics Department, European Investment Bank</i>
	Pier Carlo Padoan, Former Finance Minister, Italy
	Vítor Gaspar, Director, Fiscal Department, International Monetary Fund
	Jonathan Haskel, Professor of Economics, Imperial College London
16.00 - 16.20	Coffee Break

16.20 - 18.00 Panel Session II - Investment finance in Europe – a system fit for growth? Chair: Peter Praet, Member of the Executive Board, European Central Bank Colin Mayer, Peter Moores Professor of Management Studies, University of Oxford Catherine L. Mann, Managing Director and Global Chief Economist, Citigroup Claudio Borio, Head of Monetary and Economic Department, Bank for International Settlements Jean-Pierre Mustier, CEO, UniCredit 18.00 - 18.20 Policy Address Klaus Regling, Managing Director, European Stability Mechanism

Session II

years have been successful in improving financial the long-term benefits of these policies are still diversification in the forms of finance available. Looking forward, how self-sustained are these of the European financial sector to attract all available resources, transform and allocate them efficiently across countries, sectors and firms. It will also probe on the question of whether the European market offers appropriate finance needed to support innovation and growth and whether there is enough equity demand and the role of the regulatory framework – including related obstacles and their relative importance – in promoting the efficient allocation of long-term savings to productive projects and supporting

Session III

The world is embarking on what many have described as a fourth industrial revolution. Integration of digital and physical technology can deliver many potential benefits, such as increased efficiency, greener technology, increased service levels and reduce the risk of human error. At the same time, these technologies risk to have a profound impact on labour markets: increasing automation may result in job losses and downward wage pressure for low-skilled workers, while demand for highly qualified, technically skilled specialists increases. How is digitalisation affecting the firms, the market in which they operate and the social and economic environment? This panel will be an opportunity to hear from leading market players and experts about the disruptive power of the digital transformation and associated opportunities and challenges.

Thursday, 29 November 2018

EKI/East Entrance - Salle Belvédère

8.30 - 9.00	Registration and Welcome Coffee
9.00 - 9.15	Opening Remarks
	Andrew McDowell, Vice-President, European Investment Bank
9.15 - 9.45	Keynote Address: "The future of labor and the university system in Europe"
	Jean Tirole , Chairman, Toulouse School of Economics and the Institute for Advanced Study in Toulouse - awarded with the Nobel Prize in Economic Sciences in 2014
9.45 - 10.30	Panel Session III - Digitalisation and Demand for skills: a market overview
	Chair: Shirin Wheeler , Senior Media Officer and Principal Advisor International Media, European Investment Bank
	Filip Geerts, Director General, European Association of Machine Tool Industries
	Christel Heydemann , Member of the Executive Committee and President, Schneider Electric France
	Jatsu Intxaurbe, Director of Innovation and Promotion, Batz Group

11.00 - 12.30 Parallel Sessions (first round)

Session A1 - Digitalisation - the Productivity Puzzle

Chair: **Reinhilde Veugelers**, *Professor*, *KULeuven*

Eric Bartelsman, Professor of Economics, Vrije Universiteit Amsterdam Diego Comin, Professor of Economics, Dartmouth College James Manyika, Chairman and Director, McKinsey Giuseppe Nicoletti, Head of the Structural Policy Analysis Division, OECD Fronomics Department

Despite the on-going digital revolution, productivity growth has slowed in recent years. This panel will discuss various hypotheses of what might be at the core of this interesting paradox, notably measurement related issues and/or the limited adoption of digital technologies by the corporate sector. Alternatively, is it a matter of low economic impact of these technologies compared to previous waves of technological advancement? The panel will discuss policy options (if any) to tighten the link between digitalisation and productivity growth as well as examples of existing good and bad practices in this respect.

Session B1 - Skills - what causes the gaps in the EU?

Chair: Jan Svejnar, Director of the Centre on Global Economic Governance, Columbia University

Klaus Zimmermann, GLO President, University of Bonn Juan Francisco Jimeno, Head of Research Division, Bank of Spain Maarten Goos, Professor of Economics, Utrecht University

Inez von Weitershausen, Associate

Why are (missing) skills increasingly perceived as an issue by firms? The panel will focus on the nature of current skill gaps and mismatches in Europe, disentangling their sources, including the role of cyclical and structural drivers as well as technological change. The panel will also shed light on the policy implications following from the different hypotheses.

Session C1 - Macroeconomic benefits - moving towards more market based finance

Chair: **Karel Lannoo,** *CEO, Centre* for European Policy Studies

Olivier Garnier, Director General for Economics and International, Banque de France
Boris Vujčić, Governor,
Croatian National Bank
Eli Noam, Professor of Finance and Economics, Columbia Business School Roger Havenith, Deputy CEO,

The panel will focus on the first signs of EU Financial re-integration and rebound in worldwide crossborder financial flows, associated with a possible shift towards a broader-based financial system. How to ensure that the trend continues along the normalisation of monetary policy? How to enhance private-based risk sharing in the EU and cross-border financial flows? The panel will also discuss the contours of the right forms of finance needed to support innovation and growth.

Parallel Sessions (second round) 13.45 - 15.15

Session A2 - Digital Transformation - enablers and consequences

Chair: Reinhilde Veugelers, Professor,

Hugo Spowers, CEO, Riversimple **Steve Leonard.** Founding CEO and

Laura Piovesan, Head of the Innovation Hans-Georg Schnauffer, Program Manager, Plattform Industrie 4.0

examples of policies that can help promote the diffusion and effective use of digital technologies and, thus, technologies. The panel will also discuss address some of the potential, negative consequences of digitalization.

Session B2 - Skills in the CESEE region

Chair: Jan Šveinar. Director of the

Laura Papi, Assistant Director European Hans Timmer, Chief Economist Central

constellation of factors adding to current systems with labour market needs, and firms' approach to training. It will also explore the question of whether skill gaps pose an obstacle for CESEE countries to move to a different growth model and what policies can be implemented to

Session C2 - Understanding impediments and incentives to foster EU equity base

15.15 - 15.45	Coffee Break
15.45 - 17.20	Panel Session IV - The EU competitiveness challenge: What lessons for policy?
	Chair: Andrew McDowell, Vice President, European Investment Bank
	Jan Švejnar, Director of the Centre on Global Economic Governance, Columbia University
	Reinhilde Veugelers, Professor in the Department of Management, Strategy and Innovation, KU Leuven
	Karel Lannoo, CEO, Centre for European Policy Studies
	Robert Koopman, Chief Economist, World Trade Organisation
	Sergei Guriev, Chief Economist, European Bank for Reconstruction and Development
17.20 - 17.40	Closing Remarks Ambroise Fayolle, Vice President, European Investment Bank

Session IV

The ongoing recovery offers a unique opportunity for Europe to focus on tackling structural problems and take action to improve its productivity and long-term competitiveness. Innovation and technological progress are the most important drivers of economic growth over the longer term—but does Europe have the right policies in place to enable and stimulate them? The panel will debate the policy options to meet the European challenges on technological transformation, skills, and financing. How can the specific financing needs of innovative firms be met best? What are the implications of technological change for skill policies? How can Europe facilitate the spread of innovation and its firms to push the technological frontier?

Speakers Guide - Biographies in alphabetical order by surname



Giorgio Barba Navaretti Professor of Economics, University of Milan

Giorgio Barba Navaretti is Professor of Economics at the University of Milan, Scientific Director of the Centro Studi Luca d'Agliano and Distinguished Visiting Faculty at Sciences Po, Paris. He has a PhD in Economics from Oxford University and a Degree in Economics from Bocconi University in Milan. He is specialised in international and development economics. He has been working extensively on the economics of multinational firms on firms' dynamics and competitiveness and on several international economic policy issues. He is or has been a consultant for many international organisations, including the European Central Bank, the World Bank, the OECD and the European Commission and for Italian public institutions like the Bank of Italy and the Ministry of Foreign Affairs. He was part of the Task Force on Industrial Policy of



Eric BartelsmanProfessor of Economics,
Vrije Universiteit

Eric Bartelsman is professor of economics at Vrije Universiteit Amsterdam and General Director at Tinbergen Institute. He holds a BS from MIT and a PhD from Columbia University. Prior to his appointment at VU in 2000, he served as economist at the Federal Reserve Board in Washington DC, as advisor to CPB Netherlands, and as Head of Economic Research at the Ministry of Economic Affairs in the Netherlands. In 2007 and 2008 he was a member of the Netherlands Council of Economic Advisors (REA), in 2012-2013 he was non-resident

the Italian Ministry of Economic Development. He is a non-executive director of Aon Italia, and R&S Mediobanca.

He is the Vice President of Collegio Carlo Alberto Foundation in Torino and member of the Board of Directors of Unicredit Foundation and of Fondazione Pesenti.

He published many papers in key international academic journals and books, including Multinationals in the World Economy with Anthony J. Venables (Princeton University Press; in Italian Le multinazionali nell'economia mondiale, Il Mulino) and Made in Torino? Fiat Chrysler e il futuro dell'industria, Il Mulino.

He is a columnist for II Sole 24 Ore and Editor in Chief of "European-Economy. Banks Regulation and the Real Sector".

Fellow of DG ECFin and from 2014-2016 a Research Visitor at the ECB. His teaching ranges from first-year lectures to PhD seminars. His research interests are in the area of productivity growth, both from a micro and macro vantage point, and have led to publications in top journals.



Claudio Borio
Head of the Monetary
and Economic
Department, Bank for
International Settlements

Claudio Borio has been at the BIS since 1987, covering various responsibilities in the Monetary and Economic Department including Director of Research and Statistics and Head of the Secretariat of the Committee on the Global Financial System and the Gold and Foreign Exchange Committee, which examine, inter alia, issues related to financial stability and market functioning. From 1985-1987, he worked as economist at the OECD in the country studies branch of the Economics and Statistics Department. Prior to that, he was Lecturer and

Research Fellow at Brasenose College, Oxford University. He holds a DPhil and MPhil in Economics and a BA in Politics, Philosophy and Economics from the same university. Author of numerous publications in the fields of monetary policy, banking, finance and issues related to financial stability.



Diego CominProfessor of Economics,
Dartmouth College

Diego Comin is a Professor of Economics at Dartmouth College. He is also Research Fellow at the Center for Economic Policy Research and Faculty Research Fellow in the National Bureau of Economic Research's Economic Fluctuations and Growth Program. Comin is a fellow for the Institute of New Economic Thinking (INET).

Professor Comin has published multiple articles in top economic journals on the topics of business cycles, technology diffusion, economic growth and firm volatility. He has also authored cases studies published in the book Drivers of Competitiveness. Comin's research has been supported by the Gates foundation, the National Science Foundation, the C.V. Star Foundation, the INET foundation and the Zentrum für Europäische Wirtschaftsforschung (ZEW).

Comin advised during two years the Prime Minister of Malaysia on its development strategies and led the creation of the Malaysian Public-Private Research Network (PPRN), a public institution that provided solutions to companies' technological problems by matching them with researchers that were experts in the relevant field.

Comin has developed macroeconomic models of technology and business cycles for the design of policies at the European Central Bank (ECB), the European Commission (EU). Additionally, he has consulted for the World Bank, IMF, Federal Reserve Bank of New York, Citibank, Danish Science Ministry, and the Economic and Social Research Institute (ESRI) of the government of Japan. Recently, Microsoft has used the models of technology diffusion developed in Comin and Hobijn (2010) to forecast the diffusion of their cloud services.



Luis De Guindos Vice-President, European Central Bank

Luis de Guindos Jurado is Vice-President of the European Central Bank since 1 June 2018. In this capacity, he is also a member of the Executive Board, the Governing Council and General Council of the European Central Bank. He was Minister of Economy, Industry and Competitiveness (2016-2018) and Minister of Economy and Competitiveness (2011-2016). He was Secretary of State for Economic Affairs and member of the Economic and Financial Committee of the EU (2002-2004). Prior to that, he was Secretary General for Economic and Competition Policy (2000-2002) and Director General (1996-

2000). Mr de Guindos was Head of Financial Services (2008-2009) at PricewaterhouseCoopers and Director at IE Business School and PwC Center for the Finance Sector (2010-2011). He was Chief Executive Officer Iberia at Lehman Brothers and Chief Executive Officer at Nomura Securities (2006-2008). He graduated with honours in BSc in Economics from Colegio Universitario de Estudios Financieros (CUNEF) in Spain (1982) and graduated as State Economist and Trade Expert (1984).



Ralph De Haas Director, European Bank for Reconstruction and Development

A Dutch national, Ralph de Haas is the Director of Research at the European Bank for Reconstruction and Development (EBRD). He is also a part-time Associate Professor of Finance at Tilburg University and a Fellow at the European Banking Center. Ralph earned a PhD in economics from Utrecht University in 2006 and is the recipient of the 2014 Willem F. Duisenberg Fellowship Prize. He has published research in the Journal of Financial Economics. Review of Financial Studies:

Review of Finance; American Economic Journal: Applied Economics; Journal of the European Economic Association, among others. Ralph's research interests include global banking, development finance, and development economics more widely. He is currently working on randomised controlled trials related to financial inclusion in Morocco and Turkey. Ralph lives with his husband in London.



Ambroise Fayolle Vice-President, European Investment Bank

Ambroise Fayolle was appointed Vice-President of the European Investment Bank in February 2015. He is currently in charge of the operational activities of the Bank in France, Germany, South Africa, and, for ACP/OCT mandates, West Africa and Pacific Islands. He is also responsible for EFSI, innovation, the EIB Economic Department, Development policy and is Board member of the European Investment Fund.

Ambroise Fayolle, represented France at the Executive Boards of the International Monetary Fund (IMF) and of the World Bank, in Washington DC from September 2007 until

his appointment as head of Agence France Tresor, the Debt Agency of the French Ministry of Finance, in March 2013. He was also a staff member of the IMF between 2003 and 2005. A graduate of the Ecole Nationale d'Administration (ENA), most of his career was spent at the Treasury Department in the Ministry of the Economy and Finance. In particular, he was division chief in charge of the State Financing and Monetary Affairs Bureau — the predecessor to AFT — and, in 2005, was appointed assistant secretary for Multilateral and Development affairs at the French Treasury, Sous-Sherpa for the G8, and Co-Chairman of the Paris Club.



Federico Galizia Chief Risk Officer, Inter-American Development Bank

Federico Galizia, Chief Risk Officer at the Inter-American Development Bank, is responsible for overseeing and maintaining the Bank's capacity to identify, measure, and manage financial and operational risk. Prior to joining the Bank, Mr. Galizia served as Head of Risk and Portfolio Management and Chairman of the Investment and Risk Committee at the European Investment Fund. Before that, he was Deputy Division Chief in the International Monetary Fund, and Adviser to the President of the European

Investment Bank. Mr. Galizia holds a Ph.D. in Economics from Yale University, and has published and taught MBA courses in the fields of risk management and corporate finance.



Olivier Garnier Director General for Economics and International, Banque de France

Olivier Garnier is Director General for Economics and International at Banque de France. Before joining Banque de France in September 2017, he was the Group Chief Economist of Société Générale and a member of the Group's General Management Committee. He has also been Deputy-CEO of Société Générale Asset Management. He started his career at the French Ministry of Finance where he held various positions. In particular, he was the Economic Adviser to the Finance Minister from 1994 to 1997, and to the Treasury's

Director in 1992-1993. He also served as an economist at the US Federal Reserve Board in Washington DC from 1990 to1992. Olivier Garnier is a member of the Scientific Advisory Board to the French Financial Market Authority. He has also been a member of the Economic Advisory Council to the French Prime Minister from 2002 to 2012. He is a graduate of Ecole Polytechnique, Ecole Nationale de la Statistique et de l'Administration Economique (E.N.S.A.E.), and the University of Paris-Dauphine.



Vitor Gaspar Director Fiscal Department, International Monetary Fund

Vitor Gaspar, a Portuguese national, is Director of the Fiscal Affairs Department of the International Monetary Fund. Prior to joining the IMF, he held a variety of senior policy positions in Banco de Portugal, including most recently as Special Adviser. He served as Minister of State and Finance of Portugal during 2011-2013. He was head of the European Commission's Bureau of European Policy Advisers from 2007 to 2010 and director general of research at the European

Central Bank from 1998 to 2004. Mr. Gaspar holds a Ph.D. and a post-doctoral aggregate in Economics from Universidade Nova de Lisboa; he also studied at Universidade Católica Portuguesa.



Filip Geerts
Director General,
European Association
of Machine Tool
Industries

Director General of CECIMO, the European Association of the Machine Tool Industries and related Manufacturing Technologies. Filip Geerts is a professional in international, EU and national public and regulatory affairs. Mr. Geerts is specialised in the management of corporate and governmental affairs departments of companies, national and EU trade associations and non-profit organizations. He was deputy-director for the Belgian association for the technological industry, public and regulatory affairs manager

for IBM EMEA and secretary general for numerous European trade associations in the ICT, the electro-medical, lighting and environmental sector. He has degrees from Insead Fontainebleau and Singapore, London School of Economics, Vlerick, College of Europe, Catholic University of Louvain-la-Neuve and Catholic University of Leuven.



Maarten Goos Professor of Economics, Utrecht University

Maarten Goos is Full Professor of Economics and Institutions at the Faculty of Law, Economics and Governance at Utrecht University. His research focuses on labor markets including technological progress, labor market intermediation, inequality and institutions.

His award-winning research is published in international peer-reviewed journals, books and magazines. He is a regular speaker at international conferences in the areas of innovation, productivity, economic growth, labour markets and the ethical, legal, socio-economic and political consequences of ongoing technological progress. He is also an award-winning teacher, and has taught courses on European

macroeconomics, economic growth and labour economics at various schools and organizations.

Maarten received his PhD from the London School of Economics (LSE) and held positions at Erasmus University Rotterdam, University College London and KU Leuven before joining Utrecht University. He also held visiting positions at Princeton University, the Centre for Economic Performance at LSE, Fudan University Shanghai, the Massachusetts Institute of Technology and Boston University. He is currently coordinating the Future of Work initiative at Utrecht University and is involved in various initiatives by the European Commission, national policy institutes and multinational corporations.



Sergei Guriev Chief Economist, European Bank for Reconstruction and Development

As the EBRD's Chief Economist, Sergei Guriev is responsible for advising the President and other senior members of the Bank's management team on economic issues of strategic or operational relevance pertaining to the EBRD region. In 2004-13, Dr. Guriev was a tenured professor of economics and rector of the New Economic School in Moscow. Since 2013 he was a tenured professor of economics at Sciences Po, Paris. He has been a board member of several companies between 2008 and 2014 and a member of the President of Russia's

Council on Science, Technology and Education (2008-2012). Dr. Guriev has published extensively in academic journals including American Economic Review, Review of Economist Studies and American Political Science Review.



Jonathan Haskel Professor of Economics, Imperial College London

Professor of Economics at Imperial College Business School, Imperial College London, Jonathan Haskel is also an external committee member of the Monetary Policy Committee at the Bank of the England. He was previously Professor and Head of Department at the Department of Economics, Queen Mary, University of London. He has taught at the University of Bristol and London Business School and been a visiting professor at the Tuck School of Business, Dartmouth College, USA; Stern School of Business, New York University, USA; and the Australian National University. Member of the Conference on Research in Income and Wealth (CRIW) and a research associate of the Centre for Economic Policy Research, the Centre for Economic Performance, LSE, and the IZA, Bonn. Since September 2015, was member of the Financial Conduct Authority Competition Decisions Committee and the Payment System Regulator Enforcement

and Competition Decisions Committee. Since 1st February 2016, he has been a non-Executive Director of the UK Statistics Authority. Between 2001-2010 he was a Member, Reporting Panel of the Competition Commission (now the Competition and Markets Authority), on market inquiries into Mobile Phones, Home Credit and Airports, and the EMAP/ABI merger. He has been on the editorial boards of Economica, Journal of Industrial Economics and Economic Policy. Between 2013 and 2016, he was an elected member of the Council of the Royal Economic Society and between November 2012 and December 2015, a member of the "Research, Innovation, and Science Policy Experts" (RISE) high level group advising the European Commissioner for Research, Innovation, and Science on policy. In October 2017 he was the joint winner of the first Indigo Prize, for re-engineering GDP.



Roger HavenithDeputy CEO, European
Investment Fund

Deputy Chief Executive of the EIF since 1 January 2016. Roger is supervising the risk management, compliance, financial control and middle/back-office services of EIF, ensuring the smooth running of processes that enable EIF to carry out its business. He acts as main senior counterpart for the EU institutions, notably European Commission, Parliament and Court of Auditors. In this function, he also represents EIF in the discussions with EIB and EC on the next EU Multi-Annual Financial Framework and in the preparation of the next generation of financial instruments addressing EU policy priorities. Previously, he was heading the EC's DG ECFIN Unit L2 on financing of innovation, competitiveness and employment policies for more than five years. His long-standing professional career with the EC – which

he joined in 1990 – includes several key roles: among others, he was a Commission negotiator and member of the EC team in charge of the European Fund for Strategic Investments (EFSI) SME Window, as part of the Investment Plan for Europe. For several years he also led the EC's Designated Service responsible for the negotiation, implementation and oversight of financial instruments under CIP, EPMF, MAP and other initiatives. Roger Havenith has a B.A. in Business Administration from HEC St. Louis in Brussels (Belgium) and LL.M. in International and Comparative Law from Vrije Universiteit Brussel. He also earned a postgraduate degree in European Studies from Institut d'Etudes européennes de l'Université Libre de Bruxelles and M.A. from Licencié-Interprète, Institut supérieur de Traducteurs et Interprètes.



Christel Heydemann Member of the Executive Committee and President, Schneider Electric France

Christel Heydemann is Executive Vice President, France Operations, and Member of the Executive Committee of Schneider Electric since April 2017.

Christel began her career in 1997 at the Boston Consulting Group. In 1999, she joined Alcatel where she held various executive positions, notably during the merger of Alcatel and Lucent. In 2005, she moved to the sales division of Alcatel-Lucent where she was in charge of SFR and Orange key accounts. In 2008, she was appointed Sales Director France and Member of the Executive Committee of Alcatel-Lucent France. In 2009, she negotiated a strategic alliance with HP

in the United States, and was then promoted in 2011 to the position of Executive Vice President Human Resources and Transformation.

Christel joined Schneider Electric in 2014 as Strategic Alliances Vice President with the mission of accelerating, launching and promoting loT solutions through the development of strong partner network, before being appointed in 2016 Corporate Strategy & Alliances Senior Vice President.

Christel graduated from Ecole Polytechnique and from the Ecole Nationale des Ponts et Chaussées.



Werner Hoyer President, European Investment Bank

Werner Hoyer has a PhD (economics) from Cologne University where he also started his career in various positions. Dr Hoyer served for 33 years as a Member of the German Bundestag. During this period, he held the position of Minister of State at the Foreign Office on two separate occasions. In addition, he held several other positions, including that of Whip and FDP Security Policy Spokesman, Deputy Chairman of the German-American Parliamentary Friendship Group, FDP Secretary General and President of the European Liberal Democratic Reform Party (ELDR).

Upon appointment by the EU Member States, Dr Hoyer commenced his first term as EIB President in January 2012. His mandate was renewed for a second term commencing on 01 January 2018.

Dr Hoyer and wife Katja have two children.



Jatsu Intxaurbe Innovation Director, Batz Group

Jatsu Intxaurbe has a MSc in Industrial Mechanical Engineering and a Master Degree in Business Administration, both from the University of Basque Country.

He started his career in Tecnalia, as researcher, and specialized in Innovation Management at Mondragon Innovation and Knowledge Technical Center. He joined BATZ in 1998 and since then, he has held different positions within the company in the field of engineering and innovation. Currently he is the

Innovation Director at BATZ Group, a world class supplier of premium solutions for OEMs in the automotive industry, that combines with an intense dissemination activity.



Francisco Jimeno Juan Head of Research Division, Bank of Spain

Juan F. Jimeno (Ph. D. in Economics, MIT, 1990) is head of the Macroeconomic Analysis and Modelling Division of Banco de España, where previously he was Head of the Research Division during 2004-2015. Before joining the Bank of Spain, he was Professor of Economics at Universidad de Alcalá (Madrid), Senior Researcher at FEDEA, and Lecturer at the London School of Economics. He is also a Research Fellow of the Centre for Economic Policy Research (CEPR, London), of the Institute for the Study of Labor (IZA, Bonn), and editor of the IZA Journal of Labor Policy.

He has published several books, book chapters and papers in academic and policy-oriented journals, mostly in applied macroeconomics and labour economics issues, such as Economic Growth and Aggregate Productivity; Prices, Business Fluctuations and Cycles; Consumption Saving, Production, Employment and Investment; Macroeconomic Aspects of Public Finance; Macroeconomic Policy and General Outlook, Wage and Employment Determination; Regional Labour Markets, Labour-Management Relations; Trade Unions and Collective Bargaining.



Robert B. Koopman *Chief Economist, World Trade Organization*

Robert B. Koopman serves as the Chief Economist and Director of the Economic Research and Statistics Division, World Trade Organization

In this post Bob provides the Secretariat and Member Countries with analysis and information that promotes a deeper understanding of trade and trade policy's role in economic growth and development.

Prior to this post he served as the Director of Operations and Chief Operating Officer for the United States International Trade Commission. Bob oversaw the Commission's trade policy research and negotiation assistance to the President, the U.S. Trade Representative, and Congress; antidumping, countervailing duty, and safeguard; investigations; intellectual property investigations; maintenance and analysis of the Harmonized Tariff System, as well as the agency's strategic

planning and performance measurement initiatives. He also previously served as the Chief Economist and Director of the USITC Office of Economics, and numerous leadership and research positions at the Economic Research Service of USDA. Bob previously taught international trade, applied international trade, advanced international trade, and trade and economic development in the Economics Department at Georgetown University, in Washington DC. Bob's research interests include measuring the economic effects of trade and trade policy changes, measuring global value chains, and the application and validation of large scale economic simulation models. Bob also currently serves as an ex officio member of the World Trade Review Editorial Board, and serves as an editor for the Springer Series Advances in Applied General Equilibrium Modeling, with James Giesecke and Peter Dixon.



Karel Lannoo CEO, Centre for European Policy Studies

Karel Lannoo is Chief Executive Officer of CEPS, a leading independent European think tank. Published some books and numerous articles in specialised magazines and journals on general European policy, and specific financial regulation and supervision matters. Latest book: 'The Great Financial Plumbing, From Northern Rock to Banking Union' (Rowman and Littlefield, 2015, second updated edition in preparation). Independent director of BME (Bolsas y Mercados Espanoles), the listed company that manages the

securities and derivatives market in Spain; member of various advisory councils and charities Directs the European Capital Markets Institute (ECMI) and the European Credit Research Institute (ECRI), both operated by CEPS. Karel Lannoo holds a baccalaureate in philosophy and an MA in history from the University of Leuven, Belgium and obtained a postgraduate in European studies from the University of Nancy, France.



Steve LeonardFounding CEO and
MIT Reap Team
Singapore Champion,
SG Innovate

Technology-industry leader with a wide range of experience, having played key roles in building several global companies in areas such as Software, Hardware and Services. In his current role as the Founding Chief Executive Officer of SGInnovate – a private limited company wholly owned by the Singapore Government – Mr Leonard has been chartered to lead an organisation that builds 'deep-tech' companies. Capitalising on the science and technology research for which Singapore has gained a global reputation, Mr Leonard's team works with local and international partners, including universities, venture capitalists, and major corporations to help technical founders imagine, start and scale globally-relevant early-stage technology companies from Singapore.

Prior to his role as the CEO of SGInnovate, Mr Leonard served three years as the Executive Deputy Chairman of the Infocomm Development Authority (IDA), a government statutory board under the purview of Singapore's Ministry of Communications and Information. Mr Leonard serves on the advisory boards of a range of universities and organisations in Singapore. Mr Leonard also serves as an Independent Non-Executive Director at Singapore Post Ltd (SingPost), a global leader in e-commerce logistics; and AsiaSat, a Hong Kong Stock Exchange-listed commercial operator of communication spacecraft.



Catherine L. Mann Managing Director and Global Chief Fconomist. Citi Group

Dr. Mann joined Citi as Global Chief Economist in February 2018. Her most recent position was Chief Economist at the Organization for Economic Cooperation and Development where she also worked closely with the G7 and G20. Prior to the OECD, she served in policymaking institutions (at the Federal Reserve Board, Council of Economic Advisors, and World Bank); and engaged in both research and teaching (at the Peterson Institute for International Fconomics and as the Rosenberg Professor of Global Finance at Brandeis University). At Citi, she hopes to develop synergies between financial market and real economy research, focusing in particular on

productivity, innovation, and inequality; interaction between real and financial globalization; and the relationship between financial markets, crises, and growth. Dr. Mann received her PhD in Economics from the Massachusetts Institute of Technology and her undergraduate degree is from Harvard University. Her written work includes more than 85 scholarly articles and seven books primarily on the topics of US external imbalances, trade, international capital flows and the dollar; and information technology and services trade in alobal markets.



James Manyika Senior Partner. McKinsey & Company

James Manyika is a senior partner at McKinsey & Company and chairman of the McKinsey Global Institute (MGI), the firm's business and economics research arm, James also serves as a member of McKinsey's Board of Directors.

Based in Silicon Valley for over 20 years, James has worked with the chief executives and founders of many of the world's leading technology companies on a variety of issues. At MGI, James has led research on technology and its impact, the digital economy, future of work, as well as growth, productivity, and globalization. He has published a book on Al and robotics, another on global economic trends as well as numerous articles and reports.

James was appointed by President Obama as vice chair of the Global Development Council at the White House (2012-16) and by Commerce Secretaries to the US Commerce Department's Digital Economy Board of Advisors (2016-17) and the National Innovation Advisory Board (2010-2012). He serves on the boards of the Council on Foreign Relations, John D. and Catherine T. MacArthur Foundation, Hewlett Foundation, Markle Foundation.

He also serves on academic advisory boards including Oxford Internet Institute, MIT's Initiative on the Digital Economy, a member of the standing committee for the Stanford-based 100 Year Study on Al, a fellow at DeepMind, and a fellow of the Royal Society of Arts. James was on the engineering faculty at Oxford University and a member of the Robotics Research Lab, a fellow of Balliol, Oxford, a visiting scientist at NASA Jet Propulsion Labs, and a faculty exchange fellow at MIT. A Rhodes Scholar, James received his DPhil, MSc. MA. From Oxford in Robotics, Mathematics, and Computer Science, BSc in electrical engineering from University of Zimbabwe as an Anglo-American Scholar.



Colin Mayer *Professor, University of Oxford*

Colin Mayer is the Peter Moores Professor of Management Studies at the Saïd Business School at the University of Oxford. He is a Professorial Fellow and Sub-Warden of Wadham College, Oxford and an Honorary Fellow of Oriel College, Oxford and St Anne's College, Oxford. Fellow of the British Academy and the European Corporate Governance Institute, member of the UK Competition Appeal Tribunal, the UK Government Natural Capital Committee, the International Advisory Board of the Securities and Exchange Board of India, and the Board of Trustees of the Oxford Playhouse. He was appointed Commander of the Order of the British Empire (CBE) in the 2017 New Year Honours for services to business education and the administration of justice in the

economic sphere. He was a Harkness Fellow at Harvard University, a Houblon-Norman Fellow at the Bank of England, the first Leo Goldschmidt Visiting Professor of Corporate Governance at the Solvay Business School, Université de Bruxelles, and has had visiting positions at Columbia, MIT and Stanford universities. Colin Mayer was chairman of Oxera Ltd. between 1986 and 2010 and assisted in building the company into what is now one of the largest independent economics consultancies in Europe. He is a director of the energy modelling company, Aurora Energy Research Ltd. He advises companies, governments, international agencies and regulators around the world, and he leads the British Academy enquiry into "the Future of the Corporation".



Cecile Mayer-Levi Co-Head of Private Debt, Tikehau Capital

Cécile Mayer-Lévi joined Tikehau Capital in 2013 and heads the Private Debt platform of the asset management firm. She has extensive knowledge in direct lending transactions, and has worked closely with major private equity houses, investment funds and corporates.

Cécile started her career at Merrill Lynch in 1988 in the Corporate Finance department and in M&A in Paris and New York. In 1991, she joined Elig one of France's pioneers in capital investment. In 2001, she joined Mezzanis (Omnes), the mezzanine fund of Credit Lyonnais Private Equity, as Investment Director. From September 2005 until March 2013 she launched and developed the Private Debt activity

at AXA Private Equity (ARDIAN). In addition to mezzanine investments, she broadened the scope to unitranche, forming strong partnerships with corporates and investment funds

She seats as board observers on over 10 Boards of portfolio companies.

Cecile is also chairing the Private Debt Commission of France Invest and seats as board member of the Alternative Credit Council (ACC). In these functions, Cécile is promoting the collaboration of investors on ESG topics (notably via the adoption of a standard ESG clause at France invest level).



Andrew McDowell Vice president, European Investment Bank

Andrew McDowell joined the European Investment Bank as Vice-President on 1st September, 2016. He is the first Irish member of the bank's Management Committee for 12 years. Prior to joining the European Investment Bank, Andrew McDowell was Economic Advisor to the Taoiseach, Ireland's Prime Minister, since 2011. He has 20 years of experience in economic policy and public service management. Prior to working for the Taoiseach, Andrew was Chief Economist at the Irish Business Development Agency. Forfás, and European

Deputy Editor at the Economist Intelligence Unit. He holds an MBA from the Michael Smurfit Graduate School of Business and studied at Johns Hopkins University and University College Dublin.



Jean-Pierre Mustier CEO, UniCredit

Starting his career in Société Générale, working primarily within the Corporate & Investment Banking division, Jean Pierre held numerous senior positions in various markets and financing activities. In 2015 he became a London based partner of Tikehau Capital, an investment management group, with specific focus and responsibility for Tikehau's international expansion; he also advised many financial institutions and completed large amounts of fundraising for various social enterprises and non-profit institutions, for

several of which he is a trustee. He was appointed Chief Executive Officer of UniCredit in July 2016.



Giuseppe NicolettiHead of Structural
Policy Analysis Division,
OECD

Giuseppe Nicoletti has been heading since 2004 the Structural Policy Analysis Division at the OECD Economics Department, where he is in charge of cross-country structural studies. He supervises research in several areas, including productivity, finance, labour markets and green growth, and shares responsibility for managing the Global Forum on Productivity. He has designed and implemented the first vintages of the OECD Product Market regulation indicators and has published extensively in journals (e.g. Journal of Monetary Economics, the Economic Journal, the

Review of Economics and Statistics, Journal of the European Economic Association, Journal of Economic Behaviour and Organization, Oxford Bulletin of Economics and Statistics, Economic Policy), and collective volumes focusing on the influence of policies and institutions on the determinants of growth and productivity. Giuseppe previously worked as senior economist at the OECD and at the Italian Antitrust Authority. He holds a Ph.D. in Economics from New York University.



Eli Noam
Professor of Economics
and Finance, Columbia
Business School

Eli Noam is Professor of Economics and Finance at the Columbia Business School since 1976, and is Garrett Professor of Public Policy and Business Responsibility. He is the Director of the Columbia Institute for Tele-Information, a research center focusing on management and policy issues in communications, internet, and media. Noam has published 30 books and over 300 articles. Recent books and projects include: Who Owns the World's Media (Oxford); two textbooks: Managing Media and Digital Organizations & Media and Digital Management (Palgrave, forthcoming);

and the project: A National Initiative for Next Generation Video. Noam advisory board memberships have included the Federal government's telecommunications network, the Nexus Mundi Foundation (Chairman), the Electronic Privacy Information Center, Oxford Internet Institute, Jones International University, and several committees of the National Research Council. He received the degrees of BA, MA, Ph.D (Economics) and JD from Harvard University, and honorary doctorates from the University of Munich (2006) and the University of Marseilles Aix-la-Provence (2008).



Pier Carlo PadoanFormer Finance
Minister, Italy

Pier Carlo Padoan has a degree in Economics from the University of Rome, he is also a retired professor of Economics from University La Sapienza of Rome.

He has held various academic positions in Italian and foreign universities, including at the University of Rome, College of Europe (Bruges and Warsaw), Université Libre de Bruxelles, University of Urbino, Universidad de la Plata, and University of Tokyo.

He has published widely in international academic journals and is the author and editor of several books.

From 1998 to 2001, Pier Carlo was the Economic advisor to the Italian Prime Minister Massimo D'Alema and subsequently to Prime Minister Giuliano Amato. From 2001 to 2005 he was Executive Director at the International Monetary Fund. In 2006, he became Director at Fondazione Italianieuropei, a policy think-tank focusing on economic and social issues. From 2007 to 2014 he was Deputy Secretary General and in 2009 he was Chief Economist at the OECD.

From February 2014 to May 2018, Pier Carlo was the Italian Minister of Economics and Finance. He is currently a member of the Italian Parliament.



Laura Papi
Assistant Director
European Department,
International Monetary
Fund

Laura Papi is Assistant Director in the European Department of the International Monetary Fund, heading the Emerging Economies Unit. She leads the work for the Regional Economic Outlook Report for Europe. She has about 25 years of experience, of which 21 at the IMF, focused on emerging markets covering all regions. She has worked on a broad range of countries and, most recently was IMF mission chief for South Africa and India. Previously, she worked as Associate

Director at Deutsche Bank, London, in Emerging Market Research focusing on Turkey and Emerging Europe (1997-2000).



Laura Piovesan Head of Division Innovative Industries, European investment bank

Laura Piovesan works at the European Investment Bank (EIB), the EU's long-term financing institution headquartered in Luxembourg. Since joining the Bank in 2000, her prime role has been to carry out techno-economic assessments of projects requesting EIB funding. She is currently heading the team within the EIB that is responsible for the due diligences of investments in R&D- manufacturing and services sectors, including industrial equipment, automotive and high-tech

industries. Laura is a graduate in Chemical Engineering from the University of Padova, Italy. Prior to joining the EIB she worked for eight years for an Italian engineering company, first as Research Scientist and then as Industrial Economist.



Peter Praet
Member of the
Executive Board,
European Central Bank

Peter Praet joined the European Central Bank as Member of the Executive Board in 2011. He is responsible for the Directorate General Economics. Before joining the ECB, Peter Praet was Executive Director of the National Bank of Belgium (2000-2011). Here he was responsible for International Cooperation, Financial Stability and Oversight of Financial Infrastructures and Payments Systems. Between 2002 and 2011, he was also a Member of the Management Committee of the Belgian Banking, Finance and Insurance Commission (CBFA), where he was responsible for Prudential Policy for banking and insurance. Peter Praet served as Chief of Cabinet for the Belgian Minister of Finance from 1999-2000,

as Chief Economist of Générale de Banque and Fortis Bank from 1988-1999, as Professor of Economics at the Université Libre de Bruxelles from 1980-1987, and as Economist at the International Monetary Fund from 1978-1980. He earned a Ph.D. in Economics from the Université Libre de Bruxelles in 1980. Peter Praet served on several high-level international committees, including the Basel Committee on Banking Supervision, the Committee on Payment and Settlement Systems, the Committee on the Global Financial System, and the European Banking Authority. He was First Alternate of the Board of Directors of the Bank for International Settlements from 2000-2011



Klaus Regling Managing Director, European Stability Mechanism

The Managing Director of the ESM is appointed by the Board of Governors for a renewable term of five years. Klaus Regling is also the CEO of the European Financial Stability Facility (EFSF), a position he has held since the creation of the EFSF in June 2010. Klaus Regling has worked for 40 years as an economist in senior positions in the public and the private sector in Europe, Asia, and the U.S., including a decade with the IMF in Washington and Jakarta and a decade with the German Ministry of Finance where he prepared Economic and Monetary Union in Europe. From 2001 to 2008, he was Director General for Economic and Financial Affairs of the

European Commission. During 2008-09, he spent a year at the Lee Kuan Yew School of Public Policy in Singapore where he researched financial and monetary integration in Asia. Subsequently, he opened an economic and financial consultancy in Brussels. Previously, Mr. Regling had gained experience in the private sector as Managing Director of the Moore Capital Strategy Group in London (1999-2001) and as an economist with the German Bankers' Association. Mr. Regling studied economics at the Universities of Hamburg and Regensburg.



Debora Revoltella
Director and Chief
Economist of the
Economics Department
of the European
Investment Bank

Debora Revoltella is Chief Economist and the director of the Economics Department of the European Investment Bank, and has held this position since April 2011. The department provides impact-driven economic analysis to support operations, the global positioning as well as the policy and strategy definition of the bank. Debora holds a degree in economics and a masters in economics from Bocconi University as well as a PhD in economics from the University of Ancona in Italy. After the experience as an adjunct professor in macroeconomics at Bocconi University, Debora joined the research department of Banca Commerciale Italiana,

a leading Italian Bank. In 2001, she joined UniCredit as the chief economist for Central and Eastern Europe. During these years, the department developed into a leading research centre for the region. Debora is a member of the Steering Committees of the Vienna Initiative and the CompNet, an alternate member of the Board of the Joint Vienna Institute and a member of the Boards of the SUERF and the Euro 50 Group.



Hans-Georg Schnauffer Programm Manager, Plattform Industrie 4.0

Within the secretary of the German Plattform Industrie 4.0, Hans-Georg coordinates the Transfer-Network Industrie 4.0 which aims to strengthen the Industrie 4.0 technology transfer to German SME.

Hans-Georg started his career at the Fraunhofer Institute for Factory Operation and Automation as a researcher and team lead for knowledge and innovation management, including several studies and projects concerning skill management. He joined thyssenkrupp headquarters in 2005 where he took over the responsibility for strategic knowledge management. Core initiatives were the development, roll-out and scale-up of the corporate intranet, which was one of the early digital transformation programs. With his team he build up and

coordinated several corporate communities of experts for cross-company collaboration online and offline.

Until 2017 he was the responsible corporate business developer for Industrie 4.0 within Fraunhofer headquarters. He is one of the developers of the Fraunhofer Layer Model Industrie 4.0.

Since 2014 he is also member of the board of the German Society for Knowledge Management. Hans-Georg published several books and articles about innovation, skill and knowledge management. Among them is a whitepaper of transversal competency management in 2016 interlinking enterprise skill management with vocational training.



Martin Spolc Head of the Capital Markets Union Unit, European Commission

Martin Spolc is the Head of the Capital Markets Union unit in the European Commission's Directorate General for Financial Services, leading the team in charge of sustainable finance. Prior to his current role, he was the Head of the Economic analysis unit, Deputy Head of the Banking unit and Assistant to the Director General, directly involved in developing the Banking Union and other key projects in the area of financial services aiming at restoring financial stability since the crisis. Before joining the Commission, he had worked at

risk management consultancy. He is the holder of the CFA and FRM designations and member of the CFA Institute and Global Association of Risk Professionals.



Hugo Spowers CEO, Riversimple movement LTD

Chief engineer and founder of Riversimple, Hugo Spowers is an Oxford University trained engineer and entrepreneur. His first business was in motorsport, designing and building racing cars and restoring historic racing cars. He left motorsport for environmental reasons and set up OScar Automotive in 2001 (which became Riversimple in 2007) on the basis that a step change in automotive technology is both essential and possible. The first fuel cell car to emerge was the LIFECar, developed by a consortium Hugo brought together

with Morgan and presented at the Geneva Motorshow in 2008. The small Hyrban technology demonstrator followed in 2009. The Riversimple Rasa, the prototype of which is on the road in the UK, is the first Riversimple car designed for type approval and delivers the equivalent of 1.2 litres/100km; a pilot trial of 20 vehicles is being launched later in 2018. Hugo is responsible for all technical aspects of the cars and for the architecture of the business itself.



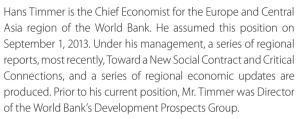
Jan Švejnar Director, Centre on Global Economic Governance, Columbia University

Jan Svejnar is the James T. Shotwell Professor of Global Political Economy and Founding Director of the Center on Global Economic Governance, at Columbia University's School of International and Public Affairs (SIPA). Professor Svejnar is also a founder and Chairman of CEREGE-El in Prague (an Americanstyle Ph.D. program in economics that educates economists for Central-East Europe and the Newly Independent States). He is a Fellow of the European Economic Association and Research Fellow of the Center for Economic Policy Research,

London, and Institute for the Study of Labor (IZA) in Bonn. Svejnar is a recipient of 2015 IZA Prize in Labor Economics. He received his BS from Cornell University's School of Industrial and Labor Relations and his MA and PhD in Economics from Princeton University. In 2008, Professor Svejnar was one of two candidates for the Presidency of the Czech Republic.



Hans Timmer Chief Economist, Europe and Central Asia Region, World Bank



Mr. Timmer is a quantitative international macroeconomist and econometrician with 30 years of management experience in leading teams of modelers, forecasters, and policy analysts. His experience ranges from long-term structural analyses of the economic impact of environmental policies, trade policies, and tax reforms, to short-term monitoring of the business cycle and analysis of monetary and fiscal policies.

When awarding him solo the Nobel Prize in Economic Sciences in 2014 for his research on understanding and regulating markets, the Royal Swedish Academy of Sciences applauded Jean Tirole as "one of the most influential economists of our times". Jean Tirole is chairman of the Toulouse School of Economics (TSE) and the Institute for Advanced Study in Toulouse (IAST, which he helped found in 2011). He is also affiliated with MIT, where he holds a visiting position, and with EHESS, and is a member of the French Académie des Sciences Morales et Politiques. He has published over two hundred articles in international reviews, as well as twelve scientific books. He was president of

Before joining the World Bank in 2000, Mr. Timmer was head of international economic analysis at the Central Planning Bureau in the Netherlands. In this role, he oversaw global scenario studies and supervised the development of two world models. He has vast experience working with the European Commission, Intergovernmental Panel on Climate Change (IPCC), and the Organization for Economic Co-operation and Development (OECD), as well as with the Indian Planning Commission and the Chinese Academy of Social Sciences. He holds a Master's degree in econometrics from Erasmus University in Rotterdam, and was a researcher at the University of Lodz in Poland and at the Netherlands Economic Institute.



Jean Tirole Chairman, Toulouse School of Economics and the Institute for Advanced Study in Toulouse

the Econometric Society in 1998 and of the European Economic Association in 2001. He holds Honorary Doctorate degrees from eleven universities, and is an honorary member of a number of learned societies, including the United States National Academy of Sciences and the American Academy of Arts and Sciences. He has received many honors, including the Yrjö Jahnsson prize of the European Economic Association in 1993, the gold medal of the CNRS in 2007, the inaugural BBVA Frontiers of Knowledge Award in economics, finance and management in 2008, and the Nemmers prize in 2014.



Reinhilde Veugelers *Professor, University* of Leuven and Bruegel

Full professor at KULeuven (BE) at the Department of Management, Strategy and Innovation and Senior Fellow at Bruegel since 2009, Reinhilde is also a CEPR Research Fellow, a member of the Royal Flemish Academy of Belgium for Sciences and of the Academia Europeana. From 2004-2008, she was on academic leave, as advisor at the European Commission (BEPA Bureau of European Policy Analysis). She currently serves on the ERC Scientific Council. She is a member of the RISE Expert Group advising the EU Commissioner for Research and Innovation. With her research concentrated in the fields of industrial organisation, international economics and strategy, innovation and science, she has authored

numerous well cited publications in leading international journals. Specific recent topics include cooperative R&D, international technology transfers through MNEs, global innovation value chains, young innovative companies, innovation for climate change, industry science links and their impact on firm's innovative productivity, evaluation of research & innovation policy, explaining scientific productivity, researchers' international mobility.



Inez
Von Weitershausen
Associate Industrial
Performance Center,
MIT

Inez is a Postdoctoral Associate at the Industrial Performance Center. She holds a PhD in International Relations from the London School of Economics, a Masters in Law and Business from Bucerius Law school & WHU Otto Beisheim School of Management, and a degree in Politics, History and Area Studies from the University of Bonn, Germany. She also attended Sciences Po Paris and Kalamazoo College, MA. Inez is interested in understanding the prerequisites for, dynamics of and impediments to cooperation and has conducted research on these issues across a wide range of

areas, including crisis management, international trade, and development. In the context of the current work at the IPC, she focuses on the realm of higher education and explores how universities, companies and the public sector cooperate in managing the transition to the 'digital economy' and the 'work of the future'



Boris Vujčić Governor, Croatian National Bank

Boris Vujčić holds a PhD in Economics from the University of Zagreb. He has also received diplomas in Economics from the Montpellier University (France) and was a pre-doctoral PhD Fulbright student at the Michigan State University. He joined the Croatian National Bank in 1997, and was Director of the Research Department for three years before becoming Deputy Governor in 2000, a position to which he was reappointed in 2006.

In July 2012, Mr Vujčić became Governor of the Croatian National Bank for a six-year term of office and was reappointed for another six-year term of office in July 2018.

Mr Vujčić has been a Deputy Chief Negotiator in Republic of Croatia's negotiations with the European Union 2005-2012. He was also a member of the Global Development Network (GDN) Board in the same period, 2005-2012. He is also a Member of the Steering Committee of the ESRB, since 2016, and a Chairman of the Steering Committee of the Vienna Initiative, since 2016. Mr Vujčić's fields of expertise are macro and monetary economics, international finance and labor economics.



Shirin Wheeler Senior Media Officer and Principal Advisor on International Media, European Investment Bank

Shirin Wheeler is the Senior Media Officer and Principal Advisor on International Media at the European Investment Bank. Shirin joined the EIB in 2014 after a career in Brussels, working mainly with BBC TV and radio.

In 2008, Shirin won the European Parliament Prize for Journalism, the first of its kind to be awarded to journalists

who have dealt with major issues at a European level. She was born in Berlin and educated in Washington DC, Brussels and Britain.



Klaus Zimmermann President of the Global Labor Organization (Glo), Unu-Merit and Maastricht University

Co-Director of POP at UNU-MERIT; Full Professor of Economics at Bonn University (em.); Honorary Professor, Maastricht University, Free University of Berlin and Renmin University of China, Beijing; Member, German Academy of Sciences Leopoldina, Regional Science Academy, and Academia Europaea, the European Academy of Sciences, and Chair of its Section for Economics, Business and Management Sciences. Research Fellow of the Centre for Economic Policy Research (CEPR) and Fellow of the European Economic Association (EEA). Editorin-Chief of the Journal of Population Economics. Editorial Board of International Journal of Manpower, Research in Labor Economics and Comparative Economic Studies, among others. Education: Study of Economics and Statistics; Diplom-Volkswirt, Doctor Degree and Habilitation, University of Mannheim. He

was the Founding Director, Institute for the Study of Labor (IZA); Past-President, German Institute for Economic Research (DIW). University affiliations: Macquarie University, University of Melbourne, Princeton University, Harvard University, Munich University, Dartmouth College, Kyoto University, University of Pennsylvania and CORE/Louvain-la-Neuve. Managing Editor "Economic Policy" and Editorial Board of Journal of Applied Econometrics, Labour Economics and European Economic Review. Distinguished John G. Diefenbaker Award 1998 of the Canada Council for the Arts; Outstanding Contribution Award 2013 of the European Investment Bank. Rockefeller Foundation Policy Fellow 2017; Eminent Research Scholar Award 2017, Australia; EBES Fellow Award 2018 of the Eurasia Business and Economics Society.





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