About the Contributors

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**Biliana Alexandrova-Kabadjova** has been working at the Banco de México since 1997 and currently she is a payment systems analyst. She is a member of the Mexican National System of Researchers since 2009 and is a Visiting Fellow at the University of Essex. Her main contribution has been to build the most advanced model (in terms of complexity and realism) of the payment card market. Further, in relation to financial market infrastructures, she has developed a framework under which one can learn about how the intraday liquidity flows. Alexandrova-Kabadjova has published several refereed journal papers and book chapters, and has co-edited the books “Simulation in Computational Finance and Economics: Tools and emerging applications” and “Analyzing the Economics of Financial Market Infrastructures.” She obtained her first degree with honors on Information Systems at the Instituto Tecnológico y de Estudios Superiores de Monterrey, CCM in 1996. She received her Ph.D. in Computational Finance from the CCFEA from the University of Essex, UK in 2007. Her main research interests are in intraday liquidity, network analysis of market infrastructures and in agent-based computational economics.

**Richar Heuver** is a statistician in the payments division of the Dutch central bank since 1996. He was involved in the development of the data warehouse of the Dutch Large Value Payment System, closely monitoring statistics during the introduction of the cash euro in 2002. Afterward, he was more actively participating in the research on Large Value Payment Systems. His research focusses on stress scenario analysis, network topology, the interbank money market and identifying behavioural aspects and signs of liquidity problems with banks. Heuver graduated in physical education in 1985 and because of market prognoses started working for the central bank as a statistician in the Economics and Research Department. Since then he moved between several departments, always heavily involved in business intelligence and analysis of financial banking data.
Serafin Martinez-Jaramillo is a senior financial researcher at the financial stability general directorate at Banco de México. His research interests are: financial stability, systemic risk, financial networks, bankruptcy prediction and machine learning. He developed an agent-based financial market to study the link between agent behavior and the stylized facts in stock markets returns. Serafin has published book chapters, encyclopedia entries and papers in high impact international journals like: IEEE Transactions on Evolutionary Computation; the Journal of Economic Dynamics and Control, the Journal of Financial Stability and the International Journal of Intelligent Systems in Accounting, Finance and Management. He has also been member of the editorial committee of international conferences and reviewer of international journals like: IEEE Transactions on Evolutionary Computation, the Journal of Financial Stability, the Journal of Economic Dynamics and Control, Applied Intelligence. Serafin holds a PhD in Computational Finance from the University of Essex, where he is currently a visiting fellow. He has belonged to the Mexican National Researchers System since 2009.

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Liliana Garcia-Ochoa is a planning analyst at the payment systems studies of Banco de México. She currently works on large value payment systems, retail payments and network analysis at Banco de México. Nowadays, she is working on applying evolutionary computation techniques to analize behaviour clustering of financial market infrastructures. Liliana holds an MSc in Computer Science from the Universidad Autónoma Metropolitana (UAM) and a MPP from the Centro de Investigación y Docencia Económicas (CIDE).

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Jennifer Hancock is a Senior Manager in the Payments Policy Department at the Reserve Bank of Australia, with the responsibility for leading its oversight of payment systems, intermediaries and the markets. She joined the RBA in 2002, with the majority of her career spent working in the Payments Policy Department. She has experience in regulation and oversight of retail and wholesale payment systems, as well as central counterparties and securities settlement systems. Her current responsibilities include contributing to international policy making and inter-agency efforts to ensure that Australia’s regulatory framework for over-the-counter derivatives is consistent with best practice. Jennifer has previously co-authored two simulation studies of real-time gross settlement systems. She holds a Master’s degree in Economics from the University of New South Wales.

Ronald Heijmans is a researcher and policy maker in the payments division at the De Nederlandsche Bank since 2006. The focus of his policy work is on legal aspects and statistics of the euro-area ‘Large Value Payment System,’ TARGET2. His research interest is in stress scenario analysis, network topology, the interbank money market, identifying behavioural aspects, signs of liquidity problems with banks and quantitative oversight. Heijmans obtained his PhD in Business and Economy from the University of Groningen in 2012 and graduated from the University of Leiden in 2001 with an MSc in astrophysics. From 2001 to 2006 he was a researcher for the Netherlands Organisation for Applied Scientific Research. His main research areas were stealth techniques for military vehicles and atmospheric modeling.

Alexandros Kaliontzoglou obtained his Diploma in Electrical and Computer Engineering in 2000 and his Ph.D. in Information Systems Security in 2006 from the National Technical University of Athens, Greece. He has extensive experience in the consultant and banking industries and has participated in several E.C. research projects in the fields of information systems security, e-business and e-government. He has authored several publications in the above areas. Since 2009, he has been working as an expert in information systems security for the Bank of Greece in the field of Payment Systems Oversight. His responsibilities focus on payment systems operational reliability assessment and payment instruments security and fraud monitoring. He is an information systems security expert for the SecurePay Forum ESCB initiative. His current research interests focus in payments pattern analysis.

Kasperi Korpinnen is an Economist and project manager at the Bank of Finland’s payments and securities settlement system simulator team under the Financial Stability and Statistics department. Formerly, he has worked for the global Accounting and Control Risk management functions of the Corporate Treasury of Nokia Corporation and the Monetary and Financial Statistics department of the Bank of Finland. He holds a Master’s degree in economics and has pursued additional studies in computer sciences, mathematics, statistics and sociology. He has research experience with topics like interest rate formation of corporate bank loans and bank competition, liquidity need effects of Financial Market Infrastructures (FMI) mergers, liquidity risks and counterparty exposures of FMI participants and economic warning signal development and computational parallelization. Kasperi has strong experience in the development of large and complex applications: Risk monitoring and reporting systems, statistical production systems with signal monitoring and error detection and simulation based modelling systems.

Susan Kriete-Dodds graduated in Economics at the University of Paderborn. After working as an analyst at the Federal Statistical Office in Wiesbaden, she received her PhD at the University of Basel.
Carlos León is responsible for investigating and developing methodologies for comprehensively overseeing local market’s financial institutions and infrastructures as the Research and Development Manager at the Central Bank of Colombia’s Financial Infrastructure Oversight Department. He is currently focusing on the assessment of systemic importance and intraday liquidity risk, and on identifying the connective and hierarchical structure of financial networks. Present interests include network theory, fuzzy logic, fractal theory, portfolio optimization, risk management, and simulation methods. Prior working experience includes positions as a Researcher for the Central Bank of Colombia’s Foreign Reserves Department and for the Operations and Market Development Department, and as Head of the Risk Management Group at Colombia’s Ministry of Finance-Public Credit Directorate. He holds a M.Sc. in Banking and Finance from HEC-Université de Lausanne (Switzerland), a M.A. in International Economics and a B.A. in Finance and International Relations from Externado de Colombia University (Colombia). He is PhD from Tilburg University (The Netherlands).

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Mark Manning is Deputy Head of Payments Policy Department at the Reserve Bank of Australia, with responsibility for the Reserve Bank’s oversight of payments, clearing and settlement systems and associated policy and research. He joined the Reserve Bank in 2008 on secondment from the Bank of England, returning in a permanent role at the start of 2012. Previously, he held a number of positions at the Bank of England in the Financial Stability Directorate, including in financial market infrastructure policy and research, prudential policy and market surveillance. Before entering central banking in 2002, Mark spent several years as a fund manager in the City of London, including spells at Goldman Sachs Asset Management and Kleinwort Benson Investment Management. Mark has published a number of articles and research papers on payments and financial market infrastructure issues, and is co-editor of a book entitled The Economics of Large-value Payments and Settlement: Theory and Policy Issues for Central Banks. He holds Masters Degrees in Economics and Finance from University College London and the London Business School, respectively.

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**Marco Massarenti**’s career in central banking started in 2010, working on payment statistics in the Directorate General Statistics. He then joined the Directorate General Payments and Market Infrastructures, where he conducted research on money markets using TARGET2 payments data. He finally joined the Directorate General Market Operations in 2013 working as a Market Operations Expert on operational activities and as project manager. His career also comprises two short work experiences at the Deutsche Bundesbank.

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**Alexander Mueller** studied economics and political science in Freiburg (Germany) and Lille (France), graduating with a diploma in economics and a master’s degree in political science. Since 2012, he has been working as an expert for payment system analysis in the Deutsche Bundesbank’s division responsible for Strategy, Policy and Oversight in Payments and Securities Settlement. His responsibilities and current research activities are focused on simulation studies and the analysis of data derived from payment systems.
Masashi Nakajima is PhD in Economics and Professor of Faculty of Economics and Business Administration at Reitaku University, Japan. He had a long career at a central bank, i.e., the Bank of Japan (BOJ). During his career at the BOJ (1981-2006), he gained a wide range of experience as a central banker, holding senior positions in various departments. He also had experience working for the Bank for International Settlements (BIS) in 2003-2005. He distinguishes himself as a coauthor of “All about Payment Systems” (2013, 3rd edition, in Japanese) and “All about Securities Settlement Systems” (2008, 2nd edition, in Japanese), and an author of “Payment System Technologies and Functions” (2011, in English). These books cover a wide-range of payment and settlement system issues and are regarded as must-read books on the subject of payment and settlement systems. He is also the author of “All about SWIFT” (2009, in Japanese), which is the first book in the world in any language to give a comprehensive presentation of SWIFT that is the essential global provider of secure financial messaging services.

Jhonatan Pérez is responsible for monitoring the activity of local securities markets (corporate and sovereign fixed income, and equity) as the Specialized Professional for local markets at the Central Bank of Colombia’s Financial Infrastructure Oversight Department. His work places an emphasis on supporting their legal framework from a central bank’s macro-prudential perspective and on assessing systemic risk. Also, he undertakes research projects about issues related to the securities market and their architecture. Present interests include Central Securities Depository’s (CSD) business lines (clearing and settlement, custodian services, securities lending), risk management, network theory and simulation methods. Prior working experience includes positions as Futures Analyst at the Colombian Stock Exchange, as well as trainee at Central Bank of Colombia’s Operations and Market Development Department. He holds a B.Sc. in Industrial Engineering from Universidad Industrial de Santander (Colombia) and specialized courses in network science (Michigan University) and financial markets structure (Yale University), among others.

Anna Pliquett joined the Deutsche Bundesbank twelve years ago as a bank examiner in the banking supervision. There she had the opportunity to follow the development of the Basel II framework and by conducting on-site inspections its implementation in German banks in practice as well. After six years in the banking supervision she moved to the central office of the Bundesbank and became actively involved in several work streams concerning exchanges, financial market infrastructures and financial stability. Her current division at the Bundesbank is responsible for payment and securities settlement systems. She is acting Head of Section of the oversight function of the Bundesbank concerning financial market infrastructures. Her main responsibilities include the monitoring and assessment of CCPs and policy work regarding CCPs, OTC derivatives and trade repositories. Prior her joining the German central bank she spent two years in the US and held the position of a compliance officer with a middle-sized broker-dealer. Her firm motivated her to join the CFA Institute, which lead to her receiving the CFA charter in 2006, already as a central banker in Germany. Before her time in the US, Anna earned an MBA in Economics from the former university of economic sciences in Budapest, Hungary, and a finance diploma from the University of Leipzig, Germany.
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Antoaneta Serguieva is Chair of the Computational Finance and Economics Technical Committee at the IEEE Computational Intelligence Society, and member of the Financial Computing and Analytics Group at University College London (UCL). She is Program Director for the UCL MSc Financial Computing, and Partnership Director at UCL for the partnership between the University of California (UC)-Berkeley’s Haas School of Business and UCL Computer Science. Antoaneta has been a Visiting Fellow at the US Treasury Office of Financial Research, the Bank of England, and the Bank of Mexico. She has also been on sabbatical at UC-Berkeley, a Fellow at the New England Complex Systems Institute, and has recently joined the Centre for Computational Finance and Economic Agents at the University of Essex as a Visiting Fellow. Antoaneta holds an MEng in systems engineering, MBA in finance, PhD in computer science, and currently works on her PhD in applied mathematics focused on systemic risk, within the Financial Mathematics Research Group at King’s College London. She has also supervised PhD students and four of them have already successfully completed their studies.

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