CONVENORS

**Associate Professor Dora Neo**
National University of Singapore, Singapore

Dora Neo is Director of the Centre for Banking & Finance Law at the National University of Singapore Faculty of Law, where she was previously Vice-Dean (Research & Graduate Studies) and Director of its Continuing Legal Education Programme. Her publications include Neo, Sauve & Streho, “Services Trade in ASEAN” (Cambridge University Press, 2019), Ellinger & Neo, “The Law and Practice of Documentary Letters of Credit” (Hart Publishing, 2010), Neo, Tjio & Lan (eds), “Financial Services Law & Regulation” (Academy Publishing, 2019) and Booysen & Neo (eds), “Can Banks Still Keep a Secret? Bank Secrecy in Financial Centres Around the World” (Cambridge University Press, 2017). Her works in progress include edited volumes on secured transactions law in Asia, and on trade finance and innovation. She is a member of the Accreditation Committee of the Singapore Institute of Legal Education, and has taught at institutions such as the University of Aix Marseille III in France, the Center for Transnational Legal Studies in London and the East China University of Political Science and Law in Shanghai. She is a graduate of Oxford University (first class honours) and Harvard Law School, and was called to the Bar in England (Gray’s Inn) and in Singapore.

**Associate Professor Sandra Booysen**
National University of Singapore, Singapore

Dr Sandra Booysen is an Associate Professor at the National University of Singapore and Deputy-Director of the Centre for Banking & Finance Law in the Faculty of Law. She serves on the editorial board of two academic journals: the Singapore Journal of Legal Studies and International Banking and Securities Law. Sandra’s research interests straddle private law, particularly contract, and banking law. Her most recent publication, in the Law Quarterly Review (July 2019), examines the role of the courts in protecting consumers in the bank-customer contract. Sandra has co-edited a volume entitled “Can Banks Still Keep a Secret? Bank Secrecy in Financial Centres Around the World”, published by Cambridge University Press and is currently working on a project that investigates the protection of retail investors from the mis-selling of financial products. Prior to joining academia, Sandra practiced law in London and Johannesburg, with a focus on commercial litigation. She is admitted as a solicitor in England and Wales, and as an attorney and notary in South Africa.

KEYNOTE SPEAKER

**Sir Geoffrey Vos**
Chancellor of the High Court of England and Wales, UK

Sir Geoffrey was appointed Chancellor of the High Court of England and Wales on 24 October 2016. He holds responsibility for the conduct of business in the Business and Property Courts and presides in the Court of Appeal. Prior to that, he was a Lord Justice of Appeal from 2013 and was President of the European Network of Councils for the Judiciary from January 2015 to June 2016. He was appointed as a High Court Judge in October 2009. He sat in the Courts of Appeal of Jersey and Guernsey between 2005 and 2009, and in the Court of Appeal of the Cayman Islands between 2008 and 2009, having begun his judicial career as a deputy High Court Judge in 1999. He was the Chairman of the Chancery Bar Association from 1999 to 2001 and Chairman of the Bar Council in 2007, having taken silk (Queen’s Counsel) in 1993 after a career practising at the Chancery-Commercial bar, both domestically and internationally. He was Chairman of the Social Mobility Foundation from 2008-2011. He was elected as an Honorary Fellow of Gonville & Caius College, Cambridge in November 2015. He is editor-in-chief of the White Book. He is a member of the UK Government’s LawTech Delivery Panel, and has been elected as Master of the Walks of Lincoln’s Inn for 2019.
Dr Orkun Akseli is an Associate Professor of Commercial Law at Durham University Law School. He has published extensively on the modernisation and harmonisation of secured transactions law. His research has focused on the laws relating to secured credit, and the social and economic impact of these laws with reference to the financing of SMEs. An especially distinctive aspect of his research has been its exploration of the international context to these phenomena, especially in respect of the work of the World Bank and the UN. Some of his publications include “Secured Transactions in Global Law-making” (under contract with Hart, co-authored with S.V. Bazinas); “The Future of Commercial Law: Ways forward for Change and Reform” (Hart 2019 forthcoming, with J. Linarelli); “International and Comparative Secured Transactions Law” (Hart 2017, with S.V. Bazinas); “Secured Transactions Law Reform: Principles, Policies and Practice” (Hart 2016, with L. Gullifer); “Availability of Credit and Secured Transactions in a Time of Crisis” (CUP 2013); “International Secured Transactions Law: Facilitation of Credit and International Conventions and Instruments” (Routledge 2011). He is a member of the ESRC, AHRC, UKRI, British Council Newton Fund, NWO, FWO, Deutsche Forschungsgemeinschaft peer review colleges. He studied law in Turkey, USA and the UK. He is an Associate Member of the International Academy of Comparative Law, a member and President-Elect of the International Academy of Commercial and Consumer Law, and a member of the Chartered Institute of Arbitrators. He has a selective arbitration practice and is a member of the Turkish Bar.

Professor Emilios Avgouleas holds the International Banking Law and Finance Chair at the University of Edinburgh and is the founding director of the Edinburgh LLM in International Banking Law and Finance and a senior research fellow at Edinburgh University’s blockchain lab. He is a Member of the Stakeholder Group of the European Banking Authority (EBA) elected in the ‘top-ranking’ academics section. He is also an independent member of the Euro-working group select panel for the Hellenic Financial Stability Fund, the major shareholder of the Greek banking sector. Emilios is currently a visiting Research Professor at the Faculty of Law, University of Hong Kong (HKU) and a Senior Fellow and Visiting Professor at the department of European Political Economy, LUISS, Rome.

Mr Jonas Bergstrom is a Senior Financial Stability Expert at the Single Resolution Board, the central resolution authority within the EU Banking Union. He is working on a broad range of financial stability issues, with a special focus on network contagion models. He holds an MSc in Mathematics from Lund University, an MBA from Vlerick Business School and has 15 years’ experience as a data and analytics practitioner in the Financial Services Industry. He has led or participated in several EU working groups to optimise the reporting and analytics of data for resolution purposes.
Dr Ann Sofie Cloots
University of Cambridge, UK

Dr Ann Sofie Cloots is a Fixed-Term Lecturer in Corporate Law at the University of Cambridge. She completed her PhD at the University of Cambridge. She has professional experience as an associate at law firms Cleary Gottlieb Steen & Hamilton LLP as well as Skadden, Arps, Slate, Meagher & Flom LLP in Brussels. Previously, she had obtained a master in law from KULeuven (Belgium) and an LLM from Colombia Law School. She was an exchange student at NYU and Harvard, and visited Wharton’s Legal Studies & Business Ethics department. Her research covers company law and the legal theory of the company, law & economics, game theory, behavioural studies and risk management, as well as digital assets, blockchain and smart contracts. She has won various prestigious awards, her most recent achievement being the winner of the Cambridge-Mckinsey Risk Prize in 2018.

Dr Marco Dell’Erba
University of Zurich, Switzerland

Dr Marco Dell’Erba is an Assistant Professor of Corporate & Financial Law at the University of Zurich. He was a Postdoctoral Research Fellow at the Centre for Law & Business. He was also a Research Fellow at the Laboratoire d'Excellence Regulation Financière (ENA, CNAM, Paris I, ESCP). Marco holds a PhD in Private Law (Droit Privé/Droit des affaires) from the University of Paris I Pantheon Sorbonne and a PhD in Commercial and Corporate Law from the University of Rome Tor Vergata. During his time as PhD researcher, he has been Research Assistant at the London School of Economics, Department of Law. He is an Italian qualified lawyer and practiced law at Clifford Chance LLP, Rome. Marco graduated from the University of Rome La Sapienza and is a fellow of the College of Excellence Lamaro-Pozzani in Rome. Marco’s main interests lie in the field of corporate law, securities law, banking and financial regulation.

Professor Dong Yang
Renmin University of China, China

Mr Dong Yang is a professor and the deputy director of the Development Planning Branch of Renmin University of China Law School. He holds a PhD degree from Hitotsubashi University. Yang is the Director of FinTech and Internet Security Research Center (RUC) as well as a Vice Chairman of the Professional Committee on the FinTech of PBoC Payment & Clearing Association of China. He is specialised in Fintech related research areas, especially in Blockchain and Crypto-currency. Prof Yang is the director of FinTech and Internet Security Research Center; he is the vice-director of Fintech Committee, Payment and Clearing Association, the People’s Bank of China, and also the director of Big Data, Blockchain and Regtech Laboratory. He was chosen to be the First batch of Youth Changjiang Scholars Programme of China and nominated for the Award of Ten Outstanding Young Jurists in China. He published the first book focused on blockchain in China and more than ten books related to Fintech; Proposer of Coken Economic Theory. He won first prize for the National Teaching Achievement in Higher Education in 2018, third prize for the 7th Outstanding Scientific Research Achievements award in Colleges and Universities (Humanities and Social Sciences), first prize for the 14th Beijing Philosophy and Social Sciences Outstanding Achievement Award, Beijing Higher Education Teaching Achievement Special Award in 2017, second prize for the 7th QianDuansheng Legal Research Achievement Award and third prize for the 4th China Law Society Outstanding Achievement Award.
Professor Benjamin Geva
Osgoode Hall Law School, Canada

Professor Benjamin Geva graduated in Jerusalem and Harvard and is a leading international legal expert on payment instruments and methods, bank deposits and collections, credit transactions and facilities, electronic banking, digital currencies and payment system regulation. He is Professor of Law at Osgoode Hall Law School of York University, Toronto, Canada (on the faculty since 1977); Counsel, payments and cards group in Torys LLP, Toronto (since 2012). He has written and published extensively in his areas of expertise, including books on the law of funds transfers and payment transactions, and held visiting positions and fellowships in the US, Australia, Singapore, Israel, UK, Germany and France. In 2011 he published his book on the legal history of the Payment Order. On behalf of the IMF, Benjamin has advised on and drafted key financial sector legislation, mostly in relation to payment and settlement systems, for the authorities of several developing and post–conflict countries. He has also been involved in various law reform projects.

Dr Tycho de Graaf
Leiden University, Netherlands

Dr De Graaf is an Associate Professor of Civil Law at Leiden University’s Institute of Private Law. His research focuses on how civil law can overcome legal problems arising from developing, selling and using technology. In the last two years, he has published articles in CLSR, ERPL and EuCML as well as many Dutch journals on, among other things, qualifying, attaching and executing bitcoins; trust when using smart contracts on the blockchain; and nullifying contracts concluded under the influence of personalised pricing (ILS-project). Currently, he is involved in intra- and interdisciplinary research on (i) the insolvency of cryptocustodians (with Prof Matthias Haentjens and Mr Ilya Kokorin); (ii) the limited liability of robots compared to that of slaves (with researchers from the legal history department) and (iii) artificial intelligence in the boardroom, eHealth and policy making (in the SAILS-project with researchers from the company and eLaw departments as well as information scientists, public administration experts and doctors from Leiden’s academic hospital). De Graaf is also a deputy judge at the district court in The Hague and an arbitrator at the SGOA (a foundation for the resolution of ICT disputes), and has worked for twenty years in private practice as a lawyer at the top tier law firm NautaDutilh N.V.

Professor Dr Matthias Haentjens
Leiden University, Netherlands

Prior to joining Leiden Law School on 1 August 2012 as a full professor of law, Prof Dr Matthias Haentjens was an attorney with De Brauw Blackstone Westbroek. In this capacity, he handled cases both as a transaction lawyer and as a (Supreme Court) litigator. Professor Haentjens studied Greek and Latin at the University of Amsterdam, became a teacher of classics, but subsequently obtained a Master degree in Law (cum laude), also at the University of Amsterdam. He obtained his PhD at the University of Amsterdam in 2007 and was a visiting scholar at Université de Paris II (Panthéon-Assas), Harvard Law School and New York University School of Law. Since 2016, he has been appointed as deputy judge in the Court of Amsterdam. Professor Haentjens is primarily interested in the way in which systems of law deal with international financial developments and its innovations. His research focuses on the interactions between European law and national private law, as well as between private law and regulatory law. He assisted in the proceedings of the Unidroit Convention on Substantive Rules Regarding Intermediated Securities in Rome. He was also a member of the Expert Group on Securities and Claims at the European Commission and has published nationally and internationally on various matters of (international) private law. At Leiden, Professor Haentjens is responsible for the Financial Law master’s programme, which includes courses such as International Financial Transactions, Dutch and European Financial Law, and Anglo-American Financial Law. Also, he is the Programme Director of the Advanced Master LLM Law & Finance.
Professor Gerard Hertig
ETH Zurich, Switzerland

Professor Gerard Hertig is currently working on the Future Resilient System project at the Singapore-ETH Centre. Previously, he served as Professor of Law at ETH Zurich (1995-2018) and Professor of Administrative Law at the University of Geneva Law School, where he was Director of its Centre d’Etudes Juridiques Européennes (1987-1995). Gerard’s research interests are in the Law & Finance and European integration areas. Publications include articles and books on corporate and securities/banking law topics, among others “The Anatomy of Corporate Law” with Reinier Kraakman (Harvard) et al. (3d ed., OUP 2017 – with translations in Chinese and Portuguese). His Working Papers are available at ssrn.com (author id=46440), whereas his ongoing research is devoted to “Contracting for Resilient Infrastructure”, “The Infrastructure Resilience Role of Corporate Governance”, “Giving Pension Fund Beneficiaries a Voice”, “CAC 40 Charters 1966-2016” and “Making Courts Deliberate Publicly: A Comparative and Historical Analysis”. Gerard Hertig has been a visiting professor at leading law schools in Asia (NUS and Tokyo University), Europe (Brussels, College of Europe, Liège, Louvain), and the U.S. (Columbia and NYU). He practiced law as a member of the Geneva bar from 1975 through 1983.

Dr Christian Hofmann
National University of Singapore, Singapore

Dr Christian Hofmann is an Assistant Professor at the National University of Singapore. Prior to joining NUS law, Christian held several positions in law faculties and in legal practice. Among others, he was a senior legal counsel for the German Central Bank (‘Bundesbank’) and a law professor at the Private University in the Principality of Liechtenstein. He held chairs at the University of Cologne and Goethe-University Frankfurt on a visiting basis (‘Lehrstuhlvertreter’), was a visiting scholar and fellow of the Humboldt Foundation at UC Berkeley and a Global Research Fellow at NYU School of Law. Christian specializes in the law and regulation of financial institutions and markets, sovereign debt restructuring and comparative corporate law. His doctorate degree in law (‘Dr iur.’) is based on a monograph on the law of cashless payment instruments and his professorial qualification (‘Habilitation’) from Humboldt University Berlin on a comparative monograph on the protection of minority shareholders. Both were published as books by leading German publishing houses. His work is published or forthcoming in journals including the Oxford Journal of Legal Studies, Law Quarterly Review, European Business Organization Law Review, Journal of Financial Regulation, Banking and Finance Law Review, Journal of Business Law and Berkeley Business Law Journal.

Dr Andreas Kokkinis
University of Warwick, UK

Dr Kokkinis joined Warwick Law School in 2013. Before that he taught at UCL, the University of Kent and Buckingham University. He holds a PhD from University College London (2014), an LLM from the London School of Economics (2009) and an LLB from the National University of Athens (2008). He qualified as an advocate in Greece in 2011. He has published widely in the areas of bank corporate governance and financial regulation and engages regularly with policy makers and the media. Dr Kokkinis is the course director of the LLM in International Corporate Governance and Financial Regulation and module convenor of its core module. He also jointly convenes the Law of Business Organisations module (UG) and convenes the International Corporate Finance module (PG). He is a member of the GLOBE Centre Steering Committee and editor of the GLOBE Centre Briefing Papers Series. Dr Kokkinis’ research interests include corporate governance, bank corporate governance, and financial regulation. His monograph Corporate Law and Financial Instability (Routledge, 2017) critiques the corporate law framework for UK banks from a prudential regulatory perspective. More recently, he has published articles on the bonus cap on bank managers' variable remuneration, and on the impact of Brexit on UK financial regulation. Dr Kokkinis’ Banking Law textbook with Palgrave Macmillan, an advanced text co-authored with Dr Andrea Miglionico, is expected to be published in June 2020.
Mr Ilya Kokorin  
Leiden University, Netherlands

Mr Kokorin is a PhD candidate at the Department of Financial Law of Leiden Law School. His research focuses on the role and place of intra-group financial arrangements in rescue and restructuring of distressed multinational enterprise groups. He also explores how new technologies (AI, blockchain, IoT) affect and transform financial practices, as well as the rules of financial, corporate and insolvency law. He has written on the treatment of crypto-assets (valuation, sale, asset tracing) in insolvency cases. Prior to joining Leiden University, Mr Kokorin studied in Russia, Hungary and the Netherlands (cum laude). He also worked as an associate with Mannheimer Swartling, Borenius and other law firms in Russia, where he advised bankruptcy trustees and assisted corporate debtors and creditors in restructuring and insolvency proceedings. Mr Kokorin is a member of INSOL Europe’s Young Academics’ Network in Insolvency Law (YANIL), INSOL Europe’s Insolvency Tech & Digital Assets Wing and a board member of INSOL International’s Early Researcher Academics (ERA) group. He also acts as a coach of Leiden University teams in Ian Fletcher International Insolvency Law Moot (in 2018-2019 winner of the “Best Memorandum” and “Best Oralist” in preliminary rounds).

Professor John Linarelli  
Durham University, UK

Professor John Linarelli is Professor of Commercial Law at Durham University Law School in the UK. He is currently Visiting Professor of Law at Touro College Jacob D. Fuchsberg Law Center in New York, USA. He has been Distinguished Visiting Professor of Global Legal Studies at Jilin University in Changchun China. He was a Visiting Professor at Georgetown University Law Center and Northeastern University School of Law. He has taught law and economics at the University of California Irvine and philosophy at the University of California Riverside. His book, “The Misery of International Law: Confrontations with Injustice in the Global Economy” (OUP 2018), co-authored with Margot Salomon and Muthu Sornarajah, won the European Society of International Law Book Prize in 2019. Professor Linarelli has written extensively on debt and inequality, including his recent article, “Debt in Just Societies: A General Framework for Regulating Credit,” published in Regulation and Governance. He is an elected member of the American Law Institute. Professor Linarelli has an MA and PhD in Philosophy from the University of California Riverside, where he held a Dean’s Fellowship. He has a PhD in Law from King’s College University of London. He earned an LLM in International and Comparative Law with distinction from Georgetown University, graduating first in class, receiving the Thomas Bradbury Chetwood SJ Prize. His JD is from the American University Washington College of Law. Professor Linarelli was a lawyer in Washington DC and is a member of the District of Columbia Bar.

Dr Lin Lin  
National University of Singapore, Singapore

Dr. Lin Lin is an Assistant Professor at NUS Law. She specializes in corporate law, corporate finance and Chinese law. Her articles have been published or accepted in leading journals in her field, such as Stanford Journal of Law, Business & Finance, Berkeley Business Law Journal, Journal of Corporate Law Studies, and European Business Organization Law Review. Her writings have been selected for presentation by the Stanford International Junior Faculty Forum and the Chicago-Tsinghua Junior Faculty Forum. Her monograph titled "The Law of Venture Capital Financing in China " will be published by the Cambridge University Press. She was a Visiting Scholar at Stanford Law School (2012-2013), a Senior Visiting Fellow at the Harris Manchester College at University of Oxford (2019) and Honorary Senior Fellow at Melbourne Law School (2020). She has been a Visiting Professor in top law schools in mainland China (ECUPL and SWUPL) and Taiwan. She has provided legal training on corporate law and FinTech for officials and practitioners from China, India and Singapore. Lin has delivered public lectures at numerous law schools including Oxford, Stanford, Tsinghua and Peking University. She currently sits on the editorial board of the Asian Journal of Comparative Law and Journal of Malaysian and Comparative Law. She is an arbitrator of the Hainan Court of International Arbitration.
Dr Giuseppe Loiacono
EU Single Resolution Board, Belgium

Dr Giuseppe Loiacono is an Economist at the Single Resolution Board (EU institution based in Bruxelles) and Adjunct Professor at SciencesPo Paris University and University of Evry, both in France. He has gathered experiences across different European institutions and central banks and conducted research on a large variety of topics. In particular, his areas of expertise relate to banks’ resolution, financial markets infrastructures, shadow banking, and broader financial stability. Giuseppe has previously worked for the European Central Bank and the Central Bank of Malta. Giuseppe holds a M.Sc. in Corporate Finance and Accounting, and a Ph.D. in Banking and Finance.

Dr Andrea Miglionico
University of Reading, UK

Dr Andrea is a Lecturer in Banking and Finance Law at Reading University. He obtained his PhD in law at Queen Mary, University of London and his LLM Masters of Laws in Banking Law and Financial Regulation at the London School of Economics and Political Science. Andrea primarily carries out research in the areas of Banking and Finance Law, Regulation of Financial Markets, Corporate and Banking Insolvency Law and Law and Economics. Much of his research work also focuses on banking insolvency and the bank restructuring regime. Having published several journal articles and being involved in the analysis of several cases of banks in distress, Andrea’s research assesses the restructuring mechanism for failing banks, mergers and acquisitions of banks and bank customer relationships.

Dr Hossein Nabilou
University of Luxembourg, Luxembourg

Dr Hossein Nabilou is a postdoctoral researcher in Banking and Financial Law at the Faculty of Law, Economics and Finance of the University of Luxembourg, a research associate at the University College London Center for Blockchain Technologies (UCL CBT) and the Center for Law & Economics (ACLE) of the University of Amsterdam. Prior to joining the University of Luxembourg, he has held postdoctoral and visiting researcher positions at the Ludwig-Maximilians-University (LMU) Munich, Columbia University in the City of New York, and EUROPAINSTITUT in Basel, where he has worked on banking structural reforms, money view of banking and regulation of hedge funds, respectively. He holds a PhD (magna cum laude) from the European Doctorate in Law and Economics from the Rotterdam Institute of Law & Economics, an LL.M. in business law from the University of Pennsylvania Law School, an LL.M. in Public Law, and an LL.B. both from the Shahid Beheshti University School of Law (formerly the National University of Iran).

Mr Thomas Nägele
NÄGELE Attorneys at Law LLC, Liechtenstein

Mr Thomas Nägele is the Managing Partner at NÄGELE Attorneys at Law LLC. Thomas Nägele advises international finance, technology and industrial enterprises, operating in the fields of Blockchain/DLT, telecommunications and internet, as well as public institutions. As a Liechtenstein Attorney and being an software developer, he focusses on Internet/IT law, as well as civil and corporate law. Besides being Attorney and legal Advisor, he teaches at the University of Liechtenstein and gives lectures and presentations on the newest legal developments. He was a member of the Blockchain Act workgroup (Trusted Technology Law).
Professor Ruth Plato-Shinar
Netanya Academy College, Israel

Professor Ruth Plato-Shinar is a Full Professor of Banking Law and Financial Regulation at the Netanya Academic College, Israel, where she also serves as the Director of the Center for Banking Law and Financial Regulation. She is the author of the books The Banks’ Fiduciary Duty, and Banking Regulation in Israel: Prudential Regulation versus Consumer Protection. Prof. Plato-Shinar serves on the Academic Boards of AIIFL at Hong-Kong University, and CCLS at Queen Mary University, London. She is a member of the Advisory Committee of the Israeli Ministry of Finance; the Advisory Committee of the Governor of the Bank of Israel; the License Committee of the Israeli Supervisor of Banks; the Advisory Board of the Israeli Commissioner of Capital Markets, Insurance and savings; and a former Board Member of the Government Fund for Class Actions.

Mr Edoardo Rulli
EU Single Resolution Board, Belgium

Mr Edoardo Rulli works for the Policy Unit of the Single Resolution Board, the central resolution authority within the EU Banking Union. In 2018, Edoardo was a fellow at the Financial Stability Institute and contributed to policy implementation work on bank insolvency regimes. He holds a PhD in financial markets law and has previously worked in the field of banking law and insolvency law in academia (University of Rome “Tor Vergata”). Edoardo is an Italian-qualified lawyer and has practised in law firms. He authored several publications on commercial, banking and financial markets laws and regulation.

Dr Alexandros Seretakis
Trinity College Dublin, Ireland

Dr Alexandros Seretakis is an Assistant Professor of Law at Trinity College Dublin. His teaching and research interests include financial regulation, alternative investment fund regulation, fintech and its regulation and corporate governance. Prior to joining Trinity College, Alexandros completed his PhD at the University of Luxembourg where he also taught courses in Alternative Investment Funds and EU Company Law. Furthermore, he acted as a consultant and was involved in the setting up of a fintech start-up. Alexandros holds a law degree from the Aristotle University of Thessaloniki, an LLM in Banking and Finance from the University College of London, an LLM in Corporation Law from the New York University and was a research fellow at the NYU Pollack Center for Law and Business. He is admitted to practice law in Greece and the State of New York. He has practiced law in Greece and has also worked for the Permanent Mission of Greece to the UN office in Geneva. He has also acted as a consultant for a US investment holding company and has been appointed an expert in financial law at the European Court of Auditors in Luxembourg. He has also been a guest lecturer at the LLM programme of the University of Luxembourg.

PANEL CHAIR

Mr Rajesh Sreenivasan
Rajah & Tann Singapore LLP, Singapore

Rajesh Sreenivasan heads the Technology, Media & Telecommunications Practice at Rajah & Tann and has been advising clients on legal, regulatory and policy matters relating to technology, cybersecurity, data protection, telecommunications, electronic commerce, cloud computing, digital forensics and digital media for over twenty years.
ABSTRACTS

The Tragedy of Retail: What Stops Consumer Financial Regulation From Doing Good
Professor John Linarelli

This paper explores the problems governments face in regulating consumer finance. The problems fall into two categories: normative and cognitive. The normative problems have to do with the way that some governments, particularly those adhering to an American model of household finance, have financed social mobility and intergenerational welfare through debt. Credit has a substantial social aspect to it in the United States, where the federal government has in some way engaged in subsidizing about 1/3 of consumer credit, particularly in the residential mortgage market, feeding into a substantial capital markets dimension through securitization. Access to credit in such a system becomes a primary social good in need of regulation to ensure compliance with equality principles appropriate to the society in question. Governments have poor records in so regulating and in some cases enact law or support social structures going in the opposite direction, substantially impairing the life chances of persons and families in historically disadvantaged groups, compounding status and material inequality. No one has as yet developed appropriate policy tools to evaluate the effects of financial regulation on equality. Cost benefit analysis is inadequate to the task. The cognitive problems have to do with the dilemma of trading off between paternalism and autonomy in consumer financial regulation. Disclosure approaches tend to fail because they assume too much of people. Debtors do not read or understand terms and conditions. Paternalism can fail because capital can freely exit a market and engage in regulatory arbitrage in seeking out the best returns. If credit is a primary social good in a society then this exit is problematic. The solutions to these twin normative-cognitive problems are in decoupling debt from its role in producing social mobility. Debt contracts are likely poorly suited for allocating basic means to a good life in a society except in rare cases. They convert collective duties of justice owed to individuals to private duties of contract owed by individuals, aggravating power and domination dynamics in a society and worsening inequality and its deleterious effects.

Robo-Advisors, Algorithmic Predictability and Investor Protection: A New Regulatory and Liability Framework
Professor Emilios Avougleas and Dr Alexandros Seretakis

Robo-advisors are revolutionizing the marketplace for the provision of financial advice and investment management services by promoting access to financial markets and opening up cross-border markets to retail investors. Even though, robo-advisory services were initially offered by fintech start-ups, mainstream financial institutions are increasingly embracing the low-cost robo-advisory model for their retail business. In contrast, the spectacular growth in robo-advisory services has been met with increasing scepticism by regulators. Robo-advisors pose unique risks to investor protection, including conflict of interests, limited access of investors to information and an unclear allocation of liability. Even though the provision of robo-advisory services is regulated under MIFID II, the MIFID regime was introduced before the rise of robo-advisors and fintech more generally. In addition, MIFID II does not govern the allocation of liability for investor losses. The present article will debate the cost savings and liquidity gains that the advent of automated asset management services bring against a backdrop of fears about exclusion bias and inability to ascertain compliance with MIFID II appropriateness and suitability regimes. The article is building upon the MIFID II product governance framework to propose a new regulatory and liability framework for robo-advisors. While this is an area where an ex-ante regulatory regime where the code is the regulator would be unfeasible under the current state of technological capabilities given black-boxing and algorithm’s vulnerability to adversarial noise other solutions may be possible in order not to halt financial innovation and the elimination of financial intermediaries fat rents for provision of investment advice and asset management services. In this context, the paper offers both ex ante and ex post solutions to the robo-advisor conundrum. First it proposes a tailor-made licensing for the robo-advisory platforms. Secondly, it offers a novel responsibility framework, as a form of ex-post regulation, that is embedding algorithmic explainability in a way that over time builds statistical periodicity to make risks insurable. Taking into account the difficulty of assigning liability in case of malfunctions or investor losses ex post explainability can become an irrebuttable presumption of wrongdoing on behalf of the authorised platform.
Open Banking and Financial Inclusion: A New Frontier of Payment System?
Dr Andrea Miglionico and Dr Andreas Kokkinis

A wide range of digital initiatives seek to promote ‘financial inclusion’, i.e. widening access to banking and insurance services both for unbanked and low-income customers. Promoting financial inclusion using financial technology in low and middle-income countries enables reaching vulnerable and excluded customers. This article discusses the impact of digital technology in the payment system in the UK and internationally. Digital technologies, often referred to as FinTech, comprise inter alia cryptoassets, online platforms, artificial intelligence and RegTech (i.e. applications of digital technology by regulation and compliance actors). The aim of the article is to examine the importance of the ‘world of alternatives’ – alternatives to credit like peer-to-peer and crowdfunding platforms and alternatives to payments, such as Open Banking – from the perspective of financial innovation. The possibility for technology-based change in the financial industry is demonstrated in the new delivery of financial services and in the business models and operations of intermediaries that provide them. This is illustrated by the case of China which has seen rapid shifts to both mobile payments (AliPay, Weipay) largely displacing notes and coins in urban areas; and to non-bank loan intermediation through the spectacular growth in the Chinese version of P2P lending. A displacement of banks and financial companies by decentralised technologies such as ‘blockchain’ allows households and businesses to cheaply and conveniently exchange payments, provide loans and pool risks without the need for financial intermediaries. Enhancing the appropriate public policy on financial data and the availability of ‘open data’ for use by other financial firms, investors and other ‘stakeholders’ are the questions at stake. This article argues that data access is a ‘public good’ that requires coordination at industry level and may sometimes also need policy intervention to ensure that the data needs of industry and policy makers are met appropriately.

‘To CBDC or not CBDC’- What is The Question (and Answer) for Central Bank Digital Currencies?
Professor Benjamin Geva

There has been much recent discussion about whether a central bank should issue a digital currency (‘CBDC’). The discussion has been unfocused, and addressed issues not all linked directly to CBDC. One objective here is to define ‘digital currency’ so as to better frame the question. Next, the paper purports to disentangle the present unfocused discussion and separate it into its diverse components. The paper will then endeavour to identify and respond to issues arising in connection with each component. Accordingly, the paper will discuss: (i) The use by central banks of Decentralized Ledger Technology as implemented by the blockchain for interbank settlement, creation of digital currencies, and the settlement of payment transactions among market participants, both businesses and consumers; (ii) The specific question of issuance of digital currency, in the true sense of the term, namely, the issuance to the public by a central bank of digital coins, in either substitution of or supplemental to physical banknotes and coins, for carrying out payment transactions in parallel or substitution of current methods of payment; (iii) Whether there is a case for central bank wholesale digital currency, as distinguished from retail digital currency available to the public; and (iv) The access to be given to the public, both businesses and consumers, whether direct or indirect, to central bank reserves. The paper will discuss the various options for such access and yet will point out that while this question has dominated much of the CBDC public discussion it is in fact a separate and distinct question. A recurring theme will be that pertaining issues ought to be resolved in the framework of the desired role for central banks taking into account their overall functions and responsibilities. In this framework, I expect to argue against the issue of digital currency to the public by a central bank and distinguish this function from the issue of physical banknotes to the public.

The Impact of FinTech on Monetary Policy
Dr Christian Hofmann

Fintech innovations and the potential benefits of AI applications animate future planning not only of the financial industry, but also of central banks. AI promises to improve the effects of monetary policy operations as a result of faster and more accurate data collection. In addition, e-commerce and social media giants are intrigued by the potential new ways in which monetary value can be created, and central banks consider issuing their own versions of digital coins. Different models are being discussed, and among them are disruptive concepts with far-reaching consequences for the financial industry and general public. However, one must caution against too much enthusiasm. Many stakeholders stand to lose more than to gain from radical models, and even financial stability may be at stake. Radical models of central bank-issued digital coins might serve questionable purposes such as total control over capital markets and access to myriad of personal data. Fortunately, less radical options exist and promise less intrusive effects and better compatibility with traditional fundamentals of open market economies and conventional monetary policy transmission mechanisms.
How to Confront Libra Cryptocurrency: The Model and Governance of Cross-border Payment with Digital Currency
Professor Dong Yang

Libra, the digital currency created by Facebook, has been considered as a new cross-border payment tool. By adopting Libra in different countries and establishing corresponding virtual accounts, Libra can construct a self-clearing cross-border payment system which become a challenge to local financial regulation system. Libra, with a inter value stability mechanism, has certain advantages compared with other relatively unstable legal tender and may threaten financial stability and monetary sovereignty. In order to cope with the risk of cross-border digital currency payment instruments, we should reform the outdated and restrictive regulatory model, diversify the developing channels of digital currency, build a sandbox-style supervision mechanism and promote the development of RegTech.

AI-Driven Financial Regulation: The State of The Art
Professor Gerard Hertig

Artificial intelligence (AI) is generally described as a set of techniques aiming at approximating human cognition, in particular via machine learning. AI is rapidly changing how financial systems are operated, taking over core functions because of cost savings and operational efficiencies. To begin with, AI is reportedly already reducing the costs of implementing anti-money laundering, fraud prevention and credit scoring requirements. For example, the Monetary Authority of Singapore has developed AI tools for the analysis of reports on suspicious transactions. AI is also credited with making it easier to forecast judicial decisions, even though predictive accuracy still depends upon judicial attributes or case characteristics. In addition, there are claims that AI facilitates the identification of those situations where judges are likely to allow extralegal biases to influence their decision-making. As a next step, AI is likely to be used to enforce rules and standards across-the-board. This, in turn, should result in an automatic update of financial regulation whenever there is a change in the state of the world. In other words, one can expect AI to gradually play a lawmaking role. On the down side, questions are raised about the capacity of algorithms to reflect human values such as fairness and accountability, and transparency. More generally, it is underlined that AI-driven financial regulation has the potential to destabilising the financial system, creating new tail risks and amplifying existing ones due to procyclicality and endogenous complexity. In other words, there is a risk of some decisions being delegated to machines even when the decisions would be superior with human input.

ResTech: Innovative Technologies for Crisis Resolution
Dr Giuseppe Loiacono, Mr Jonas Bergstrom and Mr Edoardo Rulli

Resolution is the restructuring of a financial firm by a resolution authority. The severe bank failures during the great financial crisis (2007/09) prompted a renewed interest in legal frameworks for dealing with failing financial institutions (FSB, 2011). Resolution aims at orderly managing financial firms’ failure safeguarding the public interests, preserving critical functions, financial stability and minimising costs to taxpayers. Resolution Technology (ResTech) is the adoption of new technologies to ease resolution authorities’ tasks. The increasing use of financial technologies (FinTech) by market participants fostered the discussion among supervisors on the use of similar technologies on the regulator side (RegTech) (Enriques 2017; FCA 2017). Recent studies paved the way for further research in the context of Supervisory Technology (SupTech) (FSI 2018, 2019). The dynamics in SupTech differ from those of ResTech. SupTech generally follows FinTech developments: technologies can boost profits at the cost of financial stability and investors, and this requires supervisors to run after market participants’ innovations. The same logic does not apply to ailing firms: resolution authorities should develop technologies and financial engineering solutions using computer science, statistics, and applied mathematics to resolve financial crisis. Digitalisation could make resolution planning a truly dynamic activity. Potential areas of application include: constantly updating of information; automatized crosschecks on reporting using market data and big data analytics; early warnings for crisis detection; efficient exercise of write down and conversion powers; and assessing the available liquid funds in a resolution scenario. The benefits of ResTech need to be measured against the increased risks taken by resolution authorities. In a FinTech-drive environment, this requires the build-up of IT infrastructures and e-governance processes that prevent cyber, operational, reputational and legal risks.
Crypto Shadow Banking
Dr Marco Dell’Erba

Private and often non-regulated entities have recently invaded the new crypto-economy. This Article identifies part of this activity as “Crypto Shadow Banking” and draws analogies with the previous emergence of “shadow banking” more generally. The “shadow banking” system emerged as a network of new and often non-regulated entities, that gradually entered the business of banks. Shadow banking’s development depended on specific causes and responded to specific needs of the financial system. This transformations ultimately led to the creation of a far more complex and interconnected financial system, which ultimately collapsed amidst the Financial Crisis in 2008. The similarities between shadow banking and Crypto Shadow Banking are clear when analyzing the circumstances of their emergence, their pathologies, and the regulatory response. A general question about cryptoeconomy is whether this new ecosystem relies on different mechanisms or it is rather a replication of what already exists in the context of traditional economy and finance. In trying to answer this question, this Article focuses on shadow banking and proposes the new label of Crypto Shadow Banking. After a brief analysis of the shadow banking system, this Article focuses on the evolution of cryptoeconomy and token-economy private initiatives. This Article then analyzes the main characteristics of Crypto Shadow Central and identifies specific commonalities with the shadow banking system. These commonalities can be traced at the level of financial institutions and financial products. Consistent with the traditional shadow banking private funds, prime brokers, money market funds, and non-regulated exchanges, as well as leverage, crypto-derivatives and tokenizations dominate cryptoeconomy. Finally, this Article considers the systemic risks, associated with Crypto Shadow Banking and posits some policy considerations to address such risks. In particular, this Article concludes that a better understanding of Crypto Shadow Banking is essential to design some ex-ante policy responses, on the basis of the problems experienced with traditional shadow banking. These ex-ante measures may be helpful to mitigate the risks related to potential financial shocks and financial crisis.

Stablecoins or Shadow Banking on Cryptocurrencies
Dr Hossein Nabilou

The advent of decentralized financial technologies has brought together new decentralized financial market infrastructures (dFMIs) and media of exchange native to those infrastructures. However, a decade from the launch of the first cryptocurrency, payment has only become one of its incidental use-cases. This is due to the pervasive volatility endemic to unanchored cryptocurrencies which hampered their evolution toward becoming an effective and frictionless medium of exchange. In virtually all financial systems, central bank money (CeBM) - or where impracticable or unavailable - commercial bank money (CoBM) play the role of a risk-free asset that functions as the ultimate medium of settlement within the financial market infrastructures (FMIs). In the decentralized finance (DeFi) ecosystem several efforts have been undertaken to create stability in cryptocurrencies. In the absence of government guarantees in the stablecoin context, collateralization techniques coupled with self-imposed prudential rules, and algorithmic central banking are used to engender stability. In the former, the stability originates from the funds that back the coins (tokenized funds), traditional assets backing the coins (off-chain collateralized stablecoins), and cryptoassets that can be recorded in a decentralized manner (on-chain collateralized stablecoins). In the algorithmic stablecoins, however, the stability stems from the users’ expectations about the future purchasing power of their coins. This paper argues that the attempts to create stablecoins are not substantively different from the attempt to create safe assets in the shadow banking system, where the creation of safety relies on private safety creation mechanisms. In the absence of credible public backstops, such mechanisms are unlikely to create a level of safety typically required for a currency, as runs on such stablecoins are likely to destabilize their perceived stability in distressed times. One exception could be the private stablecoins collateralized by central bank digital currencies (CBDCs) by making use of the stability of the CBDC, and by leveraging the transparency of the public blockchain where the collateral or the assets backing the stablecoins are stored.
**Private Stablecoins, DeFi and CBDC: Legal Questions on Digital Assets, Smart Contracts and Finance**

Dr Ann Sofie Cloots

The advent of bitcoin, ethereum and ICOs has drawn much attention to securities law. In the last few months, however, the debate has shifted, as we witnessed more mature financial use cases involving digital assets, distributed ledger technology (DLT) and smart contracts. The announcement of the Libra project provoked hostile reactions from several lawmakers and regulators, and the debate has now shifted. Governments are moving from being regulators and enforcers to also being potential ‘users’ of the new technology, in the form of Central Bank Digital Currencies (CBDC), and they have piloted many blockchain projects, including assessing blockchain for regulation and compliance automation. In addition, financial institutions and industry associations have piloted projects involving digital assets and smart contracts to make transactions quicker, cheaper and more transparent. Automation requires standardization - often lacking in the DLT-ecosystem. However, a number of initiatives are attempting to streamline legal taxonomy (e.g., ISO), legal standards (e.g., FATF, BIS) or technical standards (e.g., ISO, ISDA). Moreover, heightened attention by international bodies such as the BIS, FSB, G7 and IMF, are refining the legal debate on stablecoins and automation of commercial transactions through the use of smart contracts and DLT. As governments and large financial institutions have embraced DLT, digital assets and smart contracts, this may appear to re-centralize a technology originally envisaged as decentralized. However, the appeal of de-centralized assets continues to flourish. DeFi projects such as MakerDAO, OasisLabs, Compound and dYdX have seen significant transaction volumes and financial backing from established VCs. The rapid expansion in decentralized finance (including credit) raises its own legal and other risks. The paper offers a systematic analysis of the legal issues specific to each of the three categories of (i) private sector stablecoins (ii) CBDC and (iii) DeFi. It describes the efforts by international bodies to analyse stablecoins and CBDCs systematically. However, it shows very little attention has been paid so far to DeFi projects, notwithstanding their growing trading volumes.

**FinTech and the Regulatory Sandbox**

Dr Lin Lin

This paper seeks to explore potential institutional variables that contribute to the development of a sustainable FinTech market, with a particular focus on the use of a regulatory sandbox regime. This paper uses Singapore as a case study to examine the factors affecting the development of FinTech, with a particular focus on the application of the regulatory sandbox. Existing literature has discussed the various regulatory approaches towards financial innovation. There has also been literature studying how specific countries such as the UK and China have handled FinTech regulation. However, less attention has been paid specifically to the growth story of Singapore, which was able to create a viable FinTech market and quickly develop into a regional leader. As an international financial centre, Singapore has no shortage of capital and financial intermediaries to support the growing FinTech industry. In addition, Singapore has inherited the common law tradition and is known to have efficient judiciary and efficient government with well-established financial and industrial infrastructure (e.g., telecom network). This paper fills the literature gap by examining Singapore’s experience in developing the FinTech sector through: (1) regulatory reforms to encourage financial innovation (such as the introduction of the FinTech Regulatory Sandbox (“sandbox”) and its improvement); (2) improving the integration of regulatory infrastructure (such as the establishment of the MAS FinTech & Innovation Group); (3) issuing regulatory guidelines and passing laws to provide regulatory clarity in response to the evolving FinTech sector (such as the issuance of the Digital Token Guide); and (4) law reform (such as the enactment of the Payment Services Act). Singapore’s experience could be a valuable lesson to other countries that are attempting to promote the formation and growth of their FinTech sectors.

**Liechtenstein’s Blockchain Act**

Mr Thomas Nägele

On 1 January 2020, the Token and Trusted Technology Service Provider Act (Token- und VT-Dienstleistergesetz; TTTA) which had been passed by the Liechtenstein Parliament three months prior, came into force, alongside necessary amendments to existing laws, e.g. the Due Diligence Act. The TTTA’s core concept is the so-called “Token Container Model”, according to which a token is a container for representing a specific right, and can essentially represent any right, such as property, a right to use a specific object, intellectual property rights, etc. The primary goal is to provide and ensure legal certainty for the legal character of tokens and for token-based transactions. The most important challenge in drafting the TTTA lay in solving the incompatibility of transferring ownership regarding a token with Liechtenstein property law, as well as the proper regulation on reverse transactions if a token-related transaction was not or did not remain legally sound. The TTTA provides special provisions concerning the transfer of tokens and its legal effect with regard to the transfer of the right of their disposal. These provisions set aside the relevant general provisions of civil law, particularly property law. Moreover, the regulatory part provides regulation for the business activities of providers of services related to Trusted Technologies, such as the issuance of tokens, or depositary of TT Key or TT Token Depositaries. Key elements are the duty to be registered with the supervisory authority as a TT Service Provider, the duty of token issuers to draw up and publish basic information on the issued tokens, and the supervisory duties and capacities of the competent authority. It is noteworthy that the majority of TT Services are linked to duties under the due diligence legislation (KYC, anti-money laundering measures). However, the TTTA does not provide a legal basis for the regulatory traits of tokens. In line with regulatory practice, the connecting factor in that regard (e.g. whether a token represents a security that is linked to regulatory duties, e.g. a securities prospectus) is the right the token represents.
The Failed Hopes of Disintermediation: Crypto-Custodian Insolvency and Implications for Crypto-Investors

Professor Dr Matthias Haentjens, Dr Tycho de Graaf and Mr Ilya Kokorin

The founding fathers of cryptocurrencies wanted to free value transfers from the malicious interference of governments, banks, brokers and other intermediaries. In practice, however, disintermediation has not occurred. By some estimates, around 1.2 million bitcoins are currently held with the 8 major crypto-exchanges. While such storage is (usually) free of charge and user-friendly, it creates significant risks related to the possible insolvency of crypto-custodians. Recent years have witnessed the demise of Cryptopia (New Zealand), QuadrigaCX (Canada), BitGrail (Italy), Cointed GmbH (Austria) and others. These cases reveal that the qualification of the contractual and property law rights of crypto-investors is problematic. This paper explores which rights crypto-investors can and should be able to assert in case a crypto-custodian falls insolvent. To answer this question, the (legal) qualification of bitcoin is analysed and the status of deposited bitcoins is discussed. Private international law aspects are also considered. The paper starts with a short introduction to crypto-currencies and their underlying technology. Through a real-life experiment, the traceability of blockchain transactions and the possibility to “individualise” (segregate) bitcoins is subsequently tested (Section 1). Section 2 provides a typology of crypto-custodians and the different ways in which they hold and manage crypto-assets through segregated and omnibus accounts. This is followed by an overview of problems arising from the insolvency of crypto-custodians, based on two case studies: insolvency of MtGox and BitGrail (Section 3). Section 4 explores some pertinent issues of private international law and considers different ways to connect bitcoins to a certain jurisdiction. Against this background, possible legal qualifications of bitcoins (Section 5) and the rights a crypto-investor may assert if its crypto-custodian enters insolvency proceedings are discussed (Section 6). Section 7 suggests several legislative recommendations to improve legal certainty and enhance the protection of crypto-investors’ rights. While the paper primarily deals with Bitcoin, its conclusions and recommendations can potentially be relevant for other kinds of cryptocurrencies, and form a solid basis for future regulatory responses.

Secured Lending and Crypto Assets

Dr Orkun Akseli

Blockchain based distributed ledger platform has the potential to be used as a registry for security rights. It has clear interactions with the principles of the UNCITRAL Model Law on Secured Transactions (‘MLST’) and other influential secured credit laws. This type of technology has the potential to revolutionise the third party effectiveness of security interests. In this process, the modern principles of the MLST could play a pivotal role in reducing the cost of credit and expanding the financial inclusion of small businesses and individuals. Blockchain and distributed ledger technology through disintermediation have the necessary characteristics to decentralise and streamline the registration of security interests. However, this field should be regulated tightly, at least in the short term, to prevent financial bubbles and to protect investors. The technology can support the taking of security interests on digital assets. These assets include receivables denominated as cryptocurrencies, units denominated as cryptocoins, blockchain based tokens representing negotiable documents and blockchain based tokens representing securities. This paper considers taking security over these assets by making comparisons among the MLST, UCC Article 9, PPSAs and English Law. It will also consider problems arising from the conflict of laws, enforcement and the use of blockchain as general security rights registry. Finally, comments will be made on what a readiness to regulate blockchain would tell us about the contours of the market order we are creating particularly for small businesses.

How to Regulate Digital Payment Risks? The Case of Fraudulent Misuse

Professor Ruth Plato-Shinar

In recent years, there has been a significant development in the field of payments as a result of technological progress and global expansion. An ever-growing number of payment service providers offer alternatives to the customary means of payment. The common objective behind these and other developments is to enable payments to be made easily, quickly and securely. Advanced payment methods have many advantages but also increase risk. In various countries, we witness new legislation aimed at regulating the use of advanced payment services. In addition, in some countries, the provision of payment services was recognised as requiring separate regulation, leading to the establishment of a designated regulator to be in charge of supervising the provision of payment services. The article focuses on the main risk of digital payments: unauthorized or fraudulent misuse. The main question in this regard is the risk allocation, i.e. who will bear the loss. Since in most cases the rogue cannot be located and sued for reimbursement, the possible risk bearers are the payer, the payee, or the payment service providers. The article offers an outline of risk allocation between these parties while balancing consumer protection and commercial efficiency. For this purpose, the article analyses two models of risk allocation. The first is the Damage Absorption Model, according to which, the party who can better absorb the loss is the one who should bear it. In our case, these would be the payment service providers. The second model is the Model of Fault, according to which the loss will be borne by the party whose negligence caused the damage. If several parties have been negligent, the damage will be divided among them according to the degree of their negligence. The article compares the models that were adopted in various jurisdictions (the EU, US, Israel). Finally, it concludes by suggesting adopting an integrated model, based on the Damage Absorption Model, with a few exceptions adopted from the Model of Fault.