

BANKING, FINANCE AND TECHNOLOGY CONFERENCE

18-19 May 2023

Thursday, 18 May 2023	
0855 – 0910	Registration
SESSION 1: CRYPTO-CURRENCIES/ASSETS Chaired by Umakanth Varottil (National University of Singapore)	
0910 - 0920	Welcome
0920 – 1010	The Nature of Property in Crypto-Assets Timothy Chan (National University of Singapore)
1010 – 1100	The Regulation of Crypto-Lending Alexandros Seretakis (Trinity College Dublin, Ireland)
1100 – 1120	Tea Break
1120 – 1210	Insolvency of Crypto-Asset Service Providers: Legal Problems and Regulatory Responses Ilya Kokorin (Leiden University, the Netherlands)
1210 – 1300	A Framework for the Interoperability of CBDCs Kosmas Kaprinis (Binance / IE University, Spain)
1300 – 1400	Lunch
SESSION 2: TECHNOLOGY AND REGULATION Chaired by Lin Lin (National University of Singapore)	
1400 – 1440	Responsible Use of AI in the Singapore Financial Sector Xuchun Li (Monetary Authority of Singapore)
1440 – 1530	A Multi-Layered Framework of AI Governance in China’s Finance Sector Jinghe Fan (University of Oxford, United Kingdom)
1530 – 1550	Tea Break
1550 – 1640	Financial Regulation and the Advent of Digital Reporting: The End of Rule-Use as We Know It? Andromachi Georgosouli (Queen Mary University of London, United Kingdom)
1640 – 1730	Challenges Posed by the Second Generation of Digital Technologies to Financial Regulatory Strategies Teresa Rodríguez de las Heras Ballell (University Carlos III of Madrid, Spain)
End of Conference Day 1	

Programme subject to changes.

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Friday, 19 May 2023	
0900 – 0920	Registration
SESSION 3: TECHNOLOGY AND CORE BANKING SERVICES Chaired by Dora Neo (National University of Singapore)	
0920 – 1010	AI in Credit Lending and Enforcement Decision-Making by Banks: Accuracy, Risk, Data and Consumer Protection Jeannie Paterson (University of Melbourne, Australia)
1010 – 1100	At the Crossroads Where Robo-Advisers Stand Selwyn Lim (Syfe Group)
1100 – 1120	Tea Break
1120 – 1210	Payment Fraud and Consumer Protection Sandra Booyesen (National University of Singapore)
1210 – 1300	Project POET – A Successful Partnership between Law Enforcement and Banks Loretta Yuen (OCBC Bank) Ian Wong (Commercial Affairs Department, Singapore Police Force)
1300 – 1400	Lunch
SESSION 4: TRADE FINANCE AND PANEL DISCUSSION Chaired by Sandra Booyesen (National University of Singapore)	
1400 – 1520	Trade Finance and Digitisation Nathanael Lin and Lionel Tan (Rajah & Tann Singapore LLP) Dora Neo (National University of Singapore)
1520 – 1530	Tea Break
1530 – 1700	Panel Discussion: Ask Us Anything <u>Convenor:</u> Lam Chee Kin (DBS Bank) <u>Panellists:</u> Loretta Yuen (OCBC Bank) Yeong Zee Kin (Infocomm Media Development Authority / Personal Data Protection Commission / Singapore Academy of Law)
End of Conference Day 2	
1700 – 1730	Closing Cocktails

Programme subject to changes.

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BIOGRAPHIES (in alphabetical order)

Sandra Booyen
National University of Singapore



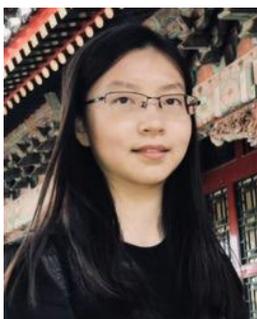
Dr Sandra Booyen is an Associate Professor at the National University of Singapore, Deputy Director of the Centre for Banking & Finance Law, and Editor-in-Chief of the *Singapore Journal of Legal Studies*. Sandra's research interests are in the fields of contract, consumer protection and banking law. Sandra's work in these areas has been published in peer-reviewed law journals in Australia, Canada, Singapore and the United Kingdom. Sandra has edited two volumes: *Financial Advice and Investor Protection* (Edward Elgar, 2021) and *Can Banks Still Keep a Secret? Bank Secrecy in Financial Centres Around the World* (Cambridge University Press, 2017). In August 2021, Sandra was elected as a member of the International Academy of Commercial and Consumer Law, and in the Easter Term of 2022, Sandra was a Beaufort Visiting Fellow at St John's College, University of Cambridge. Sandra is admitted as a solicitor in England and Wales, and as an attorney and notary in South Africa. Prior to joining academia, she practiced law in London and Johannesburg, with a focus on commercial litigation.

Timothy Chan
National University of Singapore



Timothy Chan is a Sheridan Fellow at the National University of Singapore, where he teaches property law and equity and trusts. His research interests lie in the field of private law generally, with a particular interest in personal property law, equity and trusts and the law of restitution and unjust enrichment. His recent scholarship focuses on novel issues at the intersection of property law and digital assets. His work has appeared or is forthcoming in leading journals such as the *Modern Law Review*, the *Law Quarterly Review*, *Legal Studies*, and the *Singapore Journal of Legal Studies*, and he has contributed or been invited to contribute to leading academic blogs such as the Harvard Bankruptcy Roundtable, the Duke FinReg Blog, the Oxford Business Law Blog and the Kluwer Arbitration Blog. Prior to joining the Faculty, Timothy practiced commercial litigation in Singapore, where he focused on litigation involving banks and financial institutions. His experience also includes acting in and advising on joint venture and trust-related disputes.

Jinghe Fan
University of Oxford, United Kingdom



Jinghe Fan is a DPhil in Law candidate at the University of Oxford. Her research interests focus on the intersection of law and technology in China, the UK, and the EU. Her doctoral thesis examines algorithmic proactive measures by looking into both non-discrimination and personal data protection in the UK and European legal frameworks. Jinghe is also a co-convenor of the Future of Technology and Society Discussion Group at the Oxford University Faculty of Law. Prior to pursuing her doctoral studies, Jinghe obtained her Bachelor of Laws (2018) and Master of Laws (2020) from Tsinghua University. She also holds a Master of Laws degree (2021) from the University of Cambridge. During her LLM studies, her research projects included the interaction between personal credit information and rights to reputation in the China Civil Code, and a legal analysis of minors' prepayment and tipping in live-stream platforms. In 2019, Jinghe held a full-time judicial internship for five months at the Supreme People's Court of China, where she assisted in reviewing cases concerning torts and contracts.

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Andromachi Georgosouli

Queen Mary University of London, United Kingdom



Dr Andromachi Georgosouli is a senior lecturer at the Centre for Commercial Law Studies (CCLS) at Queen Mary University of London. Her research focuses on financial law and the theory of regulation. Her recent publications address questions on financial crisis prevention and management, transnational governance, and digitalisation. Earlier publications examine a selection of topics on the use of rules for the regulation of financial markets and meta-regulation. Dr Georgosouli is the editor of *Systemic Risk and the Future of Insurance Regulation* (Routledge/INFORMA, 2015; jointly with M Goldby). Her recent contributions include an independent study for the European Parliament on the topic of Euro Area Accession focusing on the impact of the Covid-19 pandemic on Bulgaria and Croatia in collaboration with the Centre for European Policy Studies (2022). Dr Georgosouli was the holder of a prestigious scholarship under the European Central Bank Legal Research Programme. In spring 2015, she was a visiting scholar at the George Washington University Law School and at the International Monetary Fund. Between 2017 and 2021, she acted as an Academic Director of the Queen Mary-UNIDROIT Institute of Transnational Commercial Law. Dr Georgosouli holds a PhD in financial regulation and an LLM in Banking and Financial Law – both from Queen Mary University of London. She obtained her LLB from Democritus University of Thrace, Greece.

Kosmas Kaprinis

Binance/IE University, Spain



Dr Kosmas Kaprinis is a Regulatory Advisor for Binance and an Adjunct Professor of Fintech at IE University (Madrid). In the past, he held assignments at HSBC, the European Central Bank, the World Bank and legal private practice, as well as teaching and research appointments at Harvard, Oxford and Frankfurt universities. An economist and lawyer by training, Kosmas completed a masters and doctorate in law and finance at Oxford University and a masters in public policy at Harvard University.

Ilya Kokorin

Leiden University, the Netherlands



Ilya Kokorin is a PhD candidate and lecturer at the Department of Financial Law of Leiden University, the Netherlands. His research focuses on the role and place of intra-group financial arrangements (e.g. cross-guarantees, intra-group loans, centralised cash management) in insolvency and restructuring of enterprise groups, including banking groups. He is interested in new technologies, including AI and blockchain, and how they affect and transform financial practices, as well as rules of contract, property, insolvency and financial law. Ilya coaches Leiden University teams in the Ian Fletcher International Insolvency Law Moot. Alongside insolvency law, he writes on various legal challenges (and opportunities) brought to light by disruptive technologies. Ilya is a member of the Oxford Digital Assets Project and is currently editing a book on the EU Regulation on Markets in Crypto-assets.

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Lam Chee Kin
DBS Bank Ltd



Lam Chee Kin is Managing Director & Head Group Legal & Compliance at DBS Bank Ltd. He is accountable for the team which manages the legal and regulatory risk of DBS Bank Ltd (DBS) across legal entities, segments and geographies. Prior to joining DBS, he held various legal and compliance portfolios in Standard Chartered Bank, JPMorgan, Rajah & Tann and Allen & Gledhill, including a stint as Chief Operating Officer, South East Asia for JPMorgan. A lawyer by profession, he has particular expertise in financial services regulation, and financial markets product and business structuring. Currently, however, he is focusing on the impact of digitisation, and the evolution of frameworks that will be necessary to cope with digitisation and data, together with second-order issues such as how criminal activity will also evolve, and how legal and compliance departments can benefit from analytics and AI. Chee Kin currently serves on the Advisory Board to the Singapore Management University School of Law and the Advisory Panel to the NUS Centre for Banking and Finance Law. In 2015, Chee Kin was recognised as a Distinguished Fellow by the Institute of Banking and Finance in the field of compliance.

Xuchun Li

Monetary Authority of Singapore



Dr Xuchun Li heads the AI Development Office of the Fintech & Innovation Group in the Monetary Authority of Singapore (MAS). The mandate of the AI Development Office focuses on promoting the use of AI in the Singapore financial sector. It will develop and implement the AI strategy for the Singapore financial industry, facilitate industry-wide AI projects within and beyond the financial sector, as well as embark on initiatives to develop a sustainable ecosystem that supports experimentation in and deployment of AI-based technologies in the financial sector. Dr Li's major expertise covers areas such as machine learning, big data analysis, cloud computing, text mining, etc. He also has strong commercial software development experience. Before joining MAS, he was a scientist at VISA and UBS. He holds a PhD in machine learning.

Selwyn Lim
Syfe Group



Selwyn Lim is a corporate and financial services lawyer. He is currently the Head of Legal and Compliance of the Syfe Group, where he oversees the legal and regulatory affairs of the Syfe Group. During his time at Syfe, Selwyn led the legal team for the launch of Syfe's business in Hong Kong and Australia. Prior to joining Syfe, Selwyn was a private practice practitioner in the areas of corporate transactions and financial services regulation. He has advised multinational corporations, financial institutions and fintech startups on mergers and acquisitions, strategic alliances, initial public offerings, bancassurance arrangements, court-approved scheme of arrangements, restructurings, and financial licensing. Financial regulatory matters include advising on the setting up of family offices in Singapore; advising card issuers, merchant acquirers, and crypto firms on payments regulation and licensing; establishing exchanges as recognised market operators to trade in private market assets; and advising on regulatory reporting requirements relating to derivatives, substantial shareholder and other notifications.

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Lin Lin

National University of Singapore



Dr Lin Lin is an Associate Professor at NUS Law. She specializes in corporate law, corporate finance and Chinese corporate and securities law. She teaches Alternative Investments, Chinese Corporate and Securities Law, Private Equity and Venture Capital: Law and Practice, among others, at NUS Law. Lin has published in leading journals in her field. Her sole-authored monograph *Venture Capital Law in China* (Cambridge University Press, 2021) was selected in the International Corporate Law and Financial Market Regulation series at Cambridge University Press.

Nathanael Lin

Rajah & Tann Singapore LLP



Nathanael Lin's practice encompasses a broad range of commodities, trade finance, sanctions, and shipping matters, both contentious and non-contentious. He regularly advises banks and commodity traders on commodities disputes, trade finance disputes (particularly on letters of credit litigation), trade finance documentation, and shipping matters. He has also assisted court-appointed Judicial Managers in commodity fraud investigations. Nathanael has also given expert evidence on Singapore law in foreign arbitration. He has advised banks, traders, oil terminals, and underwriters on sanctions, including the recent sanctions against Russia. Nathanael has also been appointed as an external investigator on alleged sanctions breaches, filing representations and disclosure reports to the UN Panel of Experts on North Korea, Office of Foreign Assets Control, and local authorities. Nathanael has appeared at all levels of the Singapore courts, both as counsel and led by Senior Counsel. He has also handled arbitrations in Singapore, London, Hong Kong and Kuala Lumpur under the SIAC, SCMA, LMAA, HKIAC, and ICC Rules. From 2017-2020, he was the Head of Group Legal & Sanctions Compliance at one of Southeast Asia's largest vertically-integrated shipping, oil trading, bunkering and oil storage groups, where he made direct representations to the UN Panel of Experts regarding alleged sanctions breaches. From 2019-2020, he was a member of the Singapore War Risks Mutual Class Committee, the only war risks mutual insurer in Southeast Asia. Nathanael was named as one of Singapore's 70 most influential lawyers aged 40 and under by the Singapore Business Review in 2016. He is an Accredited Specialist in Maritime and Shipping Law by the Singapore Academy of Law.

Dora Neo

National University of Singapore



Dora Neo is Director of the Centre for Banking & Finance Law at the Faculty of Law, National University of Singapore, where she is an Associate Professor. Her publications include Hare & Neo (eds), *Trade Finance: Technology, Innovation and Documentary Credits* (Oxford University Press, 2021); Ellinger & Neo, *The Law and Practice of Documentary Letters of Credit* (Hart, 2010); Gullifer & Neo (eds) *Secured Transactions Law in Asia: Principles, Perspectives and Reform* (Hart, 2021); Neo, Tjio & Lan (eds), *Financial Services Law & Regulation* (Academy Publishing, 2019); and Booyesen & Neo (eds), *Can Banks Still Keep a Secret? Bank Secrecy in Financial Centres Around the World* (Cambridge University Press, 2017). She is a member of the UNIDROIT Working Group on A Model Law on Warehouse Receipts and a UNIDROIT correspondent for Singapore. 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 and Harvard Law School and is a non-practicing member of the Bar in England and Wales (Gray's Inn) and in Singapore.

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Jeannie Paterson

University of Melbourne, Australia



Jeannie Paterson is a Professor of Law at the University of Melbourne. With Professor Tim Miller (Faculty of Engineering and Information Technology), Jeannie is the founding co-director of the Centre for AI and Digital Ethics, an interdisciplinary research, teaching and policy centre at the University of Melbourne. Jeannie’s expertise lies in the areas of consumer protection, consumer credit and data protection law, as well as the law of emerging digital technologies, AI and robotics. Her research focuses on regulatory design for fair, safe, and accountable consumer products, and technologies. She is the co-author of Duggan and Lanyon’s Consumer Credit Law, and numerous articles on consumer protection and contract. Jeannie’s research has been cited by law reform inquiries and by Courts, including by the High Court of Australia. Jeannie regularly consults to government, industry regulators and community legal centres for law reform and review. Jeannie teaches undergraduate, Juris Doctor and postgraduate students in consumer protection law, and AI, ethics and the law.

Teresa Rodríguez de las Heras Ballell

University Carlos III of Madrid, Spain



Dr Teresa Rodríguez de las Heras Ballell is an Associate Professor of Commercial Law at University Carlos III of Madrid, Spain. She is currently an Academic Visitor at the University of Cambridge, and was Sir Roy Goode Scholar at UNIDROIT in 2021-2022. She is a delegate of Spain at UNCITRAL for Working Group VI on secured transactions and Working Group IV on e-commerce, and an Expert for UNCITRAL and UNIDROIT on digital economy projects. She is an arbitrator at the Madrid Court of Arbitration and the Spanish Court of Arbitration. She is also member of the European Commission Expert Group on Liability and New Technologies, the EU Expert Group for the Observatory on the Online Platform Economy, and the EU Expert Group on B2B Data Sharing and Cloud Computing. She is member of the European Law Institute (ELI) Executive Committee and Council and author of the ELI Guiding Principles on Automated Decision-Making in Europe, 2022. She was awarded one of the European Central Bank (ECB) scholarships under the ECB Legal Program with a project on Fintech Regulatory Challenges. She published her report on regulatory strategies to face fintech challenges. Her past academic appointments include the James J Coleman Sr Distinguished Visiting Professor of Law at Tulane Law School, Marie Curie Fellow at the Centre of European Law and Politics of the University of Bremen (Germany), and Chair of Excellence at Oxford University.

Alexandros Seretakis

Trinity College Dublin, Ireland



Dr Alexandros Seretakis is an assistant professor of law at Trinity College Dublin, where he served as the founding Director of the MSc in Law and Finance programme. His research and teaching interests include financial regulation, fintech and its regulation, and alternative investment fund regulation. His research is regularly featured in global media, including the Financial Times and the Banker. He has been a research fellow at the NYU Pollack Center for Law and Business and the Institute of Advanced Legal Studies in London. He is also a guest lecturer at the Institute of Bankers in Ireland. Alexandros is a member of Blockchain Ireland Legal Working Group and an expert at the Digital Euro Association. He has studied in Greece, London (UCL), New York (NYU) and Luxembourg.

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Lionel Tan
Rajah & Tann Singapore LLP



Lionel Tan started out his career in law as a Deputy Public Prosecutor and concurrently held the appointment of Assistant Director of the Computer Information & Systems Department of the Attorney-General’s Chambers. Since joining private practice, he has been involved in various high profile commercial and criminal litigation cases and has advised clients on a wide spectrum of commercial and criminal matters. He has a keen interest in the field of Information Technology Law, with special emphasis on the developing area of litigation practice in the Information Technology arena. He has been involved in cases dealing with Internet defamation, Internet fraud, on-line security breaches, trade secrets and misappropriation of confidential information, telecommunication regulatory issues and software implementation and website development disputes. He advises and represents clients on intellectual property matters relating to trade mark and copyright infringements. He also advises and represents clients on IP matters relating to brand protection, licensing and franchising issues. He also advises clients on compliance measures in relation to the Personal Data Protection Act (PDPA) and is a member of the National Council of Social Services’ Workgroup for the PDPA. Lionel also advises and speaks regularly on the legal issues involving Social Media. Lionel is a Senior Accredited Specialist in Data & Digital Economy by the Singapore Academy of Law.

Umakanth Varottil
National University of Singapore



Umakanth Varottil is an Associate Professor at the Faculty of Law, National University of Singapore. He specializes in corporate law and governance, mergers and acquisitions and corporate finance. While his work is generally comparative in nature, his specific focus is on India and Singapore. He has co-authored or co-edited six books, published articles in international journals and founded the [IndiaCorpLaw Blog](#). He has also taught on a visiting basis at law schools in Australia, India, Italy, New Zealand and the United States. Umakanth is an editor of the *Oxford Business Law Blog*, *Indian Law Review*, *Asian Journal of Comparative Law* and *Singapore Journal of Legal Studies*. He is also a Research Member of the European Corporate Governance Institute. Prior to his foray into academia, Umakanth was a partner at a pre-eminent law firm in India. During that time, he was also ranked as a leading corporate/mergers & acquisitions lawyer in India by the Chambers Global Guide. He has obtained law degrees from the Faculty of Law, National University of Singapore (PhD), the New York University School of Law (LLM) and the National Law School of India University, Bangalore, India (BA, LLB (Hons)).

Ian Wong
Singapore Police Force



Ian Wong is currently the Deputy Director of the Commercial Affairs Department of the Singapore Police Force. He oversees the operations of the Suspicious Transaction Reporting Office, the Financial Intelligence Unit of Singapore. Prior to this, he was in charge of the Financial Investigation Group within the Commercial Affairs Department, which enforces the Anti-Money Laundering/Counter Financing of Terrorism regime in Singapore.

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Yeong Zee Kin

**Infocomm Media Development Authority/Personal Data Protection Commission/
Singapore Academy of Law**



Yeong Zee Kin is Assistant Chief Executive (Data Innovation and Protection Group) at Infocomm Media Development Authority (IMDA) where he oversees the AI and Data Industry development strategy in Singapore. He spearheaded the development of Singapore’s Model AI Governance Framework, which won the UN International Telecommunication Union (ITU) World Summit on the Information Society Prize in 2019. He is a member of the OECD Network of Experts on AI (ONE AI), and was a member of the AI Group of Experts at the OECD (AIGO) which developed the OECD Principles on AI. In his capacity as Deputy Commissioner of the Personal Data Protection Commission (PDPC), Zee Kin oversees the development, administration and enforcement of the Personal Data Protection Act 2012. He is currently participating as an expert in the Global Partnership on AI (GPAI)’s Data Governance Working Group, which addresses data protection issues at the intersection of AI development and deployment. Since April 2023, Zee Kin concurrently holds the appointment of Chief Executive at Singapore Academy of Law (SAL).

Loretta Yuen

Oversea-Chinese Banking Corporation Limited



Loretta Yuen was appointed General Counsel and Head of Group Legal and Compliance of Oversea-Chinese Banking Corporation Limited (OCBC Bank) in September 2010 and Executive Vice President in June 2015. She oversees the full spectrum of legal and regulatory risks, including anti-money laundering, across OCBC Bank and its subsidiaries, and provides advice on regulatory risks and legal issues involved in decisions to management, so that management can make informed strategic choices within an acceptable legal and regulatory risk profile. Loretta has over 20 years of legal and regulatory experience in banking and finance. She graduated with Second Class Honours in Law from the National University of Singapore and is an Institute of Banking and Finance Distinguished Fellow. In 2017, Loretta was conferred the Outstanding Singapore Chief Legal Officer Award by the Singapore Corporate Counsel Association.

BANKING, FINANCE AND TECHNOLOGY CONFERENCE
18-19 May 2023**ABSTRACTS****SESSION 1: CRYPTO-CURRENCIES/ASSETS*****A Framework for the Interoperability of CBDCs*****Kosmas Kaprinis (Binance/IE University, Spain)**

Central Bank Digital Currencies (CBDCs) interoperability refers to the ability of different national CBDC systems to seamlessly exchange value and information with each other. CBDC interoperability raises a host of questions about the legal and institutional framework of the various systems involved, as well as issues of technical standards and compatibility. An effective international CBDC regime will require close collaboration between regulators, policymakers, and industry stakeholders to develop effective solutions that support innovation while protecting the interests of consumers and ensuring privacy and data protection, while promoting the stability of the financial system. The presentation will propose a three-fold taxonomy of the key issues surrounding CBDC interoperability. First, it will explore the international political economy of CBDCs, presenting CBDC pilots as a policy tool of sovereign states in their efforts to exert international influence in the realm of digital finance. Second, it will describe the major institutional and operational issues, as these have been manifested over the recent CBDC pilots. These include common protocols, formats, and interfaces that would allow for the seamless communication between different CBDC systems. Thirdly, it will refer to the calibration of the new international CBDC regime with national regulatory frameworks. Indicatively, participating jurisdictions have different anti-money laundering (AML) and know-your-customer (KYC) requirements, which could make it difficult for CBDCs from other countries to comply with these regulations.

Insolvency of Crypto-Asset Service Providers: Legal Problems and Regulatory Responses**Ilya Kokorin (Leiden University, the Netherlands)**

Insolvencies of crypto firms are not new. Perhaps the most well-known example is the collapse of the Japanese crypto exchange Mt. Gox in 2014. While customers of Mt. Gox are still waiting to get compensation, crypto markets experienced a major downturn in 2022 (the “crypto winter”). Last year, we saw the collapses of some major market players, including Three Arrows Capital, Voyager, Celsius, FTX and BlockFi. These domino-like crashes highlight the interconnectedness of market participants (e.g. crypto lenders, crypto hedge funds, crypto exchanges), volatility of markets in crypto-assets, and importance of having effective regulation. Insolvency is the ultimate litmus test that tests the adequacy of regulation and application of various doctrines from different areas of law, including property, contract and financial law. It reveals complex legal problems, including the allocation of rights over deposited crypto-assets in the insolvency of a crypto-asset service provider (CASP). An answer to the question “Who owns what in insolvency, and how should a limited pool of assets be distributed?” may depend on organisational and technological means related to the administration of crypto-assets, applicable property law and contractual arrangements between CASPs and their customers. The recent wave of crypto insolvencies also demonstrated the inherent fragility of business models of some crypto firms. The question remains: what type of regulation is needed to promote legal certainty, facilitate innovation in the financial sector, protect crypto investors and ensure market integrity? This presentation analyses the collapses of CASPs, examines the likely causes of their demise, and explores legal problems accompanying crypto failures. It investigates whether the EU Regulation on Markets in Crypto-assets – a far-reaching supranational law, which aims to make the EU a global standard-setter and which harmonises the regulation of CASPs and crypto-asset services – can prevent or at least reduce the damaging effects of crypto insolvencies. It also makes a number of suggestions concerning potential regulatory gaps and future regulation.

The Nature of Property in Crypto-Assets**Timothy Chan (National University of Singapore)**

Questions about the proprietary nature of cryptoassets are of central relevance to crypto litigation and finance. While cryptoassets have generally been accepted to be property, that is merely the starting point. To properly resolve proprietary disputes or structure crypto-finance transactions, it is necessary to consider what rules of title determine which of the various parties has a superior right to a given asset. That requires answering two foundational questions. First, what is the subject-matter of the property right in cryptoassets? And second, what is the proprietary effect of a blockchain transaction? These issues have received relatively little attention in the literature, and existing contributions (including the Law Commission’s Consultation Paper on Digital Assets) which do engage these issues are far from reaching consensus. In this presentation, I critically examine existing views and propose a reasoned approach for the application of traditional rules of title to cryptoassets. I then explore the implications of these arguments with reference to recently decided cases in Singapore and England.

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The Regulation of Crypto-Lending

Alexandros Seretakis (Trinity College Dublin, Ireland)

The collapse of Genesis is the latest in a cascade of failures of crypto lenders. The last year has seen numerous major crypto lenders, such as Celsius, Voyager and BlockFi going out of business in domino-like fashion. The failures have revealed the vulnerabilities of crypto-markets lenders' business model, most notably the liquidity and maturity mismatches in their loan portfolios, and their markedly weak corporate governance. The presentation explores avenues to regulate crypto lending within the framework of financial services regulation. It argues that crypto lenders should be taken as falling within the definition of credit institutions. As a result, they should be subject to the stringent licensing and prudential requirements introduced by banking regulation.

Session 2: Technology and Regulation

Financial Regulation and the Advent of Digital Reporting: The End of Rule-Use as We Know It?

Andromachi Georgosouli (Queen Mary University of London, United Kingdom)

Reporting requirements increase transparency, promote market discipline and help financial regulators detect and respond to emerging risks. However, the existing reporting processes are complex, time consuming and expensive. These concerns have become powerful drivers of a series of Digital Regulatory Reporting (DRR) initiatives in the UK and abroad. DRR is a machine-readable and machine-executable system of automatic reporting, and it is a conspicuous case of innovation in the field of Regulatory Technology (Regtech). If fully developed and successfully implemented, it will enable the industry to interpret and implement reporting rules consistently via a common machine-readable code thanks to – inter alia – a standardised data model. In addition, it will improve regulatory effectiveness, as regulators will be able, for example, to 'pull' data themselves and in a timely fashion instead of requiring members of the industry to submit data, hence, obviating the need for extra oversight. The digitalisation of reporting requirements is currently at the stage of experimentation. Furthermore, there are plans to expand digitalisation beyond reporting. DRR enthusiasts claim that the digitalisation project will revolutionise how we use rules to regulate financial markets, while some of them go as far as to argue for a future of rule-use without humans, as everything – from the engineering of code-based micro-directives to the execution of those micro-directives for compliance purposes – will be machine-driven. In this presentation, I do not argue against digitalisation. Rather, my aim is to explain why DRR is unlikely to dramatically change the use of rules as we know it, and to offer a more balanced assessment of what DRR can actually do for us. To be sure, the years ahead need not be dystopian. However, we need to refrain from the naïve view that everything in the future will be problem-free, and that technology will take care of all our worries.

Responsible Use of AI in the Singapore Financial Sector

Xuchun Li (Monetary Authority of Singapore)

This presentation will include a discussion of the FEAT Principles released by the Monetary Authority of Singapore to promote fairness, ethics, accountability and transparency in the use of artificial intelligence and data analytics in finance. As businesses increasingly adopt technology tools and solutions to support business strategies and in risk management, these principles will provide guidance to firms offering financial products and services. Adoption of these principles will strengthen internal governance around data management and foster greater confidence and trust in the use of AI and data analytics.

Challenges Posed by the Second Generation of Digital Technologies to Financial Regulatory Strategies

Teresa Rodríguez de las Heras Ballell (University Carlos III of Madrid, Spain)

The financial sector, traditionally receptive and permeable to technological advances, is not oblivious to the extraordinary opportunities provided by the second generation of digital technologies (AI, platforms, DLT, big data, augmented and immersive reality, IoT). The increasing penetration of digital technologies in financial markets is evidenced by promising adoption rates among users, expanding presence of Fintech firms and Big Techs providing Techfin services, and the growing use of fintech solutions by incumbents. The increasingly popular term "fintech" captures the accelerated transformation of contemporary financial markets driven and enabled by technology, and encapsulates its multifarious potential impact on services, market structures, and business models. Fintech is not, indeed, a single, global phenomenon. It comprises a vast complexity of multifaceted, evolving groups of solutions, applications, and uses based on technology-intensive strategies. Consequently, the expansive use of digital technologies crosscuts the entire financial market and impacts the structure of the market, the market actors, the provision of services, the type of products, and the relationships with the clients and the supervising authorities. Such a transversality of fintech effects reveals the severity and the extent of the impact on financial regulatory strategies and supervision models. Based on a three-variable function to assess the adequacy of regulation and devise a fit-for-purpose regulatory response, a taxonomy of policy challenges is explored, and a multi-layered regulatory strategy is proposed accordingly in this presentation. Digital innovation (fintech) is stratified in three layers: the structure layer, the activity layer, and the players layer – each of which identifies and analyses the impact of digital innovation on a financial-market dimension. Thus, the presentation devises and develops a multi-layered regulatory response to face fintech challenges.

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A Multi-Layered Framework of AI Governance in China's Finance Sector Jinghe Fan (University of Oxford, United Kingdom)

AI is expanding in scale, scope, and complexity, resulting in a wider range of applications in financial services around the globe. Despite its potential for generating better insights about financial data and improving the efficiency of financial decision-making, AI may produce three levels of potential harms. Apart from individual harms like proprietary loss and misuse of personal information, the application of AI in financial services may also lead to group harms, such as discrimination and exclusion, and societal harms, such as systemic risks to financial stability. Three types of potential harms and the complexity of technology call for a shift of AI governance from an individual-led approach to a hybrid model that combines institutional accountability, individual rights, and public oversight. By examining recent practices of AI governance, it could be observed that this hybrid mode has already manifested in multiple legislations in China. As AI governance in China has gradually transformed from ethical principles to specific legislations, a multi-layered legal framework of AI governance has been established and implemented in the finance sector. This framework entails not only hard law like domain-specific AI rules, general AI rules, domain-specific non-AI rules, and general non-AI rules, but also a series of soft law measures like AI technology standards. After a holistic review, the presentation will outline glimmers and uncertainties that have been demonstrated through this multi-layered framework with regard to its effectiveness in redressing three types of potential harms. At the end, suggestions will be provided for improving the present legal framework of AI governance in the finance sector to achieve the objectives of agile governance and reconciling the promotion of innovation with the prevention of risks.

Session 3: Technology and Core Banking Services

Payment Fraud and Consumer Protection Sandra Booyesen (National University of Singapore)

Payment fraud can take different forms, ranging from forgery and unauthorised use of payment devices and access codes, to authorised payment scams which involve customers being tricked into making payments to fraudsters' accounts. Authorised payment scams have become particularly prevalent in the context of digital payments and are attracting considerable attention. Around the world, legislators, regulators, industry bodies and payment services providers are engaged at various levels in the battle to reduce the incidence and impact of the growing problem of authorised payment scams on both payment services users, and society more generally. After a brief overview on payment fraud generally, the presentation will focus on authorised payment scams, and examine the latest measures that have been introduced to tackle the problem, including: prevention, detection, freezing and return of funds, and compensation. There will be a particular focus on the role of the bank's duty of care in combatting such scams and the recent developments in the United Kingdom in the case of *Phillip v Barclays Bank*, which was argued before the Supreme Court in February 2023, and which decision is keenly anticipated.

At the Crossroads Where Robo-Advisers Stand Selwyn Lim (Syfe Group)

Robo-advisers were originally established to empower the individual retail investor and to provide investment options to them beyond conventional bank deposits, insurance policies, and self-selected stocks. It's been over five years since the first "traditional" robo-adviser in Singapore was established. Since then, there have been two significant trends driving investing amongst the retail public. First, a global pandemic which led to stimulus-fuelled day trading, a crypto-boom, and the rise of the retail investor. Second, the growth of financial commentary in social media (Reddit being the platform of choice) and emergence of the finfluencer (or financial influencer) which serve to educate retail investors on investments but are just as susceptible to serving as an echo chamber for financial panic and mayhem. As quickly as the first trend came, it also departed with the unexpected rise in inflation and response from global central banks to hike interest rates, thereby putting out much of the retail enthusiasm around investing. The second trend, though, remains. Robo-advisers do not exist in a vacuum. They arose to serve a perceived need of the retail investor for empowered investing, and so the state and regulation of the industry must continually evolve to keep pace with the context in which it exists. This paper explores the development of the robo-advisory industry hitherto, the regulatory regime that governs the industry, the crossroads where it now stands in the face of stagnant regulation in the context of the above trends, and posits the future of the industry having regard to the 12 or so robo-advisers in the Singapore market today and their plans for the future. How should regulation respond?

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AI in Credit Lending and Enforcement Decision-Making by Banks: Accuracy, Risk, Data and Consumer Protection Jeannie Paterson (University of Melbourne, Australia)

The growing capacity of data driven technologies such as AI, machine learning and large language models has led to interest in its capacity to transform the way in which traditional banking and financial services are provided. Governments have supported developments in financial AI to improve market competition and consumer wellbeing, including through initiatives such as open banking and digital sandboxes. Inside financial institutions, AI is being used in fraud detection, cybersecurity, marketing, and onboarding new clients. Banks and credit providers are also increasingly interested in using insights from data and predictive technologies to automate decisions about whether to lend to consumers and when to enforce their rights under credit contracts. These decisions need to be reliable, robust, and comply with the relevant statutory regimes governing the provision of credit services to consumers. There is also a commercial pressure to use insights from data to more accurately price credit, and, at times, a policy pressure to expand the social benefits of credit to otherwise financially excluded cohorts. Accommodating all of these considerations is not a straightforward task. The combination of data, machine learning and large language models can provide new insights, may make certain tasks more efficient, increase the consistency of decisions, and improve effective communication in lending and enforcement. However, concerns about the opacity, accuracy and possible biases in these techniques, along with the demands of data protection, mean that fully automated decision-making in these contexts is less straightforward than sometimes assumed. This presentation will explore these issues, and also engage with the ongoing debate about whether the deployment of AI in various industries requires new law or merely the adaption of existing regimes to account for the specific risks that arise from the use of AI and related emerging digital technologies.

Project POET – A Successful Partnership between Law Enforcement and Banks Loretta Yuen (Oversea-Chinese Banking Corporation Limited) Ian Wong (Singapore Police Force)

Project POET: Production Orders – Electronic Transmission is a public-private partnership which opened a new frontier for the law enforcement community in Singapore. POET leverages technology and process automation to facilitate the way data is retrieved and provided. Banking information that used to take between 10 to 90 days to be made available is now made available to investigators within one working day. This prompt exchange of banking information has improved the agility of law enforcement. Investigators can react faster to prevent the perpetuation of crime, improve crime detection and enhance solvability. With the improved speed of detection, potential victims are prevented from falling prey early and potential money is saved. POET has also significantly transformed the way data is managed to strengthen the surveillance and sense-making capabilities of the financial industry. POET also created the opportunity for banks to gather data from law enforcement agencies' requests, indicating that the bank customer is being investigated, which is a red-flag indicator for the bank. This information can now be easily ingested into the banks' surveillance systems and used for intelligence data mining and transactional link analysis to identify hidden relationships and/or clustering relationships that may pose money laundering risks to the bank. This is achieved by deploying advanced data analytics that can trawl the information residing with the bank. Combining this with graphing technology and connectivity analysis, big data can now be analysed in a more efficient way where clusters of related entities or transactions can now be detected better. It was the First Place Winner of the 2021 World Innovation, Technology and Services Alliance (WITSA) Global ICT Excellence Awards, under the Public/Private Partnership category.

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Session 4: TRADE FINANCE AND PANEL DISCUSSION

Trade Finance and Digitisation

Nathanael Lin and Lionel Tan (Rajah & Tann Singapore LLP)

Dora Neo (National University of Singapore)

2019 and 2020 saw a significant number of high-profile failures of commodity traders in Singapore, tainted by alleged fraud. The fallout in the local trade finance market has been swift and wide-ranging: a significant number of banks have withdrawn from the structured trade and/or commodity finance market; others have reduced exposure to smaller independent traders, i.e., the very segment of the market which needs the most liquidity; and most banks reverted to 'name lending', in some cases, ignoring the fundamentals of structured trade and transactional security. One of the transformative reactions to the above has been the move towards the digitalisation of the trade finance sector. This presentation will examine some of the latest developments in this area, their aims, as well as potential limitations:-

1. the amendments to the Electronic Transactions Act 2010 to adopt the UNCITRAL Model Law on Electronic Transferable Records, and to enable the creation and use of electronic Bills of Lading (amongst others);
2. the launch of the Singapore Trade Data Exchange (i.e., SGTraDex);
3. the launch of the Trade Finance Registry (i.e., TFR); and
4. legal and regulatory issues pertaining to blockchain technology that is the underlying technology that enables the tokenisation of trade finance documents.

Two of the presenters for this session are from Rajah & Tann Singapore LLP, counsel to SGTraDex and the Association of Banks in Singapore in relation to SGTraDex and the TFR.

Panel Discussion: Ask Us Anything

Lam Chee Kin, DBS Bank Ltd (Convenor and Moderator)

Loretta Yuen, OCBC Bank (Panellist)

Yeong Zee Kin, IMDA / PDPC / SAL (Panellist)

2023 has seen increased market volatility and velocity of change. Matters occupying minds of C-suite executives include topics such as geopolitics and bifurcation, the macro interest rate environment, ESG, use cases for blockchain technology, not to mention that we are now in the midst of an extended crypto winter with material insolvencies of crypto platforms as well as adjacent banks, spilling into the tech sector. In Singapore, the pivot to digitisation during the pandemic had also brought with it a parallel rise in digital scams. Emphasis on technology continues with the latest conversations surrounding governance of generative AI and large language models, the continued rise of regtech, and whether the metaverse was but a flash in the pan. Guided by our participants' interest, the panelists will identify the most current issues and legal challenges faced by the banking sector, and the steps taken within the industry.