

# FINTECH EXCHANGE

**IMF/World Bank Spring Meetings 2018**

April 19-20, 2018



**INNOVATION**



# FinTech Exchange: Beyond the Hype – A New Reality

- DATE** Thursday and Friday, April 19-20, 2018  
(within the IMF/World Bank Spring Meetings agenda)
- LOCATION** IMF Innovation Lab, HQ1-2-701 (2nd floor)
- OVERVIEW** This series is sponsored and organized by the IMF FinTech Working group and the Fund’s new Innovation Lab (iLab). The FinTech Exchange, under the theme of “Beyond the Hype – A New Reality,” will focus on real-life applications, challenges and opportunities of new financial technologies. These will be explored in a series of exchange workshops with specific topics (see list of topics on next page). The workshops will encourage informal and open discussion in a small group setting (max. 50 attendees) between FinTech experts, industry practitioners, authorities, IMF staff and attendees and delegates at the Spring Meetings.
- OBJECTIVE** Offer Spring Meetings attendees an opportunity to interact firsthand with fintech practitioners and experts, sharing perspectives and experiences.
- FORMAT** A series of 45-minute interactive sessions led by 2-3 subject matter experts plus a moderator to promote informal discussion, sharing of experience, and potential collaboration among small groups. A networking event will be held at the end of the first day (Thursday) to highlight key discussion points and provide an opportunity for further conversation.

# FinTech Exchange Sessions

#	Day	Time	Topic
1	Thur, April 19	9:45am - 10:30am	Distributed Ledger Technology (DLT), Cross Border Payments, and Financial Inclusion
2	Thur, April 19	11:00am - 11:45am	Blockchain: Successful Applications and New Opportunities
3	Thur, April 19	1:30pm - 2:15pm	Digital Identities and Know Your Customer (KYC) Utilities
4	Thur, April 19	2:45pm - 3:30pm	Cryptocurrencies: Opportunities, Risks and Regulation
	Thur, April 19	3:30pm – 5:30pm	<b>NETWORKING RECEPTION</b>
5	Fri, April 20	10:00am - 10:45am	RegTech and Suptech: The Future of Compliance
6	Fri, April 20	11:15am - 12:00pm	Initial Coin Offerings (ICOs): The Good, The Bad, and The Ugly
7	Fri, April 20	1:30pm - 2:15pm	Smart Contracts: Are They Really Contracts and Are They Really Smart?
8	Fri, April 20	2:45pm - 3:30pm	TechFin: The Expansion of the Technology Firms into the Financial Sector



# Distributed Ledger Technology (DLT), Cross Border Payments and Financial Inclusion

**Date & Time:** Thursday, April 19, 2018  
9:45am – 10:30am

**Description:** This session will examine recent advances in DLT-led technologies and its impact on finance, and specifically on cross-border payments and fostering financial inclusion.

**Session Summary:** Mr. Herve Tourpe, ITD Unit Chief for IT Strategy and Technology Innovation, moderated a session on how DLT truly enables cross border payment. Panel members were Mr. Ryan Zagone (Ripple) and Mr. Jeremy Allaire (Circle). Both participants explained how DLT is already allowing financial institutions to make much more efficient fiat currencies cross-border payments (Ripple), and how it enables global peer-to-peer payment (Circle).

The panelists explained that despite the hype blockchain technology truly holds transformative potential and their success hinges on initially having very specialized applications. Mr. Zagone compared this blockchain expansion period to the Model T, which was then becoming a mature technology, but truly became transformational when more specialized versions were created. Likewise, more specialized and impactful DLT applications are expected to appear in the next 18 months. Targeted use cases of crypto assets, he added, such as enabling liquidity between any fiat pair for faster and cheaper cross-border payments, are already in production.

Mr. Allaire illustrated another case, where DLT enables an open record keeping system to flourish which has potential to transform the way contracts are operationalized. He believed that the public blockchain infrastructure could be the next major infrastructure worldwide, second only to the TCP/IP protocol which drives the internet. For example, a land owner could tokenize part of their property, or any other assets, to attract financial loans from international investors at low cost without traditional intermediaries. This could greatly benefit financial inclusion, as property assets can become globally accessible equities. Such scenarios, he added, would necessitate public investments to create an open and fair platform for value exchange, just like the internet is a platform for information exchange which benefited from public investment.

Both concluded that truly open and interoperable DLT platforms will enable billion of people, most importantly unbanked, to be included in a global financial ecosystem.

## MODERATOR



### Herve Tourpe, Chief Enterprise Architect, International Monetary Fund

Herve has been working at the IMF for 17 years. As Chief Enterprise Architect, he leads efforts on IT strategy, business-led architecture and technology innovation. Appreciated for his creativity and contagious enthusiasm, Herve studies and evangelizes emerging technologies, including Blockchain, AI, IoT and Augmented Reality.

## PANELISTS



### Ryan Zagone, Director of Regulatory Relations, Ripple

Ryan Zagone is the director of regulatory relations at Ripple, a payment technology company named one of the “50 Smartest Companies” by MIT and the recipient of the World Economic Forum’s Technology Pioneer Award. Zagone manages Ripple’s relationships with more than 30 central banks and regulators. Zagone is a delegate to the IMF’s High Level Advisory Group on Fintech. He also serves on the advisory board of the United Nations’ Better Than Cash Alliance—an effort to accelerate financial inclusion through electronic payments. Zagone served on the Steering Committee of the Federal Reserve’s Faster Payments initiative. Previously, he focused on product strategy at Deloitte and regulatory policy at the American Bankers Association. Zagone holds a degree in economics and lives in New York.



### Jeremy Allaire, Founder and CEO, Circle Internet Financial

Jeremy Allaire is an internet entrepreneur who has spent the past 20 years building and leading global technology companies with products used by hundreds of millions of consumers and millions of businesses worldwide. First company, Allaire Corp, pioneered the Web application development platform and grew to become a profitable \$120 million in revenue, NASDAQ-traded public company; was later acquired by Macromedia, served as CTO and helped transform Flash into a platform for rich applications and video that became the most widely adopted piece of software in the history of computing. Then founded Brightcove, the first Internet video publishing platform for websites, smartphones, tablets and connected-TVs. The company grew to become a profitable \$120 million in revenue, NASDAQ-traded public company with customers including media companies and marketers in more than 100 countries; Brightcove powers video operations for 25 percent of the top 10,000 websites in the world. Currently, Founder and Chief Executive Officer, Circle, a consumer finance company focused on transforming the world economy with secure, simple, and less costly technology for storing and using money.



# Blockchain: Successful Applications and New Opportunities

**Date & Time:** Thursday, April 19, 2018  
11:00am – 11:45am

**Description:** The benefits of the blockchain technology have been harnessed for the development of applications cutting across a variety of use case. Countries around the world are looking to blockchain to increase efficiency in payment settlements, provide more transparent record keeping and identification solutions, and improve public financial management. These applications have become particularly important for developing economies in supporting their efforts to expand financial inclusion and promote private sector development in a cost-efficient and transparent manner. This session will analyze the potential of blockchain enabled solutions to tackle country-specific needs, discuss challenges related to their adoption, and evaluate strengths and weaknesses of existing applications.

**Session Summary:** Ms. Stela Mocan, Lead Technology & Innovation, ITS/WBG, moderated a session on Blockchain: Successful applications and new opportunities. Panel members were Mrs. Jane Thomason (Abt Associates Digital Transformation) and Ms. Mercina Tillemann (Global Business Council on Blockchain). Both participants spoke about the main benefits of DLT-enabled applications in the areas of financial inclusion, land administration, agriculture and health supply chain, access to finance for SMEs, transparency and fighting corruption. Both panelists emphasized the opportunities offered by DLT-enabled applications in solving identity related issues, especially for refugees and women, thus facilitating access to finance and economic opportunities.

The panelists touched upon current challenges, which might slow down the exploration and adoption of DLT-enabled applications. Specifically, lack of sufficient awareness and education among key stakeholders in the public and private sectors; insufficient digital skills base in developing countries/emerging economies to adopt new technologies; technological challenges; policy and regulatory constraints and unknowns. The multilateral organizations along with private and public sector, can play crucial roles in facilitating the partnerships around learning, capacity building, experimentation and creation of enabling ecosystem to support innovation and harness the benefits of DLTs, while addressing and managing the risks associated with DLT applications. Also, the role of governments, private sector, startups and multilaterals is important in defining sustainable and effective models for scaling the

adoption of DLT and other transformative technologies to speed up inclusive development.

## MODERATOR



### Stela Mocan, Manager, Technology & Innovation, WBG CIO Office

Stela Mocan is leading the Blockchain Lab Initiative with the World Bank Group CIO office. In 2010, Stela was appointed by the Government of Moldova as the first Government Chief Information Officer, leading the digital transformation of government operations and public service delivery. During 2009-2010, she served as Moldova Prime Minister's advisor on governance and public administration reform. Previously, Stela led and managed governance and democracy building programs with UNDP, USAID, World Bank, international NGOs. Stela holds a masters degree from the Harvard Kennedy School of Government, and a Masters in Political Sciences from the National School of Political and Administrative Studies. In March 2015, Stela was designated as a Young Global Leader with the World Economic Forum.

## PANELISTS



### Mercina Tillemann-Dick, Chief Operating Officer, Global Blockchain Business Council (GBBC)

Mercina serves as Chief Operating Officer at the Global Blockchain Business Council (GBBC). Experienced in strategic planning and consulting, she has spent her career translating complex ideas for broad audiences in the public and private sectors. Mercina has advised state and national governments and fortune 100 companies on issues surrounding technology and public health. She has a degree in Bioethics, Political Science and Law from Yale University and speaks regularly around the world.



### Jane Thomason, Head of Abt Associates Digital Transformation

Jane Thomason leads Abt Associates digital transformation work globally. Abt Associates is a global leader in research, evaluation and program implementation in the fields of health, social and environmental policy, and international development. Jane is an advocate for using blockchain technology for social good, with a focus on the bottom billion. She has published peer reviewed articles on blockchain and climate finance and the poor and on blockchain as an accelerator for women's and children's health. She is an adviser to several blockchain startups with applications that solve global problems, and is working on blockchain Proofs of Concept in emerging markets. She is an advocate for the education and empowerment of women, #womeninblockchain and #DecadeOfWomen. She is a Global Ambassador for the British Blockchain Association and sits on their Advisory Board and Editorial Committee.



# Digital Identities and Know Your Customer (KYC) Utilities

**Date & Time:** Thursday, April 19, 2018  
1:30pm – 2:15pm

**Description:** Compliance with customer due diligence (CDD) requirements is key to safeguarding the integrity of the financial system. But it requires time and resources, as well as reliable proof of identity. As a result, it is often complex and costly. Developments in digital identity and identity verification provide great opportunities to facilitate and expedite that process. Similarly, the development of Know-Your-Customer (KYC) Utilities, such as those that aim at storing CDD information in a single repository accessible by different banks, facilitate that process further, and reduce its costs. This session will provide some examples of national digital identify programs and KYC utilities. It will discuss the benefits of these developments, in particular in the mitigation of the risks typically associated with non-face-to-face business relationships. It will also discuss their implications for policy makers and regulators.

**Session Summary:** Simonetta Nardin (Chief of Media Relations, IMF) moderated a panel on “Digital Identities and Know Your Customer (KYC) Utilities” which comprised Niall Dennehy, co-founder of AID:Tech (a private sector firm providing social and financial inclusion to underserved populations using the blockchain technology), and Bryn Robinson-Morgan, chief Product Officer at the UK Post Office (Identity Services). Ms. Nardin highlighted from the outset that, regardless of their respective level of economic development, countries across the Fund’s membership are looking at the potential benefits that technology may offer, and their potential downsides, for example in terms of privacy.

The panel discussed various ways of issuing digital ID. Mr. Robinson-Morgan presented the UK’s GOV.UK Verify scheme, through which online IDs may be used to access governmental services (such as filing a tax return online). These online IDs are provided by seven private sector entities, including the Post Office. While they have some flexibility with respect to the underlying documentation and evidence that they require prior to issuing the online ID, all seven certified identify providers must adhere to a set of standards that notably require sufficient breadth and depth of underlying documentation. In the case of the AID:tech, Mr. Dennehy clarified that they rely on third parties, such as the International Red Cross, to issue

the identification documentation, which is then used to provide access to benefits (e.g., welfare, donations) using a permissioned system on the blockchain.

Discussions also revolved around the need to ensure that the digital ID information is secure. Mr. Robinson-Morgan indicated that privacy and security concerns were notably what drove the UK to renounce the idea of a single database and single issuing authority, and to opt instead for several certified private sector identity providers that the users can choose from. The users remain in control of their information and all seven providers are prohibited from sharing that information without the user's explicit consent.

## MODERATOR



### **Simonetta Nardin, Chief of Media Relations, International Monetary Fund**

Simonetta Nardin has been Chief of Media Relations at the International Monetary Fund since 2014. She joined the Fund in 1997, working in media relations and as civil society liaison officer. Before that, she worked as a press officer for UNICEF's West Africa Office in Abidjan, and as a journalist with Reuters in her native Italy. She holds a BA in Political Science from the University of Milan and a MA in International Journalism from City University, London.

## PANELISTS



### **Niall Dennehy, Co-Founder & Chief Operations Officer, AID:Tech**

Niall is the Co-Founder and Chief Operations Officer of AID:Tech. AID:Tech's mission is to bring social and financial inclusion to the world's undocumented and underserved populations using digital identity based on blockchain technology. AID:Tech was the first company in the world to deliver humanitarian aid using blockchain technology in a completely transparent manner. In 2017, AID:Tech won the Citi Tech4Integrity Challenge, and were awarded the 'James Wolfensohn Global Game Changer using technology to fight corruption' prize by Madame Christine Lagarde at the IMF HQ in Washington D.C. AID:Tech are also the current winners of IBM's number 1 global startup award. Prior to his work in AID:Tech, Niall founded a number of other companies and held senior technology positions in organizations like HP, Ericsson, LG & Houghton Mifflin Harcourt.



### **Bryn Robinson-Morgan, Chief Product Officer—Identity Services, Post Office**

"I've worked at the forefront of digital transformation and innovation for the last 15 years. I'm a key influencer for how people transact and interact with other people, organisations and connected things through the launch of digital identity services with two of the UK's leading brands. I publish my thoughts extensively, sharing my experiences and the lessons learnt. I love to debate new ideas, and ways of thinking about problems to be solved."



# Cryptocurrencies: Opportunities, Risks and Regulation

**Date & Time:** Thursday, April 19, 2018  
2:45pm – 3:30pm

**Description:** Private cryptocurrencies are digital representations of value issued by private developers and denominated in their own unit of account. Cryptocurrency exchanges operate as “gatekeepers” that serve as a bridge between cryptocurrency schemes and the broader economy. Would the proliferation of cryptocurrencies and growth in their market capitalization pose material risks to financial systems? What is the prospect for cryptocurrencies to play fuller functions of money? How should central banks and regulators respond to potential opportunities and challenges arising from cryptocurrencies? Should central banks consider issuing their own digital currencies? What are the implications for the conduct of monetary policy and financial stability?

**Session Summary:** MCM Deputy Director Dong He moderated the "Cryptocurrencies: Opportunities, Risks and Regulation" panel, comprised of Carolyn Wilkins (Bank of Canada), Valerie Szczepanik (U.S. Securities and Exchange Commission) and Lawrence Wintermeyer (Capstone Management). Discussions revolved mainly around calibrating crypto-asset regulatory approaches.

Ms. Wilkins set the tone by framing the role of regulation as promoting innovation, but providing “guard rails” focusing on consumer protection and market integrity. Mr. Wintermeyer pointed out that there was still a lack of clarity around digital asset taxonomies which may be hindering the regulatory formulation process. Ms. Szczepanik provided the view from the regulatory “trenches” where the SEC has been dealing with a flood of crypto-asset and exchange registration requests, and are seeing lots of fraud and misinformation around the fast-growing and opaque initial coin offerings market.

All agreed that international coordination of the regulatory process was imperative, Mr. Wintermeyer pointing out that, for example, a U.S.-only framework will be “walked around”. While most of the focus was on retail applications, Ms. Wilkins pointed out that whether or not retail cryptocurrencies have a long-term future, wholesale digital tokens “are not hype” with several central banks looking seriously at their use in payment and settlement systems. Cryptocurrencies are also the

backbone of several correspondent bank competitors in the cross-border money transfer space. Ultimately, all agreed that it is important that these new markets not be judged too quickly.

## MODERATOR



### Dong He, Deputy Director—Monetary and Capital Markets (MCM), International Monetary Fund

Dong He is Deputy Director of the Monetary and Capital Markets Department (MCM) of the International Monetary Fund. As a member of the MCM's senior management team, he is responsible for providing leadership for MCM's work on central banking, fintech, and global financial stability analysis (including the production of the Global Financial Stability Report); and for assisting the Director in the management and supervision of the work of the department.

Prior to joining the IMF in October 2014, Dong He was Executive Director at the Hong Kong Monetary Authority, responsible for managing the Research Department and for directing research and policy advice on issues relating to the maintenance of monetary and financial stability and the development of financial markets. He was also Director of the Hong Kong Institute for Monetary Research, responsible for leading the Institute's research activities. He joined the World Bank through the Young Professionals Program in 1993 and was a staff member of the IMF during 1998-2004.

Dong He holds a doctorate in economics from the University of Cambridge. He has published extensively on monetary policy and financial market issues.

## PANELISTS



### Lawrence Wintermeyer, Principal, Capstone

Lawrence Wintermeyer is a globally recognized digital financial advocate, advisor, and investment manager. Based in London, he is the principal of Capstone, an advisory and investment firm focused on digital disruption in business, consumer and government sectors, in a career spanning more than 25 years in financial services, TMT, and energy.

He is the former CEO of Innovation Finance, the independent not-for-profit fintech members association, which supported the UK ecosystem into developing into the premier fintech hub in the world.

Lawrence has worked in the venture capital, private equity and institutional markets and has experience owning, running and advising investment managers and technology start-ups. He sits on a number of commercial, charity, and NGO boards, panels and working groups, often in a pro bono capacity, to promote progressive policies for a transparent, secure and quality digital future for everyone.

### Valerie Szczepanik, Assistant Director, U.S. Securities and Exchange Commission

Valerie A. Szczepanik is an Assistant Director in the Asset Management Unit of the Division of Enforcement at the U.S. Securities and Exchange Commission (SEC). Prior to that, she was a Senior Trial Counsel at the SEC, responsible for litigating civil court actions and administrative proceedings, including the Galleon and certain expert network insider trading cases. She also served as a Special Assistant United States Attorney at the United States Attorney's Office for the Eastern District of New York. Ms. Szczepanik clerked for federal judges on the United States District Court for the District of Columbia and the United States Court of Appeals for the Federal Circuit. Prior to clerking, she practiced patent law. Ms. Szczepanik received her JD from Georgetown University and her Bachelor of Science degree in Engineering from the University of Pennsylvania.



### Carolyn A. Wilkins, Senior Deputy Governor, Bank of Canada

Carolyn A. Wilkins oversees the Bank's strategic planning and economic and financial research, and shares responsibility for the conduct of monetary policy as a member of the Bank's Governing Council. She is also a member of the Bank's Board of Directors. Ms. Wilkins represents the Bank of Canada on the Financial Stability Board (FSB) Plenary and is a member of the FSB's Standing Committee on Assessment of Vulnerabilities. She was elected Chair of the FSB's Regional Consultative Group for the Americas for a two-year term, effective 1 July 2015. She previously represented Canada on the Basel Committee on Banking Supervision (BCBS) and chaired the BCBS Working Group on Liquidity.

Prior to her appointment, Ms. Wilkins was Advisor to the Governor, with a focus on the Canadian economy, its interaction with the financial system, and monetary policy. She also served as Secretary to Governing Council. From 2011 until 2013, Ms. Wilkins was Chief of the Bank's Financial Stability Department. In this role, she led the Bank's analysis and research on issues related to the financial sector in Canada and abroad, the assessment of risks to financial system stability, and the oversight of systemically important payment, clearing and settlement systems under the Payment, Clearing and Settlement Act.

Ms. Wilkins has held a broad range of senior analytical roles at the Department of Finance Canada and the Privy Council Office. Since joining the Bank in 2001, she has occupied increasingly senior positions, first in the monetary and financial modelling division of the former Monetary and Financial Analysis Department, and subsequently as Deputy Chief of the Financial Markets Department. From October 2010 until November 2011, Ms. Wilkins was on assignment as Special Director on the OTC Derivatives Market Task Force. She also chaired the inter-agency working group coordinating implementation of the G-20's commitments related to over-the-counter derivatives.

Ms. Wilkins was born in Peterborough, Ontario. She holds an Honours BA in Economics from Wilfrid Laurier University and an MA in Economics from the University of Western Ontario. In 2016, she was named by Women's Executive Network as a Canada's Most Powerful Women: Top 100 Award Winner.



# RegTech and Suptech: The Future of Compliance

**Date & Time:** Friday, April 20, 2018  
10:00am – 10:45am

**Description:** Innovations in FinTech are rapidly changing global financial system not only from the consumer perspective, but also in ways that hidden from view. New approaches using technological innovations are now used by financial sector industry to ensure compliance with regulatory requirements to reduce costs of regulatory compliance and risk management.

*RegTech* refers to the use of technologies to solve regulatory and compliance requirements more effectively and efficiently. RegTech areas include compliance, identity management and control, risk management, regulatory reporting, transaction monitoring, and trading in financial markets.

RegTech does not stop with financial institutions: the use of technologies by supervisors (*SupTech*) is starting to tackle challenges faces by supervisory agencies, including automating and streamlining administrative and operational procedures, as well as improving data collection and analysis. SupTech can move supervision to a new era by switching to real-time supervision, exceptions-based supervision, automated implementation of supervisory measures, algorithmic supervision and regulation in relevant areas, and predictive supervision using artificial intelligence and machine learning. In addition, SupTech can transform the regulatory process.

This session focuses on the future areas and challenges of RegTech and Suptech in the fast-changing technological environment. The areas include data monitoring and analysis, ways to handle innovations without compromising mandate of regulators and supervisors, automatization of elements of compliance and reporting, challenges arising from using artificial intelligence (AI) machine learning for AML/CFT regulations, and potential use of RegTech solutions to address macrofinancial risks.

**Session Summary:** Ms. Melissa Koide, founder and CEO of FinRegLab, moderated a session on what lies in the future of compliance utilizing RegTech (use of technologies to solve regulatory and compliance requirements more efficiently) and SupTech (the use of technologies by supervisors). Panel members were Mr. Brad Carr (Senior Director of Digital Finance Regulation and Policy, IIF), Mr. Michael Gronager (CEO and co-founder, Chainalysis), and Mr. Sopnendu Mohanty (Chief FinTech Officer, MAS).

Mr. Carr explained what are the challenges in adopting RegTech, including explainability of models, level of support from supervisors, data, and people, as technology is evolving faster than people are adapting. One new area of RegTech is called now RiskTech, where artificial intelligence (AI) and machine learning (ML) are used for improving risk management practices, including using risk management proactively. All these challenges include changing culture in organizations, making it more data driven, rather than activity driven. Adopting new technologies is not about reducing the number of staff, it is about improving people skills. Mr. Gronager presented a new approach to compliance for crypto assets. Chainalysis developed a tool for tracing crypto assets, and now has the “yellow pages” for financial institutions with information about clients, and the “white pages” for law enforcement agencies to trace and follow the money.

Mr. Mohanty explained how the MAS is dealing with RegTech solutions since 2016. Singapore government created a public utility “my info,” which contains data for individuals, which banks can use for customers the identity for new accounts and other operations. The issue with the data is the trust. Banks in Singapore now do not need to verify identities, as they trust “my info.” For corporate identities, there is information sharing among banks. The next step for the MAS is accessing cross-border data. The bottom line of the session is that the first step should be to put and structure the data in the right way, with financial institutions creating open API, so that supervisors could access metadata through machines and then analyze the data in various ways. This would save cost of compliance for both sides and avoid many reporting forms.

## MODERATOR



### Melissa Koide, CEO and founder, FinRegLab

Melissa Koide is the founder and CEO of FinRegLab, a new independent research organization that leverages technology solutions to achieve public policy aspirations, address regulatory requirements, and drive the financial sector towards an efficient and inclusive financial marketplace. FinRegLab provides an independent laboratory for policymakers and regulators, technology and financial sector innovators, and consumer advocates to gain an evidence-based understanding of new financial technologies and their impact on consumers and their implications for public policy.

## PANELISTS



### Sopnendu Mohanty, Chief FinTech Officer, Monetary Authority of Singapore

Mr. Sopnendu Mohanty is responsible for creating development strategies and regulatory policies around technology innovation to “better manage risks, enhance efficiency and strengthen competitiveness in the financial sector.” Prior to joining MAS, Mohanty was with Citibank as their Global Head of the Consumer Lab Network and Programs, which included driving innovation programs and managing innovation labs across multiple geographies globally.

Mohanty has spent 20 years in the APAC region and held various roles in technology, finance, productivity, and business development. He was in the list of Fintech’s Most Powerful Dealmakers of 2016 by Institutional Investor.



### Brad Carr, Senior Director of Digital Finance Regulation and Policy, Institute of International Finance (IIF)

Brad Carr is the Senior Director of Digital Finance Regulation and Policy at the Institute of International Finance (IIF). He previously led the IIF's analysis on Basel III and review of banks' credit risk modelling practices, and worked at National Australia Bank for 15 years in credit, portfolio management and with institutional clients. He has a Bachelor of Economics from the University of Western Australia and a Masters in Science & Technology Commercialization from the University of Adelaide.



### Michael Gronager, CEO and co-founder, Chainalysis

Michael Gronager is CEO and co-founder of Chainalysis, the world's leading source of intelligence on digital assets. Prior to this he was the COO and co-founder of Kraken, one of the world's largest crypto-exchanges. Before being bit by the crypto bug in 2011, Michael created and managed huge internationally distributed computing infrastructures. Michael is on the Board of the Swedish National Supercomputer Center, as well as the Working Group preparing the 5th European AML Directive.



# Initial Coin Offerings (ICOs): The Good, The Bad, and The Ugly

**Date & Time:** Friday, April 20, 2018  
11:15am – 12:00pm

**Description:** ICOs are a mechanism to raise funds by selling tokens or coins in exchange for financial resources to support the launch of a project or a new virtual currency. Since 2013, their use has shot up. According to some estimates, some 2.5 billion were raised through ICOs in 2017 alone. While many ICOs are legitimate, some have been used as fronts for fraud – this has notably led some countries to ban tokens altogether. In other countries, ICOs have been issued without consideration of existing regulation e.g., for securities or crowdfunding. In most instances, ICOs raise particular challenges for regulators because they don't play by the traditional rules – the legal classification of a coin or token may depend on the facts and circumstances, including the economic realities of the transaction. As a result, different rules may apply. This session will discuss some countries' experience with ICOs and the applicable regulation.

**Session Summary:** Andi Dervishi (Global Head Fintech Investment groups, at the International Finance Corporation) moderated a panel on “Initial Coin Offerings (ICOs): the Good, the Bad, and the Ugly” which comprised Marco Santori (President and Chief Legal Officer of Blockchain.com), Jill Carlson (Independent Consultant, Juno LLC), and Domitille Dessertine (Policy Officer, Fintech Innovation & Competitiveness, Autorité des Marchés Financiers, France). The panelists discussed the nature and characteristics of ICOs, and whether ICOs can be equated to money. All agreed that the legal nature and definition of ICO vary greatly depending on the circumstances.

Domitille Dessertine indicated that most of the tokens proposed in France are hybrid, in the sense that they may fall in one or more categories of regulated financial instruments. Marco Santori, who co-authored the SAFT proposal for self-regulatory effort of ICOs, posited that only pre-functional tokens sales to the public are ICOs – and all agreed that the distinction between the pre-functional and functional tokens may not be easy in practice. He also called on regulators to take the time to learn from the practice and consider all options before preparing regulations. Domitille Dessertine highlighted that a recent consultation of the industry in France suggested that, on the contrary, the industry is eager for immediate regulatory clarity, and that, for this reason, the French government is currently working on a new regulatory framework for ICOs that should be finalized within the coming year. The intention is to allow for a flexible approach, and to adopt a framework for the primary market and another for security platforms. Some

questioned whether the challenges and questions that ICOs raise ultimately outweighed the benefits, and the panelists agreed that, despite the challenges, ICOs remain a useful – and some say necessary – form of fund raising mechanism.

## MODERATOR



### Andi Dervishi, Global Head FinTech Investment Group, International Finance Corporation

Andi Dervishi leads IFC's FinTech investment group. An entrepreneur at heart, he loves helping managements build companies as an equity investor. Mr Dervishi started investing in his native country, Albania, in financial services, real estate, retail and manufacturing. While with IFC he has been investing around the world in over 20 countries. For the past ten years he and his team have focused exclusively on FinTech, helping IFC build the largest such dedicated portfolio in emerging markets. Mr. Dervishi is an ardent student of money and takes long-term views on the future of financial infrastructure, retail banking, lending and ultimately money itself. He has a BS summa cum laude in English from the University of Tirana and an MBA from Emory University in the US.

## PANELISTS



### Marco Santori, President and Chief Legal Officer, Blockchain.com

Marco is the President and Chief Legal Officer of Blockchain.com, which is the world's largest cryptocurrency wallet software developer. Known as the "Dean of Digital Currency Lawyers," Marco is a recognized authority in the law and policy of blockchain technologies. Prior to his move to Blockchain.com, as the leader of the Fintech team at Cooley, he counseled banks, broker-dealers, exchanges, wallets, payment providers, and other companies making new and exciting uses of distributed ledger technology. As a Partner at Cooley and at Pillsbury Winthrop prior to that, Marco counseled his clients primarily on the money transmission and securities laws, including anti-money laundering regulations.

Marco is an author of the SAFT Project Whitepaper, responsible for the first self-regulatory effort for token sales (also known colloquially as ICOs). He is an advisor to the International Monetary Fund, the Blockchain Ambassador to the State of Delaware, and was the Chairman of the Regulatory Affairs Committee of the Bitcoin Foundation. He has also been profiled by the Bloomberg, the Wall Street Journal, Forbes, Washington Post, The New Yorker, Wired, Entrepreneur.com and Crain's New York Business.



### Jill Carlson, Independent Consultant, Juno LLC

Jill Carlson is currently an Independent Consultant with Juno LLC, where she is an advisor to cryptocurrency and blockchain-based ventures. Previously, she served as the Head of Market Strategy at Chain, a blockchain technology company based in San Francisco. Chain powers next-generation financial networks for companies including Visa and Nasdaq. Prior to joining Chain, she conducted research at Cambridge University on cryptocurrencies and distributed ledger technology. Carlson began her career as a credit trader at Goldman Sachs, where she later worked in research. She holds a BA from Harvard and a MSc from Oxford.



**Domitille Dessertine, Policy Officer, Fintech Innovation & Competitiveness, Autorité des marchés financiers (AMF)**

Domitille Dessertine started her career in the field of financial market regulation at the International Organization of Securities Commissions in 2010. She was involved in the negotiations on asset management related issues and in particular on the Money Market Funds Reform. In 2013, she joined the asset management regulation division at the French Autorité des Marchés Financiers (AMF) where she was actively involved in negotiations on asset management topics both at the European and international levels. In 2016, she joined the Fintech Innovation and Competitiveness team, responsible for supporting innovative companies and reflecting the need to change the regulatory framework. As such, she is particularly involved in the discussions around the regulation of crypto-assets environment. She graduated from Sciences Po Paris and is finalizing a PhD in finance at the Sorbonne University.



# Smart Contracts: Are They Really Contracts and Are They Really Smart?

**Date & Time:** Friday, April 20, 2018  
1:30pm – 2:15pm

**Description:** The emergence of the blockchain technology, the development and use of so-called smart contracts have grown exponentially. Simply put, a smart contract is a computer code that has the ability to transfer assets upon the occurrence of one or more triggering event determined by the parties. The self-executing nature of the smart contract may in theory remove certain risks, such as those resulting from human errors. But the automation in smart contracts may also have downsides, for example in instances where the necessary funds are lacking. Today, smart contracts are used in initial token sales, when new blockchain tokens are launched, and other areas such as supply chain activities. This session will discuss the main characteristics of smart contracts, their potential areas of use, and some of their legal implications.

**Session Summary:** Ross Leckow, Deputy General Counsel, IMF, moderated a panel on “Smart Contracts: Are They Really Contracts and Are They Really Smart?” comprised of Caitlin Long, Founder and President of Symbiont, Houman Shadab, Law Professor, New York Law School, and Patrick Murck, Special Counsel at Cooley LLP, Harvard University. The discussion first clarified the definition of “smart contracts.” The panelists commented on the importance of differentiating between “smart contracts” as a technology and legal contracts. It was noted that while the computer protocol powering smart contracts can serve as a useful tool in facilitating contracts administration, they do not replace legal agreements. The panel further discussed the advantages of automatization of the processes offered by “smart contracts” against risks inherent in the use of technology, including cyber risks and risks from creating/spreading bad processes. The session concluded noting that “smart contracts” technology is yet at the early stage of development and its adoption for broader use would benefit from the ability to achieve sufficient level of standardization and mitigation of related risks.

## MODERATOR



### Ross Leckow, Deputy General Counsel, International Monetary Fund

Ross Leckow is Deputy General Counsel in the Legal Department of the International Monetary Fund. Originally from Canada, Mr. Leckow joined the IMF's Legal Department in 1990. As an IMF lawyer, he has advised on all aspects of the IMF's operations, including the governance of the IMF, its surveillance over member countries' economies, and its financial and technical assistance to IMF members.

Mr. Leckow currently leads the Legal Department's efforts to help member countries strengthen their legal frameworks for the regulation of the financial sector, to contribute to the development of international standards for financial regulation, and to study the impact of technological change on the financial sector. He is a co-author of the IMF's papers on Fintech and Financial Services: Initial Considerations (2017), and Virtual Currencies and Beyond: Initial Considerations (2016). He is also the author of "Virtual Currencies – the Regulatory Challenges" published by the European Central Bank in ESCB Legal Conference 2016.

Before joining the Fund, Mr. Leckow practiced law in the private and public sectors in Canada. He lectures frequently in the United States and abroad on the law of the IMF and other issues of international financial law.

## PANELISTS



### Caitlin Long, Founder & President, Symbiont

Caitlin Long is a 22-year Wall Street veteran who has been active in bitcoin since 2012. She helped drive Wyoming's trail-blazing blockchain legislation this year, passing five bills, as co-founder of the Wyoming Blockchain Coalition. From 2016-2018 she was chairman and president of Symbiont, an enterprise blockchain company. Caitlin ran Morgan Stanley's pension business (2007-2016), held senior roles at Credit Suisse (1997-2007) and began her career at Salomon Brothers (1994-1997). She is a graduate of Harvard Law School (JD, 1994), the Kennedy School of Government (MPP, 1994) and the University of Wyoming (BA, 1990).



### Houman Shadab, Law Professor, New York Law School

Houman Shadab is a professor at New York Law School and co-director of the Accord Project, a nonprofit organization setting standards and developing open source technology for smart legal contracts. Houman's areas of focus are fintech, financial regulation, and blockchain. He has testified before the federal government several times, is the author of numerous articles, and has been widely cited.



### Patrick Murck, Special Counsel, Harvard University

Patrick Murck's practice focuses on the legal and regulatory issues facing fintech and emerging payment systems. He has a deep understanding of the fintech industry, having been involved in a number of startups as an employee, entrepreneur and advisor.

Prior to joining Cooley, Patrick was a co-founder of the Bitcoin Foundation where he served at times as General Counsel and Executive Director. Patrick has engaged regulators and policymakers in the US and Europe on bitcoin and the emerging digital economy. He was named among America's 50 Outstanding General Counsel for 2014 by the National Law Journal.

In addition to his role with Cooley, Patrick currently serves as a fellow with Harvard University's Berkman Center for Internet & Society where he conducts research on the law and policy implications of bitcoin, distributed ledgers and smart contracts. Patrick also serves as President Board member for the BitGive Foundation, a non-profit organization focused on charitable giving and social impact using bitcoin.



# TechFin: The Expansion of the Technology Firms into the Financial Sector

**Date & Time:** Friday, April 20, 2018  
2:45pm – 3:30pm

**Description:** Technology companies around the world are increasingly providing financial services—so-called Techfin—via new products and solutions, leveraging their large customer bases. This session will discuss how Techfin could evolve and impact the financial landscape around the world.

**Session Summary:** SPR Assistant Director Vikram Haksar moderated a panel dedicated to “TechFin: The Expansion of the Technology Firms into the Financial sector.” For the first time, representatives of two of the largest global technology firms in the U.S. and China were on the same stage at the Fund, with Rory MacFarquhar for Google and Long Chen for Ant Financial. Nasir Zubairi from the Luxembourg House of Financial Technology also participated as a panelist.

Mr. Zubairi spoke about the rapid success of technology-oriented firms in improving the provision of financial services, helping make it more consumer oriented. Mr. Chen pointed out that TechFin can foster financial inclusion by providing loans to the unbanked while at the same time reducing credit risk for lenders, using data analytics. He also believed that the rapid growth of TechFin firms in China can be attributed to its widespread adoption, across the spectrum, particularly in rural areas where the reach of traditional banking services are limited. Mr. MacFarquhar argues that Google does not plan to compete with incumbent financial institutions and enter regulated spaces but rather support the provision of financial services. On privacy aspects of using consumer data, Mr Zubairi believed that data will become a future currency; this paradigm doesn't mean that companies can use data freely, but rather that they have to ask the customers and lend them something in exchange for the data. Panelists also believed that the use of big data also allowed an efficient matching of consumers to various financial products but acknowledged that addressing security and privacy concerns will be key to the future development of the TechFin industry.

## MODERATOR



### Vikram Haksar, Assistant Director – Strategy Policy and Review Department, International Monetary Fund

Vikram Haksar is an Assistant Director in the IMF's Strategy Policy and Review department. In this role, he currently leads work on finance and technology, macro-financial analysis, and policies for assessing and addressing financial stability risk. He is a co-lead of both the IMF's interdepartmental group on Fintech and that on Cyber-security. Prior to this he managed review work on global surveillance, G20 prospects, and spillover analysis. Vikram was earlier the IMF's mission chief for Brazil during the 'currency wars' and lead the IMF team on Mexico that set-up the \$70 billion Flexible Credit Line agreement with Mexico in 2009 in the aftermath of the Lehman failure. He worked earlier on emerging economies in Asia—including Thailand during the Asian crisis—and Eastern Europe and was the Fund's resident representative in the Philippines. Vikram received his Ph.D. from Cornell University.

## PANELISTS



### Long Chen, Chief Strategy Officer, Ant Financial

Dr. Chen Long is the Chief Strategy Officer of Ant Financial Services Group, a subsidiary of Alibaba Group. He was previously Professor of Finance at Cheung Kong Graduate School of Business, with research specialties in empirical asset pricing and asset pricing theory, corporate financing and payout decisions. He was also the Associate Dean of DBA Program and Alumni Affairs, and Director of Asset Valuation Center, Internet Big-data-Finance Center.

From 2001 to 2008, Dr. Chen served as Assistant Professor of Finance at Michigan State University, where he received an Excellence in Teaching award in 2003. Dr. Chen serves as referee at numerous finance journals, including the Journal of Finance, Review of Financial Studies, and Journal of Money, Credit and Banking. Dr. Chen's business exposure includes two years working in an import and export corporation in China and one year as a professional trader for the commodity futures market.

He received his PhD in Finance from the University of Toronto in 2001.



### Rory MacFarquhar, Director for Global Economic Policy, Google

Rory MacFarquhar recently joined Google as its first Director for Global Economic Policy. He had previously been a visiting fellow at the Peterson Institute for International Economics. He worked for six years in the Obama administration, most recently serving as Special Assistant to the President and Senior Director for Global Economics and Finance in the White House National Security Council and National Economic Council. At the White House, he led policy teams working on a wide range of international economic and trade issues, including US-China economic relations; economic support for Ukraine, Tunisia, and Iraq; and addressing global economic vulnerabilities. MacFarquhar helped prepare for President Obama's participation at the G-20 summits in St. Petersburg, Brisbane, and Antalya. Before entering the US government, he worked for eight years at Goldman Sachs in Moscow, for the last three as managing director and director of economic research for Central and Eastern Europe, the Middle East, and Africa. He has a BA from Yale University, an MSc in Economics from the London School of Economics, and worked towards a PhD in Government at Harvard University.



### Nasir Zubairi, CEO Luxembourg House of Financial Technology

Nasir Zubairi is CEO of The LHoFT - The Luxembourg House of Financial Technology, a public/private sector initiative to drive fintech innovation in Luxembourg. Nasir has worked in Financial Services for nearly 20 years. He spent 13 years working within Capital Markets at RBS, ICAP, HSBC and EBS. He has been immersed in the fintech and startup sector for the past six years. As an entrepreneur, Nasir has built multiple fintech businesses across verticals. He has advised the boards of leading financial institutions, central banks and governments. Nasir is included in the "Top 40 innovators shaping the future of financial services - 2014" by The Wall Street Journal/Financial News. Nasir has a BSc from the London School of Economics and is a Sloan Fellow from London Business School.