## Minutes of the regular meeting of the FINTECH ADVISORY GROUP

10:30am-12:30pm, Wednesday, October 13, 2020 Federal Reserve Bank of New York WebEx Call

## Present:

Michael Bodson, President and Chief Executive Officer, DTCC Marla Blow, Senior Vice President Social Impact North America, Mastercard Center for Inclusive Growth Lee Braine, Director of Research and Engineering, Barclays Lena Mass-Cresnik, Chief Data Officer, Moelis & Company Frank Fallon, Global Head of Financial Services, Amazon Web Services Martin Fleming, Senior Advisor, The Productivity Institute, University of Manchester Gary Gensler, Professor of the Practice of Global Economics and Management, MIT Sloan School of Management Cathie Mahon, President and Chief Executive Officer, Inclusiv Patrick Murck, Chief Legal Officer, Transparent Systems, Inc. Ulku Rowe, Director of Financial Services, Google Cloud Michael Tae, Corporate Vice President, Broadridge Financial Solutions

David Waller, Partner and Head of Data Science and Analytics, Oliver Wyman

## Federal Reserve Bank of New York attendees:

John C. Williams, Chair	Elizabeth Caviness
Adrian Franco	Shrilaxmi Satyanarayana
Matthew Bray	Bradley Groarke
Knarig Arabshian	Joey Patel
Lacey Dingman	Kimberley Liao
Pamela Dyson	Erika Ota Liedtke
Jack Gutt	Joshua Rosenberg
Antoine Martin	Kevin Stiroh
Asani Sarkar	Michael Strine
Benjamin Chan	Christopher Armstrong
Beverly Hirtle	Clive Blackwood
Helen Mucciolo	Daleep Singh
Johanna Schwab	Giovanni Salmeri
Kimberley Liao	Harry Mendell
Lisa Evanson	Nerissa Clarke
Maria Masseirosato	Pamela Dyson
Michael Held	Robert Goodman
Alan Basmajian	Sandra Lee
Arlinda Berdynaj (non-bank employee)	Thomas Doheny

Adrian Franco, Officer, Outreach & Education called the conference call to order at 10:30am. The meeting focused on the implications of artificial intelligence/machine learning (AI/ML) use for model risk management, and brief updates on the impact of COVID-19 to the Fintech landscape. John C. Williams, Chair of the Fintech Advisory Group (FTAG), welcomed and introduced the new FTAG members, and provided updates on monetary policy and the Federal Reserve's response to the COVID-19 pandemic.

Lena Mass-Cresnik, Chief Data Officer of Moelis & Company, presented on the benefits of AI/ML in financial services.. There are a range of AI/ML use cases in financial services, including automation of order execution, pricing, risk management, pattern recognition, portfolio construction, bet sizing and asset allocation meaning that financial executives are taking the opportunity seriously. AI/ML also complements human subject matter experts around use cases like credit rating analyses, scoring, fraud detection, sentiment analysis, recommendation systems, and voice recognition. Currently, there are opportunities for AI/ML implementation across multiple business lines within financial services institutions. Prevalent, value driving implementations include using ML to predict default probability, loss forecasting, and account reconciliation. Additionally, financial institutions are increasingly using ML and AI to identify suspicious activities such as fraud and money laundering. AI/ML technologies enable financial institutions to achieve customization and hyper-personalization at scale and in real-time across multiple use cases such as risk management, portfolio construction, order execution, deposit taking and lending, credit rates and credit scores, fraud detection, among others. The benefits of using AI/ML at financial institutions include revenue growth, cost reduction, better client engagement, and efficiency gains.

FTAG members also embarked on a discussion related to AI/ML's potential, which highlighted the importance of a slow and measured approach. To successfully scale adoption of AI/MI, four pillars must be explored: fairness, security, privacy, and explainability. In addition, talent is required to gather and build data sets that will develop innovative technology. Members generally agreed that there are underlying foundational elements that should be in place before firms can properly use AI/ML techniques and reap the benefits of AI/ML. FTAG members then commented on the intersection of AI with other technologies such as cloud computing, where AI and cloud together could serve as gateways to other technologies. Many firms are starting to use more sophisticated cloud strategies, including multi-cloud strategies. Among other topics of discussion, members noted the increased importance of ensuring data protection and governance, and cryptography from a cybersecurity perspective, and noted the continued research and advances in quantum computing.

David Waller, Partner and Head of Data Science and Analytics, Oliver Wyman, presented on the potential risks from implementing AI/ML. Among the big challenges that practitioners face is creating ML use cases that are both useful and accurate. In essence, the more complex and accurate AI becomes, the harder it is to explain. Data choices can create disparate outcomes that at times could perpetuate discrimination, and thus, data collection for models could have significant consequences. It would be important to have some sort of apparatus for checking data as it comes in to both evaluate it for missing values but also to determine gaps, and try to understand where data are biased in a particular direction. Members then discussed whether the AI/ML world is headed towards more or less uniformity, and observed that the benefits or challenges of uniformity depend on specific use cases. For example, uniformity in cancer detection might be good, whereas for a credit scoring model, uniformity might not be beneficial.

After discussion of AI/ML risks, members shared their thoughts on how the pandemic has influenced current industry developments. Given the shift to a remote working environment, paper-based systems might need to be reviewed and digitized, including systems related to physical securities processing and customer communications. Among other observations were the rapid deployment of collaborative technology, and the resilience of back offices technology infrastructures. Members also recognized that the future of work is being re-defined given the pandemic's longevity. In terms of Fintech investments, deal flows and fund formation remained strong, and has accelerated in select cases. FTAG members shared the perspective of small businesses, credit unions, and community development financial

institutions (CDFIs), noting how many of these institutions faced technology and liquidity strains. Members noted that many institutions had to reactively pivot and adopt online solutions to continue maintaining operations and servicing clients. Institutions also had to redefine liquidity sources that would often come from the secondary market, or Community Reinvestment Act (CRA) driven capital. Members noted the importance of these basic issues in the financial ecosystem, and highlighted that while AI/ML is advancing, it is crucial to remember the smaller players in the system that often operate on a full physical base and lack online presence or proper technology infrastructure.

The meeting adjourned at approximately 12:30pm.