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By Electronic Mail

Mr. Chris Kirkpatrick Secretary Commodity Futures Trading Commission 1151 21st St NW Washington, DC 20581

February 19, 2016

Re: Technology Advisory Committee February 23, 2016 Meeting, Panel III, Blockchain and the Potential Application of Distributed Ledger Technology to the Derivatives Market

Dear Mr. Kirkpatrick,

Markit welcomes the opportunity to provide a statement in support of statements to be made by Brad Levy, the Global Head of Markit's Processing Division relating to the discussion of blockchain technology and its potential application to the derivatives market at the Commodity Futures Trading Commission ("CFTC" or "Commission")'s Technology Advisory Committee ("TAC") meeting on February 23, 2016.

Markit (NASDAQ: MRKT)¹ is a global financial information services company, offering independent data, valuations, risk analytics, post-trade processing, and related services across regions, asset classes and financial instruments.² Markit has been involved in countless industry discussions relating to the potential use of blockchain technology in derivatives post-trade processing contexts, as well as other contexts. Like many other market participants and infrastructure providers, we are spending significant resources evaluating the use of blockchain technology and expect to utilize blockchain technology in the near future.

We thank the Chairman for inviting Brad Levy into its ranks and commend the Chairman, the Commission, and the TAC's leadership in facilitating a dialogue on the application of blockchain technology to the derivatives markets. We submit this statement to assist the TAC in its consideration of blockchain technology. More specifically, in this statement, we provide description of some of the applications Markit envisages for blockchain, distributed ledger technology and some recommendations on how the Commission can foster a dialogue between it and the industry that would facilitate the adoption of blockchain when and where appropriate.

I. Introduction

¹ Please see <u>www.markit.com</u> for further information.

² As of year-end 2013, 37% of Markit's customers were buyside customers, 12% corporate and insurance end-user customers, 20% bank customers, and 5% were government or academic. Approximately 50% of Markit's revenues in 2013 originated in the U.S.

Blockchain technology, in its simplest form, allows for:

- 1) Transfer of digital assets without a central counterparty, and
- 2) Authentication of digital assets, such as bitcoins.

Blockchains are uniquely suited to reduce costs associated with reconciliations, settlement, and security. These cost savings could, in turn, change the nature of collateral management and securitization. We keep in mind that such fundamental changes would yield not only cost savings, but also new revenue opportunities and new market opportunities.

II. Derivatives and Blockchains

Many efforts falling under the header of "blockchain technology" attempt to address different aspects of the trade lifecycle. With respect to the derivatives markets, we believe that blockchains would ultimately come to be used as digital asset registries. Blockchains are not exchanges or trading venues, but rather the mechanisms by which parties maintain custody of their obligations and the contracts that enshrine those obligations. In other words, a blockchain is a single ledger shared amongst interested parties. Importantly, instead of a central utility, it is a network of peers that secures a blockchain containing the obligations of the peers. These peers would be incentivized to participate in the network given their vested interest in the obligations that the blockchain network maintains.

Mutualization of maintenance and security of a blockchain would change the relationship between parties and the financial instruments to which they are a party. Financial instruments would exist in an exclusively digital format on a blockchain. With legal and regulatory support, the peer-topeer network replaces today's process by which multiple parties reconcile proprietary books and records to accurately represent the custody and value of a financial instrument at any given point in time.

This network would effectively unbundle the third-party services that maintain the post-trade lifecycle across all asset classes and contract types as reliance on a central utility is replaced through a golden record residing on a single, shared ledger.

a. Smart contracts

Smart contracts can play a role in the derivatives markets' blockchain technology adoption. If parties privy to a contract each reference the same data object (on the single, shared ledger), they are afforded flexibility and mutual ownership over the events that affect the contract's terms, such as cash flows, credit events, corporate actions, etc. The underlying technology is the enabler that allows all parties to maintain visibility and control over the assets they own.

b. Costs

It is important to note that such a fundamentally different approach to custody and maintenance of securities is not necessarily a cost saver. The redundancy associated with sharing a ledger might prove so unwieldy that it may still justify the outsourcing of some trade workflows to third parties. However, we remain optimistic of further developments in this space, especially in consideration of the rising costs of reconciliations, post-trade operations, and security that market participants confront today.

c. Collateral, Securitization, and Liquidity

Industry adoption of a single, shared ledger could provide market participants a degree of control over risk and versatility over the balance sheet that is unachievable with today's paper assets. To provide an example, parties that own identical records in a single, shared ledger would reap explicit cost savings around reconciliations. Similarly, parties that transact obligations in a wholly digital, peer-to-peer network underpinned by such a ledger would reap explicit cost savings around settlement activities as well.

As transaction costs and trade maintenance costs decrease, we begin to explore how collateral might be managed in different ways. As an example, parties might consider cash flow exchanges every 30 seconds instead of every 30 days, reducing counterparty and credit risk commensurately, as well as changing how these risks are measured.

Furthermore, parties would be able to manage implicit costs in different ways. Exceptions management, regulatory reporting, know-your-customer (KYC) and anti-money laundering (AML) are but a few use cases that stand to be streamlined in ways that provide maximum value in a peer-to-peer workflow. At scale, peer-to-peer networks that secure digital assets would allow parties to identify, transact, and settle with each other in expedited workflows.

Moreover, if blockchain technology can demonstrate this promise, opaque markets and the asymmetrical information that entrenches such opacity would be challenged. Greater transparency with respect to price would drive markets to like standards across all asset classes, either through legal digital representations of physical assets or natively defined digital assets. Transparency, alongside reduced transaction and trade maintenance costs, could, in turn, enhance trading liquidity.

d. Challenges to adoption

We think it is unlikely that current industry players would lose their ability to compete with the move toward a distributed ledger. Rather, we think the ways in which participants interact, and when, and for what cost, would certainly change. For example, blockchains would never provide insurance against default in the same form as a clearinghouse. However, the amount of capital needed to support a clearinghouse might be reduced. The products and services a clearinghouse offers beyond insurance would encounter a progressively competitive landscape. These are the types of changes that every market incumbent should consider. These changes must also be reconciled with existing regulations that were not designed for blockchain.

e. Moving forward

Quoting Prof. Chris Brummer, a professor of law at Georgetown University, who recently published a paper on technological disruption in financial markets in the Fordham Law Review:

[T]echnology should be embraced as a source of not only regulatory risk, but also of regulatory opportunity. One of the primary challenges that disruptive technology poses is

that technology moves quickly, outstripping the capacity of regulators to understand or respond to change.³

We think that the promise of blockchain technology and the value of a regulator-industry dialogue would warrant the formation of a TAC working group or sub-committee on blockchain technology. This group would identify blockchain applications as an initial matter and provide a mechanism for a dialogue with the Commission. The Commission should signal that in applying the Commodity Exchange Act to these new developments, the Commission is focused on ensuring its underlying regulatory objectives are being promoted in the marketplace, rather than a strict, rules-based application of the law in ways that could deter innovation. As suggested by Prof. Brummer, "objectives-based approaches should be deployed where the velocity of innovation is highest, but where fundamental changes to the relationship between market participants remain stable enough for efficient (though at times expensive) enforcement."⁴

We cite the example of the U.K. Financial Conduct Authority's (FCA) "Innovation Hub" of an example of how the Commission could go beyond facilitating a dialogue to actively promoting innovation.⁵ Through the "Innovation Hub" the FCA aims to promote "new and established businesses - both regulated and non-regulated - to be able to introduce innovative financial products and services to the market."⁶ For example, through the "Regulatory Sandbox," the FCA has introduced "a 'safe space' in which businesses can test innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences of pilot activities."⁷

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Markit appreciates the opportunity to provide this statement to the TAC. We would be happy to elaborate on or further discuss any of the points addressed above. If you or your respective staffs have any questions, please do not hesitate to contact the undersigned or Salman Banaei at <u>salman.banaei@markit.com</u>.

Yours sincerely,

Marcus Schüler Head of Regulatory Affairs Markit marcus.schueler@markit.com

⁶ Id.

³ Chris Brummer, Disruptive Technology and Securities Markets, 84 Fordam L. Rev. 977, Dec. 2015, at 1051, available at <u>http://fordhamlawreview.org/assets/pdfs/Vol_84/No_3/Brummer_December.pdf</u>.

⁴ Id. at 1050.

⁵ FCA, Project Innovate, <u>https://innovate.fca.org.uk/</u>.

⁷ FCA, Regulatory Sandbox, <u>http://www.fca.org.uk/news/regulatory-sandbox</u>.