

# 行政院及所屬各機關出國報告

(出國類別：出席國際會議)

## 出席新加坡第 15 屆美國期貨業協會亞洲衍生性商品研討會暨新加坡金融管理局監理官會議報告

服務機關：金融監督管理委員會證券期貨局

姓名職稱：羅科長嘉宜

巫稽核春梅

派赴國家/地區：新加坡

出國期間：108 年 12 月 3 日至 108 年 12 月 5 日

報告日期：109 年 2 月 19 日



# 目錄

目錄.....	0
第一章、前言.....	1
第二章、國際監理官會議內容重點 .....	2
第一節、Regulatory Crossroads: Transiting to a Different World .....	2
第二節、    Presentation & Discussion .....	5
第三節、Regulatory Perimeters Surrounding Fintech and Digital Assets .....	8
第三章、亞洲衍生性商品研討內容重點 .....	11
第一節、    致歡迎詞 Welcome Address.....	11
第二節、    交易所發展 Exchange Evolution - A Global Look .....	13
第三節、    複雜監管環境 Navigating a Complex Regulatory Landscape .....	15
第四節、    區域型交易所：全球環境 Regional Exchanges: Global Environmens .....	17
第五節、    亞太商品期貨市場 Commodities Trading in the Asia-Pacific Region.....	20
第六節、    散戶投資市場下一步發展？What's Next for the Individual Investor?.....	22
第七節、    主管機關對談 Firechat with CFTC.....	25
第八節、    產業趨勢-機會與挑戰 Industry Trends – Opportunities and Challenges .....	27
第九節、    辯論大會-法規的訂定有達到目的？The Great Debate -Is Regulation Fit for Purpose? .....	29
第十節、    環境管理相關市場解決方案 The Rise of Market Solutions to Manage Environmental Issues.....	31
第十一節、    結算機構困境 The CCP's Dilemma?.....	33
第十二節、    衍生品集中市場維運效率方法 The Way to Operations Efficiency in the Listed Derivatives Market .....	35

第四章、心得及建議 .....	37
附件一：國際監理官會議議程及出席人員清單 .....	38
附件二、研討會簡報 .....	38

## 第一章、前言

2019 年第 15 屆美國期貨業協會亞洲衍生性商品研討會 (FIA Asia Derivatives Conference) 暨監理官會議於 2019 年 12 月 3 日至 5 日於新加坡 St. Regis 酒店舉辦為期 3 天會議，活動內容包括監理官會議、專題演講、座談會及期貨業博覽會等。2019 年 12 月 3 日為新加坡金融管理局 (Monetary Authority of Singapore, MAS) 舉辦監理官會議，會議內容聚焦於金融科技及數位資產之最新監理趨勢之探討，全球計有包括美國商品期貨交易管理委員會 (Commodity Futures Trading Commission, CFTC)、美國證管會 (Securities Exchange Commission, SEC)、澳洲、阿布達比、沙烏地阿拉伯、肯亞、中國大陸、日本、柬埔寨、馬來西亞、尼泊爾、香港及我國等 13 國監理機關派員參與，另 G20 轄下之金融穩定委員會 (Financial Stability Board, FSB) 亦有派員列席本次會議，顯見 G20 對本次會議之重視。

2019 年 12 月 4 日至 5 日之亞洲衍生性商品研討會，則由美國期貨業協會 (Futures Industry Association, FIA)、新加坡交易所 (Singapore Exchange Limited, SGX) 合辦，會議內容聚焦於金融海嘯後全球金融監理革新措施推動迄今成果及後續重要發展與全球市場關注重點、金融科技創新發展及數位貨幣市場之監理趨勢。全球重要交易所、期貨業及資訊廠商與金融機構等代表超過 200 餘人共襄盛舉。我國由金融監督管理委員會證券期貨局期貨管理組羅科長嘉宜及巫稽核春梅出席；另臺灣期貨交易所企劃部黃經理定容率員出席美國期貨業協會亞洲衍生性商品研討會。

本報告分為四大部分，第一章為前言，第二部分為國際監理官會議內容重點，第三章為亞洲衍生性商品研討內容重點，第四章為參與本次會議之心得與建議。

## 第二章、國際監理官會議內容重點

為提供各國金融主管機關對於金融衍生性商品市場監理之經驗交流機會，本次會議首日援例由地主國新加坡金融管理局舉辦國際監理官閉門會議，會議內容主要針對金融海嘯後全球金融監理革新措施推動迄今成果及後續重要發展與全球市場關注重點、金融科技創新發展、數位資產之交易平台安全性等議題進行廣泛交流與討論。

### 第一節、Regulatory Crossroads: Transiting to a Different World

引言人：

**Jackie Mesa**, Chief Operating Officer and Senior Vice President & General Counsel, FIA

與談人：

**Alejandro Orgaz-Barnier**, Senior Manager, Australian Securities and Investments Commission

**Hidetoshi Oi**, Deputy Director, International Affairs Office, Japan Financial Services Agency

**Jenny Cosco**, Managing Director, Co-head of Government Affairs, Asia Pacific, Goldman Sachs (Asia) L.L.C

**Lee Betsill**, Chief Risk Officer of CME Clearing, CME Group

**Valerian Crasto**, Managing Director and Chief Operating Officer of Treasury and Markets, DBS Bank Ltd

重點摘要：

(一) 引言:引言人提及自 2008 年金融海嘯發生後，全球金融監理機關承諾進行金融改革以重建市場信心並加強抵禦風險能力，進而共識推動一系列衍生性商品市場之改革及強化監理措施，2008 年至今已 10 年，全球在推動店頭衍生性商品集中結算機制及全面提升金融衍生性商品市場透明度與全球監理機關有效管理系統性風險等面向有所進展。10 年過去，現在正是一個重要之關鍵時點，應該可以進一步回顧過去推動法規妥適性，並進一步提出檢討報告，

及對於未來重要推動事項提出具體建議及相關補強因應措施，爰今天十分榮幸邀請現場代表，從監理機關(澳洲證管會、日本金融廳)、交易所(CME)及業界(Goldman Sachs 及 DBS)面向逐一檢視過去成果及實務發現應予關注之重要議題，並對未來發展方向提出具體可行建議。

## (二) 監理機關代表:

1. 從監理角度出發，日本金融廳代表表示該國為全球重要金融國際組織（包括 G20、FSB 及 IOSCO 等）之成員國之一，對於全球金融穩定，負有一定之責任與義務，責無旁貸，日本金融廳持續於法規面落實國際接軌，包括強制性向交易資料儲存庫（Trade Repository, TR）申報店頭衍生性商品交易資料、標準化店頭衍生性商品交易強制透過結算機構進行集中結算及對非集中結算之店頭衍生性商品交易實施較高之資本要求等，相關改革措施在日本境內實務執行面上尚稱順暢，並未面臨重大執行困難，惟實務發現於跨境市場之改革在實質內容及商品適用範圍與時程上進程上不盡相同，且跨國監理機關欠缺合作與溝通，導致市場參與者使用衍生性商品效率降低並增加成本，衍生整體市場風險升高及市場分裂（Market Fragmentation）問題。
2. 參考美國與歐盟跨境交易平台相互認可機制（US/EU Trading Platform Recognition）及歐盟第三國集中結算機構認可機制（EU Third country CCP Equivalence Recognition）作法或許是解決方法之一，但是目前主要是美國及歐盟進行法規調和相關作業，其他國家跨境間法規調和作業似無進展，日本金融廳呼籲各國監理機關加強國際合作，著手進行跨境認可機制之可行性，或可擴大跨境認可涵蓋範圍之可行性，例如監理法規制度、交易所、交易平台等等，澳洲證管會代表回應認同日方看法，促請各國監理機關重視市場分裂之議題並及早因應。

## (三) 交易所代表:

1. 從交易所角度而言，美國 CME 代表表示，交易所擔任集中結算機構 (CCP) 之財務安全防衛機制 (Skin in the Game) 一直以來都是外界最為關心之議題之一，CME 身為全球知名之交易所，深切知悉 CCP 本身及其會員之財務安全，對於整體金融穩定及降低系統性風險之深遠影響，從結算機構面向，長期投注人力在關注會員公司財務健全度、結算機構財務強韌度、損失吸收順序及財務復原計畫之妥適性；從交易安全面向，適時因應市場變化，檢討會員公司及交易人保證金水位，減少交易人違約情事，當然也是風控重要環節之一；從促進跨國合作面向，積極促成歐盟跨境交易所認可機制及跨國法規差異調和相關事項。
2. 此外，目前來自亞洲市場之收入已占 CME Group 全球市場收入超過 10%，CME 尤其關注亞洲市場法規與歐美市場差異調和部分，不希望亞洲各國法規差異對 CME 業務收入有負面影響。從促進市場商品多元化面向，因應全球永續發展投資趨勢，近來全球交易所紛紛掛牌 ESG (環境【Environment】、社會責任【Social】、公司治理【Governance】) 相關衍生性商品，CME 也無法自外於這個熱潮，亦有推出 ESG 相關衍生性商品之計畫，期望引領全球衍生性商品市場邁向新里程碑。

(四) 金融機構代表：從金融機構角度而言，Goldman Sachs 及 DBS 表示，2008 年金融海嘯迄今，銀行「大到不能倒」之問題，仍然是當前最為熱門之議題之一，G20 要求巴塞爾銀行監理委員會 (BCBS) 發展衡量「全球系統性重要銀行」的方法論，並延伸要求各國辨識其國內系統性重要銀行 (D-SIBs)，並採行相關強化監理措施，全球系統性重要性銀行將面臨額外增資壓力，至於全球銀行大額增資，是否進一步引發全球金融市場之流動性問題乙節，建議值得長期關注。除面臨增資壓力外，Goldman Sachs 及 DBS 同時亦為全球重要 CCP 結算機構之會員銀行公司之一，尚須關注所屬 CCP 結算機構風險集中度問題、損失吸收能力及個別會員分擔計算方法合理性與同一 CCP 其他



會員公司個別財務健全度，以避免其他會員公司違約，影響金融穩定及引發系統性風險與自身財務嚴重損失。

(五) **結語**: 引言人總結意見，金融海嘯後 10 年來，店頭衍生性商品採集中結算機制推動迄今，雖有成效，惟隨之而來，引發市場分裂( **Market Fragmentation** ) 問題，呼籲各國監理機關加強國際合作並推動跨國認可及法規調和機制，另外，金融海嘯後，亟待解決之「銀行大到不能倒」之問題，迄今仍然存在，店頭衍生性商品採集中結算之集中結算機構，亦引發集中結算機構風險集中及是否會大到不能倒之議題，集中結算機構之財務強韌度議題仍是熱門討論議題，值得持續關注。另外，期許各界關注之 **ESG** 衍生性商品得以大放異彩，引領全球衍生性商品市場邁向新里程碑。

## 第二節、Presentation & Discussion

### 一、The Fintech Regulatory Landscape 金融科技監理架構概況

簡報人：**Stephen J. Obie**, Partner, Jones Day

因應金融科技創新發展趨勢，針對如何鼓勵金融科技創新業者將創意發想運用於金融發展，並適時將金融科技創新業者納入監理範疇乙節，已是現今最為熱門金融監理議題之一，本次會議，新加坡金管會特別邀請國際律師事務所 **Jones Day** 律師代表 **Stephen J. Obie** 就全球金融科技運用及金融監理機關法規配套措施實施現況進行簡報，重點摘要如下：

(一) **金融科技發展現況**: 首先，相關統計數據顯示，金融科技創新已引領潮流，從金融科技創新投資來看，金融科技投資屢創新高，全球投注在行動支付、虛擬貨幣及機器人理財等金融科技創新技術之投資金額已超過 120 億美元。從金融消費者問卷結果來看，10 個年輕人中就至少有 1 人使用電子錢包，10 位高階經理人中就有 9 位認為 2026 年後金融科技及區塊鏈(**Blockchain**)之應用將無所不在。金融科技創新趨勢步步逼近，各國金融監理機關在鼓勵金融科技創新及研訂相關監理措施(強化金融消費者保護、減少資訊不對稱及防範詐欺)間如何取

得平衡成為近期全球監理機關及金融機構與金融科技創新業者關切之重要議題，期許三方共同研商激勵，創造共贏。

(二) **各國金融科技相關法規現況**:日本及新加坡已發布電子支付法及證券型代幣發行(Security Token Offering, STO)法規；中國大陸已完成密碼法，若利用密碼從事危害國家安全、社會公共利益、他人合法權益等違法活動，追究法律責任給予處分或罰款；瑞士、法國及德國採取數位化資產科技中立監理方法論，並發布數位貨幣公開募集指引。

(三) **監理沙盒之運用**:

1. 為鼓勵金融科技創新，但卻擔心金融科技創新技術或商品貿然上市，恐有未審慎思慮之處，致有損及投資人權益情事，基於審慎起見，目前多數國家採用監理沙盒機制(Sandbox)，透過沙盒實驗，讓金融科技創新商品在既定框架及限制條件(例如限制投資金額或投資人數上限)運作下，以利監理機關與金融科技業者併同檢視妥適性及辨識潛在風險，在試行一段時間後，雙方相互溝通協調及就金融消費爭議事項及權益保護等面向補強後，得准予放行，目前全球採行監理沙盒之國家有英國、澳洲、香港、美國、肯亞、印尼、柬埔寨、馬來西亞、阿拉伯聯合大公國及我國，惟各國實際運作方式不盡然相同，各有發展優勢及利基點，或可相互參考應用。
2. 美國 CFTC 成立 LabCFTC 專案小組，組成成員包括金融科技業者、金融機構及監理機關代表，透過定期召開會議方式探討金融創新個案可行性；香港金管局允許金融科技公司，在一定限制條件及資訊充分揭露下試行一段時間，如試行結果正面，再進一步考量核發執照之妥適性；我國金管會則成立「金融科技創新園區 FinTechSpace」，同時舉辦監理門診及法規健檢等創新活動，期許與金融機構與科技廠商合作的企業實驗室，強化輔導機制；杜拜金管局推動金融科技巢計畫，並已立法完成，未來可對金融創新業者之創新實驗核發測試執照。

(四) **加強國際合作，研訂金融科技監理國際規範**:

1. 目前全球 17 個國家計 29 個金融監理機關訂有金融科技相關監理法規，其中雖有 10 個監理機關採行監理沙盒機制，惟各國在金融科技監理法規之運用略有不同，且多在初始摸索階段，面對金融科技創新趨勢，全球監理機關在實務監理法規及因應配套措施欠缺國際一致性之規範及作法，實有必要促請相關國際組織盡速投入人力及資源，強化國際合作，透過各國監理機關之實務經驗分享及交流，盡速研訂全球適用之金融科技監管措施實務守則，以利各國監理機關有一致性之參考依據。
2. 全球越來越多國家倡議推動金融科技相關國際合作計畫，例如英國金融監理總署(Financial Conduct Authority, FCA)於 2019 年 2 月提出創建全球金融創新聯盟(The Global Financial Innovation Network, GFIN)之倡議並促請推動全球監理沙盒 6 個月試行計畫(Global Sandbox Six Month Pilot Program)；東南亞國家聯盟( Association of Southeast Asian Nations, ASEAN)立刻跟隨英國腳步，立即提出東南亞國家金融科技創新聯盟倡議(Financial Innovation Network, AFIN)；歐盟金融監理委員會(European Securities and Market Authority, ESMA)於 2019 年 7 月提出金融科技業者執照報告(Fintech Licensing Report)，就金融監理機關給予金融科技業者執照之可行性研析做法，期待前開倡議可以獲得各國監理機關支持，進而將倡議轉換為具體行動方案，讓金融科技創新，促進全球金融市場更加蓬勃發展。

## 二、Abu Dhabi Global Market: Crypto Asset Regulatory Framework 阿布達比資本市場對加密貨幣資產監理架構

簡報人：Richard Teng, Chief Executive Officer, Financial Services Regulatory Authority (FSRA), Abu Dhabi Global Market (ADGM)

針對如果妥適將電子加密貨幣資產納入監管範疇，以協助金融科技創新發展之議題，已成為近期全球監理機關面臨之最大挑戰，本次會議，審酌阿布達比是全球首個將

貨幣資產交易平台納入市場操縱法規管理之國家，爰新加坡金管會特邀請阿布達比金管局執行長就該國目前對加密貨幣資產監管措施進行簡報，以利各國作為後續修法推動之參考，重點摘要如下：

- (一) **明訂加密貨幣資產之定義**:係指以數位化方式表彰價值，具有可數位化交換、單位或帳戶及儲值等性質之資產屬之，且非由一個國家保證之貨幣且非為一個國家之法定貨幣或電子錢包。
- (二) **以風險為基礎之監理方式**:加密貨幣資產之營運者(Crypto Asset Business, OCAB)應向監理機關申請執照始可營運，從事加密貨幣資產之交易及轉換與公開募集等行為，監理機關應關注事項包括(1)符合反洗錢及美國肥咖條款相關了解客戶程序(KYC)及申報相關規定；(2)相關風險已充分揭露，有效強化投資人權益保護；(3)加密貨幣電子錢包之相關電子交易平台及內控制度完善性，務必使加密貨幣資產流向，具可追蹤性、具可事後稽核功能、及相關電子鑰匙保管機制之完備性；(4)交易平台之交易制度、結算制度之完善程度，且於該交易平台之相關電子交易，亦應有內線交易或市場操縱等相關規定(Market Abuse Provision)之適用。

### **第三節、Regulatory Perimeters Surrounding Fintech and Digital Assets**

引言人：

**Steven Gatti**, Partner, Clifford Chance US LLP

與談人：

**Amir Zaidi**, Global Head of Compliance, TP ICAP, Conyan Tan, Vice President, China Securities Regulatory Commission

**Lucas Schmeddes**, President and Chief Operating Officer, ICE Futures Singapore and ICE Clear Singapore

**Naveen Mallela**, Head of Digital, Asia Pacific, Treasury Services, JPMorgan Chase & Co.

**Neel Maitra**, Crypto Specialist (Senior Special Counsel), US Securities and Exchange Commission

**Richard Teng, Chief Executive Officer, Financial Services Regulatory Authority,  
Abu Dhabi Global Market**



**重點摘要：**

- (一) **引言:**金融科技創新運用持續引領風潮後，衍生後續如何將大數據、人工智慧及數位化資產應用更進一步帶動金融市場正向發展與金融監理機關如何將前開創新運用納入監理範疇及如何於創新運用辨識可能金融風險等問題，是監理機構後續關注之重點問題。本次會議，榮幸邀請監理機關、金融創新業者及交易所等代表就各界後續應如何加強合作及交流，以創造金融科技創新友善環境，共同促進金融市場發展。
- (二) **監理機關代表:**美國 SEC 代表表示，針對 Bitcoin 等數位貨幣資產交易平台盛行，倘若該等數位貨幣係透過自己交易平台買賣，則未必涉及違反證券管理法令，惟倘若有人透過證券市場，利用數位貨幣資產進行公開募集行為，則屬證券市場公開募集有價證券之行為，目前美國 SEC 有接獲多起檢舉案，刻正檢視個案情形，是否有非法募集證券行為，惟其實務個案經驗認為，如何辨識數位資產是否屬於有價證券乙節，係屬最重要之關鍵問題。為協助外界辨認數位資產是否屬於有價證券並避免違法情事，美國 SEC 內部幕僚作業中，即將對外發布辨認數位貨幣屬於有價證券之原則，可能會從投資契約角度切入，投資契約如規定投資人可投資一定金額取得一個公司股份之權利，可於公司未來分配獲利取得報酬之行為，則有證券市場公開募集行為之適用。另外，面對金融機構投入金融科技創新技術之精進，美國 SEC 及 CFTC 內部刻正積極規畫強化內部資訊運用能力，如何透過大數據技術在龐大申報資料中取得有效監理資訊或透過 AI 技術補強監理技術等事項。
- (三) **交易所代表:**傳統合法之證券期貨交易所，在交易及結算系統建構完善設備，以利透過該平台交易之資訊，具有不可竄改、可事後稽核及資訊充分揭露及加密等特性，以強化投資人權益保護，惟目前實務上，數位加密資產之交易平台，似有欠缺類似特性情形，例如數位資產以數位化方式保存，數位資產公開募集

之有價證券後續轉換或交易紀錄是否詳實記載，及如何使用區塊鏈(Blockchain)技術，以確保數位資產交易不可竄改、真實存在及避免非法竊取等問題，爰現階段在數位加密資產之交易平台基礎設施上，仍有尚待補強。另外，全球交易所亦積極與金融創新業者合作，目前主要聚焦於如何透過資訊科技之精進，讓數位資產之交易平台更公平公開、其交易保管、結算及交割得以有效進行及資訊有效儲存及資訊安全等面向。

(四) **結語:** 虛擬貨幣、數位化資產之市場發展潛力大，為吸引更多機構投資人或自然人參與交易，勢必要強化相關基礎設施之建置外，相關監理措施及虛擬貨幣或數位資產投資及交易之法規尚需進一步強化，期待全球監理機關加強合作及交流，共同努力研訂妥適法規及因應措施，持續鼓勵及扶持金融業者及金融科技業者，以促進金融科技之健全發展。

### 第三章、亞洲衍生性商品研討內容重點

#### 第一節、致歡迎詞 **Welcome Address**

演講人：

**David Martin**, Managing Director, J.P. Morgan Securities Singapore and Chair, FIA Asia Advisory Board

**Walt Lukken**, President & Chief Executive Officer (CEO), FIA

重點摘要：

- (一) FIA 亞洲諮詢委員會主席 **David Martin** 為 2019 年 FIA Asia 揭開序幕，表示市場普遍認為目前處於景氣擴張循環之後期，而回顧 2019 年面對許多政治不確定性，例如：美國總統川普推特之亂、南北韓議題、各國出現反政府運動等，加上中國非洲豬瘟亦影響農產品市場，但不難看出中美貿易戰對全球市場之影響已有舒緩趨勢，例如：美元兌人民幣匯率走勢趨於穩定，各國股價指數表現仍然亮眼，例如：美股道瓊及 S&P 500 指數成長 24%，除 FTSE 以外之歐洲股價指數亦約有 20%之成長，而香港、南韓等亞洲股市亦有所成長。根據 FIA 截至 2019 年 10 月之數據，全球衍生性商品市場交易量年增 16%至 290 億口，而亞洲市場拜新加坡交易所(SGX)、韓國交易所(KRX)、印度國家證券交易所(NSE)及上海期貨交易所(SHFE)等交易所成長所賜，整體交易量成長 32%至 120 億口。若展望 2020 年，**David Martin** 預期中美貿易戰對市場影響將轉向總體經濟面，亞洲市場需特別注意，因為許多亞洲國家係以製造業為首要產業，較易受影響。
- (二) FIA 執行長 **Walt Lukken** 指出，FIA 舉辦 15 屆亞洲區年會以來，此次年會係第 11 次於新加坡舉行，並回想第 1 屆亞洲區年會係 2005 年於中國北京舉辦，而迄今中國在亞洲區扮演之角色愈來愈重要，其金融市場近年來在中國政府主導之下，對外開放腳步逐漸加快。然而，儘管中國為世界第 2 大經濟體，我們時常忽略中國人均國內生產毛額(gross domestic product, GDP)其實低於墨西哥，

且人口老化問題亦浮現出中國逐漸難以維持目前經濟成長率及生產力。中國當局亦注意該現象，意識到與海外金融市場或業者合作乃勢在必行，例如：除推出股票及債券市場與香港互聯互通機制外，即將推出與英國合作之「滬倫通」。近年亦逐漸開放外資交易中國境內期貨商品，包含已對外開放之原油、鐵礦石、塑膠類及即將開放之農產品類期貨商品。此外，繼中國證券監督管理委員會 (China Securities Regulatory Commission, CSRC) 宣布取消金融機構外資持股比例限制後，開始探討如何降低境內期貨市場散戶參與度，並進一步吸引機構投資人如：基金公司及內、外資銀行等進入市場。在中國開放外資參與市場之同時，CSRC 亦須思考跨境監管制度之必要性。

- (三) 過去 40 年來，國際間熱切討論監管認可資格(recognition)，持續努力建立合適之相關標準，因為兩國監管機制之間存在相互認可資格，彼此才能保護自身市場，且兩國市場參與者才能受到足夠保障。而新加坡可說是這方面最佳範例：早於 1984 年，SGX 即與芝加哥商業交易所(CME)合作建立部位相互沖銷機制 (mutual offset system, MOS)，乃係基於新加坡與美國相互認可彼此監管機制。監管認可制度之建立對於衍生性市場而言極為重要，FIA 去年市調發現，國際型交易所表示其市場結構約有 3 分之 1 至 90% 為外資參與者。現今，英國即將脫歐之際，歐盟(EU)當局迫切建立跨境交易之第三國認可制度，像是近來實施之 EMIR 2.2；美國亦研議建立第三國結算機構認可制度。FIA 呼籲各國主管機關在建立相關監管認可制度之同時，應考慮對現行市場不致造成太大影響，或是與國際規範產生過大矛盾之處。



## 第二節、交易所發展 Exchange Evolution - A Global Look

主持人：

**David Martin**, J.P. Morgan and Chair, FIA Asia Advisory Board

與談人：

**Loh Boon Chye**, CEO, SGX

**William Knottenbelt**, Senior Managing Director, International, CME Group

**Romnesh Lamba**, Co-President, Hong Kong Exchanges and Clearing Limited (HKEX)

**Helen Lofthouse**, Executive General Manager for Derivatives & OTC Markets, Australian Securities Exchange (ASX)

**Michael Peters**, Deputy Chief Executive Officer, Eurex Frankfurt AG (Eurex)

**Hiromi Yamaji**, President & CEO, Osaka Exchange (OSE)

重點摘要：

### (一) 資訊(Data)是否為業務主軸

CME 代表認為其業務主軸在提供及創建風險管理工具而非資訊。HKEX 代表認為資訊是業務重要成分，技術發展提高資訊整體運用價值，費用降低趨勢使交易所嚐試將資訊作為穩定收入來源之一，HKEX 將著重以資訊和技術改善客戶體驗。OSE 代表認為市場確實可以從商業化資訊受益，但若費用過高可能對市場造成進入障礙，交易所應以維持市場高效率及低屏障為目標。

### (二) 降低費用是否為交易所責任

CME 代表認為取得商品授權、監管要求及交易所營運各層面成本都在增加，因此確實上調部分費用，但調幅有限，另方面透過降低造市者折扣門檻以降低影響。EUREX 代表認為交易所提供新的基礎設施，可以提供更多競爭優勢及差異化服務，依據不同服務採取不同收費方式是合理的。ASX 代表認為金融市場是一個生態系統，交易所關注維持各參與者平衡及運作順暢，受低利率環境影響，近期調降費用受到市場歡迎。

### (三) 獎勵活動與商品流動性

**CME** 通常對新產品推出獎勵活動，主要目的是提高新商品流動性，造市者的存在對市場發展非常重要。另一方面，為符合監管機關要求，交易所需監管造市者交易，避免發生扭曲市場的不法行為。**EUREX** 代表認為造市者無法在造市初期獲得收益，由於初期即投入資源，隨成交量提升，造市者也希望從中獲益，提供長期獎勵活動有助於造市者及產品交易量持續增長。

技術發展也有助於商品流動性。隨著程式或自營交易的技術進展，交易轉為自動化，反應速度更快，並且擁有多樣化交易策略。而電子化交易提供跨市場交易發展環境，使投資人可以在不同交易所進行交易。多樣化交易策略與跨市場投資對流動性均有助益。

#### (四) **CCP** 安全性

**NASDAQ** 在 2018 年發生結算會員違約情形，使 **CCP** 穩定與安全受到重視。**HKEX** 已經與監管機關及結算會員研究相關問題，調整違約時的財務防衛機制，之後將持續關注此議題確保市場穩定。在初始保證金部分，**SGX** 代表認為訂定適當初始保證金固然重要，但更重要的是結算會員責任，例如持續檢視部位風險及違約發生時的處理機制等。

#### (五) 中國開放趨勢

**CME** 代表認為其與上海黃金交易所合作的黃金期貨商品，提供中國衍生商品國際化交易管道，若能推廣至其他商品，將是很好的開放機會。**HKEX** 代表認為近幾年中國著重於開放現貨市場及吸引資金流入，衍生商品市場開放不如現貨市場，未來監管機關將進一步開放衍生商品市場，包括在岸及離岸商品，甚至兩者都推出相同商品。**OSE** 代表認為中國金融開放提供未來成長機會，2018 年中國與日本股價指數 **ETF** 相互上市達成協定，期待擴大雙邊合作關係。

## 第三節、複雜監管環境 **Navigating a Complex Regulatory Landscape**

主持人：

**Jackie Mesa**, Senior Vice President, Global Policy, FIA

與談人：

**Jenny Cosco**, Managing Director, Co-Head, Government Affairs Asia Pacific, Goldman Sachs

**John Ho, Head of Legal**, Financial Markets, Standard Chartered Bank

Phua Wee Ling, Executive Director, Markets Policy & Infrastructure Department, Monetary Authority of Singapore (MAS)

**Alex Orgaz-Barnier**, Senior Manager, Market Infrastructure, Australian Securities and Investments Commission

**Congyan Tan**, Vice President, China Institute of Finance and Capital Markets, CSRC

重點摘要：

- (一) 中國大陸現行加強法治基礎，提升監管能力，進一步完善市場法律法規體系，特別是協助推動期貨法早日頒布增強相關制度的統一性和透明度。2020年1月1日起，大陸期貨公司將取消外資股比限制。有良好的境外金融機構加入，將增加中國期貨市場的參與主體，提高市場競爭力，有助期貨業穩定發展。
- (二) 中國大陸將持續鬆綁法規並逐步將良好的商品期貨及選擇權國際化，並持續推出符合經濟發展需求的商品期貨。在金融期貨及選擇權方面，也將根據市場需要，適時推出更多的產品，為各類機構投資者提供更加有效避險工具。繼續深耕法治基礎，提升監管能力，進一步完善市場法律法規體系，特別是協助推動期貨法早日頒布。優化交易規則，增強相關制度的統一性、透明度和標準化程度。
- (三) 亞洲地區對於加密貨幣監管的觀點，近兩年來一直是政府關注的話題。加密貨幣的多變性和法規的灰色地帶，帶來的金融犯罪風險，造成亞太地區越來越多的國家已將監管加密貨幣列為當務之急。但是，各國之間尚缺乏健全的監管框

架與一致性的方針，在法規方面也存在巨大差異。新加坡金融管理局(MAS)代表表示考慮允許加密貨幣衍生性商品在獲核准的當地交易所上市和交易，但加密貨幣衍生性商品不適合散戶投資者，建議散戶投資者在交易加密貨幣或其衍生品時需極度謹慎，可能會損失全部投入的資金，甚至更多。英國金融監管機構也提議，禁止向散戶投資者出售加密貨幣衍生性商品。

(四) **CFTC** 認為加密貨幣存在巨大風險，主要來自不受監管的交易平台的營運風險，交易平台和網路安全風險、價格劇烈波動的投機風險及可能造成欺詐和操縱風險，例如哄抬價格、龐氏騙局和其他詐騙形式等。

(五) 針對金融科技創新，**CFTC** 和英國金融行為監管局 (**FCA**) 雙方攜手利用彼此的金融科技項目支援金融科技新創公司。美國商品期貨交易委員會第一次和非美國金融機構達成合作夥伴關係。透過與英國金融行為監管局金融科技團隊合作，美國商品期貨交易委員會能在 21 世紀數位化市場裡，扮演更重要的監管角色。

## 第四節、區域型交易所：全球環境 **Regional Exchanges: Global Environments**

主持人：

**Teyu Che Chern**, CEO, Phillip Futures

與談人：

**Rinjai Chakornpipat**, Managing Director, Thailand Futures Exchange (TFEX)

**K. Hari**, Chief Business Officer, NSE

**Samuel Ho**, CEO, Bursa Malaysia Derivatives (BMD)

**Li Ning**, Chief Representative, Singapore Office, Dalian Commodity Exchange (DCE)

**John Donghoon Shin**, Chief Representative, Singapore Branch, KRX

**Lawrence Zhang**, Chief Representative, Singapore Office, SHFE

重點摘要：

本論壇主要探討全球環境及區域型交易所如何提升市場外資參與度，而主持人 **Teyu Che Chern** 表示輝立期貨與許多交易所合作市場宣導，不遺餘力從事交易人教育，並指出許多從事海外期貨交易之投資人最常關心之議題之一為該國市場結構，例如：內外資、散戶與機構投資人之交易比例，隨後 **Teyu Che Chern** 請各與談人簡介自身交易所市場概況及如何提升外資參與度。

### (一) 泰國期貨交易所(TFEX)

泰國期貨交易所成立 12 年，為泰國證券交易所(SET)之子公司，為東南亞最大之期貨市場，日均量約 42 萬口，其中交易最為活絡之商品為 SET 50 指數期貨及個股期貨，其次為黃金期貨，主要因為泰國擁有龐大黃金現貨市場交易人，就交易量占比而言，SET 50 指數期貨約占 50%，加上個股期貨則約占整體市場之 90%，黃金期貨則約占 5~6%。市場結構部分，不同於大多期貨市場，TFEX 整體交易量約有一半係來自於散戶，約 13%為外資，其餘 33%則為當地機構投資人。

### (二) 印度國家證券交易所(NSE)

以交易量而言，NSE 已成為世界第一大交易所，而就成交值而言，NSE 證券市場日均成交值約 50 億美元，期貨市場約 120~130 億美元，而匯率衍生性商品日均成交值則約 30 億美元。NSE 已成立 25 年，擁有相當成熟之市場結構：國外證券投資(Foreign Portfolio Investors, FPIs)約占 15%，境內機構投資人約占 10%，散戶加上其他國外機構投資(Foreign Institutional Investors, FIIs)約占 50%，自營交易商則約占 25%。就商品別而言，除大家相當熟悉之 Nifty 50 指數期貨暨選擇權外，Bank Nifty 指數期貨暨選擇權交易量逐漸成長，個股期貨市場亦表現不俗。

提及 NSE 近年來發展，即 2 年前於印度古吉拉特金融科技城(GIFT City)成立子交易所 NSE IFSC，其掛牌商品皆以美金交易，且交易人無需負擔印花稅、所得稅等稅賦，期能吸引外資進入市場。此外，半年前印度主管機關亦同意 NSE 推出商品期貨，目前有黃金、白銀及布蘭特原油期貨等，未來亦規劃推出農產品期貨商品。

### (三) 馬來西亞期貨交易所(BMD)

棕櫚油期貨為 BMD 旗艦商品，未平倉量約 23 萬口，為日均交易量之 4 倍，交易量及未平倉量皆占 BMD 整體市場之 80%。BMD 第二活絡商品為 FTSE 馬來西亞吉隆坡綜合指數(Bursa Malaysia Kuala Lumpur Composite Index)期貨，交易量約占 17%，未平倉量約占 11%。市場結構部分，機構投資人約占 60%，其中 45%為外資機構；散戶則占 40%，其中 17%為當地專業投資人。BMD 近來規劃擴展與 CME 在 Globex 電子交易平臺上進一步合作，期許能擴展 BMD 旗下商品範疇。

### (四) 大連商品交易所(DCE)

目前 DCE 共掛牌 19 項期貨商品，2019 年 1 至 11 月總交易量為 12 億口，日均量超過 530 萬口，未平倉量則約 900 萬口，為中國未平倉量最高之商品交易所。許多人總有中國期貨市場參與者主要為散戶之刻板印象，但其實不然，像是 DCE 棕櫚油、玉米、聚乙烯(LLDP)、聚氯乙烯(PVC)期貨之未平倉量有超過

50%係由機構投資人所持有，而唯一開放外資交易之鐵礦石(iron ore)期貨，則約有 45%之未平倉量由機構投資人所持有。自 2018 年 5 月開放外資交易鐵礦石期貨至今約 1 年半期間，已有來自 15 個國家/區域、計 180 個外資機構投資人開戶，而 2019 年前 3 季鐵礦石期貨交易量，外資約有 1,100 萬口，日均量約 6 萬口，占整體交易量比重約 3~5%。此外，亦有不少外資陸續於中國境內設置子公司，以交易鐵礦石期貨，故 DCE 預期未來外資參與度將持續成長。DCE 持續與北京當局 CSRC 合作，努力提升外資參與度，包含從現行外資取得許多建議，已簡化外資開戶程序並修改相關法規 FF0C 以利外資參與。此外，DCE 刻正研議開放更多金融商品作為保證金抵繳，另外亦期盼未來能讓外資在換匯上有更高之便利性。

#### (五) 韓國交易所(KRX)

2019 年拜中美、日韓貿易戰所賜，KRX 前 3 季交易量有亮眼成長，除旗艦商品 KOSPI 200 指數期貨暨選擇權外，由政府支持推廣之中小企業股—KOSDAQ 150 指數期貨交易量亦大幅成長 46%。KRX 不同商品有不同之市場結構，就整體而言，KRX 市場約 50%為外資、30%為機構投資人及 20%為散戶。儘管外資占比相當高，散戶仍在韓國期貨市場相當活躍，例如：KOSPI 200 指數期貨競價交易市場中，主要對手為散戶。

#### (六) 上海期貨交易所(SHFE)

SHFE 為中國交易量最高之商品交易所，旗下子公司—上海能源交易所目前有 2 項商品開放予外資交易，一是 2018 年 3 月上市之原油期貨，一是 2019 年 8 月上市之 20 號橡膠期貨。市場結構部分，交易量約 15%、未平倉量約 25%來自外資參與者，其中約一半來自於新加坡，也是 SHFE 在新加坡設立辦公室之主要原因。

## 第五節、亞太商品期貨市場 **Commodities Trading in the Asia-Pacific Region**

主持人：

**Christiane Leuthier, Senior Director of Commodities, FIA**

與談人：

**Brett Cooper, Head of Commodities, Asia, INTL FCStone**

**William Fyfe, Head of Energy for Asia-Pacific, Intercontinental Exchange (ICE)**

**Paula Spirandio, Compliance Manager, Gunvor Singapore Pte Ltd.**

**Peter Zaman, Partner, ReedSmith**

**Cecelia Zhong, Chief Marketing Officer, Guojin Metal Technology, and CEO, Guojin Resource**

**Laura Ryan, Market Development Director, Buyside Trading Asia, Refinitiv**

重點摘要：

- (一) 首先，論壇一開始就針對近期最熱門的議題「美中貿易戰」對大宗物資交易影響進行討論，**Cecelia Zhong** 表示這是一個非常艱難的問題，他引用 **Henry Paulson** 於今年 11 月於北京舉行的彭博創新經濟論壇上所說的，即使達成了第一階段協議，也不意味就已經結束了，兩個國家有太多因素考量，導致影響大宗物資供需狀況，以致於商品波動比先前更劇烈。
- (二) 有關貴金屬近期的交易，市場擔憂美中貿易戰對美國經濟造成的衝擊，促使聯準會（**Fed**）降息，黃金因此一路上漲，9 月時曾來到近六年的新高點。但近來由於美中貿易緊張關係和緩、經濟前景疑慮減少，金價轉趨下跌。
- (三) **William Fyfe** 表示近期大宗物資的生產者也轉趨悲觀，在美中貿易戰持續升溫之下，不確定性增加，避險需求也提高，例如美中貿易戰對液化天然氣(LNG)市場產生影響，中國對美國液化天然氣（LNG）課徵關稅，關稅使美國 LNG 的成本競爭力大大降低，讓中國需考慮其他選擇，中國國內市場也將遭受能源價格飆升的衝擊。現行中國經濟增長疲軟，也將對 LNG 需求造成壓力，中國 LNG 進口的增長，可能在未來幾年放緩。



- (四) 有關農產品近期的影響，Peter Zaman 表示兩個巨大的國家在吵架，影響全球經濟發展，第一個使用的武器就是黃豆，貿易戰驟然升級。兩國互相加徵關稅，其中中國對美國黃豆徵稅 25%。此前，中國是美國出口黃豆的最大買家，其向美國黃豆總產量的四分之一。自貿易戰起，美國對中國的大豆出口量下跌約 70%。中國為全球豬肉消費大國，對用於餵飼豬隻的黃豆需求巨大。另一方面，美國是世界最大的黃豆生產國，結合經濟與政治敏感性的黃豆，成為中國最有力的經貿武器之一。
- (五) 除美中貿易戰，論壇也針對能源需求進行討論，為了因應人口增長及自然資源可持續利用和更低碳未來的發展方向邁進。未來 15 年，亞洲將需要 20 到 30 億美元的基礎設施投資。此舉將增加能源的需求。
- (六) 目前歐洲針對再生能源使用持續增加，再生能源佔用電量的比重逐年成長，其中風力發電首度躍居最重要的電力來源，而燃煤火力發電的重要性則明顯下滑。德國正全面推動能源轉型，降低電業的碳排放量。德國政府宣布在 2022 年前停用核電後，今年年初德國的產官學界也首度達成共識，計畫在 2038 年前全面淘汰煤電。

## 第六節、散戶投資市場下一步發展？What's Next for the Individual Investor?

主持人：

**Terence Ang**, Head of Sales, Asia-Pacific, ION Markets

與談人：

**Denise Huang**, Senior Vice President, Taiwan Futures Exchange (TAIFEX)

**Marcus Goi**, Managing Director & CEO, Orient Futures International (Singapore)

**Thair Hussain**, Director, Global Sales, Phillip Futures

**Jackson Zheng**, CEO, HGNI International Financial (Singapore)

**Eric Jen**, Chairman of the Board & Chief Executive Officer, Yuanta Futures Hong Kong

**JB Mackenzie**, Managing Director, Asia, TD Ameritrade

重點摘要：

(一) 主持人 **Terence Ang** 詢問，國際間持續成長之散戶投資動能是從何來？**TAIFEX**

表示，散戶在臺灣資本市場一直是主要參與者，就 20 年前臺股期貨而言，散戶交易比重高達 90%，當時股票市場也是以散戶為主。經多年發展後，散戶及機構投資人交易皆持續成長後，目前呈現約各占一半之市場結構。這些散戶除部分係為追求高報酬，而選擇交易衍生性商品外，許多為專業投資人，透過程式交易及友善的下單環境，可以執行多元化交易策略，亦有許多散戶從事當沖交易。此外，散戶偏好小規模契約及較短到期期間，這也是 **TAIFEX** 在臺股期貨及選擇權成功以後，陸續推出小型臺股期貨及臺股週選擇權之原因。如今，週選擇權交易量已超過月選擇權，約占整體臺股選擇權交易量 60%。**TAIFEX** 近年來推出許多國外指數期貨商品，例如：道瓊、S&P 500、Nasdaq-100 等，皆以小規模契約設計，以吸引散戶，亦可創造機構投資人進行跨市場交易之機會。

(二) 元大期貨(香港)則指出臺灣散戶投資人偏好投資結構型商品，例如：具有期貨商品特性之槓桿型及反向型 **ETF**，於 2016、2017 上市市值約 85 億美元，至

今 2019 年第四季底，市值大幅成長至 400 億美元，估計約有 65 萬散戶參與交易 ETF 商品。而槓桿型及反向型 ETF 投資屬於間接投資期貨商品，因為 ETF 發行者必須透過期貨部位操作來追蹤指數報酬，元大期貨(香港)進一步預期未來 ETF 投資將持續成長。成立於 1975 年之 Phillip 期貨表示，過去至今，散戶客戶屬性改變許多：2、30 年前大部分散戶對投資較不熟悉，反觀現今則是主動提出不同市場及商品之投資需求，Phillip 期貨則提供一站式服務，以滿足客戶多變需求。

(三) HGNH 主要服務中國及香港客戶，成立初期即協助其客戶投資海外市場，例如：從事商品交易之中國客戶，主要基於經營業務避險需要，而非從事匯率避險；香港客戶部分，許多散戶客戶其實係自中國移入之自營商、投資公司或大宗物資交易公司，透過散戶身分進行交易，實際身分為中國企業或專業投資人。另部分客戶需求源自於受限不得交易 CSI 300 商品，進而轉向交易 SGX A50 商品，往往 A50 夜盤走勢為隔日中國股市開盤走勢指標。

(四) TD Ameritrade 表示，儘管多頭市場已持續多年，散戶投資人仍持續追求結構型商品投資，而交易所亦隨之起舞，陸續推出小型契約商品，例如：CME 之 Micro E-mini 期貨商品、ICE 亦然。在此發展趨勢之下，值得思考的是最適契約規模為何？多年來持續推出小契約規模商品之 TAIFEX 表示，商品設計主要考量係交易門檻不宜過高以吸引散戶投資人，但又不至於過小，以致造成機構投資人交易成本增加。元大期貨(香港)表示，經營期貨經紀業務 20 年以來，觀察到許多散戶交易人在期貨市場虧損不少，就經紀商角度而言，小規模契約好處在於散戶投資人虧損較小，然缺點是交易佣金則較低。況且，就新加坡人民幣期貨市場而言，同時存在標準型契約及 1/10 規模之小型契約，就交易量可知小型契約並未較受市場喜愛。Orient 期貨表示，儘管其客戶多為基金、保險、高頻交易等機構投資人，但其認為無論契約規模為何，就散戶市場而言最重要的是投資人教育。Orient 期貨正與越南客戶合作，研議如何透過人工智慧(AI)

及機器學習(machine learning)進行投資人教育，在過程中及時發現錯誤，這也是 **Orient** 期貨極為重視之加值服務。

(五) 主持人 **Terence Ang** 進一步詢問交易所或經紀商如何運用大數據、人工智慧等技術來服務市場？**TD Ameritrade** 表示，已投入大量資源於移動裝置交易服務，例如：微信、臉書、推特使用者皆可直接透過該平臺使用 **TD Ameritrade** 服務。此外，亦透過大數據分析客戶行為、市場投資趨勢，以提供其客戶完整之投資建議及諮詢服務。**Phillip** 期貨及 **HGNH** 皆表示可運用於投資人教育。**Orient** 期貨則指出其擁有龐大交易資訊，經過加工處理後，其客戶可輕易取得，並用於交易、風險管理、法令遵循、投資分析等用途。

## 第七節、主管機關對談 **Firechat with CFTC**

主講人：

**Walt Lukken**, President & Chief Executive Officer, FIA

**Dan M. Berkovitz**, Commissioner, CFTC

重點摘要：

- (一) 美國商品期貨交易委員會(Commodity Futures Trading Commission, CFTC)成立於 1974 年，為委員會組織，由 1 位主任委員及 4 名委員組成，任期為 5 年，其中主任委員係由總統指名並經美國參議院(Senate)通過，故通常會有 3 名委員為執政黨，另外 2 名為在野黨，目前即 3 名共和黨與 2 名民主黨，惟 CFTC 不隸屬於總統部會，為獨立委員會組織。
- (二) 談及 2019 年 7 月 15 日上任之 CFTC 主任委員 Dr. Heath P. Tarbert 政策方向，Dan M. Berkovitz 表示將持續並儘速完成 Dodd-Frank 法案有關資本要求(capital requirements)、店頭市場交換交易(swap)及實物商品部位限制等規範；在相關規範尚未完整訂定前，將同時提供市場參與者申請相關 No-Action Letters，以暫時豁免部分 CFTC 規範。此外，早於 2013、2014 年 CFTC 即提出自動化交易(automated trading)規範草案，惟當時未能定案，迄今一直呼籲業者自行建立合適之安全防衛系統，因此，新任主委亦計畫訂定自動化交易相關之原則性規範(principle-based approach)。
- (三) CFTC 旗下設有能源及環境市場諮詢委員會(Energy & Environmental Markets Advisory Committee)，討論包含天然氣、石油、頁岩油等全球能源及環境之發展，尤其是目前美國已從世界最大能源進口國，轉為最大能源出口國，CFTC 仍持續觀察該轉變對於全球能源市場可能潛在影響，尤以對美國能源類期貨市場之影響，例如：WTI 原油期貨、天然氣期貨、液化天然氣期貨等。儘管天然氣價格下跌多少有助於美國經濟成長，未來亦可望對外出口液態天然氣(LNG)，出口對象以亞洲市場為主，但美國始終是 WTI 原油之進口國家。此外，該影響並非僅限美國市場而已，而是涉及全球，畢竟許多能源期貨價格係全球能源價

格之參考指標，且依據 CME 提供之數據表示，能源期貨交易之境外參與者顯著成長約 30 至 40%。

(四) 有關跨境結算機構監理規範部分，CFTC 有 2 項提案：一非美國結算機構可申請豁免成為衍生性商品結算機構(Derivatives Clearing Organizations, DCOs)，當其所屬國家與美國監管架構之間具對等資格(equivalence)；二非美國結算機構可向 CFTC 註冊(registration)，CFTC 是否同意註冊則視該國監管架構、對結算機構要求及消費者保護機制而定。惟須強調的是，如何判斷兩國之間監管架構是否對等其實相當困難，畢竟涉及各國法律層面，且無論是獲予豁免或註冊資格，仍須持續觀察該國監管制度發展，若兩國監管架構原具對等資格，但當該國監管架構改變過大，CFTC 仍須撤回原先核定資格

## 第八節、產業趨勢-機會與挑戰 Industry Trends – Opportunities and Challenges

主持人：

**Bill Herder**, Head of Asia-Pacific, FIA

與談人：

**Christopher Fix**, Managing Director, Asia, CME Group

**Chin-Chong Liew**, Partner, Linklaters

**Michael Syn**, Senior Managing Director & Head of Equities, SGX

**Sharon Shi**, Managing Director, G.H Financials (Hong Kong) Limited

**Wilfred Yiu**, Managing Director & Head of Markets, Hong Kong Exchanges and Clearing Limited (HKEX)

重點摘要：

- (一) 中國市場開放是期貨產業一大趨勢。中國監管機關對中國期貨市場開放採取支持及樂觀態度，希望加快開放及改革步調，以追趕其他國際領先市場。
- (二) **HKEX** 代表認為其擁有滬港通及深港通等與中國市場連結規劃，2019 年北向及南向資金流活動均有顯著增加。此類連結規劃的建置及持續改善，有助於推動跨市場資本流動，並支持中國對外開放發展。
- (三) **CME** 代表認為，中國經濟規模達 14 兆美元，沒有任何單一方式可以與中國建立全面性連結。**CME** 近期與上海黃金交易所合作，以上海下午 3 點黃金價格為結算基準，在 **CME** 交易平台推出上海黃金期貨契約，提供其全球客戶該商品交易管道，這是一種國際化方式，但距離與中國市場建立全面連結仍相當遙遠。
- (四) **G.H Financials** 代表認為「期貨法」立法、政策透明度、匯率波動、部位結算制度、與交易所連線、資訊取得及佣金成本等，都是國外投資者對中國市場觀望的原因，中國若要與國際交易所競爭，必須在這些領域具有競爭力。
- (五) **Linklaters** 代表認為合格境外機構投資者及人民幣合格境外機構投資者的法規修訂，如放寬准入條件、擴大投資範圍等對中國期貨市場開放將有顯著影響。

此外，滬倫通透過發行存託憑證方式，提供進入對方市場融資及投資管道，是中國市場持續開放及國際化重要發展。

- (六) 在期貨商發展方面，外國期貨商希望提高中國期貨商持股比例，但中國期貨商市場已經飽和，以及對一般及專業機構投資者保護不對等，除非新進業者可以引進更先進技術或專業知識，或是引導為數眾多的證券市場投資者進入期貨市場，否則無法改變市場生態而需與現有業者競爭，在期貨商發展環境上仍有許多進步空間。
- (七) 在投資者教育方面，以國際標準檢視中國客戶違規行為持續增加，但部分行為以中國法規而言卻不違法。此外中國許多業務規則與一般國際做法不同，諸如此類都需要透過教育協助投資者了解國外市場交易結算規則。但語言是教育的一道隔閡，外國交易所必須以當地語言進行相關教育投資，才能改善中國投資者進入國際市場的落差。
- (八) 在交易所合作方面，近年來有各種合作案例，確實對跨市場整合產生實際效益。雖然投資者想要的是數量更少品質更好的交易所生態，但因文化或政治等因素，市場仍需擁有適合當地發展的交易所，優點是不同交易所之間可能有多樣性資金來源與交易行為，對於市場流動性持續將有所助益。
- (九) 在技術發展方面，許多領域由基礎架構驅動轉為市場導向驅動來推動技術進展，當市場領先佈署技術，會回頭驅動交易所導入技術以滿足市場需求，例如雲端運用、人工智慧、區塊鏈等，監管機關應訂定相關規章做為市場遵循依據。



## 第九節、辯論大會-法規的訂定有達到目的？ **The Great Debate -Is Regulation Fit for Purpose?**

主持人：

**Cathy Lyall**, Co-Founder, Seismic Foundry

正方：

**John Fildes**, Expert Vice President , Bain & Company

**Kevin Rideout**, Managing Director, Global Client Development, Hong Kong Exchanges and Clearing Limited

反方：

**Allison Lurton**, General Counsel & Chief Legal Officer, FIA

**Stephen Obie**, Partner, Jones Day

重點摘要：

本次辯論議題為「法規的訂定有達到目的？」，主持人於辯論前先進行熱身，詢問幾個問題由現場觀眾舉牌表達 Yes 或 No，例如是否同意交易所間合併已結束、接下來五年亞洲將會成為商品價格的決定者等問題。現場觀眾支持正、反兩方人數相當，隨後由雙方開始針對本次辯論議題進行辯論。

(一) 正方主要論點：

正方提到法規的角色是什麼？如同金融機構須有責任管理存戶的存款，期貨交易所的運行需遵守嚴格的規定，法規的需求來自於交易所的內部及外部，確保當交易所發生任何事情都有規定可以遵循，交易所外部法規需求如 CFTC，需監管期貨及選擇權的交易，保護市場參與者不受到詐騙、價格操縱或交易制度遭濫用，確保整個期貨及選擇權市場正常運作，每個交易人都受到公平的對待。交易所內部需求則是需在符合 CFTC 標準下，訂定法規及標準保護市場投資人，確保市場公平交易。在 1980 年代，CFTC 訂定了 2,000 個法規，2,000 年增加到 4,000 個，2016 年增加到 8,000 個。隨著期貨商家數持續增加，參與者越來越多，金融市場波動越來越迅速，需要保護的人也越來越多。2008 年金融海嘯、美國曾經發生嚴重的污染與童工問題，最終也是透過法規解決問題。

多數人會主張自由經濟，讓市場可以自由發展，不要透過法規去限制發展，但最終可能使得市場越趨混亂。例如近來的加密貨幣，越來越多的國家開始立法管制加密貨幣，降低加密貨幣帶來的金融風險。

(二) 反方主要論點：

反方提到今日主題是法規的訂定是否有切中需求，是否有過度管理，無論是金融機構或交易所都是確實需要有足夠的自身管理的能力，當過度管理時，則可能限制了他的自由性，限制了行業的發展。除此之外，當過度管理時也會增加遵循成本，公司必須聘請更多的律師，聘請更多法令遵循人員稽核公司是否依照相關規範作業，這些增加法令遵循成本是否有大於制定法規所帶來的效益。

(三) 結論:雙方結束辯論之後，由現場觀眾舉牌決定是否現行法規的訂定有達到目的，現場觀眾多數舉牌表達 **YES**，認為現行訂定的法規可確保市場可以正常運作，保護市場參與者不受到欺騙、價格操縱或交易制度遭濫用。

## 第十節、環境管理相關市場解決方案 **The Rise of Market Solutions to Manage Environmental Issues**

主持人：

**Emma Davey, Chief Commercial Officer, FIA**

與談人：

**George Harrington**, Managing Director & Global Head of Exchanges & Americas Structured Products, MSCI

**Michael Peters**, Deputy Chief Executive Officer, Eurex Frankfurt AG

**Franc Sportiello**, Head of Business Development, Financial derivatives, Asia-Pacific, Intercontinental Exchange

**Frederick Shen**, Senior Vice President & Head of Business Management, Global Treasury, OCBC Group

**Michael Tang**, Head, Listing Policy & Product Admission, SGX Regulation

**Stefan Ullrich**, Director, Sustainable Finance, Paia Consulting

重點摘要：

- (一) 永續性牽涉許多環境、社會、治理的 **ESG** 相關議題，尋求對應解決方案需要時間，但環境議題已迫在眉睫。2018 年全球對再生能源投資約 2700 億美元，為新石化燃料發電投資的 3 倍。世界最大的責任投資者組織，聯合國責任投資原則(Principles for Responsible Investment)組織，有超過 2500 個機構簽署，管理 82 兆美元資產，這些資金都投入永續發展的投資標的。
- (二) 機構投資者的鉅額資本需要尋找永續性投資標的，完善的數據資料對投資決策至關重要，許多研究顯示公司的永續性績效與其財務績效存在連結關係，是促使投資者要求揭露更多永續性相關資料的原因之一。
- (三) **SGX** 於 2011 年開始鼓勵上市公司提供永續發展報告，並於 2016 年轉為上市公司的強制要求。公司必須揭露影響業務的 **ESG** 因素、採取政策與績效、次年目標等，報告必須符合規定架構以利於資料比較。下一階段將檢視揭露資料是否足以滿足投資者需求，或是探討應提供哪些更合適資料。
- (四) 新加坡華僑銀行退出越南燃煤電廠融資計畫，重塑公司業務流程與政策，禁止參與非 **ESG** 友善機構的借貸、債券發行或相關商品交易等，這些措施對提供

永續發展報告有相當助益。此外，銀行擅長從事資源重分配，可以尋找相關金融工具進行適當的定價或資源分配，以利於環境永續發展。

- (五) MSCI 為指數提供者，從指數角度而言是以公司 ESG 評級為基礎。MSCI 在其官方網站提供 MSCI 全球基準指數(ACWI)中 2800 家公司的 ESG 評級，並計畫於 2020 年完成 MSCI ACWI IMI 指數中總共 7500 家成分公司 ESG 評級。MSCI 已經看到各領域改採 ESG 評級作為基準的趨勢，此趨勢在歐洲進展迅速，在此領域落後的美國亦正發展中。
- (六) 交易所可以提供工具協助管理永續性相關風險。在資本市場、債券融資等領域引導資本配置降低碳足跡，在衍生品市場及指數化領域，可以提供具有標準原則及參數的風險管理工具，標準必須由指數提供者排除爭議性條件，例如煤炭、核能等是否具備永續性等，還可因應不同需求加入不同參數以產生相關指數。此類指數對於已經擁有永續性投資組合的資產管理者而言，將是相對應避險工具。
- (七) 在資本市場方面，綠色債券是發展迅速的低碳經濟融資工具。目前較具領導地位的債券標準有綠色債券原則(GBP)及氣候債券標準(CBS)，其中 CBS 已發展至 2.0 版，要求債券發行前取得債券認證，發行後亦需定期對資金實際用途及成果等進行認證，確保債券發行者將資金投入約訂之綠色投資計畫並取得一定標準之成果。

## 第十一節、結算機構困境 The CCP's Dilemma?

主持人：

**Russell Beattie, Director, APAC Head of Futures & Options, OTC Clearing Services and FX/B of A Securities**

與談人：

**Lee Betsill, Managing Director & Chief Risk Officer, CME Group**

**Kate Birchall, Head of Asia-Pacific, LCH Ltd.**

**Roland Chai, Managing Director, Head of Post Trade, Hong Kong Exchanges and Clearing Limited**

**Nicolas Friedman Managing Director, Global Co-Head of Counterparty Risk, Goldman Sachs**

**Agnes Koh, Senior Managing Director, Chief Risk Officer, SGX**

**Erik Mueller, Chief Executive Officer, Eurex Clearing AG**

**Rogier van Kempen, Executive Director, Clearinghouse Risk & Strategy J.P.Morgan**

重點摘要：

- (一) 主持人 **Russell Beattie** 開頭引用 **William Wordsworth** 所說過的話，生命可以分成三個部分，過去、現在及未來，本次針對 **CCP(集中結算; Central counterparty)** 的主題也將分成三個部分來討論，就是 **CCP** 在過去所發生的事情，以及過去所發生的事情怎麼影響現在的政策，未來 **CCP** 的潛在風險及如何克服潛在風險。
- (二) **Erik Mueller** 首先針對過去 **CCP** 所發生的事情做說明，他提到 **CCP** 是一種很特別的產物，一直在持續成長跟茁壯，它也順利度過了一些艱難的時刻，如英國脫歐事件、**Lehmann Brothers** 事件等。主管機關也非常樂見 **CCP** 可以控制並管理風險。
- (三) **Rogier van Kempen** 針對 **FCM** 觀點發表看法，他很同意 **Erik** 所說，並且提到過去主要將焦點放在部位集中度加收保證金方式 <sup>1</sup>(**concentration margins**)，過去它們和全球 50 家結算公司討論針對部位集中度收取保證金的影響為何，持續精進部位集中度加收保證金方式，不斷從錯誤中學習改進。

---

<sup>1</sup> 部位集中度加收保證金方式(**concentration margins**)：集中結算機構依單一結算會員部位集中度風險，徵收之保證金。

- (四) **Roland Chai** 提到香港地理環境非常特別，除了世界各國交易人參與交易外，還有中國大陸也會在香港參與交易。由於參與者多元化，香港是個適合發展 **CCP** 的地方。因此我們嘗試建立公平開放的環境，加強風險控管的技術，以同時吸引國際及中國大陸的交易人至香港集中結算。
- (五) **Kate** 也分享了歐洲、亞洲和美洲法規不一致的經驗，他認為各地法規不一致是很大的挑戰，但 **LCH** 是一間嚴謹的結算機構，針對結算標準是不會因為法規不一致而有所讓步，它們盡可能帶給客戶一致性，針對不一致的地方，也盡可能提供協助，讓客戶有所遵從。
- (六) **CCP** 的發展整體而言對市場還是有利的，透過管理交易對手的風險，當市場發生劇烈波動時，可有效的控制風險，因此 **CCP** 未來面對的挑戰仍是如何有效管理好買方及賣方的風險，無論是透過保證金控管、集中度控管等方式及結算機構間相互合作方式，讓 **CCP** 可繼續成長茁壯。

## 第十二節、衍生品集中市場維運效率方法 **The Way to Operations Efficiency in the Listed Derivatives Market**

主持人：

**James Daniels**, Executive Director, ISG Product Operations, Morgan Stanley

與談人：

**Paul Abrey**, Senior Director, Global Head Post Trade Client Experience, FIS

**Don Byron**, Senior Vice President, Head of Global Industry Operations & Execution, FIA

**Hugh Daly**, General Manager, Message Automation, Broadridge Financial Solutions

**Max E**, Head of Listed Derivative Clearing Product APAC, Deutsche Bank

Alison King, Head of Trading & Clearing Services, SGX

重點摘要：

- (一) 近年來法規對風險監管要求不斷提升，業界投入許多資源進行資訊系統間介面整合，使資料傳遞及報表產製等更自動化以滿足多樣化監管要求。維運層面的風險包括：現有資訊系統無法滿足效能要求或市場競爭、新興技術創新發展、吸引人才的能力等。
- (二) **SGX** 定期進行系統升級導入新功能，對於系統內多數資料，提供應用程式介面 (API)存取服務。雖然交易所提供此類自動化服務，期貨商是否可以跟隨交易所導入相關應用，提供更自動化作業機制提高效率，卻是一個問題。
- (三) **FIS** 代表認為期貨業應該有業界遵循的資訊交換標準，但現況是各交易所擁有各自標準，即使是通用的金融資訊交換(**FIX**)協定，各交易所仍可能在部分欄位定義不同。不同標準導致軟體開發費時且無法一體適用，若能達到標準化，將能減少軟體開發所需資源，供應商也能提供更全面解決方案。**FIA** 代表認為不同技術或作業平台系統之間也缺乏標準化規範，使整體系統維運成本非常高。**FIA** 規劃從維運角度檢視標準化及資料正規化(**Normalization**)，希望透過標準可以降低整體維運成本，並說明 **FIX** 標籤 **1031** 的推動即為一例。

- (四) **Deutsche Bank** 代表認為提升維運效率必須考慮成本效益。建置新系統是龐大投資，必須確保導入適當技術，避免後續耗費大量資源處理因錯誤技術所引發的問題。在人力資源方面，可以透過教育訓練或雇用高生產力人員來提高維運效率，此外在成本較低的地區建置維運能量亦是提高成本效益的方式。
- (五) **Broadridge Financial Solutions** 代表認為現今科技已經可以滿足大量資料處理需求。除了硬體發展，服務架構也在改變，例如雲端服務出現，處理大量資料可以透過雲端資源來完成，不一定要建置大型主機或數據中心，讓小型業者可以較低的營運成本進入市場。
- (六) 最後各與談人認為最需要解決的問題包括：一個滿足維運作業自動化及不受時間限制的作業平台、提高業界各領域間介面透明化及標準化、交易所與供應商之間溝通協調、**SGX** 跟隨其系統供應商 **NASDAQ OMX Group** 規劃，將相關服務轉移至雲端，以提高彈性降低成本。



## 第四章、心得及建議

本次出席國際性研討會，透過與會人員相互交流，可瞭解目前國際金融市場發展及監理趨勢，謹提出以下心得與建議作為未來政策發展之參考：

- 一、**持續推動我國期貨商品國際化與多元化:**針對因應全球永續發展投資趨勢，近年來國外交易所主攻 ESG 相關衍生性商品部分，經查我國於 2017 年 12 月 18 日臺灣指數公司與 FTSE Russell 共同發布合編「FTSE4Good 臺灣指數公司臺灣永續指數」(簡稱臺灣永續指數)。該指數篩選符合環境、社會及治理之永續標準企業，排除可能之高風險投資標的，為國內首檔結合完整環境、社會、治理與財務指標篩選投資型 ESG 指數，目的使投資人落實責任投資，亦能獲得長期穩健投資報酬。長遠看來，國內現貨市場對永續投資需求將隨國際趨勢持續成長，並亦衍生避險及以期貨為交易替代工具之需求，且永續指數期貨亦可提升本國期貨市場支持永續發展形象，本會刻正督導期交所遂規劃推動臺灣永續指數期貨上市，期交所刻正研提規畫建議案中，預計可於 2020 年上半年推出，期許藉由新商品及新制度雙管齊下，完善、穩定投資環境、投資產品線，期望能夠引領台灣期貨市場邁向新里程碑。
- 二、**我國推動證券型代幣發行之監理規範與國際接軌:**因應金融科技創新國際趨勢，近年來國外監理機關欲強化對金融機構之金融科技創新技術之管理，相關具體可行做法，包括(1)優先採行監理沙盒機制；(2)開放證券型代幣發行(STO)；及(3)加強國際合作與經驗交流，經查我國亦已推動相關措施，以利制度與國際接軌，說明如下：
  - (一) 本會已於 107 年 1 月 31 日發布全球首部金融監理沙盒法律「金融科技發展與創新實驗條例」(下稱實驗條例)，自 107 年 4 月 30 日施行，本會並配套成立專責單位，訂定授權子法及推動措施，以發展創新金融商品或服務，提供金融服務創新者進行金融科技研發試作之安全環境，並採取輔導及協助措施，以持續鼓勵金融業及金融科技業者投入創新研發，促進金融科技

發展，主要措施包括(1)成立創新中心專責諮詢輔導及政策推動、(2)提供多元諮詢輔導管道，結合本會跨局處資源，提供輔導服務、(3)開辦監理門診，定期派員至金融科技創新園區協助釐清法規疑義。

(二) 本會持續進行法規鬆綁，鼓勵金融科技創新發展，例如已著手研議開放 STO 管理法規，核定 STO 為有價證券且納入證券交易法規範，並依募資金額高低訂定分級管理措施，建議未來可持續於數位資產交易平台之安全性及健全性面向強化因應措施，本會並將持續派員積極參與國際會議，以利隨時掌握國際脈動並吸取他國經驗，擴大交流，以利促進我國金融科技創新商品或服務健全發展。

附件一：國際監理官會議議程及出席人員清單

附件二、研討會簡報

15<sup>th</sup> Annual Asia Derivatives Conference  
International Regulators' Meeting hosted by MAS  
3 December 2019  
The St Regis Singapore

9.00 AM Registration and Refreshments

9.30 AM Welcome Remarks

**Panel 1 – Regulatory Crossroads: Transiting to a Different World**

Internationally, regulators have worked to address the rapidly changing regulatory landscape. In light of Brexit, the impending transition from interbank offered rates to alternative risk-free rates, and on-going implementation of the G20 derivatives reforms, what are the outstanding regulatory issues that are most pressing? How can regulators continue to leverage cross-border cooperation and partnership with the industry in addressing these issues? Looking forward, what are new trends that regulators and market participants should pay attention to?

**Moderator:** Jackie Mesa, Chief Operating Officer and Senior Vice President of Global Policy, FIA

**Panellists:**

- **Alejandro Orgaz-Barnier**, Senior Manager, Australian Securities and Investments Commission
- **Hidetoshi Oi**, Deputy Director, International Affairs Office, Japan Financial Services Agency
- **Jenny Cosco**, Managing Director, Co-head of Government Affairs, Asia Pacific, Goldman Sachs (Asia) L.L.C
- **Lee Betsill**, Chief Risk Officer of CME Clearing, CME Group
- **Valerian Crasto**, Managing Director and Chief Operating Officer of Treasury and Markets, DBS Bank Ltd

10.30 AM Coffee Break

10.50 AM **Presentation & Discussion 1 – The Fintech Regulatory Landscape**

The financial services sector is constantly experiencing transformation due to fintech innovations and increasingly market players are utilising fintech to gain a competitive edge. Amidst this landscape, regulators have to strike a balance between facilitating innovation and maintaining the soundness of the financial system. This presentation discusses the regulatory approaches adopted by authorities toward fintech innovations and their implications.

**Presenter:** Stephen J. Obie, Partner, Jones Day

11.50 AM Lunch

- 1.30 PM**      **Fireside Chat with Commissioner Dan Berkovitz, US Commodity Futures Trading Commission**
- Moderator:** **Walt Lukken**, President and Chief Executive Officer, FIA
- 2.00 PM**      **Presentation & Discussion 2 – Abu Dhabi Global Market: Crypto Assets Regulatory Framework**
- This presentation provides an overview of the crypto asset regulatory framework and regulatory position towards digital securities in Abu Dhabi Global Market.
- Presenter:** **Richard Teng**, Chief Executive Officer, Financial Services Regulatory Authority, Abu Dhabi Global Market
- 2.30 PM**      **Presentation & Discussion 3 – Digital Tokens: Innovations in the Financial Industry**
- Innovation in the financial industry continues swiftly and potentially offers to improve the efficiency and transparency of financial markets. This session comprises a series of presentations by industry members on key developments arising from innovations in the digital token space, followed by a Q&A session.
- (1) An Exchange’s Perspective: ICE Futures**
- ICE Futures US launched physically settled daily and monthly Bakkt™ Bitcoin futures contracts in September 2019. ICE believes that end-to-end regulation in listing, trading, clearing, and custody allows for better risk management and improves market quality, transparency, security as well as enhances AML/KYC practices.
- Presenter:** **Lucas Schmeddes**, President and Chief Operating Officer, ICE Futures Singapore and ICE Clear Singapore
- (2) An Intermediary’s Perspective: TP ICAP**
- TP ICAP recognises that a wider universe of digital assets may be created by the “tokenisation” of value, and this may have applications across traditional asset classes. TP ICAP is exploring how it can provide institutional solutions to clients looking to operate within this emergent asset class.
- Presenter:** **Amir Zaidi**, Global Head of Compliance, TP ICAP
- (3) A Market Participant’s perspective: JPMorgan**
- This presentation provides an overview of the JPM Coin and case studies on the envisaged use of the JPM Coin for payments and settlements, and the potential benefits compared to existing payment instruments and infrastructure.
- Presenter:** **Naveen Mallela**, Head of Digital, Asia Pacific, Treasury Services, JPMorgan Chase & Co.
- 3.30 PM**      **Coffee Break**

**3.50 PM**

**Panel 2 – Regulatory Perimeters Surrounding Fintech and Digital Assets**

As big data, artificial intelligence and digital assets continue to transform the financial markets, regulators are grappling with unique and emerging risks arising from the developments. This panel will discuss lessons learnt from the interactions between regulations and fintech innovations, and explore the challenges faced especially given the divergence in international regulatory approaches.

**Moderator: Steven Gatti**, Partner, Clifford Chance US LLP

**Panellists:**

- **Amir Zaidi**, Global Head of Compliance, TP ICAP
- **Congyan Tan**, Vice President, China Institute of Finance and Capital Markets, China Securities Regulatory Commission
- **Lucas Schmeddes**, President and Chief Operating Officer, ICE Futures Singapore and ICE Clear Singapore
- **Naveen Mallela**, Head of Digital, Asia Pacific, Treasury Services, JPMorgan Chase & Co.
- **Neel Maitra**, Crypto Specialist (Senior Special Counsel), US Securities and Exchange Commission
- **Richard Teng**, Chief Executive Officer, Financial Services Regulatory Authority, Abu Dhabi Global Market
- **Stephen J. Obie**, Partner, Jones Day

**5.00 PM**

**Adjournment**

Transport arrangements have been made to bring meeting participants to the Exchange Leaders and Regulators Evening Reception.



**15<sup>th</sup> Annual Asia Derivatives Conference**  
**International Regulators' Meeting hosted by MAS**  
**3 December 2019**  
**The St Regis Singapore**

**Participants List**

**Jill Hong**  
Abu Dhabi Global Market

**Richard Teng**  
Abu Dhabi Global Market

**Alex Orgaz-Barnier**  
Australian Securities and Investments  
Commission

**Alharthi Mohammed**  
Capital Market Authority of Saudi Arabia

**Dawod Albarkindi**  
Capital Market Authority of Saudi Arabia

**Richard M. Muigai**  
Capital Markets Authority of Kenya

**Shao Yu**  
China Institute of Finance and Capital  
Markets, China Securities Regulatory  
Commission

**Tan Congyan**  
China Institute of Finance and Capital  
Markets, China Securities Regulatory  
Commission

**Xue Linyan**  
China Institute of Finance and Capital  
Markets, China Securities Regulatory  
Commission

**Yang Yang**  
China Institute of Finance and Capital  
Markets, China Securities Regulatory  
Commission

**Li Zhicheng**  
China Securities Regulatory Commission

**Morgane Salomé**  
Economic department of the French  
Embassy

**Eija Holttinen**  
Financial Stability Board

**Hidetoshi Oi**  
Japan Financial Services Agency

**Abigail Ng**  
Monetary Authority of Singapore

**Koh Hong Eng**  
Monetary Authority of Singapore

**Lee Boon Ngiap**  
Monetary Authority of Singapore

**Loh Pui Hoon**  
Monetary Authority of Singapore

**Merion Anggerek**  
Monetary Authority of Singapore

**Merlyn Ee**  
Monetary Authority of Singapore

**Phua Wee Ling**  
Monetary Authority of Singapore

**Valerie Tay**  
Monetary Authority of Singapore

<b>Naryketia Sim</b> Securities and Exchange Commission of Cambodia	<b>Pheakdey Vin</b> Securities and Exchange Commission of Cambodia
<b>Kaoru Marakami</b> Securities and Exchange Surveillance Commission of Japan	<b>Doris Lo</b> Securities and Futures Bureau, Financial Supervisory Commission Taiwan
<b>Vira Wu</b> Securities and Futures Bureau, Financial Supervisory Commission Taiwan	<b>Julia Leung</b> Securities And Futures Commission <i>Hang Kong</i>
<b>Dr Nabaraj Adhikari</b> Securities Board of Nepal	<b>Rewat Shrestha</b> Securities Board of Nepal
<b>Alina Osman</b> Securities Commission Malaysia	<b>Hadi Saaid</b> Securities Commission Malaysia
<b>Hooi Meng</b> Securities Commission Malaysia	<b>Ivan Chan</b> Securities Commission Malaysia
<b>Tai Mei Ling</b> Securities Commission Malaysia	<b>Makoto Hosomi</b> The Financial Futures Association of Japan
<b>Tsuyoshi Kitamura</b> The Financial Futures Association of Japan	<b>Dan Berkovitz</b> US Commodity Futures Trading Commission
<b>Erik Remmler</b> US Commodity Futures Trading Commission	<b>Neel Maitra</b> US Securities and Exchange Commission



**ONE** FIRM  
WORLDWIDE<sup>SM</sup>

JONES  
DAY

**THE FINTECH REGULATORY  
LANDSCAPE**

December 3, 2019

Stephen J. Obie, Partner

JONES  
DAY

## AGENDA

### 1. Developments in Fintech

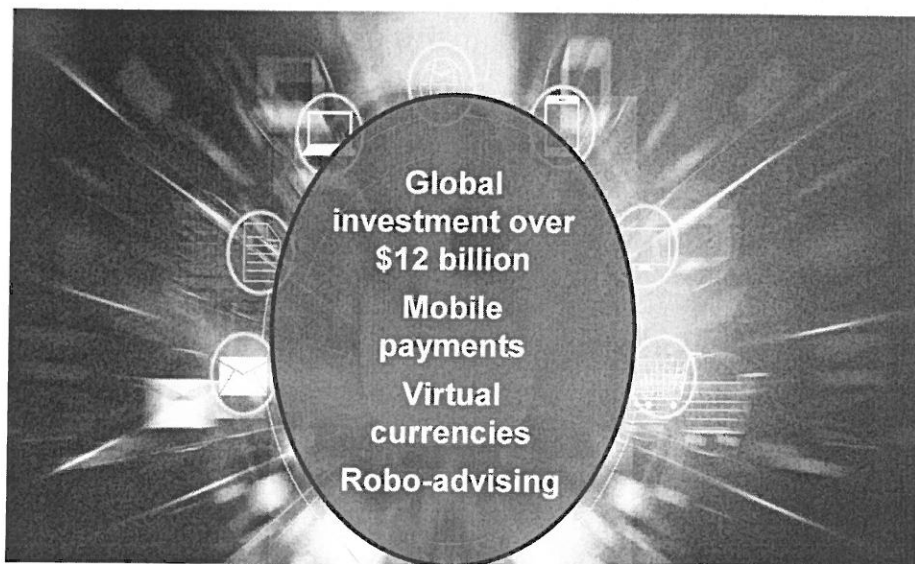
- Advances in Computing Power & Access
- The Rise of Big Data & AI

### 2. International Regulatory Models & Trends

- Legal Frameworks for Fintech
- Regulatory Sandboxes
- International Coordination

**THE PACE OF FINTECH INNOVATION**

**Is changing the world we live in...**



## THE PRE-FINTECH LANDSCAPE



7

JONES  
DAY

## FINTECH DISRUPTORS

Have now found a way into established markets

- Pioneering more cost-effective and consumer friendly solutions
- Harnessing innovative technologies



8

JONES  
DAY

## EVOLVING CONSUMER EXPECTATIONS

Today 1 out of 10 millennials uses a digital wallet for every purchase



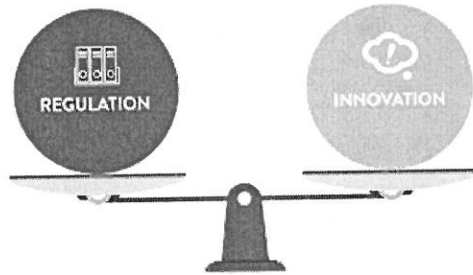
## ADVANCES IN COMPUTING POWER & ACCESS

Nearly 9 out of 10 senior executives in Finance and IT believe that blockchains will be used on a daily basis in the finance industry by 2026



## WHERE DOES THIS LEAVE REGULATORS?

Consumer protection  
 Reducing information asymmetries  
 Fraud prevention



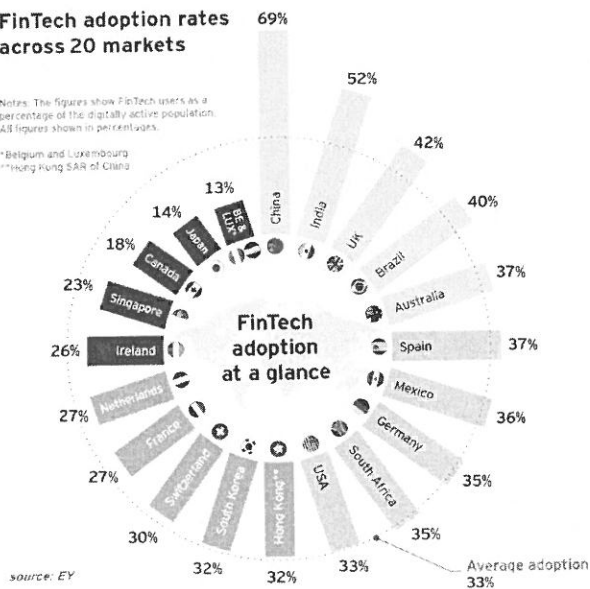
Competition  
 Reasonable compliance costs  
 Regulatory "safe" spaces

## FINTECH IS THE NEW NORMAL

### FinTech adoption rates across 20 markets

Notes: The figures show FinTech users as a percentage of the digitally active population. All figures shown in percentages.

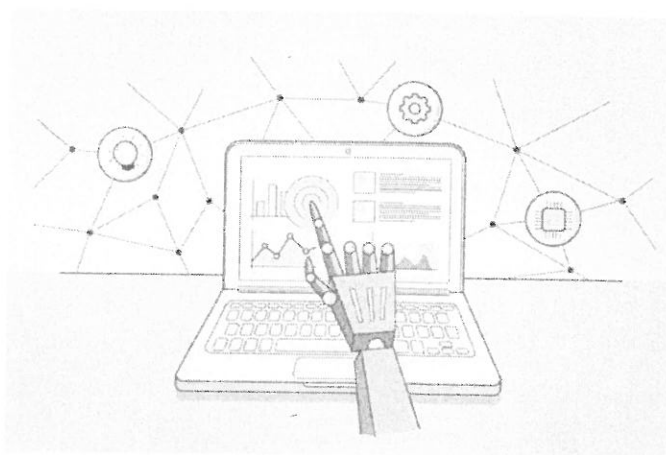
\* Belgium and Luxembourg  
 \*\* Hong Kong SAR of China



**APPLICATION OF BIG DATA & AI**

More and more decisions about our lives are made by computers

- Credit approval
- Medical care
- Hiring choices
- Predictive banking



# APPLE – GOLDMAN SACHS CREDIT CARD ROLLOUT

Apple Card completely rethinks everything about the credit card.

FUNDS NEWS

Apple co-founder says Apple Card algorithm gave wife lower credit limit



DHH @dhh

The @AppleCard is such a program. My wife and I filed returns, live in a community state, and time. Yet thinks I does. No

The New York Times

**Apple Card Investigated After Gender Discrimination Complaints**



NY No

By Linda A. Laceywell, Financial Services

Building a fairer and more inclusive financial services industry for everyone





## AI GONE AWRY

- **Google & Flickr, 2015.**
  - Photo recognition feature identifies individuals as animals
- **Microsoft, 2016.**
  - Chat bots spew racist comments 16 hours after going live
- **Facebook, 2017.**
  - Bots Alice and Bob develop their own communication capability
- **Amazon, 2018**
  - Recruiting engine biased against women

## KEY TAKEAWAYS

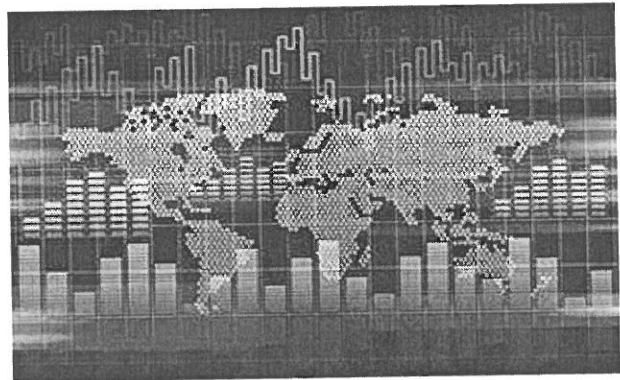
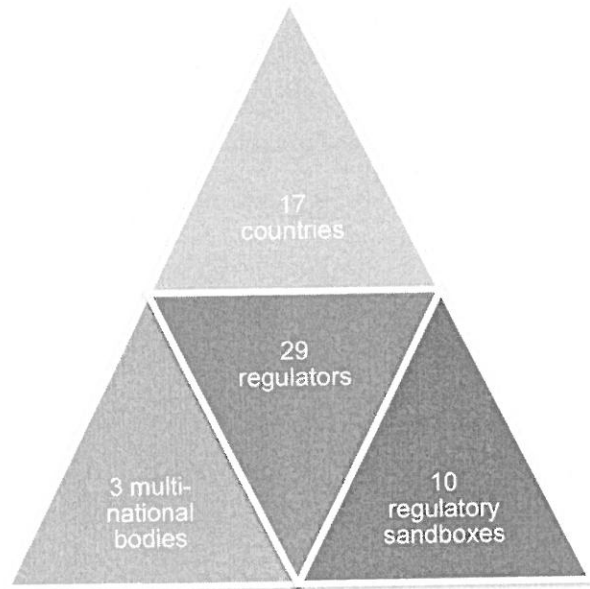
Elements of AI algorithms have the potential to result in proxies equivalent to prohibited discrimination.

How do black box and latent bias problems intersect with regulatory frameworks?

One tweet can (and did) result in an investigation.

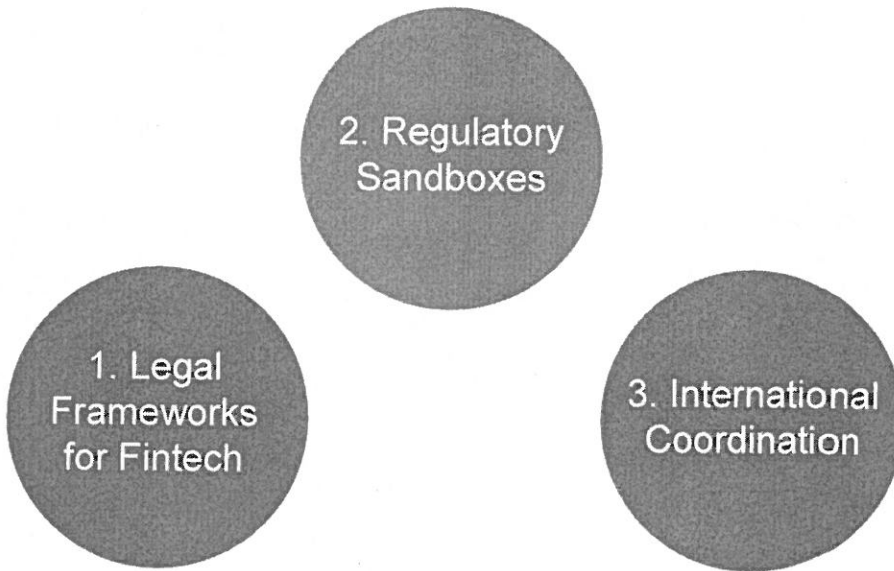
Could this translate into an industrywide investigation and increased regulatory scrutiny?

✓  
| SNAPSHOT OF INTERNATIONAL REGULATORS





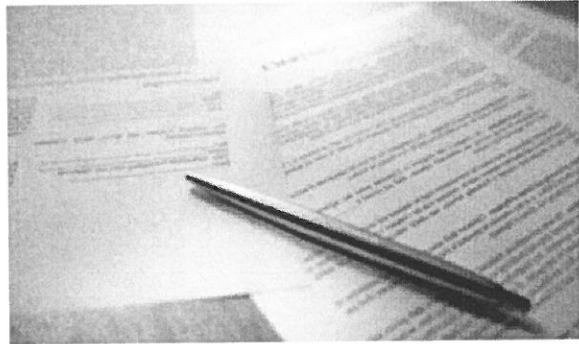
## MODELS & TRENDS IN REGULATING INNOVATION



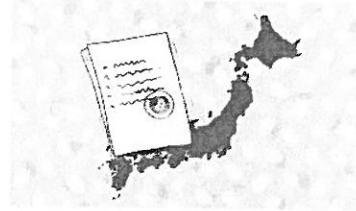
## SNAPSHOT

### Legal frameworks specifically targeted towards Fintech

- Address uncertainty surrounding the legal status of Fintech
- Drive innovation & competition
- Alternative to existing frameworks



## JAPAN



- **The Payment Services Act (the “PSA”)**
  - Independent licensing and supervisory regime for service providers of digital currencies, wallets, or exchanges
  - Amendments to extend the PSA to cryptocurrencies in the first half of 2020
- **Amendments to the Financial Instruments and Exchange Act**
  - Impose disclosure rules on token offerings under the new concept of “electronically recorded transferable rights”
  - Take effect first half of 2020

## LIECHTENSTEIN



- **The Financial Market Authority (the “FMA”)**
  - Approved a prospectus for a “security token” on August 30, 2018
- **The Token & TT-Service Provider Act (the “Blockchain Act”)**
  - Unanimously adopted by the Liechtenstein Parliament on October 3, 2019
  - Regulates civil law questions regarding tokens, the representation of rights via tokens, and the transfer of tokens
  - Imposes obligations on trustworthy technologies (“TT”) service providers that generate or issue tokens

## CHINA



### • The Cryptography Law of 2019

- Approved by the 13th National People's Congress (the “NPC”) Standing Committee on October 26, 2019
- Aimed at facilitating the development of the cryptography industry
- Applies to products, technologies, and services used to encrypt or authenticate information
- Three categories: 1) core cryptography; 2) ordinary cryptography; and 3) commercial cryptography
- Regulates the use of cryptography and sets standards for cryptography to protect cybersecurity and national security
- Takes effect on January 1, 2020

27

JONES  
DAY

## SWITZERLAND



### • Technology-neutral Approach to Regulating Digital Assets

- Blockchain and Fintech projects fall under the regulatory regimes of the industries they relate to

### • Financial Market Supervisory Authority (“FINMA”) Guidelines for Initial Coin Offerings (“ICOs”)

- Set out a regulatory framework for ICOs tied to the “underlying economic function of the token”
- Regulations apply according to token taxonomy
- Based on three token categories: 1) payment tokens; 2) utility tokens; and 3) hybrid tokens

28

JONES  
DAY

## FRANCE



- **PACTE Bill**

- Enacted by the French Parliament in June 2019
- New regulatory regime for ICOs and several categories of “crypto-asset service providers”

- **The Autorité Des Marchés Financiers (the “AMF”)**

- Universal Node to ICO Research & Network (“UNICORN”) program
- Aims to investigate the relative merits and viability of extending the scope of existing laws and developing new legislation that applies specifically to ICOs and Fintech

## MALTA



- **The Malta Financial Services Authority (the “MFSA”)**

- Established the Malta Digital Innovation Authority (the “MDIA”)
- Developed a new regulatory framework for exchanges, trading platforms, and ICOs with consumer protection, white paper, and licensing requirements

- **New regulatory framework for Fintech**

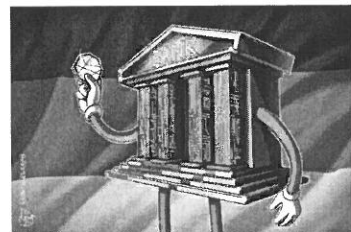
- The Virtual Financial Assets Act (the “VFA”)
- The Virtual Currency Act (the “VCA”)
- The Innovative Technology Arrangement & Services Act (the “ITAS”)

## SINGAPORE



- **The Payment Services Act (the “PS Act”)**
  - Expands the scope of regulated payment services to include digital payment token service providers
  - Digital payment token service providers must be licensed
- **The Monetary Authority of Singapore (the “MAS”) Guide to Digital Token Offerings**
  - Updated April 2019
  - Provides guidance on the application of securities laws administered by MAS in relation to offerings of digital tokens

## GERMANY



- **The Federal Financial Supervisory Authority (“BaFin”)**
  - Set up dedicated team to support Fintech companies in relation to market entry
  - Published specific regulatory guidance on alternative payment methods, automated portfolio management, blockchain technology, crowdfunding, virtual currencies, and insurtech
- **New Law Implementing EU Directive 2015/849**
  - Passed by the German Parliament on November 29, 2019
  - Enables banks to sell and store cryptocurrencies from January 1, 2020
  - Other custody providers and crypto exchanges must obtain a license from BaFin





## SNAPSHOT

### Regulatory sandboxes

- Safe spaces to test new Fintech ideas & products
- Help regulators pre-empt risks
- Features vary across jurisdictions
- Three models:
  - 1) “Case-by-case” sandboxes
  - 2) Limited sandboxes
  - 3) Voluntary sandboxes



## AUSTRALIA



- **Australian Securities & Investments Commission (“ASIC”) Innovation Hub**
  - Launched in 2016
  - Provides Fintech businesses with designated support contacts and a 12-month regulatory sandbox with licensing and registration safe harbors
- **Bill to expand the Innovation Hub Regulatory Sandbox**
  - Introduced by the Australian Parliament in July 2019
  - Enables businesses to test a wider range of financial products and services for a longer period of time
  - Provides new conditional exemptions from licensing requirements for testing of financial and credit products and services

## HONG KONG



- **Fintech Contact Point & Facilitation Office**
  - Established by the Hong Kong Securities and Futures Commission (the “SFC”) and the Hong Kong Monetary Authority (the “HKMA”)
  - Intended to facilitate the Fintech community’s understanding of the current regulatory regime
- **The SFC Regulatory Sandbox**
  - Launched in 2017
  - Permits Fintech firms to operate within a confined regulatory environment
  - Disclosure of Fintech firm business models and operations, acceptance of licensing conditions, and heightened monitoring and supervision
  - Potential for future lifting or variation of licensing conditions

37



## UNITED STATES



- **The Commodity Futures Trading Commission (the “CFTC”)**
  - Launched LabCFTC to promote responsible Fintech innovation and competition
  - Platform to inform the CFTC about new technologies through engagement with the Fintech market participant community
- **The Office of the Comptroller of the Currency (the “OCC”)**
  - Launched the Responsible Innovation Framework and the Office of Innovation in 2016
  - Provides banks and non-banks with advice regarding Fintech activities
- **The U.S. Securities and Exchange Commission (the “SEC”)**
  - Launched the FinHub initiative in October 2018
  - Provides Fintech businesses and members of the public with guidance, important regulatory updates, and a mechanism to directly engage with the SEC

38



## KENYA



- **The Capital Markets Authority (the “CMA”)**
  - Established a regulatory sandbox to test innovative products and services in a controlled and monitored environment under a more flexible regulatory regime
  - Currently receiving applications for admission to the regulatory sandbox
- **The Ministry of Information Communications and Technology**
  - Established a taskforce to explore how Kenya can leverage blockchain and IoT technology
  - Collaborating with Mastercard to develop a digital payment platform for government services

39

JONES  
DAY

## INDONESIA



- **The Financial Services Authority (the “OJK”)**
  - The OJK specifically issued the Regulations on Digital Financial Innovation in the Financial Services Sector to introduce a regulatory sandbox
  - Innovative Fintech companies are allowed to test their business models for one year (extendable for another six months) without complying with certain OJK regulations
  - The Central Bank of Indonesia (the “BI”) has introduced a similar regulatory sandbox

40

JONES  
DAY

## TAIWAN



- **The Financial Supervisory Commission (the “FSC”)**
  - Implemented the Financial Technology Development and Innovation Experiment Act (the “Sandbox Act”) in April 2018
  - Three applications have been approved by the FSC to enter the sandbox
- **FinTechSpace**
  - Established by the Taiwanese Government in 2018
  - Physical space in the city of Taipei that aims to provide assistance to Fintech start-ups
  - Acts as intermediary between Fintech start-ups and financial services entities
  - Provides a free “regulatory clinic”

41



## CAMBODIA



- **The National Bank of Cambodia (the “NBC”)**
  - Launched the Cambodian Fintech Association (the “CFA”) in August 2018
  - The CFA aims to increase financial inclusion among the unbanked and underbanked in Cambodia
  - Introduced a licensing framework for payment service providers
  - Fintech firms can apply directly to the NBC without obtaining bank sponsorship

42



## UAE



- **The Dubai International Financial Centre (the “DIFC”)**
  - The DIFC Fintech Hive runs an accelerator program focusing on Fintech, insurtech, regtech, and Islamic Fintech start-ups
  - Launched the Innovation Testing License (the “ITL”) in 2017
- **The Abu Dhabi Global Market (the “ADGM”)**
  - Launched the Regulatory Laboratory (the “RegLab”) regulatory sandbox
  - Following implementation of a Fintech legislative framework by the Financial Services Regulatory Authority (the “FSRA”) (the ADGM’s financial services regulator)

## MALAYSIA



- **Bank Negara Malaysia (“BNM”)**
  - Established the Financial Technology Enabler Group (the “FTEG”) in 2016
  - The FTEG aims to support innovation to improve the quality, efficiency, and accessibility of financial services in Malaysia
  - Introduced a Fintech regulatory sandbox with testing in a live environment under relaxed regulatory conditions for a one year period
  - Specified parameters and safeguards apply to the regulatory sandbox



• **Financial Conduct Authority (the “FCA”)**

- Started Project Innovate in 2014 to encourage innovation and promote competition
- Project Innovate currently has six initiatives, for example:
  - 1) A regulatory sandbox – allows businesses to test innovative propositions in the market with real consumers;
  - 2) The Innovation Hub – provides tailored regulatory support for innovative firms;
  - 3) The Advice Unit – provides feedback to firms developing automated advice and guidance models; and
  - 4) An initiative to encourage the development of regtech in overcoming regulatory challenges in financial services.

## SNAPSHOT

### International coordination

- Participants maintain control over their regulatory landscapes
- Opportunity to learn from other regulators
- Builds consensus & understanding



47

JONES  
DAY

## GLOBAL FINANCIAL INNOVATION NETWORK (“GFIN”)



- **Objectives**
  - Facilitating cooperation between regulators in sharing different experiences
  - Collectively managing the questions emerging from innovation
- **The “global sandbox”**
  - Six-month pilot program
  - Firms test innovative products, services, or business models across multiple jurisdictions
  - Eight Fintech firms shortlisted to participate

48

JONES  
DAY



## EUROPEAN SECURITIES AND MARKETS AUTHORITY (“ESMA”)

- **Fintech Licensing Report**

- Published in July 2019
- On the status of licensing regimes for Fintech firms
- Identifies gaps and issues in the existing EU regulatory framework
- Assesses how the national regimes of EU Member States diverge

- **General guidance**

- Consumer warnings
- Guidelines for exchanges, trading platforms, and ICOs



## ASSOCIATION OF SOUTHEAST ASIAN NATIONS (“ASEAN”) FINANCIAL INNOVATION NETWORK (“AFIN”)

- **Objectives**

- Supporting financial services innovation and inclusion in less developed markets within the ASEAN region
- Providing a platform for collaboration between ASEAN banks, microfinance institutions, non-banking financial institutions, and regional Fintech firms

- **Application Programming Interface Exchange (“APIX”)**

- Online global marketplace and regulatory sandbox based in South-East Asia
- Aims to support financial inclusion and cross-border collaboration between fintech firms and financial institutions





## KEY TAKEAWAYS

Regulators are responding to Fintech innovations on multiple fronts.

New strategies and initiatives balance regulation and innovation.

Three broader models and trends are on the rise.

Legal frameworks for Fintech involve new laws, advisory bodies, and guidelines.

Regulatory sandboxes provide time-limited safe harbors and ongoing guidance.

International coordination promotes cross-border sandboxes and guidance.

## YOUR JONES DAY FINTECH CONTACTS



**STEPHEN OBIE**  
Co-Head Blockchain Initiative

Partner, New York/Washington  
+1.212.326.3773  
sobie@jonesday.com



**ALICE TRANTER WILSON**

Law Clerk, New York  
+1.212.326.3889  
atranterwilson@jonesday.com

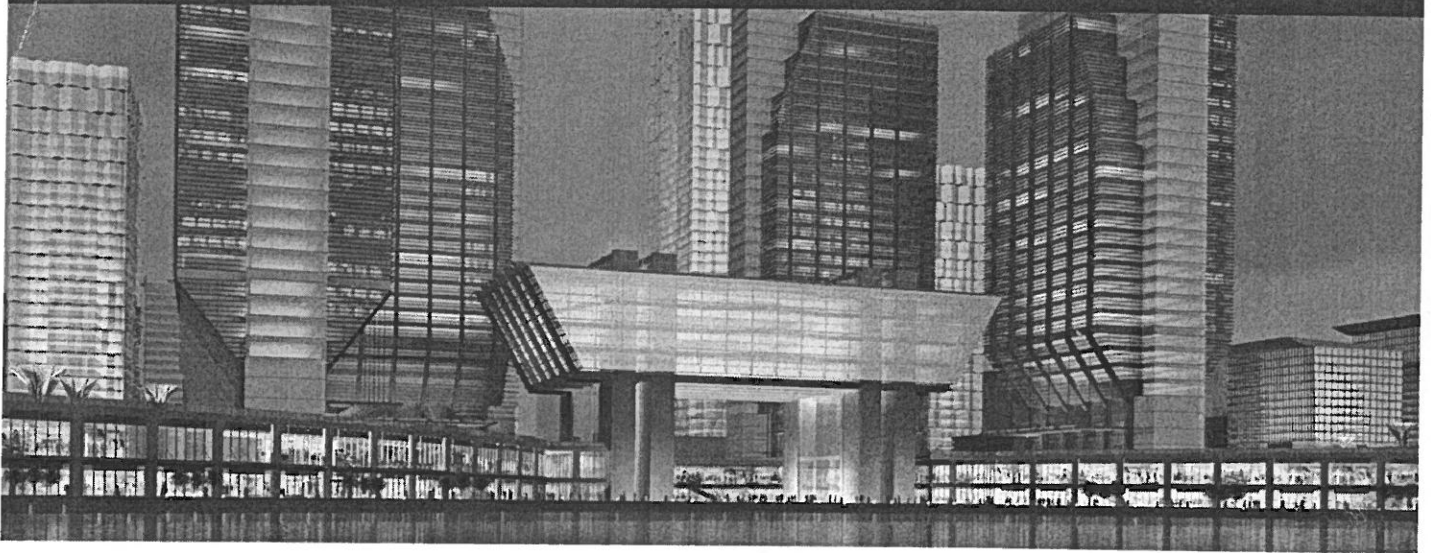
JONES  
DAY | One Firm Worldwide<sup>SM</sup>



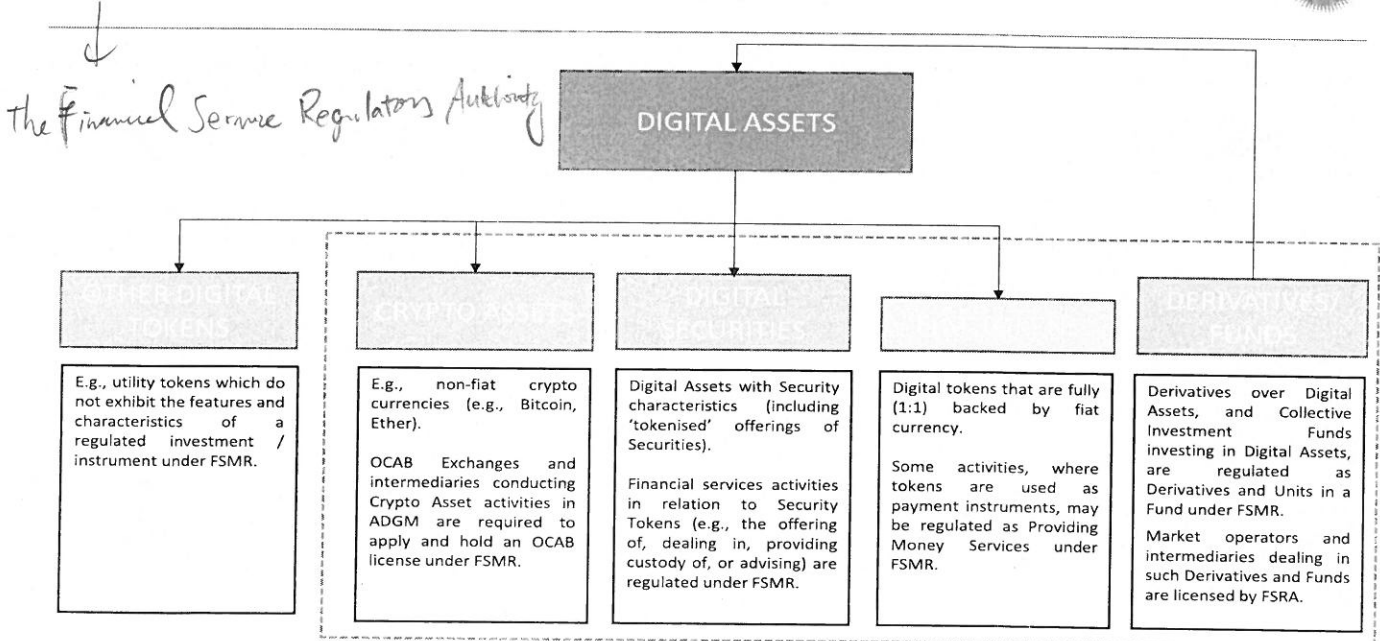
# ADGM's Crypto Asset Regulatory Framework



ABU DHABI GLOBAL MARKET  
سوق أبوظبي العالمي



## FSRA'S UNIVERSE OF DIGITAL ASSETS



The FSRA regulates, and will allow to operate within the ADGM, the Digital Assets located within the blue dotted line and Derivatives over/Funds investing in Digital Assets.

- **Digital Securities** - if ICO tokens exhibit the characteristics of a Security, FSRA may formally 'deem' the tokens a Security (applicable to both Prospectus and Exempt Offers). Once deemed as a 'Security', FSRA Market Rules (MKT) apply (which detail our Prospectus and Exempt Offer requirements).
- **Crypto Assets** – (BTC, ETH etc). FSRA treats as **Commodities**. Captured and regulated in their own right under FSRA's OCAB Framework
- **Other Digital Tokens** – including what are often referred to as 'Utility Tokens'. Treated as Commodities - unregulated.
- **Digital Assets** - used as an Umbrella term.



# WHAT IS A CRYPTO ASSET?

## Definition of 'Crypto Asset' in FSMR

FSRA introduced a new definition of "Crypto Asset" into the Financial Services Markets Regulations (FSMR).

- **"Crypto Asset"** means a digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status in any jurisdiction. A Crypto Asset is -
  - neither issued nor guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the community of users of the Crypto Asset; and
  - distinguished from Fiat Currency and E-money."



Follows the definition used by the Financial Action Task Force.

Intended to distinguish Crypto Assets from legal tender fiat currencies.

**Do not** classify it as a sub-category of 'Specified Investment' or 'Financial Instrument'

- **Extended FSRA Regulatory Perimeter** & brought 'Crypto Assets' inside



# HOW WILL FSRA REGULATE THE 'FIVE BUCKETS'?

## FIVE KEY RISK AREAS – LEVERAGING EXISTING FSRA RULEBOOKS

RISK	Regulatory Approach
AML/CFT/TAX	FSRA AML Rulebook applies in full to the new regulated activity of Operating a Crypto Asset Business (OCAB). OCAB entities will need to consider reporting obligations in relation to FATCA and Common Reporting Standards.
CONSUMER PROTECTION	All material risks associated with Crypto Assets generally, Accepted Crypto Assets and OCAB products, services and activities must be disclosed (and monitored).
TECHNOLOGY GOVERNANCE	Systems and controls must be in place in relation to Crypto Asset wallets; origin and destination of Crypto Asset funds; private keys; security and risk management.
CUSTODY	Crypto Asset Custodians will be regulated similarly to FSRA regulated 'conventional' custodians. Changes have been made to the FSMR to include Crypto Assets as Client Assets and Client Investments, and to require more frequent reconciliations/ reporting.
'EXCHANGE – TYPE' ACTIVITIES	Crypto Asset Exchanges regulated similarly to 'Multilateral Trading Facilities' (MTFs). (including for market surveillance; settlement processes; transaction recording; transparency & public disclosure mechanisms; and exchange-like operational systems and controls (including in relation to access). ADGM was the <b>first jurisdiction worldwide to widen its Market Abuse provisions</b> to directly cover Crypto Assets



# ACCEPTED CRYPTO ASSETS

## What is required to deem a Crypto Asset an Accepted Crypto Asset?

Only Accepted Crypto Assets may be used by license holders.

Factors that, in the opinion of the FSRA, need to be taken into account in determining whether or not a particular Crypto Asset meets the requirements to be considered appropriate for use.

### 7 Key Factors (in relation to a Crypto Asset):

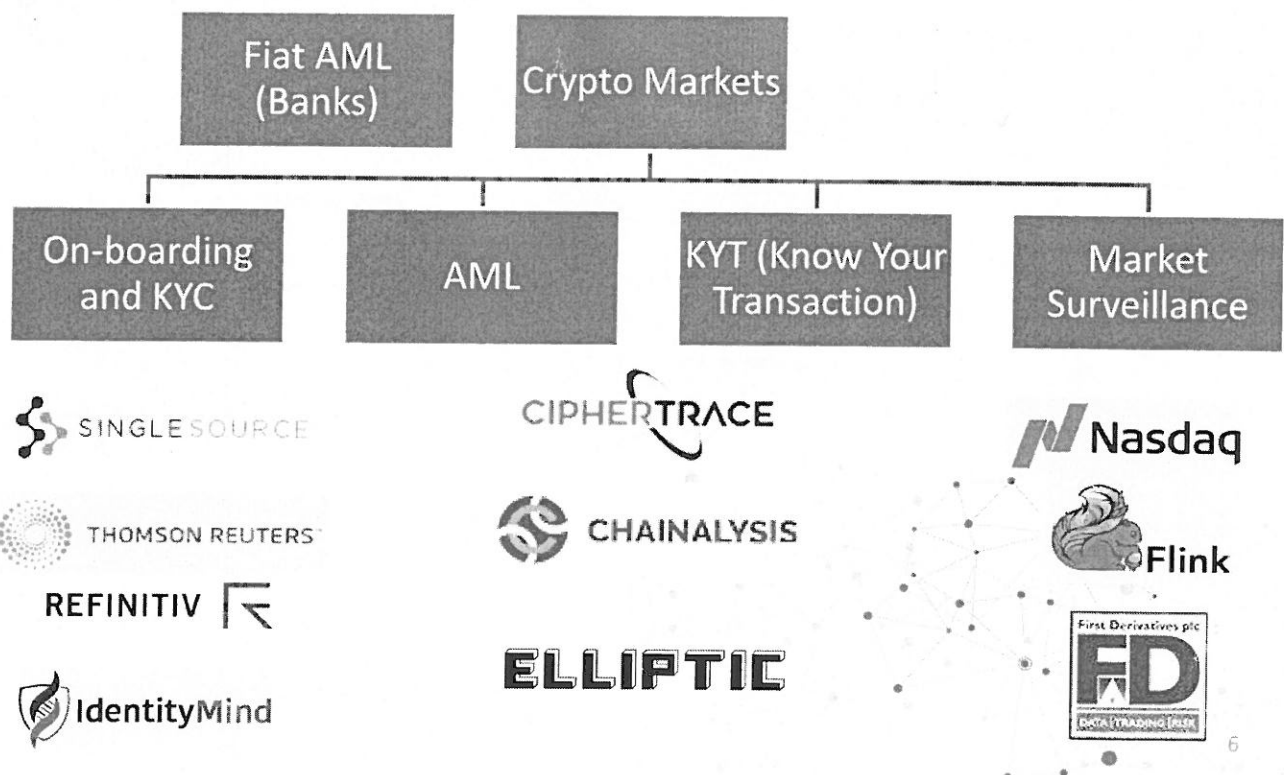
- Maturity / Market Capitalisation
- Security
- Traceability / monitoring
- Exchange connectivity
- Type of Distributed Ledger
- Innovation / efficiency
- Practical application/functionality



Note: The list of Accepted Crypto Assets is not published (it is firm specific)

Note: FSRA considers it unlikely that privacy coins will meet the requirements of each of 7 Key Factors above

# OVERVIEW OF SYSTEMS USED IN CRYPTO MARKETS



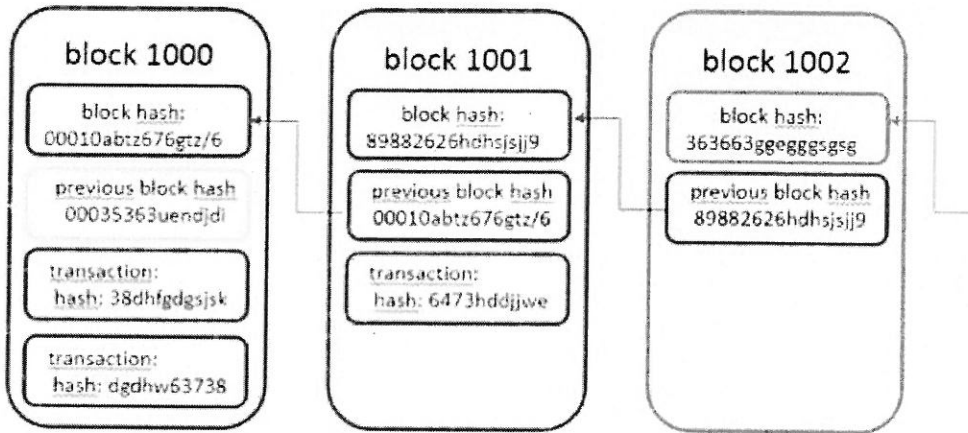




# Public Blockchains (e.g. BITCOIN)



- Not human readable
- Difficult to identify transactions
- No risk scoring
- No analytics

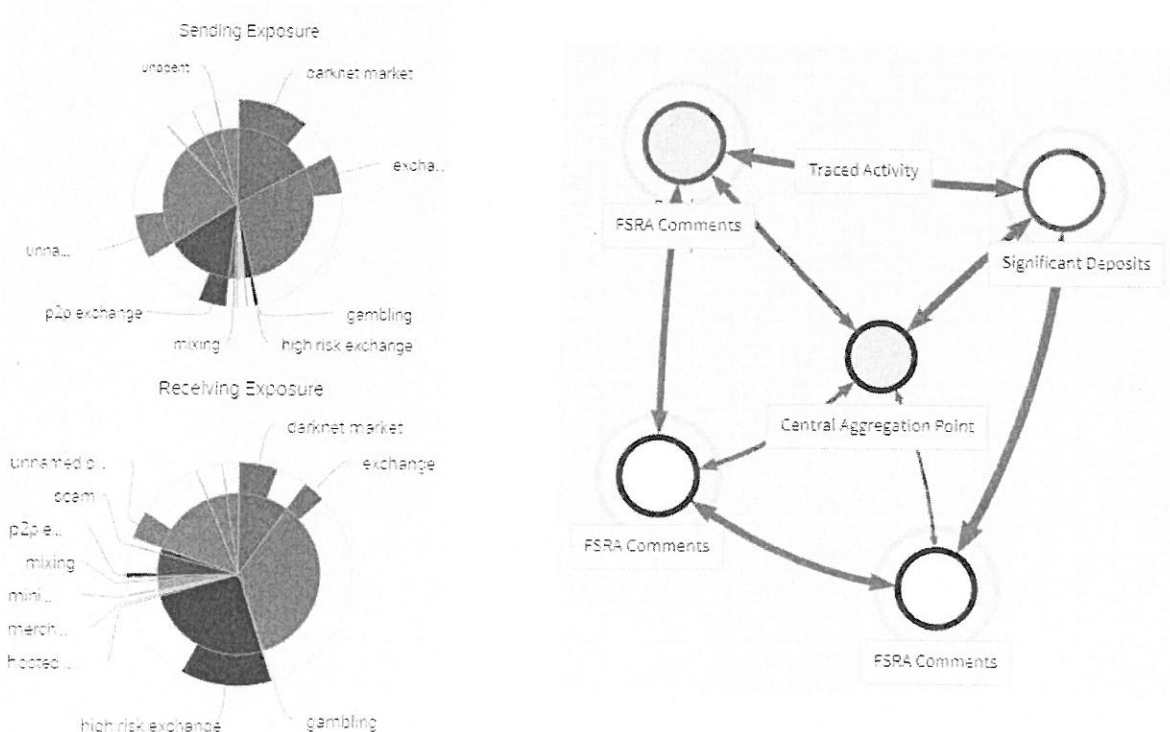


9

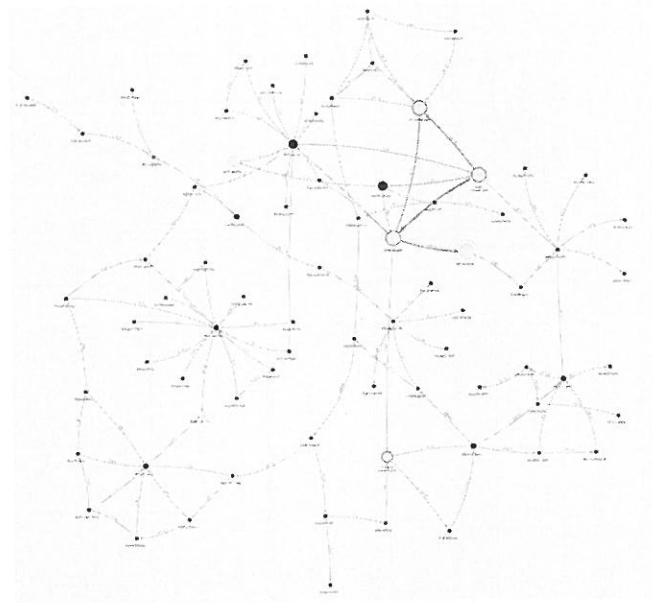
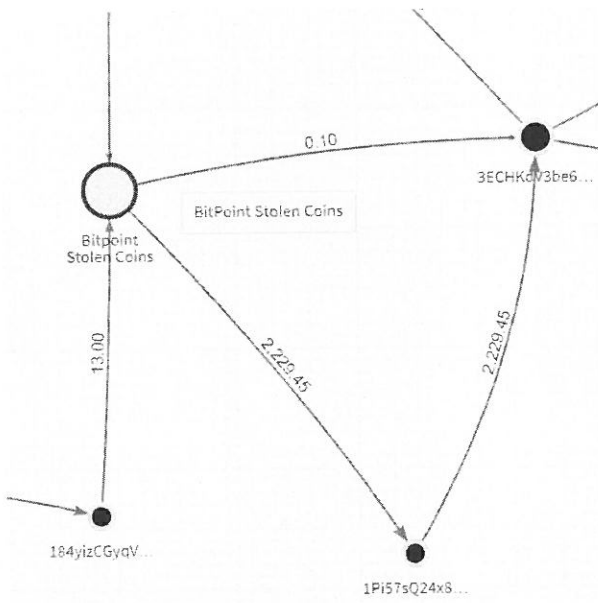
# TRANSACTION MONITORING



Both FSRA and supervised firms will monitor Blockchain transactions for assessing origin and destination wallets in transactions involving Accepted Crypto Assets. Supervised firms will also be required to provide data to the FSRA, which will have an overview of activity across wallets transacting on the Blockchain.



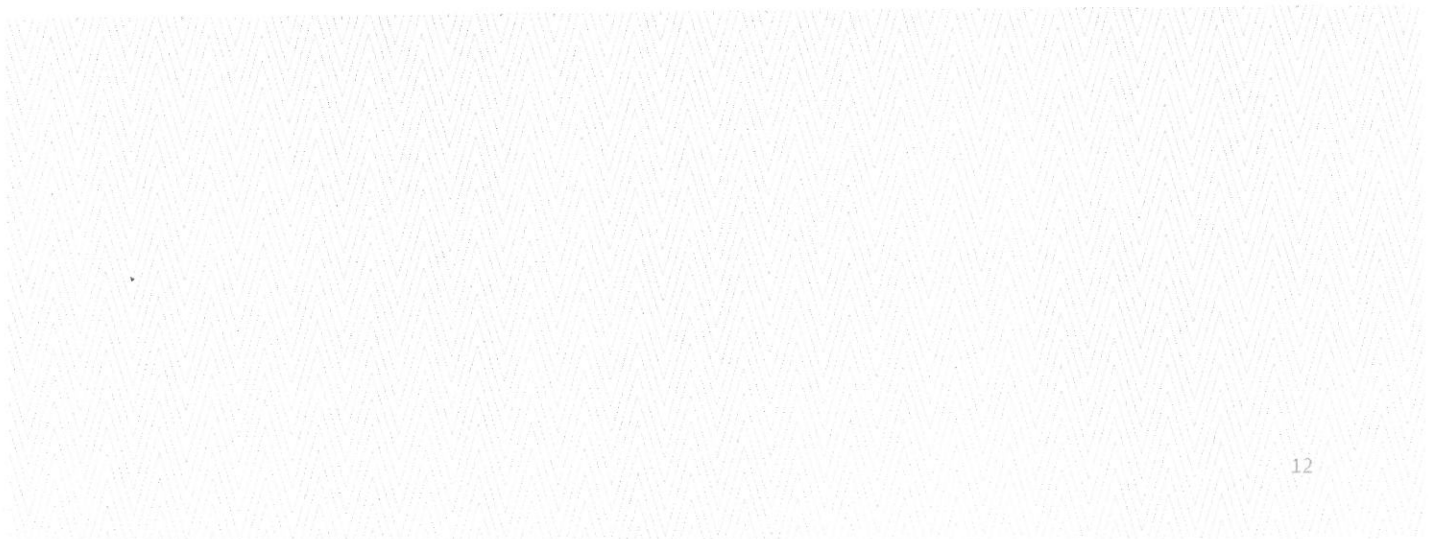
10



BitPoint Stolen Coins (Bitcoin Traced By FSRA)



## Tokenization to facilitate regulatory compliance





# Use case: cross-border offerings

## FSRA is investigating the use of tokenization to facilitate consumer protection in cross-border offerings of securities

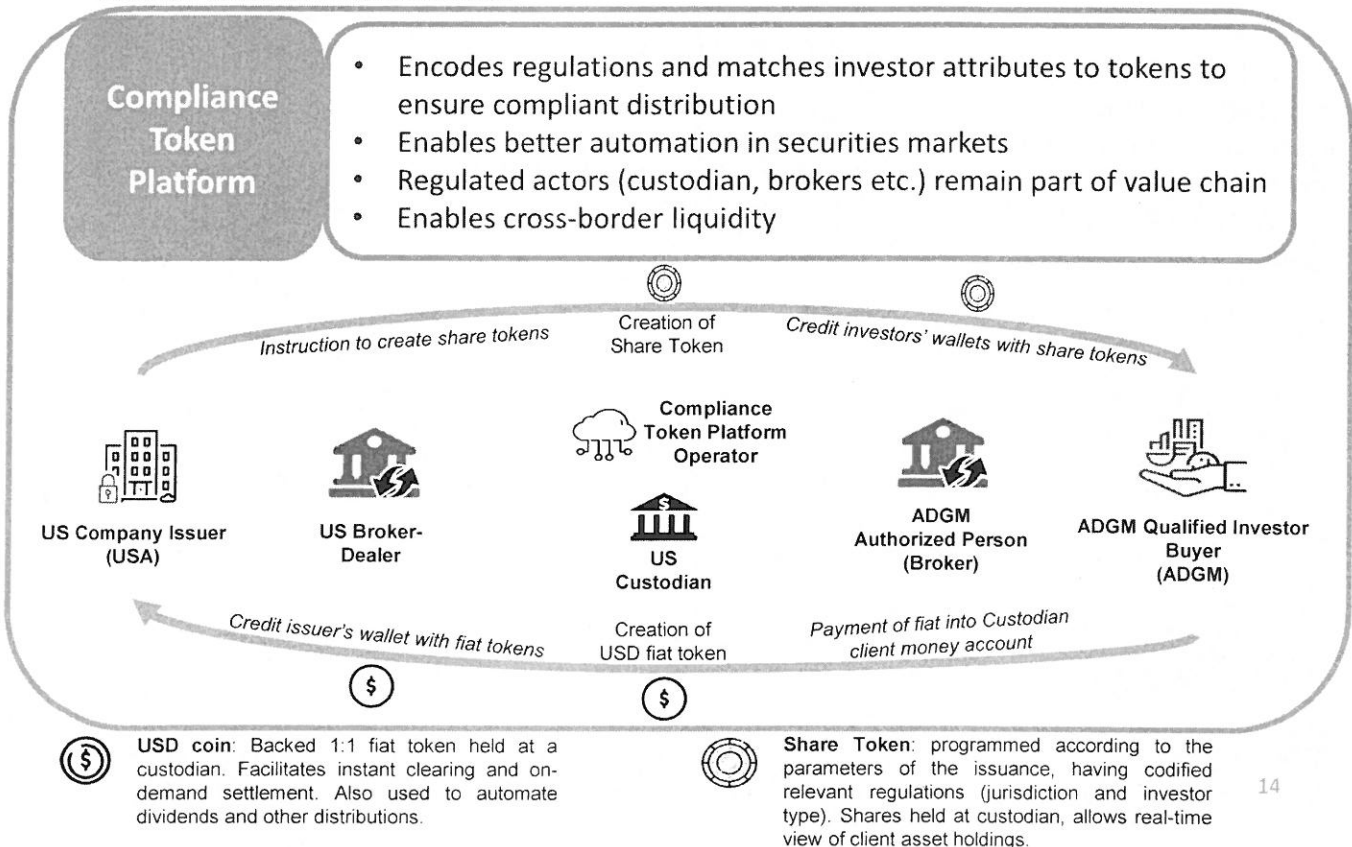
### Regulatory Parameters

- This initial test will be a “dummy” test with no real clients or money involved.
- FSRA will engage a RegTech firm to tokenize private market securities for the purposes of issuing them to a pool of investors.
- Purpose of the test:
  - a) Demonstrate that US primary offering complies with requirements in **FSRA MIR rulebook**  
Appropriate treatment of ADGM resident persons
    - maximum 50 natural persons
    - Identification of Deemed Professional Clients and Assessed Professional Clients that are not natural persons
  - b) Demonstrate that ADGM fund offering complies with the various requirements in **US Reg D**
    - US person as defined by Reg D, Accredited Investor
    - Acknowledged receipt of disclosure information
    - Issuer is not subject to SEC “bad actor” disqualification or disclosure



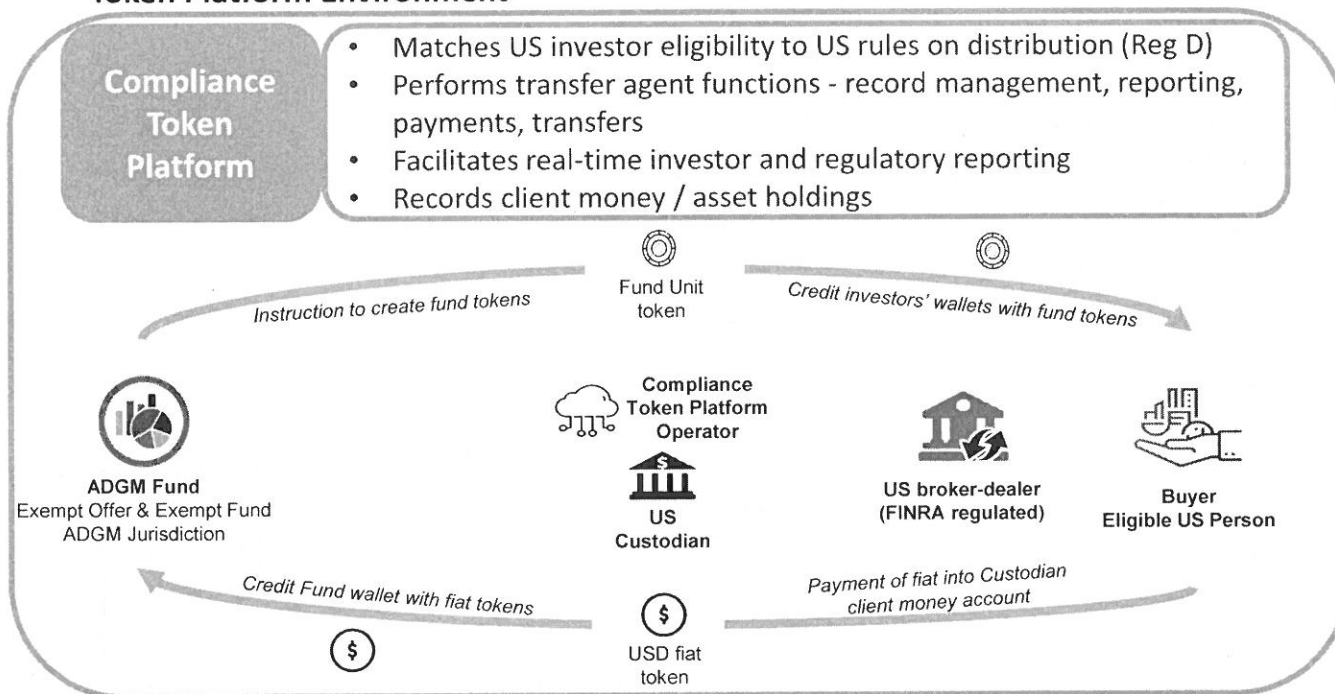
# Transaction #1: US Primary Offering, ADGM Investors

## Token Platform Environment





## Token Platform Environment



**USD coin:** Backed 1:1 fiat token held at a custodian. Facilitates instant fund redemptions. Allows real-time view of client money holdings.

**Fund Unit token:** programmed according to the parameters of the fund, having codified relevant regulations (jurisdiction and investor type). Allows real-time view of fund ownership.

## Advantages of Compliance Tokens



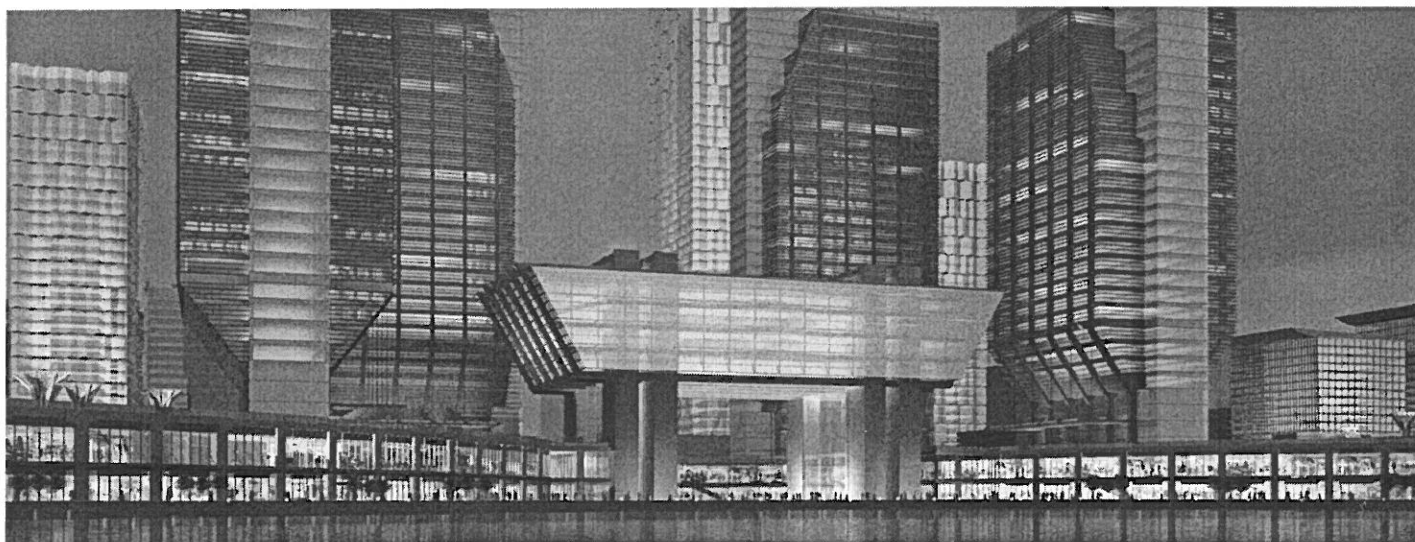
### Compliance tokens offer the regulator and firm various compliance-related benefits

Benefit	Description
<b>Transparency</b>	Tokenization supports a very granular level of transparency which gives regulators / issuers / asset managers / intermediaries a real-time view of ownership. Client money management and reporting is fully transparent for both asset / fiat.
<b>Consumer Protection</b>	Investor profiles are created to flag certain criteria (e.g. meeting Qualified Investor test) so that distribution only given to eligible investors
<b>Due Diligence</b>	Investors are not allowed to participate until they have submitted relevant DD information for AML purposes and investor status (which will require refreshing in certain circumstances). This speeds up the subsequent issuance and secondary market process if applicable.
<b>Recordkeeping</b>	Client money / client assets robustly recorded. DLT provides a robust tamper-proof record of holdings and transactions (if secondary market is enabled) for purposes of complying with regulation.
<b>Asset Servicing</b>	Automation of asset servicing (transfer agent activity, dividends/coupons etc) adds transparency and operational efficiency for all participants in the platform



---

Thank you





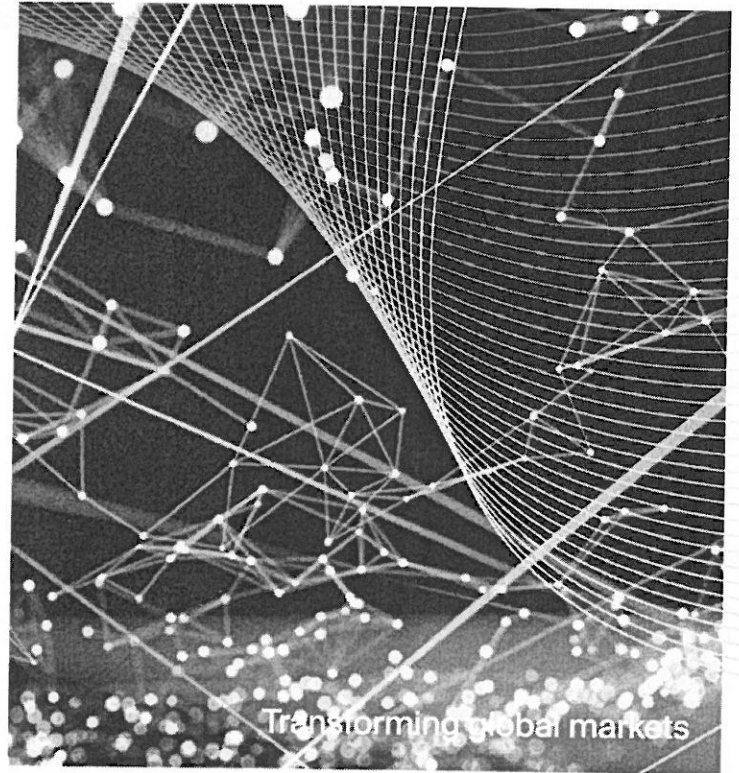


# Digital Tokens: Innovations in the Financial Industry An Exchange's Perspective: ICE Futures

FIA Asia 2019  
International Regulators' Meeting

**Lucas Schmeddes**

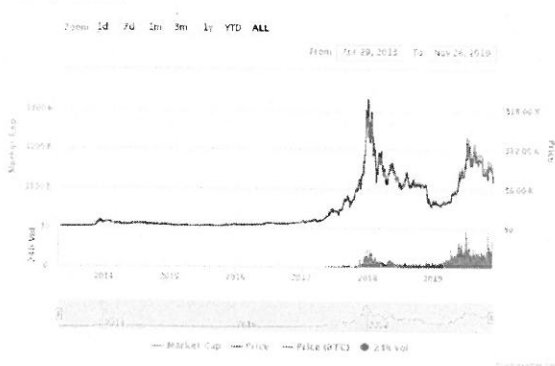
President & COO  
ICE Futures Singapore | ICE Clear Singapore  
3 December 2019



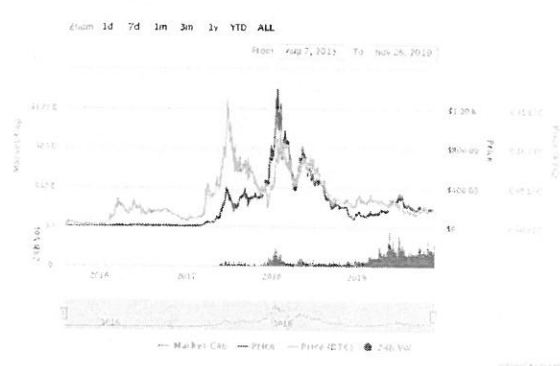
## What's new

- Digital Asset / Digital Currency
  - Bitcoin (since 2009)
  - Ether (since 2014)
  - ...

Bitcoin Charts



Ethereum Charts



## What's not so new

- Fraud
- Asset loss or theft
- Market misconduct
- Money laundering and terrorist financing
- ...

## What's not so new

- Fraud
- Asset loss or theft
- Market misconduct
- Money laundering and terrorist financing
- ...

**... unless proper systems and controls are in place**

**For financial products we care about these issues enough  
to capture standards and requirements in regulation**



## State of play

- Demand for trading Digital Currencies is high
- Digital currencies are traded around the clock and around the world
- Many venues lack today lack the best practices of the financial industry
- Regulation across the world is in different stages of development
- Regulation is not always clear, commonly evaded and sometimes absent

## State of play

- Demand for trading Digital Currencies is high
- Digital currencies are traded around the clock and around the world
- Many venues lack today lack the best practices of the financial industry
- Regulation across the world is in different stages of development
- Regulation is not always clear, commonly evaded and sometimes absent

**market participants should have clarity  
and a well established regulatory framework  
similar to other financial products**

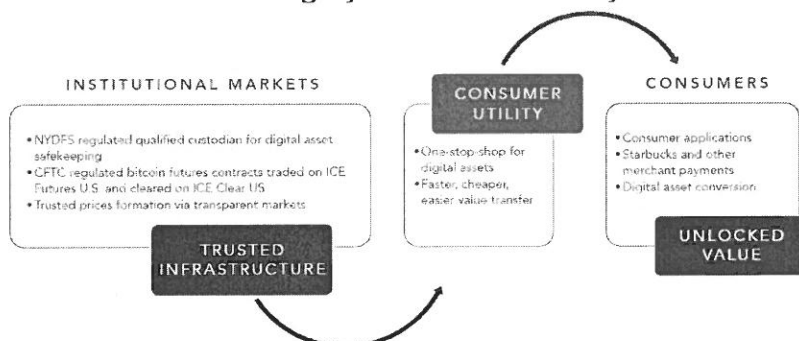
## Implications of a past and Hurdles to overcome

- **Lack of trust:** rampant market manipulation
- **Fake liquidity:** Bitwise reported that 95% of volume reported on all spot exchanges is fake
- **Excessive leverage:** Bullet on BitMEX 100x+ leveraged futures trading; unregulated offshore
- **Theft and hacking:** \$1.3B stolen, where will I put my digital assets and who will hold my key?
- **Lack of regulatory oversight** — unregulated exchanges can lead to poor business practices, investor risk



## Intercontinental Exchange and Bakkt

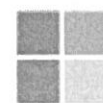
- **Mission:**  
Expanding access to the global economy by building trust in and unlocking the value of digital assets
- First end-to-end regulated digital asset ecosystem for institutions
- Designed for institutional market participants
- Best-in-class market integrity and asset security



### LAUNCH PARTNERS & SELECT INVESTORS



PANTERA



EAGLE SEVEN

BCG



Launch partner



GALAXY DIGITAL

PayU



## Challenges & opportunities

- Product innovation has outpaced the ability to regulate tokens, platforms and practices
- Global scope of products and platforms creates variance across jurisdictions

- High-profile attacks and breaches at unregulated exchanges and wallets
- Broad range of risks; insecure code; unreliable authentication and phishing

- Inconsistent applications and obligations of anti-money laundering practices and protocols
- Need for compliance and enforcement around AML/KYC and trading practices

- With the spot market manipulation and without a physically delivered futures contract there is no benchmark price for bitcoin

### REGULATION



- Launched an end-to-end regulated ecosystem for trading physically delivered futures
- Bakkt works with regulators to help educate and push the market forward

### SECURITY



- Leverage ICE and NYSE cybersecurity, technology and data centers
- Unparalleled operational support, compliance and technology

### COMPLIANCE



- Bakkt complies with regulated KYC/AML for onboarding clients
- Bakkt utilizes multiple third-party expertise for analyzing asset provenance

### PRICE DISCOVERY



- The first-of-its-kind, regulated Bakkt Bitcoin Futures contracts on September 23, 2019 with ICE Futures U.S. and ICE Clear U.S.

## What's next

We believe that  
**market participants should have clarity  
and a well established regulatory framework  
similar to other financial products**

We offer an  
**end-to-end regulated digital asset ecosystem for institutions**

We will continue to  
**work with regulators to help educate and push the market forward**

## About Intercontinental Exchange

Intercontinental Exchange (NYSE:ICE) is a Fortune 500 company that operates a leading network of global futures, equity and equity options exchanges, as well as global clearing and data services across financial and commodity markets. The New York Stock Exchange is the world leader in capital raising, listings and equities trading.

Trademarks of ICE and/or its affiliates include Intercontinental Exchange, ICE, ICE block design, NYSE and New York Stock Exchange. Information regarding additional trademarks and intellectual property rights of Intercontinental Exchange, Inc. and/or its affiliates is located at <http://www.intercontinentalexchange.com/terms-of-use>.

Key Information Documents for certain products covered by the EU Packaged Retail and Insurance-based Investment Products Regulation can be accessed on the relevant exchange website under the heading “Key Information Documents (KIDS)”.



---

## Digital Assets Presentation – Asia Derivatives Conference

---

Presented by Amir Zaidi, Global Head of Compliance  
3 December 2019

# Introduction

1. TP ICAP Digital Asset Markets
2. Products
3. Trading Venue
4. Key Regulatory Focus
5. Contacts



---

# Digital Asset Markets

---

- TP ICAP global working group in place since Q4 2017.
- Launched a new business unit **Digital Asset Markets**, within ICAP in Q3 2018 to actively explore this emergent asset class.
- **Public announcement** on 17 June 2019 regarding Digital Asset Markets business. Initially operate in cryptoasset derivatives markets.
- Led internally by Simon Forster & Duncan Trenholme (London-based).
- Initially launched in London. Asia and U.S. to follow to offer clients global coverage.



---

## Digital Asset Markets (continued)

---

- Actively onboarding clients to trade digital assets – subject to the same rigorous internal controls and processes that are in place across the TP ICAP Group (e.g., AML/KYC/CTF).
- From an AML perspective, we have implemented additional enhanced client onboarding controls for Digital Asset clients.
- Expect that our client base will evolve and expand in the future given the transformational technology, our potential expansion into additional digital assets, and that we are actively building relationships within this space.
- **At a minimum we intend to hold all areas of the business to the same standards required for those falling within scope of any regulated activity.**



---

# Cryptoasset Derivatives

---

- Initially operate in cryptoasset derivatives markets. Traditional voice broking on an exchange traded basis.
- First product: CME Bitcoin cash-settled futures contract.
- Further listed derivatives to follow (e.g., ICE Bakkt bitcoin futures & options, CME bitcoin options).
- Internally approved to broker a Bitcoin non-deliverable forward, and will explore other OTC crypto derivatives (e.g., Ether) on a name give-up basis in line with existing client demand.



---

## Other Digital Asset Products

---

*“While this marks our first step into the asset class, we believe that cryptoassets are only a subset of a wider universe of digital assets that could be created through the use of this technology, and that the tokenisation of value could have application across multiple traditional asset classes.”*

*TP ICAP press release, 17 June 2019*

- Exploration of other digital asset products:
  - Cryptoasset derivatives besides bitcoin (e.g., Ether, bitcoin cash);
  - Spot cryptoassets;
  - Security tokens;
  - Stablecoins;
  - Other digital assets (e.g., real estate, stocks, commodities, etc.).



---

## Other Digital Asset Products (continued)

---

- Seek to provide trading and connectivity for a wide range of digital assets; remain neutral at this stage on various projects & underlying protocols.
- Ensure any digital assets that would be traded are in line with rules and regulatory guidance and any possible changes as this asset class evolves (e.g., FCA Guidance on Cryptoassets).
- Work with other institutions exploring different parts of the asset value chain (e.g., primary issuance, asset servicing, etc.)



---

## Trading Venue

---

- Potential to leverage existing knowledge and standards of current MTFs, to create a non-custodial trading venue for trading digital assets. Operate to current regulatory standards and requirements.
- Eligible and professional counterparties only.
- Traditional trading technology (e.g., OMS/API/GUI) and strong oversight (e.g., rulebook, surveillance, risk controls).
- Partnerships with established top tier cross-asset custodians for storing, clearing, and settlement of digital assets
- Potential data and analytics services.





---

# Key Regulatory Focus

---

- Taxonomy:
  - Further clarity and consistency from Regulators on Taxonomy of different Digital Asset products. What's regulated vs. unregulated? Securities vs. commodities vs. unregulated?
- Clarity on regulation of spot market in certain jurisdictions.
- Strong custody standards; cybersecurity protections.



---

## Contacts

---

- Digital Asset Markets – [DigitalAssetMarkets@icap.com](mailto:DigitalAssetMarkets@icap.com)
- Simon Forster – [simon.forster@icap.com](mailto:simon.forster@icap.com)
- Duncan Trenholme – [duncan.trenholme@icap.com](mailto:duncan.trenholme@icap.com)
- Amir Zaidi – [amir.zaidi@tpicap.com](mailto:amir.zaidi@tpicap.com)





---

## Stable Coins – Market Participant’s perspective

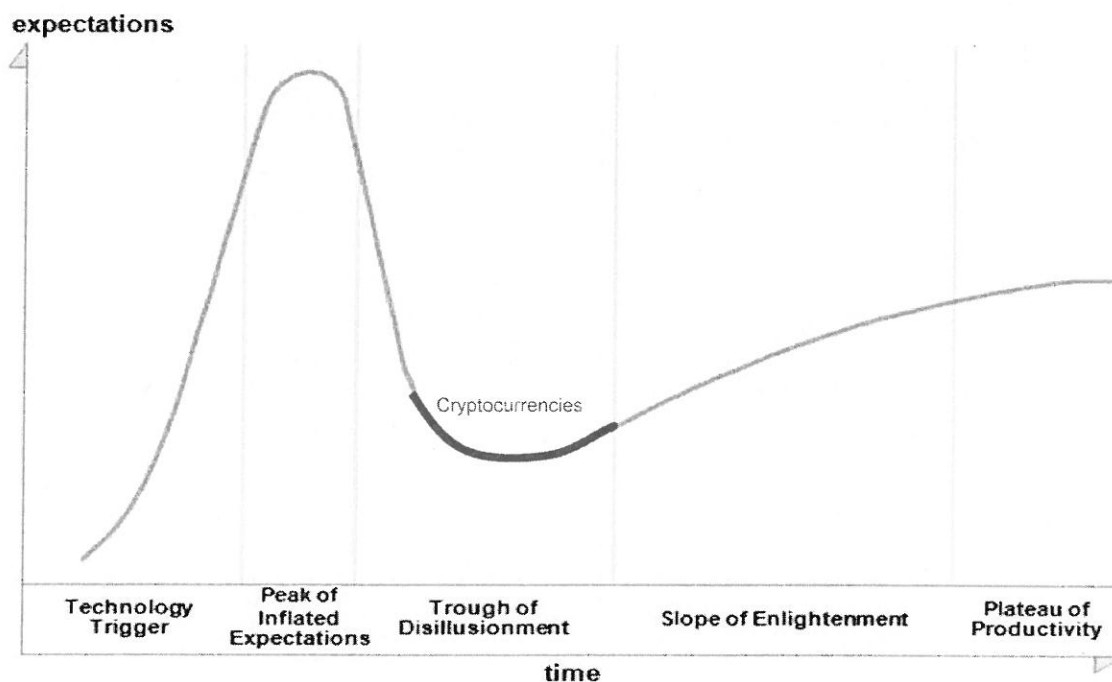
December 2019

Naveen Mallela  
Head of Digital, Wholesale Payments APAC  
J.P. Morgan

---

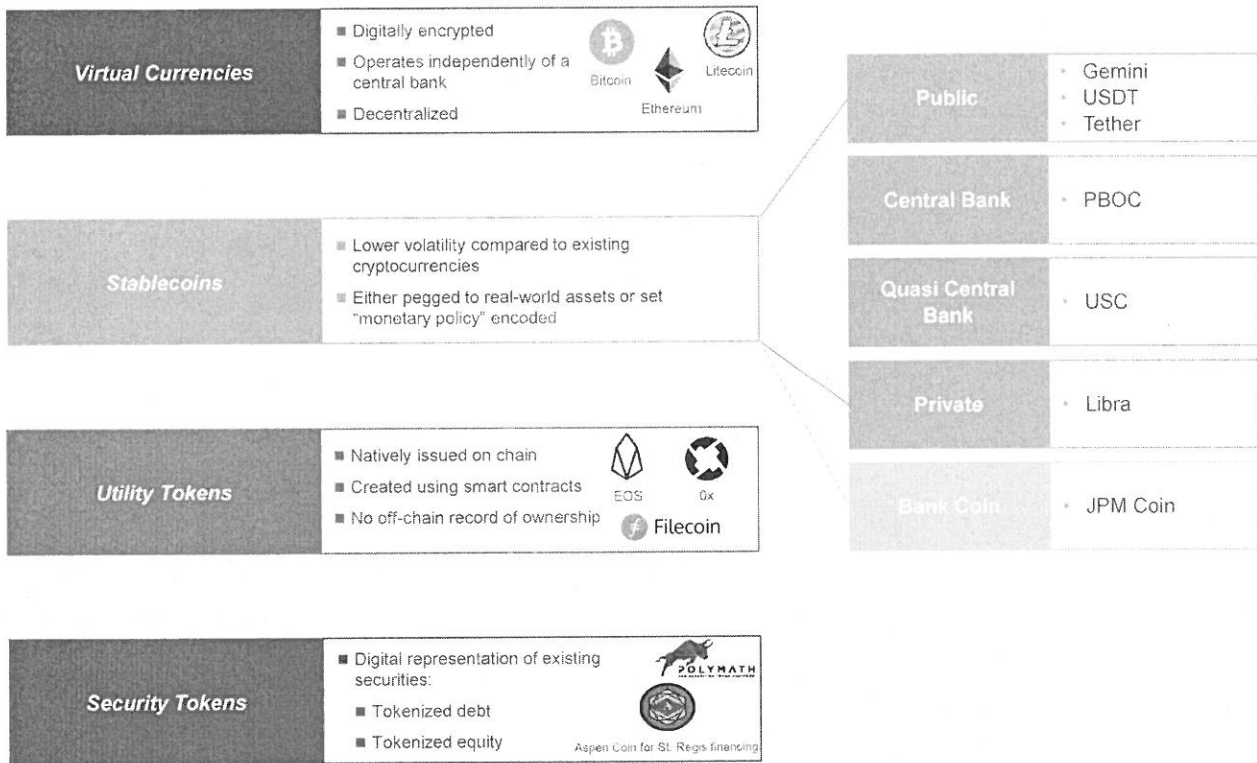
Where are we on the hype scale?

---



Source: [gartner.com/SmarterWithGartner](http://gartner.com/SmarterWithGartner); July 2019

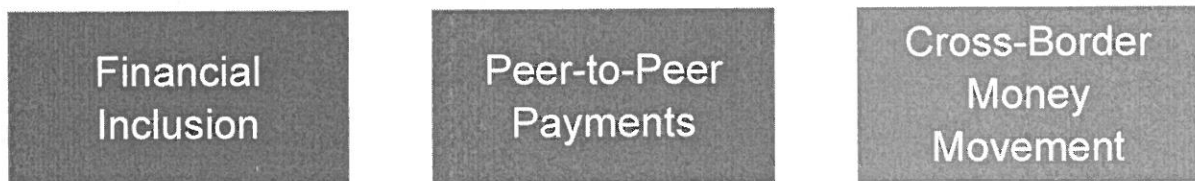
## A simplified Crypto Token Taxonomy



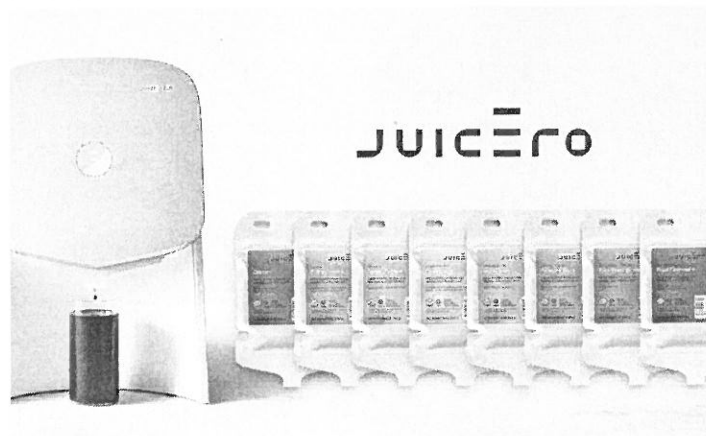
2

## The Juicero test

### Problems that the current stable coins are solving for...



### Does it pass the Juicero test?



3

## The problems today and how they're solved

---

### Financial Inclusion



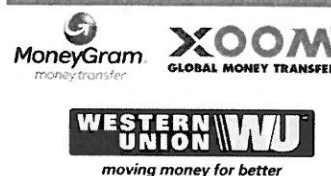
- *Vodafone* now offers M-Pesa services in 10 countries, and has over 33 million active users
- *Alipay*, a leading payment by Ant Financial Services Group, has more than 900 million users globally
- *WeChat Pay*, has over 900 million active users every month

### Peer-to-Peer Payments



- \$44 Billion Sent on 171 Million Transactions in Q2 2019 using *Zelle*, and money is typically available to an enrolled recipient within minutes in the US
- *Venmo* is on pace to do \$100 billion in payment volume this year.
- In the second quarter of 2019, online money transfer provider *PayPal* processed around 2.97 billion payments

### Cross-Border Money Movement



- *Xoom*, owned by *PayPal*, enables the users to send money from the U.S. to more than 70 countries within minutes.
- *Western Union* and *Moneygram* have presence in over 200 countries and transacts in nearly 130 currencies

4

## Stablecoins can deliver unique features

---

### Programmable

---

- *Escrow*
  - Stablecoins can be escrowed or locked off in a smart contract as a "good faith deposit". When deal closes, the deposit contract can be unlocked allowing stablecoins to be distributed to the seller in the transaction automatically as per their legal agreements.
- *KYC/AML monitoring*
  - Ability to programmatically restrict transfer of stablecoins to whitelisted participants could reduce money laundering risks. On-chain audit trail makes it easier to detect abnormal transaction activities.
- *Delivery vs. Payment*
  - If certain securities are issued on blockchain issuance platforms, transactions could occur on a peer to peer basis between issuers and investors. To reduce settlement risk, we could programmatically link delivery of the security to payment with the stablecoin leading to reduced settlement risk.
- *Parametric Payouts*
  - Conditional insurance payouts could be set up depending on certain criteria being met, for example: travel insurance. If flight is delayed by 2 hours, automatically payout to insured party 20% of ticket value. If flight is delayed by 3+ hours, payout remainder 80% of ticket value.

### Internet of Value

---

- Similar to how emails can be sent to anyone with an email ID, stablecoins could enable value transfer to anyone on the blockchain network with an address.
- Could enables new business models, such as compensating users for their usage or data provided to a network (currently most networks monetize user data by selling to advertisers).

5



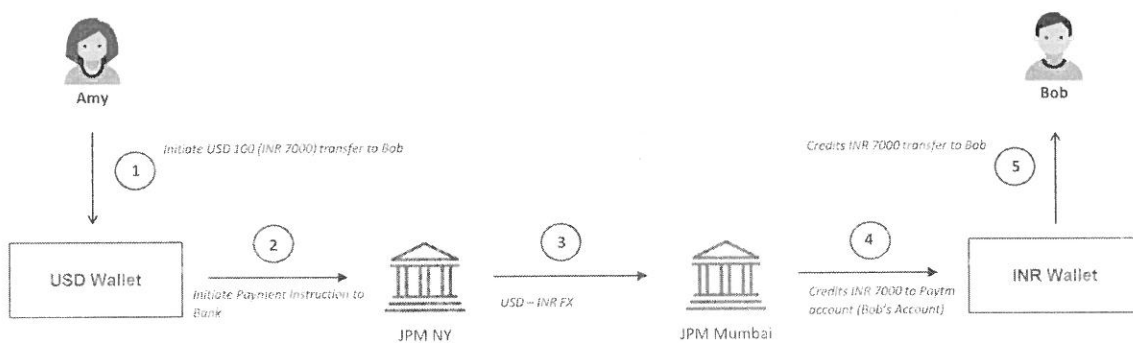
- Digital coin designed to facilitate instantaneous payments using distributed ledger technology
  - Will be available to J.P. Morgan institutional clients
  - Prototype tested successfully
  
- JPM Coin will facilitate payments in United States Dollars
  - Will be extended to other major currencies in the future
  - Will be issued on Quorum® Blockchain, but can be used on other blockchain platforms
  
- Many potential uses in the future for institutional clients of J.P. Morgan:
 

- Cross-border money movement 24/7/365 – outside traditional banking hours
  - Payments for asset transfers over blockchain
  - Internal liquidity optimization for large, complex corporate clients

<sup>1</sup> JPM Coin is a prototype. JPMorgan Chase will complete all internal procedures and satisfy all regulatory and compliance obligations, prior to any live products or services being launched utilizing JPM Coin

## Wallet-to-Wallet Transfers (USD → INR)

Illustrative high level flow (AS – IS)

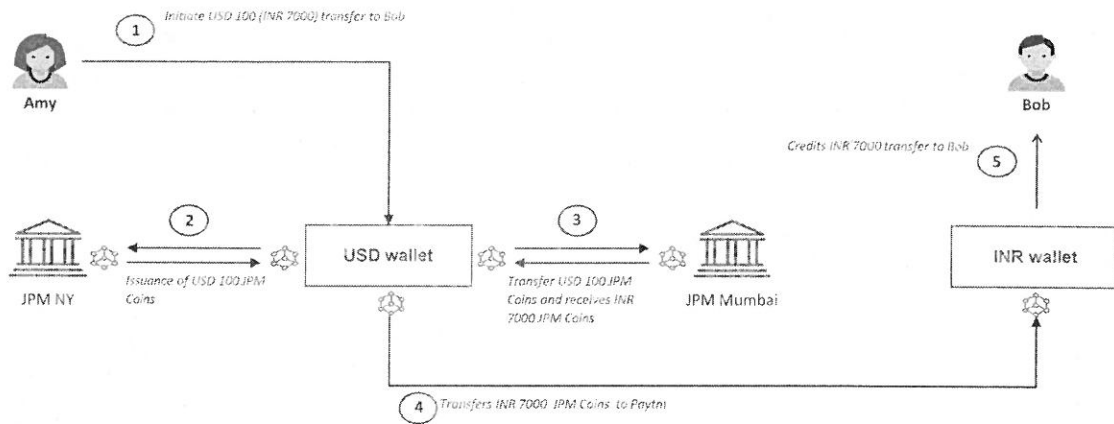


**Problem Statement:** Today sending money between two wallets cross border is an in-efficient process. Consequences of this model include:

- **Time consuming**, it can take anywhere between 2-4 days for the beneficiary to receive the money depending on what time the payment was originated and the beneficiaries location.
- **Expensive**, there are transaction fees that can be flat or a percentage of the payment amount. There could also be hidden costs due to the number of intermediary banks involved in the transfer of the funds (cross-border / cross-currency).

# Wallet-to-Wallet Transfers (USD → INR)

## Illustrative high level flow (JPM Coin)



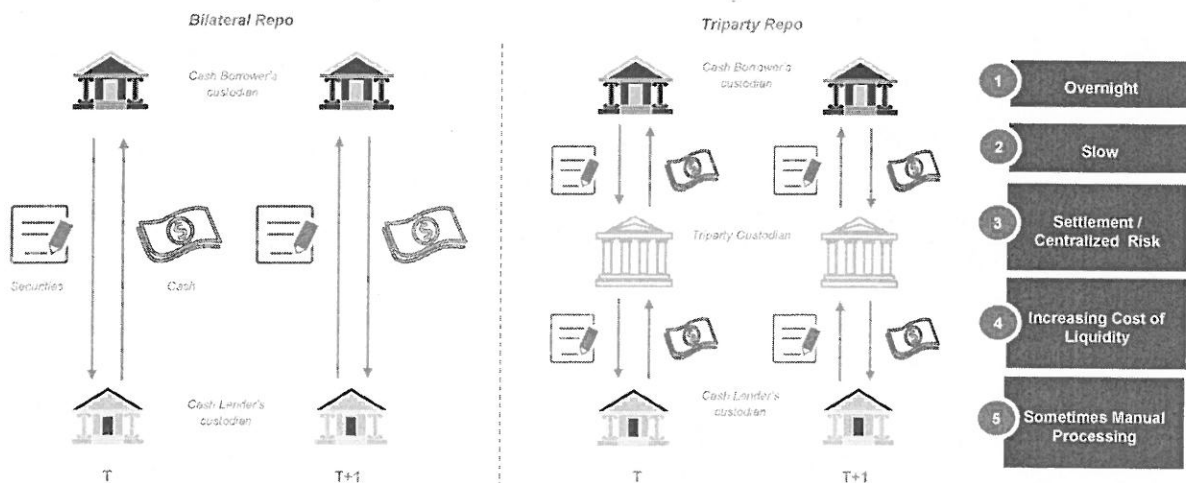
### Benefits:

- **Real time payments**, by using JPM Coin money can be sent cross-border 24/7/365 and available for the beneficiary to use real time
- **Efficient**, using JPM Coin eliminates the need to prefund and for the originator to provide liquidity to accommodate instantaneous cross-border payments providing a cost saving on current methods.

Same Blockchain network

# Payments for Assets Transfer

## Current Repo models

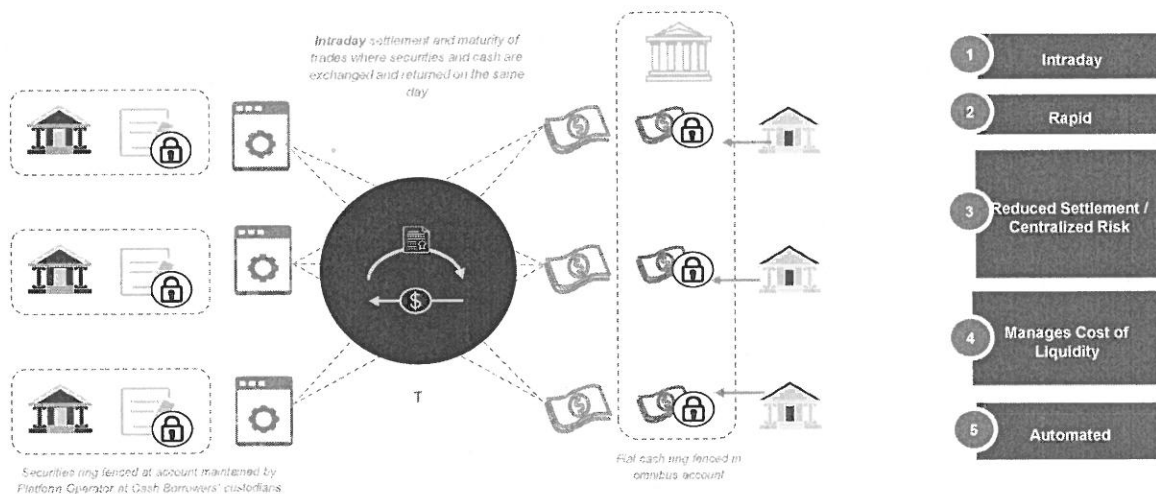


We see an opportunity to create a new financial marketplace with the initial goal of significantly enhancing active intraday liquidity management, reducing reliance on unsecured lending, decreasing systemic risk, and addressing growing concerns about the scarcity of liquidity.

- Cost of liquidity is increasing alongside reduced availability of intraday liquidity, which may lead to stress in payment, clearing, and settlement activities in the financial markets.
- Current provision of intraday liquidity is typically through unsecured, uncommitted credit, resulting in credit / counterparty risk.
- Operational processes in the existing repo market prevent the meaningful use of intraday repo transactions to actively manage intraday liquidity, resulting in limited deployment of capital.

## Payments for Assets Transfer

### Future vision for Intraday Repo marketplace



By using blockchain technology to represent collateral, cash, and the transfer of collateral and cash, market participants can enter into shorter term (intraday) repo transactions with real-time, simultaneous trade settlement.

- Reduction of cost of capital through active management of intraday liquidity measurement and real-time monitoring capabilities.
- Decreased intraday funding costs through the pledging of collateral.
- Reduction of systemic risk in market derived from liquidity facilitated via unsecured, uncommitted credit.
- Reduction of counterparty risk in market through real-time, simultaneous exchange of cash and collateral.
- Enhanced financial stability through efficient use of existing assets in banking ecosystem.
- Reduction of operational overhead by automating manual processes at settlement or maturity.

## Key Principles for Policymakers

<b>Activities-based Regulation</b>	<ul style="list-style-type: none"> <li>■ The use of blockchain technology, including digital assets, in financial markets should be subject to activities-based regulation and oversight to ensure consumer protection and the reduction of systemic risk.</li> </ul>
<b>Consistent taxonomy</b>	<ul style="list-style-type: none"> <li>■ The adoption of a consistent nomenclature on digital assets will aid the development of globally consistent regulation and oversight</li> </ul>
<b>Globally Consistent Oversight</b>	<ul style="list-style-type: none"> <li>■ A coherent, globally consistent approach to the oversight and supervision of blockchain-based activity will minimize regulatory arbitrage opportunities and encourage innovation</li> </ul>
<b>Ongoing Regulatory Engagement</b>	<ul style="list-style-type: none"> <li>■ Given the rapid pace of technological change, regulators and market participants should continually engage to ensure understanding of latest developments and appropriately-calibrated oversight of the uses of blockchain technology</li> </ul>



## Activities Based Approach



**Type of Coin**  
(intrinsic value or backed up assets)



**What is the purpose**  
(payments or securities)



**Who is the user**  
(institutional vs retail)

---

### Examples

- A depository bank's activities, with respect to a "Bank Coin", should be regulated in the same manner as other cash depository and payment activities
- Cross-border payments using Stablcoins should be regulated in the same manner as fiat cash cross-border payments
- Initial Coin Offering should be regulated in the same manner as securities issuances

