

## 《CONTENTS》

### •Regulatory news•

Electricity Market Complete Deregulation from April 1. Aiming to Launch an Electricity Futures Market in Fiscal Year 2016

### •Topics of the month•

2016 Japan Roadmap Overview - English Webinar  
JPX Changes to Coincide with Launch of Next Generation Derivatives Trading System (Next J-GATE)

### •Tech Corner Report•

FINTECH: A DEEPER LOOK AND CURRENT TRENDS

### •People Interview•

JPX CIO Shibuya Discusses his Vision for the Exchange IT  
Hiroyuki Shibuya, *Senior Executive Officer, CIO, Japan Exchange Group, Inc.*



## PRESIDENT'S MESSAGE

# Taking Care of Business During Difficult Times

In recent visits to the Tokyo offices of our members among global firms, it is becoming clear that many are facing new risks by the overwhelming amount of new regulations emanating from Basel, or what Japan Financial Services Agency Commissioner Mori describes as a “regulation factory.” The lack of regulatory harmonization across jurisdictions puts hurdles in front of our members, who are struggling to understand the risks posed by the uneven application of regulatory principles. All of which raises tough questions that global regulatory institutions have yet to answer: How much regulation is enough? How does a foreign regulator regulate another market where the regulator has no formal jurisdiction? Who is conducting the cost/benefit analysis of the new rules being added to an already over regulated market?

We combine this with negative interest rates coming from various central banks and this creates challenges that many worry will become difficult to overcome.

FIA Japan is trying its best to be constructive amid this environment.

- The technology committee has produced a superb webinar about the Japanese exchanges. The tech committee intends to produce another webinar on various exchanges actively courting the Japanese investors.
- The Proprietary Trading Study Group is actively working to become a valuable asset for program trading firms and the exchanges by providing venues to discuss error trade policies, test environments and risk management issues. This may not result in immediate changes in the market, but we believe the open and rigorous discussion between market players will have a positive impact to the market.
- Cyber Security Panel Discussion at the 17th Annual Japan International Banking and Securities System Forum 2017 was presented to an audience of 400+ people with great success

In this issue, we feature an interviews with Mr. Hiroyuki Shibuya, CIO of JPX and Mr. Loh Boon Chye CEO of SGX. FIA Japan feels honored to be able to have these two prominent market shapers to be featured in our Newsletter.

Please note that on May 26, 2016 we are planning our Annual General Meeting. Please save this date.

Michael Ross,  
President - CEO, FIA Japan

# Hiroyuki Shibuya

Senior Executive Officer, CIO  
Japan Exchange Group, Inc.



## JPX CIO Shibuya Discusses his Vision for the Exchange IT

Hiroyuki Shibuya assumed the role of Senior Executive Officer, CIO of Japan Exchange Group, Inc. in June 2015, having become Adviser of Japan Exchange Group in March 2015. He started his professional career at Tokio Marine & Nichido Fire Insurance Co. in 1977 where he spent 38 years mainly focusing on the IT area. He was named Executive Officer of Tokio Marine & Nichido Fire Insurance Co, in 2009, Executive Officer of Tokio Marine Holdings in 2010, and Adviser of Tokio Marine Holdings in 2013. He graduated from Waseda University in 1977.

**Aiming to become the number one exchange in Asia, with IT as a core competency to sharpen the competitive edge**

**FIAJ: You were appointed CIO of JPX in June last year. What is your vision for JPX, especially for its IT?**

The JPX vision is to become “Your Exchange of Choice”, and that is to become the most preferred exchange in Asia. The role of IT in realizing this vision is growing. For exchanges in this era, systems are central to trading, clearing, market data distribution and all other exchange functions. This means that IT is the foundation for developing exchange business and creating new markets, so we are being asked to combine business development and IT efficiently for the development and growth of our markets.

JPX was established in January 2013 through the merger of Tokyo Stock Exchange Group and Osaka Securities Exchange, and will complete its first three years at the end of March 2016. During this post-merger period, JPX has successfully integrated

the cash equity markets and derivatives markets, and clearing systems with extensive support from market participants. These integrations are a part of reorganizing and streamlining the base market functions, a core objective of establishing JPX. In the meantime, for markets in the US, Europe and Asia, systems have become more sophisticated, and that is intensifying global market competition. Under these circumstances, in our aim to become the most preferred exchange in Asia, JPX positions IT as a core competency to sharpen our competitive edge, and seeks to develop reliable and convenient market infrastructure with the best use of the most advanced technology. To achieve the future vision of JPX, bearing in mind the requirements for a global exchange, JPX renewed its cash equity trading system, arrowhead, last September based on the three fundamental concepts of improving reliability, convenience and capabilities. This renewal drew high praise from market participants. In addition, JPX is scheduled to launch its next generation derivatives trading system, Next J-GATE, on July 19, 2016.

Through the constant and stable operations of our two core trading systems, arrowhead and J-GATE, we would like to reinforce and make the foundations of the cash equity and derivatives markets more robust. In addition, JPX will formulate a road map for the next generation of JSCC's clearing system, which was integrated in 2014. JPX has to accommodate the needs of its market participants and enhance convenience while providing highly reliable and stable market infrastructure. IT realizes these objectives at JPX and supports the foundation of its exchange business. As such, JPX will keep raising its IT to a higher level to sharpen its competitive edge.

**FIAJ: JPX renewed its arrowhead system based on the three basic concepts of improving reliability, convenience and capabilities. Could you tell us the main focus for the development of the Next J-GATE, which will go live in July this year?**

The trend is no longer to pursue only higher processing speed. Today, market participants expect exchanges to operate the market stably and provide appropriate functions via the system. For these reasons, JPX has also set enhanced reliability and convenience as basic concepts for the Next J-GATE. To enhance the reliability of the market, JPX will introduce a Non-Cancel Period with the system so that market participants will not be able to cancel or amend their orders one minute before the opening and closing auctions. The Next J-GATE will also offer a new "Trade Guard" risk management function to provide Pre-Trade Check and At-Trade Check for each investor. Moreover, to enhance the convenience of the market, keeping the idea of a 24-hour exchange in mind, JPX will extend the night session by 2.5 hours moving the current closing time from 3:00 am (JST) to 5:30 am (JST). As a result, JPX-listed derivatives will be available for trading for about 20 hours a day. On the other hand, we see a remarkable trend with the number of orders and transactions in the derivatives market significantly increasing with the rise in market volatility, so JPX will place its emphasis on managing system capacity. To appropriately manage system capacity, we have to consider not only the current situation but also the future market conditions, taking into account the five-fold growth in trading volume in the JPX derivatives market over the last ten years, the extension of the night session, which now attracts

30% to 40% of trading volume, and the launch of new derivative products in the future.

**Addressing the serious threat of cyber-attacks: constantly upgrading to the latest cyber security measures**

**FIAJ: These days, blockchain technology is drawing great interest, with overseas exchanges moving to invest or acquire the new technology. What are your views on this?**

Thinking about blockchain technology, it seems to me similar to the impact I felt with TCP-IP, the protocol for the Internet, in the early 1990s. Both technologies essentially share the same features in that they are open, suitable for horizontal, cross-sectional deployment, and free from existing hierarchical structures. Just like how TCP-IP went on to become the dominant protocol, I see blockchain having a significant impact. JPX recognizes the need to consider in what areas and how we can apply this new technology, and will start proof of concept (PoC) tests. Doing so will help us gauge the potential of this technology for JPX.

**FIAJ: Cyber security is a major agenda in the IT area. How will you address this issue?**

Cyber-attacks are a serious threat for the exchange because IT has an extremely important role in the market infrastructure. According to recent reports, the techniques employed in cyber-attacks are advancing daily, and the websites of many companies and organizations have actually been shut down. Recognizing its mission to operate the market continuously as much as possible, JPX is expected to address cyber-attacks appropriately. As such, JPX continuously introduces enhancements against cyber-attacks in the form of not only IT-based countermeasures on entry and exit but also rule-based controls such as information management. The threat of cyber-attacks will increase as attacks turn to greater sophistication and larger scale, so JPX will constantly upgrade and reinforce its cyber security.

**Providing highly reliable and convenient systems, supporting the listing of various products**

**FIAJ: In response to the Chinese stock market disruption last year, the Japanese market is gaining**

more attention. In addition, the Japanese government is working along with the regulators to establish Tokyo as a global financial center. At the same time, JPX aims to become the most preferred exchange in Asia. How would you advance JPX's Asian strategy from the IT perspective?

I think, to raise the presence of Tokyo as a global financial center, JPX should provide investors both inside and outside of Japan with a venue to trade a wide range of listed products. Returning to the JPX vision of becoming "Your Exchange of Choice" and the most preferred exchange in Asia, the challenge is to make use of the new trading systems for cash equity and derivatives to expand our product and service offerings. As CIO of JPX, I will support the listing of various products and stable market operations through providing market participants

with highly reliable and convenient systems. On another front, although there is nothing new on the comprehensive exchange concept, Tokyo Commodity Exchange will soon start using Next J-GATE, which means that the two exchanges will use a single trading platform. This will reduce system investment and connectivity costs for market participants, and as a result, I expect it to lower the hurdle to market entry and lead to energizing both the financial derivatives and commodity derivatives markets. Considering that until a few years ago, Tokyo Stock Exchange, Osaka Securities Exchange and Tokyo Commodity Exchange each operated separate systems for trading derivatives, I believe that the series of system consolidations and integration is a very positive change for market participants.

FIAJ: Thank you.



The graphic features a dark background with a blurred, high-speed image of a financial trading floor or data center. In the top left corner is the JPX Japan Exchange Group logo, consisting of four red vertical bars of increasing height and the text "JPX JAPAN EXCHANGE GROUP". The date "July 19<sup>th</sup>, 2016" is written in large white font. Below the date, "J-GATE" is written in very large white letters, with the "G" stylized as a red and orange circular arrow. Underneath, "Next Generation Derivatives Trading System" is written in white. At the bottom, "New Products :" is written in yellow, followed by two yellow text items: "- TSE Mothers Index Futures" and "- JPX-Nikkei Index 400 Options".

**JPX**  
JAPAN EXCHANGE GROUP

**July 19<sup>th</sup>, 2016**

**J-GATE**

**Next Generation Derivatives Trading System**

**New Products :**

- TSE Mothers Index Futures
- JPX-Nikkei Index 400 Options



## Mr Loh Boon Chye

Chief Executive Officer  
Executive and Non-Independent Director



Mr Loh Boon Chye was appointed CEO of SGX effective 14 July 2015. With a career in the financial industry that spans 26 years, Mr Loh was most recently Deputy President and Head of Asia Pacific Global Markets at Bank of America-Merrill Lynch. Mr Loh spent most of his career with Deutsche Bank. In his 17 years there, he held various leadership roles including Head of Corporate & Investment Banking for Asia Pacific, Head of Global Markets for Asia, and Chief Executive of Global Markets at Deutsche Bank AG in Singapore.

Over the years, Mr Loh has played a key role in the development of the capital markets in Southeast Asia, having held a number of senior advisory positions. Apart from his directorship on the SGX Board from October 2003 to September 2012, he has also been a Director on the Board of GIC Pte Ltd since November 2012. Mr Loh holds a Bachelor of Engineering degree from the National University of Singapore.

## SGX CEO Discusses the Exchange's Objectives and Plans for Japan

**FIAJ: As the new CEO of SGX, what is your vision for the exchange and what are your priority objectives?**

With an increasingly complex and competitive market environment, it is imperative for SGX to maintain our edge as a multi-asset exchange that offers equity, fixed income and derivatives markets.

Despite challenging market sentiments, Asia remains on track to be the fastest growth region in 2016, and we will continue to further our offerings for investors by building on our current position as one of the world's largest and broadest offshore market for Asian derivatives across asset classes.

We will also keep a firm focus on anticipating the needs of investors looking to access Asia, by growing our FX futures market and fixed income offerings as well as our index services. My priorities will be to ensure we sharpen our business and operational functions to deliver continued excellence, while ensuring the success of our new initiatives, including our new bond trading platform, SGX Bond Pro and our new SGX Index Edge businesses.

**FIAJ: Can you tell us about SGX in Japan and if you have any plans targeted specifically to the Japanese market participants?**

Japan remains one of SGX's key markets and priorities, and we have seen continued investment appetite from Japanese

investors for pan-Asian investment and risk management products. This has been supported by growing interest from Japanese brokers looking to apply for both derivatives and securities remote membership with SGX.

This increasing interest from both retail and institutional Japanese investors, in both Singapore's stock market as well as our futures market, is in line with overall demand for Asia-bound capital and investment exposure. In particular, Japanese investors like the attractive yields that our Singapore REITs sector offers.

With markets expected to remain volatile and challenging in 2016, we are also addressing currency risks through the addition of our SGX Asian FX futures shelf. We have been encouraged by the significant uptake in our SGX Asian FX futures offering, which reflects the growing demand by global investors to trade Asian FX derivatives.

As investors continue to access, and hedge against, the Asia opportunity, we will ensure the relevance of our products to investors based in Japan. We will continue to expand our offerings across product, asset classes and geography.

SGX is committed to our clients and partners in Japan, through both our local office and presence in Japan, as well as directly in Singapore, and are also working with FIA Japan to facilitate more efficient ways to encourage brokers to participate in our markets.

## Electricity Market Complete Deregulation from April 1 Aiming to Launch an Electricity Futures Market in Fiscal Year 2016

Starting on April 1, the electricity retail market will be completely deregulated. The monopoly on household electricity sales held by the main power companies will cease to exist, and the consumer will be free to select the power company of his choice. Around 150 companies, including gas and railroad companies, have obtained a retail electricity license from METI (Ministry of Economy, Trade and Industry) as new power companies and they are already developing their strategies to secure customers. According to a release by OCCTO (Organization for Cross-regional Coordination of Transmission Operators), about 55,000 consumers currently with the Hokkaido, Tokyo, Kansai and Kyushu Electric Powers have expressed their wish to switch to another power company. As time goes by, it is expected that the competition to attract customers will continue to intensify and will expand beyond the current main Kanto and Kansai areas into the other regions.

On the other hand, the launch of an electricity futures market is desirable to respond to the electrical power players' needs to manage the operational risks, linked to electricity price fluctuation for example, they now face. In March last year, METI

setup a council on electricity futures market that deliberated an appropriate framework for this futures market and published its report in July. Based on this report, Tokyo Commodity Exchange (TOCOM) started preparations towards the listing of an electricity futures contract. The contract specifications and system requirements are already mostly ready, and the Exchange has entered the next stage of preparations towards the launch of the new market. The Commodity Derivatives Act prescribes that upon the launch of a new market, 20 participants must be involved with at least half of them being commercial players. TOCOM is currently implementing educational actions targeting said commercials.

The report mentioned above states that "The listing should follow as soon as possible after the 2016 implementation of the complete retail deregulation." However, TOCOM is aiming for a launch in fiscal year 2016 [ending March 2017] and TOCOM CEO Hamada commented at a press conference on January 14 that "we wish to complete the final preparations, including clearing and membership dues, a few months after the launch of the new trading system [scheduled in September 2016]."

## FIA Writes to EU Commission on Effects of EU Regulation on Asia-Pacific Markets

FIA, ASIFMA and ISDA hosted an industry roundtable with EU Commissioner Lord Jonathan Hill on 13 November 2015 in Hong Kong. On 15 January 2016, the associations wrote to Commissioner Hill to follow up on the meeting and set out concerns about the effects of existing or proposed EU regulations on Asia-Pacific markets. Topics covered in the letter include:

- the impact of EU benchmark regulation on third countries
- equivalence decisions and recognition of third country CCPs

under Article 25 of European Market Infrastructure Regulation (EMIR)

- further clarity sought for equivalence decisions under Article 13 of EMIR including for obligations under EMIR Articles 4 (clearing), 9 (reporting), 10 (treatment of nonfinancial counterparties) and 11 (risk mitigation techniques for non-cleared OTC derivative contracts)

The letter [can be viewed here](#).

## 2016 Japan Roadmap Overview - English Webinar

In a continuous effort to raise the awareness of the Japan Financial Services Industry's latest developments, the FIA Japan Technology Committee invites you and your teams to a 30-minute webinar offering an overview of the derivatives market situation, the main technical and functional changes, as well as the introduction of any new products, planned in 2016 at JPX, TOCOM and TFX. This webinar was purposely prepared in the English language so that it can be shared with your overseas

business and technical counterparts.

You can access the webinar and registration page by clicking on this [link](#).

(Please note that the webinar session will require the installation of the webex webinar tool)

Should you have any comments or questions, please feel free to contact our FIA Japan Technology Committee. Enjoy the session!

## FIA Views on Error Trade Policies

According to the [Guide to the Development and Operation of Automated Trading Systems](#), issued by FIA in March 2015, error trade policies at exchanges should be transparent, robust and clearly documented so that all participants understand the consequences of an erroneous trade. A policy like this is important for the protection of the clearing members as well as individual participants, and should be as consistent as possible across exchanges and clearinghouses.

Clear and transparent trade policies protect all market participants, including counterparties to erroneous trades. Where error trade policies are unclear or subjective in nature, it is possible that in attempting to reduce the risk of the party responsible for the error trade, the exchange may introduce risk to the counterparty or other market participants. There should be consistency in exchange practices for the same types of financial instruments across markets where possible.

Exchanges should also consider using pre-determined “no-bust” or “non-reviewable range” criteria as part of any error trade policy and publicly document and review error trade policies regularly. The ultimate goal of any error trade policy should be to promote a marketplace where all trades stand as executed. To that point, adequate exchange-level pre-trade controls can minimize the need for an exchange to cancel or price-adjust a trade. If an exchange has to cancel or price-adjust a trade, the affected party must report the error to the exchange within the prescribed reporting window. The exchange should notify the counterparties and the broader marketplace of both price adjustments and trade cancellations immediately to allow price discovery to resume. If a bust or adjustment occurs, the exchange should send notice in electronic format to all affected parties.

## Changes to Coincide with Launch of Next Generation Derivatives Trading System (Next J-GATE)

JPX decided to launch its Next J-GATE on July 19, 2016. Along with this Next J-GATE, there are four major changes that will be introduced, namely, longer trading hours, listing of new contracts, introduction of a Non-Cancel Period and mandatory use of hard-limit function by the exchange. The first and second points are reviewed in this edition, and the remaining points will be reviewed in the next edition in May. The longer trading hours are achieved by extending the night session and bringing forward the start time of regular session of day session for index futures contracts (except Nikkei 225 VI Futures). The night session will

be extended two and half hours from the current closing time of 3:00 am (JST) to 5:30 am (JST). As a result, derivatives listed on JPX will be traded until the end of US stock market (during DST). At the same time, in order to enhance liquidity, the index futures market will open fifteen minutes earlier from the current opening time of 9:00 am (JST) to 8:45 am (JST).

With the launch of the Next J-GATE, four new contracts--JPX-Nikkei 400 Options, TSE Mothers Futures, TAIEX Futures and FTSE China 50 Index Futures--will be listed. The amount of asset under management related to JPX-Nikkei Index 400 has

steadily increased after the start of calculation on January 2014 (AUM: 35 billion USD/4 trillion JPY as of the end of 2015). To meet the market participants' demands, JPX decided to provide new trading and hedging instruments to investors by listing its options contracts. TSE Mothers Futures will be the first futures contract in Japan having domestic emerging companies index as

its underlying. Moreover, as the Japanese investors have become more internationalized, diversified and sophisticated in recent years, JPX expands its line-up of international indices futures contracts by adding TAIEX Futures and FTSE China 50 Index Futures to the existing DJIA Futures and India Nifty50 Futures.

## Exchange News

### Next J-GATE Goes Live on July 19 ..... JPX

JPX announced that the development of the Next J-GATE is on schedule and will go live on July 19, 2016. In addition, a new derivatives trading fee scheme, market maker scheme, and incentive scheme for retail brokers, were announced. All of the schemes will become effective at the launch of the Next

J-GATE. The incentive scheme for retail brokerage firms aims to encourage initial liquidity and trading of new products, which will be listed to coincide with the launch of the Next J-GATE (e.g: JPX-Nikkei 400 Options and TSE Mothers Futures) through the participation of more retail investors.

### Relocation of TFX Main Office ..... TFX

Tokyo Financial Exchange Inc. (TFX) announced the relocation of its main office on the 29 of February 2016. The new office is located on the 8th floor of "Tekko Building" (1-8-2 Marunouchi,

Chiyoda-ku) which is close to the north exit of Tokyo Station. Other contact information for TFX, such as telephone numbers and FAX numbers remains unchanged.

### TFX and S&P Dow Jones Indices Sign DJIA Index License Agreement ..... TFX

On January 19, 2016, Tokyo Financial Exchange Inc. (TFX) and S&P Dow Jones Indices LLC have signed an agreement which allows TFX to list DJIA Margin contracts based on the Dow Jones Industrial Average (DJIA) on TFX. By adding yen denominated DJIA Margin contracts to TFX Exchange Equity Index Margin Contracts called "Click Kabu 365", Japanese

investors will be able to trade equity index CFDs based on Japanese, US and European equity indices without currency risk. As DJIA is one of the best known global benchmarks for Japanese retail investors, TFX expects that the new contracts will help increase the visibility of the Click Kabu 365 brand and will facilitate the further vitalization of the market.

### TOCOM Dubai Crude Oil Market Continues to Expand ..... TOCOM

TOCOM's Dubai Crude Oil futures volume has been expanding since fall of 2014, coinciding with the decline of global crude oil prices. Open interest, which represents the scale of a market, was 13,000 contracts in October 2014 and has since risen six-folds, reaching over 80,000 contracts on February 4 for the first time since its listing in 2001. Average daily volume is up four-folds to 15,000 contracts during that same period.

This growth is due to recent structural changes in the petroleum industry as well as changes to the crude contract, which now is based solely on Dubai crude oil, which is a benefit to commercial

participants. Furthermore, an ETN based on TOCOM Dubai Crude Oil prices, which prompts active hedging, helped increase volume, demonstrating a synergetic linkage between the financial and commodity markets.

TOCOM Crude Oil futures volume continues to increase in 2016 as the market turns more volatile over economic conditions and geo-political risk. Monthly volume for January was 703,313 contracts, besting the previous high reached the prior month. On February 8, daily volume exceeded 70,000 contracts for the first time since listing.



## TOCOM to Go-Live with New System on September 20 ..... **TOCOM**

TOCOM announced plans to go-live with its new trading system on September 20 (subject to change based on final system testing).

## TOCOM to Update Gold Options Specifications in September ..... **TOCOM**

TOCOM will update the Gold options contract specifications in conjunction with the launch of the new trading system on September 20 (pending regulatory approval).

The most significant change will be to move from an American-style to a European-style options contract (i.e: the exercise timing will change from a period lasting "from the First Trading Day of a new contract month until the Last Trading Day" to "Only on the Final Settlement Day"). Also, options expiring in the money will be automatically exercised and cash-settled. The contract unit will be changed to 100 grams and six contract months will be listed. As for series settings, there will be at least

20 strike prices above and below the central strike price (for a total of at least 41 strike prices)

To maintain consistent contract specifications, the October 2016, December 2016 and February 2017 contracts will not be listed until September 20. Options trading will be temporarily suspended on July 29, which is the last trading day of the August 2016 contract. On September 20, 2016, 6 contracts months will be created; October 2016, December 2016, February 2017, April 2017, June 2017 and August 2017, and will trade under the new contract specifications.

(Details will be announced on the [Exchange website](#) shortly.)

### Future Events

#### ■ Boca 2016: 41st Annual International Futures Industry Conference March 15 – 18, Boca Raton



More than 1000 senior-level executives from brokerage firms, asset management firms, international exchanges and regulatory bodies convene in Boca Raton, Florida for the FIA Annual Conference. FIAJ Officers will also be present. Please contact the FIAJ Office to arrange for potential meetings.

Further details are available [here](#).

#### ■ L&C 2016: 38th Annual FIA Law and Compliance Conference May 4 – 6, Baltimore



Hosted by [FIA's Law & Compliance Division](#), this conference delivers tailored sessions from leading experts on regulatory developments and their practical implications, professional development opportunities and ample networking activities.

Further details are available [here](#).

#### ■ FIA Japan Annual General Meeting May 26, Tokyo



We will hold the 28th Annual General Meeting along with a reception at International House in Roppongi on Thursday, May 26, 2016 from 17:00. FIA Japan expanded its activities and program this fiscal year and continues to grow. We thank our members for their continuous support of FIAJ and would like to request your active participation in our activities. We look forward to seeing you at AGM. For more details, please contact Executive Secretary at [morizono@fiajapan.org](mailto:morizono@fiajapan.org)

**Technology Committee****Chairman Bruno Abrioux**

As you can assess reading through this newsletter, our Technology Committee has been busy delivering on a number of activities during this first quarter: the 2016 comprehensive roadmap of Japan Exchanges and Clearing Houses English webinar was successfully released early February, the Technology Panel on Cybersecurity in the FSI (“Cyberattacks: Dare to Share”) for the 17th Annual Japan International Banking & Securities System Forum is just behind us and we are now entering the fashionable FinTech theme park through the Tech Corner of this newsletter.

What you can still expect from our Technology Committee in the coming months includes (in a non-exhaustive manner and subject to changes) a Japanese webinar on the 12-month technical, functional and product development plan by the overseas exchanges members of FIA Japan, an executive summary presentation of the “Guide to the Development and Operations of Automated Trading Systems” published by the FIA Market Technology Division and also some reflections on blockchain. Much more to follow though... Stay tuned!

**Proprietary Trading Study Group****Chairman Michael Ross**

FIAJ PTSG held its fifth monthly conference call on January 28, focusing mostly on risk management issues at JPX. A JPX representative participated to the call and shared some insights as to the Exchange’s plans on the items listed below. FIAJ Advisory Panel, including the Chairmen of our Legal & Compliance, Market Development and Technology Committees, also joined the call and showed their respective support towards the activities of the Group.

**Error trade Policy:** JPX explained about the history leading to the adoption of its current rule in 2007, rule which has yet to be triggered and is still rather broad, leaving the final say to the Exchange. The Group commented that clarity of the policy is important to the market participants and would help further develop the market.

**Market maker protection and self-trade prevention:** JPX explained that this is linked to the next J-Gate trading system. OSE announced that it will not provide this function from day 1 of the launch as more time is needed to make the necessary developments. The Group commented that a market maker can do a better job if there is more certainty when showing prices and agreed to provide the requirements to the Exchange.

**Test Environment:** Bruno Abrioux’ Tech Committee shared several documents with the group, including a 2014 market research focused on what should be done on test environments for the benefit of the participants and the market. The Group commented that the focus should be on availability of the test environment, which is not optimum now, even if the costs should go up.

**Commodity Study Group****Chairman Mitsuhiro Onosato**

CSG discussed the following points in recent meetings.

**Asian Market Updates:** Mr. Sugitani (previous CSG Chairman, now based in Singapore) shared updates on recent Asian commodity market developments. This included the newly launched Brent mini contract on ICE Singapore that is targeting Asian speculators, and therefore doesn't offer an offset with the ICE London contract. The contract size may have been set to match the INE Shanghai’s long-awaited crude oil contract that is planned to be launched sometime soon. We also discussed the landscape of clearing houses in Singapore as there will be 3 clearing houses in 2016, namely SGX, ICE and Eurex.

**Give-ups on TOCOM:** Continued discussions from the last meeting on improving Give-up system at TOCOM. Instead of requiring the submission of a TOCOM-form and approval by the Exchange (TFX also has its own application form but they will soon not use it anymore), accepting the Japanese version of the

FIA Give-up agreement as the valid agreement (with the English version serving as a reference) will improve the usability of the system. We also talked about actual needs for give-ups on TOCOM as there are several unique features.

**Information Updates on the Next Generation Trading System:** TOCOM had already implemented 6 briefings for members and ISVs. Testing started in Q1 2016. Upon the migration, the biggest change in systems will be the use of the JPX clearing system (instead of the current Nasdaq Secur). ITCH protocol will also be available as an option to market data distribution services to improve the overall amount of data and broadcast quality. TOCOM designated @Tokyo as a proximity service provider (no dedicated co-location).

**Options Seminar:** CSG also discussed about the option seminar planned to be organized by both exchanges and FIAJ in Spring 2016. One of the objectives will be to show the benefits of

options trading to decision makers in the futures industry. The details are still need to be discussed, but a first part could be a keynote speech on commodity options trading by a broker

experienced in such trading, to be followed in a second part by a panel discussion on options, including financial options.

## TechNews

# Now Might Be Time For VIX

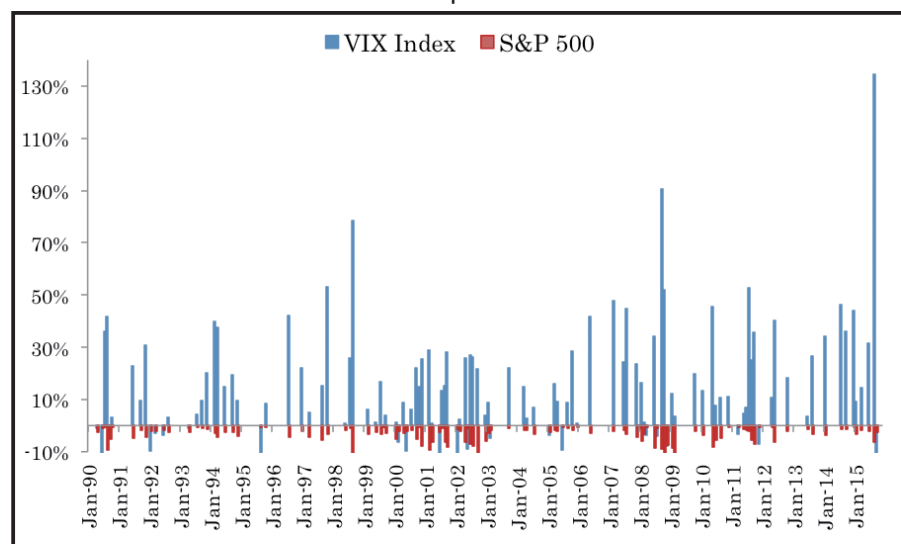
In a global market ridden with economic frailty plus US Fed rate hikes and a crashing oil price that is driving renewed credit weakness, a frightening picture is emerging. However, the S&P 500, the US stock market, hasn't collapsed yet. It is on pace to outperform commodities for the eighth consecutive year, which will be a new record. If the cycle switches, investors will need a way to protect themselves from the coming crash.

Historically, VIX, an index many investors know as “the fear gauge,” tends to spike when markets are tumultuous. Specifically, the CBOE Volatility Index (VIX) measures the implied volatility of the S&P 500® (SPX) for the next 30 days. When implied volatility is high, the VIX level is high and the range of likely values is broad. When implied volatility is low, the VIX level is low and the range is narrow.

Since 1990, the S&P 500 dropped in 37% or 115 of 300 months. On average when the S&P 500 fell, it lost 3.5%. However, in those months when equities fell, the VIX gained on average 16.4%. Moreover, the S&P 500 lost 16.9% in its worst month in Oct. 2008, and when needed most, the VIX protected with a 52.0% gain. The chart below shows VIX and S&P 500 returns when equities lost.

Given the current commodity crash has been a major force in slowing global growth, it is also important to know the VIX protects against commodity drops. Also since 1990, the S&P GSCI has lost in over 40% or 142 of 311 months. In those months, commodities fell 4.7% on average, but the VIX protected again and gained 3.4% in those months. For similar protection globally, volatility indices are popular in equity markets around the world in addition to US and Japanese government bonds.

VIX and S&P 500 Returns when Equities Lost - 1990 to 2015



Source: S&P Dow Jones Indices

# FINTECH: A DEEPER LOOK AND CURRENT TRENDS

## -GLOBAL TRENDS AND JAPAN MARKET INITIATIVES-

### THE SIGNIFICANCE OF FINTECH

FinTech: Coined to define an evolution in finance and technology, FinTech is a term endowed with shades of nuance. Its meaning and connotations vary with context and the person or party concerned. A case in point is that of financial institutions (FIs) and FinTech companies. When it comes to FIs, bureaucracy and legacy systems have been the shackles that have hampered their progress in recent years. Conversely, FinTech firms stand out for their innovative corporate cultures and technological track records; yet, by the same token, their limited regulatory experience and business successes hint that they are not necessarily in a superior business position moving forward. Indeed, these financial institutions and FinTech firms converge at the intersection of innovation. It is here that there lies great potential for collaboration and synergy. In particular, attention should be focused on helping FinTech firms understand the problem areas and pain points of FIs —because this offers a gateway to vast scope for win-win collaboration between the two.

### FINTECH TRENDS

FinTech strategies for global financial institutions can be boiled down to the below three points.

- Investing corporate capital: It is important to be aware of the total FinTech ecosystem and strike a balance between business strategy aims and those of corporate capital investment spending units
  - Accelerators: Broad access to ecosystem and mentorship are critical, with building a captive relationship key
  - Innovation labs: Most salient trends are focused around blockchain, cyber (security, attack, terrorist attacks), and artificial intelligence (AI)
- Building on the above, the below five points are central themes that will significantly impact the future of financial services.
- RegTech: Harnessing technology for real-time regulation of constantly evolving financial institutions
  - Real-time transactions: Encouraging high-speed, low-latency environments in post-trade processing
  - Distributed systems: Blockchain technology effectively distributing data to participants, offering new, more transparent approaches
  - Cognitive systems: Machine learning is a critical component when it comes to using, analyzing, and acquiring knowledge about all manner of structured and unstructured data
  - Cyber security: As these areas continue to evolve, increasingly

Figure 1: Financial Institutions and FinTech Firms - Strengths and Weaknesses

Financial Institutions	Strategy Response by FIs	FinTech
<b>Assets</b> <ul style="list-style-type: none"><li>✓ Brand</li><li>✓ Balance sheet</li><li>✓ Customers</li><li>✓ Regulatory expertise</li></ul> <hr/> <ul style="list-style-type: none"><li>• Bureaucracy</li><li>• Legacy IT</li></ul>	<b>Specialists</b> Collaboration Experimentation Resolution	<b>Assets</b> <ul style="list-style-type: none"><li>✓ Innovative culture</li><li>✓ Digital edge</li><li>✓ Customer-focused</li></ul> <hr/> <ul style="list-style-type: none"><li>• Track record</li><li>• Regulatory experience</li></ul>
<b>Needs</b> <ul style="list-style-type: none"><li>• Innovation</li></ul>		<b>Needs</b> <ul style="list-style-type: none"><li>• Insight on FI "pain points"</li></ul>



strong security and preventing cyber attacks will be essential to maintaining trust

The FinTech wave that hit Japan's financial market like a tsunami in 2015 was characterized by the below three factors.

- Major financial institution-support in terms of funding, for various innovation, competitions, and accelerator programs
- Major vendors seeking to organize in ways to capture customers and start-ups
- Government agencies proactively showing support

The above has injected energy into and focused attention on the below five areas.

1. Finance: Personal financial management (PFM), online financing
2. Investing and business support: Robo-advisors, accounting, payroll, Enterprise resource planning (ERP) support
3. Crowdfunding: capital procurement, temp staff, material procurement
4. Payment: M-POS, Online/offline payment services and related O2O (online-to-offline) marketing services, wallet services
5. Crypto-currency: Bitcoin and related services

The backdrop to all of these is digital advancements and the existence of a new generation and Entrepreneurs with no patience for inconvenience. These segments all face the dual challenges of demonstrating the validity of their applications—such as robo-advisors or payments—and investment in future

platforms—such as blockchain and the Internet of things (IoT).

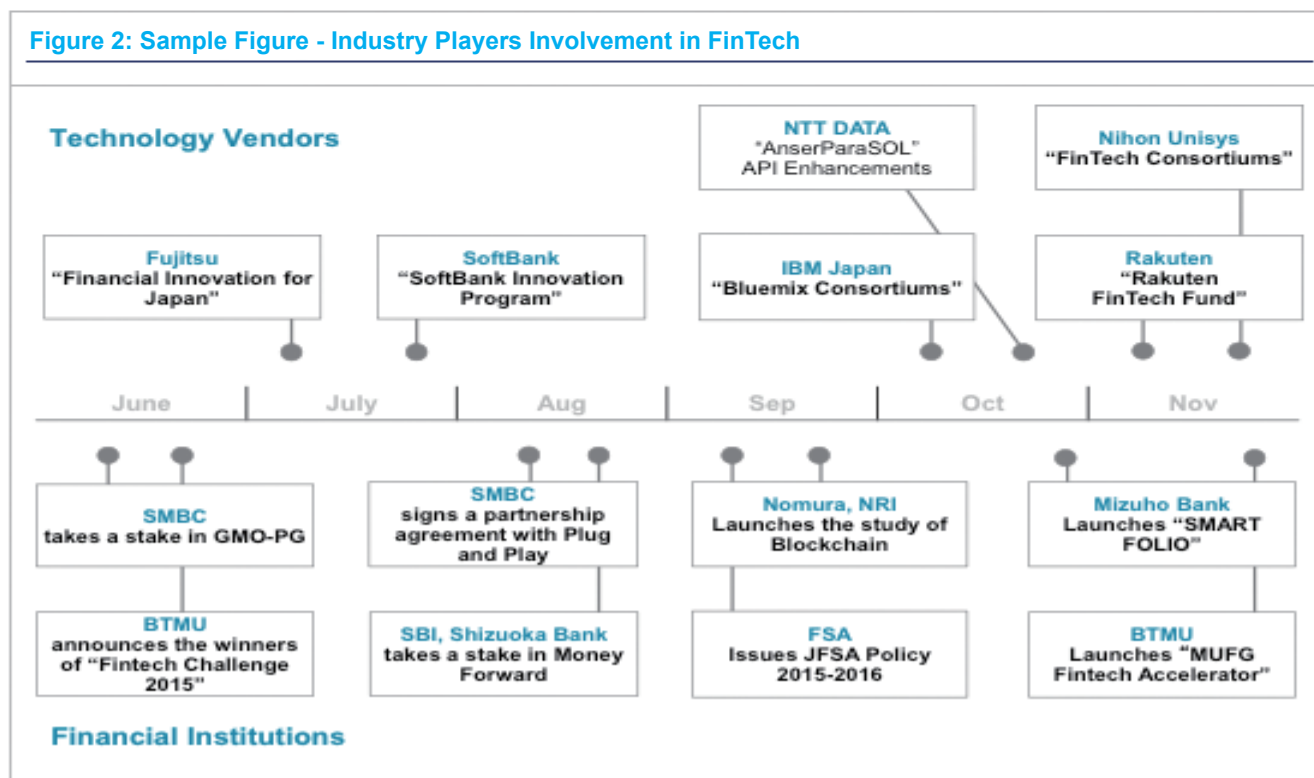
## OUTLOOK FOR FUTURE TRENDS

The future of financial services that can be inferred from emerging initiatives today is one of devising digital solutions to overcome issues in ways that translate into heightened user convenience. At the heart of this—lurking in the shadows—is tug-of-war, between global and local as well as between standardization and customization. FinTech can be used to tackle these challenges and bridge these intractable gaps. FinTech is akin to a door to an unknown world, a new, unexplored world where companies can discover new demand.

Celent sees signs of fundamental and tectonic change afoot: a generational transition in market infrastructure (centralized to distributed), a transformation in the player landscape (generational transition among vendors and business people), and new sourcing model paradigms (shift to services and the cloud).

Understanding and leveraging FinTech trends will be essential to grasping and envisioning how technology will reshape the financial sector. New technologies should be implemented based in new architectures. Establishing an infrastructure and service platforms for FinTech to flourish are areas that mandate immediate attention.

Figure 2: Sample Figure - Industry Players Involvement in FinTech



## FIA Japan New Year's Party January 19, Tokyo

FIA Japan held its New Year's Shin-Nen-Kai Party on Tuesday, January 19, 2016 at Ark Hills Club. There were over 120 people who attended the party.

There were many other VIPs including guests from FSA, METI, and MAFF. From FIA Asia Pacific, Mr. Bill Herder, Head, and Ms. Trinh, Vice President of Legal & Policy, also joined the reception, sharing updates on the FIA merger completed earlier this year.

FIAJ Chairman Maruyama made a speech wishing for a more fulfilling year for FIA Japan and its members and Vice-Chairman Mogi followed with a toast.

Gold Sponsors:



From left to right:  
Michael Ross, President - CEO, FIA Japan  
Bill Herder, Head of Asia-Pacific, FIA  
Yasuo Mogi, Vice Chairman, FIA Japan

# *As the inventor of the electronic exchange, passion for technology is in our DNA.*

Our 40+ years of experience owning and operating Nasdaq's 26 marketplaces, drive for innovation and continuous investment in R&D have produced flexible, multi-asset solutions that can support any asset class, anytime, anywhere.

Nasdaq's Market Technology solutions are proven and used in the most demanding markets, leveraged by 100+ marketplaces, regulators, clearinghouses and CSDs and 100+ market participants in over 50 countries.

**Let Nasdaq power your goals and ambitions, no matter how large.**

Learn more <https://business.nasdaq.com/TECH>



## FIA Japan Editorial Board

**Editor** Tony Crane, FIA Japan

**Publisher** Hiroyuki Naruke, Sakimono Journal

### Editorial Board Members

Bruno Abrioux, FIS (SunGard Japan K.K.)

Mitch Fulscher, Financial Consultant

Shinobu Kobayashi, Nomura Securities

Eiichi Kojima, Japan Commodity Futures Industry Association

Keiko Koyama, Tokyo Commodity Exchange

Ken Masunaga, Sakimono Journal

Sayaka Morizono, FIA Japan

Chika Nakamura, ABN Amro Clearing

Shino Nakamura, Rakuten Securities

Akio Shimizu, Stock Voice

Michael Ross, Omgeo

Jay Sapsford, Morgan Stanley MUFG Securities

Duncan Symmons, Touch-Fire Trading

Hitoshi Taga, Patsystems

Masahiro Tobita, Japan Exchange Group

Yuko Watanabe, Tokyo Financial Exchange

David Wilkinson, Equinix Japan

## FIA JAPAN Office

c/o Greenberg Traurig Tokyo Law Offices

Meiji Yasuda Seimei Bldg, 14th Floor

2-1-1 Marunouchi, Chiyoda-ku,

Tokyo 100-0005

Tel/ fax +81 (0)3-4510-2222

Website: <http://www.fiajapan.org/>

Tony Crane, Administration Manager

[crane@fiajapan.org](mailto:crane@fiajapan.org)

Sayaka Morizono, Executive Secretary

[morizono@fiajapan.org](mailto:morizono@fiajapan.org)

Opinions contained in this newsletter are the contributors' personal opinions and do not necessarily reflect the views of FIAJ.

The information contained in this newsletter represents the contributors' own evaluations, and FIAJ does not explicitly or implicitly guarantee the accuracy or completeness thereof. FIAJ is not liable to any third party for any losses, costs or expenses, including any direct, indirect, incidental, consequential, special or exemplary damages or lost profits, resulting from any use of the information contained in this publication.

If you have any questions regarding the contents of the newsletter, please contact the Editor ([editor@fiajapan.org](mailto:editor@fiajapan.org)) or the FIAJ Executive Secretary.



## Sponsorship of this newsletter is available! Reach out to the global derivatives trading community.

The FIA Japan Newsletter is a bimonthly and bilingual medium, covering news relevant to both financial and commodity derivatives. Our electronic distribution list reaches over 900,000 contacts, both in and out of Japan, thanks to the cooperation of our distribution partners (see below).

Sponsor one of our editions today and access a very unique marketing tool!

### Cost

From JPY 50,000



### Distribution Partners:

FIA



Contact us: [editor@fiajapan.org](mailto:editor@fiajapan.org)



FIA Japan was originally established in Tokyo in 1988 as a nonprofit organization by foreign and Japanese futures industry participants and later reorganized as a “General Incorporated Association” (“Ippan Shadan Hojin”). It is the only organization in Japan of its type with a membership drawn from the entire cross section of the derivatives industry. It has approximately 60 members representing the various corporate sectors participating in the derivatives industry in Japan. Their Mission is to encourage the growth and success of the Japan financial marketplace and its development as a regional and global financial center.

## FIA JAPAN BOARD OF DIRECTORS

■ Executive Committee Members

### OFFICERS / BOARD MEMBERS

#### Chairman and Representative Director

■ **Junichi Maruyama**

*Citigroup Japan Holdings Corp.*

*Executive Officer, Head of Government Affairs*

#### Vice Chairman and Representative Director

■ **Yasuo Mogi**

*Nissan Securities Co., Ltd.*

*Chairman of the Board*

#### President - CEO and Representative Director

■ **Michael Ross**

*Omgeo K.K.*

*Representative Director*

#### Vice President

■ **Jay Sapsford**

*Morgan Stanley MUFG Securities Co., Ltd.*

*Managing Director and Chief Administrative Officer*

#### Vice President

■ **Peter L. Jaeger**

*Citigroup Global Markets Singapore Pte. Ltd.*

*Managing Director, Regional Head Asia Pacific*

*Futures, Clearing & Collateral*

#### Secretary and Representative Director

■ **Koichiro Ohashi**

*Greenberg Traurig Tokyo Law Offices.*

*Attorney at Law, Partner*

#### Treasurer

**David Wilkinson**

*Equinix Japan K.K.*

*Senior Director, Business Development, Asia-Pacific*

#### Other Board Members

**Bruno Abrioux**

*FIS (SunGard Japan K.K.)*

*Senior Vice President, Head of Sales Japan/Korea*

**James Busby**

*Goldman Sachs Japan Co., Ltd.*

*Managing Director, Head, Futures Sales Trading, Securities Division*

■ **Richard Clairmont**

*ABN AMRO Clearing Tokyo Co., Ltd.*

*Chief Executive Officer*

**Wataru Ito**

*Tokyo Financial Exchange Inc.*

*Managing Director*

**Izumi Kazuhara**

*CME Group.*

*Executive Director Head of Japan*

■ **Yoshio Kuno**

*Individual Member*

**Yuji Kusunoki**

*Rakuten Securities, Inc.*

*President*

**Walter L. Lukken**

*Futures Industry Association*

*President and CEO*

**Mitsuo Miwa**

*Japan Exchange Group, Inc.*

*Director, Global Strategy*

**Mitsuhiro Onosato**

*Tokyo Commodity Exchange Inc.*

*Executive Officer*

**Toru Tsukahara**

*Daiwa Securities Co. Ltd.*

*Executive Director, Global Markets Planning Dept.*



#### Advisors to the Board

**Shozo Ohta**

*Tokyo Financial Exchange Inc.*

*President & CEO*

**Bob Takai**

*Sumitomo Corporation, Executive Officer*

*Sumitomo Corporation Global Research Co. Ltd.*

*President & CEO*

#### Advisor to Executive Committee

**Mitch R. Fulscher**

*FIA Japan Chairman Emeritus, and Business Consultant*

#### Auditor

**Nagayoshi Miyata**