

Summary of Q&A at JPX IR Day 2017
Japan Exchange Group, Inc.

(Held on July 4, 2017)

Cash Equities Market and Information Services Business

- Q1: In terms of enhancing ETF market liquidity, what are the current problems with ETF creation/redemption? How do you plan to solve those problems?
- A1: (Miyahara) Currently, it takes T+4–6 for investors to go from acquiring baskets of equities to receiving ETFs when manually applying for ETF creation, because the baskets must first be sent to the ETF issuer before the issuer can send the ETFs back to the investor. We are considering a scheme where the CCP, JSCC, is involved in creation/redemption. This scheme would allow for the ETF process to be completed by T+3, which is the same period of time required for settling a cash equities transaction. The scheme would also enable investors to conduct netting for equities trading.
- Q2: There have been discussions on the matter of tightening regulations against high-frequency trading (HFT). With more regulation, how do you mean to prevent investors from fleeing Japanese markets?
- A2: (Miyahara) Adoption of a registration system for HFT firms has just been approved to reflect the discussion at the Financial System Council. Japan FSA is studying the system in detail to devise how to enforce regulations. By informing investors as soon as a decision is made, we hope to relieve any of their concerns.
- Q3: For the next system replacement: a) What enhancements are you aiming for? b) What expectations do users have? c) Will costs rise?
- A3: (Miyahara) We will look into the state of systems used at major global exchanges while also collecting information from investors on what they expect from us in terms of system capabilities before determining in which direction to proceed with the next replacement. As discussed in the HFT registration system, we understand that stability will be more critical for systems in future and it will be more important than speed. We are unable to answer about the cost as of now.

- Q4 I believe there is a growing market for ETFs. If retail investors increase in number and ETFs are more widely used, what kinds of increases do you expect to see in the number of shareholders or trading value? How will that contribute to revenue?
- A4: (Miyahara) In addition to the measures for enhancing ETF market liquidity that I have just explained, we will diversify the underlying asset classes and list ETFs that meet retail investor needs. ETFs have been included in investment products for 20-year savings-type NISA (the Nippon Individual Savings Account small-lot investment system), which will serve as a driving force to enhance ETF market liquidity. With this view in mind, we will work with securities firms and regional banks in promoting the market. For ETFs tracking indices calculated by JPX, we can expect revenue increases in four areas; trading, listing, index licensing, and information services. Thus, we will facilitate listing of ETFs tracking indices calculated by JPX.
- Q5: You mentioned that the information-related business accounted for 17% of income. Is there a possibility that JPX will look to raise its profitability by buying indices businesses in a similar manner to the cases seen with overseas exchanges? Or, will you continue to choose organic growth?
- A5: (Miyahara) We do not have a specific plan at the moment. As we have our own index calculation system, we want to use the system and that knowhow to accept orders for custom indices. We are also developing indices with other index providers and will keep exploring possibilities, including collaboration with other index providers.

Derivatives Market Business

- Q6: Can you provide any updates on the comprehensive exchange initiatives, especially the possibility of a merger with Tokyo Commodity Exchange (TOCOM)? If a merger is realized, what do you expect in terms of international competitive advantages and synergy in business performance?
- A6: (Yamaji) Cabinet decisions were made to advance the comprehensive exchange initiatives by the Abe administration and we would like to proactively move the initiatives forward toward realization. OSE currently provides its derivatives trading platform to TOCOM and has no difficulty in terms of systems; however, progress has been slow due to some inter-ministerial issues. As for synergy effects, since many investors who trade derivatives products on the OSE market trade commodity products as well, it will enable us to conduct comprehensive promotional activities that encompasses commodity products. Also, if we establish a comprehensive exchange, it will allow us to explore more opportunities to cooperate with overseas exchanges by leveraging its size. As the impact on our business performance cannot be estimated at this moment, I am afraid I cannot touch upon that.

- Q7: Derivatives trading expanded. One of the reasons is thought to be the extended trading hours. Is it technically possible to extend the hours further? What conditions would be needed to further extend trading hours?
- A7: (Yamaji) It is technically possible to extend hours a little. However, we lean toward letting the system have some capacity to spare, and decided to extend hours through 5:30 a.m. upon discussion with trading participants. Only one year has passed since the previous trading hour extension to the current 5:30 a.m. We will continue exploring the possibility of further extensions while monitoring request from the market.
- Q8: Trading volume of TOPIX Futures has not increased. Tell us your views on measures to boost the market.
- A8: (Yamaji) We started cross-listing our index futures products with Taiwanese exchanges. One possible idea is that we may also do the same kind of efforts with other markets.

Clearing Business

- Q9: Please tell us what you think is important in competition with LCH.
- A9: (Miyama) JSCC has introduced the cross margining scheme for JPY-denominated products. Although the number of users is limited, they often use the scheme. Although LCH obtained the license to conduct the financial instruments obligation assumption business in Japan, they have not handled any JPY-denominated products yet. We don't yet know how it will fare, but we would like to retain users in Japan by further improving the clearing services for JPY-denominated products.
- Q9-2: What else do you think can be done besides retaining users in Japan?
- A9-2: (Miyama) We see more foreign participants use the clearing service for IRS resulting from the widened interest rate gap between Japan and other countries due to Japan's negative interest rate policy. We will put forth every effort to retain such investors as well.
- Q10: Can you tell us how much capital JSCC requires and whether there arises any impact on consolidated capital if progress is made in discussions regarding the Principles for Financial Market Infrastructures (PFMI), which serve as the international regulatory framework for clearing organizations?
- A10: (Miyama) Our current capital meets the requirements under the PFMI. As PFMI additional guidance has not been published yet, we do not expect any additional capital required. At present, however, we plan to increase our retained earnings (settlement guarantee reserve for security trades and others) to JPY 40 billion by adding approximately JPY 10 billion.

- Q11: It is difficult to launch new services quickly?
- A11: (Miyama) CCPs are, like exchanges, an infrastructure business. When we renew our systems, our users will also have to make adjustments to their systems. As such, we have to discuss and coordinate the launch period with them to ensure a smooth service launch.
In terms of new business, we are also exploring the possibility of providing them in the form of packages to be deployed in user systems.
- Q12: JPX is studying distributed ledger technology. Is JSCC doing something in this area? What is the timeframe being considered for applying this new technology to post-trade processing? Is there a chance of cooperating with overseas exchanges?
- A12: (Miyama) For fintech, we are working with JPX to explore this technology together. While we have yet to reach any concrete outcomes, since we believe that it is best suited to post-trade processing, that will probably be the first area where we will try to do something.
At the moment, we do not have tie-ups with any overseas exchanges and are studying the technology in a JPX-led consortium.

General Q&A

- Q13: As part of your efforts to boost the Japanese market, you set an objective to increase the number of foreign listed companies. How do foreign companies benefit from listing on the Japanese market? What are your selling points? And, what kind of response have you obtained?
- A13: (Miyahara) We target foreign companies that regard Japan as a market to operate their businesses or collaborate with Japanese companies and move to attract them to list on the Japanese market.
The Japanese market's attractiveness lies in its diverse investor base with not only institutional investors but also retail investors who possess abundant financial assets amounting to JPY 1,800 trillion. If only institutional investors participate in trading, the trading may be concentrated on either the bid or ask side. However, having many retail investors participate in the market provides liquidity, and the trading tends to not be concentrated on either side. A prime example for the force of retail investors is the IPOs of Japan Post group companies, valued at JPY 1.4 trillion, which successfully sold at once. In addition, for natural resources companies, since natural resource prices that affect their share prices change around the clock, I believe people would want them to list their stocks in Europe and the U.S., as well as Asian markets, so that they can be traded 24 hours.

- Q14: Concerning information services, you said you had no plans to conduct M&A in terms of index business. Considering recent cases overseas involving data analytics, if you were to broaden business targets, is there a chance of M&A?
- A14: (Miyahara) We are aware that data analytics can be an important business. For the index business, I just mentioned we have nothing specific in the works at the moment. We are open to considering a wide-range of areas for conducting M&A to expand our information business.
However, even though the Financial Instruments and Exchange Act will be revised, the Japanese exchanges will have less freedom in the scope of operation compared to overseas exchanges. As such, we are not sure that we will be able to conduct M&A comparable to those conducted by overseas exchanges.
- Q15: FX trading in Japan is mainly conducted on the OTC market. Is there a chance that exchanges could enter or develop FX-related businesses?
- A15.1: (Yamaji) In Japan, with the history of removing the tax breaks for on-exchange trading while introducing regulations on FX trading leverage, exchanges do not gain any competitive edge by offering FX trading. While we do have an interest in currency derivatives, we are looking into this area at more of a medium to long term span rather than in the short-term.
- A15.2: (Miyama) In relation to FX, for clearing, we had previously considered services for FX transactions, but we abandoned the idea, because there was no user demand.
- Q16: In Japan, JPX has a high share in the exchange business. Even if the official documents and releases from the government agencies say that they are trying to encourage more competition, it is not visibly evident. Can I just check whether there is any chance, perhaps an event, in the changing business environment or regulatory regime that would give rise to competition in the medium to long term?
- A16.1: (Miyahara) In terms of direct competition, there are the PTS. J-FSA's Financial System Council has already discussed and agreed to open the doors to margin trading on PTS if certain conditions are met, and I understand that JSDA is leading discussions on how to address issues like conflict of interest and regulatory frameworks. Once margin trading starts on PTS, JPX will be affected to a certain extent, so we will need to monitor the situation and respond accordingly.
- A16.2: (Miyama) To add on PTS, I would like to point out that JSCC does not share the same concerns with TSE. JSCC also clears PTS transactions, so JSCC revenue is neutral to market share. In fact, if the entire pie grows bigger, then it would be better for our revenues.

- Q17: To reach out to companies in the ASEAN region, for instance, do you promote English disclosure?
- A17: (Miyahara) For English disclosures, we already have our TOKYO PRO Market, and we are approaching companies not only in Japan but also in ASEAN countries. However, certain legal requirements mean some disclosure still needs to be made in Japanese. Along with this issue, we will think about how to reduce the burden of disclosure as we continue discussing with the authorities.
- Q18: Are you looking to promote the use of single stock options to retail investors, since they tend to engage in margin trading?
- A18: (Yamaji) We recognize that we have to further encourage retail investors to adopt "covered call" and other strategies when trading single stock options and have set milestones directed at making steady progress.
- Q19: I understand that the capex plans for the next two years will be focused on the clearing system. How much of it will be for enhancing services? Or, is there a chance that JPX will fall short of the targeted overall capex for the three years?
- A19: (Tabata) In our three-year medium-term management plan (FY2016–2018), we are targeting an overall capex of JPY 46 billion. In FY2016, we had an outlay of slightly over JPY 10 billion, and we will divide the remaining JPY 35 billion over the next two years, having it slightly more slated for the final year. Capex for clearing-related infrastructure will take up the largest portion. There are also plans for capacity expansion on the derivatives side, so there will also be capex for that, but this portion will not be as large as that for clearing.
- Q20: Compared to overseas exchanges, you seem to be pursuing a relatively conservative strategy. Can you share any difficulties you had with coming in as an outsider and changing the organization or of sowing the seeds for future growth, as well as any possibilities for the future?
- A20.1: (Yamaji) About joining JPX as an outsider, when I assumed my position four years ago, TSE and OSE had just completed the merger, so the first thing we worked on was to integrate the organizations and generate merger synergies. Blending two different corporate cultures is not always easy, but we were brought together under the name of "Japan", and that helped us work together to create something new.
- As for sowing the seeds for future growth, compared to overseas exchanges, perhaps we are more cautious in pursuing new growth areas. On the other hand, there are many areas where we can still improve on and grow. We are setting milestones for our progress to move forward, not back, and not end up with a bunch of catchphrases that show no end result. For projects such as cross-listing futures products, which was mentioned earlier, or increasing convenience for overseas investors via linkage with data centers of overseas exchanges, something we have already achieved with SGX, we will be pursuing these initiatives from a new perspective.

A20.2: (Miyahara) Just to add to what has been said, JPX has a New Business Development unit in its Corporate Strategy Department. Besides conducting proof-of-concept tests on blockchain technology, in these past two years, the unit has been giving young employees the chance to free themselves from the traditional exchange business model and think up new business ideas. The management discusses these ideas vigorously, and some of them eventually get a supervising officer and budget to bring the ideas through to implementation. This is an example of how JPX is trying to breakdown and transform the organizational culture.