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SUMMARY RECORD OF

OECD-ADBI 18TH ROUNDTABLE ON CAPITAL MARKET

AND FINANCIAL REFORM IN ASIA

("TOKYO ROUNDTABLE")

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Background

The OECD-ADBI Roundtable on Capital Market and Financial Reform in Asia ("Tokyo Roundtable") was established jointly by the Asian Development Bank Institute (ADBI) and the OECD in 1999 in the aftermath of the Asian financial crisis. Since the inaugural event, the Tokyo roundtable has provided an annual forum for high-level policy dialogue among OECD and Asian countries on topical issues of high interest from the viewpoint of capital market reform in Asia.

The Roundtable benefits from high-level participation from a range of backgrounds. The meeting in 2018 attracted high-ranking officials from finance ministries/treasuries, central banks and securities regulators from 14 non-OECD economies, including Bangladesh, India, Iran, Kazakhstan, Nepal, Sri Lanka and ASEAN nations, as well as OECD member countries, such as Australia, Germany, Italy, Japan, Switzerland, Turkey, the UK and the U.S. It also brought together experts from international organisations, particularly BIS, IMF, and World Bank, as well as private sector representatives and academics.

In addition, the meeting welcomed the attendance of financial regulators/supervisors from Asian and African regions, who took part in the seminar organised by the Japanese Financial Services Agency (JFSA) as a back-to-back event with the Tokyo Roundtable.

Agenda items

Developed jointly with the ADBI, the agenda for the Roundtable was designed to reflect the challenges and risks facing the Asian capital markets and financial sectors. The agenda also included a number of structural issues which pose challenges for further economic development of Asian economies.

In a departure from previous Roundtables, the agenda includes the following four topics were chosen for discussion:

- The recent trends and prospects of Asian capital markets under steady economic growth and stable financial environment
- Increases in private (corporates and households) and public debt
- The impact of new technologies, such as Fintech and Artificial Intelligence
  - Part 1: New financial business, inclusion, products,
  - Part 2: Regulation, consumer and data protection
- Resilience of financial portfolios; ESG investment

With the consent of the speakers, slide presentations are available on the OECD website under: http://www.oecd.org/daf/fin/financial-markets/2018-tokyo-roundtable-asia.htm

Opening Remarks

Mr. Masamichi Kono, Deputy Secretary-General, OECD, discussed the fact that the global economy is now growing at its fastest pace since 2010, and growth is increasingly synchronised across countries. At the same time, there have been solid employment gains globally, and upturns in trade and investment. However, financial markets have recently been somewhat volatile, given shifts in market expectations towards higher inflation and tighter monetary policy. Large corrections in asset prices could be triggered if uncertainties increase over monetary policy normalisation. However, after the Asian financial crisis, countries have made efforts to develop capital markets as an alternative means to finance growth, and to use capital markets as a promising channel for direction significant regional savings to regional long-term investments, particularly in large-scale infrastructure projects within the region. Among the topics relevant to capital market, ESG issue has been drawing more and more attention. It would be significant to identify and discuss what are the practical impediments for ESG investment today. Policy makers should priorities providing adequate finance for sustainable and inclusive growth as an overarching objective. The OECD is also working on how to identify and address the practical obstacles to integrating ESG factors in investor duties.

Mr. Naoyuki Yoshino, Dean, ADBI, highlighted nine topics for upcoming discussion. 1) High savings rate in Asia; this eminent characteristic of Asia can support substantial potential growth, but the outcome is dependent on how the funds are allocated. 2) Asia has huge infrastructure needs that require financing, but long-term investment on infrastructure tends to be unattractive because of low returns (mainly user charges). 3) Over 90 percent of companies in Asia are SMEs, but many face difficulties in gaining access to finance. The challenge is greater in facilitating start-up businesses. 4) Fintech developments provide some opportunities but also raise challenges. 5) For many countries in the region, bond markets are still lacking. Given the fact that many countries have fiscal surpluses, there is little need for sovereign borrowing, with the consequence that there is no benchmark curve against which private instruments can be priced. 6) Financial education and literacy are very important, but in many countries in the region there are no programmes in place. 7) Like many other regions, Asia is experiencing demographic change. This may help to support potential growth of the economy, but also suggest a need for a social benefits system, with pensions and insurance. 8) While economic prospects for the region remain positive, private debts are increasing, in some case quite noticeably. 9) A final challenge is one that is not limited to Asia, namely cyber security. New digital technology has brought many benefits, but has been accompanied by numerous cyberattacks. How to regulate such new type risks is worthy of discussion.

Keynote address:

Mr. Asakawa noted the fact that Asian economies collectively continue to be an engine of global growth and, thanks in part to the significant reforms Asian countries have undertaken since the Asian Financial Crisis, international capital continues to flow into the region. Despite the progress thus far, countries should press forward with structural reforms, taking advantage of the current favourable economic situation. In addition to the traditional challenges on the macro-economic front, new issues have been arising, such as Fintech, cyber security, and ESG investment. Fintech innovations could potentially change the global financial landscape in a dramatic manner, including financial development and economic activities. It is becoming important for policymakers and regulators to analyse the impact of Fintech on financial markets and the broader economy, and introduce as necessary policy and regulatory measures in a proactive manner. As cyber threats are common across sectors, coordination between the financial sector and other critical sectors is also warranted. Given the cross-border nature of cyber threats, strengthening international cooperation is critical. Finally, the business community is becoming increasingly conscious about how to protect the environment and this factor is becoming an important consideration in the effort to attract private sector investment. In this context, the Japanese Government has been encouraging the development of “quality infrastructure” in developing countries, a key part of the effort to support resilience against natural disasters.

I. Recent developments in the capital markets

Session 1: The recent trends and prospects of Asian capital markets under steady economic growth and stable financial environment

Dr. Sayuri Shirai, Professor, Keio University, Visiting Scholar, ADBI, delivered remarks focusing on the recent development of capital markets and cross-border investment in Asia. With respect to the development of bond markets, Dr. Shirai noted that the size of markets has grown dramatically over the past ten years in some Asian countries, thanks in part to country-based and regional initiatives. The biggest changes have been recorded by the People’s Republic of China on corporate bonds and Hong Kong, China on government bonds. Taking a closer look at the government bond segment, Dr. Shirai indicated that holdings of government bonds by institutional investors are sizable in most major markets in the region with the exception of the PRC, where banks continue to account for two-thirds or more of holdings. Most governments have succeeded in diversifying the maturity profile of their offerings. On the equity side, stock market capitalisation has increased significantly since the mid-2000s for most major economies, and four economies in the region rank among the top ten financial centres. Entities from the U.S. and the EU have been major investors in the securities issued in the Asia-Pacific region, again with the exception of China, for which major sources of funding have come from Hong Kong, China. Among countries in the Asia-Pacific region, Japan has the largest inward and outward investment. The U.S and the EU still serve as major recipients of cross-border investment for investors in the Asia-Pacific region, but cross-border investment within the region has also grown.

Dr. Pornpen Sodsrichai, Director, Economic and Policy Department, Bank of Thailand, focused her remarks on prospects and determinants of portfolio flows and offered policy recommendations to address the challenges ahead, including the potential for unexpected monetary policy actions of the U.S. and the EU. Stable corporate profitability has made Asian equities attractive to foreign investors, while ample liquidity in global markets has supported flow into emerging Asia bond markets. A number of factors determine portfolio flows, some of which are domestic, while others are global in nature. The favourable macroeconomic environment in the Asia regions has tended to pull funds into the local economies, while the quantitative easing programs in advanced economies have acted to push funds into the region. The current "Goldilocks" conditions, with growth picking up while inflation remains subdued, are not expected to last much longer. In particular, going forward, major central banks are expected to gradually normalize their monetary policy stance, the pace of which may prove faster than market participants expect, which could influence their investment decisions. Faced with the challenges, policymakers need to remain vigilant against risks to stability and step up their efforts to build deeper and more liquid financial markets to manage vulnerabilities. They also need to maintain sound macroeconomic, structural and financial policies to cope with any potential retrenchment in global risk appetite.

Mr. Akira Otani, Deputy Director-General, Financial Market Department, Bank of Japan, mainly spoke about the Quantitative and Qualitative Monetary Easing with Yield Curve Control that the Bank of Japan (BOJ) has introduced. The BOJ adheres to its commitment to achieving the two percent inflation target "at the earliest possible time" and its policy approach has two components; 1) Yield Curve Control and 2) Inflation-Overshooting Commitment. With regard to Yield Curve control, the BOJ will work toward the formation of the most appropriate yield curve in order to maintain the momentum toward achieving the two percent price stability target, taking account of developments in economic, price, and financial conditions. The guideline for market operations under YCC specifies a short-term interest rate of minus 0.1 percent and a target level of 10-year interest rates of around 0 percent. The BOJ has so far purchased JGBs under the competitive auction method. However, upon the introduction of Yield Curve Control, it has introduced the fixed-rate method. Under this method, the BOJ can purchase an unlimited amount of JGBs at a fixed rate, and the controllability of the yield curve has improved dramatically. The BOJ used this method in view of the heightened upward pressure on the long-term yields. Under the Yield Curve Control, the BOJ has purchased two-thirds of recent JGB offerings and now holds over 40 percent of the total amount outstanding. The other policy component - Inflation-Overshooting Commitment - entails that the BOJ continues to expand the monetary base until the year-on-year rate of increase in the observed CPI exceeds the price stability target of two percent and stays above the target in a stable.

Mr. Toan Nguyen, Deputy Head, Financial System Division, the Financial Monetary Stability Department, State Bank of Vietnam, spoke about the trends in capital flows to Asian economies over the past two decades and about some of the underlying factors. He noted that capital flows to the region trended downward, on balance, after the global financial crisis. Flows rebounded from about 2010 to 2013, partly reflecting the favourable economic situation in Asia. However, flows again edged lower subsequently amidst concerns over a possible hard landing in China, declines in commodity prices, and still sluggish activity in major western economies. There are exceptions to this overall trend. In Vietnam, for example, capital flows have picked up recently and despite a clear decline in inflows from the U.S. growth in flows from other sources remains upward since the beginning of 2017. The factors underpinning the resumption of capital flows include sound economic performance and the rising equity market. Concerns have been raised recently over the implications for capital flows of the prospective and already begun changes in the policy stance of a few advanced economy central banks. Empirical evidence suggests that the main drivers for capital flows in Asian economies include growth differentials, risk perceptions, interest rate differentials and movements in commodity prices. He suggested, however, that the fundamentals in Asian economies, in terms of macroeconomic conditions, financial system soundness, and resilience, are such that the change in stance of monetary policy in advanced economies should not pose a significant threat for Asian economies or precipitate a sharp fall in capital flows.

Discussion

The discussion noted the challenges with potential risks associated with sudden stops in capital inflows or worse actual outflows. There are three characterisations of capital flows linked to perceptions of the risks, ranging from generally good to always bad. One can think of the measures used to contend with capital flows as akin to measures used to contend with oceanic flows. The latter consist of flood walls, levees, and canals such as the system in place in Amsterdam. Flood walls are obviously intended as barriers to simply prevent the water from entering; Levees serve a similar purpose, with the pumps there as backstops in case some water actually makes it over the levees. They are akin to policy measures that kick in at certain times. Canals are a different approach; they are intended to direct the water in productive ways. Since barriers, assuming they are effective, block the benefits of incoming funds, it is useful to make some distinctions among types of flows. What makes capital flows potentially "bad" (e.g. for GDP) is when they are pro-cyclical and accentuate booms and busts in domestic cycles. Among types of flows, debt flows tend to be more pro-cyclical than equity flows, with bank loans and deposits exhibiting relatively more tendency towards pro-cyclicality than portfolio debt, and with funds channelled through weak banks being particularly sensitive in this context. Taking these results into account suggests that economies would be better served by putting in place the reforms and structures needed to attract long-term funds that are channelled into productive and sustainable uses (canals in the analogy as opposed to barriers). The discussion noted the fact that the long-standing easy monetary policy of central banks in the developed countries, including the U.S., the EU and Japan, has provided substantial benefits by supporting lower interest rates and encouraging investment into equity, bonds and alternative markets. Private companies also could make use of capital or debt at negligible cost. The difficulty with an accommodative stance held for too long is that it enables the build-up of risks, such as through overvalued financial products, unaffordable lending via fragile banks, etc. As long as the positive cycle continues, the various potential risks may not materialise, but unexpected shocks do happen. The potential for a faster than expected change in the interest rate cycle of the U.S. or the implications of tax policy changes in the U.S., may have negative consequences. Another challenge relates to China, which is the central nudge factor of the overall Asian economies. Problems there would no doubt spill over to the rest of the region. Concerns have been raised in this context over the build-up of China's local debt. Even so, Asian countries have undertaken financial reforms steadily since the Asian crisis, and based on that progress, there is much more resilience than before. Still, it is important to monitor the market closely for signs of stress, while remaining focused on allocating sufficient resources into viable and productive sectors effectively.

Session 2: Capital Market Developments in Asia

Mr. Toshiyuki Miyoshi, Director, International Organizations Division, International Bureau, Ministry of Finance, Japan led off the discussion of this topic. His remarks focused on Asian debt markets from the perspective of 1) Debt vulnerabilities in emerging markets and 2) Japan's public debt management. Linking back to the first session, he noted that capital flows to emerging markets have increased more or less constantly in recent years, with small fluctuations. Empirical evidence suggests that the pattern of flows is mainly explained by the stance of U.S. monetary policy. In this context, the shift of U.S. monetary policy into tightening mode may trigger capital outflows from other regions given the implied change in interest rate differentials. Debt levels as a share of GDP have increased for all three major categories of borrowers - household, government, and non-financial corporate sector - with the steepest rise recorded for non-financial corporate debt. China, Hong Kong SAR, and Singapore are most notable in this respect. Fortunately, for many emerging market economies, the double mismatch problem has been improved, reflecting deeper capital markets and positive economic fundamentals. That said, foreign currency exposure has continued to rise, at least as measured by the volume of US dollar-denominated credit to non-banks outside the U.S. And certain vulnerabilities to changes in risk appetite still exist for some emerging economies because of the rising share of local currency government bonds held by foreign investors. Regarding Japan's public debt management, the government of Japan has diversified the line-up of JGB products while taking into account investors' demand via ongoing dialogue with the market. From the perspective of JGB holders, while banks have tended to reduce their share, the decline in their holdings has been more than offset by the BOJ.

Mr. Fakhri Hilmi, Deputy Commissioner, Capital Market Supervision, Indonesia Financial Services Authority, spoke in general about the attractiveness of Asian bond markets, noted a few areas of concern, and then offered some views about the bond market in Indonesia. Asian bond markets are supported by a number of favourable developments. The strengthening in global economic activity helps to decrease macroeconomic risk, which results in significant improvement in emerging Asia bond market fundamentals. Since the growth rate in emerging markets in the region is projected to remain high, inflation rates are expected to remain stable at low rates. On the demographic front, emerging Asian countries are still young relative to the world average, which, other things equal, may be expected to exert downward pressure on real rates. In addition, Asian corporate debt metrics are stable and cash levels are strong, which also makes investment into markets in the region attractive. As compared to the run-up to the Taper Tantrum, Asian fundamentals are now much stronger, based on comparisons between the current account balance and the fiscal balance, while savings rates remain quite high. All of these factors are in favour of investing in the region, but there are a few issues that bear watching, such as the surge in nonperforming loans as a share of total loans in India. Regarding Indonesia's bond market, the corporate bond market has increased steadily, although much of the outstanding supply of tradable bonds is accounted for by government debt. Improvement in credit ratings on Indonesia's bonds has led to a rising share of foreign investment in the bonds, and foreign investors are now the largest holders of the debt, with a share on the order of 40 percent, well above the 22 percent share of commercial banks. Despite the attractiveness of the bonds to investors, there are some outstanding issues such as low liquidity of the secondary market. In order to address the issue, Indonesia has established the Indonesia bond market strategy, which consists of five components; 1) infrastructure program; preparing trading platforms, 2) harmonization of regulation for fixed-income intermediaries, 3) development of regional bond market, 4) diversifying products, and 5) taxation harmonization on bond transaction.

Dr. Jae Young Lee, Group Head and Lead Economist, Asean+3 Macroeconomic Research Office (AMRO), Singapore, raised several points regarding private and public debt markets in the Asian region, noting that overall debt levels have risen significantly in several emerging market economies in the region. While advanced economies have faced problems regarding sustainability of government debt, several emerging market economies are facing issues with rising corporate and/or household debts. Household debt as a share of GDP is relatively high in a few emerging market economies in the region, including

Korea, Malaysia and Thailand. As for corporate debt, China stands out. Corporate debt in China has increased sharply since the Global Financial Crisis, driven mainly by country specific factors, which include the investment-driven growth model, lagged development of equity financing, lower efficiency in the SOE sector and the large economic stimulus after the GFC. While the current trajectory does raise concerns, future of China's corporate debt will depend on progress of comprehensive reform that should include raising capital efficiency, improving firm profitability and enhancing equity financing. Should comprehensive reform with capital efficiency and firm profitability progress, the corporate debt-to-GDP ratio as well as the ratio of SOE debt to sectoral output would decline gradually. Overall, financial spillovers from China to regional markets are on the rise, with trade linkages functioning as the main transmission channel. That said, most of the economies in the region have strengthened their international investment positions since the Asian crisis, which reduced vulnerabilities in short-term capital flows and large exchange reserves will serve as buffers against potential external shocks. Even so, the impact of tightening global financial condition should be closely monitored and be taken into account in policy-making, as faster-than-expected Fed rate hike may lead to capital outflows and external volatility in emerging market economies in the region.

Discussion

The role of advanced economy monetary policy was again noted in the discussion. While the low rate environment has served to improve the capacity of borrowers to repay, the easy credit conditions also act to undermine its effectiveness of the market in terms of the credit evaluation function. An example of this fact could be seen in 2017, when Argentina succeeded in selling USD 2.75 billion of 100-year maturity bonds just over a year after its default on other outstanding obligations. This case explicitly shows that the bond market's discovery function is becoming less effective, and many countries have been enjoying the situation, because they do not need to consider how to minimize their public debt in the short term. Needless to say, this situation leads to excess public debt and subsequently to market fluctuations. Given the predictable situation that a series of interest rate hikes in the U.S. will happen, two questions were proposed; one concerns the extent to which Asian countries might suffer from the increase in U.S. dollar-denominated public debt? The second asked whether Asian countries would be able to continuously roll over their public debt in the more limited fiscal space? Similarly, private sector debt, including corporate and household debt, have also tended to expand steadily, given the search for yield on the part of investors from low-rate jurisdictions. However, it is unforeseeable that those high-risk products would continue to provide high returns to beneficiaries in a rising rate environment. In response, it was noted that, in principle, it is difficult to map out in advance how policy makers in any given jurisdiction should deal with the high debt level issue because factors of which are diversified by nature. There is no one-size-fits-all prescription that could apply to developed countries as well as emerging countries. Therefore, policy makers are left with need to monitor various indicators and make a choice among valid policy options as when feasible.

Keynote address:

Mr. Greg Medcraft, Director, Directorate for Financial and Enterprise Affairs, OECD, discussed 1) Fintech revolution, in particular in Asia, 2) opportunities and risks, 3) role of policy-makers in managing the Fintech revolution. With respect to 1) Fintech revolution, there are three reasons which the issue should be discussed in Tokyo round table; i) developments with unprecedented pace, ii) continuing to reshape financial landscape, and iii) importance of OECD role. In fact, Fintech innovation thrives in Asia because comfortable backgrounds exist; penetration of mobile phone, less developed banking sectors, and fewer regulatory constraints. Regarding opportunities and risks, three of the key technologies are i) big data and predictive data analytics, ii) Blockchain, and iii) crypt-assets and ICOs. To be more specific, predictive data analytics have potential in the field of finance for enhancing risk management, etc. Blockchain's range of applications is broad, and its technology will completely revolutionise our economies and societies. Crypto-assets including ICOs has also been growing sharply, which shows their huge potential for financial services and the broader economy, but these markets present challenges for investors, market participants and governments. Finally, policy makers have an important role to play in unlocking the potential benefits of financial innovation while mitigating its risks. Thus, they should bear in mind 1) to be proactive and forward looking, 2) to ensure international co-ordination and global standards, and 3) to keep up to date with the rapid changes.

II. Capital markets of the future

Session 3: The impact of new technologies, such as Fintech and Artificial Intelligence

Part 1: New financial business, inclusion, products

Ms. Loretta Joseph, Director of Business Development at the Sydney Stock Exchange, Australia, introduced the possibilities of Blockchain technology on financial services. Blockchain is a decentralised ledger of all transactions across a peer-to-peer network without a central certifying authority where participants can confirm transactions. Blockchain would not make banks disappear but their business model gets shaped. For example, KYC and AML processes would be streamlined through Blockchain enabling to identify customers or end-users in a short time. In addition, tokenisation is another eminent characteristic. For instance, Gold is illiquid asset and very hard to move as asset class but Blockchain can enhance its liquidity because it is capable of tokenizing every assets. As a first step, government authorities such as central banks put on land title (land registry) to the properties. Those who get the land title would be able to trade immutable, secured and movable asset tokenized through Blockchain. The tokenisation is utilized cross industries and it would become the biggest application of Blockchain in the next ten years. Finally, there is the successful application of digital identity in Papua New Guinea, given the fact that 500 million people in the state have neither identification nor bank account, digital identity register system has started, which leads to improve access to financial inclusion for the poorest and most vulnerable.

Ms. Yuko Kawai, Head of Fintech Center, Payment and Settlement Systems Department, Bank of Japan, discussed the new digital technology including substitution for traditional financial services and risks. Initially, most important thing is to consider the concept on the new technology including Blockchain and how to categorise it according to practical applications because Blockchain itself is nothing but the corrections of old technologies. The technology is good at matching flows and data-dependent pricing/risks management, and also general users are sticky where the incumbent services are trusted and good enough like in Japan not China and other Asian countries. With respect to risks of innovative technology, there is not so much of risk accumulation, but unprecedented risk may materialize upon operation or cyber-disruption. For example, disruption of data trends in crisis time may destroy the existing algorithm, which could make credit flow may stop and automation, chaining (sequencing) of process/transactions may magnify price fluctuations. As a recent trend, crypt currencies/assets are getting drawing more attention and the integration of finance and non-finance proceeds further. This means that new type of systemic risk may materialize.

Dr. Bihong Huang, Research Fellow, ADBI, delivered the actual case in rural area on Fintech and financial inclusion. Fintech can become drivers of financial revolutions which benefit financially underserved population thanks to its traits such as low margin, scalability, etc. Generally, peoples living in rural areas usually have limited access to credit and financing. For those people, Fintech has capabilities of helping to improve in accessibilities to financial services. In China, for instance, Alibaba has established rural service centers at the local convenience stores where computers, monitors are provided with well-trained villagers serving as representatives, which makes possible for villagers to purchase and pay bills online in the centers. The successful Fintech cases such Alibaba can enhance further financial inclusion and result in profitable growth.

Ms. Naoko Nemoto, Financial Economist, discussed new approaches to SMEs finance using bank account information. SMEs account for about half of economic output in many Asian economies and growth of industry often hindered by structural factors, particularly financing bottlenecks. Generally, banks are often reluctant to lend since they lack sufficient and correct information about SMEs enough to assess credit risk, which leads to shortage of SMEs finance in Asia. In this sense, Fintech can provide alternative sources of funding, but so far the amount of Fintech-based lending is still limited (except China). For example, P2P lending has various advantages including efficiency, higher return, less regulation, but P2P lending has not developed well because of high interest rates and unfavourable terms. New approaches to SMEs finance is "bank account model" which utilizes the information on liquid deposits balance and trends in cash transactions in business. Thanks to the model, banks will be able to predict default probabilities more precisely and score credit risk of SMEs efficiently by making use of bank account information.

Discussion

It was widely agreed that Fintech could provide a lot of benefits in the field of financial sector, but on the other hand, require policy makers to consider how to regulate financial innovation generated by Fintech. Following the financial crisis in 2008, regulators encouraged to grasp the detail of risks embedded through tightening regulations such OTC derivatives regulation. Those regulations could centralise economic activities and make it easier to grasp their risks, but simultaneously, they may weaken the advantages of financial innovation such Fintech. One of the potential of Fintech is decentralised power; Distributed Ledger Technology (DLT) which makes it possible to streamline the financial services. Thanks to the technology, mandatory procedures such as KYC between financial institutions and consumers may become simpler or intermediary services such as asset industry may not be needed any more. In addition to that, the crypt assets which are getting popular as means of investment, do not prepare the safeguard system like deposit insurance. Policy makers may consider the balanced regulation without interfering innovative activities of private sector.

Part 2: Regulation, consumer and data protection

Mr. Motonobu Matsuo, Deputy Director-General, Planning and Coordination Bureau, Financial Services Agency, Japan, explained Japan's Fintech policy, which focuses on promoting innovation while ensuring adequate protection for consumers. In principle, regulators should be guided by their ultimate goal of best promoting national welfare by contributing to the sustainable growth of the national economy and wealth. Based on the growth of Fintech innovations, the regulatory framework is partially amended to adapt to the underlying Fintech environment, while consumer protection is properly ensured. To this end the JFSA amended the Banking Act and Payment Services Act, etc. in 2016 for enabling and facilitating financial group firms to invest in financial-related IT start-up companies. Subsequently, in 2017, FSA sought to facilitate open innovation between financial institutions and Fintech firms by partially amending the Banking Act to allow for the use of open API architecture, while again ensuring proper protection for end-users.

Mr. Assylbek Davletov, Chief Fintech Officer and member of Executive Body, Astana Financial Services Authority, Kazakhstan, discussed how we should keep pace with digital disruption. The number of Internet users has been steadily increasing worldwide, reaching nearly half of the population. The impact of the Internet has correspondingly been substantial, as reflected for example in the fact that Uber has become the world's largest taxi company, but owns no vehicles. In a similar way, technology such as the Internet may change the efficiency of financial services. But there are issues that need to be addressed. For example, P2P lending arrangements such as crowd funding do not have intermediaries in charge of client identification. In addition, there are also potential issues as regards data protection, marketing, compliance, and disclosure. In order to regulate such services effectively, it is important for regulators to try to catch up with the pace of technology. To do so, financial regulators should 1) collaborate closely with other regulators, 2) cooperate with and learn from disruptors, and 3) train existing staff in new skills needed for regulation, licensing and supervision.

Mr. Greg Medcraft, Director, Directorate for Financial and Enterprise Affairs, OECD, spoke about the opportunities and policy challenges associated with Fintech innovations. A number of factors have enabled the ongoing advances. Firstly, predictive and prescriptive data analytics have enabled 1) the evolution of data use from descriptive to predictive to prescriptive (as in artificial intelligence). At the same time, there has been a tremendous increase in the scope of data available, derived mainly from the expansion in big data and the use of social media. The third enabling factor is the use of machine learning – from voice and unstructured data – to make decisions. Relevant applications include risk profiling and pricing, investment and trading, and risk management. Mr Medcraft spoke in particular about the opportunities provided by Blockchain. Its four core attributes include transparency, traceability, distributed as compared to centralized processing, all of which helps to facilitate trust. Value and data can be transferred safely, quickly, and securely, with the use of a distributed network of nodes versus a single node helping to promote cyber-security. However, digital financial technologies come with challenges and risks in terms of privacy and investor protection, competition and cyber-security. In order to reap the full benefits of Fintech and manage its risks, policy-makers should focus on five priorities; 1) balancing innovation and stability, 2) protecting and equipping financial consumers and MSEs, 3) providing a regulatory level playing field, 4) facilitating international coordination and 5) tackling obstacles and unintended consequence. These priorities and the scope of its expertise make the OECD uniquely placed to develop Fintech policies and help governments implement them, including for data analytics and Blockchain.

Mr. Erik Vermeulen, Professor, Tilburg University and Tilburg Law and Economics Center, Netherlands, speaking by way of recorded video, directed his remarks at how the new Fintech revolution should be regulated, focusing on the landscape of Initial Coin Offerings (ICOs) and Blockchain. He noted that an ICO is often used by start-ups to bypass the rigorous and regulated capital-raising process required by venture capitalists or banks. In reality, although the number of ICO funding has increased dramatically, in 2017, almost half of the ICOs proposed have failed to reach the initial goal of funding. To respond to the challenges raised from the digital world regulators should change their mind-set from words and text-based regulations to proportional regulations embedded in technology. For example, Blockchain can reduce the need for trusting intermediaries, but the elements of which also need some form of reputation rating in order to be trusted. Regulators are required to strike a balance between business innovation and regulation through the dialogue among technologists, financial institutions, Fintech firms, lawyer, etc.

Discussion

It was widely agreed that Fintech innovations could provide a lot of benefits in the financial sector, but it is necessary for regulators to consider how to regulate financial innovations generated by new digital technology. In reality, as technological development is proceeding faster than policy makers' knowledge, policy makers are expected to try to understand the risks associated with new businesses and to strike a balance between regulation and innovation. To be more specific policy makers should consider how to maintain sound competitiveness, while not only preventing regulatory arbitrage but also protecting consumers. One of the potential solutions is the use of a regulatory sandbox. In the case of Singapore, the MAS has introduced a sandbox framework in the field of Fintech and facilitated innovative businesses under the proportionate regulatory environment. Regarding the solution for preventing regulatory arbitrage, a more suitable type of regulation may be activity-based regulation rather than entity-based regulation, because activity-based regulation would be more effective in helping to maintain a level playing field, which is likely to contribute to preventing regulatory arbitrage. For energizing competition, it is important that regulation is sufficiently accommodative to enable new products and arrangements to be tried, which favors the use of a framework such as a sandbox. However, there are limits and regulators need to avoid a race to the bottom, whereby regulation is reduced to the minimum.

Session 4: Resilience of financial portfolios; ESG investment

Mr. Yasuhisa Nakao, Deputy Vice Minister of Finance for International Affairs, Ministry of Finance, delivered Japan's domestic situation and international contexts related to ESG investment. Although ESG does yet have accurate definition, how to sort out the relationship between ESG investment and fiduciary duty is quite important because ESG investment tends to be recognized as cost without visible return at least short term. Given the fact that institutional investors are reluctant to integrate the ESG factors into their portfolios, possible measures to solve this situation include 1) clarification of ESG in rules and regulations, and 2) establishment of better financial instruments such as ESG-related index. In this sense, Financial Services Agencies, Japan revised the Stewardship Code in May 2017, explicitly referring to ESG. At the international level, various actions under G7 and G20 have been underway. For example, in G20, Argentina, presidency in 2018, is promoting adaptation to climate change and extreme weather events with a focus on infrastructure, etc. In 2019, Japan will take over the G20 presidency and will continue to contribute to climate-related discussions. Furthermore, ESG investment has close relationship with quality infrastructure in terms of friendly environment and sustainable development. Thus, further discussion of quality infrastructure at the international level is surely good exercise for development of ESG investment.

Mr. Nehal Vora, Chief Regulatory Officer and member of the Executive Management Committee of BSE Limited, India, mainly introduced roles of stock exchanges in sustainability initiative. Stock exchanges bind multiple stakeholders of the capital market eco system at a regulatory level, which is likely to fill gap between sustainable business practices and complying with legislations. BSE will conduct its business and its operation to prevent pollution, to minimise the adverse impact on the environment of its activities, to continually improve its performance against commitments associated with significant environmental best practices and to comply with all applicable environmental legislation as prescribed by law. As a result of launched sustainability indices S&P BSE Carbonex and S&P BSE Greenex, both Carbonex and Greenex have shown high growth over the long term. In 2015, SEBI (Listing Obligations and Disclosure Requirements) Regulations were put in effect as a regulatory framework on business conduct. The regulations set out the inclusion of Business Responsibility Reporting in Annual Report by top 100 listed entities (now amended by top 500), an enabling instrument for listed companies to integrate ESG parameters into their core business practices, and nine principles provided by SEBI to cover all significant aspects of business sustainability. The nine principles were released in 2011 called the National Voluntary Guidelines for Social, Environmental and Economic Responsibilities of Business (NVGs). The guidelines describe what business should take into account such as sustainability, well-being of employees, human rights, environment, etc. Finally, through the experiences of implementation, the best way of adapting to change is to start from grass-root level because the value principles of sustainability and crisp compliance should not only be the responsibility at top management level but also at the implementation level. Namely, regulators, investors and companies as three pillars should cooperate. In addition, disparity between qualitative and quantitative disclosure needs to be ruled for synergy and to make an organisation sustainably sensitive.

Mr. Masaaki Nagamura, Division Head, Corporate Social Responsibility, Strategy & Synergy Dept.,Tokio Marine Holdings, provided the overview of recommendation related to Task Force on Climate-related Financial Disclosures (TCFD). In response to the G20's request, the FSB established the TCFD, which aims to propose a clear, efficient and voluntary disclosure framework for both producing and using climate-related financial disclosures. Among various risks, financial regulators are concerned about the "Transition Risks" because Transition Risks created by human beings, which tends to provide substantial impact on financial market such as the measure that France and the UK will ban the sale of new petrol and diesel cars by 2040. Moreover, investors are also focusing on opportunities side for further returns. The TCFD Recommendations consist of “governance”, “strategy”, “risk management” and “metrics and targets”, which are respectively supported by guidance to assist organisations in implementing the recommended disclosures. In addition to guidance for all sectors, the Task Force developed supplemental guidance for the financial sector and non-financial groups in implementing the recommended disclosures. The Task Force will work with organizations and other partners to support and monitor adoption and submit a report on implementation of the recommendations to the FSB in September 2018.

Ms. Fiona Stewart, Senior Financial Sector Specialist, Global Lead Insurance & Pensions, World Bank, United States, Finance, Competitiveness and Innovation (FCI), discussed how ESG influences on investment, and the legal clarity and flexibility through research findings. As for the overview of research findings, many studies searched for empirical link between ESG and financial indicators. One study stated that 90 percent of studies including a small number of studies on bond performances find a nonnegative relation between ESG and corporate financial performance. PRI summarised that both academic and market research support clear link between ESG factors and credit risk. With respect to legal clarity and flexibility for institutional investors, there are three areas that need to be tackled. First one is data which covers not only certain targets but also adequate breadth of information that investors want to access to. Second one is robust frameworks. Since the definition is different country by country, introducing robust regulatory framework is important rather than strict definitions. For example, in the case of green bond, if the conducts diverting from the green bond principles are observed through the monitoring the investment reporting process, investors could withdraw their investment. Final one is product development. In order to satisfy various investor needs, more innovative products are necessary (e.g. World Bank Sustainable Development Bonds).

Discussion

Firstly, it was pointed out that there is no internationally common language about the detail of ESG. Its coverage varies country by country, which is one of the difficulties for regulators, investors and corporates considering how to deal with ESG issues. Although Japanese Corporate Governance Code sets out that listed companies are expected to work on ESG issues proactively and to promote the disclosure on non-financial information, it is difficult to maintain effectiveness as well as comparability of disclosure without common definition. In this sense, the EU has already started the action plan associated with sustainable finance which includes establishing a clear and detailed EU classification system or taxonomy for sustainable activities. As an initial step, harmonising definitions or languages at international stages is quite important. Secondly, the conflict of interests would exist among long investment chain including asset owner, institutional investors and corporations. Namely, some institutional investors are required to gain certain returns relatively on the short term basis by the asset owners, but ESG investment, for example, such as green financing is the long term and low return investment by nature. Besides, institutional investors need to consider the interpretation of fiduciary duty obligations. On the other side, corporations do not have strong incentives to disclose non-financial information related to ESG because those activities do not explicitly contribute to the tangible benefits such as increase in credit rating or equities without evaluation frameworks. In conclusion, it is important to consider the effectiveness of regulatory approach with taking into account the enabling framework to meet various interests.