

Summary of the 32nd ASEAN+3 Bond Market Forum (ABMF) and 19th Cross-Border Settlement Infrastructure Forum (CSIF) Meetings

17-18 October 2019, China Capital Market Institute, Shenzhen, PR China

The 32nd ABMF Meeting and 19th CSIF Meeting were held on 17 and 18 October 2019 and kindly hosted by the Shenzhen Stock Exchange at the China Capital Market Institute (CCMI) campus in Shenzhen. In addition to market and regular work updates, the ABMF Meeting saw the launch of the ASEAN+3 Bond Market Guide for the Exchange Bond Market in the People's Republic of China and included a session on green bond market developments in the PR China and the region. The CSIF meeting represented an open session with ABMF members and other participants in cooperation with the Asian Prime Collateral Forum (APCF), focusing on collateral needs and practices in the region. ABMF Meeting materials (this time including CSIF materials) are available from the ABMF website (asean3abmf.adb.org) and ABO website (asianbondsonline.adb.org)

I. ASEAN+3 Bond Market Forum - Sub-Forum 1

1. In his keynote speech, Prof. Guoqing Song from the National School of Development of Peking University detailed recent developments in the PR China economy. He suggested a growth rate of 6% for the whole of 2019 that, while lower than previous years still came in at a relatively high level. Interest rates remained low, but with the inflation rate even lower, this was still good news, particular for enterprises. Traditionally, PR China has had a high savings rate and rate of investment. More recently, the rate of investment – according to Prof. Song the most important driver of demand – was beginning to slow. Taxation concessions offered another possible option to stimulate demand and consumption, for both enterprises and households, but it might represent a negative net impact on growth, as people often saved the extra income. He calculated that to spend one extra dollar, a person's income had to increase by 1.7 dollars, and asked the audience to be mindful of such a factor.
2. Prof. Song stated that demand was weak and, while non-food inflation was ok, the inflation rate of food items was increasing, which would drive the consumer price index to increase by more than 3% in the coming months, and go as high as 4% in the next year. A high CPI provided a policy challenge, as fiscal and monetary policies typically had a limited effect. Prof. Song explained that in the GDP of CNY98 trillion, the consumption of pork alone represented 1-1.5%, hence, the impact of higher pork prices (as a result of the swine flu) was not that drastic. At the same time, he hoped for pork prices to decline in the second half of 2020. He closed with looking at the next few years: while the economic growth rate

was 6% now, he estimated it to be at around 5% in 10 years' time and remaining at around that level for many years to come.

3. In his keynote speech, Mr. Fei Chen, Director of the Corporate Bond Supervision Department of the CSRC, detailed the development of the exchange bond market. Beginning in the 1990s, it had a slow start but had been rapidly growing in recent years, due to continuous reforms. At the end of September 2019, the outstanding value of bond issuances in the PR China bond market overall had reached CNY95.1 trillion, making it the 2nd largest bond market in the world, with the exchange bond market representing CNY11.5 trillion, or about 1/8 of the total. Mr. Chen explained that the securities law provided a solid foundation and the 2015 measures¹ represented a key milestone in the development of the exchange bond market, providing for increasingly efficient approval processes, for both public and private placements. From 2015 to 2018, the weighted average corporate bond interest rate was 10-70 bp lower than the interest rate of bank loans in the same period; thus, bond issuance decreased financing costs of enterprises by more than CNY100 billion and the exchange bond market served an important role in supporting national initiatives, such as green or ESG bond issuance, the diversification of instrument types, and also supported local governments in issuing bonds.
4. Yet individual holdings only represented about 0.3% of the outstanding bond balances, with retail investors facing challenges in accessing relevant information, particularly for corporate (enterprise) bonds. At the same time, the settlement approach had been diversified, with netting and gross settlement available. The exchange bond market also featured a convenient repo system, allowing bilateral and tri-party transactions, which also allowed non-financial institutions to manage their liquidity. Mr. Chen described the established regulatory system as integrating self-regulation with formal regulations and including the exchanges and industry associations, forming a complete regulatory framework. In addition, the market institutions were working with law enforcement agencies to address any potential market violations. Together with the PBOC, the CSRC was focused on further opening the bond market: as of September 2019, CNY128bn of Panda bonds had been issued, and Chinese government bonds were recently included in international bond indices.
5. Going forward, goals for the exchange bond market included the enhancement of supervision efficiency, to further improve infrastructure and market mechanisms, and to enhance the cooperation between regulators. This included various measures to mitigate risk, including the early detection of market volatility due to global events. CSRC will strive to take appropriate measures to guide issuers and investors and enhance regulations and compliance with them. In addition, further attention will be placed on improving market connectivity, which had begun with Bond Connect, as well as further optimizing conditions

¹ China Securities Regulatory Commission. Measures for the Administration of Corporate Bond Offering and Trading (No. 113), 2015.

for Panda bond issuance. CSRC welcomed the participation of foreign institutional investors (FII) in the exchange bond market, which would in turn be able to offer more and higher quality services to all participants. CSRC intended to further streamline and harmonise regulations with other regulators to align the exchange bond market with best practices in the international bond market. For that, Mr. Chen invited feedback and recommendations from the audience and the international investment community at large.

6. **Launch of PR China's Exchange Bond Market Guide and Role of Exchange in developing a Bond Market** (ADB Secretariat): Mr. Satoru Yamadera announced the publication of the ASEAN+3 Bond Market Guide for the Exchange Bond Market in the People's Republic of China (EX BMG) on this day, available for download from the ADB or ABO websites.² The EX BMG was a first of its kind on the exchange bond market in the PR China, and it would allow a comparison to other bond markets in the region, using the familiar structure of the ASEAN+3 BMG. ADB Secretariat had decided to split the publication of the PR China bond market into two, owing to the distinct regulatory frameworks and practices in the exchange bond market and the Inter-Bank Bond Market. Mr. Yamadera believed that parties interested in the PR China bond market would find the comprehensive EX BMG extremely useful and thanked all the colleagues and contributors from the PR China for their efforts.
7. Mr. Yamadera also highlighted the role of exchanges in the development of bond markets. Typically, developing markets tended to segregate an exchange and an OTC market for debt instruments. Principally, an exchange fulfilled the basic function of a trading place, providing an organised and standardized marketplace. In contrast to equities, bonds came in many different varieties and had many distinct features, which tended to point to an OTC market as an efficient marketplace. As such, exchanges were most often associated with trading equities (only). However, the SSE and SZSE were good examples of the role of exchanges in bond market development. In Asia, the emerging trend has been to feature bond trading on exchanges, utilizing their basic function of listing also for bonds, which created visibility, allowed the provision of information in a reliable manner and helped ensure compliance with disclosure requirements. Mr. Yamadera argued that, hence, the exchange function was beneficial in the early stages of capital market development, and it was not efficient to maintain multiple trading places initially. Added to the benefits of an exchange was the concept of profile listing, without trading, only for the purpose of ensuring disclosure.
8. Exchanges can also play the role of an SRO, in addition to regulators, in particular because nascent markets may need regular adjustments, which are more difficult to effect in law or regulations, instead of SRO rules. This was desirable, as market practices should come from the market, including the SRO; then, regulations may follow. At the same time, interaction between regulators and SRO were desirable. This would allow regulators to

² Available at <https://asianbondsonline.adb.org/abmg.php>.

relax some regulations and streamline or delegate approvals. An SRO would also be able to focus on institutional investors, ensuring the use of English language and the application of widely accepted accounting and reporting standards. While equities markets and issuers aim to distribute shares among as many investors as possible, bond markets attracted mostly institutional investors, though small in number, which did not affect the ownership of the issuer and was not a sign of weak demand. Based on these characteristics, exchanges could set their rules accordingly. This approach was well represented in the exchange bond market in the PR China, and Mr. Yamadera opined that other markets might learn from the PR China experience.

9. **The Role of the Bond Market in supporting the Development of the Guangdong-Hong Kong-Macao Greater Bay Area** (panel discussion; the panel consisted of Ms. Jiajia Cao of the MOF of the PRC, Mr. Ping Wen of the Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen, Ms. Yonghui Tan of SZSE, Ms. Chang Shu of Bloomberg, and was moderated by Mr. Fuzhong Liu of SZSE): The so-called Greater Bay Area (GBA) is comprised of 9 cities in Guangdong province plus Hong Kong and Macao, with approximately 76 million inhabitants and a combined GDP that would rank 11th worldwide, similar to that of Russia. Because of its size and economic impact, it made sense to have a consolidated plan for the area. Within the GBA, Shenzhen acted as a 'demonstration zone' for public and private initiatives, among them infrastructure and financial system connectivity. While the MOF is responsible for government bond issuance according to provisions in each budget law, the GBA sees significant bond issuance by local government. In response to the financial crisis, local governments were authorized under the budget law 2014 to issue their own bonds, up to CNY1.2 trillion. The total issuance amount was decided by the National People's Congress, with allocations given to provinces and localities. In 2019, Guangdong province was allocated CNY50 billion for regional development.
10. As a result, the local government bond market has been thriving since 2015, with issuance in 2019 reaching CNY213 billion, and a total issuance value of CNY553.9 billion between 2015 and 2019. The local government bond market fulfilled an important role for the local economy, focusing on infrastructure, transport, agriculture and rural development, and had achieved a reduction in financing cost. Shenzhen also issued the first dedicated bond for green transport. However, challenges remained, such as a limited investor universe and the lack of a market-based pricing mechanism at issuance. The SZSE was working on improving the pricing mechanism and hoping to attract foreign institutional investors, as well as Panda bond issuers.
11. The Qianhai Free Trade Zone was formed to create a new platform for the development of the GBA; it fulfilled two strategic roles: acting as a window into the GBA and providing services to further open the area to the outside world. This included facilitating cross-border issuance between the China and Hong Kong bond markets and attracting Panda bond issuers to Shenzhen. Policies were available to support green initiatives, e.g. with subsidies, and heavy upfront investments or long return periods. Qianhai was a pioneer in

the GBA area, working with the SZSE in standardizing the issuance of green bonds and their documentation. It also plays a role for the financial sector connectivity in the GBA, e.g. by bringing insurance firms into its initiatives, and has also conducted feasibility studies on whether commodity trading should be introduced. Qianhai also aims to be the sandbox for cross-border regulatory cooperation.

12. In turn, the bond market was significant to the SZSE and the area. Guangdong-based issuers had so far issued CNY1.6 trillion in debt instruments. This included a special corporate bond type for the GBA, known as Greater Bay Bonds, first issued in May 2019, which was initiated by the regional government and supported by dedicated staff, reporting and approval processes at SZSE; each issuance can raise up to CNY50 billion. The focus of GBA bonds was on certain projects in the Shenzhen-Hong Kong innovation zone, and 2 more issuances have occurred since. At the same time, the SZSE was looking to further improve policies for other issuers. Products recently introduced included ETFs and the securitization of intellectual property (IP); so far, patenting or licensing ABS worth CNY300 million had been issued. The SZSE was also aiming to support non-SOE companies, resulting in the issuance of liquidity enhancement bonds and CDS, as well as ABS on accounts payable for Guangdong companies. SZSE has seen its bond market grow by 300% since 2015, with 1,500 issuances totaling CNY3.5 trillion, and will continue to improve its infrastructure and services and work with all stakeholders to support the regional bond market.
13. Putting the GBA and China bond market in perspective, PR China was receiving interest of 2.9% on its investments while paying out 5.3% to investors in its bonds (numbers by Bloomberg). This resulted in negative investment income overall, despite the PRC being a large creditor. One practical remedy in this regard was the development of a domestic bond market in the PRC and to make this attractive for financial institution participants. This represented a great opportunity for the GBA, in particular in the development of financing options. Bond Connect was one of the initiatives already involving the GBA. In this context, it was advocated that 'open' should not just apply to a market buy also to the discussion how to improve such market. With the significance of an exchange confirmed, it was important to enhance interconnectivity between markets and participants and find more channels for added value in the capital market. Panelists wanted to see more conducive policies from the authorities to leverage capacities across markets, such as the ability to issue products in one market and use the same products in another market.
14. **Latest Development in the Exchange Bond Market** (panel discussion; the panel consisted of Mr. Jun Zong of CCDRC, Mr. Satoru Yamadera of ADB, Mr. Jianguo Wang of SSE, Mr. Liyuan Zhu of CSRC and was moderated by Ms. Gaiqin Ni of the CSRC): panelists stated that the China bond market had huge potential and was developing very fast, growing at an annual compound rate of 20% in recent years. FII held more than CNY2 trillion in the China bond market, yet there were only a limited number of FII present in the market, with investment in the PRC lower than in most other markets. As a result, 2017 and 2018 had seen a number of new policies to make the market more attractive to investors,

including FII. The bond market itself consisted of 3 major product areas, with about 1/3 each for central government, local government and corporate bonds. 90% of all products were highly rated, which attracted investors. At the same time, the PRC was not strongly correlated with developing markets, which helped investors in diversifying their portfolios. Challenges, however, included infrastructure and perception (i.e. that there was no easy access to the market), market accessibility (investors think it was not convenient), investor education (FII may not understand the market rules, in particular credit rating practices), a level of mistrust (in that information may not be readily available, and questions on high credit ratings), or a partial coverage of investment subjects by the media.

15. Bond market institutions were working hard on addressing these challenges, by talking to potential investors, using those already here as case studies, creating indices, and by providing information services and market education mechanisms. In addition, bond investors often preferred to hold bonds than trade on price differential. As a result, market institutions had introduced products to leverage the holdings, such as through repo and other collateral uses. By now, market access had also diversified, offering direct access to central banks and to other institutions via an appointed intermediary. FII presently held 90% of their holdings in the China bond market through these direct access methods, with 10% being held through Bond Connect, also referred to as a transit access model. Market institutions were also talking to other markets, such as Japan and Canada, to improve investors access. In this context, ABMF was seen as an international platform for cooperation between markets, institutions and participants, highlighting the need to work together as a region to address some of the challenges; markets could learn from one another but also lend their collective voice to worthwhile initiatives; while investment into the PRC would increase, the investment of PRC entities into other regional markets could also rise. ADB is publishing Bond Market Guides (BMG) for all 14 ASEAN+3 bond markets to address the lack of information and defray the perceptions mentioned. ADB was also working to finalize the BMG for the Inter-Bank Bond Market (CIBM). Since a harmonization of markets was not possible, the use of common standards was also important.
16. Like other market institutions, the SSE promotes internationalization of bond issuance. It ranked as the 4th largest exchange in the world, and was trying to establish interconnectivity with other exchanges; this included the Shanghai-London Stock Connect and a Shanghai-Japan ETF connection. The SSE represented 20% of the domestic bond market and had listed CNY160 billion of green bonds as well as 13 Belt and Road Initiative bonds as of September 2019. For green bonds, the SSE has a tie-up with the Luxembourg Stock Exchange. The SSE is aiming at making investing on its markets attractive for QFII and RQFII, which represented more than CNY52.5 billion of bond holdings, and was pleased to see FII diversify their investments more, which may be attributable to an increasingly better understanding of the China bond market and its practices. The SSE was also pursuing the cross-listing of bonds, encouraging and supporting Panda bond issuance, as well as a greater participation of banks in the exchange market – for the latter, the SSE was conducting research on how to engage banks as direct market participants. It also plans to

improve its infrastructure, across front and back office. One key plan was to promote the inclusion of Chinese corporate bonds into international bond indices.

17. Panelists also expressed their opinion that the exchange bond market and the CIBM should be better connected, with the current situation seen as both a challenge and an opportunity. In fact, the connections between these market segments were already increasing, with more products being fungible between the market segments, now representing about CNY1 trillion, or about double of 2016. Already, some back office integration could be seen for Treasury bond issuance. In addition, most of the investors in the exchange bond market were institutions – they can also participate in the CIBM. Another development objective would need to be how to improve the participation of FII in the market. At present, QFII and RQFII only represented 0.5% of the repo market volume, with few international investors able or willing to participate. More products may be needed to engage more participants.
18. **State of the Market – Recent developments of Global Green Bond Market and its implication on Asian Markets** (Climate Bonds Initiative): Mr. Cedric Rimaud introduced CBI as an NGO based in London that provides a standard and certification for green bond verifiers, acts as a policy adviser and carries out market research. The green bond market started to grow significantly from 2015, with total issuance in 2018 reaching USD187 billion and issuances in excess of USD200 billion expected for 2019. Green bonds were issued by a diverse group of issuers, including governments, financial institutions, development banks, as well as corporates. Government green bond issuances were seen increasingly, with issuances amounting to USD18.4 billion alone in the first half of 2019. The higher issuance volume in turn achieved a higher demand for sovereign green bonds. In Asia, PR China represented the largest issuance size and the most green bonds issued, totalling USD86 billion, followed by Japan, Indonesia and Australia. Indonesia issued 2 *Sukuk* in 2018 and 2019 that were well received by the market. In ASEAN, green bonds worth USD4.5 billion had so far been issued in 2019, with proceeds focused on the building industry, infrastructure and transportation.
19. Mr. Rimaud went on to explain why parties were issuing green bonds and who would get involved in green bond issuance. Issuances were typically prompted by a change of business or a desire to become ESG-compliant; some issuers used green bond issuance as a differentiator to enhance their reputation or attract additional investors. Green bond issuers needed to appoint a verifier of the claimed green bond credentials, and would typically appoint advisers and underwriters that have experience with green bonds. At the same time, the number of investors specifically interested in green bonds was growing. In order to issue green bonds, an issuer needed to define an ESG or green bond framework, pursuant to, e.g., the Green Bond Principles. Underwriters played an important role by helping the issuer to navigate the green bond principles and market practices and expectations. Projects to be funded needed to be clearly identified and defined to qualify as green, then needed to be linked to the bond to be issued through a description of the use of proceeds. An external review would ensure that the claimed green bond credentials were fact. Mr. Rimaud explained the individual steps to issuance in slides.

20. Benefits for green bond issuers included the ability to enhance its reputation and an increase in investor participation; green bonds were typically oversubscribed due to a lack of supply. The long-term focus of green bonds also aided in less price volatility of the bonds, which in turn made it valuable for certain investor types. Anecdotal evidence also suggested that the borrowing costs were sometimes lower. Underlying the green bond framework of an issuer were generally accepted principles for green bonds, with the Green Bond Principles (GBP) formulated and maintained by ICMA the most prominent. The work of CBI was based on the GBP. The GBP included 4 key aspects, namely the adequate description of the proceeds and the subsequent management of the proceeds, the documentation of the process for the selection of a green project, as well as suitable reporting on the above during the lifecycle of the green bond. The taxonomy of the GBP was aligned with the global goal of a maximum increase of 2 degrees Celsius in temperature compared to pre-industrialized levels. The resulting impact of green bond projects was clear for many projects, such as solar energy, while subjects such as geothermal energy could also contribute to further pollution and might not qualify under the GBP.
21. Mr. Rimaud explained that the benefits of a certification included a full alignment with the GBP and its taxonomy and the Paris Goals of limiting global warming and the use of market best practices, resulting in a clear assurance for investors. Independent verifiers included a number of well-known, established names, such as EY and KPMG, but also other parties specializing in green bond certification. Just recently, the market was also seeing Social Development Goals (SDG) aligned bonds, which required a separate set of qualifying criteria. In ASEAN, Indonesia and Malaysia had published additional Islamic Finance Guidelines, while some regional economies allowed their market to decide on acceptable criteria by themselves. In all markets, CBI is observing an increasing engagement of the industry with issuers and regulators. In addition, global fund flows were beginning to capture green bond and other ESG instruments; ETFs were beginning to create easy access to green bonds for retail investors, and green bond funds were deploying much needed capital. Funds committed in green bond investments were estimated to reach USD1 trillion by 2020.
22. In the Q&A session, Mr. Rimaud explained that an issuer may consider issuing green bonds in a market where normal finance via conventional bonds may not be easily obtained, such as in markets with tenor limitations; due to the typical nature of green bonds as funding long-term objectives, their nature may go beyond usual market expectations and, hence, might be treated as a separate instrument category. On the question on whether dedicated green bond investors or funds existed in Asia already, Mr. Rimaud conceded that CBI had not yet seen those investors but was in the process of conducting a survey to determine the state of play.
23. **Overview of the Green Bond Market in China (EY):** According to Ms. Judy Li, the green bond policy discussion in the PR China dates back to 2013, when a number of policies were announced, covering green finance and loans, green bonds, green insurance and

green funds. By now, green finance at large was a national strategy in the PRC and represented one of the largest national policy frameworks worldwide. Regulators had identified pilot zones as well as so-called demonstration cities in 5 provinces. Each pilot zone government was putting in a lot of effort to attract and facilitate green investments to establish its green credentials. This included the use of incentives but also the development of green think tanks to guide the market.

24. After the issuance of regulations specific for green bonds, the first green bond issuance was observed in 2016. In 2018, the largest amount of issuances had come from financial institutions, also called green financial bonds. At the same time, more corporates have started to issue green bonds, with green ABS also having recently been issued. Quarter 4 of a given year will typically see the highest issuance volume. The first green Panda bond (i.e., an issuance by a non-resident entity) was issued in 2016 and since then interest by foreign institutional investors in green (Panda) bonds had increased; at the same time, PRC-based issuers have also pursued the overseas issuance of green bonds, including in Hong Kong, China.
25. Under prevailing regulations, a green bond issued in China will need a 3rd party verifier, with a focus on the description of the use of proceeds and the ongoing reporting to include a number of specific indicators. PBOC and other regulatory authorities have issued guidance on this 3rd party verification for their respective remits. Ms. Li expressed her belief that all of the above had contributed to green bonds issued in the PRC being a reliable financial product. In the meantime, the Bank of China and other parties had begun to issue sustainable bonds in Hong Kong, China, which supported both green and social projects. EY was working with the United Nations to develop metrics that would be able to quantify the actual ESG impact of a green bond or other sustainable finance product; this would also further support the labeling of green bonds as such.
26. Ms. Li described the PRC green bond market as big and growing even bigger over the next 5 years. To support that development, policymakers were working on a new, updated green bond standard that would be binding for the entire industry. For Panda green bonds, market parties had to take into consideration both the regulations for and features of Panda bond issuance as well as the green bond features, both of which were still evolving. The issuance of bonds supporting the Belt and Road Initiative was guided by the Green Investment Principles (GIP), consisting of 7 stated principles, which were in line with the ESG principles established by the UN and designed to be aligned with the Paris Agreement; so far, 32 banks had signed a declaration initiated by the Sino-British Organization. In response to an audience comment on how global the global standards really were, Ms. Li conceded that industry metrics differed in the PRC compared to other standards (e.g. wind power metrics had different thresholds and output prescriptions) and the PRC may be ahead in some metrics and behind in other, but also emphasized that the regulatory authorities continue to have a role to play in providing a conducive market environment for green bonds and also converge domestic standards with international standards

27. **Green Bond Market Development in ASEAN countries** (ADB): Mr. Kosintr Puongsophol provided an overview of the ASEAN capital markets landscape, with 10 exchanges, 4,010 listed companies and a total market capitalisation of USD2.6 trillion; Singapore Exchange was the largest exchange, the Stock Exchange of Thailand the most liquid; Korea Exchange and Japan Exchange cooperated with exchanges in Cambodia, Lao PDR and Myanmar; while each market was unique, many areas of collaboration existed. ASEAN as a whole was very much smaller than the +3 markets (Japan, Korea, PRC); this was why the capital market regulators in ASEAN were working together, for example through the ASEAN Capital Markets Forum (ACMF). Mr. Puongsophol gave an overview of the ASEAN finance ministers' process, which was similar to ASEAN+3, under which ABMF is situated. ABMF and ACMF were working towards the same goals. The key output of ACMF included the ASEAN Green Bond Standards issued 2 years ago, based on the International Capital Market Association (ICMA)'s Green Bond Principles (GBP), with some more stringent requirements.
28. The requirements to satisfy the ASEAN Green Bond Standards included an issuer to be based in ASEAN or the proceeds to be used in ASEAN, to achieve a geographical or economic connection with ASEAN; the issuer would need to publish an annual report on its website accessible to the public; and, in contrast to the GBP, projects that required fossil fuels for power generation were specifically excluded. Subsequently, ACMF created the ASEAN Social Bond Standards and has recently combined the green and social standards into the ASEAN Sustainability Bond Standards. Mr. Puongsophol explained that national efforts to promote green bond issuance has led to some differences in criteria, such as the prescription of proceeds, where GBP required 100% focus on green purposes while, e.g., Indonesia required only 70% of the proceeds to be used for green purposes.
29. Mr. Puongsophol stressed that sustainability efforts went beyond the issuance of green or social bonds. Financial institutions were increasingly asked to consider the environmental impact when lending for projects. While central banks and banking associations were working on establishing a green finance framework to provide guidance for responsible lending, individual financial institutions were working on setting their own specific lending criteria. Examples of the framework set by the State Bank of Vietnam and the criteria for lending by the Bank of the Philippine Islands were mentioned. Mr. Puongsophol mentioned the roles of ADB in this process, as a trusted knowledge partner, issuer, facilitator or anchor investor; a report on green bonds in ASEAN+3 was available from the ADB and ABO websites. He explained the ASEAN+3 finance process and the resources available through ABMI, ABMF and CSIF and illustrated the upcoming technical assistance (TA) programs. Activities promoting an inter-connected, inclusive and resilient ASEAN capital market would be coordinated by ACMF and ADB was proposing a new TA to create ecosystems for green local currency bonds for infrastructure development in ASEAN+3. The latter also included a special section for information on green bonds on the ABO website. The PRC was seriously considering supporting the proposed TA, which would also provide support for the issuance by PRC issuers in ASEAN, as well as the Panda bond

issuance in the PRC though increased awareness. This could help dispel some of the misperceptions still held by some parties.

30. **Experience Sharing on China Onshore Green Bond issuance** (panel discussion; the panel consisted of Dr. Daming Cheng of China International Capital Corporation, Ms. Luying Gan from HSBC, Mr. Han Zhang from iGreenBank, Ms. Chubai Liu from SZSE, and was moderated by Ms. Ka-Yin Chan of SZSE): SZSE took first steps toward a green bond market in 2016 and has issued a number of rules and guidance since then. Fundamentally, the differences between green and conventional bonds in the exchange bond market were verification and continuous disclosure. The issuer would submit a letter of commitment on the use of proceeds for green purposes and SZSE was encouraging a 3rd party review of said commitment and required 100% of the proceeds to be green. For easy recognition, SZSE was including a 'G' in the official bond code. So far, 23 corporate green bonds had been approved, and 19 issued, amounting to CNY14 billion of a possible CNY39 billion. 44 green government bonds had also been issued so far, with a volume of CNY22 billion. In addition, 19 ABS products had been issued, totaling CNY23 billion. SZSE and the Luxembourg Stock Exchange had created a green bond index in 2017 and established a green bond information link in 2019, supporting dual-listed green bonds. At the same time, the Luxembourg Stock Exchange was not able to accept PRC-based verifiers for green bonds issued in the China bond market. SZSE had also joined the UN Sustainable Stock Exchange Initiative in 2017 and was a member of the Shenzhen Special Economic Zone Green Finance Committee.
31. Overall, Chinese green bonds issued amounted to USD42.8 billion in **2018**; using CBI methodology, recognized green bonds amounted to USD31.2 billion; of the overall volume, 76% were issued onshore (60% in the CIBM, 16% in the exchange bond market) and 23% offshore, with 1% issued as Panda bonds. The use of proceeds focused on transportation (33%) and energy (28%), following by water and building projects. In the first half of **2019**, most green bonds were issued domestically, with 48% issued in the CIBM and 37% listed in the exchange bond market; key issuers were big banks (41%), followed by non-financial corporates with 34%; issuances from policy banks, government-backed entities and ABS totaled 25% of the overall volume of USD21.8 billion. Of this total volume, USD18.6 billion were issued onshore and USD3.2 billion offshore. The key industry remained transportation, while the largest issuer was ICBC with USD2.7 billion. If using international green bond practices, the total issuance volume was USD10.7 billion, making issuances not meeting international definitions roughly 50% of the total issuance volume. Of those, 70% of the issuances stated the use of proceeds for working capital, in line with a concession by PRC regulatory authorities, 28% were not aligned with the stated green bond goals and for 2% of issuances, not enough information was available.
32. Two key areas of difference between the PRC standards and international definitions were those for clean coal and for energy efficiency improvements on fossil fuel usage; the example given was that an improved gas heater was still using fossil fuel. However, the existence of differences in opinion was a typical sign of a market maturing. In addition, the

market was increasingly moving from 'just' green to sustainability bonds, which included green and social bonds. At the same time, there were poverty alleviation bonds already being issued that are not designated social bonds but that might be recognized if domestic practices were aligned with international definitions. While green loans, then bonds are only about 10 years old, now the market developed very fast. Institutions had established a link of sustainability to interest rates, where good meant a lower rate of interest. The market was already seeing the interest rates linked to global greenhouse emissions. Much innovation was also seen in the market, with the example of CCB given. With a green, social and sustainability bond framework established in 2019, CCB was now using bond proceeds to fund loans to rural communities, students and small enterprises; it also issued one of the first sustainable bonds. Another example mentioned was Modern Land, who was making significant efforts through its liability management, by replacing existing financing with green financing and raising new funding through the green bond market. These companies also embraced the regular reporting as a tool to connect with their shareholders and investors. These experiences from the PRC were well suited for other ASEAN+3 issuers to pursue.

33. Since the birth of green bonds in the PRC in 2015, verifiers have had a tough job, providing both advisory and training to issuers, intermediaries and investors. Verifiers were often also used for offshore issuance by issuers based in the PRC. At present, there were 7 or 8 verifiers that were helping with the growth and development of the industry. Of the 84 green bonds issued in 1H2019, 55 bonds obtained a certification (=65%); these bonds only represented 1.32% of the total issuance in the China bond market which was, however, higher than the 0.9% the previous year. The key reasons for green bond issuance had also evolved, from the need or willingness to innovate back in 2016 to the use of grants or subsidies and necessary efficiencies and the need to innovate in order not to be left behind in the two years thereafter. By now, all of these reasons were valid plus the fact that issuers wanted to leverage green bond issuance to build green finance expertise overall. Many of these reasons were often more important to issuers than pure numbers alone, although domestic issuers continued to look for cost savings in (green) issuances. Today, issuers are focusing on the effective management of green bonds and are aware that annual reviews and regular and comprehensive disclosure are important. The market has already seen a company being certified as green (instead of only its bonds), which meant that any instruments issued by that company were automatically registered as green.
34. Panelists agreed that all service providers together were beginning to form a green ecosystem. With the issuance volume growing, manual work on supporting and certifying green bonds will not be easy. In addition, there was still much opportunity for further growth in green bonds; the local governments alone were issuing CNY23 billion annually; this contained a lot of room to be greener. Panelists acknowledged that the 2 key factors in the growth of the green bond market had been both internal development and a further opening-up, to attract more FII. While private placement may not need a dedicated green framework itself, issuers still needed to observe the 4 pillars of the green bond principles in

the absence of prescriptions. Establishing a dedicated investor category for green bonds was moving slower than in the EU, which already had many sustainability funds; Asia was moving at baby steps but some momentum had already been observed, in the form of dedicated Asian investors or subsidiaries or associates of international investors. It was mentioned that green bonds would hold their value better in adverse market conditions. At the same time, it was important to reduce green bond/finance costs, whether through subsidies or conducive tax policies or through the attractiveness of related products; here, innovation played a major role, be it in the productization of energy usage rights or green Panda bonds. The market had already seen trial guidelines for green investment, as well as a green bond support project catalogue to guide the industry in its efforts, which were occurring at all levels but in an increasingly coordinated manner. Going forward, it was important to unify the relevant standards and to achieve consistency with international markets.

35. In the Q&A session, participants commented that international standards are not sacred and that big markets, such as the PRC, could make and maintain their own standards. At the same time, green and social standards and objectives may possibly not always be compatible if, e.g., clean coal was better and cheaper (for consumers) than a green initiative for the sake of being green. Yet, assessments should be done by economy since poorer nations also tended to feel the effects of climate change in a more pronounced manner; using the right ESG tools would still provide more benefits than conflicts. Members also warned of the role of sustainability versus its function in the economy overall – a quick move away from fossil fuels might result in that market collapsing with an adverse impact on the world economy. Overall, any approach should take into consideration the existing diversity and different values of markets and economies; the key goal was to achieve a common understanding even if individual measures may differ. Ultimately, investor preferences might prevail.
36. **Meet the Market in the PRC: What is ABMI, ABMF, and AMBIF?** (ADB Secretariat): Mr. Yamadera mentioned the tremendous growth of the bond market in the PRC but also pointed to the growth of the bond markets in ASEAN (+3) overall. Some markets were well developed and in fact bigger in terms of percentage of GDP than EU markets. The objective of ABMF was to link the markets, by focusing on the professional investors; this would allow concessions from regulations without compromising investor protection, which is the key mandate of regulators and the biggest concern in capital markets. Compared to equities with their large distribution, bonds can target selected professional investors only and these institutional investors are able to understand and mitigate the risks. For that, many economies had created an exempt or wholesale market or market segment, often labeled as ‘professional investors only market’ or similar. Professional investors are able to read documentation and disclosure information in English and understand accounting and financial reporting standards, including IFRS.
37. ADB recommends establishing a professional bond market in each jurisdiction and promotes the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF). The eligibility

criteria promote issuance in local currency and domestic settlement, require issuers to be based in ASEAN+3 and regular disclosure through a listing or registration concept. An integral part of AMBIF is the Single Submission Form (SSF), a harmonized issuance and disclosure document which can be (re-)used in all participating AMBIF markets and has been normalized against the regulatory and listing or registration requirements of those markets. AMBIF promotes the use of English in documentation and disclosure but ADB also recognizes that language may be an issue in some jurisdictions and is happy to discuss to what extent English could be accommodated in the China bond market; ultimately, ADB will accept each markets requirements. Mr. Yamadera highlighted that disclosure via the use of a profile listing provides assurance for investors that they will continue to be able to obtain adequate information on the bond and the issuer. As for these issuers to be based in ASEAN+3 to be eligible, this could of course include subsidiaries of EU or US companies.

38. ABMF relies on the definition of professional investors in each jurisdiction but most include the relevant investor categories, such as financial institutions, investment funds and, possibly, high net-worth individuals; for the latter, the definitions may differ by market. AMBIF aims to provide some flexibility for the use of governing law, to allow issuers to address a larger or specific investor universe, and it will be up to the parties concerned to decide on the governing law. Credit rating requirements may depend on investor preferences or market practice, and need not be prescribed in regulations. It was important to understand that the SSF and its use did not change regulations or require such changes; instead, it includes the specific requirements of any participating market. ABMF has also been publishing AMBIF Implementation Guidelines to translate the AMBIF eligibility criteria and related requirements into each market's functions and features. A similar approach is being taken for green bonds. Mr. Yamadera believed that there were good opportunities for PRC companies when issuing in the region. At the same time, new features always represented a challenge and ADB was ready to act in its role as honest broker to connect issuers and markets. He closed by asking the audience to let ADB know where it could help in this regard.

II. ASEAN+3 Bond Market Forum - Sub-Forum 2

39. **Update of Bond Market Guide Drafting and Recent Developments in ASEAN+3 Bond Markets** (ADB Secretariat): According to Prof. Shigehito Inukai, the completion of the ASEAN+3 Bond Market Guide for the Exchange Bond Market in the PRC (EX BMG) took about 2 years. To achieve success, a dedicated team had been formed, with key contact persons at each exchange bond market institution and at ADB Secretariat. In addition to the frequent email exchanges, the team had several collective and individual meetings in Manila in January, Shenzhen in March, in Tokyo in June, and in Beijing and Shanghai in September 2019. Through this process, it was possible to table and quickly solve any questions or clarifications. ADB Secretariat wanted to express its heartfelt thanks for the

patience, efforts and strong support from the CSRC, SSE, SZSE, CSDC, SAC and other stakeholders in the exchange bond market. ADB Secretariat also wanted to thank the ABMF International Experts in Beijing and Shanghai for providing valuable input.

40. Prof. Inukai reflected that ABMF was in its 10th year, having been established in 2010. With the EX BMG published and the CIBM BMG on its way to a likely publication in Q1, 2020, BMGs for all markets in ASEAN+3 will have been published soon. Since the production of the Bond Market Guide for individual markets started in 2016, up to 4 or 5 BMGs had been produced each year. In this context, ADB Secretariat had wanted to express its appreciation for the support from ABMF colleagues and related parties in ASEAN+3 over the past four years for the creation of this new series of Bond Market Guides. Prof. Inukai re-iterated that the objective was not just to publish these BMGs as such, but to use the BMGs as a tool to help address market misperceptions and, ultimately, to link the markets towards an intra-regional professional bond market; the BMGs provided an indispensable foundation for that objective. At the same time, the structure of the BMG, originally developed by ADB consultant Matthias Schmidt, made the markets comparable among themselves; this allowed readers to easily find information and make their own comparisons according to their specific interest. ADB Secretariat hoped that this structure might be of great value to all bond market participants, including issuers, investors, policy makers, regulators and SROs in this region.
41. Also important for understanding and linking the regional, professional bond markets were the AMBIF Implementation Guidelines (Impl GL), published for the convenience of issuers, their underwriters and investors involved in AMBIF bond issuance using the Single Submission Form (SSF) in each participating jurisdiction. The Impl GL were made for the purpose of fulfilling a complementary role to the issuance regulations, rules and guidelines by regulators and SROs in each jurisdiction by explaining each market in the context of AMBIF. Prof. Inukai highlighted the significance of the BMGs, Impl GLs and the SSF as important materials for parties interested in the regional markets.
42. To achieve the completion of the CIBM BMG, ADB Secretariat held a number of meetings in Beijing and Shanghai this week to conclude on pending topics, for which thanks go to the CIBM colleagues and International Experts. Mr. Matthias Schmidt explained that the fact that two distinct major bond markets existed in the PRC, each with specific regulatory frameworks and institutions, also meant that the ability to re-use information from the production of the EX BMG was limited; this included terminology and interpretations of domestic and international practices. In contrast to the exchange bond market, many regulations and rules remained in Chinese only and had to be translated and understood. At the same time, the very rapid pace of development in the CIBM and the sheer volume of information to be processed required a number of revisions during production. With presently 209 pages, the CIBM BMG was likely to become the largest BMG in the series, with some information still to be added. Based on the information received this week, ADB Secretariat would aim at finalizing the final input version soon, then proceed to a final

review by market parties and editing. The target for publication remained in early 2020, but depended on the amount of final feedback to be received.

43. As mentioned in previous meetings, ADB Secretariat was considering a two-pronged approach when updating the BMGs. While a full update would be warranted for a market that had significant and comprehensive changes to its legal and regulatory framework, issuance processes or market practices, a supplementary or update note to a BMG might be suitable if a market had recent important but topical changes. The intention was to publish these updates as separate, simpler documents and post them on AsianBondsOnline. An example was Thailand, where a partial revamp of private placements to professional investors had occurred, while other market features largely remained unchanged. In turn, full BMG updates were being considered for those markets where the BMG had been published in 2016, if sufficient significant changes could be identified or information had become outdated. Mr. Schmidt appealed to ABMF members to approach ADB Secretariat in case a market update for their jurisdiction was considered warranted.
44. In any case, ADB Secretariat was aiming to synchronize information from BMGs into Impl GL whenever one of these documents would be updated for a given market. Here, Mr. Schmidt pointed out that Impl GL were now being issued as standalone documents for each participating market; the original Impl GL had been contained in the AMBIF Report issued in 2015. The Impl GL for the Philippines was now ready for editing and would likely be published by the end of 2019. Impl GL for other markets were in the pipeline, with Cambodia waiting for dedicated regulations for offers to Qualified Investors and recent such regulations still needing to be fully digested by the market in Indonesia. For Malaysia, the practices described in the original Impl GL needed to be re-affirmed since market practices had evolved since then; one of the key subjects here was to understand how electronic submission of issuance and disclosure data affected AMBIF. For the PRC, initial discussions on an implementation of AMBIF in the exchange bond market and the CIBM were a target for ADB Secretariat.
45. Any update of a BMG going forward would also likely include additional topics that had been identified by ADB Secretariat or the ABMF members for that market. Based on the discussion at this ABMF meeting, these could include information on green and sustainable bonds but also infrastructure bonds. Dispute resolution and arbitration have been key topics for interested parties, as had been market practices and (trading) conventions. In addition, KYC or onboarding, tax processing and payment system information were regular topics of interest, not only at ABMF meetings; some of these topics might be included in the planned update to the Sub-Forum 2 report. At this stage, the question remained whether operational and technical information (including transaction flows) should be integrated into the current BMG structure, or continue to be published as a separate report. ADB Secretariat invited any suggestions on this and the other topics mentioned.

46. **Recent ASEAN+3 Market Developments** (ABO team): Dr. Shu Tian shared the key messages on the recent economic development in the region. GDP growth forecasts for developing Asia had been further adjusted down, from 5.7% to 5.4% for 2019 and 5.5% for 2020; the original forecast had been 6%. Growth in India and the PRC was beginning to moderate, with inflationary tendencies slightly up but remaining benign; inflation is expected to recover by late 2020 or early 2021. Growth projections are also revised down for developing Asia's largest and most open sub-regions, and 8 out of 11 surveyed markets will see a contradiction in investment. The US-PRC trade tensions remained the primary risk to growth and financial stability in the region. Indicators already showed weakening of domestic demand, though demand will stay robust, and clear signs of the redirection of trade and a sharp contraction in the global electronics cycle.
47. In the local currency (LCY) bond market, the total outstanding amount reached USD15.3 trillion at the end of June 2020, and foreign holdings remained stable during the period. LCY bond yields trended down after regional central banks cut their policy rates, following the rate cuts and QE announcements in the US and EU. Currencies showed mixed development but also remained largely stable while equities markets generally retreated. Rising CDS spreads indicated a souring of investor sentiment. Overall, downside risks continued to weigh on the region.
48. With regards to an update on the work of ABO, the team entered into a cooperation with the MOF of Viet Nam; ABO now carried data from 2014 to 2018 on an annualized basis and from 2019 on a quarterly basis. The Bloomberg historical data that had been used to-date will be retired in 2020. The richer data now includes foreign holdings, investor breakdown, trading volume and turnover ratio for bonds. Dr. Shu Tian also explained the ABO knowledge products, among them the Weekly Debt Highlights, the Monthly Roundup and quarterly Asia Bond Monitor. ABO was also conducting seminars and workshops on bond market topics, most recently in Viet Nam. The flagship AsianBondsOnline website was being continuously improved, with a greater focus on synergies between the various Task Forces under ABMI to better serve the variety of stakeholders. The website will now also include events happening in the region. ABO will present the work of ABMF, specifically the Bond Market Guides in a distinct tab under market information or a similar label, with links to relevant publications or market material to be included. Information on green bonds and related events will also be included. Going forward, ABO will continue to refine the user experience, and further focus on projecting the work under ABMI, pursuant to its mission to make ABO a brand for ASEAN+3 bond markets to investors.
49. **Update on Credit Guarantee and Investment Facility activities** (CGIF): Dr. Dong Woo Rhee provided a brief introduction of CGIF and an update on its activities. CGIF was a core element under ABMI, with a focus on increasing the supply of local currency bonds. CGIF started in 2012 and wrote its first guarantee in 2013. It presently had a maximum capacity to issue guarantees of USD2.6 billion and was rated AAA by regional credit rating agencies. Effective 1 August 2019, Ms Guiying Sun had taken over as CEO, with Mr. Mitsuhiro Yamawaki appointed as Chief Risk Officer and Deputy CEO effective as of 17

September 2019. Over the past few months, new capital pay-ins had been received from ADB, the Lao PDR, the Philippines and PR China. Three new guarantees had been issued in 2019 so far, to issuers based in Korea, Myanmar and Viet Nam.

50. Dr. Rhee reviewed the size of the individual government and corporate bond markets in ASEAN+3, also in comparison to the combined corporate bond and loan markets. He mentioned as caveat that the bond market data used may differ from other bond market statistics, e.g. due to the inclusion or exclusion of private placements or unregulated market segments, as may be applicable. As for the characteristics of the bond markets, the China bond market had the shortest average tenor, while the Malaysian bond market had the longest; here, more than 30% of the bonds were in support of infrastructure projects. Indonesia had the most straight bonds, while the Philippines had a high proportion of callable bonds, due to a higher bargaining power by issuers, and other markets showed a variety of special bond features.
51. Fixed coupon bonds represented the majority of issuances, except in PR China and Viet Nam; floating rates were the most common coupon type. Most bonds in ASEAN+3 markets were issued unsecured, with only Malaysia having a higher degree of secured bonds, again the result of the infrastructure projects, and Indonesia with a higher proportion of secured corporate bonds. The credit rating quality of bonds differed widely between markets, with Korea, Malaysia, the Philippines and PR China showing mostly AAA and AA rated bonds, while other markets features the whole range of investment grade bonds. Guaranteed bonds occupy a substantial part of the corporate bond market in Malaysia and Singapore, while Thailand features a higher number of partially guaranteed bonds. Dr. Rhee closed with a summary of the characteristics of each of the reviewed ASEAN+3 bond markets.
52. **Account Structure and KYC Process** (ADB Secretariat): Given that this ABMF Meeting benefitted from the attendance of many non-members, Mr. Yamadera provided a quick introduction to the distinctions of the work focus between Sub-Forum 1 (SF1) and Sub-Forum 2 (SF2). Sometimes, the focus of an ABMF Meeting was on either SF1 (like in Shenzhen) or on SF2, depending on the more pressing topics. One common approach was for ABMF to examine and explain where market practice differed from regulations and rules, or from expectations of interested parties. As for the account structure study, the objective has been to examine cross-border information flows, where investors are non-residents in the market they invested in. Taxation was heavily influenced by data originating during the know-your-customer (KYC) process, and while taxation itself was not disputed, the actual practices for tax processing may become barriers or impediments for market entry or investment. The purpose of the study was to identify such impediments and the underlying processes leading to them and propose solutions or standardisation of the procedures for market entry and tax status identification, where possible. This was one of the projects that would bring together public and private sectors and Mr. Yamadera expressed his hopes for active participation from members, for the benefit of all stakeholders.

53. KYC represented the necessary due diligence when acquiring a new customer, new business or specific transactions; similarly to taxation, one of the key objectives was to find out the beneficial owner of the investment, which may not always be easy (some examples of companies or trust vehicles were shown). As a result, financial institutions (FI) had a lot of responsibility and needed to undertake a lot of effort to fulfill the many requirements and establish the many necessary data checkpoints. Through the Common Reporting Standard (CRS), tax authorities were increasingly committed to automatically exchange bank account data. Collected were data elements for market entry, such as name, nationality or domicile and legal entity, as well as information to establish the tax status, particularly whether the entity was eligible for double-taxation relief. Custodians and other FIs may use their international network to validate such data and, despite maximum effort, this could still translate into difficulties.
54. Information required for market entry was often supplemented by information that an FI needed to fulfill its own obligations, including prescriptions from its home market. In contrast, the actual data needed for tax processing was not that much and was fairly similar across the markets. As such, the study was documenting the data flows for both KYC and taxation data. Using the example of Indonesia, Mr. Yamadera pointed to the opportunities for data standardization or streamlining of requirements in a given market. The onus was on the custodians to keep the info, to ensure that it was trustworthy and to provide it on every occasion. In Malaysia, reporting to regulatory authorities already included the Legal Entity Identifier (LEI), which could be used to derive a number of KYC and tax data indicators. The flows for the PRC market shown may not yet be 100% correct and members were encouraged to provide feedback to ensure completeness and accuracy.
55. Among the key findings of the study so far, KYC data could differ from FI to FI, under regulatory KYC and institutional KYC requirements, and according to the level of intermediation; here, requirements may differ at the domestic custodian, the global custodian and those at the investor's domicile. The account structure in regional markets can be divided into segregated accounts, omnibus accounts and omnibus accounts with a specific investor ID. ABMF was recommending a standardization of KYC data, at least between initial and transactional KYC (which included tax data), although it recognized that regulatory KYC might not be easy to define across all markets. However, tax authorities were increasingly changing their approach towards a focus on the level of risk inherent in taxation efforts; if ABMF could convince the authorities that the appropriate data would be available and the necessary underlying work at streamlining and defining the data was done, this may allow for concessions in the tax processes in the region. In these efforts, it may be possible to utilize the LEI, since there was a significant overlap between KYC and tax data. The LEI was already used for the OTC derivatives business in entity and transaction identification.
56. In the context of KYC and AMBIF, it may be possible to reduce the reporting burden for stakeholders since investors were professionals and, hence, known and regulated entities. A review at data element level appeared rather technical, but operational procedures

mattered greatly in making practices successful. ADB participated in the regional discussion among tax authorities as an honest broker, though tax authorities did not hold their own regional forums. Here, ABMF could be the platform for dialogue to infuse the tax discussion with practical and meaningful recommendations. This would also give the opportunity to link with efforts under CRS, because of the possibilities of the use of ISO20022 – maybe it was possible to find a way to bridge the transactional KYC reporting and the aim would be to automate transactional KYC to the extent possible. ABMF was trying to help avoid a situation where each market created their own practice; the technology to achieve some standardization and automation was available, members just had to use it. Mr. Yamadera expressed his hope that members were interested in this discussion and happy to engage ADB Secretariat to pursue concrete opportunities in this regard. ADB will draft the report for the account structure study and outline its recommendations towards standardization. Here, it was necessary to maximize the benefits available under the standards. Hopefully, ABMF had the ability to contribute to the regional discussion.

III. **Cross-Border Settlement Infrastructure Forum (CSIF) - Open Session**

57. Mr. Yamadera explained that the CSIF session normally was a closed session between central banks, CSDs and ADB Secretariat but that it was held as an open forum on this occasion to share its discussions and gain feedback and insights from the meeting participants. Cross-border collateral was an important topic for bond market stakeholders. As the bond market was growing, it was important to tap the opportunity in cross-border collateral; the region was also seeing an increase in cross-border banking business and APAC banks exposure to Asian markets was much bigger nowadays. In addition, the linkage (of the markets) discussion held in CSIF was addressing the need for cross-border DVP and Mr. Yamadera expressed his hope to see cross-border repo in due course. While the momentum of cross-border business was not yet that strong, today's proceedings were meant to highlight why the discussion was taking place; it was important to take stock and determine what next steps should be taken.

58. **Building a Culture of Repo Collateral for Bond Market Development** (Mr. Josh Galper, Finadium): Mr. Galper shared his views as a specialist consultant in the areas of securities lending (SBL), repo, collateral and derivatives. Repo is the grease that lubricates well-functioning markets; repo supports market liquidity, was used to park short-term funds, serves as a source of securities for short-selling strategies and allows tighter spreads; liquidity also contributes to lower issuance costs. If repo disappeared, negative consequences would occur, since the market was suddenly lacking a crucial component for liquidity and investor confidence; examples shown from the Global Financial Crisis illustrated these points. The strong leverage ratios of major Asian banks under Basel III may contribute to the lack of urgency in driving collateral in this region. Yet, Basel III rules principally encouraged collateralized lending, though Asia had not yet seen the same level of demand as Europe or the US. Activity in repo markets was largely carried out in USD and local (currency) activity was not easily visible.

59. Market participants were increasingly looking at the use of SBL and repo instead of OTC derivatives, in order not to be subject to margining requirements that now featured global, aggregate limits by institution. Mr. Galper emphasised that the move towards repo was largely driven by banks, not by investors, and banks and their clients would trade repo where the costs were lowest. Data was important to understand and explain repo activity in a market context; here, industry associations, trading venues and information vendors offered analyses of repo activities. At the same time, vendor data was not as consistent as may be desired, simply because there was no one single repo contract. Mr. Galper identified the EMEAP study on repo business as a more recent discovery. These studies were important to capture and understand the status quo and offer recommendations for the future.
60. Mr. Galper emphasized that repo worked best in private sector markets but may need help under specific circumstances, such as markets in local currencies or if there was no preference for secured over unsecured lending. He offered a number of ideas to support an Asian repo market: regulators could encourage banks to prioritize secured over unsecured financing and provide incentives for investors to hold and trade corporate bonds which would in turn drive liquidity; to encourage market making and market makers, since those were drivers of securities borrowing; CGIF could formally support repo as a market activity, e.g. by guaranteeing a basket of collateral; ADB could be a conduit for market development and sponsor a pan-Asian collateral basket or a bucketing concept that could be traded underlying a repo and could be listed on a futures exchange. One third of banks polled in 2016 were in favour of the latter, though it would have to be decided what currency the basket or bucketing concept would be in, and which currencies could participate. Participants agreed that not just banks but also investors in many regional markets would like to lend or repo debt securities, but were not allowed under market rules and regulations. At the same time, central banks in some markets may need to preside over the repo market to deliver adequate liquidity.
- 61. Possible Models in Asia** (various presenters); Mr. Yamadera of ADB Secretariat explained the objective of the session: the need for a cross-border collateral and repo (CBCR) market was increasing, due to the increase in cross-border banking activities and the correlation to the developments of the domestic bond markets in the region; the tightening of risk management and regulations also drove a need for more collateral. At the same time, most cross-border collateral transactions were booked against US Treasuries or USD dollar cash; the strong and increasing demand for both asset types created vulnerabilities in Asian markets. At present, cross-border activities were mostly carried out by international banks that had large operations in USD dollar and activities in US Treasuries. For them, and for participants at large, it seemed difficult to accept the different legal frameworks prevalent in the region to explore other collateral sources and practices, which becomes the biggest hurdle in creating a common regional CBCR market. To promote cross-border transactions, it was important to understand the cross-border transactions presently being booked. As possible models, Mr. Yamadera reviewed the

classical repo in a domestic market and tri-party repo practices in a domestic market, as well as the possible iterations of cross-border tri-party repo, including possible combinations with securities lending, plus repo via an international bank, directly or in a correspondent banking context. The case of collateral deposited with CCDC and accessed either by domestic or international counterparties was also shown. The subsequent sessions would explain impediments and challenges of cross-border tri-party repo in Asia and explore measures to mitigate them.

- 62.** Mr. Davin Cheung, Clearstream highlighted that, while it may be possible to use domestic collateral to cover domestic exposures, such as towards the central bank, domestic repo, securities lending or derivatives transactions, the big question was whether domestic collateral could be used to cover exposures in other markets. The usual collateral givers in the domestic market, such as CSDs, would have to have access to collateral that was accepted in those other markets, to be able to continue to service market participants. Collateral could consist of debt securities and equities but also other asset classes. However, maybe international collateral could also be used to cover exposures in a given domestic market, if those assets were accepted at the central bank or by domestic counterparties, as was already the case with US Treasuries or also JGBs in selected markets. The ideal scenario was seen where domestic and international collateral was available to a collateral giver in the domestic market and to cover exposures in other markets; this required the collateral giver to have the capabilities to connect the collateral receiver with the most practical or suitable collateral within short timeframes. Tri-party repo services were seen as a suitable model to achieve this objective.
- 63.** Mr. Danny Missotten of Euroclear stated that of the EUR30 trillion worth of securities held in Euroclear, EUR1.093 trillion were available as collateral; this did not mean that the other EUR29 trillion were not eligible to be used as collateral - they were just not used or blocked as collateral at that time. Of the assets in the pool, Europe (including the UK) represented 60%; Japan was the 2nd biggest, with 11% of its assets available for collateral; the US stood at 10% of its outstanding debt securities available for collateral, while the Hong Kong bond market only showed 0.02% of the assets in the pool. Among the currencies, EUR surprisingly dominated with a 51% share of the assets, followed by USD with 19%, GBP with 13% and JPY with 12%; AUD-denominated assets made up 1% of the pool. For domestic securities to be used as collateral and to address the increasing demand, it was necessary to have collateral givers holding these types of securities, and these givers needed to be able to be part of or access the pool at Euroclear. In turn, collateral takers were needed to accept a wider variety of assets to broaden the collateral pool. The large-volume collateral takers are central banks and CCPs, so the effort was to get these collateral takers to accept certain domestic securities as collateral and add them in their collateral eligibility list. Needed were also efficient collateral management platform(s) that are linked to those collateral givers and takers, and provide the necessary collateral management services. If processes were too cumbersome or risks considered too high, the takers would for practical purposes continue to revert to the usual counterparties and usual

assets. A good example were JGBs; among the collateral givers, many were already holding JGBs, and these were not only Japanese but global investors. When central banks and CCPs in the EU and US started including JGBs as eligible securities in their collateral eligibility lists a few years ago, a lot of these investors were able to use their existing JGB holdings; this gave hope for a more efficient use of JGB holdings overall. In any case, the eligibility of the JGBs was driven by investor confidence that the Japanese government will pay its debt. Australian government bonds were considered similar to JGBs in principal, though very few central banks and CCPs had them in their collateral eligibility lists so far. Market stakeholders were now working on the consideration of debt securities issued in the PRC.

- 64.** Mr. O'Delle Fitzromeo Burke of J.P. Morgan relayed a growing interest in and shift towards tri-party repo (from bilateral repo); key arguments included safety and convenience, since the transaction occurred at the tri-party agent, not in a particular market. The size of the global tri-party market was USD4.7 trillion of which 5% was booked in Asia Pacific, with the EU seeing 52% of the volume and the US 43%; the US was more restrictive on securities lending and, hence, focused on repo transactions, while the EU focus was mostly on securities lending transactions. The volume in Asia Pacific represented USD235 billion (2017 figures), with Japan dominating (86%), followed by Hong Kong (6%) and Australia (5%), with Singapore volume at 2%; however, the Asia Pacific volume had grown by 25% compared to the previous year, yet the lion share of the growth came from international market participants. These participants were typically commercial banks and broker/dealers; the latter were using repo to fund their positions. Drivers for the increase were OTC derivatives transactions that needed to be collateralized, in particular the initial margin requirements; initial and variation margin may have different collateral eligibility requirements. Here, posting (appropriate) securities as collateral was easier since cash was the rarer commodity, particularly for broker/dealers. The global bond market was integral to securities financing; of a global bond market size of USD104 trillion, 48% were in government bonds and 33% were Asian bonds.
- 65.** One important observation was that the acceptance of collateral was often driven not by the credit but by the liquidity of the collateral asset. Hence, in Asia, market liquidity was key to develop robust repo markets. Other challenges for the markets were the need for adequate technical connectivity and market infrastructure, which also required a robust underlying legal and regulatory framework; here, the infrastructure was the easier aspect, with regulatory issues, including tax, the more complex aspects. Interoperable market infrastructure was important to facilitate cross-border transactions, including for collateral. Differences or specifics in some ASEAN+3 markets hindered the development of the repo market. Tri-party repo could address these differences through a harmonization of practices. At the same time, access for a wider audience to the repo market could improve the market significantly.

66. Mr. Fei Tao of China Central Depository & Clearing gave an overview of the CCDC collateral management services, including the cross-border business aspects. The investment by foreign entities in the CIBM had reached CNY1.72 trillion as of September 2019, across 1,009 accounts. Of the total outstanding balance of CNY95 trillion in the CIBM, CCDC accounted for approximately CNY63 trillion, or 66%. Of the holdings at CCDC, CNY12.1 trillion were used as collateral, roughly equivalent to 13% of the market, with 2017 having seen a peak of more than CNY14 trillion. The CCDC Collateral Management Center provided services to 6,393 market institutions, including the PBOC, MOF, CFFEX and commodities exchanges. The balance of collateral for cross-border transactions had increased nearly 3fold since 2016, reaching CNY44 billion at the end of September 2019. Cross-border business refers to collateral transactions of resident or non-resident CCDC account holders with other CCDC account holders on underlying transactions outside the PRC; examples of the use of BOC green bonds as collateral for the issuance of covered bonds overseas and the support for currency swap transactions between domestic banks and foreign central banks were mentioned. In principle, bonds issued in the PRC were available as collateral for transactions in the UK but this agreement had yet to be fully implemented. CCDC also cooperated with the ICSDs and many CSDs worldwide. In October 2018, the PBOC announced the introduction of tri-party repo in the CIBM, which allowed CCDC to act as tri-party agent between its account holders. CCDC was also offering services to quickly dispose of collateral for the collateral taker in case of a default of the collateral giver.
67. **Central Bank Collateral Frameworks for ABMI** (Dr. Gongpil Choi, Asian Prime Collateral Forum): Dr. Choi expressed his view that the central banks in the region needed to do more to support the work of ABMI and ABMF in their efforts to unlock local bonds as collateral. Central banks had done a tremendous job for stable economies and exchange rates, with the FX rates their primary concern for a long time – this, however, bound their hands in the application of monetary policy. At the same time, cross-border funding was largely, if not exclusively, carried out in US dollar. Dr. Choi explained the liquidity framework under Basel III and how the open market operations of central banks influenced the eligibility and availability of collateral; those measures determined the scarcity of collateral and affected quantity and price of potential collateral through their pledgeability. Central bank balance sheets in developed markets were growing but, at the same time, the operating framework had led to a lack of collateral, which affected, e.g., the operation of hedge funds. Yet, market participants in Asia appeared to be very complacent, though they needed the capital market to be efficient to make the economies work. Dr. Choi showed that secured funding was here to stay and would increase further; yet, bilateral repo, which depended on trust, remained the biggest market segment, e.g. in the US, at 79% in 2014. The use of US Treasuries dominated the market, with more than a 50% share, followed by agency mortgage-backed securities.
68. While the world was increasingly coming closer together, repo and collateral practices continued to require a jurisdictional approach. The objectives of the EU Collateral

Framework showed a broad eligibility of collateral, combined with non-traditional collateral practices, such as the use of credit claims; guarantees can also be used to mobilise eligible collateral. In contrast, Asian collateral has not been given much opportunity on the global stage, though there was no reason why Asian parties could not come up with their own haircut and eligibility requirements; even government bonds of nascent markets could be considered as collateral. While the EU had established formal cross-border arrangements, Asia had not created the necessary infrastructure. Dr. Choi proposed an Asian Collateral Framework as a core element of trust for cross-border transactions in the region, including the need to further activate the government bond markets to promote capital market development. A comparison of the repo markets in Indonesia, Japan, Korea, Malaysia and the PRC showed that they are distinct and cannot be harmonized. However, these markets' central banks should get together and, while some bilateral collateral arrangements already existed, should do more to establish a cross-border or regional framework. While the EU collateral framework was maybe too accommodative, the existing Asian framework was too segmented.

69. Central bank currency swap arrangements were slowly taking the role of repo transactions among banks and, in practice, have become permanent liquidity facilities around the world. At the same time, private sector participants had to overcome currency mismatches via market operations, such as repo collateral transactions. Instead, a multilateral currency swap facility backed up by a collateral pool could bring new momentum to the bond markets. Present limitations for such momentum lay in the legal structure and regulatory framework in some markets, with examples of tax regulations as well as in the recognition of a fiduciary transfer of title versus bankruptcy regulations in Korea shown for illustration. The concern was who would be the party to address all these limitations: Asia did not have a regional central bank, but it did have ASEAN+3. According to Dr. Choi, Asia needed lots of preparation and investment to provide grounds for market development, in particular a region-wide recognition of collateral by central banks, who should collaborate with the aim of achieving multilateralization of cross-border arrangements, including the recognition of one another's government debts and suitable eligibility criteria, as well as haircuts. However, this required changes in the policy framework and a shift in the mindset of policymakers and a general openness with collaborative discussions among diverse members. Dr. Choi argued that central banks needed to collaborate because the current framework was outdated and out of touch; a new framework would create the ultimate pillar of trust in the regional markets and become a cornerstone for an Asian collateral market. Asia needed to also be linked with the rest of the world, through appropriate infrastructure and agreements; the idea of an Asiaclear had been raised some time ago and could again be considered.
70. In turn, banks could create collateral pools instead of maintaining multiple accounts at CSDs, which had the potential benefits of an optimization of the use of assets and allowed for a streamlining of service coverage through the integration of global collateral management, settlement and asset servicing. The liquidity risk in selected markets may

also be mitigated if, e.g., global banks were allowed to use collateral where they can raise it to be used as collateral in markets where they needed it. Dr. Choi proposed a roadmap with broad steps towards a regional collateral framework, including greater unlocking and eligibility of assets, their subsequent use for cross-border transactions and the integration of infrastructure. A proposed action plan laid out specific objectives for stakeholders and related activities, including capacity building, knowledge-sharing and training efforts, while the outcomes could be announced on AsianBondsOnline.

71. **How Asia Can Increase More Cross-border Collateral and Repo Transactions?** (panel discussion; the panel consisted of Mr. Davin Cheung; Mr. Danny Misotten; Mr. O’Delle Fitzromeo Burke; Mr. Yulu Pu, China Central Depository & Clearing; Mr. Joon Hwan Im, Korea Insurance Research Institute; and was moderated by Mr. Yamadera): Mr. Im kicked off the panel discussion with the view that market liquidity was much broader than just in terms of collateral, while development stages and the management of the different levels of liquidity differed, e.g., through policy rates, not always supply. Central banks had to stabilize the market by using liquidity. At the same time, the government and corporate bond markets were not necessarily liquid by default. Mr. Im described cross-border collateral as an alternative way of funding external borrowing and that the FX market was more liquid than cross-border bond market transactions. Cross-currency repos (cross repos) combined the 2 elements, in that the cash and securities involved in the repo transaction were (likely) denominated in different currencies.
72. Mr. Im outlined an ASEAN+3 framework with common collateral features and arrangements, including valuations, haircuts and processes. However, some currencies in the region were not fully convertible and the interest rate could not be based on Treasury bonds in each market, since those were long-term in nature. The use of, e.g., 3-month tenured products was more practical – hence, the dependency on LIBOR as guiding rate. Korea was actually considering using the repo rate as guidance. How to establish such a regional framework depended on the level of commitment of the ASEAN+3 economies to define specifics, agree on the definition and eligibility of collateral and the linking of trade and settlement systems. There may also be the need for the adjustment of cost between the markets. Mr. Im encouraged participants to try to disprove the assumptions made in the discussions; if this were to occur, the region would automatically build a strong use case for a regional framework.
73. Mr. Misotten elaborated on the recent cooperation between Euroclear and CCDC; the approach did not provide a new product but targeted the unlocking of new collateral givers and takers – both were needed to have an efficient market. The intention was to create a practical system accessible to many; the impact on collateral givers was to obtain more efficient links to the CIBM, which currently did not reap enough benefits. It also required CIBM Direct to be more efficient in terms of communications and protocols and the provision of straight-through processing. The objective was to improve two dimensions, the ability to move collateral and hold collateral according to participants’ needs. One issue remained the disposition of collateral, which the partner institutions were hoping could be

improved through a streamlining of legal and regulatory practices. Mr. Pu added that the cooperation would include real life use cases, such as the placing of initial margin required for selected transactions under IOSCO regulations and also impacting banks in the PRC. At the same time, the cooperation promoted bonds denominated in CNY to be included in eligible collateral pools. CNY bonds could be used as collateral for cross-border repo transactions and FII investing in the CIBM could support their network using their CIBM holdings. Overseas branches of banks in the PRC could support their operations with intra-group loans supported by bonds as collateral.

74. On the question on what the biggest issue was in Asia, panelist agreed on cash givers or collateral receivers; they had eligibility policies that, by and large, forced collateral givers to turn to the 'usual suspects' (limited, accepted collateral assets). To mobilise Asian local currency bonds as collateral, one needed collateral receivers to be willing to accept those bonds; the commitment doing so was one thing, but once economics were considered, this would become a big consideration. Another typical issue: was it possible to get one's hands on suitable collateral right away and would the legal framework accommodate such needs. Collateral agents could play the role of arbiter in the region. With the primary driver for investment in a domestic market being spread, if investors continued to obtain a high(er) spread for unsecured lending products, there would be no incentive for secured transactions, such as repo or securities lending. Hence, making the yield for secured transactions more attractive would be a driver of demand for those transactions. However, demand continued to be impeded by the clarity, or lack of, on liquidation or enforcement of collateral across a number of economies. Market conditions may also play a role in that the current situation might encourage a flight to quality assets and parties might shun unproven asset classes.
75. Central banks were reluctant to be the first movers so the impetus for change should come from the market. In the PRC, a higher level of cooperation was being observed, including between the mainland and Hong Kong. Market parties understood the central banks' concerns and reluctance to become first movers; however, the firm belief was that any change should be demand driven. Here, the market had to create its own success and it may be necessary to start small or with selected participants, such as the Chinese banks who were the biggest holders of Chinese government bonds. Panelists agreed that the necessary infrastructure was largely in place though it could be further improved. Instead, one key hurdle remained the enforceability of contracts since they included recourse. Collateral frameworks should be established and regulators should continue to remove any barriers; a framework in place and not used much still posed a greater opportunity than no framework at all. However, one big consideration was whether to wait for a regional framework or have each market move on its own. On questions to the applicability of the EU collateral mechanism (CCBM), it was mentioned that a common currency and largely harmonized regulations removed many of the hurdles faced in Asia; also, CCBM already connected all central banks. Ultimately, the existence of a clearing house for cross-border transactions could address this challenge of non-connectivity.

IV. Next ABMF Meeting

76. The 33rd ABMF Meeting and 20th CSIF Meeting will be held at ADB Headquarters in Manila. Owing to Chinese New Year being early in 2020, the meeting will need to be held on 6 and 7 February 2020, with a stronger focus on Sub-Forum 2 topics. A preliminary agenda was subsequently sent together with the meeting invitation in November 2019.