Summary of the 30th ASEAN+3 Bond Market Forum Meeting(s)

28-29 January, ADB Headquarters, Manila, Philippines

The 30th ABMF Meeting and related meetings were hosted by ADB in Manila, the Philippines. The meetings took place on 28 and 29 January 2019 at ADB Headquarters, including the 17th CSIF Meeting. The ABMF Meeting materials are available from the ABMF website (asean3abmf.adb.org), and CSIF Meeting minutes and materials are available separately to eligible participants.

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

1. Mr. Bambang Susantono, ADB Vice President (Knowledge Management and Sustainable Development), welcomed the participants to ADB Headquarters and the 30th ABMF Meeting. ABMF was inaugurated in 2010 under the Asian Bond Markets Initiative (ABMI) as a platform for harmonisation of practices and possible standardisation across the regional bond markets. It remained the only regional forum for dialogue between the public and private sectors and has achieved a number of successful outcomes since inception: the creation of the ASEAN+3 Bond Market Guides as the first official information source on the regional bond markets; the integration of bond markets through the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF), with AMBIF issuances starting in 2015 – by now, 7 economies have adopted AMBIF; and the description of cross-border message flows and definition of standard message items for such flows.
2. Mr. Susantono emphasised that the ASEAN 2025 Vision recognised the significance of standardisation, including in the capital market, and also embraced the importance of harmonisation across the markets, in particular since a complete convergence of regulations was unlikely across a heterogeneous set of economies. He welcomed the latest AMBIF issuance in the Philippines, this being the first CGIF-guaranteed AMBIF issue, which also supported financial inclusion. Mr. Susantono stressed that AMBIF can help develop the corporate bond markets in the region and, while some issues still needed to be sorted out, such issues were a normal, expected feature of market development. The objective for AMBIF was to allow the markets to be on par with international markets, for which new technologies also played a role – ABMF had been at the forefront to discuss such new technologies and their impact on the capital market.
3. In 2017, ADB published a report on the regional infrastructure needs. According to the report, USD 1.7 trillion of investment would be needed every year to meet the regional requirements. At present, ADB observed about USD 800 billion of annual such investments, about half of what was needed. Green bonds, infrastructure bonds and other such specific instrument types would help to fill the financing gap. Some of these instruments attracted socially responsible investment, which ADB also championed. Mr.

Susantono concluded that all these developments would support the development of the regional bond markets and that all the relevant institutions, including ABMF, ABMI, the finance ministers' meetings and ADB continued to be committed to supporting such developments.

4. Mr. Koji Ito, Chairman of Sub-Forum 1, also welcomed the members and participants to the ABMF Meeting and reminded the audience that it had been three and a half years since the first AMBIF issuance in Thailand. He was happy to point out that the recent AMBIF issuances in Cambodia and the Philippines were first for their respective markets, with more expected to come soon. He stressed that to support future AMBIF issuances, it was beneficial to share the efforts for and experiences from the recent issuances.

5. **Update of ASEAN+3 Multi-Currency Bond Issuance Framework** (ADB Secretariat and presenters from the Philippines and Cambodia): Mr. Ephyro Louis B. Amatong, Commissioner of the Securities and Exchange Commission of the Philippines (SEC) relayed the SEC experience for the recent Aeon Credit issue in the Philippines. AMBIF was to support intra-regional cross-border issuance with the use of the Single Submission Form for all markets, and AMBIF Implementation Guidelines for each of the participating markets to guide potential issuers. The Aeon Credit issue in the Philippines was the third issue so far and the first in the Philippines. The issue was oversubscribed and attracted 7 investors, all Qualified Buyers. The bond was the first listing on the QB Board or Qualified Buyer market, which was the Philippine equivalent to, e.g., the Tokyo PRO-BOND market. Some of the salient transaction details were mentioned in the presentation slides.

6. Aeon Credit, as the issuer, provides credit services to the unbanked population of the Philippines and, hence, the issuance supported financial inclusion, which was also an objective of the SEC. The Aeon issue was the first AMBIF issuance credit-enhanced by CGIF, and was considered necessary since Aeon Credit was not a name as naturally familiar to investors in the Philippines as it would be in Japan. The SSF was used as the key disclosure document and its use presented no problems to the institutions involved. The transaction was, in fact, beneficial for all stakeholders, since Aeon Credit could raise funds with a suitable tenor, the issuance represented a new feature and milestone in the development of the Philippine bond market, the access to professional investors (Qualified Buyers) was successfully tested, and any potential FX risk was successfully mitigated.

7. While there were no problems from a bond market perspective as such, some issues related to the nature of the issuer, in relation to its licensing status and the number of potential investors were identified and successfully addressed. To accommodate the issuer and the investor implications, PDEx published supplementary rules that were fast-tracked by the SEC to meet the desired timeframe. In this context, Commissioner Amatong reminded the audience to consider that regulations other than those prescribing the actual debt securities issuance could also be triggered, depending, e.g., on the nature of the issuer or other circumstances. Overall, the transaction timeline took 4 months, since it represented a number of firsts: the first AMBIF issuance, first use of the SSF, first for PDEx

on the QB Board and the related rule change, and the first issuance supported by CGIF. While the timeline was a bit longer than originally anticipated, the stakeholder feedback was overall positive. As such, Commissioner Amatong advised that potential issuers and their service provider should allow for some extra time for a first issuance in another market.

8. He stated that the SEC liked to think that it had been enabling and provided a conducive environment for the corporate bond market. In 2017, the SEC had launched a number of capital market reforms, supporting the focus on more transparent bond pricing, including for government bonds which are seen as the benchmark. As a result, the Philippines now saw a smoother yield curve and less volatility in bond prices. Commissioner Amatong concluded that the Aeon Credit issuance had proved the AMBIF concept in the Philippines and also provided a replicable model for cross-border issuers tapping the local currency capital market, for financing or credit companies to raise funds through the capital market and the issuance promoted financial inclusion through AEON’s innovative lending activities. The use of innovative risk reduction tools (here, the CGIF guarantee) was useful to build confidence around new capital market products and, ultimately, cooperation among supervisory agencies and stakeholders was crucial.

9. Mr. Takayuki Araki of Aeon Credit represented the issuer’s experience with the first AMBIF bond in the Philippines. He introduced the nature and financials of the holding company in Japan and the business of Aeon Credit in the Philippines with a short video that stressed the key objectives to improve the livelihood of borrowers, ensure repayments on a manageable scale, and the use of new technologies (GPS device and Internet-of Things, or IOT approach); please also see the presentation materials for details. Mr. Araki mentioned that it had been easy to get access to bank loans for his firm, for tenors ranging from short-term to about a maximum of 3 years. However, through the AMBIF issuance, Aeon Credit now also had access to the capital market, which made for better management of assets and liabilities. The raising of funds through the issuance was smooth; some issues had to be overcome but did not become impediments.

10. For Aeon Credit, the Philippines was an attractive market. Of the overall population of about 100 million, about 60 million were aged 15 and above, and the working population represented about 40 million people. As of 2017, BSP’s Financial Inclusion Survey considered 77.4% of Filipino adults as unbanked. Aeon Credit was focusing on specific customer classifications that were considered unbanked or transacted on a cash basis only. Aeon Credit was now working with the drivers’ representative body, in effect creating a microfinance initiative. This has worked well for all stakeholders, with a non-performing loan ratio of 0%. The company was expanding the scheme to car loans and was trying to adopt the concept to personal loans. Its objective was to leverage the IOT technology to create more products that could service the market needs and achieve financial inclusion.

11. In the Q&A session, Aeon Credit was asked about its choice to use the CGIF guarantee, with the example given of Thailand, where many Japanese issuers had issued bonds

without such guarantee. Had cost savings been a deciding factor? Mr. Araki conceded that Aeon Credit's name recognition in the Philippines was not that strong (yet) and the company had not been sure enough whether this would affect the issuance plans. He described the costs incurred as reasonable, in particular to a potential funding in USD plus the associated swap costs. Maybe Aeon Credit would be able to issue a next bond on a standalone basis.

12. Mr. Rady Mok, of the Securities and Exchange Commission of Cambodia (SECC), presented the legal and regulatory framework for its market and relayed the regulatory experience with the recent AMBIF issuance, which also represented the first-ever corporate bond issuance in Cambodia. He detailed the journey since establishment of the SECC about 10 years ago, the initial blueprint for the bond market having lead to the creation of the necessary securities laws for government and corporate (non-government) bond issuances. The strategy had been updated twice since, which gave rise to the current policies and regulations. By now, all the necessary market infrastructure parties were in place. In 2018, the SECC introduced the financial advisor concept to support more and faster IPO activities. As of December 2018, the investors in the capital market had doubled. Basic market infrastructure for the future derivatives market had also been established.

13. The SECC considered the current stage of market development as the product development stage. In addition to corporate bonds, collective investment schemes and selected derivatives were targeted to be added in the capital market. In addition, the SECC had received 8 letters of intent from companies interested in listing on a new growth board on the exchange. But the focus was very much on corporate bonds. The AMBIF issuance by Hattha Kaksekar Limited (HKL) was the first corporate bond in Cambodia and was issued on the basis of specific recent regulations for debt securities. The issuance was successful, with higher proceeds than anticipated – the planned issuance of USD 20 million was upped to 30 million. In this context, the SECC had wanted to express its thanks to the ADB/ABMF team which had supported the establishment of the regulatory framework, facilitated market dialogue, introduced CGIF and conducted workshops for market participants. Mr. Mok singled out the Bond Market Guide for Cambodia, which had given stakeholders a first comprehensive view of their own market and its capabilities and other interested parties a path to understanding the Cambodian bond market.

14. The SECC had also introduced specific regulations (Prakas) for the accreditation of credit rating agencies and the accreditation of bondholder representatives, with eligible entities now taking up these roles. Potential issuers were in the pipeline and could include commercial banks, microfinance institutions and other corporate issuers, since international issuance for these entities was considered expensive. In fact, each business sector in Cambodia has a huge demand for capital. In addition, the planning for the issuance of government bonds was well under way, with the SECC having recently been appointed as secretariat by the Ministry of Economy and Finance. The next step would be to review and revise the law on government securities and prepare the necessary regulations.

15. Mr. Mok concluded by reviewing the tax incentives, which had been extended in a new sub-decree in January 2019. The sub-decree distinguished between incentives affecting the tax on income for listed companies, and those for public investors. A qualifying issuer will be eligible for a 50% reduction of its annual Tax on Income (TOI) liability for three years commencing at the beginning of the first tax year that the approval was given if the securities were issued before 30 June of that year; if the securities were issued after 30 June and before 31 December the TOI reduction would take effect from the following year.

16. For qualifying companies listing their stock or debt securities on the CSX Main Board, a historical tax liability waiver can extend up to 10 years from the date the entity meets the requirements for listing on the Main Board. The initial two historical years, from the date of listing, will still be subject to tax re-assessment by the General Department of Taxation. For SMEs that qualify to list on the CSX Growth Board, the historical tax liability waiver also extends to 10 years. The first two historical years remain subject to tax re-assessment by the General Department of Taxation. Public investors, whether resident or non-resident are entitled to a 50% reduction of the withholding tax that would be applicable on the payment of interest or distribution of dividends received by them from holding or trading in government securities, equities or debt securities. This reduction is effective for three years from the effective date of the sub-decree.

17. Mr. Seng Chan Thoeun, of SBI Royal Securities, updated the audience on the state of the capital market and provided the underwriter's perspective on the first AMBIF issuance in Cambodia. The Cambodian capital market had a small market capitalisation, with only 5 equity listings and now one listed bond. With the market that small, liquidity was an issue for investors. However, bonds could rapidly increase the size of the capital market. 2018 already saw an increase in investors of more than 40% despite no new IPOs, and the trading volume (in equities) also doubled in 2018. Bank loans still represented the main role in financing. It is hoped that the launch of the corporate bond market in Cambodia in2018 will bring a new approach to both financing and investment. Bonds may be issued in Cambodian riel (KHR) and in US dollars.

18. SBI Royal Securities started working on the AMBIF issuance with ADB and CGIF from early 2018; CGIF may only fully commit depending on the issuance currency. The HKL bond was issued on 14 November 2018 to Qualified Investors only, which is the professional investor concept in Cambodia; the bond was subsequently listed on the Cambodia Securities Exchange. It has a 3-year tenor, intended to test the market, and was fully subscribed by banks and insurance companies, with the International Finance Corporation as the key investor. The SSF and a short version of the bond prospectus required by regulations were used as disclosure documents, with the draft AMBIF Implementation Guidelines for Cambodia used as guidance. Mr. Thoeun described the practical difficulty in determining the interest rate, in the absence of a government bond market, and the careful approach to setting the eventual rate knowing that this rate could become a future benchmark.

19. Mr. Thoeun also described a number of issues and challenges in achieving the first issuance. The initial challenge had been the necessary interpretation of regulations since not all circumstances for typical debt securities issuance had been described in the existing regulations. Some of the resulting outcomes will also be reflected in the Implementation Guidelines. As underwriter, SBI Royal worked closely with all stakeholders to achieve agreement or consent on the necessary actions. The entire preparation process took 1 year, with the approval from the NBC taking 6 months. Further challenges were the small investor pool as well as the focus of corporates and investors on USD; it has proven to be hard to offer instruments issued in KHR.

20. Mr. Thoeun stressed that SBI Royal continued to be optimistic about the capital market development, also given the positive economic outlook. The tax incentives for issuers mentioned by the SECC could be used to offset potentially higher coupons than for a bank loan. At the same time, there continue to be a number of challenges. While the FX rate had been stable, a typical investor question was for how long. In addition, Cambodia featured 36 commercial banks, which have seen a more than 25% annual loan growth over the past 5 years. Microfinance was growing at a rate of 40% per annum, which also helped lead to a gap between deposit and loan balances. The issuance of corporate bonds could help address that gap. One remaining key issue was that issuers continued to need USD, since most companies' balance sheets were in USD. This posed a challenge for CGIF participation, since CGIF was only able to support local currency issuance. Similarly, it was difficult to collect KHR proceeds within a reasonable timeframe. Other challenges included the need for custodians and the absence of a swap market. Mr. Satoru Yamadera, of ADB, added that CGIF was one potential avenue to support bond issuance in the region. Activities under the ABMI, such as ABMF and CGIF, were increasingly connected, and ADB/ADB Secretariat of ABMF was fully committed to support further bond market issuances in Cambodia.

21. Among the next steps for the Cambodian bond market were the introduction of a hybrid KHR and USD issuance, with the structure to be approved by NBC, the education of issuers on the ability to tap the capital market for funding, the need to enlarge the investor pool and the continued dialogue with foreign investors to address their typical concerns. Issuances to the latter would benefit from a guarantee from CGIF to mitigate any perception issues about the market. However, a number of issuers had expressed their interest in issuing bonds – one key objective would be to add a few bond issuances in the market to fine tune the issuance process and offer more investor choices.

22. In the Q&A session, members asked about details on the tax incentives in Cambodia: 3 years of concessionary rates (50%) on profit tax for the issuer (first issue only) and income tax or withholding tax for the investor, for an effective tax rate of 7%. A tax amnesty was available as well, with the tax office being able to go back up to 10 years. The tax incentives approved in January 2019 were also accessible for the bond issued in November 2018 under a clause supporting recent issuances/listings. A capital gains tax did not apply in Cambodia. Other members highlighted the significance of benchmarks for price

formation in the bond market or capital market in general. With the EU benchmarking regulations coming into effect in 2020, the regional markets would need to know how to comply to ensure continued investment by EU-based institutions in their markets. Mr. Yamadera added that benchmarking developments would be one of the topics at the next ABMF Meeting.

23. **Update of CGIF guarantee operations** (CGIF): Mr. Kiyoshi Nishimura mentioned that CGIF fell under the remit of ABMI Task Force 1, which is focused on promoting bond issuance in the region. CGIF has an ASEAN focus and supported the issuance of debt securities in local currencies. CGIF has its own board and management and, although located in the same building as ADB, was operationally separate from ADB. By May 2019, CGIF would have a paid-in capital of USD 1 billion, as part of a gradual increase of the paid-in capital to an agreed USD 1.2 billion. CGIF was rated AA by Standard & Poor's (S&P), also reflecting the separation from ADB. On a regional credit rating scale, CGIF was rated AAA by RAM and other domestic rating agencies in ASEAN. The domestic ratings continue to be of importance, since the CGIF-supported issuances are in those domestic markets. As of the end of 2018, CGIF had guaranteed 28 bond issuances by 19 issuers, for a total of USD 1.4 billion, and featured a healthy pipeline, with 2 bonds amounting to USD 170 million scheduled to be issued in January 2019 alone; namely, a THB issuance for MM Company and a VND denominated bond issued on this very day.

24. Issuers so far represented 8 regional economies, including the People's Republic of China. Of the 10 economies in ASEAN, only 6 were considered to have a functioning bond market; CGIF had supported issuances in 5 of those markets. In Viet Nam alone, CGIF supported issuances represented 15% of the approximately USD 3 billion issuance size. Continued efforts focused on kick-starting LCY corporate bond markets in frontier markets like Cambodia, Lao PDR and Myanmar. CGIF was presently looking at opportunities in Cambodia, but also reviewing options in Brunei Darussalam, Lao PDR and Myanmar. Among its business focus were 3 groupings of markets: the ASEAN6 as the primary focus area, the BCLM markets as an increasing focus as their markets developed, and the +3 markets in ASEAN+3, which were not a priority but may be considered as well.

25. A CGIF guarantee was available to first time issuers or to extend the bond tenor; two-thirds of issuances so far were first-time issuances. CGIF was now supporting AMBIF cross-border issuances, though AMBIF as an issuance concept was not yet that well known in the region. If possible, CGIF would like to prioritise AMBIF issuances more. CGIF was also open to support introducing new debt instrument types to markets, such as project bonds or green bonds. Among its pipeline deals, CGIF now had renewables. Another goal was to broaden the existing investor base, e.g. to introduce Japanese investors to invest in the Indonesian bond market. Mr. Ito added here that CGIF could be a good deal-supporting tool when discussing potential AMBIF issuances in participating markets.

26. During Q&A time, members enquired on the purpose and merits of a partial guarantee. Mr. Nishimura explained that this was not common in ASEAN markets, and issuers may need a

full guarantee instead. However, CGIF could support partial guarantees in Thailand and the Philippines, in particular if the bond investors would already know the issuer well. In addition, the provision of a partial guarantee may depend on the rating methodology – for example, S&P did not recognise partial guarantees in their rating process. At the same time, the fee for a partial guarantee was commensurate with the actual guarantee amount.

27. **Country study update** (Nomura Institute of Research, as TACT consultant): Mr. Kengo Mizuno explained that NRI had been engaged by ABMI and the ASEAN Financial Technical Assistance Fund of Japan under the TACT arrangement, to support market development efforts in Cambodia, Indonesia, Lao PDR and Viet Nam, also referred to as the CILV markets. These markets shared some common characteristics, such as the absence of a formal professional placement scheme and a mandatory trade repository, and the need for a mandatory listing of debt securities issued via a public offering. Markets also did not prescribe the mandatory deposit of privately placed debt securities into the CSD. In contrast, most other ASEAN markets had a mandatory trade repository as well as a bond info center in place.

28. According to Mr. Mizuno, commercial banks were also unable to underwrite corporate bonds in the CILV markets, removing a typical significant market participant from some bond market activities. In contrast, in Thailand, commercial banks dominated the underwriting of bond issuances. Thailand was also used as an example of a market where most bonds were issued as private placements, and where as good as 100% of bonds were traded in the OTC market.

29. For Cambodia, Mr. Mizuno noted that the current regulations necessitated a review by the SECC and no profile listing was possible so far. Based on the feedback from the TACT team, the SECC will send a formal response. For Indonesia, ADB was working with OJK on the professional issuance concept. In the Lao PDR, potential issuers needed shareholder approval for each issuance and no credit rating capabilities existed. In effect, a guarantor was required to achieve a bond issuance. Viet Nam was facing a change in the legal and regulatory framework, featured a high level of non-regulated private placements which were not listed and, hence, not visible; other bonds were listed but not traded on the exchange. The market needed a formal professional placement concept and while banks were principally allowed to underwrite under securities market regulations, the banking law did not state such, which resulted in no underwriting activity by banks in the market. Mr. Mizuno also outlined the proposed remedial measures that had been put forward to the policy bodies and regulatory authorities for each of the CILV markets.

30. During the Q&A session, participants offered a number of corrections to the information presented, including the existence of the CTP platform in Indonesia as a mandatory trade capture mechanism, even for OTC trades, and the change in April 2018 from the PP-AI to the PP-II issuance concept referenced for the case of Thailand.

31. **ASEAN+3 Bond Market Guides Update** (ADB Secretariat): Prof. Shigehito Inukai and Mr. Matthias Schmidt, ADB consultants, updated members and participants on the progress of

the Bond Market Guides (BMGs) and gave an overview of the highlights from the work on the draft PR China bond market working papers. Most recently published (on 12 October 2018) was the Viet Nam BMG, now available from the ADB and AsianBondsOnline websites, as part of the 13 BMGs already published. The 2 draft working papers for the China bond market were being finalised, and had been circulated to members prior to the meeting, just for reference. The objective was to largely finalise the documents by March 2019 (tentatively), followed by a substantive review by the respective market stakeholders. ADB Secretariat was also supporting the creation of a Mongolia BMG.

32. In addition, the information contained in the AMBIF Implementation Guidelines for existing and newly participating markets should be normalised against the information collected in the recent BMGs. The proposed updating of some of the BMGs published since 2016 would also lead to a corresponding revision of the Implementation Guidelines, to ensure that the information across ABMF output documents remained in sync. Triggers for such an update could be significant changes to market features or the legal or regulatory framework, but also the learnings from AMBIF issuances. Potential updates were considered for Hong Kong, the Lao PDR and the Philippines, as well as for Thailand and even for Viet Nam, if potential significant legal and regulatory changes would occur. An update would also bring the older BMG versions in line with the latest ADB style as an ADB flagship publication series. In any case, the current BMG template allowed for a quick turnaround for changes.

33. Prof. Inukai welcomed the colleagues from the Shenzhen Stock Exchange, who attended the ABMF Meeting for the first time, and explained some of the highlights from the working papers on the China bond market – two working papers were necessary to reflect the distinct nature, features, size and regulations of the Inter-Bank Bond Market (CIBM) and the exchange bond market. However, both markets shared some recent characteristics: foreign issuers and investors were able to participate in both markets, which had also become more institutionalised in recent years; and both markets had introduced professional investor concepts in recent years which, in-principle, could allow a participation of both markets in AMBIF. At the same time, the focus of each market differed: the diversity of the debt financing instruments issued in the CIBM included many short and shorter type instruments and required separate depositories with distinct services for these offerings; in contrast, the exchange bond market was made up of mostly corporate bond issuances across a number of debt securities types.

34. Prof. Inukai provided an overview of the institutions and salient features of each market segment. In 2017, two-thirds of the issuances in the CIBM came from the public sector. The exchange bond market was very much private sector oriented (only 3.8% were public sector issuances). Common to both markets, though, and as was the case for the China capital market in general, was the increased opening of all market segments, a development that cannot be turned back. In fact, the bond market segments developed from a framework with inherent limitations to a framework with a focus on enabling investment at the discretion of foreign investors.

35. At the same time, CIBM and exchange bond market introduced different issuance types: in the CIBM, public offers were complemented by 2 types of non-public offers for different investor types; in the exchange bond market, issuers can issue via public offers to all investors or only to Qualified Investors if certain issuance conditions cannot be met; in addition, non-public offers to only Qualified Investors were possible. Foreign issuers were able to issue Panda bonds across these issuance types in both the CIBM and exchange bond market; however, the use of English documentation and disclosure may still be difficult. When comparing the current market features for CIBM and exchange bond market to the AMBIF Elements, already 5 of the 6 Elements were in place in both markets. Prof. Inukai pointed to the selection of market statistics circulated in the presentation materials and concluded that a continuous dialogue with regulatory authorities and market stakeholders was necessary and expressed his hope that an AMBIF Panda bond was not too far off.

36. **Asian Bonds Monitor Update** (ABO team): Dr. Donghyun Park gave an overview of the economic developments having an impact on emerging East Asia economies. A common factor was that the US and EU tightened their monetary policy in the last quarter of 2018, with the ECB discontinuing its quantitative easing after December 2018. The US was expected to raise interest rates twice more – market consensus saw these hikes before September 2019 - before the rate would stabilize, also as a result of the expected lower growth of the US economy, from 2.9% in 2018 to 1.8% for 2019, as projected by the IMF. This will be a relief for emerging markets. Currency and equity markets strengthened, government bond yields generally fell, as a result of the limited rate-rise expectations, foreign inflows into emerging East Asia increased and the holdings by foreign investors rose in most markets.

37. The outstanding amount in local currency bond markets in the region stood at USD 12.8 trillion as of the end of September 2018, and was expected to continue to grow. The PR China remained the largest LCY bond market, followed by Korea. The PR China also saw the largest issuance of LCY bonds in the review period (Q3 over Q2 of 2018), accounting for 63.6% of all issuances. Dr. Park explained that the upside risk for the region was significant, since the US economy was slowing. However, downside risks remained, such as through global trade tensions, which may have contagious effects from developments outside the region, and the risk of a sharper than expected slowdown of global growth.

38. As part of the ongoing revamp of AsianBondsOnline (ABO), the team had introduced a new knowledge product in October 2018, the Monthly Debt Roundup, which contained additional data including that on foreign capital flows for selected economies. Dr. Park also pointed out that the Viet Nam Bond Market Guide was recently published and was available from the Publications and Events section of the ABO website. The improvements to the website and data offerings was an ongoing process and, hence, another user survey was published to gain feedback on further improvements to the website and data offerings. Future plans included an increase in data frequency, and extension of the selectable data period, more types of data (including inflation) and to provide more granular information for

some indicators. Some of these proposed features required cooperation from the relevant government agencies in providing the necessary raw data for each economy. Ultimately, ABO was aiming to become the ABMI information platform and provide information and updates on ABMI and other Task Forces as well.

39. The ABO team also conducted a study on why there was less turbulence in emerging foreign exchange markets in 2018. The Indian rupee and the Indonesian rupiah depreciated somewhat, but not as strongly as the currencies of Argentina and Turkey. However, since Q4 of 2018, emerging market currencies had stabilized and some had even appreciated; this was true for both the markets overall but also for individual, more vulnerable economies. Underlying reasons were identified in country-specific policies as well as the projected slowdown of US interest rate hikes. However, Dr. Park emphasised that the emerging markets were not entirely out of the danger zone just yet.

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

40. **Recap of account structure study and taxation** (ADB Secretariat, NTT Data): Mr. Satoru Yamadera gave an introduction to the topic: KYC was a tedious task and was closely linked with anti-money laundering efforts – the objective for both were the same (identify the correct party) but the actual processes differed from country to country. For tax-related information, ADB Secretariat needed to compare the processes in the individual markets, then can recommend potential solutions. ADB Secretariat would not just be looking at efficiency but also would want to harmonise the processes and increase the transparency in the processes for all stakeholders. While the intention was to expand the study to include all ASAN+3 markets, resources were limited, so the focus had been on those markets for which most of the complaints or feedback had been received.

41. Using the same slides as the ones presented at the previous ABMF Meeting in Jakarta, Mr. Shinya Kim reiterated that the key points included the need for costs for KYC and tax-related information processing to be reduced and for the processes to be simplified. As it turned, out, each market had different tax withholding process and actors, such as the withholding agent. The differences in the processes across markets alone provided opportunities for normalisation. Mr. Yamadera added that ADB Secretariat understood from the many market visits that individual custodians or other intermediaries and institutions involved in the processes may have different requirements, including the need to observe the relevant prescriptions for these processes in their home jurisdictions. However, ADB Secretariat would like to take a shot at harmonisation of the processes, and Mr. Yamadera welcomed the participation from members for this exercise.

42. **Update on the New Registry of Scripless Securities (NRoSS) in the Philippines** (Bureau of the Treasury, BTr): Mr. Erwin Sta. Ana, Deputy Treasurer of the Philippines, shared with the audience the experience of the BTr in modernizing some of the critical market infrastructure in the Philippines. BTr was responsible for housing the registry of government securities and acted as the fiscal agent of the Philippine government – a task

taken over from the BSP in the mid 1990s. The BTr had previously transitioned from physical certificates to digital records.

43. The BTr had originally used 2 systems, the Automated Debt Auction Processing System (ADAPS) and the Registry of Scripless Securities (RoSS), which had been in operation for close to 20 years and were becoming obsolete. The objectives for a system change had included to modernize the auction platform and strengthen risk management; meet existing and future liability management programs and capital market development initiatives conducted by the BTr; conform to best practices and international standards, including those set by CPSS-IOSCO and the BIS, and ISO20022; and consolidate auction and registry information for data mining and analytics to support policy-making. BTr had been exposed to these practices and international standards through the participation in ABMF.

44. After the transition, market making activities and auctions are conducted in NRoSS, and a number of previously heavily manual processes across primary and secondary market operations had been automated. Corporate action processing became possible within the system, including functions for early redemption. Mr. Sta. Ana took the audience through a build-up system diagram to explain the processing environment and its interfaces, and explained the salient changes in system features from the original systems to NRoSS. Participants now had direct access to certain functionality, such as participant-generated reports and a consolidated accounts and positions view and the tax position, since NRoSS can now do tax tracking, which was previously performed by PDTC. Payment automation had been achieved, since NRoSS was now connected to PhilPass, as well as to PDEx.

45. In NRoSS, participants may view their own accounts or client accounts, which are kept on an omnibus or a sponsored (by individual client) basis. However, not every participant is able to sponsor clients and keep segregated accounts. This account structure was important relative to the tax status of the investors. A department order, issued in 2014 and implemented in 2015, allowed transfers of government securities between taxable and tax-exempt institutions, using a reimbursement concept on coupon payment days. BTr's advice to non-resident TEIs is to open a tax-exempt account with an onshore intermediary to ensure tax exemption; to open such accounts, certain documents would need to be provided by the TEI, which Mr. Sta. Ana detailed in his slides. He closed by showing how the flow of trading and settlement of government securities had evolved from the original RoSS through the 2 phases of NRoSS implementation.

46. In Q&A time, Mr. Sta. Ana was asked whether there was a plan to consolidate all holdings of an investor into a single account, regardless of intermediary; he confirmed that BTr had thought about this as a possible objective but found it difficult to implement due to the lack of a mandated national ID; this also meant that a single investor ID was difficult to prescribe. Mr. Yamadera added here that ABMF was hoping to advocate a harmonisation of account and investor identification concepts across the region; members felt that a single investor identification did not necessarily require a unique national ID. Members also asked whether the tax-tracking in NRoSS existed for the purpose of facilitating the mentioned

reimbursements between account holders or for general tracking of tax obligations. Mr. Sta. Ana confirmed that the functionality was implemented to support the reimbursement mechanism. This meant, however, that a financial institution had to open sub-accounts in NRoSS to avail themselves and their clients of this functionality.

47. **Progress and update on standardization in the Philippines** (NMPG Philippines): Ms. Cornelia Dagdag presented the National Market Practice Group (NMPG), which was established in November 2016 to facilitate and harmonise best practices and their implementation in the Philippines. The NMPG had established 3 working groups to handle the identified industry challenges, on clearing and settlement, corporate actions and open connectivity. Following a number of meetings of the working groups (WG), the NMPG now needed to reassess the current status and the necessary next steps. Membership in the NMPG was voluntary and included the regulatory authorities, ADB and SWIFT; the BTr had joined as of 2019.

48. The working groups had set out to review the domestic landscape and review available standards versus the current practices in the Philippines, and would then formulate possible improvements and enhancement lists. One key objective was to allow for practices that had no reflection in global standards. The corporate action WG identified 5 corporate actions and found that, for example, cash dividend processing was very much aligned with global practices; other corporate actions did not show quite the same alignment. The clearing and settlement WG had reviewed the typical clearing and settlement processes and identified a number of improvements. It also reviewed possible considerations for the shortening of the settlement cycle.

49. Ms. Theresa Ravalo, of PDS Group, elaborated on the parallel creation of a task force (TF) for the implementation of ISO20022 in the Philippines, with a focus on the payments space. The TF was trying to address all types of payments and was established in conjunction with the upcoming replacement of PhilPass, and included representation from the BSP, the Bankers Association of the Philippines and other market organisations, as well as representatives from third-party payment system providers. The TF was tasked to create an ISO20022 implementation road map, to establish ISO 20022 Payments Market Practice Guidelines and Rulebook and monitor the compliance of the financial community thereafter, to liaise with SWIFT as the standard setting body, be the medium for stakeholder engagement and carry out any related activities to support its mandate. The TF had set out to collect and study all payment message schema used by the industry and analyze their inclusion in the list of Philippine ISO20022-compliant messages. BSP had just announced (in Jan 2019) its adoption of ISO20022 for the upcoming replacement of PhilPass and Ms. Ravalo showed the agreed timeline for the next steps, with a target implementation by the end of 2020, or early in 2021.

50. Ms. Cindy Foo from SWIFT added that the next step for the NMPG was to publish the Philippine standards, which would reflect the requirements of its member institutions and the market at large. Mr. Masayuki Tagai, in his capacity as vice-convener of the Technical

Committee 68 (TC68), also added that payments went beyond what financial institutions conducted via SWIFT. He pointed to a real-time payments group which will also publish their requirements soon and proposed to contact the NPMG with regards to how real-time payment practices could work with ISO20022 and its messaging.

51. **Progress and update on standardization in the region** (SWIFT): Ms. Foo explained the latest developments for ISO20022 at SWIFT, following the completion of the ISO20022 migration study. In September 2018, the SWIFT Board had taken the decision to facilitate the industry migration to ISO20022 for cross-border payments and cash management. With that decision, ISO20022 will become the baseline for high-value payment systems and developments. The transition will commence in November 2021 and SWIFT will provide a service to translate between MT messages and ISO20022 messages for the planned 4 years of co-existence of both message concepts, after which the adoption of ISO20022 messages will become mandatory. For securities messages, participants may opt into ISO20022, with no end date set for the MT5-Series messages. In contrast, in the trade finance space, no particular appetite was detected for a migration to ISO20022.

52. Ms. Foo relayed the highlights from the SWIFT report issued in December 2018. Focus of any migration would be the coexistence and translation approach. During the coexistence phases, messages would be transmitted using the native network service for each message standard. SWIFT had established the working group Cross-Border Payments and Reporting Plus (CBPR+) which was to devise market practice guidelines which will govern all ISO20022 messages for cross-border payments and cash management. All users would be automatically enrolled for the translation service during the coexistence period; the receiver of a message would be responsible for the translation. The use of the translation service will be free of charge initially, but may attract fees the closer the transition period gets to completion, to provide an incentive for users to migrate.

53. During the coexistence period, end-to-end payment messages may use any combination of the two standards; to ensure identification of end-to-end payments, a so-called 'Unique End-to-End Transaction Reference' (UETR) will be included in the message and the message tracked by SWIFT. Other shared services, such as Financial Crime Compliance (FCC) and Business Intelligence products will be adopted to work with either message concept by the start of the coexistence period. FCC Sanctions Screening for ISO 20022 will be offered to users with MT-based back-office systems to ensure that received messages can be fully screened before processing, since the nature of ISO20022 was richer than that of the MT messages.

54. Ms. Foo also informed the audience on the ASEAN ISO20022 baseline developments for high-value payments, intended to support the ASEAN 2025 Vision to harmonise the messaging standards in the ASEAN economies. The intention was to leverage HVPS+, the ISO20022 global best practice for high-value payments for this exercise. Two messages had been selected and 6 markets participated in providing their practices. SWIFT experts had reviewed the domestic practices versus HVPS+ and provided their feedback, which

was shared in consultations with the market parties in January 2019. The next step was to publish the ASAN 20022 baseline on SWIFT's MyStandards tool, so that all parties had a formal and practical reference framework when developing or utilising high-value payment messages in or for ASEAN. Among the preliminary results of the gap analysis had been the realisation that AML/CFT regulations required a mandatory inclusion of specific data elements, compared to HVPS+. The purpose of the payment was also a mandatory field in some markets. The currency denomination would have to be extended from the current 14 digits to serve all ASEAN currencies, and the inclusion of data elements in local language may be required.

55. Among the proposed next steps was a high-level analysis for the remaining economies and upon completion, uploading the ASEAN baseline to MyStandards and to compare the baseline with other standards covering similar transactions, including those proposed by CSIF. Subsequently, the review should be extended to non-core messages. Ultimately, SWIFT hoped to publish a baseline for the use by all central banks, for their use when aligning their own infrastructure with ISO20022.

56. Members enquired whether the baseline would be free to use and available to the public. Ms. Foo will feedback this interest; SWIFT welcomed the participation from other standard bodies and would also want to consider doing a baseline initiative for the securities space. Members remarked that almost all members of HVPS+ were from the US and Europe and that a greater representation from Asia was desired. It was important that Asian parties sat at the table when the important decisions were made and standard guidelines determined. In fact, Asia was cutting edge, in particular when it came to real-time payments. Hence, members questioned whether the region needed a group of experts, maybe under the RMG, and were happy to discuss this subject further. Mr. Yamadera concluded that Asia was ahead in payments but also enjoyed nearly the same time zone across most markets. However, cross-border payments were largely conducted through the correspondent banking model and consisted mostly of wholesale transactions. He identified a link to the cross-border collateral discussion in ABMF and suggested that ABMF start its own discussion how a meaningful connection and contribution to this subject may be made.

57. **Working Group on Cross-Border Collateral and Repo** (WG-CBCR, ADB Secretariat and other presenters): Mr. Yamadera recapped for the audience that ABMF had conducted a study in 2016 to assess the cross-border collateral landscape in ASEAN+3, which had pointed to the dominance of USD collateral, either as Treasury bonds or cash. Collateral needs were increasing and the associated costs were going up as well. ABMF was looking for opportunities in the region to help unlock collateral assets. The presentation in this section were intended to offer a review of past findings and some recent developments in cross-border collateral.

58. Mr. Daisuke Yashi, of NTT Data System Technologies, explained the background of the establishment of the WG-CBCR and went through the findings of the 2016 study in detail once more. He emphasised that many initiatives were carried out after the Asian crisis to

increase issuance and have more debt securities available. In addition, the Lehman Brothers collapse resulted in a shift from uncollateralized to collateralized transactions. Suddenly, the demand for collateral for cross-border transactions had increased dramatically. Asia was also facing an increased demand for collateral assets and regional cross-border collateral would need to be considered once the Qualified ASEAN Bank (QAB) concept was implemented. With LCY bond issuance steadily increasing in ASEAN+3, the basic premise for the study had been whether one could increase the utilisation of this increasing issuance volume for cross-border collateral purposes.

59. Mr. Yashi relayed the typical occurrence of transactions with collateral needs such as repo and reverse repo as part of monetary (open market) operations of a central bank to control liquidity or between financial institutions for funding purposes. Cross-border transactions expanded these needs by pledging collateral in a market other than that of the investment. The study had collected information from WG and ABMF members and carried out interviews with selected financial institutions active in collateral businesses. The findings revealed that transactions involving collateral were not necessarily easily visible to the market at large, tended to be counterparty to counterparty instead. Differences in the legal arrangements prevalent between the GMRA (Global Master Repo Agreement) annexes and, specifically, its CSA (Credit Support Annex) and some domestic markets were also identified as impediments for an acceptance of standard practices. And, while USD assets and USD-based institutions dominated the supply of collateral, potential LCY transactions within Asia appeared to have been observed by the market.

60. The lack of visibility of cross-border collateral transactions was attributed to the limited number of such trades in the region, the dominance of transactions involving USD or US Treasuries which would be booked outside the region, but also the difficulty to effectively identify a trade as a repo transaction versus a straight buy or sell trade. Market intermediaries often did not capture the necessary connections, as underlying assets and collateral tended to be settled separately. As a result, it had been difficult to capture a true state of the market. The legal discrepancies existed even for English law jurisdictions, such as Malaysia and Singapore. However, the study team suspected that perceptions or a lack of or limited confidence about regional legal frameworks and market practices drove the lack of interest. Recommended changes to domestic laws, if so necessary, may also not be easy to achieve. At the same time, JGBs were now able to be used as collateral in Europe, after the BOJ extended its BOJ-Net operating hours and market participants amended their CSA.

61. As a result of the issues observed, market participants may have psychological barriers to use cross-border collateral because they are unable to assess what they are or are not able to do, with whom, and where. Among the observed transactions in the region, other than in or versus USD, examples included arrangements between the BOJ and BOT as a standby-facility in the event of, e.g., natural disasters, and the conduct of repo transactions between financial institutions in Malaysia and Singapore, using domestic arrangements between firms that had a presence in both markets. Among the proposed cross-border

collateral transaction agreements were these two practices, as well as tri-party arrangements or via the proposed CSD-RTGS linkage. The connection between central banks existed but should also extend beyond cases of emergency, as was the practice in Europe, for example. The model proposed by the CSD-RTGS linkage provided tru DVP and, hence, featured a very low settlement and counterparty risk compared to the other models, other than between central banks. Mr. Yashi concluded that more research was necessary to identify potential demand for Asian assets as collateral, to find potential service providers and identify the actual legal issues and other impediments to cross-border collateral transactions.

62. Dr. Gongpil Choi, of the Korea Institute of Finance and Director of the Asian Prime Collateral Forum, looked at the macro aspects of the use of collateral. According to him, the US had dominated the legacy system and practices, which were driven by USD assets held predominately by banks. However, some complacency had sent in and now, market participants were experiencing legacy system-related issues, which also tested the limits of the FIAT trust (i.e. in a currency by decree, one that is not backed by a commodity). Collateral tended to follow the IMF definition that used the term 'safe assets' and which inferred strict requirements, in particular for prudential collateral takers. Asia as a region did not have much current supply of safe assets, also as a result of the disparity between the pledgeability and the credit rating of high quality assets. Asia needed to catch-up and close this gap. Dr. Choi highlighted the use of Italian bonds as acceptable collateral, as a result of Italy being within the EU framework, and despite the better credit rating of Asian government bonds. Yet, Asian bonds were not pledgeable as collateral.

63. Dr. Choi pointed out that the collateral supply was generally lower than collateral demand – this conundrum had to be addressed to achieve efficiency of capital allocation. Already, signs of stresses were visible. Yet, while the US was running a large deficit, its collateral was still preferred across markets. In turn, Asia had a role to play, as it sat on a huge supply of potential safe assets. Market participants had tried to increase hypothecation with much effort and technical support that had, however, not achieved a real impact. Dr. Choi emphasised that it was imperative to improve cross-border pledgeability. In Asia existed a polarization of the pledgeable assets between JGBs and all other instruments. The eligibility of pledgeable Asian collateral was also affected by different tax treatment and legal differences. He advocated that such practices needed to be harmonised. The Asian Prime Collateral Forum (APCF) had been studying cross-border collateral for years, and was attempting to figure out ways to improve the gap between eligibility and pledgeability of Asian collateral in relation to USD collateral. The APCF was trying to create new flows while avoiding additional stresses to the financial system.

64. Mr. Eric Chng, of The Bank of New York Mellon, updated the audience on the development of the APAC Hub collateral platform, which had a tri-party focus. The BNY Mellon team had started by studying ABO data and information collected by ADB, and had quickly found a lack of fungeability of collateral across markets, then concentrated on how to improve that. This also tied with the expressed objectives of ADB, ABMF and ABMI. APAC Hub will be

supported by intra-regional banks, for which developing a liquid cross-border market would also support the domestic markets. Key among the required features was price discovery. Looking at the past 10 years of data, capital formation had been uneven among the markets, effectively occurring in blocs. PR China had been a capital exporter and such outflow from the (ASEAN)+3 economies could be utilised as capital in ASEAN. Under this premise, APAC Hub was looking to create opportunities for regional banks and other financial institutions.

65. The development within BNY Mellon was first targeting clients that were already trading on its tri-party platform. APAC Hub represented the idea of a platform within the tri-party product that created exposure to Asian assets. While USD was ok in principle, its issue lay in the transferability of the underlying USD assets, typically in a different time zone. Market participants also wanted to exchange collateral in a safe and controlled environment. APAC Hub allowed domestic collateral in the Asian markets to be transferred into tradeable collateral through the use of trust receipts. These receipts were, effectively, backed by domestic assets. Once exchanged, it just came down to trading and settling the trust receipts, the underlying assets did not move any further. In addition, the market forced to value collateral in the interest of transparency, which incorporated the market-driven value determination and regulatory supervision, or that by a market SRO.

66. Mr. Chng also related the progress with APAC Hub: the system was in place now, with legal opinions being taken on the proposed markets and regulatory checks being completed. Simulation trades were already being conducted with selected counterparties, while more test participants and pilot trades in individual markets were sought. A recent BNY Mellon reorganization had led to resource constraints to conclude all the preparations and high recent volatility on the equity and FX markets had also taken attention elsewhere. Mr. Chng assured ABMF Members and participants that APAC Hub was available for testing and was looking for test trades to check its functionality. BNY Mellon stood ready to support further debt securities issuance and the effective use of issued bonds. He concluded by thanking ADB Secretariat and ABMF members and participants who supported these developments.

67. Mr. Fei Tao, of the CCDC Collateral Management Service, provided an overview of the China Inter-Bank Bond Market (CIBM), including a timeline of significant market developments. At the end of 2018, 769 accounts were held by foreign institutional investors (FII) in the CIBM, a 25% increase of 2017. Among the FII, central banks were the largest investor group, with a share of about 80%. The accession of the Chinese renminbi (RMB) into the Special Drawing Rights (SDR) had resulted in many investors wanting exposure to RMB assets. FII invested mostly in Chinese government bonds (73%) as well as policy bank bonds (24%). Total FII holdings stood at about RMB 1.5 trillion as at the end of 2018.

68. Mr. Tao then explained the application of collateral since inception of the CCDC collateral management system in 2011. CCDC had built its own system, taking into account market conditions and international practices. CCDC had built a dedicated collateral management

center in Shanghai in 2016. As of 2018, the collateral under management at CCDC amounted to RMB 13.9 trillion, which had evolved from an original RMB 3.1 trillion in 2013; only 18% of the collateral assets were bonds. The CCDC service extended to about 6,000 institutions, and supported transactions in the CIBM, derivatives and FX markets, as well as the bullion market. PBOC used the collateral management platform to support its monetary operations.

69. Mr. Tao also explained that an increase in cross-border transactions had led to a solid demand for collateral services, also supported by feedback from foreign investors. The focus here was for market participants to explore the use of RMB bonds as collateral. According to Mr. Tao, more than RMB 10 billion of bonds had been pledged as collateral to support cross-border business. He also referred to innovations in the use of collateral, e.g. in the support for green covered bonds issued offshore by PRC-based companies, for example in the London market. Here, CCDC acted as collateral hub and agency. As a result, the achievable credit rating for this type of bond may be higher than the rating of the issuer, as a result of the covered structure using collateral. Another use case was the pledging of collateral by domestic banks in return for overseas loans in foreign currency. CCDC also supported collateral use for currency swap transactions.

70. CCDC was conducting the use of RMB bonds in support of cross-border business with many partners, including CSDs and ICSDs, as well as international financial institutions. PBOC had officially announced the start of tri-party repo transactions in October 2018, with CCDC as the tri-party facilitator. CCDC was also working on the inclusion of further instruments and to enhance its system functionality. CCDC had also assumed the role to support collateral disposition in cases where the debtor (issuer or collateral giver) was unable to fulfill its obligations. Here, the difference between the transactions with pledged collateral, as practiced in the PR China, and transfer-of-title transactions became significant. In the CIBM, upon the default of a debtor, the creditor(s) could negotiate to utilise pledged assets before general bankruptcy or insolvency proceedings. If negotiations proved unsuccessful, the disposal of the pledged assets could be facilitated by CCDC, via a sale by auction. Mr. Tao concluded that CCDC was also looking into the reuse of collateral to maximize available assets.

71. Upon enquiries from participants in the Q&A session on collateral subjects, Dr. Choi confirmed the top-down, strictly hierarchical structure of the collateral business and expressed his concerns for something to go wrong and topple the current structure. The collateral supply was firmly in the hands of the government, since sovereign bonds were typically the only acceptable safe assets. However, governments were focused on printing currency instead of opting for making available already issued instruments for use as collateral.

72. Participants also learned that CCDC was using its own repo agreement, not the GMRA widely accepted as standard. Due to the still limited scale of cross-border transactions and only specific transactions, the need for the use of an international standard had not yet

been so pressing. The Thailand experience was shared to explain some of the typical issues, including tax and the need to adopt the GMRA to domestic parties. CCDC's collateral support for FX swaps was presently limited to RMB bonds as well as USD and selected African currencies; no Asian banks had so far participated. The increased interest by foreign investors in RMB bonds had been assessed in a survey in October 2018 and CCDC would not be able to tell whether such interest existed before the RMB's inclusion in the SDR due to the timing of the survey. Mr. Yamadera concluded the session with the hope that ABMF – as a public/private sector forum and once more research had been conducted – could pull prudential regulators and investors together into a common dialogue in ABMF to unlock safe assets and enable their use as collateral.

73. **Use of Distributed Ledger Technology by market infrastructures** (DTCC): Ms. Cornelia Dagdag mentioned some of the transaction numbers that DTCC processes, which gave the best argument that any new use case had to be scalable. She briefly showed a chart borrowed from the ECB on the increase in number of companies and investments since inception of distributed ledger technology (DLT) around 2006. Annual spend on DLT was expected to reach over USD 11 billion annually by 2022.

74. DTCC had created a number of DLT initiatives so far, notably for repo clearing, where the proof of concept (POC) had been successful, though DLT will not yet be used for actual processing. The initiative had, however, shown that DLT was not technology for technology's sake. DTCC also trialed DLT in its trade information warehouse (TIW) re-platforming and when calculating performance benchmarks on US equities settlements. In the TIW use case, the project scope had been perfect – a significant size of records but a limited set of participants. The decision had since been taken to implement DLT also since the market would have changed the existing platform anyway. The POC had been successful and included banks and other users (names included ABMF member institutions). The necessary coding for the final installation will be completed within 18 months and the live date was envisaged at the end of 2019.

75. Among the lessons learned were the typical issues of an early adopter, such as the issue of interoperability with infrastructure or users that did not use DLT, or resulting practices that needed a governance framework, and the fact that DLT development tools were still primitive and debugging tools for future production issues did not exist. What was also learned was that simply not all business cases will make practical or economical sense, despite best intentions and technical possibilities. In the benchmark testing use case, which was based on a private blockchain, the scalability of a DLT application was proven in principle, but a solution not implemented due to other dependencies. DLT applications would so far only share information with non-DLT systems. In this context, Ms. Dagdag mentioned other use cases in the region, including ASX in Australia, HKEX as well as SWIFT.

76. **APEC Data Ecosystem Roadmap** (Asia Pacific Financial Forum, APFF): Dr. Julius Caesar Parrenas explained the APEC mission statement and stressed that data was very

important to achieve that mission, and the tremendous importance of data inclusiveness. However, tough challenges were being faced: data was often paper-based, bound by legacy processes or a domestic focus. This situation got in the way of the digitalization of data and its re-use, cross-border data flows as well as any attempts at efficiency. At the same time, privacy laws in the region were administered in an uncoordinated manner. Dr. Parrenas introduced the process to arrive at an APEC Roadmap for a New Financial Services Data Ecosystem, which should contain what each individual jurisdiction should do to support the roadmap and mission. APFF members had conducted calls, workshops and conferences in 2018, from which a number of key points had been derived.

77. These key points included consistency with the core principles of data protection, and more importantly, consistency among the domestic laws and regulations in each member jurisdiction. Data collection and sharing should be expanded, including for credit information systems and the development of the potential of unstructured data, also referred to as Big Data. Sound frameworks were needed for data collection, storage, sharing and use; this included collaboration between the private and public sectors as well as domestic and international cooperation, and could include self-regulation, codes of conduct as well as public education and awareness campaigns. Cross-border data flows should address the concerns related to data localization and consider the importance of a common privacy regime. This was being demonstrated by how the EU was aiming to achieve interoperability among member states.

78. Another necessary feature was the strength of data security, with cross-border access to data by law enforcement agencies identified as an issue, which in turn drove data localization. Ultimately, data privacy was driven by domestic data protection, some of which had turned out to be counterproductive. Here, APFF had prepared a common approach to developing domestic infrastructure and industry recommendations. APFF was also looking into the existence or development of regional platforms for the facilitation of cross-border financial services. This also included the creation of regulatory sandboxes. As next steps, feedback was being sought from a number of industry representatives, including ABMF, before the roadmap would be finalised and presented for consideration to the APEC Finance Ministers in October 2019. So far, the responses to the proposals had received more and better feedback than expected.

79. Members enquired on the APEC position on national IDs; the response: this had not been subject to much discussion at the APEC Finance Ministers level so far, but had been discussed among the Trade and Commerce ministries on electronic trade subjects. Mr. Yamadera added that a national ID was critically important, with some economies already having developed a national ID. However, there was political sensitivity involved and governments were not pushing the subject too hard. At the same time, one had to also think of a common entity ID, which is available in the LEI, for example. Here, funds or trusts should be included. However, the awareness on LEI was not (yet) great in Asia. Tax authorities were trying to establish the Common Reporting Standard – in effect, wanting an LEI equivalent. Through ABMF, the promotion of LEI had become possible, as there was

no need for the creation of multiple entity IDs. Already, financial market infrastructures were becoming issuers of LEI, which would allow for quick market absorption. This would help create a good cyber ecosystem.

80. Dr. Parrenas conceded that the biggest challenge in the region was to build the infrastructure to collect data. Proposed was the use of existing data (public) utilities to establish financial inclusion. Private regimes were uncoordinated which became a real problem in cross-border business. Here, collaboration among stakeholders was needed, also because the promoters of the good ideas were not necessarily the parties in charge of the changes needed. Hence, multi-lateral agencies were needed to support the dialogue and act as conduit. Members also agreed with the concern on data localization; here, the issue was often that data sovereignty was discussed emotionally, despite the fact that capital markets in the region needing each other to grow. From the perspective of post-trade intermediaries, data localization also meant the positioning of hardware, which was an extra cost factor.

81. When asked what pointers he could give for stakeholders to talk to governments, Dr. Parrenas stated that this was the purpose of the APEC roadmap; at present, there was no other clear direction on the subjects mentioned. In the absence of such direction, data localization was fraught with issues and often data security was considered more significant. The roadmap would offer a chance at consensus and offer new avenues for collaboration. A discussion with the EU might not necessarily help with the Asian regional integration, hence, a need to develop a regional regime anyway. In addition, developments in other markets could also have an impact on Asia, e.g., the General Data Protection Regulation, or GDPR, in the EU. As a result, some draft legislation in Asian market now also included the concept of extra-territoriality – what could this mean for the region as a whole? Dr. Parrenas concluded that a debate on whether the EU model was appropriate for Asia should include the need to achieve a balance between the need for data privacy and protection and growth. There have been cases where people were willing and able to trade their data – that was possible in Asia but not under prevailing regulations in the EU. This discussion seemed to point to the need for an Asian solution, rather than adopting one from the EU.

82. **Good Practices to develop a Bond Market** (ADB Secretariat): Mr. Yamadera introduced the ABMF publication on Good Practices to Develop a Local Currency Bond Market (in short: GP paper) which was intended to share the collective efforts and experiences of ABMF with other regions. He took the audience through the proposed table of contents and explained some of the parts, including market features and participants and the concept of identifying the necessary building blocks to develop an LCY bond market. Mr. Yamadera expressed his hope that the GP paper could become the reference for starting a bond market. One key purpose of the GP paper had been to show the successes of ASEAN+3 in building their LCY bond markets. He was confident to be able to show the final draft of the GP paper at the Deputies Meeting in early April before a publication in time for the ADB annual meeting in May.

III. Next ABMF Meeting

83. The 31th ABMF Meeting will be held in Tokyo, with the kind support from Daito Bunka University; the meeting was proposed to be held during the week of 24 June 2019, with the exact dates to be confirmed at a later stage. The meeting dates were subsequently announced as 24-25 for the 31st ABMF Meeting and accompanying meetings from 26-28 June 2019. A preliminary agenda was sent with the meeting invitation and a firmer agenda had since been sent to members and observers.