# Summary of the 33rd ASEAN+3 Bond Market Forum Meeting and Related Meetings

## 5-7 February 2020, ADB Headquarters, Manila, Philippines

The 33rd ABMF Meeting and related meetings were held from 5 February 2020 to 7 February 2020 and hosted at ADB Headquarters in Manila. The related meetings consisted of a Joint Meeting with the APEC Business Advisory Council / Asia-Pacific Financial Forum (ABAC / APFF) and a Joint Meeting with the Association of Credit Rating Agencies in Asia (ACRAA), both preceding the formal ABMF Meeting. ABMF Meeting materials are available from the ABMF website (asean3abmf.adb.org) and from *AsianBondsOnline* in due course. Minutes and materials for the 20th CSIF Meeting held back-to-back with the ABMF Meeting are available separately for CSIF members only.

## I. Joint Meeting with ABAC/APFF

1. Mr. Satoru Yamadera (ADB Secretariat) emphasised that the day's focal points were on technology and its implications for APFF and ABMF stakeholders as well as on green bonds (in the afternoon). Dr. Julius Caesar Parreñas (ABAC/APFF, Mizuho Bank) explained that the Asia-Pacific Financial Forum (APFF) was a platform for public sector and private sector stakeholders established in 2013 under the APEC Business Advisory Council (ABAC). Its purpose was to create a Single Action Plan for the regional financial industry through recommendations for secure transactions, the creation and use of reliable credit information and other big data applications, as well as in subjects connected to securities-linked issuance. The Joint Meeting was being held to explore how APFF and ABMF could collaborate further.

2. **Regional Approaches to Facilitating Cross-Border Data Flows** (presentations and panel discussion by Mr. Raymund Enriquez Liboro, Chairman, National Privacy Commission, Republic of the Philippines; Dr. Julius Caesar Parreñas, Coordinator, APFF and Mizuho Bank; Mr. Richard Robinson, Bloomberg; moderated by Dr. Parreñas): Dr. Parreñas referenced the APFF Roadmap for a New Financial Services Data Ecosystem; data increasingly played a central role in financial services, also allowing the industry to be more inclusive and provide faster, more affordable services. Social media was already being harvested by, e.g., insurance companies to learn about the habits of their clientele. Predictive analysis played an increasing role, for example in the farming sector. Much of the resulting opportunities required or enabled cross-border data flows that, however, tended to still clash with most of the regulatory regimes in the region. In fact, efforts in this regard were largely uncoordinated, leading to inefficiencies in establishing new rules. This also created issues with the regulatory mandate and efforts at data privacy or protection in each jurisdiction.

3. The APFF roadmap was the result of 2 years of efforts, including multiple conferences and consultations, including with ABMF. The APEC Finance Ministers had endorsed the roadmap at their meeting in October 2019. The two key areas of the roadmap were the strengthening of data security and regional capacity building in this regard, and how to address challenges related to cross-border data flows. Among the objectives of the roadmap were efforts to develop general regulations on the collection, sharing and use of data – both structured and unstructured; the exploration of new technologies, especially those that can be used by micro, small or medium-sized companies; and the development of a regional privacy regime. For the latter, key was the ability to obtain certification of data privacy compliance, which, at present, was cumbersome and expensive; APEC intends to establish a task force that would help SMEs meet the set requirements and achieve continuous compliance across markets going forward. The detailed roadmap is available online.[1]

4. Mr. Liboro shared his thoughts on promoting cross-border data flows. By 2040, 50% of the global GDP will be in Asia. Over the next 20 years, an additional 1 billion people will enter the workforce in Asia alone. Already, 50% of international students were Asian. The Philippines was well on its way from a lower-middle income to an upper-middle income country and, correspondingly, business processes were shifting towards higher value work. This led to the business of processing data and transferring such data across borders. At the same time, new technologies such as artificial intelligence (AI), machine learning and the Internet of Things (IOT) were being adapted for everyday work. These developments threatened an individual's dignity and respect, the definitions of community and trust. Hence, robust frameworks were needed to balance business needs with the protection of individuals. The Philippines promulgated its Data Privacy Act in 2012 (Republic Act 10173), at the time referencing the predecessor of the GDPR[2] now established in the EU. The act applies to both the public and private sectors, created the National Privacy Commission (established in 2016), an independent body for the administration and implementation of the law, regulates the free flow of data as well as data protection and the extra-territorial application of such provisions in the domestic market and abroad. The objective was to create accountable companies and responsible digital citizens, and to take into account that the digital persona of a citizen would manifest in countries that the actual person had never been to.

5. As of 2017, 132 countries had data privacy laws or data protection laws. In ASEAN, privacy laws existed in Malaysia, the Philippines and Singapore, with Thailand due to promulgate such law by May 2020, and Indonesia expected to follow by the end of 2020. Under APEC,

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[1] See https://www2.abaconline.org/assets/2018/APFF/Data_Ecosystem_Roadmap_Final.pdf.

[2] The General Data Protection Regulation (EU GDPR) is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas [*Wikipedia*].

21 countries had agreed on the CBPR[3], a framework similar to the GDPR, if established on a voluntary basis. This framework included standards that were measurable and harmonized, since interoperability was key, but also an enforceable privacy code of conduct. The framework governed data transfer across borders among the CBPR countries, allowing a certification in one country to be acceptable in all participating countries. So far, 8 countries had adopted the framework into national legislation, with the Philippines about to become the 9th country. According to Mr. Liboro, digital data governance will increasingly take center stage and, while the benefits are clear, risks often only became obvious at later stages. The Philippines had just recently signed a bilateral MOU on cross-border data flows, the first of its kind, with Singapore, who had recognised the Philippine standards as comparable to its own. At the same time, the discussions on cross-border data flows and protection were increasingly seen from a regional perspective: ASEAN was working on the Cross Border Data Flow Mechanism, which would guide cooperation on data protection, data privacy and enforcement.

6. Mr. Robinson explored how data flows impacted businesses and introduced the audience to the concept of Communities of Practice (COPs). Within financial services, there were a number of COPs, such as retail and equities businesses, each representing a distinct customer set, but also different operational requirements and rules. In turn, a single firm dealt with many different communities that all have different rules, practices and may speak different (business) languages, though these communities may not be mutually exclusive; a customer could have multiple products with a firm or be a customer and staff; customers may also attain different levels of sophistication in relation to a firm's range of products and services. Cross-border activities increased the complexity of these relations with multiple communities, e.g. through individual local regulations and definitions of fairness and appropriateness; they also raised the subject of extraterritoriality (which home rules may apply in the host market, or vice versa). Data privacy typically had an impact on one community or was often intended for one specific community but could have unintended consequences for other communities; an example was the need for data privacy not allowing the sharing of client KYC data and, thereby, making the provision of other services to the same client more difficult. There was no one-size-fits-all solution. However, the objective had to be to protect the end client as well as the firm. In the context of data security, sophistication often did not equate to being secure, as many breaches were not the result of technical abilities alone. At the same time, setting too sophisticated goals may result in the need for localization of data protection rules, if economies could not attain an expected standard; that in turn undermined the desire to operate under harmonised rules and compromised interoperability. Mr. Robinson identified one of the key challenges as satisfying the lowest common denominator versus not providing services to certain communities.

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[3] The APEC Cross-Border Privacy Rules (CBPR) System is a government-backed data privacy certification that companies can join to demonstrate compliance with internationally recognized data privacy protections. The CBPR System implements the APEC Privacy Framework endorsed by APEC Leaders in 2005 and updated in 2015 [*Wikipedia*].

7. The panel discussion and subsequent Q&A emphasised that, in principal, all stakeholders agreed on the need for data protection and the significance of cross-border data flows. The APEC roadmap was seen as a device needed at this stage to guide the discussion, even if it was acknowledged that it might not work for all markets, also because the impact on businesses differed in each location. A step-by-step implementation of such roadmap and its component practices could ease such impact and also allow stakeholders (including regulators) to work together to achieve a regional regime. A number of outright cross-border data flow restrictions existed in some markets, so firms were unable to share KYC and other data, even with other branches or affiliated entities. This limited the re-use of data and required a lot of duplication efforts. At the same time, different rules for the same data universe existed across markets; an example were the rules for data verification, e.g. under AML, which were subject to different lists. Such requirements drove the need for better, if bigger, internal processes to cope with multiple parameters but also limited the ability of firms to consolidate client data for the review of risks or opportunities.

8. Panelists expected the data privacy or protection laws to become even stricter; yet, stakeholders were also increasingly eyeing harmonisation and interoperability – it was clear that the regulatory authorities had some form of link-up in mind. The example of the MOU between the Philippines and Singapore also included coordination between the regulatory sandboxes of each nation. Participants expressed their views that even the GDPR were monolithic and not considering all the differences that existed in the EU; apparently, the intention of the common rules had been not to want all national rules be the same but require the individual member states to work together to address common challenges; here, the conduit was the practice of certification. In Asia, the definitions of 'privacy' and 'privacy ethics' were different, with often a stronger regulatory prescription in place. This required a certain measurability, since one could only penalize a breach if it had been adequately defined together with the underlying requirements for market participants.

9. Of particular interest to participants were the concepts of the 'right to be forgotten' (client request to delete all data) and of explicit permission for data sharing and storage. The right to be forgotten or the blocking of data for other parties' consumption was embedded in, e.g., the Philippine Privacy Law but the Privacy Commission was now studying its practical application; the need for consent to data sharing was required to be explicit, and could not merely be implied, leaning on the established treatment under the GDPR. However, regulators had to constantly study these subjects since they were evolving in both the domestic market and internationally; an example were product terms and conditions, to ensure that they were created for end users, not just lawyers. On the other hand, the right to be forgotten could also conflict with data retention requirements with both concepts regulated by different laws under separate objectives. In addition, participants highlighted the possible conflict of objectives between efforts to introduce Open Banking regulations and the need for data privacy and protection. Participants agreed that a next step would likely be to develop a vehicle for regional cooperation on the subjects discussed.

10. **Use of Technology and Global and Local Standards for FMI Interoperability** (panel discussion among Mr. Boon-Hiong Chan, Deutsche Bank; Mr. Steven Landman, Kiu Global; Mr. Rishi Kapoor, ISDA; Mr. Richard Robinson, Bloomberg; Mr. Satoru Yamadera, ADB; moderated by Mr. Alex Kech, Onchain Custodian): Mr. Kech set the tone by stating that the topics discussed by this panel may well influence the manner in which assets would or should be held and owned in the future. Mr. Yamadera asked the group on how best to represent Asia's voice in ongoing discussions on standardisation and what the issues were; an Asian voice should be reflected in those discussions and on those issues. ABMF with the support from ADB can fulfill that function and ADB can also facilitate and support other regional efforts. Mr. Chan highlighted that if even a single process in Asia of an international firm touched on the provisions of GDPR, it meant that such provisions needed to be observed; in addition, having operations in multiple markets in Asia meant multiple regional processes plus observance of GDPR. The definition of personal identification information (PII) still differed in each market and ABMF and ADB can help organise the necessary efforts to harmonise these definitions.

11. Mr. Landman opined that for efforts to be successful, all stakeholders needed to benefit from proposed changes – he had not observed true stakeholder engagement just yet and was convinced that the interest of all stakeholders needed to be aligned towards common goals. Mr. Robinson stated that XML was practical and powerful and ISO20022 provided a great foundation but more was needed on top of the standard itself. Data standards were getting more specific for very specific purposes, such as the ISIN in the post-trade business; as such, there was a need to apply the right standard to the right problem. ISO20022 offered a good base but was not necessarily designed for specific purposes – this had to be applied by the implementing entities. In addition, there were still quite a number of standardisation bodies putting out their recommendations. From ISDA's experience, and working beyond the derivatives market, Mr. Kapoor explained that as long as a certain level of coordination was evident, the implementation of standards and the resulting outcome were good. A key challenge was the varying degrees of awareness and information in any implementation efforts. One area of interest here was the substituted compliance for data use, privacy and protection across participating markets and organisations.

12. According to Mr. Kech, the crypto space – which is cross-border by default through the capabilities of distributed ledger technology – was a nightmare from a coordination perspective, with questions as to where the customer was domiciled and what rules might thus apply to a transaction. This key subject, referred to as 'travel rules', was heavily discussed in the crypto industry. He identified a key challenge in the efforts at data localization that impacted cyber security and required decentralization of infrastructure and processes. On the subject of data localization, panelists offered the analogy of power plugs that continued to be different in many countries – on the other hand, one could buy so-called 'power blocks' that contained all possible plug standards and USB connectors. The most logical solution to solve the multitude was to have only one standard plug – globally.

However, that approach would affect existing infrastructure and manufacturing capacity. Data should be looked at in the same way – one needed to consider legacy in efforts towards interoperability. Similarly, new technology might also lead to inadvertent data localization. The regulatory view was often that data was a valuable commodity and should, hence, be kept onshore; this, however, made the shifting of such views (towards harmonisation) difficult. As such, efforts at educating the regulatory authorities on the challenges and potential benefits were necessary.

13. Differences in data requirements were also observed within particular markets, resulting in a need for all domestic stakeholders to develop the same understanding of data elements and requirements. Instead of a complex approach, the solution was often in finding the lowest common denominator and work from there. This approach did, however, require a leading organisation to facilitate the necessary dialogue. With payment or securities transaction information sent cross-border consisting of many parts, other questions in relation to data localization were whether all data should be localized or only the parts pertaining to a particular location, with the added question who defined what was relevant; was it possible to keep or transmit a copy of data, if only for business continuity purposes; some parts of the data may be sensitive, so could data be anonymised when sent offshore? If data was encrypted, could it still be analysed for data verification and screening purposes? And, importantly, was it possible to actually enforce data localization? All of these subjects needed to be considered to find a balanced outcome. Key to that would be the normalisation of definitions and a common understanding of the data concerned.

14. On ISO20022, panelists mentioned that it had already been fully adopted in the treatment of digital assets; this included a standard API (application programming interface) for customer interaction. While this suggested that ISO20022 could be used for messaging and APIs, the legal definitions of the underlying technical terms differed, limiting compatibility. Concerns were also expressed if APIs were to drive technical change, since it would be very costly to replicate or rather build the legacy processes on that basis. After all, XML was not the only solution; C, the programming language, had quite a few facilities of its own to address complex processes. It might also not be necessary to build every single process on a new standard by default. The ongoing challenges included that jurisdictions continued to issue competing or contradicting regulations; instead, regulators should be guided by the maxim "as cross-border as possible and as interoperable as possible". Panelists appealed to regulators to work together before creating regulations and to imagine future needs rather than focus on regulating the subjects presently before them. Panelists also hoped that forums such as ABMF could bring data privacy regulators together in dialogue with financial market stakeholders. Participants were asked to understand the COP concept and consider working with individual communities, not against them, for the sake of harmonizing.

15. Mr. Yamadera emphasised that cooperation required standardisation, which required digitization, all of which required human action even if the outcome may later be used in artificial intelligence. He opined that for a regional solution, the basis had to be an element

of comfort and trust among regional economies. ABMF could provide that element, also since there was not necessarily a single coordinating entity in each market. ABMF wanted to coordinate with ISDA, ICMA and APFF to check on an acceptable common approach. As a platform, ABMI had made participants become comfortable to also tackle subjects other or bigger than bond markets for the common good; this also included payment subjects.

## II. Joint Meeting with ACRAA

16. Mr. Kosintr Puongsophol, Financial Sector Specialist, ADB, welcomed participants. In his opening remarks, Mr. Santiago F. Dumlao Jr., Secretary General of ACRAA, pointed out the general unsustainability of the current use of natural resources and referenced the 2018 ADB Statement on Sustainability – this was why ADB was co-hosting the meeting with ACRAA. Green finance would drive sustainability and this session's proceedings were aimed at reviewing how to be part of a solution to the challenges. CRAs encouraged greater awareness of green bond issuance and were keen to promote the green bond agenda overall, including through this conference, a cooperation with the Asian Bankers Association and with the European Credit Rating Association. ACRAA was also happy to co-sponsor functions on the subject in other South East Asian markets, and was promoting the idea of CRAs becoming independent verifiers; for that purpose, discussions with CBI were ongoing.

17. In his keynote speech as Co-Chair of the Sustainable Finance Working Group of ACMF, Commissioner Ephyro Luis B. Amatong of the SEC Philippines explained that 2019 had seen the issuance of USD3.8 billion worth of bonds adhering to the ASEAN Green Bond and Sustainability Standards, six times the value of 2018, which had already increased 50% over 2017. Not only green bonds had been issued but also sustainability bonds, in fact of a value 14 times higher than in 2018. Commissioner Amatong suggested that the necessary foundations for an ASEAN green and sustainable bond market had by now been laid.

18. The ASEAN5 markets dominated green and sustainable bond issuance: Singapore had the largest outstanding amount, both domestically and in the region; Indonesia issued the first green government *sukuk*, totaling USD2 billion; the Philippines saw an issuance amount of USD3.04 billion across 15 issuers, mostly from the private sector; Malaysia recorded the issuance of USD1.85 billion and Thailand USD 1.3 billion, both including social bonds. In 2016, only 3 bonds had been outstanding in the whole of ASEAN, with a total of USD252 million. Since then, more than 50 bonds had been issued in the region. Commissioner Amatong identified three main actors: parties that provided green or sustainable finance, such as commercial and investment banks and other investors; parties that were seeking green or sustainable finance, the issuers; and parties that were facilitating green or sustainable finance as intermediaries, such as securities firms, advisors and certifiers. The ACMF had recognised the importance of green finance early on and sought to provide

reliable standards, which became the ASEAN Standards[4]. The standards were developed in close cooperation between regulators and market parties, including consultations with ICMA, and are expected to evolve with market developments and practices. So far, 23 bonds had been issued under the Standards (16 green, 6 social, 1 sustainability).

19. Some of the past transactions in the Philippines had been supported by ADB and CGIF or by the IFC; other transactions were standalone and some issuers have since accessed the markets three times; banks had been particularly successful. Commissioner Amatong gave examples of specific transactions. Six markets in ASEAN already required companies to issue sustainability reports, even if they do not yet issue related bonds. Investor demand had been higher than could be fulfilled; yet, no specific single type of green or sustainability investor had emerged and this universe was still evolving. At the same time, infrastructure financing needs could also fall under green or sustainable finance purposes. ASEAN was off to a good start but more was needed to be done, including further support of the sustainable finance or capital market. Commissioner Amatong welcomed suggestions and the support from development partners, such as ADB and was also looking to the credit rating agencies to become partners in these efforts.

20. **Overview of Green Finance and Green Bonds** (ADB Secretariat): Mr. Puongsophol reviewed the constraints often mentioned in discussions with regulators and investors; these included what projects were eligible for green bond issuance and that the issuer wanted to know early whether a project qualifies; the lack of bankable projects; and a general lack of understanding of green bond related subjects. Often, this lack of understanding resulted in missed opportunities. At the same time, issuers cited the additional cost of green compliance, such as for the reporting and an external verifier as obstacles; however, internal cost was often higher than the external cost. Another challenge was that Asian issuers may not be well known outside their markets and the region, leading to doubts as to the marketability of LCY green bonds. In addition, demand from within the region remained low and primarily focused on economic returns, rather than green credentials.

21. **Development of Sustainable ASEAN Capital Markets:** Commissioner Amatong stated that the growing ASEAN bond markets represented opportunities for investors; taken together, the ASEAN countries represented the 5$^{th}$ largest economy globally but needed continued investment in infrastructure, particularly green infrastructure, to the tune of USD200 billion per annum until 2030. At the same time, 2,500 global investors were looking for investments, representing USD89.6 trillion in investable assets. The existing standards were mostly looking at disclosure by issuers. Commissioner Amatong explained the ASEAN Green Bond Standards, with four principles, based on the Green Bond

[4] Details on the ASEAN Green Bond Standards can be downloaded from the Asian Capital Market Forum (ACMF) website, at https://www.theacmf.org/initiatives/sustainable-finance/asean-green-bond-standards. For the ASEAN Sustainability Bonds Standards, please see https://www.theacmf.org/initiatives/sustainable-finance/asean-sustainability-bond-standards, and information on the ASEAN Social Bond Standards can be found at: https://www.theacmf.org/initiatives/sustainable-finance/asean-social-bond-standards.

Principles administered by ICMA. In addition, the ASEAN Standards required a connection to ASEAN for the issuer or the use of proceeds and excluded projects with fossil fuel components; issuers also had to provide regular, more frequent disclosure on the green bonds on their website and had to disclose the qualification of an external reviewer. The ASEAN Standards used a negative list concept, rather than defining what was green. More recently, ACMF had established the ASEAN Social Bond Standards, acknowledging that social may be very local in nature and depend on context and jurisdiction; some examples were shown. The negative list for the ASEAN Social Bond Standards included projects related to alcohol, tobacco or gambling. The Green and Social Bond Standards together established the Sustainability Bond Standards.

22. Commissioner Amatong explained that the Philippine experience was tracking the ASEAN experience closely. This also related to the contentious subjects of pricing, and whether these bonds carried an advantage or a penalty. So far, compared to established markets, ASEAN yields were still good and, if compared to other emerging markets, ASEAN yields were, in fact, tight. ASEAN ESG initiatives had identified four priority areas, which also went beyond the debt capital markets; these areas included strengthening the foundations for sustainable capital markets; catalyzing products and enabling access to underserved areas; raising awareness and capacity-building; and increasing regional connectivity. Possible products include the so-called transition bonds, where proceeds may not necessary be green as such but would help make an overall positive impact, such as reduce emissions; here, the development of a common taxonomy would be particularly important. ASEAN also wanted to understand better the sustainability-linked bonds introduced in the EU in the 2nd half of 2019; if the regional markets would be willing to accept such instruments, this could create additional opportunities.

23. **Issues and Challenges in Promoting Green Finance in Emerging Economies** (Mr. Mushtaq Kapasi, International Capital Market Association (ICMA)): Mr. Kapasi applauded the efforts of ADB and the SEC of the Philippines for promoting green and sustainability bonds. He provided an initial overview of green, social and sustainability bond categorisation, defined as any type of bond where the proceeds will be exclusively applied to eligible environmental and social projects. He also noted that the ASEAN Standards were a bit stricter than the ICMA principles. ICMA had just celebrated 50 years of existence and was a trade association originally created for the Eurobond market; it created, managed and promoted best practices and standards, aimed at more efficient markets, though the implementation was voluntary. ICMA maintained and published the Global Master Repurchase Agreement (GMRA) and other standard contract templates. While ICMA were not green experts, it had experience in setting related standards. The Green Bond Principles represented the founding ideas of ICMA members and were only 5 or 6 pages long. 300 members and observers of ICMA had been involved in the principles' creation; this also included ASEAN. The principles were divided into four pillars (process for evaluation and selection, use and management of proceeds and reporting), with the key concept being the use of proceeds.

24. Mr. Kapasi mentioned that, originally, the issuer did not matter so much, other than the credit rating and financials; however, market parties realised that investors were increasingly checking on what issuers actually did. That extended to the process that issuers used to select potential green or other eligible projects, thereby assuring investors of the viability and suitability of a project. After declaring the use of proceeds, an important function was the management of the proceeds, e.g., with the use of a special purpose vehicle or other ring-fenced entity and dedicated accounting. Eventually, the ongoing reporting through the life of the eligible bond would bring together the use of proceeds and the impact the proceeds were having, thereby describing and confirming the legitimacy of the project selection and execution. Investors were increasingly keen on understanding the impact of a project, also because these investors were beginning to measure impact across their own portfolios.

25. External reviews of the bonds were initially more of a nice-to-have feature, also since the initial group of issuers had been development banks and were trusted by the market. Once more corporates began issuing such bonds, and being less familiar to potential investors, the need for verification increased. Today, the credit rating agencies (CRAs) were heavily involved in green bonds, including Asian CRAs, e.g., in the PRC and in Thailand. Yet, most often the reviewers or verifiers were environmental consultancies. ICMA was promoting best practices for external reviewers; these best practices were agnostic to the nature of the reviewers. The green bond market itself represented only about 1% of the global bond market at this point but the market was expected to grow significantly, while the bond market related to fossil fuels was expected to reduce over time. Mr. Kapasi stated that green finance overall was increasingly trickling down to the real economy as more corporates were taking up green bond issuance. Different markets also had different drivers in green bond market development and markets were evolving at the same time; there was now more evidence of experimentation.

26. Exchanges were also beginning to create green bond segments on their markets; examples were the Luxembourg Green Exchange or the green classification on the London Stock Exchange. In contrast, Japan managed the green bond market through the Ministry of the Environment. Some markets used subsidies to attract green bond issuance, among them Hong Kong, China and Singapore; in the PRC, subsidies existed at national, regional and local level. For 2020, Mr. Kapasi saw four strategic themes: the evolution from green bonds to sustainability bonds or loans, where the coupon depended on the issuer meeting certain pre-agreed targets; an increase of involvement of the public sector through official recognition and regulations; the advent of additionality, where additional products drove new investment in infrastructure; and a transition to sustainable finance overall. He also pointed at the emergence of specific category bonds, such as “blue bonds” where proceeds were aimed at projects relating to ocean or waterways.

27. The Q&A session saw questions on the impact on issuance cost and pricing. Mr. Kapasi quantified the additional costs into the 10s of thousands of USD, for the external review alone but depending on the size of the bonds. The real additional cost was the need for

internal processes and efforts to create and maintain a green bond framework and the need to comply with the relevant reporting requirements; these costs could be significant. Pricing was potentially tighter than for plain vanilla bonds and with the increasing investor universe, demand was now a key driver; these effects were more pronounced for a frequent issuer and less so for new corporate issuers.

28. **Case Study - TCFD Overview** (Ms. Vicky Cheng, Bloomberg): Ms. Cheng reviewed the impact of and financial implications from climate change, which included risks to the financial system and to business sectors, such as to revenues and expenditures, assets and financing; an example given was the bankruptcy of a public utility in California in the face of damages claims following forest fires. In this context, transparency was key, which allowed investors to allocate resources efficiently. The Task Force on Climate-related Financial Disclosures (TCFD)[5] was established by the FSB to develop recommendations for more effective climate-related disclosures to help stakeholders better understand related risks and make suitably informed decisions. TCFD consisted of 29 international members who developed recommendations emphasising on disclosure by individual enterprises across business lines and jurisdictions on the impact of climate change on their operations. The key areas of the recommendations, finalised in June 2017, take in governance, strategy and risk management of climate change related subjects and the setting of metrics and targets for each of these areas. In effect, companies report on how responses to climate change are integrated into their business operations, from board level down.

29. In addition, TCFD issued disclosure guidance for all sectors, with the objective for companies to provide decision-useful information in their public (annual) financial filings with regulators and listing places, as may be applicable. Supplementary guidance was issued for specific sectors, such as the financial industry. Key elements of the disclosure were that the same rigour should be applied to this disclosure as for the other financial reportings of a company and that the disclosure should center on the resilience relative to climate change scenarios and risks. Ms. Cheng provided an example of an implementation path of the TCFD recommendations and an overview of the 2019 TCFD Status Report. According to its findings, the percentage of disclosure was not greater than 50% (of the examined entities) for any recommended disclosure, even those related to governance and risk management, while the lowest percentage was found in disclosure related to resilience to the climate change scenarios. At the same time, supporters of TFCD had increased to 908 as of November 2019, including 445 financial firms. Ms. Cheng also referenced a number of public sector statements on the acceptance or adoption of TCFD recommendations. The next status report was expected at the end of 2020, and TCFD was considering offering additional guidance on climate change scenarios to aid companies in the recognition how their business related to these scenarios and to help companies meet increasing demand from investors. Mr. Yamadera added that TCFD was also in

[5] Please see https://www.fsb-tcfd.org for further details.

discussions with accounting and financial reporting standard bodies about integrating its recommendations with financial reporting principles.

30. **Role of Credit Rating Agencies in Supporting Sustainable Finance** (Mr. Atsushi Matsuda, Chairman of ACRAA and Japan Credit Rating Agency): Mr. Matsuda focused on the role a CRA can play as a good (green bond) verifier and the sustainable finance market in Japan. CRAs had to understand the new standards while maintaining their traditional principles: fair, independent and professional assessment of instruments and issuers. In addition, CRAs had to face new characteristics, such as assessing the image versus the creditworthiness of an issuer and the contribution of various factors in assessing hybrid vehicles. In green finance issuance, Japan had moved from 12th rank in 2018 to 8th rank in 2019, according to Climate Bonds Initiative data and the focus was on green buildings and renewable energies; the sector represented 7.5% of the total market in Japan, leaving much room for improvement; however, the green bond market was expanding rapidly. Corporate ratings in Japan typically were AA or A and green bond issuance could lead to further rating granularity.

31. As for the role of a CRA in the green (sustainable) bond market, CRAs were experts on financial markets but no so much experts on the technical aspects of sustainable finance. International investors had their choice of CRA in most major markets; Japan featured two domestic CRAs, among them JCR. Mr. Matsuda explained the footprint of JCR in sustainable evaluations; JCR has been a CBI Approved Verifier since August 2019. The different phases of green bond evaluation focused on determining the greenness of a bond (project), the management, operation and transparency of the project according to a process balanced across four factors and the actual Green Finance Evaluation, the ranking of the instrument. The Social Finance Evaluation process was very similar, only differed in the assessment of the social impact of an instrument. In turn, the Sustainability Finance Evaluation combined aspects of the previous two processes to come to a suitable classification of the sustainable instrument.

32. **Case Study - Green Bond Issuance and Green Finance Framework** (Mr. Jose Esteban Salvan, Bank of the Philippine Islands): Mr. Salvan explained that BPI, now 168 years old, was the first bank in the Philippines and in South East Asia and has a commitment towards sustainability, disbursing more than PHP128 billion for 316 sustainable energy and climate resilience projects over the past 10 years. BPI had selected 12 of the United Nations Sustainable Development Goals towards which it felt it could make substantial and lasting contributions. In preparation for the issuance of green bonds, BPI published its green finance framework in June 2019, which is aligned with the ICMA Green Bond Principles, the ASEAN Green Bond Standards and the Green Loan Principles of the Loan Market Association.[6] The framework's focus has been on green and sustainable energy and pollution reduction but also other sustainable development goals such as clean water and

[6] Information the Green Loan Principles can be found on the website of the Loan Market Association, at https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf

sanitation. BPI also established a register for the management of the proceeds, all of which was reviewed by an external provider in order to ensure compliance with the standards by aligning the bank's assessment with the standards' requirements.

33. Mr. Salvan highlighted BPI's very successful green bond issuances and also stated that BPI was able to tap a new funding source in the form of green investors. BPI had managed to raise about USD400 million across two tranches, being CHF100 million and USD300 million. The Swiss franc issuance was the first ever public issue out of the Philippines and also the first ASEAN green bond benchmark for BPI and first ever rated Philippine green bond in the international market. The said issuance also managed to achieve a negative yield, which is considered a first for a Philippine issuer. On the other hand, the US dollar tranche was the first USD-denominated ASEAN green bond issued by a Philippine bank and featured the lowest coupon and yield ever paid for a USD-denominated bond from the Philippines at the time.

34. In response to questions, Mr. Salvan mentioned that BPI had established a sustainable finance department 10 years ago, with technical expertise assistance from the IFC. This allowed BPI to train staff to make an environmental assessment of finance proposals. The issuance of green bonds itself was no different from a normal capital market transaction, but BPI had to climb a learning curve in preparation of the issuance nevertheless. Mr. Salvan likened this experience to adding a checklist to your issuance process. At the same time, he confirmed that BPI's gradual exposure over the past few years had helped it develop its own criteria. He also conceded that the preparatory work would be easier for issuers with basic frameworks readily available from, e.g., ICMA. Mr. Salvan also stressed that BPI had found a supportive regulatory framework and it helped that the ASEAN framework was already geared towards issuance in in the region. Mr. Puongsophol added that one issuance does not create a market and repeat issuance was needed to sustain the market and allow practices to be established.

35. **Proposed Technical Support of ADB to Local Arrangers and Issuers** (ADB Secretariat): Mr. Puongsophol introduced the Asian Bond Markets Initiative (ABMI), since some participants may be new to the subject, and the structure and focus of the task forces under ABMI; this session was a cooperation of Task Forces 1 (supply) and 3 (regulatory framework). ADB was preparing a technical assistance (TA, or project) to support green bond issuance and practices. The TA follows the recommendations in the ADB Report *Promoting Green Local Currency-Denominated Bonds for Infrastructure Development in ASEAN+3*, published in April 2018[7], was endowed with USD500,000 funded by the Ministry of Finance of the PRC and will commence from March 2020. Key focus areas of the TA were advisory services to potential issuers, grants to partially offset issuance costs and the

[7] The report is available from AsianBondsOnline, at https://asianbondsonline.adb.org/documents/abmi_promoting_green_local_currency_bonds_infrastructure_development.pdf?src=spotlight

promotion of ASEAN+3 green finance markets to global investors through AsianBondsOnline (ABO).

36. ADB was targeting to support the implementation of international and regional standards to avoid 'green washing' and wanted to promote both issuance and the demand side. Under the TA, ADB may be able to offer grants to defray costs for green bond issuance and related activities; at the same time, ADB would need an issuer to commit to regular issuance in order to make the required efforts worthwhile for all parties. Mr. Puongsophol painted the ideal scenario as the issuance of a green bond under the ASEAN Green Bond Standards, using the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF)[8] and the support of the Credit Guarantee and Investment Facility (CGIF). Information on the TA and on green bonds in the region would be integrated into the ABO platform and ADB was aiming to synchronize activities under the TA with the ASEAN Working Committee on Capital Market Development (WC-CMD) and the ASEAN Capital Markets Forum (ACMF).

37. AMBIF was an output of the ASEAN+3 Bond Market Forum (ABMF) and included the concept of the Single Submission Form (SSF), a common key disclosure document accepted by regulators and/or listing or registration authorities in 7 domestic bond markets. AMBIF focused on the professional market segment in each jurisdiction and the SSF had been normalised against key disclosure and application documents in the participating markets. To aid in the adoption of AMBIF and related practices and to increase market transparency, ABMF had issued AMBIF Implementation Guidelines for each of the original participating markets and would continue to update and publish these Implementation Guidelines as markets developed or new markets joined. At the time of the meeting, 6 AMBIF bonds had been issued in participating markets, with several more in the pipeline.

38. On the question of a potential for overregulation in the context of the new standards, Mr. Puongsophol relayed that regulatory authorities had actually enquired with ADB whether new, specific regulations would be required for green bonds; ADB had responded no and advised that markets only needed guidance from regulators on these new instrument class. Mr. Yamadera added that the reaction of investors was key and that recommendations rather than new/additional regulations might be better received. The standards were trying to find a common space across the jurisdictions and ADB wanted to make sure that markets followed international best practices so that investors would have the same level of attention. He did concede, however, that better coordination might be necessary.

39. Participants also stated that, from an issuer perspective, green bonds should be cheaper and easier to issue than they are now and associated costs and effort might only allow bigger market parties to issue; the effort was likened to a first rating from a CRA. Mr. Salvan offered that since the GBP were widely accepted, there had been no need to talk to a specialist provider, keeping costs contained within the firm; the internal costs would also

[8] For more information on AMBIF, please see the dedicated webpage on AsianBondsOnline, at https://asianbondsonline.adb.org/ambif.php

be further defrayed with every additional issuance. It was, however, important for a potential issuer to understand the principles, since the investors already understood them; the rest was really only a normal capital market transaction. Some issuers might need some initial technical assistance, as the case may be. Mr. Yamadera added that the benefits of green bonds went beyond green; as market parties became aware of the benefits, cost factors would be addressed. The increased awareness will translate into more issuance and critical mass will soon be achieved.

40. On the issue of incentives, some context was needed when looking at different markets. Some incentives looked large but came with plenty of conditions; these conditions may come with a mandatory listing and the issuer in turn had to pay the listing costs. With a often-cited preference for English law by many investors, the appointment of a UK law firm would not satisfy the conditions in, e.g., Singapore, where a key condition was that issuance and support services had to be provided from within its own market.

## III. ASEAN+3 Bond Market Forum - Sub-Forum 1

41. **Update of ABMI** (ADB Secretariat): Mr. Yamadera highlighted the importance of the ASEAN+3 Bond Market Guides (BMGs); 14 BMGs had been published so far. At the last ABMF Meeting, the exchange bond market in the PRC had been highlighted, with the publication of the exchange bond market BMG and following the market's rapid growth and focus on institutional investors. But, the PRC had two major market segments with significant distinctions; hence, it was important to focus on the China Inter-Bank Bond Market (CIBM), the one BMG left to publish, with a publication aimed at by June 2020. For the CIBM BMG, ADB Secretariat had been interacting with the PRC authorities and received good feedback, e.g. from NAFMII (National Association of Financial Market Institutional Investors), the SRO for the CIBM. In contrast to the exchange bond market, which carried a definition of professionals, the CIBM assumed that all participants were professional. The equivalent of a listing in the exchange bond market to ensure visibility and disclosure was the registration with NAFMII in the CIBM. Mr. Yamadera noted that while, originally, arbitrage opportunities existed between bonds issued in the two bond market segments, this was no longer the case.

42. The BMGs had become an important tool for ADB and ABMF to share information on regional bond markets with international interested parties, to create opportunities for all stakeholders to learn from each other's markets and to foster the engagement with and between market authorities. Many parties had downloaded the BMGs from the ADB website or accessed them via AsianBondsOnline (ABO). To attract even more viewers, ABMF needed to disseminate information in a timely manner. This created the option to provide BMG updates, as separate documents focused on specific subjects, rather than doing a full review of a BMG every time a market development occurred. The first such supplementary update on a BMG would likely be for Hong Kong, also due to developments related to the CIBM. Potential targets for a complete BMG review would be Viet Nam (new

securities law and related regulations), the Philippines (a number of market developments), Thailand (ongoing discussions on a new regulatory framework) and Indonesia (new professional investor and private placement regulations); in any case, changes in regulations should be reflected in due time. In addition, a periodical review of the Single Submission Form (SSF) was also necessary to keep the contents in sync with prevailing market regulations.

43. Colleagues from Mongolia have already been willing to learn from the ABMI and ABMF experience, resulting in the compilation of the Mongolia BMG after intensive discussions with stakeholders. The drafting of the BMG was close to completion, with a view of publishing the BMG by April 2020. ADB Secretariat was also happy to announce the publication of the AMBIF Implementation Guidelines (Impl GL) for the Philippines, effective today. Mr. Yamadera thanked the Philippine regulatory authorities and market institutions for their strong support. The next Impl GL to be published would be for Cambodia, where new regulations for professional issuances would formalize an AMBIF market; the SECC was providing great cooperation in the compilation of the draft document. Other markets would follow in line with market developments, such as those in Indonesia, while existing AMBIF markets might require an update of their Impl GL following multiple issuances and the emergence of specific market practices.

44. ADB Secretariat was also increasingly cooperating closely with the TACT team on regional initiatives. This included the support for the changes in the Viet Nam Securities Law and regulations and the amendments to the Law on Government Securities in Cambodia, which was moving to become a middle-income country and may no longer have the same access to concessionary funding. Already ADB and ABMF were supporting the issuance capabilities for corporate bonds in Cambodia. Mr. Yamadera also reported on the progress with the account structure study, currently being compiled. Desirably, the information provided can become input into a discussion with tax authorities, since tax processing was found to be tedious, document heavy and highly repetitive. It was also worth examining whether the study could be linked to the discussion on LEI. The document will be circulated to members for comment upon completion.

45. The ABMF SF2 Report was published in 2014, with many developments having occurred in regional markets since. Originally, the focus had been on wholesale payments related to bond market settlement but the region has seen a payment system evolution, with infrastructures increasingly using similar approaches in both payment and securities markets. ADB Secretariat was planning to conduct market visits for fact finding and welcomed the participation of ABMF members. Mr. Yamadera invited members to express their interest to ADB Secretariat and expressed his appreciation for the members' general support and cooperation. He also updated members that the current ABMF TA had to close by the end of 2020 and expressed his hope that the Japanese MOF would support a continuation. ADB Secretariat would like to offer more support to members, e.g., in the form of the study and comparative analysis of capital market law related subjects, which would then be linked with the ABMF discussions.

46. **Recent ASEAN+3 Market Developments** (ABO team): Dr. Donghyun Park presented the regional economic outlook; the most important task under the mandate of the economists at ADB was the GDP growth forecast for the developing Asian economies. ADB had observed the large economies in the region slowing down, and visibly so: this included PR China but also India, with growth forecasts needing to be adjusted down further. In October 2019, ADB had forecast 5.5% growth, which had now been revised to 5.2%. Among the reasons, Dr. Park listed that global trade and global economic activity overall was slowing down, the US was slowing and the US-PR China trade conflict had only slightly resolved; at the same time, a sharp contraction in global electronics, with the IT and technology business cycle being in a downturn, was also impacting business confidence as well as investment and consumption. The developing Asian economies heavily relied on exports and were affected by investment weakening in much of the region. The GDP forecast for PR China alone had to be adjusted from 6.1% in April 2019, to 6% in October 2019, then 5.8% in December 2019. However. PR China had already been slowing down even prior to the recent trade conflict, but was wealthy enough to afford such slowdown.

47. Dr. Park pointed out that not all indicators showed doom and gloom; the downsize risks to the forecast, while prevalent, had eased slightly: he highlighted the temporary ceasefire of the trade conflict as a good sign, though many, even structural issues remained. As for the coronavirus outbreak, it will likely have an impact but it was too early to assess the magnitude and duration of such impact; there was not enough known about the virus itself to assess its impact. Lessons from the SARS outbreak in the early 2000s pointed to a sizeable but limited economic impact, though selected economies were hard hit, among them Singapore. In response to the recent outbreak, some private sector estimates have come out quickly and were quite pessimistic, forecasting a reduction of regional growth by 0.6%. Yet, it was generally agreed that this development would not push PR China and the rest of the world into a recession, despite the interruption of the global value chain.

48. Bond yields and CDS premiums were mostly lower, as central banks left policy rates unchanged in December 2019. Currencies showed a mixed development, while the equity markets appeared to be recovering across the board. The total LCY bonds outstanding in Emerging East Asia's domestic bond markets had reached USD15.2 trillion, consisting of government bonds and corporate bonds at about 2/3 and 1/3, respectively, which left much room for further development. PR China and the Republic of Korea remained the largest bond markets, followed by Thailand, Malaysia and Singapore. Dr. Park pointed out that markets were perceived to be underdeveloped, but that was not the case; when compared to selected European bond markets, the Emerging East Asia markets were catching up. The share of foreign holdings across the bond markets remained relatively stable. On the audience question whether a noticeable shift of, e.g., manufacturing from PR China to Viet Nam would become entrenched as a result of the pandemic or economic downturn, Dr. Park responded that any shift depended on what production other markets could accommodate and what their workforce skills were; while principally that could be good for Viet Nam, it would also put other economies in the frame, including Mexico as an example.

49. Dr. Shu Tian highlighted the launch of ABO's flagship publication, the Asia Bond Monitor (ABM), in conjunction with the SECC in Cambodia in November 2019, attended by more than 70 participants; ABM was issued quarterly and featured topical research on top of general statistics in each publication, with the November issue containing a chapter on bond market development and bank risk taking that was also presented at the launch event. The ABO team had been making changes to its knowledge products, offering a revamped Weekly Debt Highlights newsletter for the first time in January 2020, replacing text with info graphics and tables containing the data in an easily structured and more user-friendly layout. The newsletter provides a snapshot of relevant economic and financial indicators, bond-related news and information on bond issuances; every 2 weeks, the newsletter would also contain a list of upcoming events and dates.

50. Summarizing the work achievements of the ABO team in 2019, Dr. Tian pointed to the data collaboration with the Ministry of Finance of Viet Nam, which allowed ABO to publish annual data from 2012 to 2018 and quarterly data beginning from 2019. As part of the information dissemination and data collaboration, the annual Vietnam Bond Market Report prepared by the Ministry of Finance of Viet Nam is now publicized through the ABO website. Information on AMBIF issuances are also now available on the website, while publications and events are now shown on separate pages to provide more focus for web searches and easier access. In addition, the ABO team had developed a registration system for published events, which can also be used for ABMF Meetings going forward.

51. **Update on Credit Guarantee and Investment Facility Activities** (CGIF): Mr. Jin Young Park provided an overview of the work of CGIF. 8 years ago, CGIF had not been well known but the association with ADB had helped. By now, CGIF was established in its own right and can focus on issuance rather than on marketing. Initially, CGIF had focused on the ASEAN5 markets, with the board subsequently being asked to cover Viet Nam, then the BCLM markets to help issuers tap their own markets. Mr. Park reviewed the annual guarantee targets and outcomes. By now, CGIF supported issuers from 10 regional economies, of which 5 had issued in ASEAN6 currencies. Among the new markets, 2 companies were being developed in the pipeline, with a proposed issuance in 1Q2020 for Cambodia; the pipeline might also yield the first dual-currency issuance under AMBIF. CGIF had issued 27 guarantees so far (details given on slides). Among the lessons learned was that a high credit rating should not be the only or main criteria for issuer selection; the example was the Noble case, being CGIF's first guarantee, which was successful at the time, yet the issuer was now in default.

52. CGIF had also been focusing on cross-border transactions, such as the Myanmar issuer tapping the market in Singapore and issuance for a Lao PDR issuer in Thailand. An additional focus for CGIF from 2019 had become high developmental impact issuances, such as solar bonds or amortized bonds; the Thai Baht issuance by Yoma Strategic Holdings in January 2019 had channeled the liquidity of Thailand's bond market towards one of Myanmar's growth sectors, while the bond was issued in Singapore. CGIF also supported the first green bond issuance in East Asia certified by the Climate Bonds

Initiative (CBI) and the first renewable energy project bond in Viet Nam. Mr. Park argued that there was a need for a financial hub, such as Singapore, to drive demand and the chance for co-guarantees or co-participation in bond issuances, as CGIF wanted to use its capital more efficiently. In terms of supporting green bond issuance, CGIF encountered similar challenges to those reported by other market observers: a limited issuance universe among corporates, few dedicated investors in green bonds and a general lack of knowledge and understanding of the necessary preparation for green bond issuance and their certification.

53. Audience feedback included that the CGIF offer for regional issuers to tap the +3 markets should be studied well, since those markets did not always provided the right offerings; Mr. Park acknowledged this but also pointed out that the +3 markets offered more flexibility in terms of tenor and size of a bond. With regards to the Noble case, participants enquired if a payout was necessary, how would CGIF get the necessary amount in local currency if its capital was in USD. Mr. Park explained that the guarantee documentation contained a clause allowing CGIF to pay out in a 2nd currency if local currency was not available; at the same time, this would typically not be an issue in regional markets, with the possible exception of Cambodia and Myanmar. A payout would occur within 30 days of the default and, while the agreements did not specify a particular FX rate, CGIF would follow market conventions to determine the adequate rate, such as the average rate of the last 3 or 5 days of fixings preceding the payout date. On the Yoma issuance. Mr. Park responded that no Myanmar market parties had been involved, since no opportunities were seen to place the bond in Myanmar – hence, the issuer had to think of other markets to tap. On a question whether CGIF has a completion risk product for project financing, Mr. Park opined that such product would be more suitable for a project loan; however, CGIF was in the process of exploring innovative products to meet market demand.

54. **Green Bond Market Development** (ADB Secretariat, Climate Bonds Initiative): Mr. Cedric Rimaud of CBI gave an overview of the state of the green bond market. In 2019, green bonds in the amount of USD255 billion had been issued, and issuance in 2020 was expected to top USD300 billion. It was expected that large investors would invest more in green bonds but Asia Pacific specifically should see green investment demand rise. The green bond market had developed significantly over the past 4 years and now accounted for a total outstanding of USD773 billion worldwide, across 1,125 bonds, with a focus in energy production, building and transport areas. South East Asia was seeing more and more issuers; Mr. Rimaud detailed some of the landmark green finance deals across ASEAN and emphasised that a conducive environment, such as in Thailand, helped markets attract green bond issuances. Malaysia had seen mostly green sukuk issuance while Singapore also featured green loans, particular by real estate investment trusts (REIT) and other property firms, on the back of the development of infrastructure for green financing.

55. CBI's work in ASEAN included workshops and events, including in conjunction with ADB, issuer and investor engagement and market newsletters, including in Thai language. CBI

was supporting Thailand to field a domestic verifier to support Thai issuers. CBI had also created a report into infrastructure investment opportunities in Indonesia in 2019, with the intention to ultimately offer such report for each ASEAN market. Mr. Rimaud referenced the Green Bond Principles (GBP) maintained by ICMA since 2014: the 4 principles covered eligibility of certain uses of proceeds, specific prescriptions for the selection of the project(s) to be financed and the management of the proceeds, as well as formal reporting obligations. He highlighted the agreed green bond taxonomy for a large number of sectors and activities which would allow prospective issuers to assess whether their own project was supported under the GBP.

56. Mr. Rimaud mapped out a journey towards a thriving green bond market; this required policy makers to act as green bond champions and the need for regulatory guidance on green bonds; initial issuances could be by the public sector or private issuers; this should be followed by marketing of the initial issuances and the general readiness of the market. Mr. Rimaud stressed that incentives for green bond issuance were certainly welcome by issuers and other market parties, however, were not seen as mandatory for success. Stock exchanges could create dedicated green bond segments and clearly show green bonds on screens. At the same time, regional and global investors are increasingly showing signs of their intention to invest more in green bonds, so it was important to also project a green bond market to foreign institutional investors. CBI was holding its global conference in London in May, which would bring together issuers, service providers and the buy side. It had been observed, particularly in Europe, that increasingly exchange traded funds were being established for the purpose of investing in green or other sustainable bonds.

57. Mr. Rimaud cited the European Green Bond Investor Survey, which had attracted responses from 48 parties, representing a combined EUR13.7 trillion in assets under management, of which EUR4.3 trillion was invested in bonds. Plans for a similar survey in ASEAN were under way. Key findings from the survey included a lack of green bond supply in the face of strong investor demand, a preference for non-financial corporate issuers, certification was important and the description of the use of proceeds needed to be clearer. Respondents identified that the majority of issuances were by development banks and, hence, a need for greater sector diversity and stated their preferences that if all major bond features were equal, the majority of investors would invest in a green bond. It was also found that the top 5 bond issuers in the energy and materials sector had not issued green bonds, except for utilities. Having a described policy was key to increasing green bond issuance in a market and the need for standardisation of practices was considered a priority. Feedback from investors in emerging markets indicated currency risk as a key consideration, as well as a focus on ratings and deal sizes. The use of credit enhancement measures would be key to achieve more green bond issuances in the region. Mr. Rimaud concluded that the urgency to build and offer a robust green bond market has been established.

58. The Q&A session saw a focus on what was the benefit for an issuer if pricing was not different to vanilla bonds, especially in view of the extra efforts; Mr. Rimaud mentioned that

the underlying green bond framework was a one-time effort and required the publication of 15-20 pages but conceded that internal processes within the issuer's organisation might require some efforts. As for pricing, an ADB study had found a possible 4-6 basis points differential between vanilla and green bonds at issuance, but no discernable difference in the secondary market. The key benefit for issuers were the interest from an additional investor universe and the ability to make the own organisation and its operations more climate resilient.

59. Mr. Kosintr Puongsophol elaborated on the green bond market in ASEAN+3. ADB had issued a report on green bonds[9] that included a number of recommendations and ADB was now in the process of setting up a new Technical Assistance (TA) to help implement some of these recommendations. Support under the TA could include advisory services to and grants for issuers but also capacity building to develop markets and train participants, including credit rating agencies. The funding for the TA was USD500,000, supported by the Poverty Reduction and Regional Cooperation Fund of the People's Republic of China; approval for the TA was expected by March 2020. To be eligible, green bonds would need to have a developmental impact and adhere to the GBP, Climate Bond Standards or the ASEAN Green Bond Standard defined by the Asia Capital Market Forum. Mr. Puongsophol described the ideal scenario as a domestic green bond issued under the ASEAN Green Bond Standards using the Single Submission Form (AMBIF) and guaranteed by CGIF. ADB would also be happy to help more economies adopt the AMBIF issuance programme, with or without the added benefit of green bond issuance.

60. Issuer feedback had revealed that it was considered difficult to engage international green bond verifiers, mainly due to language and cost issues. Consequently, ADB was hoping to develop local verifiers under the new TA. In addition, ADB would explore the feasibility of establishing an ASEAN+3 green bond exchange traded fund and an ASEAN+3 green bond index. In support of the efforts, ABO will create a dedicated section on green bonds. Among the TA outcomes, ADB would like to see more green bonds in more markets but would focus on building each market's ecosystem since different economies had differing needs.

## IV. ASEAN+3 Bond Market Forum - Sub-Forum 2

61. **LIBOR Reform and New Benchmarks** (ADB Legal): Mr. Nicholas McBride provided an introduction to the LIBOR benchmark reform and transition. LIBOR is the average rate at which banks in the London market are willing to lend unsecured funds, available for 5 currencies (CHF, UR, GBP, JPY, USD) across 7 maturities (overnight, 1 week, 1 month, 2 months, 3 months, 6 months and 12 months). LIBOR is determined by the contributions from between 11 and 16 banks for each currency. LIBOR could be traced back to

[9] Promoting Green Local Currency-Denominated Bonds for Infrastructure Development in ASEAN+3 is available for download from the ADB and AsianBondsOnline websites.

transactions involving the then Shah of Iran in the 1960s. Widespread manipulation by panel banks between 2005 and 2012 caused by vested interests led to USD9 billion in fines and a lack of confidence in the benchmark. Already, the number of underlying transactions in the short-term credit market had declined and questions had been raised whether LIBOR remained representative of market activities.

62. The need to move away from LIBOR as a benchmark can be traced back to a July 2017 speech by A. Bailey, Chairman of the Financial Conduct Authority (FCA) in the UK. The speech stated that LIBOR was not fit for the intended purpose, but that a transition will take time; it also contained the warning that regulatory authorities will not step in if the benchmark failed the market, which indicated that the FCA had withdrawn its support; in fact, the FCA might actively dissuade market parties from using LIBOR. Mr. McBride reviewed the growing regulatory shift towards alternatives that had preceded the speech, starting with a review in 2012 that recommended a reform, if not an abolition, of LIBOR, followed by an FSB report in 2014 recommending domestic benchmarks with stronger underlying data and culminating in the prescriptions by EU regulators in 2016 for the composition of benchmark indices and related practices.

63. However, there were and remain many challenges for a transition away from LIBOR, including which alternative benchmarks to use and the legal and operational impacts on documentation and practices entrenched with LIBOR as a reference rate. In response, public sector and private sector working groups in many jurisdictions set out to nominate alternative reference rates for their markets (overview shown). That led to another key challenge in that the alternative rates were typically constructed differently to LIBOR and also behaved differently, such as having a higher historical volatility. Most significantly, the alternatives were often based on risk-free rates with secured underlying transactions. The challenges extended to a need for risk premium adjustments between existing contracts with a tenor beyond the replacement of LIBOR. Fallback provisions in contracts were not designed for the discontinued use of LIBOR and needed to be adjusted across all product groups, such as loans, derivatives and bonds, with each product possibly needing a different solution. At the same time, generic adjustments (in fallback provisions) might not work for specific live transactions and just drawing up a fresh contract with new clauses would not address the many in existence. For the derivatives segment, at least, ISDA coordinated an industry-wide approach. Elsewhere, significant work was underway on contractual robustness, while an adoption of market-based conventions for the use of alternative reference rates in different financial products was beginning to occur.

64. One of the key issues for the LIBOR transaction remained the definition of how LIBOR would actually end; should it be in an orderly fashion over a period of time or as a big-bang approach (sudden cut-off) and what would the consequences be for a disorderly disengagement from LIBOR. Market parties may require a publicly evident trigger for a cessation of LIBOR practices. In this context, ISDA had done a significant job in working with the market and regulators to achieve a common understanding. Yet, all parties concede that appropriate and representative benchmark rates may not exist for some time.

This was also the key challenge in the interaction between the cash and the derivatives market, with the question of who would best act as reference to whom, also given that market conventions differed by segment and even by product. Yet, slowly the focus of the industry was shifting towards the planning for the transition; the FCA had indicated to the market to not plan for LIBOR to continue existing beyond the end of 2021. Mr. McBride urged market parties to plan for the transition across their organisations, including reviewing existing contracts and update systems and processes.

65. ADB had started working with its counterparties and created an internal working group to assess its exposure to LIBOR across its loans portfolio, derivatives transactions and investments. ADB had begun issuing debt instruments on the basis of SONIA (Sterling Overnight Index Average, used in the UK) and SOFR (Secured Overnight Financing Rate, used in the US) from 2018, with a total of 8 issuances since. Mr. Yamadera added that the LIBOR transition was positioned under ABMF SF2 because it was an industry event and required examination from an Asian perspective. Market parties in the region may understand the benchmark but not necessarily the full consequences of a transition. There was lots of legal work to be done, even for parties that did not trade in products using LIBOR. In addition, SOFR and other alternative rates were not the same as LIBOR; the new rates were based on secured transactions, requiring traditional practices to add a credit spread to rates and quotes. The prevalent use of non-deliverable forwards (NDF) in the currency market – the example of quotes for INR and KRW in Singapore was used – may be affected if benchmarks moved onshore, thus investors potentially losing a hedging tool which, in turn, might lead to less investor interest in the region. In addition, local markets in the region used USD term rates at hypothetical exchange rates since a fixing would not occur same day in Asia; this led to a time delay and a calculation of appropriate reference rates after the fact – the result could be a Y2K-like impact on Asian markets.

66. **EMEAP Report on Benchmark Reform** (EMEAP, Hong Kong Monetary Authority): Mr. Lawrence Tang briefly introduced EMEAP as a cooperative organization of central banks and monetary authorities from 11 jurisdictions in the East Asia and Pacific region, established in 1991. EMEAP conducts a governance meeting annually and working group meetings twice a year; at present, EMEAP featured 3 working groups. Its Working Group on Financial Markets (WGFM) agreed in 2018 to conduct a study on the implications of financial benchmark reforms to regional markets, which included the transition away from LIBOR. In November 2018, a survey was issued to members to enquire about market readiness and the regulators' expectations as to their role in any reform or transition. Findings from the survey included that regulators and central banks had a higher awareness of the issue, as had financial institutions, while corporates showed less such awareness. The WG concluded that it needed to raise awareness among all stakeholders. Consequently, an impact analysis was done in the report. It found that LIBOR USD rates were embedded in other reference rates, leading to a delayed or tiered impact for Asian markets. Also identified among the challenges were issues with legacy contracts, tax, accounting and infrastructure issues.

67. In its risk assessment, the report concluded that markets were not ready for the transition to alternative reference rates (ARR) and that the need to revise and renegotiate large amounts of contracts created uncertainty in domestic markets. While the risks had been somewhat recognised by the market, more awareness was needed for the actual financial and risk implications of the transition. The report recommended collecting more information on the financial exposure to LIBOR, form industry-wide groups in each jurisdiction to raise awareness, formulate a common central bank perspective on how to adopt ARRs and encourage the creation and trading of products using new benchmarks. The impact from the EU Benchmark Regulations on Asian markets could be that European counterparties would (have to) leave markets with an unregulated benchmark rate which could affect market liquidity and hedging activities. Operators of a benchmark would need to register with the EU and show equivalence to regulated benchmark rates, and also comply with IOSCO principles; so far, exemptions had only been registered for Australian and Singapore benchmarks. This issue was identified as possibly affecting the functioning of markets in the region, with a moderate risk rating since the transition period had been extended to 2022, by which new benchmarks may already exist in Asia.

68. Most members of EMEAP were planning to adopt a multiple-rate approach, in that they would retain the original benchmark while building new benchmark rate(s), depending on circumstances in each economy. This was seen as practical because collateralized or secured transactions were relatively few compared to benchmarks based on unsecured transactions. This required a dialogue between central banks, regulators, counterparties and industry associations. Mr. Tang showed the proposed new benchmark rates for the member economies. Once published, the report had also been shared with other industry associations representing affected stakeholders, such as ASIFMA, ICMA and ISDA. Central banks should also actively engage financial institutions in their market and address the operational and practical matters, such as tax and accounting related subjects; most importantly, though, stakeholders should be made aware of the urgency of the need for preparations. Mr. Yamadera added that markets would pursue individual approaches and he expected EMAP to continue to monitor developments in this regard. Asia was depending on USD funding and corresponding rates but had not been involved in the discussion from the outset. He hoped for the cooperation between EMEAP and ADB/ABMF to continue.

69. **Progress with benchmark transition** (Bloomberg): Ms. Vicky Cheng provided an overview of the benchmark transitions in progress and reviewed the recommendations from the Financial Stability Board (FSB). Local reference rates should be strengthened and, where possible, based on greater numbers of transactions; markets should identify risk-free rates (RFR) and encourage the derivatives market to start referencing these new RFR, while working towards fallback rates and on the robustness of contractual provisions. The FCA had urged market participants to act now because it would not compel panel banks to continue submitting information beyond 2021. Ms. Cheng reviewed the jurisdictions that had already selected an ARR, which included Japan. The question whether Asia was ready

would be difficult to answer as it was facing many and additional challenges, such as the implied USD FX rates. As for corporate awareness, Ms. Cheng pointed out that response rates by corporate to calls for industry action had increased in recent times and the attitude of corporates was beginning to change from simply being a rate taker to enquiring on what they needed to be aware of.

70. Mr. Edmund Lee reviewed the ISDA discussions on ARR in 2018 and 2019, including on the types of rates principally available for consideration as ARR, and the characteristics of SOFR and RFR against LIBOR. Administrators were faced with the challenge to create a robust forward-looking benchmark based on trades while being IOSCO compliant. It was found that near-RFR followed a different calendar of calculating interest – and potentially different times of publication – and that the locality where rates would be applied could also differ; for example, Asia would get such rates 2 days later. One key consideration was whether to adopt a forward looking or look-back calculation method. While these discussions had been under way, the exposure to LIBOR had continued to grow with no real preparations occurring or firm answers on what a transition should look like. For SOFR, the question of how to calculate spread adjustments had not been formally stated; instead, it was recommended to follow ICMA guidance.

71. The impact on Asian bond markets was likely seen in domestic hedges and rates but also in cross-border hedges. An impact on the USD market in Asia was expected, simply because a large number of pending contracts expired after 2021. Among interest rate curves, 73% were expected to cease following the end of LIBOR, while others would be built. Conventions for new benchmarks had to be built and aligned among markets and products; this was particularly pressing for cross-currency swaps in case both currencies' benchmark rates used different conventions or practices. ADB had indicated in November 2019 that both foreign and domestic investors in the region's bond markets would need to prepare for a potential shift away from LIBOR to ARR. On the contractual side, ISDA had been mandated to determine the pre-cessation triggers and conditions that would allow existing contracts to be amended; among these triggers could be that a bank stopped submitting information into LIBOR. It was also hoped that an agreement could be made that LIBOR could no longer be used as reference rate in new trades. Regulators had been encouraged to check whether market fallbacks existed and amend those accordingly. In the meantime, some issuers have been observed amend their bond conditions to reflect the expected changes.

72. In October 2019, the US Fed had stated that the use of forward-looking rates was not ready as there was not enough breadth and depth in underlying transactions. Mr. Lee reviewed the typical questions facing the national working groups on benchmark transition and highlighted that market participants needed to start working on necessary adjustments to technology, data sets, legal and compliance practices, as well as assessing the impact on asset and liability management. Key among the challenges for investors was the need to understand changes in risk and valuation on a portfolio and the individual trade level. With the impact from benchmark transitions on an organisation, managers would also still be

competing for the same resources across IT, legal and operations in a firm that also had to manage a number of other regulatory initiatives affecting the industry. It might, hence, be necessary to raise awareness of the challenges facing an organisation to get the right attention at the right time. Mr. Lee also stressed that the Bank of England and the FCA had asked banks to stop referencing LIBOR from April 2020, which would create a pre-cessation trigger that would allow all financial institutions to become aware of the need for changes and begin working on those changes. In the US, a similar call was made for banks to stop referencing LIBOR from October 2020. Mr. McBride added that regulators had indicated that they would take further actions if the markets did not.

73. **Progress of ISO 20022 migration** (SWIFT): Ms. Mieko Morioka introduced to the audience the programme for ISO20022 migration in cross-border payments and cash management. The term programme had been chosen because the roll-out was based on an agreement in the payments community to embark on a 4 to 5 years process to replace the original MT messages by 2025. MT messages (ISO15022) had been used for 30 years but markets had seen a rush towards ISO20022 to allow participants to deliver next generation payment solutions. After initial skepticism, users were beginning to get used to the features and opportunities offered by ISO20022. 50% of High Value Payment Systems (HVPS) will adopt ISO20022 by 2025, with 10 HVPS already on ISO20022; all reserve currencies were already live or had declared a live date. The significance of payment messages lay in the volume – the annual world GDP of about USD28 trillion was moved through payments on the SWIFT network about every 3 days.

74. To complement the migration efforts, SWIFT will provide a value rich service in addition to the messaging; this will include security and compliance products. Ms. Morioka showed the path for the payments community from the initial discussions to the final decision and reviewed the community agreement: participants had to be able to receive ISO20022 messages from November 2021, across MT1xx, MT2xx and MT9xx message formats. The old and new message formats would co-exist in a transition period until November 2025, before the old messages would cease to exist; however, participants were encouraged to migrate as soon as possible. Treasury and trade finance related messages were not included in this programme. The migration programme was aided by the Cross-Border Payments and Reporting Plus initiative (CBPR+), a group of peer banks, which would advise the community on the definition of payment practices and was expected to change the language of payments, arriving at global market practice and usage guidelines for the entire industry; GBPR+ guidelines would be interoperable with HVPS+ (a payment systems association) guidelines, dating back to 2016 and 2017, and would document and justify deviations between the guidelines (examples of CBPR+ Phase 1 usage guidelines and planned translation rules were shown). Ms. Morioka also noted that, sometimes, local content was needed which would be documented accordingly.

75. Ms. Morioka offered a refresher on ISO20022 and its objectives, offering more, richer data in a more structured way to allow many more uses and applications, with some examples of payment message comparisons shown. Among the new features in ISO20022 messages

were the inclusion of other standards, such as the International Bank Account Number (IBAN), the ability to include end-to-end transaction identifiers and also new data elements. These features also reflected the increasing demand and prescriptions of transparency in cross-border transactions, as promulgated by, e.g., the Financial Action Task Force (FATF). In Asia Pacific, about 900 banks will have migrated to the new message format by November 2025 and the region was very much in sync with the global migration programme, and SWIFT was continuing to engage with market participants in many jurisdictions to support local migration efforts. In Japan, a working group under the Japanese Bankers Association was examining how to apply the rich data nature of the new cross-border payment messages to the domestic payment system that was already ISO20022 compliant. Resulting guidelines to the market were expected to be distributed in 1Q2020.

76. Mr. Yamadera added that one consideration for Asia was whether local character sets should be added to the messaging, since ISO20022 had rich data capabilities; such idea should be guided by how to maximize the use of local characters, not just focus on a pure translation. This also highlighted the requirement to think ahead of a migration to ISO20022 since it offered many new possibilities. Participants enquired on what actions may be taken if clients with messaging capabilities did not want to participate in the migration programme or were indifferent. Since SWIFT covered bank-to-bank messages, all banks had to participate in the migration, which may not directly affect clients of a bank; at the same time, clients had quite different levels of sophistication and abilities how to respond to a migration – key was to engage clients to achieve a higher rate of acceptance. At the same time, it was necessary to engage specifically those non-bank financial institutions (brokers or fund managers) that generated instructions volume. Participants also commented on the challenges of rich data in the context of AML compliance checks, where more data also meant more work to define additional tests. While screening systems would indeed need to be adjusted, the richer data would also allow for a more differentiated check on entities, their activities and purposes.

77. **ISO 20022 Challenges today** (J.P. Morgan): Mr. Masayuki Tagai lauded the ability of ABMF to create awareness and offer guidance and lessons for and from ISO20022 migrations. ISO20022 had, thus, become entrenched in the members discourse and no longer presented just a concept. Mr. Tagai emphasized the richer, more structured nature of ISO20022 with the example of an address, which under ISO20022 messaging consisted of 17 tags; the new message formats had many such additional tags for client attributes. In contrast, the current messages and their free format approach often led to ambiguity and false positives during screening. While the original thought had been that a payment was just a payment, nearly everybody – clients and regulators – now wanted more information, including what had previously been covered outside the payments business and now needed to be brought into the payments fold. On the other hand, the new message formats (e.g. pacs008) could extend to 1,000 lines and were no longer easily human readable; in contrast, an MT103 used to be about 100 lines. This development needed new processes

and required a new understanding of abilities but also opportunities. At the same time, an integration of the new messages into an institution's processes was called for, even though most people would not associate such tasks with payments. Integration was becoming more and more important and warranted capacity building and training across an organisation.

78. One of the key drivers for the need for ISO20022 capabilities have been the so-called 'travel rules' for cross-border payments, following the FATF Recommendation 16 on wire transfers, which prescribed the need for a payments message to contain information on the originator and beneficiary through the payments chain and where such information could not be tampered with. This meant that the payment originator as well as the beneficiary information needed to be retained in a payments record, even if not all information might always travel (= be in the same message) together. In addition, some jurisdictions had imposed strict adherence to practices for which such travel information was crucial; e.g., Singapore required the screening of an incoming payment's information before crediting a beneficiary's account. Hence, SWIFT had been focusing on the intermediaries, in bank-to-bank transactions; the prescriptions also meant that not only selected intermediaries, but all firms had to participate.

79. Mr. Tagai stated that ISO20022 as a standard was still evolving and some systems had been implemented with earlier versions of ISO20022; those would be migrated to the latest versions eventually, could probably already reap some of the available benefits but needed to define interim solutions to be able to comply with regulatory expectations. Commenting on myths and opportunities, Mr. Tagai also stressed that the local payments community in each market had the responsibility to ensure that its needs were met and not just leave the discussions – and definitions – to cross-border practices. Stakeholders in each community were accountable relative to both their own regulations and those prescriptions their counterparties were subject to. While a translation service between the old and new payments messages would be available, participants should expect a critical data loss when translating from ISO20022 to MT message formats since the old formats did not have provisions for identifiers or other new elements built into ISO20022. As a result, much organisation, resourcing and hiring would be required to migrate to ISO20022 but the foundation for a successful project would be laid by creating awareness and the recognition of the impact of the migration on the organisation. If a firm did not change now, it risked becoming isolated – from clients, counterparties and the industry at large.

80. Mr. Tagai reminded the audience that ISO20022 was the data transportation design standard; separately, the industry needed to define a data standard. In his experience, top tier clients were becoming more data savvy, wanting more data more structured, and including much additional information not previously part of messaging. This led to an impact on reporting, by instance, in consolidated or granular versions, using and analyzing specific data elements – and all of it cross-border and in real time, if necessary. The use of reporting could be extended to accommodate specific needs, such as information on tax residency or tax codes for tax processing and other applications. Beyond a migration to

ISO20022 existed strategic opportunities which could become the foundation of cross-border real time data exchange – ISO20022 was the catalyst for data services going forward. On the question which markets had retained the MT5xx formats for securities, Mr. Tagai mentioned that MT messages under ISO 15022 were already rich and well-structured and the corresponding ISO20022 messages contained the same data, which did not warrant the same demand for an immediate migration as in payments. The industry had, hence, left it to bilateral agreements to utilise ISO20022 messages.

81. **Panel Discussion: How to Move Towards a More Data-oriented Financial System-Potential Areas of Improvement** (panel discussion; the panel consisted of Ms. Mieko Morioka, Mr. Go Nagata (ADB), Mr. Changmin Chun (GLEIF) and Mr. Masayuki Tagai and was moderated by Mr. Satoru Yamadera): Mr. Yamadera stressed the conclusions from earlier presentations that organisations had to think ahead and not just aim to translate existing business models and processes. Mr. Nagata was leading the dialogue with tax authorities and it was encouraging to see a regional discussion on subjects of interest for stakeholders; hopefully, it would be possible to link ABMF work with the tax discussion.

82. Mr. Nagata elaborated on the data collection and use by tax authorities. Among the United Nations development goals, Goal 17 emphasised the mobilization of domestic resources to improve the domestic capacity for tax and other revenue collection; Goal 16 recommended strengthening relevant national institutions, including through international cooperation, for building capacity at all levels, particularly in developing countries. A representative measure among tax authorities was the proportion of tax revenue to GDP; 15% was considered a minimum level for the subsistence of a proficient public service; the average among OECD countries was 34% while in Asia, the average was 18%, with some economies recording less than 15%. A part of ADB's response to the regional challenges, under ADB's 2030 strategy, had been to organise meetings for tax officials for capacity building and to create a platform for knowledge sharing and the development of best practices that suited regional economies. ADB had also supported domestic tax policy and administration reform through TAs under its mandate to support sustainable tax revenue.

83. Data collection and use was a hot topic among tax authorities. ADB was assisting the tax authorities and the OECD and had held a number of workshops. The discussions among tax authorities in these workshops centered on evidence-based tax policy reform, the digital transformation of tax administration as well as compliance risk management (CRM), effectively the understanding and addressing of the underlying risks of non-compliance among taxpayers. Instead of giving guidance on tax matters, ADB had focused on providing guidance on how to collect data and use data in a meaningful manner, and ADB will continue to provide such guidance. OECD and G20 initiatives towards the same goals had already resulted in the Common Reporting Standard (CRS) and a common reporting approach by multinational companies on their revenues, profits and tax contributions across borders.

84. Mr. Chun, a GLEIF Board Director and professor at the Seoul National University of Science and Technology, argued that it was time for a wider adoption of the LEI in conjunction with the ISO 20022 migration. The use of LEI had drastically increased following European and US regulatory action and ISO20022 was a good ecosystem for the use of LEI; there was much synergy between LEI and ISO20022. LEI represented a standardised entity identification that also represented multiple fields in messaging and its underlying data already carried some information relevant for the assessment of an entity as client or counterparty. Industry support for the use of LEI in payments had been evident since 2017, when the Payments Market Practice Group had identified the lack of structured data as a material barrier to efficient and effective AML screening and had recommended the use of LEI for debtor and creditor identification in payment messages as golden copy, also making existing data fields obsolete. The migration of payment system infrastructure to ISO20022 was seen as the right catalyst for the introduction of LEI.

85. GLEIF was soon to offer an API solution to dock to interested users' systems, where one could search for a specific entity name or by other criteria to obtain the LEI of an entity or check on its validity. Additionally, reference data filters allowed checking on specific aspects of an entity. LEI also contained the Legal Entity Form code among its underlying data and other data attributes allowed the determination of 'who owns whom' through a list of subsidiary or related entities under a single LEI. Given the need to migrate payment messages to ISO20022 by November 2021, financial institutions should consider the inclusion of LEI in their databases and processes. The API gave them the capability to validate or augment their clients' data with LEI.

86. The panel discussion reviewed the remaining challenges relating to ISO20022 migration: some institutions had older versions of ISO20022 and were required to migrate again to the latest standard; SWIFT was aiming to support these institutions in their efforts. Banks faced a multitude of challenges, since the focus was often on the global or cross-border business but the domestic volume was often larger and subject to specific practices. As a result, banks had to attune themselves internally to address challenges in both global and domestic business; at the same time, the exposure to retail clients offered both opportunity and challenges. This was part of the journey to look at one's business wholesome.

87. For tax authorities, it was a challenge to obtain or consolidate data from other government organisations, let alone in a standardised manner. Discussions with the financial industry on standards were not yet on the agenda. The proposed dialogue among tax authorities facilitated by ADB was welcome and ABMF could act as a conduit into the private sector with the objective to break down silos. Here, it was important to focus on the capital market because cross-border investment would pursue tax reclaim or relief for which the process was highly repetitive and came with much documentation requirements.

88. GLEIF was facing challenges in promoting LEI to other parties in that regional markets were not aware of LEI in the same way as some counterparties; Korea was mentioned as an example. Markets might also not see the need to introduce LEI since they had working

domestic identifiers. In addition, a perception was prevalent that LEI was only required for counterparties of EU or US institutions. While LEI will eventually spread further, the scale of an economy was also relevant. By 2019, 1.5 million LEI had been issued, yet it was felt that about 40 million LEI could be used to benefit stakeholders. While GLEIF referred to the low cost of LEI, industry sources bemoaned the need to spend for an indicator that did not bring them any direct revenue or benefits. Advantages of an LEI, however, were the data collection and validation by other parties, not requiring the recipient to do all the work themselves. Cost for a migration to ISO20022 was a factor to be acknowledged but panelists also pointed out that not all processes had to change – the primary focus should be dealing with accessing the additional data, which would ultimately reap benefits when, e.g., conducting screening or other compliance activities.

89. Among the use cases, panelists referenced the example of ESMA, which was accepting derivatives reporting information from trade repositories in ISO20022 formats since 2017. In contrast, banks reported in proprietary formats. This made parties realize that ISO20022 could act as an integrator of reporting, business processes and physical messages. The approach of ESMA had since been adopted by other EU regulators. Hence, ISO20022 offered the opportunity to be a standard for government entities to talk to each other.

## V. Next ABMF Meeting

90. The 34th ABMF Meeting and 21st CSIF Meeting and related meetings are planned for the week of 15 June 2020 at Hokkaido University in Sapporo, Japan. The meetings will include a focus on new technologies and real applications and are expected to cover 4 or 5 days, depending on the subjects included and any potential side meetings.

91. Subsequently, under increasing measures to combat the COVID-19 pandemic, including health advice, flight and travel restrictions, the meeting was initially postponed to early September, then called off. [Note: the meetings were eventually held as virtual meetings on 31 August 2020.]