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Financial Inclusion in a Digital Age

Summary Report

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This report reflects the views of the authors based on presentations by and discussions among participants at the Forum, and not necessarily those of the Advisory Group on APEC Financial System Capacity Building, APEC Business Advisory Council, Asian Development Bank Institute, the Foundation for Development Cooperation, nor of any of the other collaborating institutions. The terminology used may not necessarily be consistent with Asian Development Bank official terms.

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Abbreviations

ABAC – APEC Business Advisory Council
ADBI - Asian Development Bank Institute
AML - Anti Money Laundering
ASP - Application Service Provider
BSN - Bank Simpanan Nasional
BSP - Bangko Sentral ng Pilipinas
CGAP - Consultative Group to Assist the Poor
CIC - Credit Information Corporation
CIS – Credit Information System
DBT - Direct Benefit Transfers
DFS - Digital Financial Services
FDC - The Foundation for Development Cooperation
FMP – Finance Ministers’ Process
GIZ - Gesellschaft fur Internationale Zusammenarbeit
IFC - International Finance Corporation
INR - Indian Rupee
JICA - Japan International Cooperation Agency
KYC - Know Your Client
MNO - Mobile Network Operator
MSME - Micro, Small and Medium Enterprise
MYR - Malaysian Ringgit
NRPS - National Retail Payment System
P2P - Person to Person
PERC - Policy and Economic Research Council (PERC)
PMJDY - Pradhan Mantri Jan Dhan Yojana
PRC - People's Republic of China
RTGS -Real-Time Gross Settlement
SBV - State Bank of Vietnam
SEC - Securities and Exchange Commission
VTA - Virtual Teller Machine
WSBI - World Savings and Retail Banking Institute

Forum Organizers

The Asian Development Bank Institute (ADBI), located in Tokyo, is a subsidiary of the Asian Development Bank. It was established in December 1997 to respond to two needs of developing member economies: identification of effective development strategies and improvement of the capacity for sound development management of agencies and organizations in developing member economies. As a provider of knowledge for development and a training center, ADBI serves a region stretching from the Caucasus to the Pacific islands. For more details, visit www.adbi.org

The Asia-Pacific Economic Cooperation (APEC) Business Advisory Council (ABAC) was created by the APEC leaders in 1995 to advise APEC on the implementation of its agenda and to provide the business perspective on specific areas of cooperation. ABAC is comprised of up to three members from each of APEC's 21 member economies, representing a range of business sectors. ABAC holds an annual dialogue with the APEC leaders and engages in regular discussions with APEC ministers in charge of trade, finance, and other economic matters. For more details, visit www.abaonline.org

The Foundation for Development Cooperation (FDC) is an independent Australian foundation committed to building prosperity in developing countries in the Asia Pacific region by pursuing initiatives that reduce poverty and promote equitable growth. We achieve this by researching, piloting and promoting development initiatives that are market-based and innovative, drawing on the collective skills, knowledge and resources of organisations from across the public, private, NGO and academic sectors. Established in 1990, FDC has its head office in Brisbane. For more details, visit www.fdc.org.au

Forum Partner

The Citi Foundation works to promote economic progress and improve the lives of people in low-income communities around the world. We invest in efforts that increase financial inclusion, catalyze job opportunities for youth, and reimagine approaches to building economically vibrant cities. The Citi Foundation's "More than Philanthropy" approach leverages the enormous expertise of Citi and its people to fulfill our mission and drive thought leadership and innovation. For more information, visit www.citifoundation.com

Executive Summary

The 2016 Asia-Pacific Forum on Financial Inclusion was organized by the APEC Business Advisory Council (ABAC), the Foundation for Development Cooperation (FDC) and the Asian Development Bank Institute (ADBI) in partnership with Citi Foundation. Additional support for the Forum was provided by several organizations including the International Finance Corporation (IFC), the Consultative Group to Assist the Poor (CGAP), Japan International Cooperation Agency (JICA), the Policy and Economic Research Council (PERC), TRPC, The Australian APEC Study Centre, the Australian Centre for Financial Studies and the World Savings and Retail Banking Institute (WSBI). Through the collaboration of each of these partners the Forum contents were designed with the aim to facilitate discussion on financial inclusion that would result in action amongst stakeholders to address key issues.

The Forum has occurred annually since 2010 and is a policy initiative under the APEC Finance Ministers' Process (FMP). It provides an opportunity for policy makers and regulators to engage in high-level dialogue with representatives of the private sector to review the current trends, challenges and achievements in the region and provide recommendations to enhance regulatory frameworks in support of financial inclusion.

The Forum, now in its 6th year, consisted of eight sessions that addressed a range of topics including: (i) credit bureaus and credit information systems, (ii) microinsurance, (iii) cross-border payment systems, (iv) savings, (v) digital finance infrastructure, (vi) financial literacy, (vii) digital finance and consumer protection and (viii) insolvency. In total, the Forum was attended by 135 participants of which 30 were government representatives including officials from the APEC Finance and Central Banks Deputies Meeting. The other 105 participants included representatives of the private sector, academic institutions and civic organizations. The Forum was officially opened with remarks from:

- Dr. Naoyuki Yoshino, Dean, Asian Development Bank Institute (ADBI), Japan;
- Mr. Hiroyuki Suzuki, Chair, ABAC Finance and Economics Working Group; and Director and Board Member, Nomura Holdings Inc., Japan;
- Mr. Anthony P. Della Pietra, Jr., Representative Director, President & CEO, Citibank Japan Ltd. & President & CEO, Citigroup Japan Holdings G. K.; and
- Mr. Daikichi Monma, Director-General of the International Bureau, Ministry of Finance of Japan.

The 2016 Asia-Pacific Forum on Financial Inclusion provided an opportunity for stakeholders to review the current trends, recent achievements, ongoing challenges and opportunities within the region relative to financial inclusion in the digital age and discuss how these developments are impacting different markets. Through these discussions the Forum has produced several specific recommendations for APEC policy makers and regulators to support their financial inclusion efforts. These recommendations are outlined as follows:

Credit Bureaus and Credit Information Systems

- Governments should collect data as a matter of policy at the data subject level and with the underlying premise that this data is owned by the data subjects. Within this framework, data subjects must be given access to their data when needed. However, in cases where privacy issues are of concern, at the very least, data generated by data subjects in their transactions with government franchises, utilities, and other services that have a public interest component that can have an impact on an individual's ability to have access to credit and other financial services, should

be contributed to registries or bureaus (depending on government policies covering these) as part of their franchise or authority to operate.

- Efforts should be made to allow this data (from the point) to be paired with other forms of data that can serve to make it valuable to the MSMEs. Data Subject authorization for data use should be the prime determinant of how data is used as long as there is full disclosure of uses of the data and a time period to the use. Also, revocation of right to use by third parties (which does not include government agencies in the context of policy creation and statistical analysis) should be unilateral.
- Assuming alternative data has a lower cost of acquisition, use of alternative data in credit scoring should be considered for loans of smaller value, with government monitoring of success, failures, and difficulties, and from there policy developed in response. However, these loans based on alternative data should be carefully recorded and monitored to protect the borrowers from unscrupulous lenders who will push the borrower into over indebtedness specially for the purpose of acquiring the borrowers' assets.
- Micro borrowers are currently borrowing having supplied very little data. In this lending process, risk is measured by an actual knowing of the data subject by the lender (arm's reach lending). However, lenders must be encouraged to convert this goodwill of lending without requiring data into engaging the borrower to submit additional documentation over several renewals of the loan specially with the focus of formalizing the financial footprint of the borrower. The goal being to begin the process of identity and repayment file creation, then applying non-traditional data along with behaviors obtained during the arm's reach lending process as "transitional data" for micro and no file borrowers, with the end goal of applying traditional forms of data over time.

Microinsurance

- Proportional regulation is needed to allow the market to support a range of insurance products including disaster risk and products developed specifically for MSMEs. In addition, digital delivery of products may entail supervision by several different departments and regulations, highlighting the need for affected government ministries to align departmental policy and work together to provide appropriate and proportional regulation for the microinsurance industry.
- There is substantial value in public-private dialogue, where policymakers and regulators engage with insurers as partners in developing products and solutions for both responses to and mitigation of disaster risk.
- The mobile phone platform is an enabler, but not a complete solution to financial inclusion. Many financial services require a degree of human interaction to meet the needs of customers, including in the insurance market – especially in building trust and the capability of new clients. Policy makers need to understand that while mobile products are gaining traction, models providing human touch also require attention as insurance providers respond to the needs of different market segments.

Cross-Border Payments

- Effective financial inclusion entails providing access to and use of a combination of products, with an increasing focus by providers on a holistic approach to meeting the needs of clients through making the right financial products and services accessible, and less on the traditional discrete products offered by individual providers.
- Whilst the focus of policy has been on reducing the cost of remittances, convenience and trust are the other key factors migrant workers and their families consider in their remittance decisions. To increase transparency and foster competition, governments can facilitate:
 - Participation of non-bank service providers in the financial services sector; and
 - The provision of independent and objective information to remitters on the range of options available, specific to their main corridors.

Savings

- Financial service providers employ a range of channels such as the use of agents to reach “last mile” clients. Regulation needs to respond to channel-specific situations, such as clear designation of responsibility between agents and financial services providers.
- Financial education is essential for financial products such as how savings accounts can be used and provide meaningful benefits to customers. Financial inclusion and financial education should be seen as an ecosystem with government, financial services providers and other specialists working together to develop and implement effective programs.

Digital Financial Infrastructure

- Systems interoperability is one of the most important elements of financial infrastructure that government can foster or influence to achieve greater efficiency, innovation, lower costs and convenience for consumers.
- MSME credit cannot be given in a vacuum and requires supporting services such as financial infrastructure, some of which can be developed and provided by government agencies, some by the private sector, and some through the industry associations, such as Japan’s Credit Risk Database.

Financial Literacy

- Adopting a domestic financial education program and strategy can better integrate the initiatives of financial service providers, governments and other stakeholders to extend the benefit of financial inclusion from access to usage and impact.
- Financial education programs that integrate with domestic school curriculums have shown to be effective, especially where tailored for various age groups and appropriate training is provided

to educators to ensure its success.

- E-learning platforms are gaining popularity across a range of educational fields and have proven successful in different markets in a providing greater variety of ways in which to reach more people.
- A Financial Health Check platform could be established which would allow individuals to monitor their cash-flow position (surplus or negative) and personal net worth (positive or negative). Such a platform would be particularly useful for individuals considering major purchases or borrowing as a way to be better informed of their financial position prior to making a decision.
- Regulators and policy makers should consider ways in which individuals can more easily check their credit scoring. The implementation of an individual credit checking system could serve as a way for individuals to easily access their credit information. Such a platform could also potentially also alert individuals over indebtedness if indicators are shown.
- Governments should consider providing a one-stop financial portal which can provide useful references on financial products for consumer comparison purposes.

Digital Finance and Consumer Protection

- Consumer protection in digital finance presents different challenges to those in conventional finance as the customer is different, agents are an additional dynamic, the interface is technology based, and it is often unclear as to who in the delivery channel is responsible to the client for what.
- At present, the challenges are manageable, as digital finance represents a relatively small proportion of transactions, with one of the main challenges being reliability of service. As digital finance becomes pervasive through more competition and the introduction of interoperability, suitability of products for clients, privacy and data protection will become more significant challenges for policy makers and regulators.
- The behavioral sciences and consumer centricity should be applied, not only to product marketing but also product design, diversification, consumer transparency, protection and regulation/supervision. Supply-side innovations and initiatives to increase access to finance should be influenced by a demand-side focus on how to best serve poor clients.
- In the same way that 'FinTech' is disrupting financial markets, 'SupTech' and 'RegTech' provide opportunities for technology to ease compliance burdens and enable rapid consumer feedback and early detection of problems, and communication of messages back to consumers.
- In the context of APEC, a consumer protection agreement among member economies will be needed since cross border DFSs are increasingly available soon.

Insolvency

- Sound insolvency and secured transactions regimes are essential for the effective redeployment of capital and assessment of risk by investors and lenders.
- Effective management of insolvency of SMEs is a question of balance: of the rights of creditors and debtors/ investors; between liquidation and reorganization; and need for efficiency and need for legal fairness.

Introduction

The Asia-Pacific Forum on Financial Inclusion has been hosted annually, following the successful holding of the first Forum in Sapporo, Japan and the endorsement of its regular convening by the APEC Finance Ministers at their 2010 annual meeting in Kyoto. The Forum is a policy initiative under the APEC Finance Ministers' Process that is entrusted to the APEC Business Advisory Council (ABAC). The 2016 Asia-Pacific Forum on Financial Inclusion was hosted by the Asian Development Bank Institute (ADBI) and co-organized by the APEC Business Advisory Council (ABAC), and the Foundation for Development Cooperation (FDC), in partnership with the Citi Foundation. Additional support for the Forum was provided by several organizations including the International Finance Corporation (IFC), the Consultative Group to Assist the Poor (CGAP), Japan International Cooperation Agency (JICA), the Policy and Economic Research Council (PERC), TRPC, The Australian APEC Study Centre, the Australian Centre for Financial Studies and the World Savings and Retail Banking Institute (WSBI).

The Forum provided an opportunity for stakeholders to review the current trends, recent achievements, ongoing challenges and opportunities relative to financial inclusion in a digital age in the region. By providing this platform for high-level dialogue amongst policy makers and regulators across the region, the Forum aimed to strengthen their capacity as well as provide priority recommendations for policy related issues impacting financial inclusion.

The Forum consisted of eight sessions that addressed a range of topics including the: (i) credit bureaus and credit information systems, (ii) microinsurance, (iii) cross-border payment systems, (iv) savings, (v) digital finance infrastructure, (vi) financial literacy, (vii) digital finance and consumer protection and (viii) insolvency. In total, the Forum was attended by 135 participants of which 30 were government representatives including officials from the APEC Finance and Central Banks Deputies Meeting. The other 105 participants included representatives of the private sector, academic institutions and civic organizations. This report provides a detailed overview of the discussions which took place at the Forum as well as specifically highlights the recommendations that were made for the consideration of APEC policy makers and regulators.

Chapter 1: Credit Bureaus and Credit Information Systems

Session Chair:

- Dr. Michael Turner, President and CEO, Policy and Economic Research Council (PERC), USA

Speakers:

- Mr. Jaime Garchitorena, President and CEO, Credit Information Corporation (CIC), Philippines
- Dr. Moon YoungBae, Managing Director, NICE Credit Bureau Research Institute, Republic of Korea
- Mr. Anthony Hadley, Senior Vice President, Government Affairs and Public Policy, Experian, USA

Quality information on the credit risk of borrowers is vital for financial institutions in making lending decisions. Credit bureaus provide a critical function in providing such information. In addition, the analysis of aggregated credit information from banks on the results of their lending activities can offer a valuable source of information and advice to financial institutions in developing their lending strategies. Policymakers can encourage the establishment and regulation of such institutions and activities.

It is also important to note the critical link within credit information sharing between both consumer credit data and commercial credit data providers. For micro, small and medium enterprises (MSMEs), comprehensive, or full-file, and rigorous reporting through a private credit bureau with a suite of full value-added services is important to overcome some of the most significant challenges in relation to finance options for MSMEs.

Credit Bureaus and Credit Information Systems: The Role of Data Analytics

Experian is a global information services group which currently operates 18 consumer and 13 business credit bureaus globally. One of the services which the company provides is data analytics for financial institutions, companies and regulators. Experian has entered into several partnerships with commercial banks, central banks and credit registries to help them understand how to manipulate and understand various types of data to create credit scores and similar analytical tools.

How a Credit Bureau Works

Within the basic credit bureau model, banks, non-bank entities and public sources such courts (which provide bankruptcy, lien and judgment records) contribute data to the credit bureau which is then distributed as credit information to several other entities including lenders, (i.e. banks or other non-financial entities), but also to consumers who play a very vital role in the accuracy of credit reports by looking at the report, determining any inaccuracies in it and disputing that information if necessary to ensure that the information is constantly evolving in terms of its accuracy and reliability. Credit bureaus also distribute data to central banks for oversight and systemic risk analysis. The specific expertise on the part of the credit bureau in this process is their ability to take data from thousands of sources and compile it into consistent formats. This process is known as data normalization. Credit bureaus also need to have expertise in data security, accurate matching (i.e. putting data into the correct files), real time access of data, bulk data processing, monitoring of portfolios, consumer relations, benchmarking and value added products and services.

Comprehensive Data

Comprehensive data is defined as positive data about an individual's transactions combined with their negative, or derogatory, data. Globally, about 32% of credit bureaus operate as negative only bureaus; however, in negative only databases all that can be found is default information. These negative-only bureaus have a very limited view of borrowers which compromises financial institution's ability to assess future credit risks. As an example, a negative-only bureau would typically exclude high-risk borrowers that may have multiple accounts open but haven't gone into default on any of them, but could potentially be at risk of defaulting on all of them.

Comprehensive data, or full-file data, provides the history contained on all open and closed accounts. Among all consumer and SME credit bureaus around the world, 68% of them operate as comprehensive data bureaus. This comprehensive model allows the lender a more accurate assessment of the credit worthiness of an individual and also helps creditors understand over-indebtedness by being able to collect data on all open accounts, not just the accounts that they hold on that consumer, or those that have gone into default. This makes it possible for creditors to see assets and liabilities that allow creditors to assess an applicant's "ability to pay," thereby ensuring that lenders are not over-indebting consumers who have already taken on substantial credit liabilities.

The Benefits of a Credit Bureau Model

The comprehensive credit bureau model benefits consumers, banks and the economy in general. Examples of these benefits include:

- Higher loan quality;
- Greater access to credit, including more favourable and fair terms for consumers;
- Better risk management, which benefits not only banks but the economy;
- Reduced indebtedness, which accrues benefits to consumers, banks and the economy;
- Data quality and transparency, which particularly benefits lenders but also consumers by understanding what information is held on consumers and their right to assess and dispute inaccuracies; and
- Data security, or the system by which the information is held and transferred under contracts, agreements and certifications. It is very important to ensure that this data is being held for permissible purposes only.

The comprehensive credit bureau model and its associated benefits is not just theory as the model has been proven time and time again through empirical studies that have been conducted by multiple organizations on the value of comprehensive versus negative data. These studies have shown that by utilizing both positive and negative data it leads to an increase in credit approvals by 74% as well as an overall decrease in default rates by banks. The analysis' also conclude that the more sources of data that is accurate and has integrity, the more default rates are decreased.

Regulatory Framework for a Credit Bureau

A credit bureau works within an ecosystem which consists of not only its owners and shareholders (if it is private), or government agencies (public), but of banks, other data providers and users. All of these stakeholders have a say in how this ecosystem is structured. Consumers particularly play an important

role in this ecosystem as its structure will directly impact on how a credit bureau can provide them with benefits. The regulatory and central bank oversight typically provides two roles. The first is ensuring that consumers are protected and have access to their data. They also need to ensure that data is being held securely and is being used for permissible purposes. The second role is to oversee the safety and financial soundness of the banking system because indeed it is financial infrastructure that allows greater risk assessment by lenders leading to a virtual circle of improved economic activity, as well as fair and more readily available data for loans to consumers.

Value-added Products from Comprehensive Credit Data

In environments in which Experian operates where negative only data is being collected, there are a limited number of value-added products and services that can be delivered to financial entities and others to help them understand, score and use data to enhance their own risk management. In contrast, areas where Experian operates where both positive and negative, or comprehensive data is being collected there are about dramatically more value-added products and services that will allow a lender to better assess and analyze their consumer data. These additional products and services that credit bureaus can provide on behalf of lenders include:

- application processes to manage thousands of applications being handled by an entity;
- credit scoring which assesses the probability of default;
- “ability to pay” assessments to mitigate the risk of over-indebtedness;
- portfolio monitoring which allows lenders to see across their portfolio whether or not positive or negative trends are occurring;
- consumer trend analysis to help creditors understand cross marketing;
- fraud detection including identity verification and identity management;
- bank benchmark analysis to help banks compare themselves to other lenders operating within the same markets; and
- collections products to help lenders know who they are collecting from and having the source data relating to the debt and understanding where the person is located.

Data is useless unless it can be turned into decisions. As the industry moves towards more digital banking services, these decisions often have to be made instantaneously. This leads to an understanding that in most mature economies credit report information, data analytics and scores have to be returned within fractions of a second, otherwise it becomes useless to the lender and they will move to one of the credit bureau’s competitors. This shows how important technology delivery has become in recent years to the speed of data analytics as well.

Filling the Digital Gaps in Data Generation, Collection and Distribution for Greater Inclusion

The Credit Information Corporation (CIC) was created by the Philippines Government in 2008 with the mandate to make highly available, highly accurate and low cost credit available to micro, small and medium enterprises (MSMEs) while also ensuring the protection of consumer interests. As a public institution, the CIC is a credit registry which aggregates and collates both positive and negative data submitted by financial institutions; unlike a credit bureau which is typically a privately owned company that would provide credit scores or other value added services. The CIC is supervised by the Philippines

Securities and Exchange Commission (SEC) and coordinates closely with the central bank, the Bangko Sentral ng Pilipinas (BSP). 60% of the CIC is owned by the Philippines Government with the remaining 40% owned by banks and other lending associations.

Much of the data which the CIC collects is required by law for submission. However, the use of this data is voluntary. Mandatory submission is important because by establishing the CIC the government was essentially creating a virtual monopoly and forcing banks to give up what they thought would be their competitive advantage over other lending institutions operating in the same space. To overcome this the CIC had to help them understand the quality, availability and usability of the data and how it could be used to increase their own effectiveness and efficiency. To achieve this the CIC has been engaged in several education campaigns and other capacity building programs over the past 12 months to help submitting entities better understand how to make use of the data made available by CIC. By helping the submitting entities understand how to benefit from the data, including direct access to credit reports from the CIC, the financial institutions have become more open to sharing this data as the benefits are now more widely accepted.

Scope of Coverage

The total population of the Philippines is about 100 million, with about half of the people being of working age. Current estimates indicate that there are about 20 million people banked (i.e. using formal financial services) in the Philippines. The CIC is currently working to include the 20 million banked population into their database by the end of 2016 while the long-term goal is to including the entire working age population (representing about 40-50 million people).

An unintended consequence of the Philippines' central bank allowing foreign bank ownership of 100% is that it has forced the local banks to look at lower income markets for a source of revenue. Traditionally, banking portfolios typically consisted of 80% to corporates and 20% to consumers, and included MSMEs. But due to the interest of the newer foreign banks that were better capitalized and offered better opportunities for lending, this caused many of the local banks in the Philippines, including the larger ones, to focus on the lower income and largely "un-tapped" portions of the market and look for data that would support their being able to operate in these markets. This has also led to many of these local banks having to now communicate and cooperate with cooperatives, rural banks and microfinance institutions since these smaller service providers are needed to act as first points of contact for many people who want to receive credit. As a result of this new business opportunity for the smaller financial institutions they are now taking a greater interest in looking at ways in which their data can contribute to this process to support their own business.

While there are approximately 40 universal commercial banks and about 40 credit card issuers operating in the Philippines, there are 24,000 registered cooperatives. If CIC is mandated to get data from all of these cooperatives, and the law requires that the origin of the data comes specifically from each cooperative, then this is where the challenge of going digital begins. Digital is a great enabler for those that have the data and the necessary infrastructure, which can support speed, accuracy and profitability. But for those that do not have access to any type of digital infrastructure this is problematic. Their licenses and ability to operate are tied in to being compliant to the CIC.

Digital Solutions for Expanding Coverage and Compliance

To overcome the issues of how smaller organizations can be compliant with their data without having access to proper digital infrastructure which would make their compliancy efforts far more efficient, the CIC has been working on solutions to make the recording of data easier across all institution types based on their specific needs and capabilities. As such, the CIC has developed its system so that data can be submitted simply by an encrypted spread-sheet via an internet connection. A significant advantage for the Philippines is its level of internet connectivity. Currently the Philippines has nearly 45 million internet users (almost 50% of the total population) and approximately 100 million active SIM Cards. The growth of internet connectivity in the Philippines has been exponential and creates important opportunities for small financial service providers to work with the CIC as well as other credit bureaus to further diversify their product offerings.

When assessing the market, the CIC found that when institutions developed the capacity to submit their data, they would also be ready to use it. To encourage this process, the CIC has worked with submitting institutions to ensure that their systems adequately match their capability to submit. Of particular concern to the CIC was the rural banks and cooperatives due to their lack of internal structures that would allow them to prepare data for submission in an efficient manner. To overcome this the CIC is working with a range of technology providers to identify workable solutions, including potentially adopting a cloud-based solution, that would enable a more cost-effective and efficient data reporting process.

Experiences and Challenges from Korea

Formally known as National Information and Credit Evaluation Inc., the NICE Group was established in 1986. At the time, NICE only collected negative data, and as such, the company was not regarded as a credit bureau. This changed after 2003 when Korea experienced a credit card crisis as a result of rapid expansion of credit through reckless issuance of credit cards. Prior to this crisis, all banks in Korea kept their customer data on their own databases as this information was viewed as their own asset. However, during the crisis it was realized that sharing this data had mutual advantages; particularly as consumers began to realize that they could continually access credit from different sources without the need to worry about how much debt they had accumulated from other sources. As a result, Korea's government began work to establish a credit registry which would collect consumer data and pass it on to the credit bureaus. Through the credit bureau this data is now safely stored and shared with banks to mitigate against the risks of future credit crisis's.

Building a Reliable Credit Infrastructure

Today, Korea's credit registry and credit bureaus cover the entire economically active population. The credit registry, however, does not compile any credit scores. Its main function is simply collecting the information from financial companies and passing it on to the credit bureaus. Korea currently has two credit bureaus which compete with each other to enhance the quality of credit scoring with the aim of enhancing the financial access of financial consumers who do not have enough collateral to borrow money from commercial banks and other traditional financial institutions.

The collaboration between Korea's credit registry and credit bureaus has led to the development of a very reliable credit infrastructure which is consistently ranked very high by global standards. A major benefit of this collaboration is the efficiency of the system. In terms of utilization, this allows for more accurate and efficient monitoring and assessment of data. Considering the purpose of the data collection, the partnership allows for greater depth and coverage while also enabling greater flexibility of the data collection process making it easier to adopt to the market's needs and changes.

Subprime Credit Bureau

Due to the unique characteristics of Korea's subprime market a separate credit bureau, known as Subprime Credit Bureau, was created. Managed by NICE, which has built a reliable financial credit bureau consortium, Subprime Credit Bureau provides customized services to subprime money lenders. Currently, Subprime Credit Bureau has 94 members which are made up exclusively of microfinance companies. The data collected by Subprime Credit Bureau is not shared with general financial institutions, but instead is only shared with other MFIs.

Overall, three factors have been identified which were crucial to the success of Subprime Credit Bureau. The first key factor was the effective anti-fraud systems which the credit bureau was able to implement. Since microfinance customers typically have a high need for credit they are often more vulnerable to financial fraud such as manipulated or false statements about their income or employment status or applying for multiple loans within a very short time period. With the establishment of Subprime Credit Bureau, these risks of fraudulent activities have been significantly diminished.

The second key factor for Subprime Credit Bureau's success was its ability to provide customized credit scores for subprime lenders. These credit bureau scores allow lenders to lower their costs by enhancing risk measurements. The customized scores also allow money lenders to assess credit applications much more accurately than what would be possible from generic credit bureau scores.

The third key success factor was the introduction of the Application Service Provider (ASP). The ASP is an effective loan risk management solution for startups or small-sized subprime financial companies. It is an alternative cost and time efficient online solution that smaller sized financial firms, including microfinance companies, can access to utilize an effective credit scoring system without, or before, developing their own in-house system.

Increasing Financial Access through Credit Reporting

The most critical factor of a credit bureau is its ability to collect negative information. Positive information is then added to the negative information to provide a more robust assessment. For certain population groups, such as young people just starting their career or the elderly, positive or negative data may be difficult to collect resulting in thin-file cases. In situations where there are a number of thin-file cases to assess, the use of non-financial data may be used as part of the equation to develop credit scores.

In emerging markets, traditional credit scoring methods are often not effective enough. In comparison with developed markets, where large credit scoring firms are able to provide lenders with credit scores based on accurate loan payment histories, emerging markets face several challenges such as data being inaccurate, incomplete or simply unavailable. Due to these constraints, many emerging market players are now turning greater attention to the potential of non-traditional data, such as social information, to

generate credit scores. In the long-term, it is important for emerging markets to develop its credit reporting system to the point where it can rely on both traditional and non-traditional data sources to ensure a reliable and stable credit market.

Recommendations:

- Governments should collect data as a matter of policy at the data subject level and with the underlying premise that this data is owned by the data subjects. Within this framework, data subjects must be given access to their data when needed. However, in cases where privacy issues are of concern, at the very least, data generated by data subjects in their transactions with government franchises, utilities, and other services that have a public interest component that can have an impact on an individual's ability to have access to credit and other financial services, should be contributed to registries or bureaus (depending on government policies covering these) as part of their franchise or authority to operate.
- Efforts should be made to allow this data (from the point) to be paired with other forms of data that can serve to make it valuable to the MSMEs. Data Subject authorization for data use should be the prime determinant of how data is used as long as there is full disclosure of uses of the data and a time period to the use. Also, revocation of right to use by third parties (which does not include government agencies in the context of policy creation and statistical analysis) should be unilateral.
- Assuming alternative data has a lower cost of acquisition, use of alternative data in credit scoring should be considered for loans of smaller value, with government monitoring of success, failures, and difficulties, and from there policy developed in response. However, these loans based on alternative data should be carefully recorded and monitored to protect the borrowers from unscrupulous lenders who will push the borrower into over indebtedness specially for the purpose of acquiring the borrowers' assets.
- Micro borrowers are currently borrowing having supplied very little data. In this lending process, risk is measured by an actual knowing of the data subject by the lender (arm's reach lending). However, lenders must be encouraged to convert this goodwill of lending without requiring data into engaging the borrower to submit additional documentation over several renewals of the loan specially with the focus of formalizing the financial footprint of the borrower. The goal being to begin the process of identity and repayment file creation, then applying non-traditional data along with behaviors obtained during the arm's reach lending process as "transitional data" for micro and no file borrowers, with the end goal of applying traditional forms of data over time.

Chapter 2: Insurance as the foundation of economic growth in the APEC region: What is the cutting edge?

Session Chair:

- Mr. Michael McCord, President, Microinsurance Network, USA

Speakers:

- Mr. Michael McCord, President, Microinsurance Network, USA
- Dr. Antonis Malagardis, Program Manager, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Philippines
- Mr. Puay Lim Yeo, Regional Manager for South East Asia and the Pacific, BIMA, Singapore

Insurance is often the forgotten partner of financial inclusion efforts. Yet, effective risk management strategies, especially for low income people, are crucial for developing economies. The efforts towards inclusive insurance have required a paradigm shift for regulators, insurers, and others in the insurance value chain. Major new efforts in the areas of mobile insurance, disaster risk management and public private partnerships are successfully expanding inclusive insurance while also highlighting several important considerations and solutions to continue this success.

Microinsurance consists of insurance products that are designed to be appropriate for low-income markets in relation to cost, terms, coverage and delivery mechanisms. Microinsurance is not just cheap insurance products. There is an environment that goes around it to make sure that the microinsurance products are effective for the low and relatively low income population. There is potential for an estimated three billion people globally to be microinsurance customers totaling an estimated \$30 billion in insurance premiums; representing a substantial market for many developing economies where microinsurance products are appropriate.

Microinsurance is often equated with microfinance insurance, however, only about 20% of microinsurance is distributed by MFIs globally. There are several distribution mechanisms including active and passive channels, agents and brokers and insurance companies are looking at a variety of methods in order to sell a broad range of insurance products.

In a global view, 5.2% of the total market in Asia, Africa and Latin America are currently covered by microinsurance. This shows that there is some substance behind microinsurance, but also shows that there is still a great deal of work to do in order to increase access. With regard to the number of providers and products there are nearly 1,000 microinsurance products currently being offered by more than 500 insurers. While these statistics show promise for the microinsurance industry, further examination is needed into the specifics of what products are being sold globally. Currently, the primary microinsurance product is a life product, followed by an accident product. Far down the list are health insurance products. It is important to consider how more valuable products can be developed and sold to clients. To do this, consideration must be given to the key drivers of the growth of the microinsurance industry.

One important driver is scale. By achieving scale, the cost of microinsurance products can be reduced with a greater number of insurers and clients being involved. Not only does achieving scale lower costs,

but it also leads to improved quality of insurance products. For example, microinsurance products can be expanded to support health and other issues to support low-income households.

Within the APEC region, the Philippines stands out as a leader in microinsurance. There are currently 31-35 million people identified as having microinsurance in the Philippines. So it can be seen that tremendous growth for microinsurance is currently occurring in the Philippines. More broadly, within APEC economies between 2012 and 2013 it was estimated that there were about 66 million people covered by microinsurance products; whereas today this estimate has increased to about 85 million people.

Microinsurance Against Natural Catastrophes for MSMEs

The Philippines has a thriving microinsurance market and due to the frequency of natural disasters there are several examples that can demonstrate the effectiveness of microinsurance as an important financial product for the poor. As of 2014, 62% of the entire insurance coverage in the Philippines is through microinsurance products.

In November 2013 Typhoon Haiyan (Yolanda) hit the Philippines with wind speeds reaching 313 km/h, the highest wind speeds ever recorded on land. The typhoon left over 16 million people impacted and nearly 4.1 million displaced. Over 6,000 lives were lost and an estimated USD 700 million in damage to agriculture and infrastructure. Following the typhoon 126,363 microinsurance claims were made with payments from insurers totaling USD 12 million. The average payment to microinsurance clients was USD 108 (PHP 4,777) which was used for either housing repairs (50%) or restarting livelihoods (50%). In terms of timing, 27% of claims were paid within the first 4 ½ weeks of the typhoon, with 60% being paid by March 2014. Due to the level of the catastrophe, and the relatively long time required to process payments as a result of the number of deaths and inability for clients to provide the necessary documentation, the Philippines' Insurance Commission allowed the payment of 50% of payout amounts without any documentation. As a result of Typhoon Haiyan, many insurers and distribution channels are rethinking their business models as the risk of such catastrophic events makes it difficult for many of these companies to maintain sustainability.

For disaster risk management each economy typically has specific institutions set up to address disaster management issues. This is done to increase the effectiveness and efficiency of both the planning and response of these occurrences. However, in some economies local coordination is an issue. The concept of disaster risk finance brings additional complexities to this issue. Traditionally, most discussions about disaster risk finance begin with the idea of using Natural Catastrophe Bonds, which are risk-linked securities that transfer a specified set of risks from a sponsor to investors. While these types of bonds might be effective in some parts of the world, they are relatively ineffective in Southeast Asia where capital markets are relatively underdeveloped. So for many developing economies within APEC alternative mechanisms are needed to provide the necessary financial safeguards, particularly for MSMEs.

MSMEs are a crucial part of developing economies and are also highly vulnerable to the shocks of natural catastrophes. The result of these facts is that when natural disasters occur, the loss of MSMEs can have significant impacts on the economy's economic growth. Conventional insurance products and services typically fail to consider the unique needs of MSMEs; particularly their value chain integration. As such, analytical tools and methodologies are needed to investigate the specific needs of MSMEs. The

result of these assessments might provide useful information which could help to motivate relevant stakeholders to enhance the amount of insurance products available to MSMEs.

A Toolkit for Public and Private Entities

To address this need, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), through its regional program “*Regulatory Framework Promotion of pro-poor insurance in Asia*” (RFPI Asia), has developed a specific toolkit to help insurers develop products that are appropriate for MSMEs. The main principle behind the development of this toolkit was to effectively integrate insurance into the range of disaster risk management mechanisms and as a result of this, enhance the protection against natural catastrophes and climate change. By using the analytical framework within the toolkit regulatory institutions and insurers are able to complement existing disaster risk strategies.

The toolkit emphasizes four steps as part of the analytical framework to successfully integrate microinsurance into the disaster risk management strategies. These steps are risk assessment, disaster risk management mapping, identification of gaps and exploration of disaster risk options. Throughout these steps, the framework supports the integration of microinsurance as a key part of broader disaster risk strategies.

Delivering Scale and Value Through Mobile Microinsurance

Today, the adoption of formal insurance products in most emerging markets is about 5% of the total population. Although some exceptions exist such as the Philippines where penetration is already quite high. In contrast, mobile penetration, or the adoption of mobile phones and the usage of mobile services, the penetration rates in developing economies is often 70% or more. This gap represents a significant opportunity for insurance providers in developing economies to reach a much larger portion of the population through mobile products.

BIMA is a specialized insurance intermediary, but not an insurance company. In most markets they operate as a licensed agent or broker. The aim of BIMA is to bridge the gap between insurance companies and the target group of bottom of the pyramid customers. They do this by designing affordable low-cost insurance products, including life, accident and more recently health insurance, to find ways to bring premiums down to a level that provides meaningful value for money to the target customers. BIMA distributes these microinsurance products through mobile technology. This technology is not limited to modern “smart” phones, but is adaptable for a wide range of mobile handset devices to ensure maximum reach.

BIMA puts significant focus on trying to understand their customers, 97% of which are estimated to be living on less than \$10 per day. Furthermore, nearly half of their target customers do not have access to formal bank accounts or mobile money wallets. 80% of BIMA’s customers are accessing an insurance product for the first time in their lives. This new experience for them has important implications for how BIMA operates.

BIMA’s underlying philosophy is to use a combination of human interactions and technology. Neither of these elements is sufficient on its own. Once the customer is known, it is easier to understand that what their barriers of entry are and how these barriers can be effectively addressed. Some examples of

common barriers of entry include lack of education or trust. BIMA follows four steps to ensure a satisfactory customer experience:

1. Human interaction. BIMA employs a large group of employees who regularly contact customers through phone calls or face-to-face interactions. These representatives focus on trying to educate customers to help them understand the products and how they could be beneficial to them.
2. Enrolment process. Simple code is used to produce live menu screens on the handsets and information about the customer is collected. Keeping this process as simple as possible is important. Additional value of the process is that it is completely paperless which moves away from traditional insurance and documentation procedures.
3. Billing. More than 90% of mobile users in developing markets are on pre-paid plans. This makes pre-paid AirTime credit the most effective billing plan. To implement this BIMA works with Mobile Network Operators (MNOs) to use this as a payment channel for premiums.
4. Customer Service. This step addresses any of the customer's needs with regard to the product including if they have questions or want to make a claim. A simple interface is used which can be displayed on the handset. A menu of options makes it easy for customers to submit requests or make claims. After using the interface, a customer service agent from BIMA will call the customer back to further discuss the issue.

Steps two-to-four are mobile based technologies which simplify the enrolment, billing and customer service payments processes. These are based on USSD and SMS technologies which do not require a modern smart phone to operate.

The combination approach of human and technology interaction has allowed BIMA to achieve significant volume in the insurance space. Within five years of operating BIMA currently reaches nearly 20 million customers across 15 countries worldwide. BIMA also works with approximately 4,000 agents or representatives helping them to make face-to-face or phone call interactions with their customers. To-date, they have developed more than 40 products; primarily in the life, accident and increasingly in the health insurance spaces. The success of BIMA illustrates how well the approach of using technology as a tool for microinsurance is an effective way to achieve inclusion in developing markets.

Choice of Business Model: Free Versus Paid

In terms of BIMA's choice of business model, when the company first started five years ago they launched a product known as Tigo Family Care Insurance in Ghana, West Africa. This product utilized what is known as the "free model". In this model, the more pre-paid airtime that a customer used, the more free life insurance they would receive. The mobile operator is then left to pay the premium. The incentive for the mobile operator to pay these premiums was develop a loyal customer base which would deliver positive business impacts in the long term.

Against the free model there was also a more conventional approach BIMA utilized for mobile delivery of insurance known as the "paid model," otherwise known as value-added services. The simple idea behind this approach is to put something on the shelf within the mobile network operator's portfolio and allowing customers to sign up and pay directly for insurance products with pre-paid airtime credit.

Throughout BIMA's short history, several commentators and others working in the industry have commented positively about their use of the free model as a way to distribute microinsurance products. Initially, BIMA believed that the free model was a key component of their success. However, today 100% of BIMA's new product launches over the past two years have been entirely on the paid model. There are several key learnings which resulted in BIMA making this transition.

The first key learning for BIMA when comparing the two approaches was that significant volumes of growth within the industry can be achieved by launching the paid model first. There is a contesting philosophy within the industry currently where some practitioners believe that significant volumes cannot be achieved unless the free model is used first. The basic argument behind this theory is that something free to customers must be released first to lower the barrier of entry, allow customers to adopt the product easily and then finally offer them a paid enhanced version of the product and convert them into paying customers. BIMA's experience over the past two years, however, has been that this theory is actually not correct. BIMA now believes that products do not need to be given out for free initially in order to build volume.

As an example, BIMA has operated in Cambodia for about two years. Within 1 ½ years of beginning their operations there they have managed to roll-out a very simple and basic life insurance policy through a partnership with a local mobile network operator. This policy currently reaches approximately 500,000 people in Cambodia. This policy is now the largest life insurance product being offered in Cambodia with an estimated 80,000 new customers added each month. BIMA has also had similar experiences in Sri Lanka, Papua New Guinea, and other operations in Africa and Latin America, proving that their success in Cambodia was not an isolated incident.

The second key learning for BIMA in terms of the different business models was that paid models deliver stronger value to customers. When comparing the types of products and the levels of benefit that are offered, the free model has several limitations. For example, under the free model the level of benefit for a life insurance product tends to be about a few hundred dollars per life with only one life being insured per policy. On the other hand, insurance offered under the paid model has the opportunity to include different types of cover such as hospital cash, personal accident or multiple family members for life products.

The reason for these differences is that under the free model, the mobile network operator is required to pay the premiums because they are looking at the product as a retention program. This method naturally imposes a ceiling on the amount of premium that can be paid on any policy. So in this case the mobile network operator must make an assessment as to what this ceiling should be. Often times, these ceilings set by the mobile network operators will be quite low. If you can convince and persuade a customer to pay premiums that are affordable to them, in almost all cases the ceilings that they will impose will be higher than that of the mobile network operator under the free model. This enables insurance providers to deliver more sophisticated products that offer higher and wider ranges of benefits.

The ability to provide higher value products is not the only benefit the paid model has over the free model. The paid model also results in a stronger claims experience. From BIMA's experience in Ghana, for their first two years' operating there they used the free model. Following two years of using this model they introduced the opportunity to their customers to upgrade to a paid model for an extra level of benefits. The two products being offered under each model were extremely similar and there was an

active migration of customers from the free to paid model. Currently, BIMA considers both models as being fairly mature in that specific market; each having developed for more than two or more years. By comparing the claims experience of both models, it is clear that customers using the paid model are much more likely to make claims. BIMA's internal hypothesis on why this is the case is that when rolling out policies for free, the insured persons and beneficiaries do not necessarily know about, or actively engage with, the policies. The result is that even when there are claimable cases claims do not necessarily happen. In contrast, customers using the paid model are far more likely to make claims and make fuller use of the benefits available to them through the product.

The third key learning from BIMA's experience is that paid models are ultimately more sustainable in the long term. The basis behind this stems from the simple principle that with the paid model they are able to achieve much stronger alignment across each of the relevant stakeholders; primarily the insurance company, mobile network operator, the customer and BIMA as an intermediary. The commercial interests are better aligned and therefore the business model has a longer lifespan.

Insurance as the Foundation of Economic Growth in APEC

Clients are the most important component of microinsurance. If insurance providers don't have good products for low income people, they will not receive any value. Increasingly, quantifiable value can be found in many microinsurance products.

Recently the Microinsurance Network conducted a major study looking specifically at value for clients. One of the objectives of this study was to better understand differences between how insured and uninsured people paid for recovery issues in the event of crisis. The study concluded that the uninsured typically use up all of their savings to cope with crisis events whereas the insured do not. Furthermore, the study found that the uninsured would commonly secure informal loans and pay very high interest and additional expenses. The uninsured were also found to reduce consumption including limiting nutrition or taking children out of school which have detrimental impacts on the family. In contrast, this types of negative impact were far less common among insured people.

When reviewing the results of this study, it is important to recognize that between the insured and uninsured people included in the study, their expenses required to deal with crisis were almost the same. But the difference and impact between those that were insured and those that were not is significant.

In order to get insurance to people distribution channels are necessary. The traditional distribution channels for insurance, such as professional salesmen, are not effective for products being tailored specifically for low income people. There has been a great deal of innovation in the field of distribution in recent years. Many of these innovations have led to products which are very simple and easy to manage making them more suitable for a wider range of customers. Today, insurers are using many different mechanisms to expand their reach and progress financial inclusion.

The business case for microinsurance has been proven over several years of successful implementation and monitored impacts. However, many insurance companies still do not believe that there is a viable business case for microinsurance, despite several studies showing quantifiable evidence that microinsurance can be profitable for a business. As an example, in the Philippines the microinsurance

market shows that both insurers and distributors are making money while at the same time providing better value for clients making it an ideal situation for all major stakeholders. This is made possible due to the fact that the Philippines has excellent distribution networks and a growing demand for insurance products. The Philippines government has also been actively involved in supporting consumer and market education. Lastly, the level of competition of providers in the Philippines has had a very positive effect by not influencing providers to lower costs and strive to add more value to customers, but the competition has also led to the products being more profitable for the providers as well.

Regulatory Issues for Microinsurance

Regulatory issues commonly hinder the potential for the advancement of microinsurance. There are several issues that regulators need to address and consider, and in most cases this is a lengthy process. One reason for this is due to how current legal structures are set up. As a consequence, insurance markets move ahead and the regulators struggle to catch up. In some cases, regulators will even intentionally stall growth in order to give them the chance to catch up. This creates problems for the microinsurance industry.

To address this, there is a great deal of discussion between practitioners and regulators about the concept of proportionality in regulation. The basic concept of proportionate regulation is that when there is less risk to the system regulations can be loosened to accommodate this. When applied, this approach works very well for microinsurance. However, in most APEC economies, proportionate regulation is not applied particularly well. The Microinsurance Network is currently conducting a study on behalf of the International Association of Insurance Supervisors to examine cases of proportionality. The study aims to highlight how regulators have managed to implement proportionate regulation and how successful these attempts were. So far, the researchers behind this study have not found many cases where proportionality is being implemented effectively. This represents a critical issue for the potential of the microinsurance market to grow and maintain sustainability in the APEC region.

Product Integration

When considering financial inclusion, it is important to recognize that products such as savings, credit, insurance and payments should not be addressed individually. There is a need for greater recognition among stakeholders about how these products can be integrated to increase impact and overall effectiveness in achieving financial inclusion. As an example, the mixed use of financial services can be easily examined in a risk management situation. In the event of a crisis, a household would potentially use a variety of financial products to recover including their savings, micro loans and insurance cover. By integrating multiple products new solutions can be found to provide better value for customers and more effectively achieve an environment of financial inclusion which isn't limited to a single product.

Microinsurance as a Catalyzer for Financial Inclusion

Microinsurance is an important catalyzer for financial inclusion. In many areas, microfinance services are offered because there are microinsurance products also available to back up these services and help mitigate risk concerns of lenders. Microinsurance also reduces the diversion of capital by allowing people or business to access insurance rather than seek additional loans as well as to create risk-aware environments where people begin to recognize the link between insurance premiums and the amount

of risk taken. In cases of catastrophic events or other major shocks, microinsurance also provides liquidity.

Microinsurance and the Cebu Action Plan

The Cebu Action Plan has four pillars:

- Promoting Financial Integration
- Advancing Fiscal Reforms and Transparency
- Enhancing Financial Resiliency
- Accelerating Infrastructure Development and Financing

Within this framework microinsurance falls under the pillar of enhancing financial resilience which includes three components: macroeconomic policy, capital markets development and disaster risk financing and insurance. Within this last component the objectives being sought are to deepen insurance penetration with high quality products, develop a roadmap for expanding microinsurance coverage and to create a public-private dialogue to help bring the different stakeholders together to work collectively to understand the issues and provide better risk management for low-income populations. More specifically, the initiative aims to enhance financial education so that people can better understand microinsurance products, develop strategies to promote proportional regulation and expand public-private partnerships. By achieving these objectives, it is hoped that the overall microinsurance market will be able to expand and provide benefits for a greater portion of the population within APEC economies.

Recommendations:

- Proportional regulation is needed to allow the market to support a range of insurance products including disaster risk and products developed specifically for MSMEs. In addition, digital delivery of products may entail supervision by several different departments and regulations, highlighting the need for affected government ministries to align departmental policy and work together to provide appropriate and proportional regulation for the microinsurance industry.
- There is substantial value in public-private dialogue, where policymakers and regulators engage with insurers as partners in developing products and solutions for both responses to and mitigation of disaster risk.
- The mobile phone platform is an enabler, but not a complete solution to financial inclusion. Many financial services require a degree of human interaction to meet the needs of customers, including in the insurance market – especially in building trust and the capability of new clients. Policy makers need to understand that while mobile products are gaining traction, models providing human touch also require attention as insurance providers respond to the needs of different market segments.

Chapter 3: Unlocking Cross-Border Opportunities for the Bottom-of-the-Pyramid and Beyond

Session Chair:

- Dr. Peter Lovelock, Director and Founder, TRPC Pte Ltd, Singapore

Speakers:

- Mr. Nghiem Thanh Son, Deputy Director General, Payment Systems Department, State Bank of Vietnam
- Ms. Juanita Woodward, Principal, CTD Connecting the Dots, Singapore
- Mr. Ron Hose, Co-founder and CEO, Coins.ph, Philippines
- Ms. Adilah Junid, Assistant Vice President, Group Regulatory Affairs, Axiata, Malaysia

Of the estimated two billion adults currently unbanked globally, approximately 625 million of them are in South Asia. Within ASEAN, up to 45 million SMEs are unable to access finance. In terms of remittances, the average cost is estimated to be \$15 per transfer. Within this current state of financial exclusion, the situation is believed to be steadily improving with an estimated 700 million adults gaining access to formal finance since 2011. The expansion of mobile money services has been particularly significant in recent years, with 271 services now available across 93 economies including 411 million mobile money accounts. However, of these 271 active services only a small portion of them are regarded as being successful.¹

In 2015 the fastest growing financial product was cross-border transactions with the total volume of remittances increasing by more than 50%.² Due to the number of remittance services increasing the median cost of sending 100 USD via mobile money has reduced by half; from \$4 in 2014 to \$2 in 2015. This trend is expected to continue as more remittance services and corridors become available, coupled with the impact of mobile money as a catalyst for driving down the cost of cross-border money transfers.

Global payments revenue is predicted to reach \$2 trillion by 2023; however, it is worth noting how differently this will impact different areas whether by geography or sector. By examining where remittances are having the greatest impact and how important the issue of cross-border transactions is, those that benefit the most from remittances and cross-border transfer flows can be identified, which include migrants, SMEs and women. For SMEs it is difficult to specifically identify the scale of this impact, but enabling SMEs is clearly important. With regard to women, they are the dominant receivers and spenders of remittances.

It is increasingly accepted that the digitization of remittances is very important for improving access and lowering costs. The financial technology, or Fintech, industry is making the most of this market by utilizing technology to increase the efficiency of financial services. The Fintech industry is extremely fragmented and deals with a wide range of services including payments, money transfers, digital currency, lending, personal finance, institutional tools or equity crowdfunding. Within the remittance market, the Fintech industry is likely to increasingly take the lead due to their ability to turn new

¹Data sourced from: World Bank, BTCA, GSMA, Bank Negara Malaysia

²GSMA, State of the Industry Report: Mobile Money 2015

technology tools, particularly those which focus on analytics and data, into a revenue stream. Currently the use of these tools includes cloud computing storage which is considered the first step into analytics and big data and a source of savings by enterprises. Out of necessity their business models will focus more on revenue growth and aggregation across jurisdictions. Another advantage that the Fintech industry has is in the remittance market where they commonly come from outside the formally regulated financial sector which allows them to overcome key barriers.

International Remittance and Its Implications for Financial Inclusion in Vietnam

For emerging and middle-income economies such as Vietnam, international remittances play a very important role in the economic development of various markets. Over the past 15 years the volume of remittances flowing to Vietnam has increased from about 1.8 billion USD in 2000 to over 12 billion USD in 2015. These remittance flows have significantly contributed to Vietnam's economy and currently account for more than 6% of the economy's GDP. The average growth rate of international remittances is about 15-20% each year.

In terms of the cost of remittances to Vietnam, when examining a market such as the United States, the average cost from banks and money transfer operators (MTOs) is roughly the same (about 5%) due to the competitive nature of the United States' remittance market. On the other hand, in Australia's market there is a huge gap between the average costs of banks and MTOs with MTO costs being significantly lower (about 5%) than those charged by banks (nearly 20%). This difference is mainly due to the customer base of Australia's banking system which includes relatively fewer Vietnamese residents in comparison to the United States.

Vietnam's Financial Infrastructure and Regulatory Framework for Remittances

In 2002 Vietnam established a real-time gross settlement system (RTGS) which is managed by the central bank, the State Bank of Vietnam (SBV). As part of the infrastructure Vietnam has also established a retail payment system known as NAPAS which is a card switching system. A project is currently underway to build NAPAS and to promote it for further integration with the financial infrastructure over the next two years.

There are two official Decisions, or laws, established through Vietnam's Prime Minister regarding remittances. Decision No. 170 issued in 1999 and Decision No. 78 issued in 2010 were enacted to encourage money transfers from Vietnamese living overseas into Vietnam. The Ordinance on Foreign Exchange, established in 2005, recognizes the lawful rights of resident remittance receivers. In 2013 Vietnam created an Anti-Money Laundering Law which was used to set up AML/KYC measures relating to international remittances. The Law on the State Bank of Vietnam (SBV) was established in order to empower SBV to license non-bank entities, or payment intermediaries, for intermediating between banks and their clients with regard to payment transactions. SBV's Circular No. 34 in 2015 further provides guidance on foreign exchange cash-in/cash-out service providers.

Vietnam's Remittance Service Providers

Vietnam's remittance service providers consist of five organization types: commercial banks, authorized exchange bureaus, international money transfer institutions, postal network and payment intermediaries (i.e. e-money institutions). Vietnam's payment intermediaries are service providers which

have recently emerged but are playing an important role for remittances. Currently, there are nine non-bank institutions licensed for e-wallet services which use a bank-based model with floating accounts held at commercial banks. In 2015, nearly 70 million e-wallet transactions were processed with a total value of USD 1.5 billion. Due to the lack of regulation in this area, SBV is currently allowing three pilot models for non-cash payments in rural areas to be tested in an attempt to find effective ways to further increase services.

Measures to Promote Financial Inclusion

There are three key measures being undertaken by SBV to further improve and promote financial inclusion in Vietnam. The first is to improve the legal framework, especially agent banking regulations and remittance cost reduction measures. Second, SBV aims to improve the financial market infrastructure through the standardization and harmonization of payment systems to promote interoperability, restructure the RTGS, and improve the retail payment system. Thirdly, SBV aims to develop a domestic financial inclusion strategy for consistent implementation and improved coordination between government ministries and other relevant stakeholders.

Remittances as a Catalyst for Financial Inclusion

In the past, remittances were mainly being handled by MTOs as a cash to cash business which was also very expensive. In more recent years as the focus of remittances has shifted to migrant workers, and the prices that they encounter in using these services, significant efforts are now being undertaken to find ways to make prices more affordable and thus increase the value of remittances to developing economies. Due to new technologies being introduced into the financial market the potential for remittances to be a major catalyst for financial inclusion is becoming increasingly more apparent. This creates opportunities for financial inclusion and economic growth for both the migrant workers abroad and their families back home.

According to the World Bank there are currently about 250 million migrant workers worldwide. In 2015 it is estimated that these migrant workers sent about \$601 billion to their families, resulting in about \$441 billion received by developing economies. The largest sources of remittances are the United States (\$56 billion), Saudi Arabia (\$37 billion) and Russia (\$33 billion). The largest remittance receivers are all in Asia being India (\$72 billion), China (\$64 billion) and the Philippines (\$30 billion). APEC economies make up more than 40% of remittance outflows and more than 30% of remittance inflows globally.

Remittances remain as a key source of funds for developing economies and far exceed official development assistance and direct investment for these economies. Remittances are also generally very stable and continue to flow even in times of economic crisis or disaster situations. In some cases, remittances have actually been known to increase in times of crises making them more valuable for developing economies. With approximately 250 million migrant workers, remittances are bringing economic benefits to approximately 1 billion people globally. Despite the positive elements of remittances, there are significant problems to address. For example, remittances are primarily received in cash which leads to higher operational costs of service providers involved. This is particularly the case in rural areas where potential digital alternatives are not available. Further, remittances are also not being used to their full potential for economic development in situations where they are applied for consumption rather than productive purposes.

Market Share for Money Transfer Operators

Money Transfer Operators (MTOs) have been the primary provider of remittances. In most cases, these services are called Person to Person (P2P) payments which can be made internationally. P2P has been especially popular with overseas workers as a method to send a portion of their earnings home to support their families. Of the prominent MTOs, Western Union has the largest share of the market (about 50%), followed by Money Gram (11%) and Ria (3%). Xoom (2%) is another operator based in the USA which is particularly interesting as it utilizes a purely digital platform for remittances. World Remit (0.24%) is another interesting player due to its success in building up a relatively large customer base within a short period of time.

Lowering Remittance Costs

Since 2008, the World Bank has provided data on the cost of sending and receiving small amounts of money (i.e. USD 200 and USD 500) between various economies. This data is publicly available through a website which the World Bank maintains called *Remittance Prices Worldwide*.³ This website, which is updated quarterly, covers 300 remittance corridors including 35 sending economies and 99 receiving economies. According to the data collected on the website the average cost of sending money has been steadily decreasing over the years. However, certain economies such as Japan (11.95%) and Canada (9.08%) are still above the global and G8 averages.

By lowering the price of remittances more money is received in developing economies. The cost of remittance is a primary driver when customers choose which remittance service to use. But there are other important drivers to consider as well. One of these is the recipient, including where the recipient is located or if he/she is banked or unbanked.

Globally, the average cost of remittances is 7.37%. Across the different service providers, banks are typically the most expensive with an average price of 11.12%, followed by MTOs (6.24%) and Post Offices (5.8%). There is a real opportunity for savings and postal banks to continue to provide further services in this area which would provide greater competition and enhance the overall potential for financial inclusion through remittances.

Industry Trends Impacting MTOs

Competitive pricing and services are putting pressure on MTOs to shift from cash to digital payments. Even Western Union which is very well known for its cash to cash service is doubling its digital services year upon year in order to keep up with this demand. New global and local MTOs are also entering the market with new models, better technology, better prices and with a specific focus on a particular market (i.e. the Pacific Islands), but mostly utilizing the model of customers sending digital payments with recipients receiving cash. The industry is also being impacted by increasing competition as well as new partnerships being formed with MNOs. More competition is increasing from social media players such as Facebook and WhatsApp, as well as other players such as PayPal (via Xoom) and card schemes. Some new remittance players entering the market are using new digital models that focus on a more holistic view of migrant workers and their needs. These models go beyond just sending and receiving

³ *Remittance Prices Worldwide*: <https://remittanceprices.worldbank.org/en>

money but also include services such as savings products, direct bill payments, education expenses, microinsurance and access to microloans.

Migrant Worker Information Portal

Developing Markets Associates Ltd (DMA) is planning to implement an initiative in 2016 to serve migrant workers across the ASEAN region. This initiative will include the launching of a Migrant Worker Information Portal. DMA currently manages a website called Send Money Pacific which compares the cost of remittances from Australia and New Zealand with the Pacific Islands. The Migrant Worker Information Portal will take this a step further by not only providing comparisons of remittance costs in the Asia region but by reaching out to the migrant worker community through the portal as well as other means of communication to provide them with relevant information to increase their education and financial capability. The program will also provide general information to provide further assistance to migrant workers in their host economy.

The Future of Money

Telecommunications companies have experienced rapid change over the past decade. By examining the way a traditional phone call is routed it is possible to see that as the call is transferred from one end it goes through numerous switches, or intermediaries, before it reaches the receiving end. On the other hand, technology such as Skype use a more efficient topology in which connections are made directly between the sender and receiver of the communication. This direct exchange is facilitated by the internet.

Technology is rapidly transforming just about every business sector, not just the communications industry. At the core of this change is the fact that mobile phones are becoming prominent thereby giving an increasing proportion of the population access to personal computing devices. The prominence of mobile phones is also creating more direct links between people. As a result of this innovation shift several new disruptive companies are emerging which are able to serve customers directly and change the existing industries. One major change which is occurring is the shift of power from companies to consumers. Because consumers are able to connect directly to services and choose which one best fits their needs it can lead to better service outcomes as well as greater variety in the market. It also leads to greater transparency as consumers determine which services work and which ones do not meet expectations (and communicate this directly and widely to the market via social and other media). Due to this factor, the reputation of companies has become more important than ever before.

What happened to the Telcos?

Because the internet connects consumers directly to each other and consumers can connect directly to services, these services are increasingly becoming simplified and commoditized. Previously, the telcos provided services directly to the consumer, now consumers are going through other service providers such as Google, WhatsApp, Skype or Facebook to procure the service they need directly. This means that the telcos are no longer the sole intermediary to extract revenue.

It is not just the telcos, however, that are undergoing this transformation. Another example similar to the telco infrastructure is correspondent banking. Because banks are unable to network directly with each other, they rely on using intermediaries when transferring funds between them. Just as with the

traditional telephone system where several intermediaries were involved to make a call, when transferring funds from one bank to another the services of these intermediaries require costs which make the service less valuable to the customer. On the other hand, by using blockchain technology funds can be transferred directly between parties without the need for intermediaries, making it a much more cost-efficient service.

Blockchain facilitates the direct exchange of value between parties. Similar to how the internet allows for the direct exchange of information, blockchain enables users to send value, contracts or trust to anyone globally without any intermediaries. As an example, each time a person uses a credit card, the transaction goes through several different parties including the issuing bank, the network which manages the settlement, and the bank that handles the receipt. Throughout this transaction each of the parties involved needs to extract value. When a payment is made using blockchain, the exchange is direct, meaning that value flows directly from the customer's e-wallet to the e-wallet of the service provider.

Just as has occurred with the telco industry, banks should expect that financial services will become increasingly simplified and commoditized as a result of blockchain technology. This new technology will also drive focus away from infrastructure with more importance being placed on applications or specific services. The financial sector will also increasingly see power being shifted away from financial institutions to consumers which will enable greater user experiences. When any consumer can access any service from any party a perfect level of competition is enabled. This will in turn increase the variety and quality of services over time as well as drive down prices.

The Future of Banking

The future of banking will be shaped by how banks connect customers directly with financial services they need, when they need it. The current market conditions in the Philippines are interesting as more Filipinos have Facebook accounts than those that have bank accounts. Only 2 out of 10 households are banked, with only about 1 out of 20 Filipinos owning a credit card. When traditional banking is examined, it is clear that it is very expensive to operate (i.e. branches, staff, etc.). In contrast, in the Philippines most customers have very low savings rates resulting in the likelihood that the bank will lose money each time the customer enters a branch.

This issue is not confined to the Philippines, however, as most emerging markets in southeast Asia face similar challenges. Across southeast Asia, less than half of the population is considered banked with less than 5% having access to credit cards. Despite this, companies like Facebook or WhatsApp have found ways to reach far more customers. This highlights the fact that these customers are not "unreachable" but simply that the financial sector has not found adequate ways to deliver services to them.

In order to achieve this, it is important for financial service providers to look beyond metrics and data and truly try to understand their customers. Traditional money transfer services such as those provided by Western Union and other major MTOs are often inconvenient and expensive for migrant workers. Migrant workers are also faced with the difficulty of comparing rates between service providers as such services are currently rare. Furthermore, using traditional MTOs for many migrants is considered unsafe due to the large crowds gathering at MTO branches and the wide knowledge that most people in the area carrying cash for their remittances. One aspect which is quite common among these migrant workers today is that almost all of them own a Smart Phone which highlights the significant opportunity

through technologies such as blockchain to provide a much more convenient, cost effective and safer service for this large market.

The coins.ph Model

Coins.ph uses digital currency and blockchain technology to drive financial inclusion. Their model is completely mobile-based and uses blockchain to facilitate transactions so that it does not need to rely on the existing banking network. The company has made it very easy for people to sign up and open accounts which takes about 30 seconds to increase the user-friendly experience and lower barriers of entry.

How the coins.ph model works is that customers can deposit money in a variety of different places globally such as a convenience store or an Automated Clearing House (ACH), typically through another intermediary which facilitates blockchain transactions. There is an underlying contract which is settled with the onboarding cash party, which is then settled by coins.ph which also facilitates the last field delivery of the transaction. Customers can either pick up their remittances in cash or digital form.

From a customer perspective the transaction looks very similar to a traditional transaction, but the underlying model is actually very different due to the fact that there is no money moving. Instead, there is simply an underlying digital contract settled within the blockchain. This model allows coins.ph to partner with several different companies in different economies globally which has resulted in a very broad network for the company which is built within existing infrastructure. While the focus of coins.ph is currently on remittances, the company believes that there is scope for the technology to be used for a variety of different services including lending, insurance or payments.

Axiata

Telecommunications companies have an important role to play in financial inclusion. Axiata is one of the largest telecommunications groups in the Asia region, based mainly in south and southeast Asia. The group's total subscriber base includes about 275 million people. Axiata is currently assessing its capacity in the area of financial services with the aim of being able to provide more specific recommendations to policy makers.

Banks are generally less available and accessible to the base of the pyramid population. In comparison, mobile phone coverage is much higher than traditional access points such as bank branches or ATMs. In each of the markets which Axiata operates in there exists at least 2g coverage of close to 100% which allows for the possibility of accessing basic banking services. For 3g coverage the coverage in most of Axiata's markets is close to 80%. These levels of coverage provide significant opportunities to provide access to financial services to portions of the population that are currently unbanked or unreachable through traditional banking access points. The growth levels of these traditional banking access points such as bank branches or ATMs is extremely small in comparison to 3g coverage, in which the growth levels are exponential with the expectation that 100% of the population in the region will have access to at least 3g coverage within the next 5-10 years.

As a long term investor, Axiata is particularly concerned with development in the region. As such, financial inclusion is well-aligned with the Government's domestic development goals. Within Axiata's markets, there are large numbers of overseas foreign workers who are frequently remitting money to

their home economies. Some corridors in the region which are particularly active in remittance transfers include Malaysia, Bangladesh and Indonesia. The cost of remitting money through traditional financial institutions is quite high compared to other models which are increasingly becoming available. Axiata is taking advantage of this opportunity by developing initiatives and partnerships to increase the quality and quantity of low-cost remittance services in the region. As an example, Axiata has formed a partnership with Merchantrade, which is Malaysia's largest non-banking remittance company. Through this partnership, Merchantrade has established a joint venture with Celcom, Axiata's operating company in Malaysia, to offer a mobile remittance service which provides significantly cheaper remittance fees than the average bank. This partnership highlights one example of Axiata's efforts to provide better value for its telecommunication customer base through new financial service offerings.

Recommendations:

- Effective financial inclusion entails providing access to and use of a combination of products, with an increasing focus by providers on a holistic approach to meeting the needs of clients through making the right financial products and services accessible, and less on the traditional discrete products offered by individual providers.
- Whilst the focus of policy has been on reducing the cost of remittances, convenience and trust are the other key factors migrant workers and their families consider in their remittance decisions. To increase transparency and foster competition, governments can facilitate:
 - Participation of non-bank service providers in the financial services sector; and
 - The provision of independent and objective information to remitters on the range of options available, specific to their main corridors.

Chapter 4: Promoting Savings via Formal Channels: Challenges and Opportunities

Session Chair:

- Mr. Chris De Noose, Managing Director, World Savings and Retail Banking Institute (WSBI), Belgium

Speakers:

- Dr. Rajat Bhargava, Joint Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India
- Mr. Krishna Mohan Trivedi, Chief General Manager, Rural Business, State Bank of India
- Ms. Lisa Kienzle, Global Director of Financial Services, Grameen Foundation, Philippines
- Mr. Frederick Siew Kim Meng, Deputy Chief Executive – Corporate Support, Bank Simpana Nasional, Malaysia

Savings is important from both a macroeconomic and microeconomic point of view. In low income and emerging economies, the major challenge with promoting savings is to ensure that the right business models are used for low income people. In many European countries the interest rates for savings are currently so low that many people fear that the banks may soon start charging negative interest rates. This fear is causing many people to withdraw their savings and lock them away in a safe instead of using a bank.

High levels of household saving can contribute to domestic infrastructure building, business expansion and other investments as well as reducing reliance on foreign investment. Understanding how domestic policies impact savings rates and the roles of different stakeholders in promoting a better regulatory environment is important to progressing financial inclusion.

In developing economies, household savings are not fully captured by formal channels, particularly in rural areas. Many stakeholders are now working on solutions to this by driving savings from informal savings modes to formal financial service providers.

Agents appointed by formal financial service providers and agents of mobile money operators are key distribution channels to collect savings in remote rural areas. But how deposit-taking institutions and agents are supervised and understanding what would be considered an adequate level of client information and protection are important components of making these distribution channels effective. It is critical to address the need to develop deposit-taking institutions and agents, as the basis of frameworks developed for the supervision of banking institutions. Policymakers should establish clear rules regarding the responsibilities of different actors and the types of activities the agents are allowed to perform (i.e. collecting deposits) and develop an appropriate regulatory framework which establishes a level playing field but also an enabling environment to encourage the general population to integrate into the formal banking system.

India – Economy of Opportunities

Financial inclusion in a displaced world is essential. The high level of financial savings usually translates into more opportunities for infrastructure development as well as the business community more

broadly. The cost-effectiveness to consumers of these services is very important in order for the system to be effective.

India has a population of 1.2 billion with 68% of the population comprising people between the ages of 15-54 years of age. The current median age of the population is 26-27 years for both males and females. A large number of India's youth is currently involved in the savings process with the general interest among youth in savings estimated to be steadily growing. India's gross domestic savings product is currently about 29.3% with demographic data showing that the majority of the economy's population is within the standard earning age which further highlights the potential for savings.

There are several key advantages of promoting savings by formal channels. One is the confidence and reliability of the Indian system and the building of a conducive atmosphere. India's government also provides protection for the system through specific regulation. The India case also benefits from synergy of operations between relevant stakeholders which has further enabled efficient delivery of services to customers. These advantages have enabled India's government to analyze the system and achieve a better understanding of how it works, what elements could be improved upon and what potential risks exist, or may exist in the near future.

Within the India context, much of the investment derived from savings, including India's popular Public Provident Fund, has gone into better retirement planning. The economy's first formal savings bank was the Post Office Savings Bank which was established in 1882. Over time India's government continued to follow a model of promoting savings via formal channels to discourage the use of informal channels which are considered not saver-friendly. Today there are about 15 million Post Office branches in India and the digitization process is now occurring to enable the bank to provide a wider range of services and reach a greater portion of the population.

The main channels of formal savings in India include the various government savings schemes which are regulated by the Union Ministry of Finance, savings via formal banking channels and savings through local formal channels including cooperatives, federations, or local and private banks. The smaller institutions including self-help groups and cooperatives have increased greatly in recent years and are providing many benefits to previously unbanked communities.

Formal Structure of Promoting Government Savings

India's Post Office, with its 15 million branches, serves both the urban and rural sectors. However, the Post Office's significant presence in rural areas has positioned it as an ideal channel to offer savings to many unbanked portions of the population. India also utilizes an authorized agency system for mobilizing savings into formal channels such as the Standardised Agency System. Pay Roll schemes have also been introduced for organized wage earners as well as a school savings bank known as "Sandhayika" which has been used to inculcate savings and thrift habits among students.

Policy initiatives have also been introduced to further promote savings in India such as the implicit sovereign guarantee for common individuals which allows savers to be assured of the interest rates which they are expecting. Similarly, some of the savings schemes available also include tax incentives to attract further interest from potential savers. The government's savings schemes are also made to be easily available and accessible including through the use of in-field agents who do door-to-door

canvassing. Lastly, the government ensures that these schemes offer better returns than commercial banks.

Formal channels have been very successful in promoting savings in India and these savings have been a crucial resource to enable financing for developmental plans of both the Central and State governments. The savings mobilized under government savings schemes is shared between the Central and State governments through an agreed formula which was developed through a public savings account known as the National Small Savings Fund (NSSF). These formal savings channels have also been helpful to India's overall development in several other ways including helping the government control inflation, promoting small entrepreneurship and the self-sufficiency of the economy among citizens and have helped to maintain a robust domestic savings rate in the economy.

Challenges and Opportunities in Promoting Savings via Formal Channels

Some of the most significant challenges in promoting savings via formal channels which India's government has experienced include how to best manage increasing costs, inter-channel competition (i.e. Post Office vs. Banks), disruptive technologies, coordination and mutual trust issues and product duplication and differentiation. The government is also concerned about the risk of saturation if too many new savings programs and schemes are launched.

Despite these challenges, several key opportunities exist to further promote the formal channels and increase their development impact. Some examples of these opportunities include the increased utilization of manpower which is enabled through the introduction of new technologies, making use of surplus capacities currently found within formal channels, increasing the acceptability and recognition of savings schemes among citizens and the increase of digitization to increase transparency. India's government also recognizes the significance of an earning youth population and the importance of helping them to develop savings habits as a major opportunity.

Promoting Savings – State Bank of India

The State Bank of India is the economy's largest commercial bank and was established more than 200 years ago. The bank has more than 16,000 branches and more than 300 million customers, including about 21 million retail internet banking customers. The bank also has nearly 25 million mobile banking customers with nearly 3 million of them subscribing to the bank's mobile wallet called "State Bank Buddy" which is available in 13 languages. In terms of financial inclusion, the bank addresses this through a range of products and services including savings, debit cards, insurance, remittances, small overdrafts and financial literacy.

The bank's implementation strategy for progressing financial inclusion is to first assist customers to build up their savings and monitor their consumption. By building up savings customers are more likely to indulge in investments which result in the production of goods and services which further leads to broader economic expansion. By controlling unproductive spending, the overall savings rate is improved. In the case of India, individual savings deposit accounts have grown considerably over the past few years, effectively doubling between 2010 and 2015. This same trend is evident in terms of total deposits, with the amount of deposits doubling between 2010 and 2015. In 2010, the State Bank of India held 73 million customer accounts with a deposit base of about 55 billion INR. As of 2015 this had increased substantially to 398 million accounts with a deposit base of 439.5 billion INR.

Pradhan Mantri Jan Dhan Yojana (PMJDY)

PMJDY is India's domestic financial inclusion initiative, launched by the prime minister in 2014 with the aim of facilitating greater collaboration among stakeholders to address demand and supply side constraints. Through the initiative over 600,000 villages have been grouped into 125,935 Sub Service Areas (SSAs) with banking outlets established within reasonable distances to each SSA to ensure that banking facilities are available. Customers were also provided RuPay debit cards to improve the ease of operations. In order to attract customers, the PMJDY also provides a number of special benefits including various insurance products (accident and life) as well as savings bank overdraft of up to INR 5,000 depending on the customer's transaction history.

Since the initiative's launch in 2014 over 200 million PMJDY accounts have been opened with over INR 350 billion deposits mobilized. Of the 125,935 SSAs, to-date all but 784 of them have received some form of banking service such as a physical branch or ATM. By the end of June 2016 the remaining 784 SSAs are expected to also receive some form of formal banking service. Highlighting the value of the PMJDY accounts, 72% of them are currently funded (i.e. do not have an INR 0 balance).

Social Security Benefit Schemes

In addition to the PMJDY initiative, three social security benefit schemes have also been launched. The Pradhan Mantri Suraksha Bima Yojana provides accidental insurance up to INR 200,000 at the cost of only INR 12 per annum. Anyone within the age bracket of 18-70 is eligible for this product and to-date more than 90 million people have been enrolled as part of this scheme. Another scheme called Pradhan Mantri Jeevan Jyoti Bima Yojana provides life insurance. Under this scheme, up to INR 200,000 is provided for an annual premium of INR 330. Almost 30 million people between the ages of 18-50 have enrolled as part of this scheme. The third scheme is a pension program called Atal Pension Yojana. Under this scheme the subscriber is guaranteed a minimum monthly pension of INR 1,000 to INR 5,000 after reaching 60 years of age. The scheme is available to people between the age of 18-40 years with over 2 million subscribers to-date.

Direct Benefit Transfers (DBTs)

Currently, the subsidy for cooking gas cylinders (LPG) is being remitted directly to the accounts of the people which has enabled the Government of India to save an estimated INR 150 billion in one year. Based on the success of this subsidy program, the Government is now taking steps to remit all of its subsidy and social welfare payments directly to the account holders. Not only will this save the government money but it will also benefit the receivers by facilitating a much more efficient and timely payment process.

India's Government has also begun using biometrics to improve its DBT processes and is now issuing 12-digit unique identity numbers to residents called Aadhaar. Currently about 1.2 billion people have been given their Aadhaar numbers. More recently the government has begun implementing an Aadhaar-enabled payment system where all payments can be made using the Aadhaar number which are bank agnostic.

Challenges in Financial Inclusion and the Way Forward

There are several challenges with achieving financial inclusion in India which the State Bank of India is attempting to overcome. Some of these challenges include connectivity issues, low value accounts, profitability, growing expectations, lack of financial awareness and how to effectively monitor and mitigate risks. To address these issues, the State Bank of India has taken several steps including the introduction of new products, establishing micro ATMs, providing VSAT connectivity, providing financial literacy through schools and training bank agents.

Financial literacy is one of the major components of the PMJDY initiative. People who are using a bank account for the first time generally do not understand the advantages of the bank account, how to keep their accounts up to date and active (which is a requirement for insurance payments) and how to use the RuPay Debit cards. To address these challenges, the State Bank of India is utilizing a financial literacy model in which they have standardized financial literacy materials and use a range of outlets including video clips, comic books, games, etc., to connect with customers. The bank has also set up hundreds of rural self-employment training institutes and 250 financial literacy centers across the economy.

Going forward there are a number of specific targets which the State Bank of India has set to further its financial inclusion achievements. These include ensuring 100% availability of banking services to all allocated SSAs, using GIS mapping of banking outlets to improve transparency with regard to the availability of banking services, ensuring that all accounts are being seeded with Aashaar numbers to improve security and increase the level of digital transactions being made to 85% by March 2017.

Mobilizing Formal Savings

Customer trust is critical for organizations wanting to offer savings products. With credit, institutions are being asked to trust the client. But with savings, institutions are asking the clients to trust the institution with their funds. This level of trust can be a particularly large step for a poor person to take. Savings products also need to be appropriate. This requires institutions to customize their products to ensure that they are effectively meeting the needs of their target market. Lastly, simplicity is also crucial to enable products to make a difference; particularly in the lives of the poor. Financial institutions serving poor communities are often asking customers to take their first step into the formal sector, which is increasingly utilizing technology for new ways to interact with customers. These products need to be simple to access with available infrastructure, and for the target market to adopt.

Cashpor

In 2009 Grameen Foundation partnered with Cashpor to help them offer savings services to their clients in India. In India, an MFI is unable to mobilize deposits themselves, but at this point in time the regulation had changed to enable MFIs to become business correspondents, meaning that the MFIs were able to take deposits on behalf of a bank partner. Cashpor's clients already had credit but did not have access to savings. Through a partnership with ICICI Bank, which had a no-frills savings product,

Cashpor was able to offer this savings product to their clients. The third party in this partnership was EKO Technologies to enable the mobile service for the savings product.

Between these three partners a digital offering was created which enabled the existing infrastructure of Cashpor to continue offering credit, but also offer savings products to their clients as well. In order for this product to work the technology being used had to be reliable. Grameen Foundation invested a considerable amount of time to create and build client confidence in the system. This included investing time in Cashpor staff to build their capacity to ensure that they understood savings, as well as spending time with the clients to build their confidence in the system. In many cases first-time savers feared that they would be unable to access their money. To overcome this, they were encouraged to try it for themselves by making multiple deposits and withdrawals to build their confidence so that they knew if there was ever a need they could access their savings easily and quickly.

Underpinning the success of the program was Cashpor being able to use its existing infrastructure to serve their clients. At the end of the project after a four-year engagement with Grameen Foundation, Cashpor had 120,000 clients who were first-time savers; 95% of whom were living on less than USD 2.50 per day. The most important lesson learned from this program was the importance of client trust. Cashpor had a sound reputation with its client base from offering credit and their customers trusted the Cashpor intermediaries enough to open savings accounts and deposit their savings.

CARD Bank

About the same time Grameen Foundation began working with Cashpor in India, they also began working with CARD Bank in the Philippines. CARD Bank had been offering savings products since 2003, but wanted to expand. To begin with, Grameen Foundation worked with CARD Bank to conduct intensive market research to better understand two important factors:

1. For clients who already had a savings account, but were not actively using it, why were they not using it?
2. For clients that did not have a savings account, what was keeping them from opening one?

After partnering with behavioral scientists and conducting intense research, the solutions to these problems were found to be very simple. First, customers thought that the forms necessary to be completed to open a savings account were far too complicated - the forms were long and redundant in many places. Secondly, the opening balances that were required to open a new account were too high. For one of the products being offered at the time the opening balance required was about PHP 1,000 (or USD 23).

Through the program with Grameen Foundation, this requirement was eventually dropped to PHP 100 (or USD 2). As a result of this change, there was an immediate spike in uptake for savings accounts with CARD Bank. Despite the lower opening balance requirement, the business case remained intact as the Bank was able to mobilize enough deposits from a larger client base to support the product.

For the customers that had accounts, but were not actively using them, the research showed that these customers generally lacked a sense of how they should save - such as lack of savings plans or ideas on how to articulate a long-term goal. The conclusion was the need for greater financial literacy support to further help people understand how to set a budget or a goal. To assist with this CARD Bank began utilizing SMS reminders to clients to help them develop savings plans.

At the end of the engagement between Grameen Foundation and CARD Bank, more than 480,000 new savers joined CARD Bank. The program also highlighted the important fact that sometimes the changes which are needed to provide access to the poor are simpler than many would imagine. Within this program, not only were these simple changes effective in enabling CARD Bank to reach more clients, but also more *poor* clients.

Barclays Bank

In Uganda Grameen Foundation engaged in a project with Barclays Bank. Barclays Bank was working with informal savings groups by offering them tailored group accounts and overdraft products to enable access to credit as well. The Bank wanted to work with Grameen Foundation to explore ways in which they could drive further uptake and usage of the products through the digital channel.

Similar to the engagement with CARD Bank in the Philippines, Grameen Foundation began by conducting research to determine challenges informal savings group members faced in managing their group activities and funds and whether the introduction of digital technology solutions could make products more attractive to clients. The particular methodology that Barclays was serving was the Village Saving and Loan Association (VSLA) methodology. With this methodology, every week 25-30 people get together and deposit a small amount of savings into the group fund. Most of those funds are then released as loans with the remainder stored in a metal box which is secured with three locks, with the keys being held by three separate group members.

The results of this study highlighted what might be considered standard issues when trying to drive uptake of financial products in rural communities. For example, access was a huge challenge. While Barclays had an appealing product, many of the savings groups were located 20-30 km away from the nearest bank branch, making the products irrelevant to them in the absence of any sort of distribution network.

In Uganda at the time, there was not agency banking regulation enabling banks to establish agents to offer cash in/cash out services. In working with Barclays Bank to find ways to incorporate the informal savings group methodology into a formal digital solution offered by the Bank, a partnership was formed with Airtel, a mobile operator, which already had a broad distribution network of agents who could perform cash-in and cash-out functions. Through this partnership a tailored mobile product was developed specifically for informal savings groups. The mobile product was specifically made to look exactly like the analog product, just in a digital format. Instead of a standard individual mobile wallet product with a single PIN, a wallet product was created with three PINs. This meant that in order to access the wallet three separate people with phones had to confirm the PIN before any interaction with the account was possible. The program is currently in its pilot phase with 125 savings groups including about 5,000 members. So far, the feedback which is being gathered from the pilot is indicating that the customers like the increased confidence with the familiar security aspects of the system.

Developing Savings: The Way Forward

Financial institutions with an interest in providing or expanding existing savings products need to consider what channels they are using for these products and whether or not these channels are trusted by clients. This means ensuring that whatever agency network is being used to offer these solutions are ones which the rural and poor communities trust and feel comfortable depositing their savings with. The

solutions also have to be appropriate, which does not necessarily mean it needs to be exotic or complex. In many cases the best solutions are very simple, but what is most important is that they are designed to meet the specific needs of the target market. Lastly, institutions need to develop products which meet the needs of the poor today, not where they expect the poor to be in the future. For example, if smart phones are not currently common in a particular community, products utilizing this technology should not be prioritized, even if there is an expectation that smart phones will become more popular in the future. Institutions need to consider the realities of the current market they are exploring and find ways to create as little change as is necessary to encourage people to adopt formal channels for the first time.

Formal Savings in Malaysia

Bank Simpanan Nasional (BSN) is owned by the Ministry of Finance and was started in 1974 under the Bank Simpanan Nasional Act. BSN is a domestic savings bank of Malaysia. The bank began with seed capital of MYR 100 million and has two subsidiaries: Permodalan BSN Berhad (PBSN) which primarily deals with unit trusts, and Prudential BSN Takaful Berhad (PruBSN) which is a provider of Islamic insurance policies. It also has two associate companies: BSN Corporation Berhad which provides leasing to large banks in Malaysia and Gibraltar BSN Berhad which provides conventional insurance products.

The main purpose of BSN as outlined by the Ministry of Finance when it was first established was to promote and mobilize savings (particularly from small savers), inculcate the habit of thrift and savings, provide the means for saving by the general public and to utilize the funds of the Bank for investment including financing of economic development.

Today, BSN has grown its assets to MYR 32 billion (about USD 8 billion) from the initial seed capital of MYR 100 million. The bank currently has about 9 million customers which accounts for about 30% of Malaysia's total population. It is also one of the largest Development Financial Institutions (DFI) in terms of employment size, with more than 7,000 current employees. The bank's outreach is also significant, with 402 physical branches, 54 microfinance centres, 842 ATMs, 386 Cash Deposit Machines (CDMs), 93 Virtual Teller Machines (VTMs) and 440 Virtual Teller Agents (VTAs). Due to the many challenges that the bank faces with expanding, it is currently focusing more on ways to expand its outreach without the need for more physical branches which are more expensive; particularly in rural areas.

BSN is tasked by the government to be a bank for the unbanked. Due to this requirement BSN has opened branches in many areas where commercial banks have traditionally been reluctant to operate. The cost of setting up these rural branches is very expensive. Finding suitable locations to set up rural branches, as well as finding qualified staff to operate them, has also proved challenging for BSN. The distance of branches to the homes of customers can be a major challenge in rural areas as it can often be located too far to be considered convenient. Due to Malaysia's high multicultural mix language barriers can also be problematic in some communities. To help overcome these challenges, BSN has established a large network of agent banks with more than 6,000 agents currently working with them. These agents include service stores, mini markets or petrol stations. The owners of these businesses are recruited as agents of BSN and given training and Point of Sale (POS) machines. By using these agents rural customers are able to more efficiently access formal banking services.

BSN continues to support the Government's aspirations through various government financing schemes such as the Creative Industry Loan, the microfinance scheme for new Chinese residents or Mortgage

Loans for plantation workers. Through these different schemes BSN aims to provide products and services which meet the needs of each of the prominent cultures making up most of Malaysia's population. With the agent bank BSN is able to penetrate all of the rural areas where transportation is a common problem. When BSN opened its agent banks their touch points increased tremendously. Today, BSN has the highest number of agents (about 7,000) operating within Malaysia. This large network of agents is crucial for BSN to achieve its purpose of providing banking services to the unbanked.

As of today, BSN has managed to cover every district in Malaysia. In 2013 a survey showed that 20% of Malaysia's population was unbanked. However, due to BSN's success opening up so many agent banks in every district they have managed to reduce this estimate to less than 10%.

Rebranding of BSN

In October 2015 BSN launched a rebranding. The purpose of the rebrand was to enable the bank to offer further value-added services such as business generating activities rather than purely transactional banking. With the launching of the rebranding BSN also launched its first VTMs. The Bank's physical branches were still necessary due to several of their customers not understanding the technologies used for alternative banking channels. However, the bank also recognized that it needed to attract the younger population who are also more technologically savvy. The use of VTMs, mobile banking, agent banking, contact centres, ATMs, CDMs and social media were all important contact points along with physical branches enabling the Bank to achieve the necessary balance and attract a broader range of customers. This balancing act was critical for the Bank since about 60% of its customers are based in rural areas where having a greater variety of access points is necessary to meet their needs. The use of social media is particularly important, and the bank has launched several social media campaigns to specifically target younger customers.

BSN's Virtual Teller Machines

BSN's VTMs have been an important part of its financial inclusion strategy. Essentially, these machines are interactive teller machines which enable customers to perform banking transactions while interacting with tellers located at branches nationwide via video conferencing. BSN has set up these machines in several business branches with generally three machines available in each branch along with two tellers. When these tellers are fully occupied servicing other customers, the bank's queue management system will automatically push waiting customers to one of the VTMs. When the customer engages with the machine an available teller from any BSN branch in Malaysia will link with the machine via a video link to service the customer.

With the VTMs BSN can divert customers from high-traffic branches to low-traffic branches and enhance the Bank's productivity. The successful use of VTMs has led to BSN progressively rolling out additional VTMs in other areas outside of their physical branches including inside bus or train stations to make them more widely available and expand the potential access points for customers. Currently, BSN has 150 machines operating within 31 of its branches. The services of VTMs include cash deposits or withdrawals, bill payments, balance enquiry, credit card repayment, loan repayment and intra-bank fund transfers. BSN plans to add more services through VTMs in the near future such as loan or credit card applications, foreign currency remittance and mobile prepaid payments.

An initial challenge BSN faced with its VTMs was the lack of an available software system capable of meeting their requirements for the VTM. This meant that BSN had to engage with dedicated independent software vendors to develop a completely new VTM application. Another challenge was the level of infrastructure readiness. In order for the VTM system to function properly a resilient network infrastructure and security control was required. Encouraging customers to adopt the new technology was also difficult for BSN as this required changing customers' expectations towards the new technology and the concept of virtual banking. Lastly, BSN has had to develop their use of VTMs within a constantly evolving regulatory framework to ensure compliance.

BSN aims to impact the lifestyle of its customers through the use of VTMs by giving them the opportunities to do their banking while in transit to and from work, rather than having to set aside time out of their day to visit a branch. The Bank also hopes that the use of VTMs will make banking more attractive to younger generations who are more comfortable using the technology and may be more reluctant to visit a physical branch to conduct their banking transactions. Another strategy which BSN is using to attract younger customers is the use of IPADs in their branches which enable customers to access internet banking. The use of IPADs is particularly popular in rural areas where the bank hopes that this technology will help better prepare the population to adopt future mobile banking products.

Recommendations:

- Financial service providers employ a range of channels such as the use of agents to reach “last mile” clients. Regulation needs to respond to channel-specific situations, such as clear designation of responsibility between agents and financial services providers.
- Financial education is essential for financial products such as how savings accounts can be used and provide meaningful benefits to customers. Financial inclusion and financial education should be seen as an ecosystem with government, financial services providers and other specialists working together to develop and implement effective programs.

Chapter 5: Digital Financial Infrastructure for Digital Finance: Extending Reach to MSMEs

Session Chair:

- Mr. Jinchang Lai, Principal Operations Officer and Lead for Financial Infrastructure, Finance and Markets, East Asia and Pacific, World Bank Group, Vietnam

Speakers:

- Ms. Catherine Simmons, Managing Director, Head of Government Affairs, Asia Pacific, Citi, Hong Kong, China
- Mr. Gerald Sun, Head of Sales, Commercial Payments, Asia Pacific, Middle East & Africa, MasterCard, Singapore
- Mr. Patrick Yao, CEO, Qunxing Financial Service, Inc, People's Republic of China
- Mr. Satoshi Kuwahara, President, Credit Risk Database (CRD) Association of Japan

While financial infrastructure is a fundamental service, it needs to be able to adapt to the changes of financial services which are increasingly becoming digitized. There are two ways to understand the concept of digital financial infrastructure. One way is that financial infrastructure itself needs to be digitalized; a process which has been occurring for the past several decades. As an example, several years ago when a lender would ask for a credit report they would receive it by mail or fax. Today, however, lenders are able to access credit reports much more easily through system-to-system connections or other electronic means. For the past two years in China any consumer has been able to make self-enquiries of their own credit report by mobile phone. Similarly, for collateral registries, several years ago this information was organized by catalogue cards. Today creditors can easily register and search security interests over the internet. This process of digitizing the financial infrastructure has been occurring for several decades.

The other way to understand the concept of digital financial infrastructure is to consider how such infrastructure can better serve the growing digital finance space. Digital finance is here to stay and will continue to grow. This means that, among others, supporting services for digital finance will also need to be developed. As an example, a Chinese law firm recently developed a fully electronic legal service for digital finance players. One of the main services this firm provides is to conclude contracts electronically without the need for physical face-to-face contact. This example highlights one type of the new services which are increasingly becoming available in this space.

Regulatory, Legal and Policy Dimensions

The Financial Infrastructure Development Network (FIDN) was launched in 2015 as part of the APEC Finance Ministers' financial development roadmap known as the Cebu Action Plan. FIDN specifically targets micro, small and medium enterprises (MSMEs) which are a fundamental component of the regional economy contributing to over 60% of total employment, 40% to GDP and 15% to total exports among APEC economies. However, approximately 40% of the financing needs of MSMEs remain unserved. What the FIDN initiative seeks to do is bring together relevant parties such as the International Finance Corporation (IFC), APEC Business Advisory Council (ABAC), Organization for Economic Co-operation and Development (OECD) and the Asia-Pacific Financial Forum (APFF).

To achieve its goals FIDN will focus on four specific issues:

1. Credit information systems. The initiative will push for more proposals that help to establish credit information bureaus across the region as well as improving the efficiency of already established bureaus.
2. Secured transactions. The initiative will promote legal and policy reforms that will enable banks and other financial institutions to accept other forms of collateral besides real properties in extending loans such as accounts receivables, inventory and intellectual property among other assets. Currently, many MSMEs find it difficult to acquire loans because they don't have real property to serve as collateral.
3. Insolvency Systems. The initiative will assist in the development of better guidelines for how to deal with insolvency in a manner that respects the rights of the creditors and the borrowers. With this type of protection in place banks and other financial institutions will be more confident in extending loans to small borrowers with good credit standing.
4. Factoring. The initiative aims to make factoring, which allows enterprises to raise additional funds by selling their accounts receivables at a discount, a common practice.

Increasing Innovation for Financial Services

The rapid emergence of digital finance has created new products and services and has enabled digitization in delivery as well as platforms. Some of the examples of this are innovations in systems and frameworks such as credit reporting, insolvency frameworks and collateral registries. This can be as simple as using telephone records to judge whether a person is credit worthy or not. All of these mechanisms that are needed for an individual to access financing are applicable to MSMEs as well.

There have also been innovations in payments including secured transactions and credit enhancements. One specific example of this is M-PESA, a mobile phones-based money transfer system in the Philippines. A critical factor in the success of M-PESA has been the fact that regulations were created which were conducive to mobile money in the Philippines including streamlined and simplified Know Your Client (KYC) regulations so that it only needs to be done once, good service design and by having the application embedded into SIM cards so that it became user-friendly as well as making the sourcing and use of funds convenient and inexpensive.

Data analytics is another important area to consider with regard to financial infrastructure. Innovations such as biometrics are increasingly changing the landscape. Many of the current initiatives seeking to help institutions adapt to these types of innovations are applicable to a range of institutions outside of the financial sector such as Apple and Samsung using fingerprint technology. A lot of what the traditional firms are doing is also relevant in this space and the amount of overlap taking place reinforces the need for institutions to work together to come up with the best solutions.

Application Programming Interfaces (APIs) are also becoming very important as they allow users to launch new applications without the need for large amounts of IT infrastructure or spending. Banks are also beginning to use this as well to help enable third party developers develop new products for the banks which in particular encourages innovation. Near-field communication is also increasingly becoming useful as it allows users to make fast and secure payments through their phones. This sort of technology will allow businesses to offer a wider range of payment options which could have positive impacts.

Regulatory, Legal and Policy Issues

Mobile phone records can provide valuable information about consumers such as their bill payment history or shopping patterns. For financial institutions to access and use this data, however, raises some important concerns for policy makers. There are several regulatory and legal policy issues that emerge as more financial services become digital, with data being a key issue in this regard. At the core of digital finance initiatives is digital data with governments increasingly needing to think about their positions on this issue.

Some of the key issues that policy makers are considering include:

- Digital data and advanced systems need to be managed by highly-trained professionals backed up by reliable IT infrastructure;
- Data collection needs to be effectively utilized by business to enhance competitiveness and efficiency while ensuring privacy of individuals;
- Data needs to be secured against fraud, criminal activity and natural disasters in an increasingly complex and interconnected world;
- Cross-border data transfer, processing and storage needs to lead to discussions about onshore versus offshore activities; and
- A level regulatory playing field is needed for traditional providers and new entrants to manage risks across the system and equalize costs.

The Way Forward

Governments have an important role to play in helping MSME growth. First of all, collaboration between regulators and market players is very important to encourage innovation. Regulators often find it difficult to understand what these new technologies do and the solution for this is having the industry explain the technology to regulators and then working together to establish the proper protection needed for consumers.

Regulators should also consider a regional initiative to map regulatory changes needed to allow digital finance to better support MSMEs. These changes could be as simple as the use of electronic signatures or the recognition of electronic documents which are currently not allowed in many Asian markets.

Regulators also need to allow a broader range of products and services to be offered digitally. For example, India has just allowed the same products and services to be offered by ATMs as by traditional bank branches. This enables the banks to significantly increase their reach and provide services to new markets.

The importance of providing a level playing field for traditional providers and new entrants to the market was noted earlier. However, regulators also need to consider instances where the use of light regulation, which will better allow for innovation, might be more beneficial than stricter regulation.

Regulations need to be clear and accessible for everyone. A good example of this is South Korea where all of their regulations are outlined on a single website which has also been translated, making it easier for firms to find and understand the relevant regulations for their business.

Lastly, the standardization of documentation will make it possible to have it converted into digital formats, be processed by machines and make it easier to swap between countries when issues such as trade are being examined.

MasterCard Solutions: Enablers of Growth for SMEs

About 10 years ago MasterCard rebranded itself as a payments company. This rebranding also resulted in a shift in terms of where MasterCard deployed its assets and what value the company wanted to deliver. MasterCard has now shifted from focusing on retail payments to now provide more on wholesale payments which also includes increasing financial inclusion by providing more access to MSMEs.

In terms of assets, issuing cards has become a very small portion of MasterCard's business today, with most of the company's business now occurring digitally in the Cloud, or virtually through accounts and leveraging on networks. As an example, today if a consumer uses a website such as Expedia.com to purchase a ticket for a flight, chances are that the payment to the supplier is being done on a MasterCard product in real-time. The reason for this is that this type of transaction works out to be much cheaper and more efficient than the traditional SWIFT funds transfer or Automated Clearing House (ACH) credit transfers. One of the key reasons for this is that most of these transactions that MasterCard is processing through sites like Expedia are considered to be fairly small and MasterCard's payments are not batched. In a broader sense, MasterCard is simply leveraging its connectivity with its over 20,000 partner banks and giving companies a much more efficient and cost effective method of processing payments that avoids intensive, conventional reconciliation.

Why are SMEs Underserved?

SME's lack hard assets which leaves them with limited options for collateral to access credit. Without cash many SMEs struggle to finance their business or expansion. Another disadvantage SMEs face is that they almost always have a higher transaction cost. SMEs are poor at what they don't do as part of their core business. For example, a small law firm is likely to have high levels of expertise in legal issues but might struggle with managing their accounting processes for the business. This may result in higher costs in order to meet the needs of the business outside of their core function. SMEs also often struggle with limited risk management, cash flow management or their ability to monitor resources. The result is that SMEs are more likely to consume overdrafts than a larger company since the SME most likely won't have the standard governance processes in place to monitor and assess these issues regularly. Lastly, lending to SMEs is very localized today with lending decisions being made by local branch managers. SME's generally rely on working with local branches since they typically do not have credit scores or have "thin files" which would enable them to be assessed by a bank for credit more easily without the need for a local branch manager to assess the company. This creates additional challenges for SMEs as they are in many cases limited to only working with banks which have a local branch in their area.

To provide greater support for SMEs, and to help them overcome some of these challenges, MasterCard focuses on helping SMEs to improve their cash flow, including helping them with their collections of receivables, purchasing and examining marketplaces to come up with ways to increase efficiencies. For receivables, SMEs generally have high costs of working capital, low transparency in processing and a

poor user experience. Digital technologies can provide solutions for this by lowering costs, increasing transparency and creating more positive user experiences.

Increasing Access to SMEs

Traditionally, finance is usually granted by a lender based on a company's receivables. The problem with finance based on receivables is that documents are often hard to validate; particularly for smaller companies. Banks have limited appetite for this because trying to validate these documents is often not worth the trouble. To solve this problem, MasterCard is working with regulators and key industry players to test viable solutions. One action MasterCard is taking is to secure invoices from their source and then find banks willing to back them. This solution would bypass the need for an invoice standard or central registry where banks can validate invoices.

SMEs also need access to trade but are often kept out due to cost barriers. To assist with this MasterCard is working with some of the world's major ports to link up ecosystem participants through digital applications so that elements such as bills of lading, warehouse receipts and customs permits can all be digitized and accessible from a marketplace and be transparent to both banks and regulators. The implication of this is important as it will allow SMEs to operate in a seamless end-to-end online fashion. It is also a key factor for achieving greater financial inclusion for SMEs since in today's world of trade most major banks have a minimum ticket size on trade (i.e. \$100,000). The reason for the minimum ticket size is that the required paperwork is too onerous and when considering the operational costs of the bank any transaction worth less than the minimum ticket size amount is too costly to process. If an SME wants to buy a container load worth only \$25,000, which would likely represent a major investment to the SME, it will be difficult for the SME to get financing due to the minimum transaction size most banks require. However, if the marketplace was digitized along the lines of what MasterCard is currently trying to achieve, it would significantly increase opportunities for SMEs to access financing for their trade transactions through banks as well as other forms of formal financing.

The Treasure Island in SMEs

The People's Republic of China (PRC) has a very large SME market with about 55 million SMEs in total representing about 60% of GDP output and 80% of job creation. Due to the significance of the SME market, the government cannot afford to ignore it to ensure the overall stability of the domestic economy. Like most other economies, SMEs in the PRC also suffer from several financing challenges. Of the economy's 55 million SMEs, about 40% of them are distribution firms that lack any fixed assets which could be used for traditional financing methods. The economy's SMEs also struggle with very high debt to asset ratios with large amounts of accounts payables and private loans from peers. These SMEs also generally struggle with adequate corporate governance and providing clear bookkeeping.

One of the major issues making traditional financial institutions reluctant to serve SMEs is the costs involved with doing so. The first major issue in this regard is the high cost of information asymmetry. This makes it difficult for lenders to assess the ability of SMEs to repay their loans. The second major challenge SMEs face in terms of costs is the tremendous costs involved with operations due to the required paperwork involved in securing financing. The average loan size for SMEs in the PRC is about CNY 110,000, however, the cost of obtaining a loan this size can easily reach CNY 100,000 due to the amount of work required in order for the SME to secure the loan. As a result, the value of the loan

becomes almost worthless as it is too expensive to obtain. Lastly, SMEs struggle with the high cost of customer acquisition. The PRC's 55 million SMEs need to service several physical branches and sub-branches to meet the market demand for their products or services. These branches are very costly in terms of both human resource costs and property costs.

Every SME has a Treasure Island

Accounts receivable is an important asset that every SME has, and can be considered a "Treasure Island" due to its potentially hidden value for many SMEs. According to the results of a recent survey conducted by the People's Bank of China (PBOC) accounts receivables account for up to 40% of total assets among SMEs. When doing business with larger companies, the payment terms are typically 60 or 90 days. The down-side of accounts receivables for SMEs, if all of the accounts receivables were put together and rendered from the largest to the smallest only less than 10% (representing the largest accounts receivables) would be covered or serviced by financial institutions. The remaining 90% of the accounts receivables remain liquid.

When considering the long-tail market for SMEs accounts receivables it is generally agreed that digital or internet innovations will play a major role in the short term. The reason for this is that significant costs can be saved through each transaction if SMEs are able to sell their accounts receivables online.

Accounts receivable financing is the best way to solve the financing problem for SMEs because it is too difficult for financial institutions to assess the necessary risks and stability of a SME to provide it with a traditional loan and SMEs only have limited fixed assets to use as collateral to enable them to qualify for inventory-backed loans. On the other hand, SMEs generally have high amounts of accounts receivables and the risks of these receivables can be more easily evaluated.

Accounts receivables can be transformed into cash through online SME accounts receivables trading platforms. Such a platform enables SMEs to easily sell their accounts receivables to large financial institutions or other funds. To facilitate the trading, mobile phone apps can be used to simplify the process for users and make the market more accessible. Such platforms allow SMEs to turn their accounts receivables into cash within a matter of minutes and at a significantly low cost. If a small company wants to secure a loan from a micro credit company or a bank, the annualized interest rate may be as high as 20%. By selling receivables, however, the interest rate is typically less than half with an average of about 8%.

Credit Risk Database for SME Finance in Japan

The Credit Risk Database (CRD) Association collects anonymous financial data and provides statistical risk evaluation services. The database is essentially a part of the financial infrastructure; specifically for risk evaluation. Traditional financial infrastructure is very important for capital markets, however, many SMEs have little or no connection with capital markets. As such, the CRD Association, as well as credit bureaus and credit registries, are very important for SME financing to mitigate information asymmetry. The CRD Association operates the largest credit database in Japan and in many ways is unique to the economy.

The CRD Association

The CRD Association collects data on SMEs from its members and in return the CRD Association provides services for its members. The data collected from its members include anonymous financial information which is then stored within the CRD Association's database. The CRD Association provides its members with a variety of services including scoring services, statistical information services, sample data provision services and consulting services. The Association also conducts periodic valuations to maintain the quality of information provided in scoring models.

Presently, the CRD Association has 175 members which includes credit guarantee corporations, government-affiliated financial institutions, private financial institutions and credit-rating agencies. The participation of nationwide credit guarantee corporations has helped the Association develop a well-balanced database in terms of both the region and industry. The gross number of incorporated and sole-proprietor SME statements that have been accumulated into the database is more than 3 million. Given that the number of all existing SMEs in Japan is about 4 million, the high amount of SME data currently included in the database demonstrates the success of the Association.

The Credit Information System

The credit information system can be divided into four categories made up of two public and two private components. Private credit bureaus and credit risk databases make up the private components, with credit bureaus being the most prevalent worldwide. The essential business of credit bureaus is to collect individual credit information and provide it to lenders. However, some private credit bureaus have extended their business to also provide scoring services. The private credit risk database is unique to Japan. On the public side, public credit registries are also quite common globally, but there does not currently exist a public credit risk database anywhere in the world.

There are currently four private credit risk databases in Japan, all of which were established between 2000 – 2004. They were established after the collapse of Japan's economy which resulted in a major financial strains for SMEs. At that time, Japanese financial institutions urgently needed advanced risk evaluation systems and the credit risk databases were established to service this need.

Credit risk databases are often confused with credit bureaus. A credit bureau, or registry, can be defined as a credit information center which collects personally identifiable information and having individual information as its function. On the other hand, a credit risk database can be defined as a credit information center which collects anonymous financial information and having no individual information as part of its function. This simple difference between the two entities, and their databases (anonymous versus identifiable), is connected with the fundamental differences of their characteristics and functions. Credit bureaus share the credit worthiness of individual borrowers, with the emphasis on data regarding the borrower's past loan performance rather than ongoing business performance; whereas credit risk databases share information on the credit worthiness of the average borrower in the group having the same attributes. Here, the emphasis is placed on data regarding the borrower's present ongoing business performance rather than their past loan performance. This approach allows for a more accurate prediction of a borrower's credit risk based on a large database.

Practical Usage of the Credit Risk Database

Many of the CRD Association's members use the CRD scoring models for validating their own scoring models. Comparatively large scale financial institutions usually build up their own scoring models and risk evaluation systems based on their own databases. However, the database of a single financial institution is limited and significantly smaller than the CRD database. Furthermore, the attributes found within databases of financial institutions such as region, industry or scale of company are often biased. These factors make their scoring models unstable and vulnerable to changes to economic conditions. It is very important to validate the internal rating by comparing with that of a third-party based on a large scale database.

Some of the CRD Association members develop their internal rating systems by employing CRD scoring models. They do this by grouping customers into categories in accordance with the degree of estimated probability of default on CRD scoring models. The internal rating systems are then developed which take into account other attributes such as qualitative items. CRD members can further construct their internal rating systems to reflect statistical predictions of probability of default and qualitative items which they have weighed for loan decision making. This process contributes to the improvement of risk management.

Recommendations:

- Systems interoperability is one of the most important elements of financial infrastructure that government can foster or influence to achieve greater efficiency, innovation, lower costs and convenience for consumers.
- MSME credit cannot be given in a vacuum and requires supporting services such as financial infrastructure, some of which can be developed and provided by government agencies, some by the private sector, and some through the industry associations, such Japan's Credit Risk Database.

Chapter 6: Financial Literacy through Education

Session Chair:

- Mr. Peter Morgan, Senior Consultant for Research, Asian Development Bank Institute (ADBI), Japan

Speakers:

- Dr. Naoyuki Yoshino, Dean, Asian Development Bank Institute (ADBI), Japan
- Mr. David Boyle, Group Manager, Investor Education, Commission for Financial Education, New Zealand
- Mr. Ngah Tasir Azaddin, Chief Executive Officer, Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit) (AKPK), Malaysia

The connection between financial literacy and financial inclusion is important. Access to financial services without adequate financial literacy levels among customers to effectively make use of these services does not result in positive impact. As such, when discussing the challenges and opportunities for progressing financial inclusion, access is only one part of the equation with the quality of these services and the customer ability level to make use of them also key components in achieving inclusion.

The evidence provided through research on the topic suggests that levels of financial literacy are generally low in emerging economies, both with regard to individuals as well as SMEs. This highlights the opportunity for greater financial literacy through education as an important part of each economy's financial inclusion strategy.

There is an interesting symmetry between financial literacy and financial inclusion in that financial inclusion generally improves directly with income meaning that as economies enhance their average income levels financial inclusion also increases. However, within this trend levels of financial literacy often remain relatively low despite the increase in income and financial inclusion. Even in more advanced economies significant gaps remain in terms of financial literacy. Some of these gaps can be explained by various factors as incomes progress such as the increasing complexity of financial products or aging populations putting strains on government finances leading to policy shifts requiring individuals to take more personal responsibility in their financial and retirement planning.

Financial Literacy through Education: The Japan Experience

Asia's financial sector is greatly dominated by banking industries with depository institutions holding the majority of assets in comparison with shadow banking entities (i.e. investment trusts) and insurance companies or pension funds. When comparing Asian economies, Japan and Singapore both have relatively long-established insurance markets. There are important reasons for why Japan's insurance industry has developed so well.

Japan's Growing Insurance Industry

Life insurance generally consists of two main distribution channels. One is through Post-office life insurance. Japan has provided postal savings and at the same time Post-life insurance. Private life insurance companies have also developed following the second world war. At the time, a large portion of Japan's population consisted of jobless widows as a result of the war. In an attempt to get them into

the workforce the government initiated a program to hire these widows for private insurance companies to sell life insurance products to the younger generation.

These life insurance companies mainly focused on large businesses and government officials. Other groups such as small business workers and agricultural farmers were often neglected due to the uncertainty of their businesses in comparison to the larger businesses and government employees. This resulted in small business workers and farmers being excluded from the insurance industry. Recognizing this issue, Japan's government responded by creating tailored life insurance products which were more appropriate for these excluded groups. Watching the success of the government's insurance products for these excluded groups made several of the private insurance companies realize that the levels of certainty of many of these groups were actually greater than they had estimated. This realization helped to influence many of the private insurance companies to target these excluded markets as well. The financial education necessary for customers to take up these insurance products were often provided by the sales women who were recruited after the war. Further financial education systems were provided by Japan's Post Office as one of the main life insurance providers.

Financial Education in Schools

The purpose of financial education in Japan is to provide lessons of financial activities and economic schemes to achieve an improved quality of life and wellbeing. The Japan Securities Dealers Association (JSDA) conducted surveys with 4,462 schools in Japan to determine the levels of financial literacy education being taught. The results of these surveys showed that levels of financial education in schools is lacking significantly. Furthermore, the research also examined the reasons behind the lack of financial education being provided by schools. The main cause was found to be the lack of financial literacy skills found within teachers to effectively train students. Most teachers in Japan are trained through the governments Department of Education and generally know very little about finance. Economics and business graduates who become teachers only represented about 13%.

To address this issue, programs are now being put in place to provide specialist training to teachers which will enhance their capability to teach finance to their students. Japan's central bank is also involved and is offering special teacher training courses over the summer holiday period to give more teachers the opportunity to develop financial literacy skills.

Financial Education for SMEs

A common finance issue for SMEs is that it is often difficult for them to borrow money without collateral. They also usually have to pay higher interest rates in comparison to larger companies and have difficulties computing compounded interest rates. These challenges represent some of the key issues which need to be taught to SMEs in order to increase their potential for success.

In Japan, the first lesson taught to SMEs is book keeping to help them learn how to take note of daily revenues and expenses. Further training is provided on topics such as long-term planning, accurate reporting of their business, reducing default loan losses, asset management and pension contributions for the SME's employees.

Central Council for Financial Services Information

In 2013 Japan established the Central Council for Financial Services Information with the Bank of Japan's Public Relations Department acting as Secretariat. The members of the council include the Central Bank of Japan, the Financial Services Agency (FSA), Ministry of Education, Consumer Protection Agency, Bankers' Association, Trust Companies' Association, Security Dealers' Association, Insurance Association, university professors and school teachers. The group meets quarterly to discuss ways to increase financial education in Japan.

This economy-wide network hopes to create a sound and effective financial education system for Japan including plans to introduce specific financial education curriculum into school text books. The Council has recently developed a framework which aims to identify the specific subject areas relating to finance which should be taught in the various school grade levels. Now the Council is working with politicians in an attempt to convince them to back the financial education strategy.

Financial Literacy through Education: The Malaysia Experience

There are several ways in which financial literacy or financial capability are defined. The common assumption is that the more literate a person is the more capable they are as well, and furthermore, the more capable a person is the greater their wellbeing will be. However, this is unfortunately not always the case.

In Malaysia, there are several major players providing financial education. The Central Bank of Malaysia is the main driver of financial education initiatives and formulates policies, sets strategic directions, integrates financial education into the school curriculum and equips teachers with financial education knowledge and skills. The Credit Counseling and Debt Management Agency/Agensi Kaunseling Dan Pengurusan Kredit (AKPK) is another important player in Malaysia's financial education space as it is the lead agency providing financial education to adults. AKPK develops financial education modules for adults according to key life events. The institution specifically targets vulnerable groups such as low income households, young adults and women. The remaining major players for financial education in Malaysia consists of the Securities Commission, the Employees Provident Fund, Banks and Consumer Groups. These stakeholders are important investors in financial education programmes and also provide their own financial education services to the general public.

Credit Counseling and Debt Management Agency (AKPK)

AKPK was set up by the Central Bank in 2006 as part of the government's Consumer Protection Framework. The agency is essentially a pre-emptive measure to provide a channel to resolve potential credit issues and enhance the financial literacy level of the public. AKPK has two main objectives. The first is to build a more resilient household sector by providing a venue for the general public to obtain financial advice. The second objective is to promote a sound and robust banking system whereby AKPK is able to assist in the collection of loans to minimize the instances of non-performing loans in the banking industry.

The specific services offered by AKPK includes credit counseling in which advice is offered to the public on credit and money management, analysis of customer's financial situation and identification of options to address credit issues. AKPK also has a debt management programme which includes tailor-

made loan repayment programmes for individual borrowers whereby loan repayments are suited to individuals' cash flow. Lastly, AKPK also provides financial education services with the aim of promoting financial prudence among young adults over key life events. As part of the agency's financial education initiative talks and briefings are organized on personal financial managements modules which are further complimented through the publication of articles and books on money management.

All of AKPK's services are free of charge and the agency has experienced an average annual client increase of 25%. The average enrollment into AKPK's Debt Management Programme is about 40% of all counseling cases, with the main reasons for customers enrolling in this program being issues associated with repaying credit cards and personal loans. Based on AKPK's experiences with its clients it has found that the main reason for loan defaults (52%) is poor financial planning. This highlights the need and importance of financial education among customers of the banking industry.

After 10 years of operation, AKPK has reached out to more than 5 million consumers through structured advertisements and other promotional activities. Over 1 million participants have attended the agency's financial education programmes and another nearly 500,000 customers have approached AKPK for credit counseling in an attempt to get their finances back on track. 150,000 customers have participated in AKPK's Debt Management Programme with more than 10,000 successfully graduating from the program and successfully repaying their loans.

Addressing Major Concerns on Financial Issues

To support their clients AKPK examined the financial sector and how the various age groups within the population commonly engaged with it to identify the priority issues which each age group needed to understand. For the younger population (i.e. 18-25 years), the most important issue is lack of awareness. AKPK is addressing this by developing a strategy to support awareness building and aims to empower this population segment with knowledge and skills in money management. For the middle aged groups (i.e. 20-30 and 25-45 years), AKPK identified that cash flow, credit management and lack of long-term planning are the most pressing issues requiring further action. The older aged population (40+ years) required greater support in understanding retirement issues and what they need to do to be financially prepared for this.

Based on the identified needs of each population age group AKPK is developing financial education modules according to the various stages of each person's life cycle. These modules are designed to fit within the critical events of a person's life such as taking a study loan, acquiring a credit card, buying a house, changing jobs or managing retirement funds. These modules aim to provide a more common understanding of relevant scenarios that a person is likely to encounter at different stages of their life and equip them with the knowledge to successfully navigate each situation with the best financial outcome.

Because AKPK's resources are limited, the agency prioritizes providing its services to vulnerable groups. Currently, more than 70% of AKPK's clients are classified as low-income households. These households and individuals are at risk of greater negative impacts on their wellbeing if they make financial mistakes and so AKPK concentrates on this market with the aim of reducing the frequency and level of such mistakes.

AKPK utilizes a number of delivery mechanisms for its financial education programmes such as facilitator assisted learning sessions (i.e. classroom learning), self-directed learning through online resources, including financial education into higher education curriculum and collaborating with other stakeholders to reach particular audiences.

Gaps and Challenges

Recent studies conducted by the Central Bank of Malaysia and the Asian Institute of Finance have identified a number of gaps and challenges which AKPK is now considering how to best address. These issues include:

- A lack of readiness to deal with major unexpected expenses;
- Malaysians are less familiar with the concepts of diversification or risk spread or reduction;
- Those entering pre-retirement age (>50 years) are generally poorly prepared for financial emergencies;
- Prudent financial behaviour does not translate to better financial preparation for income shock; and
- Financial education leads to improvement in financial knowledge but does not translate to behavioural and attitudinal changes.

Based on these gaps and challenges, AKPK is striving to ensure that its financial education programmes include various critical success factors such as that financial education should start from the young, it must be continuous over key life events, it must be complemented with other appropriate interventions to ensure behavioral and attitudinal changes and all stakeholders must take ownership of financial education and play active roles.

Sorted Workplace Programme

The Sorted organization started as a website in New Zealand. To-date it has received no financial support from financial institutions and is completely funded by the government which provides it with about \$5.8 million each year. Sorted currently has about 20 staff members and the majority of its government funding is used to build the Sorted Programme. The Sorted Programme aims to support financial education not just by providing online resources through its website and other digital channels but also through initiatives which are implemented directly within communities and via employers.

Sorted's programmes aim to address key issues such as mortgages, investment, insurance, or understanding bad debt. Overall, the program hopes to influence peoples' behaviors by enabling them to make better financial decisions and as a result improve their overall wellbeing.

Statistics of New Zealand's welfare system show that the majority of people which the government is required to support have relatively low levels of financial literacy. So programmes such as Sorted aim to build the financial capability of people and ideally reduce the overall reliance on government welfare. A major challenge for organizations such as is that financial education programs are usually quite expensive to implement and can only service small groups of people at a time. To address this, the

Sorted programme aims to prioritize the different population segments and seeks the involvement of individuals who would likely benefit the most from it.

The Sorted program is intensive and lasts 6-9 weeks. It utilizes interactive apps to ensure a more modern approach to the training. The programme also makes use of interactive websites which provide a wide range of information including video clips to explain specific products and services. Many of these materials and resources made available on the websites are aimed at financial planners or employers who are encouraged to download them to use as part of their own training for their customers or employees.

Sorted's Financial Capability Programmes

Sorted's Fighting Fit Seminars are usually about two hours in duration and are designed to be highly interactive. The overall aim of these seminars is to try and help people understand the short-term and long-term impacts of various financial decisions and how different products and services are available to help them reach their financial goals.

Through Sorted's Workplace and Community Growth programme about 50 facilitators have been trained. Each of these facilitators has been audited and has a programme of work which they have to follow with their audiences. The audiences are predominantly engaged via an employer or community. The total number of participants for each of these courses is quite small, however, the results show strong evidence of people who have completed the course changing their behavior. To ensure that this is a lasting impact, Sorted has conducted additional evaluations with participants a year after their completion of the course to confirm that their behavior change has been permanent. These behavior changes are important ways of impacting on peoples' wellbeing, not just in terms of financial position but have flow-on effects in areas such as health and education.

The Sorted programmes have been successful at showing employers that having financially capable staff is a benefit to them. Having higher levels of financial capability has been found to be directly related to worker confidence, work ethics, productivity and absenteeism. Helping employees learn to better manage their finances gives them one less thing they need to worry about which will enable them to better focus on doing their jobs.

Recommendations:

- Adopting a domestic financial education program and strategy can better integrate the initiatives of financial service providers, governments and other stakeholders to extend the benefit of financial inclusion from access to usage and impact.
- Financial education programs that integrate with domestic school curriculums have shown to be effective, especially where tailored for various age groups and appropriate training is provided to educators to ensure its success.
- E-learning platforms are gaining popularity across a range of educational fields and have proven successful in different markets in a providing greater variety of ways in which to reach more people.

- A Financial Health Check platform could be established which would allow individuals to monitor their cash-flow position (surplus or negative) and personal net worth (positive or negative). Such a platform would be particularly useful for individuals considering major purchases or borrowing as a way to be better informed of their financial position prior to making a decision.
- Regulators and policy makers should consider ways in which individuals can more easily check their credit scoring. The implementation of an individual credit checking system could serve as a way for individuals to easily access their credit information. Such a platform could also potentially also alert individuals over indebtedness if indicators are shown.
- Governments should consider providing a one-stop financial portal which can provide useful references on financial products for consumer comparison purposes.

Chapter 7: Digital Finance and Consumer Protection

Session Chair:

- Mr. Kazuto Tsuji, Visiting Senior Advisor, Japan International Cooperation Agency (JICA)/ Professor, Saitama University, Japan/The Executive Committee Chair, CGAP, Japan

Speakers:

- Mr. Ouk Sarat, Director of Payment System Department, National Bank of Cambodia (NBC)
- Mr. Raymond Estioko, Deputy Director, Office of the Deputy Governor, Supervision and Examination Sector, Bangko Sentral ng Pilipinas (BSP), Philippines
- Mr. James Vancel, Managing Director, The Busara Center for Behavioral Economics, Kenya
- Ms. Kate McKee, Senior Advisor, The Consultative Group to Assist the Poor (CGAP), USA

Digital financial services (DFS) have been expanding in many parts of the world and have substantially contributed to promoting financial inclusion for the unbanked poor. Today there are more than 270 providers of DFS across 93 countries serving over 411 million customers. DFS includes micro financial services such as payments, remittances, credit, savings, insurance and even DFS+ which includes financing for electricity, water or school fees. Combined with effective consumer protection can help ensure transparent and fair treatment of current customers while also giving potential customers the confidence to take up and use DFS. This is particularly vital for low income customers given their precarious economic and social circumstances and limited familiarity with DFS providers and products.

Without proper mitigation measures against consumer risks and transparent and fair competition DFS will not fully benefit the poor in terms of access, usage, quality of services and value proposition. These challenges are leading to an increasing emphasis on *responsible* DFS.

Digital Finance and Consumer Protection: The Cambodia Experience

Cambodia is a small southeast Asian economy with a population of about 14.5 million and a GDP per capita of about \$1,000. Cambodia is classified as a less developed economy and is gradually making progress towards becoming a middle-income economy.

In terms of financial inclusion, less than 20% of Cambodia's population has a bank account. However, this figure varies from time to time depending on what indicators are being used. Currently, Cambodia's central bank is working on assessing financial inclusion levels based on guidelines provided by the World Bank and the Alliance for Financial Inclusion (AFI).

Current Status of DFS

Cambodia's DFS operations are in the form of a third party processor, meaning that they are required to attach to a bank and receive full guarantees and monitoring from the bank. Cambodia's largest DFS provider is Wing, which currently controls about 80% of the market. In addition to this DFS provider Cambodia's banking and financial institutions also participate in the payment market offering services such as mobile banking or online banking. More recently banking institutions have been introducing agent banking services as well to expand the reach of their networks.

Sector Level and Regulatory Issues

With the help of the IFC, the National Bank of Cambodia has recently conducted a sector-wide assessment of Cambodia's payment market. The results of this assessment indicate there are prominent issues which need to be addressed. Most of these issues are directly related to the current market structure, regulatory structure, risk management and market integrity and consumer protection.

All DFS providers are subject to prudential regulation and are also supervised by the central bank. This is a burden to DFS providers because they need to meet both the requirements of the central bank as well as the regulatory authorities. In most cases the regulatory authorities simply rely on the bank which the DFS provider is attached to monitor their operations rather than taking a direct approach to monitor them themselves.

In the current situation, it is very difficult for newcomers to enter Cambodia's DFS market due to the need to find a partner bank. This is due to the onerous procedures that banks must follow in order to ensure compliance with regulations. Competition and ensuring a level playing field is also an issue. At the moment, Cambodia's DFS market is dominated by a single player. This company does not want newcomers to enter the market and so they tend to use their influence to create high entry requirements for newcomers. Further work needs to be done in order to promote a level playing field for all players, but the regulators have so far struggled to effectively manage this as it is difficult to decide which rules they should apply to banks vs. DFS providers.

To address these issues the government is currently considering new policies which would allow DFS to receive individual licenses rather than requiring them to attach to a bank. This new category for DFS providers would be referred to as payment institutions or e-money institutions. Along with this measure, new regulations are also being drafted to ensure that consumer protection safeguards are in place and which would specifically apply to licensed DFS providers. This will include measures to ensure that customers are provided with sufficient information from DFS providers in order to make informed financial decisions. Further measures will also address the prevention of unfair practices by DFS providers and to ensure that customers have access to a mechanism for dispute resolution.

Risks for DFS Consumers

In designing a proper framework for consumer protection regulators need to understand the risks for customers. These risks generally involve incomplete information based on either the supply side or demand side. An important role for regulators is to ensure that customers always have access to complete and accurate information and customers need to also provide adequate information to the providers.

Security features adopted by the provider are also important. Regulators need to ensure that any security risks are sufficiently addressed and that customers are also adequately educated with regard to any security features. Agent banking also created unique customer risks such as cases of fake agents. To combat this the DFS provider needs to have systems in place by which their agents can be monitored and controlled. On the other hand, agents face their own risks, particularly in terms of liquidity. So it is important that they always have sufficient liquidity available in order to honor their obligation to the receiver when they come to withdraw funds.

Another key issue is in regard to the DFS providers themselves. Regulators need to ensure that all DFS providers have acquired a proper license from the regulatory authority. In Cambodia there have been some cases where operators have failed to seek proper approvals prior to entering the market. Such actions not only put themselves at risk but also any agents they may be working with along with their customers.

To ensure that DFS providers have adequate funding for their operations they are required to maintain a trust account with a commercial bank. This trust account needs to be properly reconciled between the bank and the DFS provider. Furthermore, this trust account, which cannot generate interest, needs to be separate from the provider's normal operating funds.

Once regulators understand the risks that customers face with regard to DFS they can take appropriate actions to address them. Cambodia's central bank is now taking the necessary steps to achieve this by introducing policies that will mitigate these risks. Some examples include ensuring disclosure of information and operator support, creating consumer education and awareness programs, setting minimum security standards, setting guidelines for agent training and oversight and outlining reporting requirements for DFS providers.

Digital Finance and Consumer Protection: The Philippines Experience

The Philippines central bank has defined financial inclusion as a state wherein there is effective access to a wide range of financial services which includes credit, savings payments and the availability of financial products that are designed, priced and tailored to market needs and capacities. Furthermore, financial inclusion requires the participation of strong, sound and duly authorized financial institutions that utilize innovation to provide financial services and effective interfaces of bank and non-bank products and services to reach the financially excluded.

DFS Landscape of the Philippines

In the Philippines there are currently about 22 million e-banking users, more than 100 banks offering e-banking facilities, more than 30 e-money issuers and over 70 million card-based products. As early as 2000, electronic money had been introduced in the Philippines by mobile network operators (MNOs). Initially it was offered as an alternative means of sending remittances to the economy via mobile phones. E-money was considered as a financial highway where funds only passed through and were expected to be withdrawn immediately or as simply a tool to move funds in a safe, fast and efficient manner. Therefore, e-money is not considered as a deposit product but another form of liability.

In the Philippines, most banks and their electronic banking products such as ATMs and POS terminals are located in cities or larger town centers resulting in lack of financial services in many more rural areas. Since e-money, through the use of mobile phones, has the potential to reach remote and otherwise hard to reach areas the central bank decided to allow non-banks to offer DFS to the public. This was an experiment conducted by the central bank. The approval of non-banks to offer DFS was subject to certain conditions:

- MNOs were required to establish a subsidiary that would issue e-money and would be under the jurisdiction of the central bank;

- Funds received were required to be deposited in banks and maintained separately from operating funds; and
- Minimum paid up capital of P100 million pesos or about USD2,300 was required; which raised the bar for entry level and discouraged fly-by-night operators.

DFS Regulation in the Philippines

After several years of experimentation, the knowledge acquired was assessed and used to form part of the E-Money Regulation which was issued in 2009. Under these regulations some of the basic features of e-money in the Philippines include a maximum accumulated amount of 100,000 pesos that can be loaded monthly as a tool to prevent money laundering. E-money is also required to be redeemable at face value, meaning that it does not accumulate any interest. All e-money accounts are required to be compliant with AML requirements and establish an audit trail so that any suspicious transactions could be tracked.

While these requirements were formalized as part of the new regulation, other outsourcing regulations were relaxed. What was originally a long list of allowable activities that could be outsourced became a short list of specific prohibited activities. This has enabled banks to freely outsource a wider range of activities without the necessity of seeking prior approval from the regulatory authorities. This has enabled rural banks to more easily develop linkages with technology service providers, larger banks, e-money issuers or development network operators.

Cloud computing was also allowed under the new regulations which enabled small to medium-sized banks to gain critical access to infrastructure and computational resources that would otherwise be out of their financial reach or too complex for them to effectively manage. What is prohibited, however, is the enabling of a public cloud for core operations. For a hybrid or community cloud prior approval is required by the central bank.

Consumer Protection

The unbanked are vulnerable financially and prone to be exploited. As such, the implementation of adequate protection is very important. To achieve this, the central bank of the Philippines has required price transparency and disclosure rules for all credit granting entities including banks, non-banks as well as businesses with credit activities. Market conduct regulations on financial consumer products and services have also been implemented to address concerns about complex and confusing user interfaces. The central bank also drives consumer education and awareness of consumer protection laws, rules and regulations to mitigate cases of poor customer recourse, fraud and inadequate data and privacy protection.

To ensure the protection of financial consumers' rights and to facilitate development and enforcement of a client-focused and responsible banking industry, the central bank developed a dedicated unit called the Financial Consumer Protection Department (FCPD). The FCPD monitors compliance with the consumer protection framework and assesses and rates financial institutions in this regard on an annual basis.

To adequately manage risk, the central bank has set minimum requirements with which banks and non-banks must comply. Examples of some of the operational issues which are covered under the risk management guidelines include the inability to transact during service operator's downtime, and the

liquidity of agents. With regard to technology risk management, banks determine what best suits them based on their size and the complexity of their operations and risk profile. In this way commercial banks are expected to have more rigid risk management compared to thrift, savings or rural banks.

Ongoing Challenges

Despite of the adoption of technological advancements by banks, the participation of non-banks in providing financial services and enabling regulations to promote digitization of financial products and services and expand financial inclusion, overall progress has been slow. The central bank was surprised to learn that of the 2.5 billion transactions per month, which is equivalent to USD 74 billion, only 1% are made via electronic means. The rest are made in cash and checks.

Based on an economy diagnostic provided by the Better than Cash Alliance (BTCA), this unfavorable situation was identified as being due primarily to the limited interoperability of the domestic payment systems. Major payment providers to-date have preferred to build their own eco-systems which makes it difficult and costly for smaller institutions to participate while also limiting the flow of funds and lessening productivity. Furthermore, the MNOs themselves are also not interoperable, including their agent networks.

This situation has prevented the growth of financial inclusion in the Philippines and about 36% of the economy's municipalities still do not have the presence of any financial institutions. It is common practice for businesses to open multiple bank accounts with different banks and then initiate on-us payments at their own banks to avoid high fees and other disincentives associated with making interbank digital payments.

A major lesson from the Philippines' experience is that if economies remain heavily dependent on cash and cheques, financial inclusion is very difficult to achieve.

National Retail Payment System (NRPS)

In an attempt to address the challenges of progressing financial inclusion the central bank initiated the establishment of the National Retail Payment System (NRPS) which is a policy and regulatory framework. The NRPS Framework defines high-level policies, standards and governance principles covering retail payment operations and infrastructure. It promotes interoperability among payment system participants to allow movement of funds between different accounts, fast-track the establishment of an effective electronic retail payment system, foster a "cash-light" economy and ultimately improve the economy's economic competitiveness.

Since retail payment systems contribute to the efficiency and stability of the financial system, the attainment of the NRPS vision will help to achieve higher economic growth and enhance overall competitiveness of the Philippines' economy. The central bank has engaged various stakeholders including payment service providers such as banks, savings and microfinance oriented banks, non-bank payment providers and government agencies, as well as domestic and local government units such as remittance agents including pawnshops, e-commerce participants and Fintech companies, to inform them of the central bank's plans, gather feedback and address their major concerns in order to give the project the greatest chance of success.

The central bank has emphasized that the NRPS will be a cooperative and collaborative area where participants work together under self-governance to achieve its goals. Competition remains with the products and services they offer, their price, quality and availability. The central bank provides oversight over the NRPS by providing a framework and terms of reference for the industry's governance body.

As a next step, the central bank plans to undertake the following actions:

- Establish an industry governance body which will be composed of representatives from various payment service sectors including commercial banks, savings banks and non-banks;
- Focus on the development of an electronic credit transfer scheme and the growth of debit cards;
- Harmonize government policies to increase consistency and more enabling for the digitization of payments;
- Align the NRPS efforts with ASEAN Economic Integration; and
- Engage the media, including social media, to promote a better understanding of the NRPS concept and other plans related to it as a form of consumer awareness and education.

The overall vision of the NRPS is to facilitate the development of an interoperable payment system that enables people, businesses and the government to have access to accounts to receive and store funds, make payments and/or transfer value to other accounts maintained in other institutions through the use of any digital device anytime, anywhere and at an affordable price. The goal of the NRPS is to increase the level of digital payments to 20% by 2020.

Behavioral Design and Consumer Protection in a Digital Environment

Behavioral science can be an important factor when designing policies and products in the context of increasing financial inclusion; particularly with regard to consumer understanding and consumer protection. The link between behavioral science and consumer protection is particularly relevant in a digital environment.

Overview of Busara

The Busara Center for Behavioral Economics is a behavioral research and advisory firm that works to identify core behavioral biases and structure programs, products and policies around these barriers. Most research which has been conducted globally on this topic has been done with laboratory subjects within universities which is often not very generalizable to the general population. Busara's research looks at how other research findings change with context and aims to identify new barriers in emerging markets.

Behavioral Science

Behavioral Science considers rationalities or inconsistent decisions that people often make and the barriers that might prevent people from following through on their intentions. A person's brain tends to function in two ways, the automatic vs. the thoughtful. The automatic system is more reactionary whereas the thoughtful system is more deliberate. However, as people make decisions it is common that they apply the automatic or reactionary thought process when they should be using the more

thoughtful or deliberate process. This type of action can happen frequently to anyone in their daily lives and it is important to understand how it can also impact consumers.

Loan Replacement with Jumo World

Jumo is a large lending organization based in South Africa with operations also across the African continent. Since their establishment only about 18 months ago they have issued approximately 5 million loans. The loans which Jumo provides are small digital loans usually for amounts of about \$20-\$50 and the information about their customers is limited.

Working with the Busara Center for Behavioral Economics and CGAP, Jumo's lending scheme was put through a series of tests to see how the onboarding process for these loans could be better calibrated. Most of Jumo's clients were unfamiliar with the organization. Their first interaction with Jumo was often via a text message which Jumo sent to potential clients offering a micro loan. This raised significant concerns regarding whether or not Jumo was making informed decisions regarding its clients and also if these clients were being adequately protected. Jumo also commonly experienced very high default rates on their first loans which was understandable due to the very limited information they had on their potential clients at the time of offering the initial loan.

Busara and CGAP worked with Jumo to try and identify the most significant challenges they were facing. In terms of Jumo's repayment plan several customers were frequently dropping off; potentially due to confusion since many clients probably did not understand the concept of the repayment plan. This was one issue which the partnership looked at as a potential challenge which could be overcome and lead to better results for the company. Another challenge that was identified was in relation to the terms and conditions aspect of the loan. When presented with the terms and conditions many potential customers again dropped off. It was unknown, however if the reason for this was due to customers reading the terms and conditions and deciding that they did not want the product or if they felt intimidated by the terms and conditions and instead opted to quit. So the partnership looked at ways in which they could make the terms and conditions component of the process more accessible and less intimidating to the audience.

In terms of pricing, many customers did not understand that fees and interest rates would apply. So it was common for customers to be surprised after taking a loan of \$50 and then being asked to repay \$60 when they expected only have to repay the exact loan amount. To address this the partnership explored ways to make the pricing of the loans clearer and relevant to the target customers. In most cases only small changes were needed to achieve significant positive effects for Jumo with customers defaulting on loans at much less frequent rates.

When Markets Fall Short

A basic question surrounding mobile money pricing is how much do people understand about the cost of each transaction? In the case of M-PESA, the information provided through its mobile phone app confirms the final transaction but gives the customer no information regarding fees. These fees are made publicly available and every M-PESA agent has a list of the tariffs, but this information is not available at the point of transaction. This forces customers to search for the fees themselves by reviewing their M-PESA records, but this is a very burdensome process and few customers are likely to

actually go through it. This raises an important question as to why this information is not available at the point of sale.

To examine this issue further, Busara conducted an experiment when M-PESA changed their tariffs. At the time, M-PESA widened its product range to include a lower-priced tier of transactions. Busara monitored the transaction behaviors of 500 low-income respondents based on a sample of informal settlements in Nairobi. By monitoring these transactions Busara was able to examine how they changed their transaction behaviors over the course of a six-month period and determine if the M-PESA customers were making more informed decisions about which transactions they used.

Previously, an M-PESA customer could send 500 Kenyan shillings for roughly the same price as sending 100 shillings 5 separate times. Through their monitoring of this situation Busara found that many of M-PESA's customers knew that the tariff changes had occurred, however, very few of them knew specifically what the new fees were and what impact it would have on them in terms of cost. It became apparent that people who were using more M-PESA transactions tended to be more aware of the new fees and were able to optimize their transactions more effectively in order to save on transaction costs.

This led Busara concluding that this in context, customer knowledge regarding pricing is very important. Simply making the fees public and accessible is not enough for customers to extract the full benefit of the product. More importantly, customers need to have information about fees given to them at the right time; or more specifically when they are making the transaction. This research demonstrates that availability of information is not necessarily the same as access to information.

Although the amount of money which customers would likely save is so small as to seem insignificant, it remains a consumer protection priority. The potential number of transactions and consumers involved is significant, and for low-income individuals these small differences in fees add up, with the savings which customers can achieve by having a clear understanding of the fees and optimizing their transactions accordingly, having a significant impact on their financial circumstances.

Common Themes to Help Diagnose

From these experiences, Busara concluded that there are key questions to ask when engaging with providers to help them diagnose issues with their services. The first is to determine the product's revenue model by examining whether the firm's revenue is dependent on the customer relationship or merely the customer transaction. Mobile money tends to favor the transaction model with profits being made with each customer transaction. On the other hand, the lending model requires repeated customer engagement as it usually requires multiple loan cycles with a customer before profitability is achieved.

A further question for financial services providers to consider is the extent to which the customer's understanding of the product helps drive profitability. This involves examining potential misconceptions of customers with regard to the product, whether customers over or underestimate fees, penalties or other costs and if customers feel they have adequate avenues for recourse.

Lastly, it is important to consider whether or not the customer base is captive to the product or firm. Some customers may not have alternative providers or products to compare and choose from. The number of options open to customers is important to assess; particularly for regulators as in situations

where customers have limited choices it may be more difficult to influence the firm's behavior due to the lack of competition.

What's Next for Digital Finance and Consumer Protection?

There are four main features characterising digital finance. First of all, the customers are different. This is important when considering what types of consumer protection methods are appropriate, what's likely to be effective, and what are the important issues in the market. For consumers that have never transacted with formal financial service providers, their own personal characteristics might make it difficult due to their lack of understanding of the formal financial market. This issue tends to preoccupy both providers and regulators.

Secondly, the use of agents introduces distinct risks as well as benefits to consumers.

Thirdly, the fact that the interface tends to be technology based can create unique challenges as it may be a new experience for many customers to navigate.

Lastly, there is in many situations a value chain involved in delivering digital services. This creates complications in terms of establishing liability and responsibility as well as whether or not the customer understands who their provider is.

Each of these aspects has its own dimension when looking at the digital delivery of financial services in terms of the traditional objectives of financial consumer protection such as transparency, effective recourse or safety. Furthermore, it is important to note that consumer protection in the context of digital finance does not necessarily create new risks. Many of the risks associated with digital finance are the same as with traditional finance, however, the issue becomes more one of who should bear the risk. Some risks may also be the same but take on a different nature due to inherent mitigating factors. For example, for consumers using smart phones, developers can create features within the applications to make the service more intuitive than physically going to a bank and transacting with a teller. As a consequence, an open-mind is important in determining effective responses to different and changing risks as digital technologies become more prevalent in the finance space.

Globally about 30% of mobile money customers are actively transacting on their digital wallet over a 90-day period. Considering the investment that providers have made in establishing the business and, agent networks, developing the digital platform, etc., the fact that only 30% of customers are likely to be active does not make this an attractive business opportunity or sustainable financial service.

CGAP examined this issue, with research of 16 mobile money markets around the world identifying common risks. The main problem identified by this study was simply the reliability of each service itself. This highlights one of the most basic barriers for providers in order to get their business model right and whether or not the business is adequately addressing the needs of its clients. Not being able to transact reliably due to issues with the service provider is more likely to lead customers to risky behavior such as leaving their phone and PIN with an agent or asking a third party to transact in the client's stead.

The Future of Digital Finance: What to Expect?

If providers of DFS can overcome the current barriers concerning consumer trust and usage, what does the next phase hold for DFS? Looking ahead, it is likely that the sector will increasingly introduce more

complex products and services, innovative business models and partnerships as new ways are developed to reach the unbanked. From a consumer protection standpoint there are several critical issues to consider.

Unsolicited digital credit offers such as via SMS on a potential customer's phone can be effective; particularly since the engagement is relatively private with the customer able to make a decision without peer pressure. The instant nature of such loan offers also stimulates different behavioral responses by on customers. Regulators will need to consider these more complex products which may have different consequences and how the digital aspect of these products impacts how a customer engages with them. For example, a provider trying to incentivize good repayment behaviors of its clients or the system being overwhelmed by a sudden spike in people being reported to the credit bureau for being delinquent on very small loans.

More complex products do not necessarily translate into more suitable products. Providers and regulators need to consider what "suitability" means, particularly in the context of digital which typically features instant engagement with customers. Regulators need to consider ways by which suitability of products can be appropriately incentivized including using mechanisms which make it clear as to which provider in the distribution system is liable for the welfare of the customer.

Data privacy and protection concerns are other major issues which will become more important as DFS continue to expand and develop. It is early days in assessing the adequacy of current guidelines in managing and ensuring data privacy and protection in the Fintech space, with issues of ownership of consumer data, commercialization and data security risk within an extended value chain, currently being tested in the market.

Regulation vs. Supervision

Most jurisdictions are putting in place specific rules or extending the rules which have been previously adopted in order to cover digital finance. Having established the rules, the big challenge faced by government is effectively enforcing these rules.

One consideration for regulators as the digital finance sector continues to grow is how the power of Fintech innovation can be applied to assist with supervision. One of the key features of successful companies within the digital industry today is their use of customer feedback platforms. Supervisors could take advantage of such platforms and encourage DFS providers to establish an effective feedback mechanism which might also make the compliance burden easier by having a collection of standardized data to report on the complaints resolution and handling. This feedback would also provide valuable information as to what is working well within the market. As regulators face resource constraints, priorities should be determined, and a standardized feedback platform developed to lessen the burden on both parties.

Recommendations:

- Consumer protection in digital finance presents different challenges to those in conventional finance as the customer is different, agents are an additional dynamic, the interface is technology based, and it is often unclear as to who in the delivery channel is responsible to the client for what.
- At present, the challenges are manageable, as digital finance represents a relatively small proportion of transactions, with one of the main challenges being reliability of service. As digital finance becomes pervasive through more competition and the introduction of interoperability, suitability of products for clients, privacy and data protection will become more significant challenges for policy makers and regulators.
- The behavioral sciences and consumer centricity should be applied, not only to product marketing but also product design, diversification, consumer transparency, protection and regulation/supervision. Supply-side innovations and initiatives to increase access to finance should be influenced by a demand-side focus on how to best serve poor clients.
- In the same way that 'FinTech' is disrupting financial markets, 'SupTech' and 'RegTech' provide opportunities for technology to ease compliance burdens and enable rapid consumer feedback and early detection of problems, and communication of messages back to consumers.
- In the context of APEC, a consumer protection agreement among member economies will be needed since cross border DFSs are increasingly available soon.

Chapter 8: Insolvency: Moving Beyond Stability to Growth

Session Chair:

- Mr. Mahesh Uttamchandani, Global Lead, Credit Infrastructure, World Bank Group, USA

Speakers:

- Dr. Shinjiro Takagi, Executive Senior Advisor, Frontier Management Inc, Japan
- Mr. JR Smith, Partner, Hunton & Williams LLP, USA
- Mr. Gavin McCosker, Chief Operations Officer, Australian Financial Security Authority (AFSA), Australia
- Mr. Ta Dinh Tuyen, Assessor cum Secretary to Deputy Chief Justice, Department for Cassation Review No. 3, Supreme People's Court of Vietnam

Credit infrastructure is the term used to describe the legal and regulatory framework for access to finance. There are three core aspects of credit infrastructure which form the basis of access. These are credit information, secured transactions and insolvency. Credit information reduces credit asymmetries, enables more data-driven lending decisions and provides a level of transparency for both lenders and borrowers. Secured transactions involves moveable collateral which enables increased leverage by firms and enables them to use a broader range of assets while also increasing their appetite for risk as they move away from traditional forms of collateral; particularly in the form of housing. Insolvency systems provide a predictable and transparent framework for resolving bad debts and loans.

When a borrower is unable to pay its obligations the insolvency system provides a clear set of guidelines for how to resolve those situations. Insolvency is primarily focused on determining whether that borrower can be “rescued” or needs to be liquidated and have its assets returned into the market place into productive use. When creditors are able to rely on predictability and transparency they are more inclined to lend at more reasonable rates and at higher volumes. There is an impact on the original credit decisions that come from being able to predict what will happen at the end of the life of each loan.

It is not obvious why access to finance is an important contributor to reducing poverty. The evidence is becoming increasingly overwhelming that access to finance for firms in the private sector results in improved lives of the poor; particularly through the creation of jobs. In a recent study published by the World Bank the effects of increased access to finance for firms across 70 economies found that firms with access to finance were able to create more jobs and at a faster rate than economies where firms lack access to finance. The study highlighted that increased access to finance for MSMEs or SMEs reduces rates of joblessness and results in positive impacts on poverty.

The smallest and newest firms are the main engines for job creation. At the same time, these firms typically are the most excluded when it comes to access to finance. It is possible for insolvency regimes to be tailored in a particular way to respond to the unique needs of MSMEs and SMEs. In doing so, issues of consumer protection arise because an MSME or SME in many existing markets globally might only consist of a single individual. In many cases this individual is legally indistinguishable from the business itself meaning that when they access credit they can borrow in their own name. This creates a challenge as business debts and consumer debts can be difficult to distinguish between one another. As access to finance for individuals continues to improve and these individuals gain access to different

types of credit products it is important to consider from consumer protection standpoint how their failure or inability to pay those loans will be treated in the form of bankruptcy.

Importance of the Insolvency Framework in the United States for the Financial Sector and SMEs

The goal for any international insolvency regime should be the efficient redeploy of capital. Systems need to be created which are transparent for lenders in order to decrease the cost of lending and transparent to consumers so that they understand the risks. The insolvency regime should provide an effective safe haven for borrowers to receive a fresh start and be relieved of the debt burden as an incentive to try again. In doing so, the borrowers would hopefully take advantage of redeployed capital in a way that is more meaningful.

International insolvency regimes typically share common components which are used to drive capital to a particular market and conversely also drive capital away from a particular market. Having the right laws in place is very important. An efficient law can help to facilitate the preservation of capital which in turn promotes greater growth. Having professionals, judges, lenders, lawyers and others who are able to act with high levels of sophistication is another key component for insolvency regimes to function effectively. Transparency is also important as a way of lowering the cost of capital. The more transparent the transaction, the more efficient the process can be which results in lower costs. The last common component is culture. Culture represents the underlying force of each of these components that drives the efficiency of the insolvency regime. It ranges from values concerning risk, to beliefs about the stigma associated with entrepreneurial failure. In some regions, particularly Asia, insolvency may not be regarded as culturally acceptable in comparison to economies in other parts of the world.

Insolvency System in the United States

SMEs are an enormous engine for the US economy and currently contribute up to 40% of GDP. However, despite the importance of SMEs in the US consistently about 50% of them fail within the first year and about 70% within 10 years. With such a high rate of failure it is essential to ensure that the capital which has been invested - not just in terms of lending - but also the personal capital of the entrepreneur, is not disadvantaged.

While the US has a sophisticated code in bankruptcy and insolvency regime, the economy is only now coming to recognize the inadequacy of the system to address and respond to the high rate of SME failure. Currently in the US bankruptcy code there is a framework that provides for special rules as it relates to SMEs and includes features to allow SMEs to try and efficiently go through the process. But in reality what is happening is that barriers have been created which ultimately become an impediment for filing and the bankruptcy process of SMEs has instead become a process of liquidation rather than a process of revitalization and redeploy of capital.

The current US bankruptcy code has abbreviated deadlines which actually work to prevent SMEs from efficiently going through the process. This is because many SMEs entering into bankruptcy are not well prepared to deal with the process. It is also very expensive. Set deadlines for tasks such as confirming a bankruptcy plan are difficult for SMEs to achieve and lenders, in particular secured lenders, are commonly able to dictate the process. This has forced SMEs to be less transparent, less available and

less efficient. This leaves individuals who are tied into these processes with personal liabilities which don't get the benefit of a discharge. This liability then potentially stays with them over a period of time and prevents their future access to capital due to their damaged credit rating.

Recently a group of professionals in the US met to critically examine the US bankruptcy code as it existed in 2015. They assessed how the code was functioning including areas where it was not performing well. A specific area of shortcoming was the SME framework. As a result, the group has provided a series of recommendations:

- **Definition:** A new and more inclusive definition of SME was needed, capturing a larger portion of what has traditionally been identified as an SME. The group recommended that the definition be revised to include companies that don't have any publicly traded securities and less than \$10 million in consolidated liabilities.
- **Oversight:** No creditors' committee should be established unless it is specifically requested. Such committees comprise unsecured creditors who are given a special voice in traditional US bankruptcy. The concern about these committees is that they incur a substantial cost which is borne by the debtor or estate.
- **Timeline:** The timelines of the processes need to be relaxed to a degree. While the creation of specific deadlines was intended to accelerate the process, in reality it shifted emphasis from effective resolution to the meeting of deadlines. The group recommended that the plan timeline be more flexible to give debtors more of an opportunity to come up with a reasonable way to reorganize.
- **Plan:** Give SMEs an opportunity to retain equity in their business and allow the possibility of a payout to unsecured lenders over a period of time, but at the end of the specified period of time enabling an opportunity to keep the business going to leave more alternatives other than simply liquidation.

Saving Troubled SMEs in the Asia-Pacific Region

After the Asian currency crisis, the ADB and World Bank contributed to the reform of Asian insolvency laws. Today most Asian economies have developed their own sophisticated bankruptcy laws. Bankruptcy laws are important to liquidate the non-viable enterprises, but despite the reforms, Asian economies still experience relatively low bankruptcy cases. While this is likely in part due to cultural perceptions of bankruptcy, the training of judicial staff and other professionals is also important to ensure that the system not only works well but also provides confidence to entrepreneurs.

In addition to the statutory bankruptcy scheme Asia also commonly has informal out-of-court schemes. These schemes, which are popular in Hong Kong and Singapore, minimize the need for court interventions and require less time and are less costly than the traditional formal methods. Such schemes are particularly important in economies where the judiciary may be constrained in delivering effective financial and economic outcomes.

Japan's SMEs Turnaround Associations

SMEs Turnaround Associations have been established in 47 different prefectures in Japan providing coverage of the entire economy as of 2003. In 2007 a formal headquarters of the Associations was

established. The Association conducts debt restructuring workouts to revitalize ailing SMEs. By 2015 the total number of cases dealt with by the Association exceeded 10,000.

The Guidelines for Out of Court Workouts were created in 2001 by the Japanese Bankers' Association (JBA), the Japanese Business Federation and others involved through the Financial Supervisory Agency (FSA). In 2007 Japan's Ministry of Economy, Trade and Industry (METI) along with the Ministry of Justice (MOJ) created the Business Reorganization Alternative Dispute Resolution (BRADR). The Japanese Association of Turnaround Professionals (JATP), which is licensed by METI and MOJ, has been tasked with implementing the BRADR proceedings since 2008.

Tools for SME Finance in Japan

In the late 1960s in Japan, many SMEs were unable to borrow money from formal financial institutions. One of the main reasons for this was their lack of record keeping and accounting practices which were required for formal financial institutions to deal with them. Today, most SMEs in Japan keep records of their financial statements and other relevant information which has allowed them greater opportunities to access credit from formal institutions and at lower interest rates. However, many are still excluded due to lack of collateral for loans.

There was also a concern about the reliability of the financial statements of some SMEs. Furthermore, without ownership of real property many SMEs struggle to meet the minimum requirements to access capital. One tool which is increasingly used is Asset Based Lending (ABL). ABL provides secured lending to SMEs based on the value of collateral which consists of other accounts receivables and inventory. In order to access credit based on ABL, SMEs must undertake perfection by filing or registration of secured rights in accounts receivable and inventory. In the valuation process, both the quality and quantity of the accounts receivable and inventories must be assessed. Lenders are also required to conduct periodic on-site examinations to monitor and inspect the SME to ensure that collaterals remain adequate.

Another tool for SME finance is the credit guarantee. Under a credit guarantee system an SME can apply to the Credit Guarantee Corporation (CGC) through a bank. In cases where the debtor SME defaults on its debt, the CGC will repay the creditor bank in subrogation. The repayment is then compensated by the Government Owned Corporation (GOC). Together the CGC and GOC create a blanket insurance contract to cover all necessary compensations. This tool is very popular for SMEs in Japan.

Insolvency: Experience from Australia

The insolvency system is an important part of overall capital flows within an economy. However, insolvency systems cannot be examined in isolation and must be looked at as part of a broader system.

According to the IFC there are about 8 million SMEs in the Asia region which are underserved with regards to access to finance. Developing effective capital and credit markets are both important parts of providing access to financial systems. In large part the capital or equity markets at the beginning of a business cycle can be seen as inaccessible to the SME sector. In order to make debt affordable for the SME sector the risk attached to a loan needs to be addressed, including borrower insolvency.

In Australia, loans can be secured by registering capital as security. Policy makers are unable to directly affect individually the risk profiles of borrowers, but this can be addressed at an overall system level and

risks associated with the credit market. This is done by giving confidence to lenders by ensuring that if a borrower does default and enters the insolvency system, the system will handle the process in a fair and predictable manner. The insolvency system should create confidence in the credit system by ensuring that the rights of creditors, including those derived from secured transaction laws, are recognized, respected and able to be enforced. As consequence, it is important to examine the intersection of secured transaction regimes and insolvency systems to ensure that access to finance for SMEs can be further enhanced.

Australia's Insolvency Systems

Australia has two insolvency systems; a personal and corporate system. It is possible for personal insolvency to result from corporate insolvency. When an entity is incorporated in Australia, as a small business there are many circumstances in which a personal guarantee is given against the assets of the actual borrower as the business owner themselves. This is done irrespectively of whether the business is formally incorporated or otherwise. Australia does not have a tailored insolvency regime for SMEs. This means that in the event that an SME cannot repay its debts the individual behind the business also becomes bankrupt regardless of the corporate structure. Because the individuals running the businesses are the ones providing the personal guarantees they are dealt with through the personal insolvency system and are declared bankrupt for a minimum of three years. Internationally, this is seen as quite harsh relative to other systems and standards.

It has also been argued that Australia's insolvency system discourages entrepreneurs to take risks and innovate. In response to this, the Australian Government has recently proposed the reduction of the bankruptcy period from three years to one year, introduce a safe harbor for directors from incorporated entities for any personal liability in the event that they do appoint a re-structuring advisor and making ipso facto clauses to allow contracts to be terminated solely due to an insolvency event.

The public narrative concerning bankruptcy is still very negative in Australia. So what the Australian government is attempting to do is drive an innovation agenda which encourages people to engage with the system rather than be too concerned about entering into bankruptcy. At the forefront of this initiative is the attempt to drive SME development and greater economic growth because SMEs in Australia make up 97% of the economy's businesses.

Personal Property Register

Another action which the Australian government has taken in an attempt to close the finance gap for SMEs is to broaden the possible collateral classes that can be readily used for businesses to secure finance. According to the IFC about $\frac{3}{4}$ of the collateral taken by traditional financiers are based on land or real estate, whereas small businesses generally do not have access to these types of collateral to offer. It is estimated that in Australia less than $\frac{1}{4}$ of SME's assets include real estate or land. A much greater share of the assets of this sector is made up of moveable property such as accounts receivables, intellectual property or inventory.

To address this inequity in 2012 the Australian Government introduced a personal property securities register. This register makes it easier for non-corporates to offer alternative business assets such as stock in trade as collateral. The register also protects SMEs from risk when they are buying goods from

another party as well since they are also able to access and search the register and identify if there is already finance over the goods they are buying.

When it comes to the different types of assets that can be registered there are four broad categories which have been stated in the law. These include tangible property, intangible property, general property and financial property. Essentially anything can be classified within these categories and the law is considered a significant step in terms of closing the SME finance gap. Since going live in 2012 the register has become one of the largest centralized secured transaction registers in the world. It currently supports an estimated \$500 billion of capital flowing into Australia's economy each year.

As a result of the register it is becoming more apparent that new lending is occurring. The traditional fintech and peer-to-peer (P2P) lenders who were offering unsecured finance are now beginning to offer secured finance options which is further increasing access to finance for several SMEs.

An important step in gaining the lending markets confidence in the register has been the government's ability to demonstrate that creditors can actually enforce their rights through their usage of the system. Registering on the personal properties register is a form of perfection which allows those involved to be formally aware of the relationship which exists between two parties. In order for this to function well, however, it is important to understand and ensure that the right policy balance is in place when secured transaction and insolvency regimes are established.

Bankruptcy Legal Framework in Vietnam: Key Reforms

Vietnam's first law for bankruptcy was established in 1993. After more than 10 years of implementation a new law was adopted in 2004. At this time Vietnam was experiencing new reforms and developments which were impacting economic growth. In 2014 Vietnam's bankruptcy law was updated again with the support of the IFC and other members of the World Bank Group with the aim of bringing the law closer to international best practices.

Among the changes to Vietnam's bankruptcy laws over the years have been a number of key reforms. Some of these include differentiating insolvency and bankruptcy concepts, introducing an insolvency administration system, creating Insolvency Administrators (AIs) with the responsibility of organizing the liquidation of enterprises, allowing AIs to apply to stay execution on secured assets when such assets are needed for a restoration of the business, adopting the avoidance of transaction provisions, requiring a double-majority by both number and amount in creditor meeting voting and separating credit institution insolvency from corporate insolvency.

Vietnam's 2014 Law of Bankruptcy officially came into effect from 1 January 2015. As of 31 January 2016 only 161 bankruptcy cases had been processed. A general assessment of the law concluded that it had been well documented and was closer to international best practice. While not many cases had been filed and processed it was still agreed that while the law had been improved over its previous version it still had several shortcomings which needed to be addressed.

Shortcomings in Vietnam's 2014 Bankruptcy Law

Some of the key shortcomings in Vietnam's 2014 bankruptcy law include the following:

- Required time after a payment request to file for a bankruptcy procedure;
- Correct the definition of insolvency: as the debtor failing to pay debts as they fall due, as opposed to being unable to pay debts as they fall due;
- The provisions allowing the parties to “negotiate” the petition to open bankruptcy proceedings;
- Empower IAs' role by giving them full authorities and responsibilities in liquidation of debtors' assets;
- More detailed provisions on netting and setoff; and
- More detailed provisions/guidance on credit institution insolvency.

Based on these shortcomings as well as the experiences after implementing the plan for more than one year Vietnam's government has documented a number of important lessons learned from their new bankruptcy laws. One of the most important lessons from this experiences has been regarding the UNCITRAL Model Law on cross-border insolvency (1997) and how this law can be an important reference point for Vietnam to further improve its legal framework for bankruptcy. Another important lesson learned is the importance of supporting the investment climate and the development of the financial market to ensure that bankruptcy proceedings are transparent.

Working closely with international organizations such as the IFC which has significant insolvency expertise has been crucial for Vietnam to successfully guide its reforms to more closely align with international best practices. Furthermore, working closely with other relevant government agencies has also been important for Vietnam as a way to share and learn from each other.

Possibly the most important lesson which Vietnam has learned from its experience reforming its bankruptcy law is the need to provide adequate capacity building for key stakeholders. This includes training for key groups such as judges or trustees. Currently in Vietnam there are more than 6,000 judges, but only between 40-50 of them are considered to be well trained in the field of bankruptcy. The capacity of these groups is directly related to the quality of the law's implementation.

Recommendations:

- Sound insolvency and secured transactions regimes are essential for the effective redeployment of capital and assessment of risk by investors and lenders.
- Effective management of insolvency of SMEs is a question of balance: of the rights of creditors and debtors/ investors; between liquidation and reorganization; and need for efficiency and need for legal fairness.

Chapter 10: Special Presentations

Speakers:

- Mr. Hisashi Ono, Vice Commissioner for Policy Coordination, Japan Financial Services Agency
- Mrs. Tongurai Limpiti, Deputy Governor for Financial Institutions Stability, Bank of Thailand

The Emerging Integration of Financial Businesses and Information Technologies

The Asia-Pacific region has accomplished remarkable progress not only in the economic field but also in its financial sector. Fintech has the potential to transform the industry and market by providing a range of innovative services to customers through new delivery channels. The emergence of Fintech can be seen as a movement of alleviating “pain points” for traditional financial services to better serve customer needs. In this way FinTech can grow and develop in a variety of forms based on domestic economic situations, financial markets and customer needs in each jurisdiction.

In developing economies, it is expected that Fintech will play a key role in financial inclusion by providing financial services such as credit provision, savings, payment and remittance to customers who have had difficulty in accessing those services. In this case, technology innovation such as mobile phones can offer solutions to such customers when tied to a financial function.

From this perspective, M-PESA, born in Kenya, is a great example of making remittance services workable to even unbanked customers by leveraging current technological innovations. The service provided through M-PESA allows customers to make money transfers by using short messages on mobile phones and withdrawing cash from an agent. This innovation serves the customer needs well, particularly for providing an easy and cost effective channel for remittances from city workers to their families in rural areas.

Against this backdrop, financial authorities should consider the need to become flexible in tailoring their policies to promote unconventional trends in delivery of financial services which have the potential to enhance customer convenience.

JFSA “Strategic Directions and Priorities 2015-2016” on Fintech

In Japan Fintech has already started to show its presence in the financial industry. The Japan Financial Services Agency (JFSA) has made Fintech a priority as one of its policy initiatives illustrated in its annual business plan, “Strategic Directions and Priorities 2015-2016” published in September 2015. This showcases JFSA response to Fintech, that it conducts forward looking analysis on Fintech’s potential impact on the financial industry and seeks input from experts, industry participants and users around the world. JFSA is also exploring different regulatory structures to identify which model will best fit the increasingly digital environment of Japan’s financial sector.

Deliberation at the Financial System Council

The Financial System Council is an advisory body to Japan’s Minister of Finance. It has established two working groups and deliberated Fintech-related issues including how to increase the sophistication of banking payments and transactions and assessing how different financial groups react to the changing environment. The first working group has been holding discussions on strategic approaches to make settlement more sophisticated and to improve infrastructure for settlement. The second working group

has focused its efforts on an appropriate legal framework for financial groups in response to rapid progress of IT innovation. Both working groups have published reports including action plans and a review of the current legal framework in December 2015. The reports of these working groups proposed specific actions related to the evolution of Fintech within the finance industry.

First, in order to promote a competitive and innovation-friendly finance industry, JFSA will conduct further studies on the provision of remittance using cell phone numbers in which multiple financial institutions can participate, as well as the utilization of blockchain and open API (Application Programming Interface) in consultation with the banking industry. In light of the possible appearance of new services in the future, JFSA will further discuss issues on the cross-sectional legal system to ensure the flexibility of extending various financial services in view of user convenience and level playing field among payment-related services. Moreover, as a measure to advance payment-related services, JFSA will make cash out services available at checkout counters of convenience stores, supermarkets, etc.

Second, an appropriate regulatory framework on virtual currencies was discussed by the working group. G7 Summit Leaders' Declaration in Elmau and FATF guidance on virtual currencies as well as the bankruptcy of virtual currency exchanger in 2014 were taken into consideration as part of this discussion. As a result, the introduction of measures on anti-money laundering and counter-terrorist financing (AML/CFT) as well as user protection has been proposed. More specifically, the report emphasized the necessity of introducing registration requirements for virtual currency exchange which trades virtual currencies and fiat currencies, and of the regulatory requirement from AML/CFT perspective and user protection.

Lastly, it has been proposed that the current legal framework be amended to enable financial groups to conduct business activities flexibly, incorporating IT innovation in a strategic manner. This will allow banking groups to invest in IT business companies that contribute, or may contribute, to improving services provided by a bank on the condition that there is no negative impact on the financial group's soundness, no threat of abuse of dominant bargaining position or conflicts of interest, etc.

Following the conclusion of the reports, JFSA has submitted an Act to amend the Banking Act, the Payment Services Act, etc., to the current parliament session.

Establishment of "Fintech Support Desk"

In December 2015 JFSA established a Fintech platform called the Fintech Support Desk. This platform provides a one-stop contact point for inquiries and opinions which businesses and individuals would like to raise with regulators concerning innovation and Fintech. With this initiative, JFSA aims to enhance financial innovation through Fintech in-line with its annual business plan.

Since the Support Desk's launch, JFSA has taken and responded to a variety of inquiries in areas including services on payments, lending and asset management in relation to the relevant laws and regulations. Through this platform JFSA is striving to help firms and individuals through e-mail, phone calls and face-to-face meetings on a daily basis.

The Fintech Support Desk platform has been successful at helping not only Fintech ventures but also assists JFSA in keeping up with the current movements of the Fintech industry as a financial regulator. The dialogues over cutting-edge Fintech business plans with private firms gives JFSA a real-time understanding of what to expect in terms of upcoming innovations before they materialize in the

financial market. By leveraging these dialogues, JFSA endeavors to adapt swiftly to Fintech trends and provide greater support to the development of the financial sector.

Conclusion

As seen with the current emergence of Fintech around the world, there is a variety of developments responding to specific customer needs in each economy. In this situation, financial authorities are required to become more flexible than ever in their operations.

It is important for financial regulators to proactively seek understanding of the global and local state of play in terms of financial innovations. At the same time, authorities need to also pay attention to potential issues on customer protection and financial stability which may arise in the delivery of newly introduced financial services.

Fintech has the potential to serve as a catalyst to increase convenience for users and the competitiveness of financial services in Asian economies. This movement will contribute to the promotion of domestic welfare by enhancing living standards and achieving the sustainable growth of business activities and the economy through smooth provision of credit to MSMEs.

Financial Inclusion Policies in Thailand

Financial inclusion is an important issue, especially for emerging economies. However, in the past many economies, including Thailand, have focused too much on the accessibility of credit and not enough on other important aspects such as savings or transactional accounts. As a result of recent technological developments it is now easier than ever to reach customers.

Trends of Financial Inclusion Policy Around the World

When examining the trends of financial inclusion policies around the world there are several key features which stand out. In terms of payment structures, issues such as interoperability and the introduction of e-money are important features which regulators need to consider. The trends also show an increase in the use of agent banking as a model to reach the unbanked including innovations such as banks partnering with non-banks or telcos to extend their reach. In terms of literacy and consumer protection new online platforms are driving financial education services. Lastly, innovation trends have seen the emergence of fintech and the use of big data by financial services providers to increase the reach and quality of their services.

Thailand's central bank, the Bank of Thailand (BOT) follows the World Bank's definition for financial inclusion which consists of three components: financial access, consumer protection and financial literacy.

BOT's Policy: Financial Access

Financial Access has been a key pillar in the BOT Financial Sector Master Plan (FSMP) since the first phase of the Master plan was implemented from 2004-2008. The second phase of the FSMP was implemented between 2010-2014 and a third phase is currently being developed. The vision of the FSMP is that every individual should have access to financial services which are appropriate to their needs.

For phases one and two of the FSMP the focus was mainly on the commercial bank model for financial inclusion. As part of phase one, BOT adopted the Universal Banking Model to increase commercial banks' scope of business. This meant that commercial banks could carry out virtually any type of financial transaction in order to provide financial services to every group of customer. BOT created a retail banking license with the aim of increasing the number of players active within the retail segment and fill the financial needs gap within the SME sector. Unfortunately, this license scheme did not work well in Thailand so the initiative was discontinued.

As part of phase two of the FSMP the BOT issued microfinance guidelines for commercial banks. These guidelines were to encourage commercial banks to engage in micro credit services. During this phase BOT also relaxed regulation on bank branch establishment so that specific customer segments could be more easily targeted. Nanofinance measures were also implemented as part of phase two as a way to enhance loan access for micro-enterprises through non-banks.

Throughout the implementation of both phases of the FSMP, BOT also consistently conducted demand-side surveys to monitor the level of financial access. The general financial access level in Thailand is quite high. The result from BOT's household survey in 2013 indicated that approximately 88% of Thai households had access to at least one financial service. This result represented an increase from about 84% in 2010. Financial services in Thailand are mainly provided by formal financial service providers, particularly commercial banks and specialized financial institutions.

BOT's Policy: Financial Literacy and Consumer Protection

In preparation for phase 3 of the FSMP, BOT has established the Financial Consumer Protection Center (FCC) in 2012 as a central point of contact to ensure adequate financial consumer protection and the promotion of financial literacy. The establishment of the FCC also helps to facilitate collaboration with external stakeholders; in particular to further support and promote the basic consumer rights such as the right to be informed with the correct information, the right to freely choose financial products and services, the right to be heard and the right to redress. The FCC has three primary mandates which are complaints handling, financial literacy and market conduct.

Financial Sector Master Plan Phase 3

Phase three of BOT's FSMP will be implemented from 2016-2020. The coverage of the plan is much broader than just financial inclusion, however, financial inclusion remains as one of its main pillars. The key areas of focus with regard to financial inclusion include the promotion of digital financial services, financial access (particularly funding aspects for SMEs) and financial literacy and consumer protection.

As part of the FSMP phase three, BOT aims to develop infrastructure to support digital financial services, enhance the role of payment service providers (both commercial banks and non-banks), review the regulatory framework to support e-payments and promote the usage of electronic financial products and services.

For the retail sector, the FSMP will promote financial access; particularly in remote areas. This will include increasing the number of Post-terminals and ATMs and supporting the customer's rights to basic products and services. Financial institutions will also be encouraged to offer financial products and services for retirement.

To support the SME sector, the FSMP will seek to improve the existing SME database, expand the scope of the data and develop a credit bureau score. The plan will also promote alternative sources of funding such as crowdfunding, venture capital or peer-to-peer finance, and enhance institutional support by credit guarantee. The government's policy to nurture the capacity of SMEs will be supported through the National SME Board and other SME sub-services.

E-Payment Master Plan

In line with Thailand's FSMP, the government is also working to implement an e-Payment Master Plan. The plan was formally approved in December 2015. The objective of this plan is to develop the domestic payment infrastructure to support financial transactions and economic activities effectively, enhance business competitiveness and quality of life of Thai people and to support the government's digital economy.

BOT plays an important role in this e-payment initiative by being a member of the e-Payment Working Group. This working group has been established to help formulate the plan prior to its implementation. Of the five projects included as part of the e-payment initiative BOT is the leader two: Any ID Payment and Card Usage Expansion. The Any ID Payment project aims to develop a domestic payment infrastructure for individuals to use their registered ID for funds transferred. Through the Card Usage Expansion project Thailand's card acceptance network will be expanded as well as customer usage of cards being promoted.

Lessons Learnt and Policy Going Forward

Based on Thailand's experiences developing and implementing its own financial inclusion policy, there are a number of lessons which it has learned:

1. The commercial bank model is not the only answer to financial inclusion. Other institutions such as community financial institutions and non-banks are also important players as they are able to provide additional coverage and have local advantages. To support the success of financial inclusion policy and programs the capacity of community financial institutions and non-banks should be enhanced to enable them to serve as access points (i.e. agent banking). Furthermore, it is important to promote interoperability among the various providers.
2. The government needs to provide the necessary infrastructure and policy makers should leverage on existing infrastructure. Thailand has found success in this aspect by developing transactional accounts which link to the central infrastructure, promoting interoperable products and services and enhancing existing infrastructure.
3. New Fintech models have the potential to significantly lower the cost of providing and accessing financial services. In order to take advantage of this effectively governments should introduce policies which facilitate innovation while ensuring stability, promote financial and technological literacy and establish reliable consumer protection mechanisms.

Appendix: Forum Program

DAY ONE	Thursday 7 April
08:30 – 09:00	REGISTRATION
09:00 – 09:30	OPENING SESSION
	<p>Opening Remarks:</p> <ul style="list-style-type: none"> • Dr. Naoyuki Yoshino, Dean, Asian Development Bank Institute (ADBI), Japan • Mr. Hiroyuki Suzuki, Chair, ABAC Finance and Economics Working Group; and Director and Board Member, Nomura Holdings Inc., Japan • Mr. Anthony P. Della Pietra, Jr., Representative Director, President & CEO, Citibank Japan Ltd. & President & CEO, Citigroup Japan Holdings G. K. • Mr. Daikichi Monma, Director-General of the International Bureau, Ministry of Finance of Japan
09:30 – 09:45	PHOTO SESSION
09:45 – 11:15	SESSION 1: Credit Bureaus and Credit Information Systems
	<p><i>Quality information on the credit risk of borrowers is vital for financial institutions in making lending decisions. Credit bureaus provide a critical function in providing such information. In addition, the analysis of aggregated credit information from banks on the results of their lending activities can offer a value source of information and advice to financial institutions in developing their lending strategies. Policymakers can encourage the establishment and regulation of such institutions and activities.</i></p>
	<p>Session Chair: Dr. Michael Turner, President and CEO, Policy and Economic Research Council (PERC), USA</p>
09:45 – 09:50	Session Chair's opening remarks
09:50 – 10:05	<p>Presentation 1: Mr. Jaime Garchitorena, President and CEO, Credit Information Corporation (CIC), Philippines</p>
10:05 – 10:20	<p>Presentation 2: Dr. Moon YoungBae, Managing Director, NICE Credit Bureau Research Institute, Republic of Korea</p>
10:20 – 10:35	<p>Presentation 3: Mr. Anthony Hadley, Senior Vice President, Government Affairs and Public Policy, Experian, USA</p>
10:35 – 11:05	Open forum
11:05 – 11:15	Session Chair's closing remarks
11:15 – 11:30	BREAK
11:30 – 13:00	SESSION 2: Insurance as the foundation of economic growth in the APEC region: What is the cutting edge?
	<p><i>Insurance is often the forgotten partner of financial inclusion efforts. Yet, effective risk management strategies, especially for low income people, are crucial for developing economies. Yet, the efforts towards inclusive insurance have required a paradigm shift for regulators, insurers, and others in the insurance value chain. This session will look at some of the major new efforts in expanding inclusive insurance, and the key considerations and solutions for the issues that emerge from them. These will include: mobile insurance, disaster risk management, public private partnerships.</i></p>
	<p>Session Chair: Mr. Michael McCord, President, Microinsurance Network, USA</p>
11:30 – 11:35	Session Chair's opening remarks

11:35 – 11:50	Presentation 1: Mr. Michael McCord, President, Microinsurance Network, USA
11:50 – 12:05	Presentation 2: Dr. Antonis Malagardis, Program Manager, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Philippines
12:05 – 12:20	Presentation 3: Mr. Puay Lim Yeo, Regional Manager for South East Asia and the Pacific, BIMA, Singapore
12:20 – 12:50	Open forum
12:50 – 13:00	Session Chair's closing remarks
13:00 – 14:30	LUNCH
14:30 – 16:00	SESSION 3: Unlocking Cross-Border Opportunities for the Bottom-of-the-Pyramid and Beyond
	<p><i>Much progress has been made in improving cross-border payments, including remittances and B2B settlements, in recent years. The global average cost for sending money has fallen from more than 9% in 2010 to 7.5% in 2014 (to transfer USD200 cross border). In addition to the number of rapidly growing mobile phone-based services, new business models using new technologies based on blockchain or data analytics continue to emerge. Countries throughout the region are looking into the introduction of proportionate regulatory approaches or tiered bank account structures, using biometric identification systems, and so on, so as to expand financial services for the poor.</i></p> <p><i>Yet more can be – and needs to be – done to improve the intrinsic inefficiencies in cross-border payments. These include differences in data residency regulations which impact the ability of banks and Money Transfer Operators (MTOs) to exchange data; variations in the practice of regulations such as KYC/AML, determining if a fund can flow from an origination economy to a receiving one. As a result any payments services provider wanting to expand its remittance services overseas needs to navigate through a host of different licensing requirements.</i></p> <p><i>Against this background, this session will focus on beyond-the-border policies and regulations that inadvertently drive up the cost of operation for banks, financial institutions and MTOs, and which are eventually passed on to end-customers. The session will also look to introduce case studies about emerging services that circumvent current inefficiencies in the system and are succeeding in making the remittances and cross-border payments work for the poor and the MSMEs.</i></p>
	Session Chair: Dr. Peter Lovelock, Director and Founder, TRPC Pte Ltd, Singapore
14:30 – 14:35	Session Chair's opening remarks
14:35 – 14:50	Presentation 1: Mr. Nghiem Thanh Son, Deputy Director General, Payment Systems Department, State Bank of Vietnam
14:50 – 15:05	Presentation 2: Ms. Juanita Woodward, Principal, CTD Connecting the Dots, Singapore
15:05 – 15:20	Presentation 3: Mr. Ron Hose, Co-founder and CEO, Coins.ph, Philippines
15:20 – 15:30	Presentation 4: Ms. Adilah Junid, Assistant Vice President, Group Regulatory Affairs, Axiata, Malaysia
15:30 – 15:50	Open forum
15:50 – 16:00	Session Chair's closing remarks
16:00 – 16:30	BREAK
16:30 – 18:00	SESSION 4: Promoting Savings via Formal Channels: Challenges and

	Opportunities
	<p><i>High levels of household saving can contribute to domestic infrastructure building, business expansion and other investments as well as reducing reliance on foreign investment. What domestic policies should governments adopt to improve savings rates and what are the roles of different stakeholders? How to cultivate a savings habit in particular among the young generation?</i></p> <p><i>In developing countries, household savings may not be captured fully by formal channels, particularly in rural areas. So how can we draw savings from informal savings vehicles to formal financial service providers?</i></p> <p><i>Agents appointed by formal financial service providers and agents of mobile money operators are key distribution channels to collect savings in remote rural areas. But how are such deposit-taking institutions and agents supervised and is there an adequate level of client information and protection? It is critical to address the need to develop of deposit-taking institutions and agents, on the basis of the existing framework developed for the supervision of banking institutions. Policymakers should establish clear rules regarding the responsibilities of different actors and the types of activities the agents are allowed to perform (i.e. collecting deposits) and develop an appropriate regulatory framework which establishes a level playing field but also an enabling environment to encourage the general population to integrate into the formal banking system, also for savings.</i></p>
	<p>Session Chair: Mr. Chris De Noose, Managing Director, World Savings and Retail Banking Institute (WSBI), Belgium</p>
16:30 – 16:35	Session Chair’s opening remarks
16:35 – 16:45	<p>Presentation 1: Dr. Rajat Bhargava, Joint Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India</p>
16:45 – 16:55	<p>Presentation 2: Mr. Krishna Mohan Trivedi, Chief General Manager, Rural Business, State Bank of India</p>
16:55 – 17:05	<p>Presentation 3: Ms. Lisa Kienzle, Global Director of Financial Services, Grameen Foundation, Philippines</p>
17:05 – 17:15	<p>Presentation 4: Mr. Frederick Siew Kim Meng, Deputy Chief Executive – Corporate Support, Bank Simpana Nasional, Malaysia</p>
17:15 – 17:55	Open forum
17:55 – 18:00	Session Chair’s closing remarks
18:15 – 20:15	DINNER
DAY TWO	Friday 8 April
09:00 – 09:30	DAY 2 OPENING SESSION
	<p>Session Chair: Dr. JC Parrenas, Coordinator of the Asia-Pacific Financial Forum and Senior Advisor, Nomura, Japan</p> <p>Speaker 1: Mr. Hisashi Ono, Vice Commissioner for Policy Coordination, Japan Financial Services Agency</p> <p>Speaker 2:</p>

	Mrs. Tongurai Limpiti, Deputy Governor for Financial Institutions Stability, Bank of Thailand
09:30 – 11:00	SESSION 5: Digital Financial Infrastructure for Digital Finance: Extending Reach to MSMEs
	<i>With the progress in Internet, mobile and cloud technologies, financial services have become increasingly digital. A broad spectrum of innovative digital financial solutions for MSMEs has emerged in recent years, expanding access beyond the conventional reach. These range from mobile money, digital payments, online lending, electronic supply chain finance platforms, to data-driven finance, Internet-based cash and liquidity management, and crowd funding, etc. Financial infrastructure (secured transactions and movable asset finance regime, credit reporting system, and insolvency framework) has been a critical element of the growing eco-system for digital finance. The infrastructure services providers have developed, for example, batch registration, online credit reporting solutions, anti-fraud applications, and the digital systems for speedy and transparent resolution of insolvency cases, etc. How should financial infrastructure progress further and adapt to the digital finance environment? What are the demands of digital finance operators for financial infrastructure services? How the future shape of financial infrastructure will look like? What more can be done to support greater, efficient and safer financial services to MSMEs in digital ways? This session will bring together both digital finance players and financial infrastructure practitioners to discuss these issues.</i>
	Session Chair: Mr. Jinchang Lai, Principal Operations Officer and Lead for Financial Infrastructure, Finance and Markets, East Asia and Pacific, World Bank Group, Vietnam
09:30 – 09:35	Session Chair's opening remarks
09:35 – 09:47	Presentation 1: Ms. Catherine Simmons, Managing Director, Head of Government Affairs, Asia Pacific, Citi, Hong Kong, China
09:47 – 09:59	Presentation 2: Mr. Gerald Sun, Head of Sales, Commercial Payments. Asia Pacific, Middle East & Africa, MasterCard, Singapore
09:59 – 10:11	Presentation 3: Mr. Patrick Yao, CEO, Qunxing Financial Service. Inc, People's Republic of China
10:11 – 10:23	Presentation 4: Mr. Satoshi Kuwahara, President, Credit Risk Database (CRD) Association of Japan
10:23 – 10:50	Open forum
10:50 – 11:00	Session Chair's closing remarks
11:00 – 11:30	BREAK
11:30 – 13:00	SESSION 6: Financial Literacy through Education
	<i>To foster access and make best use of financial services, it is critical that individuals, households, and small enterprise owners understand financial concepts, transaction procedures, risks, and liabilities. This need is heightened by recent developments in digital finance which provide an opportunity to increase access among the financially excluded. The session will discuss approaches that can be supported by government to deliver financial education as a means to increase financial literacy.</i>
	Session Chair: Mr. Peter Morgan, Senior Consultant for Research, Asian Development Bank Institute (ADBI), Japan
11:30 – 11:35	Session Chair's opening remarks
11:35 – 11:50	Presentation 1: Dr. Naoyuki Yoshino, Dean, Asian Development Bank Institute (ADBI), Japan
11:50 – 12:05	Presentation 2: Mr. David Boyle, Group Manager, Investor Education, Commission for Financial

	Education, New Zealand
12:05 – 12:20	Presentation 3: Mr. Ngah Tasir Azaddin, Chief Executive Officer, Credit Counselling and Debt Management Agency (<i>Agensi Kaunseling dan Pengurusan Kredit</i>) (AKPK), Malaysia
12:20 – 12:50	Open forum
12:50 – 13:00	Session Chair’s closing remarks
13:00 – 14:30	LUNCH
14:30 – 16:00	SESSION 7: Digital Finance and Consumer Protection
	<i>Digital finance has been expanding in many parts of the world, including APEC economies, and has substantially contributed to promoting financial inclusion for the unbanked poor although its potential has not been fully exploited. In parallel with its success, various consumer risks, especially to the poor and vulnerable, have been researched. CGAP identified seven risk areas, which were 1) inability to transact due to network/service downtime, 2) insufficient agent liquidity or float, which also affects ability to transact, 3) user interfaces that many find complex and confusing, 4) poor customer recourse, 5) nontransparent fees and other terms, 6) fraud that targets customers, and 7) inadequate data privacy and protection. Without proper mitigation measures against these risks, digital financial services will not be fully benefit the poor in terms of access, usage and services’ quality. This session discusses lesson learnt on consumer protection measures in relation with digital finance, as well as challenges ahead. It will look at the implications for customers, digital finance providers and policy makers more specifically.</i>
	Session Chair: Mr. Kazuto Tsuji, Visiting Senior Advisor, Japan International Cooperation Agency (JICA)/ Professor, Saitama University, Japan/The Executive Committee Chair, CGAP, Japan
14:30 – 14:35	Session Chair’s opening remarks
14:35 – 14:50	Presentation 1: Mr. Ouk Sarat, Director of Payment System Department, National Bank of Cambodia (NBC)
14:50 – 15:05	Presentation 2: Mr. Raymond Estioko, Deputy Director, Office of the Deputy Governor, Supervision and Examination Sector, Bangko Sentral ng Pilipinas (BSP), Philippines
15:05 – 15:20	Presentation 3: Mr. James Vancel, Managing Director, The Busara Center for Behavioral Economics, Kenya
15:20 – 15:30	Respondent: Ms. Kate McKee, Senior Advisor, The Consultative Group to Assist the Poor (CGAP), USA
15:30 – 15:55	Open forum
15:55 – 16:00	Session Chair’s closing remarks
16:00 – 16:30	BREAK
16:30 – 18:00	SESSION 8: Insolvency: Moving Beyond Stability to Growth
	<i>15 years after the Asian Financial Crisis, which spurred the international community towards an organized and concerted effort to tackle issues of corporate insolvency, do we have a better understanding of the role that sound insolvency systems play in the financial sector? Specifically, where the Crisis prompted a focus on the link between insolvency and financial stability, do we now have a better understanding of the role that sound insolvency systems play in access to finance, growth and entrepreneurship? Moreover, with the commitment by the G20 Group of countries in Antalya in 2015 to focus on insolvency reform as a key driver promoting SME finance, specialized SME insolvency regimes are popping up around the world, including most recently in South Korea. We will look at the specific issues that arise in this context and the need for SME</i>

	<i>insolvency regimes that respond to growing financial inclusion.</i>
	Session Chair: Mr. Mahesh Uttamchandani, Global Lead, Credit Infrastructure, World Bank Group, USA
16:30 – 16:35	Session Chair’s opening remarks
16:35 – 16:47	Presentation 1: Dr. Shinjiro Takagi, Executive Senior Advisor, Frontier Management Inc, Japan
16:47 – 16:59	Presentation 2: Mr. JR Smith, Partner, Hunton & Williams LLP, USA
16:59 – 17:11	Presentation 3: Mr. Gavin McCosker, Chief Operations Officer, Australian Financial Security Authority (AFSA), Australia
17:11 – 17:23	Presentation 4: Mr. Ta Dinh Tuyen, Assessor cum Secretary to Deputy Chief Justice, Department for Cassation Review No. 3, Supreme People's Court of Vietnam
17:23 – 17:50	Open Forum
17:50 – 18:00	Session Chair’s closing remarks
18:00 – 18:10	CLOSING REMARKS:
	Remarks: <ul style="list-style-type: none"> • Dr. JC Parrenas, Coordinator of the Asia-Pacific Financial Forum and Senior Advisor, Nomura, Japan • Mr. David Dole, Senior Capacity Building and Training Economist, Asian Development Bank Institute (ADBI), Japan