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The Financial Inclusion Landscape in the Asia-Pacific Region: A Dozen Key Findings

by Sarwat Jahan, Jayendu De, Fazurin Jamaludin, Piyaporn Sodsriwiboon,
and Cormac Sullivan

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I N T E R N A T I O N A L M O N E T A R Y F U N D

IMF Working Paper

Asia-Pacific Department

The Financial Inclusion Landscape in the Asia-Pacific Region: A Dozen Key Findings

Prepared by Sarwat Jahan, Jayendu De, Fazurin Jamaludin, Piyaporn Sodsriwiboon, and Cormac Sullivan¹

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Abstract

Financial inclusion is a multidimensional concept and countries have chosen diverse methods of enhancing financial inclusion with varying degrees of results. The heterogeneity of financial inclusion is particularly striking in the Asia-Pacific region as member countries range from those that are at the cutting edge of financial technology to others that are aiming to provide access to basic financial services. The wide disparity is not only inter-country but also intra-country. The focus of this paper is to take stock of the current state of financial inclusion in the Asia-Pacific region by highlighting twelve stylized facts about the state of financial inclusion in these countries. The paper finds that the state of financial inclusion depends on several factors, but a holistic approach calibrated to specific country conditions may lead to greater financial inclusion.

JEL Classification Numbers: G10, G18, G20, G28

Keywords: Financial Inclusion, Emerging Markets, Developing Asia, Pacific Islands

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I. INTRODUCTION

The role of financial inclusion in the fight against poverty and the pursuit of inclusive development is now widely recognized. Over the past few years, Asia-Pacific economies have bolstered their reform efforts that target financial inclusion. Policymakers have pursued these reforms to improve livelihoods, reduce poverty and inequality, promote entrepreneurship and advance economic development. This is particularly important in the Asia-Pacific region given that the use of formal finance is minimal in some countries, and the prevalence of informal finance is still high. Policymakers in these economies have come up with different measures to enhance access to financial services to those excluded from the mainstream financial sector. These measures, including fully fledged national financial inclusion strategies, have supported a rapid expansion of financial inclusion over the past decade and continue to do so.

Despite the importance of financial inclusion, there have been relatively few cross-country studies for the Asia-Pacific region. Where cross-country studies have been employed, they have typically focused on subregional groups such as South East Asia (ADB, 2017) and South Asia (World Bank, 2006). This paper, therefore, seeks to contribute to the literature by outlining the state of financial inclusion in the Asia-Pacific region as a whole: providing stylized facts which document important trends, distinctive country-specific approaches, persistent problem with financial exclusion, and emerging policy challenges. By adopting this approach, the paper provides a more granular picture of the Asia-Pacific region, while providing a general overview. It describes some of the initiatives put forth and takes stock of progress in financial inclusion efforts in different Asia-Pacific economies. This paper provided the background analysis to the IMF Departmental Paper *Financial Inclusion in the Asia-Pacific* (IMF2018a) on the state of financial inclusion in Asia-Pacific and has expanded the stylized facts section to provide a wider array of background information, policy considerations and ongoing challenges.

The Asia-Pacific region is particularly heterogenous in its approach to financial inclusion (see Annex I on country specific national strategies on financial inclusion) given the wide variation in income-levels, structural challenges, and adoption of technology in its members countries. Despite the heterogeneity, there are some common traits across countries. The paper aims to distill the common characteristics while highlighting the uniqueness of individual countries.

The remainder of the paper is organized as follows: Section II provides a short literature review. Section III discusses our twelve stylized facts on the state of financial inclusion in the Asia-Pacific region. Section IV concludes.

II. LITERATURE REVIEW

Definition and Background

Financial inclusion is typically defined as the broadening of access to and usage of financial services, particularly within segments of the population who have traditionally faced formal or informal restrictions. Nevertheless, practitioners and researchers have used a widely varied definition of financial inclusion. For example, the IMF defines financial inclusion as “access to and use of formal financial services by households and firms” (IMF, 2015a). Similarly, the Government of India’s Committee on Financial Inclusion defines it as the delivery of financial services at an affordable cost to vast sections of disadvantaged and low-income groups (Rangarajan, 2008). In an inverted formulation, Leyshon and Thrift (1996) define financial exclusion as “those processes that serve to prevent certain social groups and individuals from gaining access to the financial system”.

In recent years, financial inclusion has risen onto the global policy agenda given both the theoretical underpinnings of the benefits of financial inclusion as well as countries’ actual positive experience. Many countries have started to report the macroeconomic benefits of financial inclusion, and empirical research has confirmed the growth enhancing and poverty reducing effects. Theoretical justifications for the income-enhancing effects of financial services, particularly financial inclusion, are also well documented. Of particular relevance are the consumption smoothing effects of saving and associated gains in allocative efficiency from capital redistribution (Levine et al, 2005). Additional benefits come from improving access to credit, which can allow for greater economic opportunities and can spur entrepreneurship and development. Finally, there are efficiency gains from insurance and other risk-pooling products, which reduce excessive precautionary saving and can help to mitigate the potentially ruinous impacts, such as adverse climate and health incidents (at both an individual and aggregate level).

This increased prominence on the global policy agenda also includes reference to financial inclusion under Special Development Goal (SDG) number eight – promoting inclusive economic growth. Specifically, the SDGs target “Strengthening the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all”. This target is measured through commonly used indicators of financial inclusion, which are also employed frequently in this paper. They are the proportion of adults (15 years and older) with an account at a financial institution or with a mobile money service provider and the number of commercial bank branches and automated teller machines (ATMs) per 100,000 adults. Despite our best efforts, the paper had to mainly rely on conventional metrics of financial inclusion (such as ATM, bank branches, etc.) for cross country analysis, as very limited number of countries report on the access/usage of new technologies in finance. These new measures of financial inclusions could be introduced and monitored in the future in tandem with technological developments.

Given the benefits of financial inclusion, much of the early literature tried to answer why such a large proportion of the world’s population did not have access to even the most basic financial services. In 2017, roughly 39 percent of the adult population in low- and middle-income countries did not have a bank account (55 percent of which were in Asia; World

Bank's Global Findex) and only 9 percent of the population borrowed from formal financial institutions. The vast array of culprits identified in the literature reflects the multifaceted nature of financial inclusion. Explanations include: (i) purported high fixed costs and relatively low commercial returns associated with improving financial access (Cull et al, 2009; Johnston and Morduch, 2008), (ii) information asymmetries leading to excessive caution on both the demand and supply sides (Lusardi and Mitchell, 2014; and Jappelli and Pagano, 2002), (iii) excessive or even discriminatory regulation, (iv) the dominance of state financial institutions which operate with distorted incentives (World Bank, 2013) and (v) conversely the dominance of private financial institutions which cannot capture the positive externalities accruing to society from providing financial services (World Bank, 2014). In addition, recent literature and associated randomised controlled trials, informed by behavioral approaches to economics, have pointed to a set of variables² that affect the successful adoption of financial services (Karlan et al, 2016).

Such a large number of potential barriers highlights both the complexity of the topic and the dangers of a simplified, prescriptive policy solution. Formal and informal barriers to financial inclusion are present around the world and operate differently across a variety of societal cleavages. Research has documented a variety of restrictions on financial access and usage, based on income, gender, age and rural/urban divides.

The policy challenge is complicated by the significant risk of introducing unintended distortions when intervening in the financial system. A case in point is the possibility of having too much finance that can cause financial instability (Panizza et. al., 2012). However, these risks have to be weighed against the macroeconomic evidence of financial inclusion's benefits.

Studies have shown benefits of financial inclusion and/or financial development, which include:

- stronger growth (IMF (2015a) and Rajan et al (1998));
- reduction in inequality and poverty (Beck, Demirgüç-Kunt, and Levine, 2007);
- greater financial services through financial technology (IMF, 2017a);
- better targeted government spending (IMF, 2018b);
- enhancing the effectiveness of monetary policies (Mehrotra and Yetman, 2014); and
- fostering greater financial stability under certain conditions (Han and Melecky, 2013).

Financial Inclusion and Financial Development

Financial inclusion is generally measured in three dimensions: (i) *access* to financial services; (ii) *usage* of financial services; and (iii) the *quality* of the products and the service delivery. Financial inclusion also encompasses a broad range of financial services, including savings, credit, payments, and insurance, with varying degrees of priority across countries.

² For example, several empirical studies have found that low-cost but sustained marketing approaches dramatically increase the take-up and use of account services, for example by sending regular SMS text messages encouraging customers to save funds.

On the other hand, financial development is a vast concept and has several dimensions including depth, access, efficiency, and stability³.

While financial inclusion and financial development are crucial to economic development, often it is difficult to disentangle the two. They generally share several similarities and could well be complement to each other. This paper focuses on the developments of financial inclusion based on evidence from Asian economies.

Box 1. Financial Inclusion and Financial Development

<p>Financial Development</p> <p>Depth:</p> <ul style="list-style-type: none"> • Private sector credit to GDP • Deposits to GDP • M2 to GDP • Bank asset to GDP 	<p style="text-align: center;">Financial Inclusion</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid blue; vertical-align: top;"> <p>Access:</p> <ul style="list-style-type: none"> • Accounts per thousand adults • Branches per 100,000 adults • percent of people with a bank account • percent of firms with line of credit </td> <td style="border: 1px solid blue; vertical-align: top;"> <p>Usage:</p> <ul style="list-style-type: none"> • Average savings balances • Number of transactions per account • Number of electronic payments made </td> <td style="border: 1px solid blue; vertical-align: top;"> <p>Quality:</p> <ul style="list-style-type: none"> • Quality proxy for convenience, product-fit, transparency, safety, consumer protection, financial literacy </td> <td style="border: 1px solid blue; vertical-align: top;"> <p>Impact on firms/households:</p> <ul style="list-style-type: none"> • Impact assessment of financial inclusion on e.g. businesses' performance or human capital investments. </td> </tr> </table>			<p>Access:</p> <ul style="list-style-type: none"> • Accounts per thousand adults • Branches per 100,000 adults • percent of people with a bank account • percent of firms with line of credit 	<p>Usage:</p> <ul style="list-style-type: none"> • Average savings balances • Number of transactions per account • Number of electronic payments made 	<p>Quality:</p> <ul style="list-style-type: none"> • Quality proxy for convenience, product-fit, transparency, safety, consumer protection, financial literacy 	<p>Impact on firms/households:</p> <ul style="list-style-type: none"> • Impact assessment of financial inclusion on e.g. businesses' performance or human capital investments.
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<p>Efficiency:</p> <ul style="list-style-type: none"> • Net interest margin • Lending-deposits spread • Non-interest income to total income • Overhead costs (percent total assets) • Profitability (ROA, ROE) <p>Stability:</p> <ul style="list-style-type: none"> • Z-score • CAR • NPL ratios • Liquidity ratios 							

Source: World Bank

³ See for example <http://www.worldbank.org/en/publication/gfdr/background/financial-development>

Data Description

Since the concept of financial inclusion is multi-faceted, there is not one representative indicator that is equally important in all countries. Therefore, in drawing out general conclusions, this paper uses information from a wide array of databases and conducts robustness checks by comparing and cross-checking various variables across different databases. Data on financial inclusion are primarily drawn from the IMF's Financial Access Survey (FAS), IMF's AFR Financial Inclusion Toolkit 2017, and the World Bank's Global Findex. Additional socio-economic data are taken from International Financial Statistics (IFS), World Economic Outlook (WEO), World Development Indicators (WDI) and various other specialized databases, outlined in Annex II. The list of countries covered in the study are shown in Annex III.

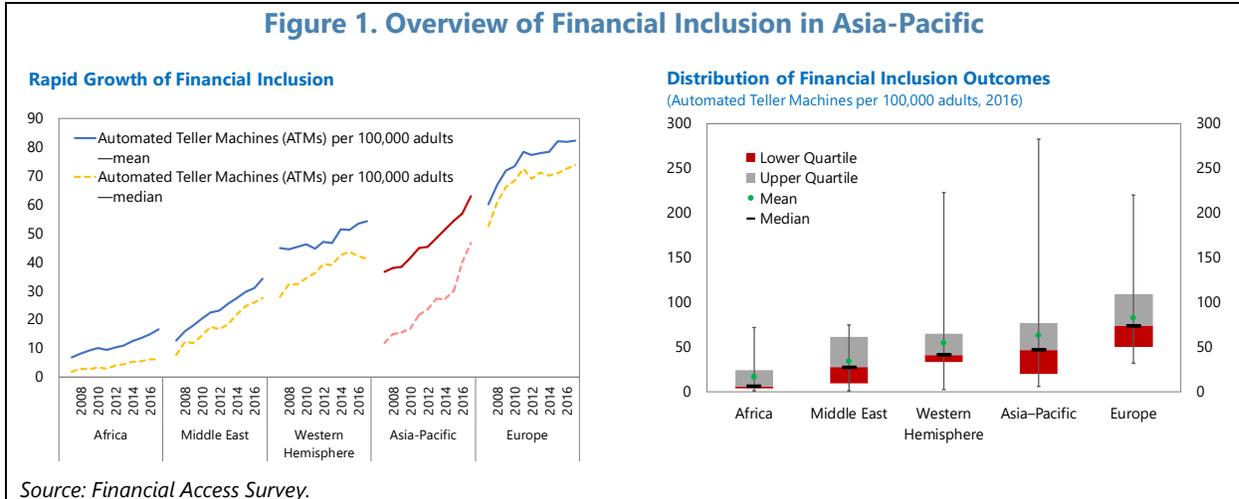
III. A DOZEN KEY FINDINGS

Based on the data analysis, this paper has divided the twelve main facts on financial inclusion in Asia-Pacific into four broad categories: recent trends, financial inclusion gaps, structural issues related to financial inclusion, and emerging challenges despite the accomplishments. Most of the findings are limited to financial inclusion of households (Fact VII is an exception) due to limited data availability for enterprises. In addition, not all countries provide the same degree of information across various indicators of financial inclusion. We chose the variables that had the most country coverage for each fact, but this also impeded having a uniform set of countries for all results. Despite these caveats, this paper has been able to find several facts that provide a description of the financial inclusion landscape in Asia-Pacific.

A. Recent Financial Inclusion Trends: How Does Asia-Pacific Compare to its Peers?

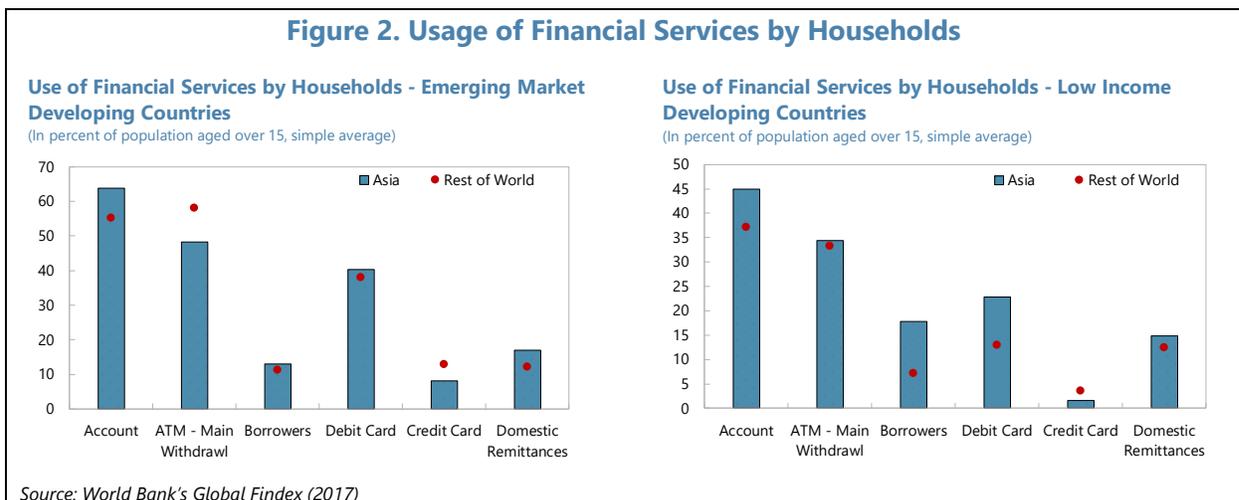
Fact I: Asia-Pacific countries have made significant progress in financial inclusion broadly in line with other regions, but it also has the widest disparity.

The Asia-Pacific region has made considerable progress in financial inclusion over the past decade. For example, the mean number of ATMs per 100,000 adults in Asia-Pacific has increased from about 37 to 63 in the course of ten years. The median growth in ATMs is sharper, growing by almost four-fold over the same period (left panel, figure 1). Although many other regions have also undergone rapid financial inclusion (for example, Africa), the pace has been higher in Asia-Pacific. Nonetheless, large disparities in financial inclusion persist in this region (right panel, figure 1). For example, Japan or Korea tend to be the global leaders with over 200 ATM machines per 100,000 adults compared to a global average of less than 50. On the other hand, countries such as Myanmar with only 2 ATMs per 100,000 adults are lagging behind. Comparable results hold, when using other indicators of financial inclusion such as bank accounts.



Fact II: Asia-Pacific countries tend to fare well in terms of both financial access and usage, compared to peers in their income group.

Asia-Pacific emerging markets (EMs) and low-income developing countries (LIDCs) tend to have greater access to banking accounts compared to their peers (Figure 2). However, the use of financial services tends to be higher in Asia-Pacific LIDCs compared to other countries in their income-group, for example, using an ATM card to make withdrawals or taking out a bank loan. This could be due to the difference in the income levels, as the average per-capita income in Asia-Pacific LIDCs is higher compared to other LIDCs⁴. Nonetheless, the Asia-Pacific LIDCs clearly trail behind the EMs and there is scope to improve both access and usage.



⁴ The average income in Asian low-income economies was 2,039 U.S. Dollars in 2017, compared to 1,088 for the rest of the world. For Asian emerging markets the average income was 7,036 U.S. dollars, against an average of 10,379 U.S. dollars across other regions.

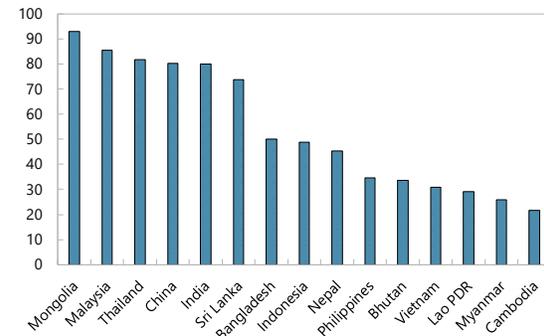
Fact III: Progress of countries in Asia-Pacific reflects various dimensions of financial inclusion and differs across the countries.

Financial inclusion is multi-faceted and involves the multi-dimensions, such as the mode of operation (traditional banking system or micro-finance); the main providers of financial services (public sector, the private sector, or a combination); and the degree of emphasis placed on technological and conventional solutions. Some countries such as China, Malaysia, or Thailand perform well, based on both traditional banking measured by account at a financial institution and digital banking measured through making/receiving digital payments (Upper panel, Figure 3). In these countries, households do not only have a banking account, but also actively use banks for saving and borrowing. Additionally, in these countries mobile phones are frequently used to make payments. On the other hand, informal sources of financing are important in countries such as Cambodia or Nepal, where less than 40 percent of the households have a banking account. Nonetheless, Cambodia has made significant strides in enhancing financial inclusion using mobile payments, but Nepal has yet to become a major user. India has been able to improve access to financial services, more than half of the population with a bank account. However, India has been less successful in usage of financial services as only 20 percent of the population uses the bank accounts. A larger segment of the population relies on the informal sector which could explain the mainly dormant bank accounts.

Figure 3. A Snapshot of Different Dimensions of Financial Inclusion

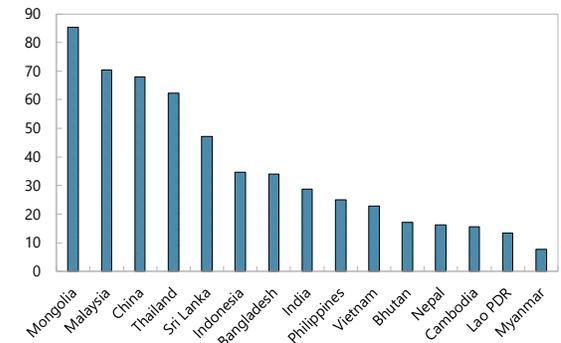
Account at a Financial Institution

(Share of population)



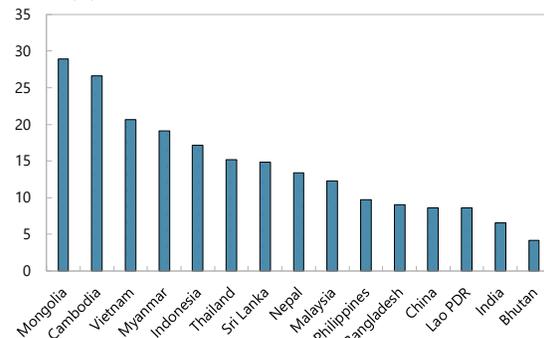
Made or Received Digital Payments in Past Year

(Share of population)



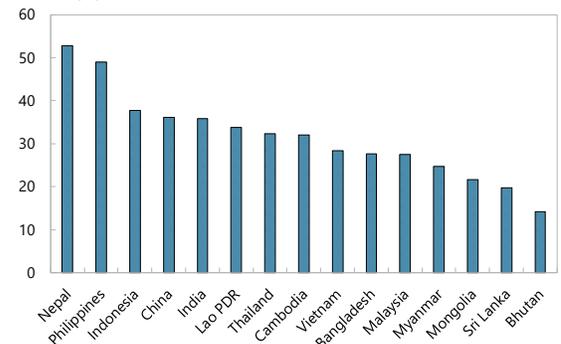
Borrowed from a Financial Institution

(Share of population)



Borrowed Outside Financial Institution

(Share of population)

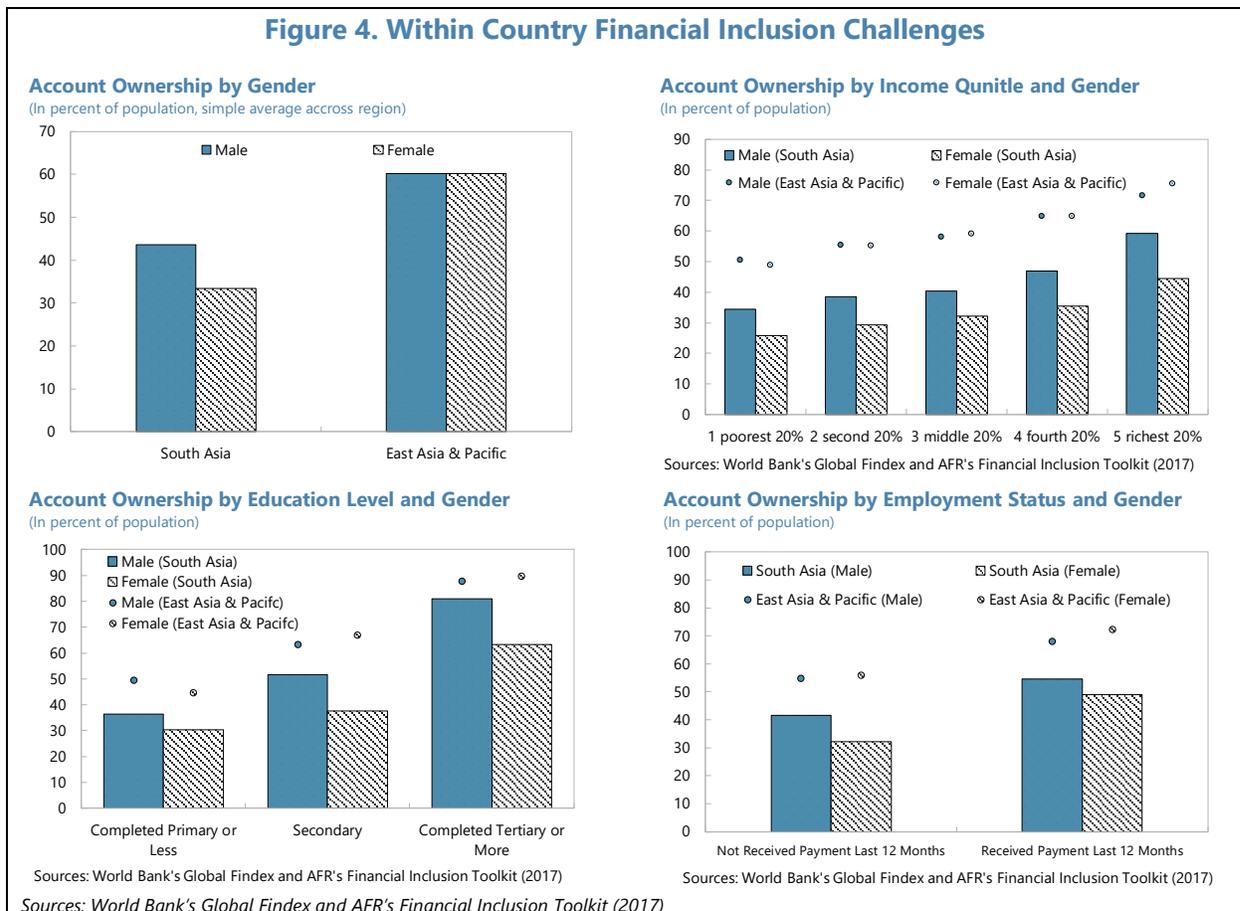


Sources: World Bank's Global Findex (2017) and IMF Staff Calculation.

B. Financial Inclusion Gaps: Who is Financially Excluded in Asia-Pacific?

Fact IV: Even countries with high degree of average financial inclusion face in-country disparities.

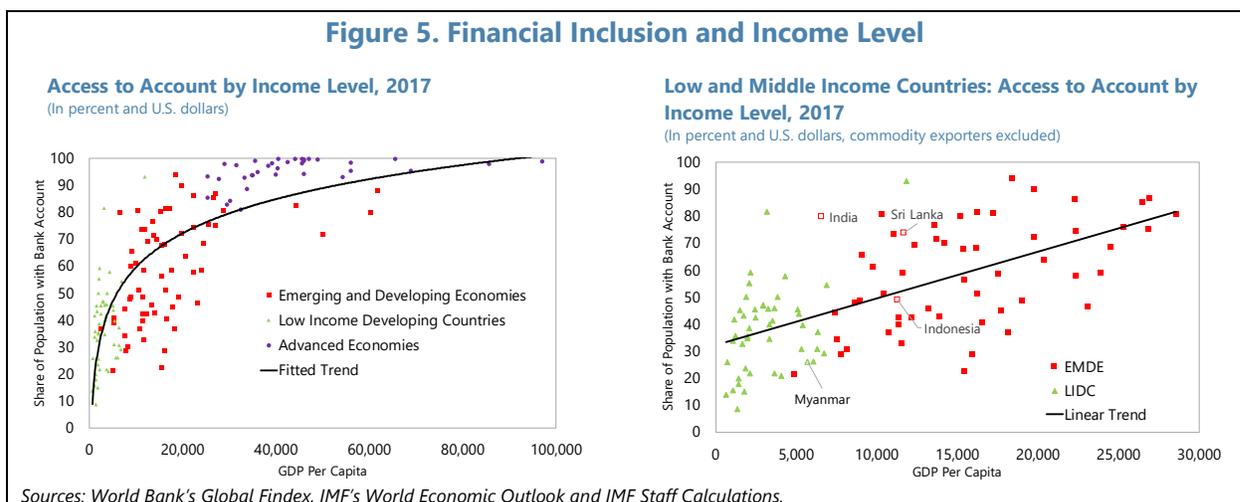
In-country disparities can be large when access to financial services is examined within population segments and across income levels. Despite recent progress, gender disparities have been significant, particularly in South Asia, where roughly 30 percent of women have a bank account, compared with nearly 45 percent of men (Figure 4, AFR's Financial Inclusion Toolkit 2017). Evidence also suggests that higher exclusion is associated with higher income inequality and with vulnerable groups such as young, uneducated, unemployed, and the poor in rural areas (Figure 4, Global Findex 2017). For example, in Indonesia, only about 10 percent of adults from the poorest quintile have a formal bank account, compared with about 60 percent from the richest quintile. Similarly, in India, only about 46 percent of adult males from the poorest quintile have a formal account, compared with 79 percent from the richest quintile. India's disparity between the richest and poorest groups is even more pronounced when measured by use of mobile transactions (fourfold difference) or borrowings from a financial institution (about threefold difference).



Fact V: Countries with a higher income-level tend to have higher financial inclusion but wide disparities exist for EMs and LIDCs.

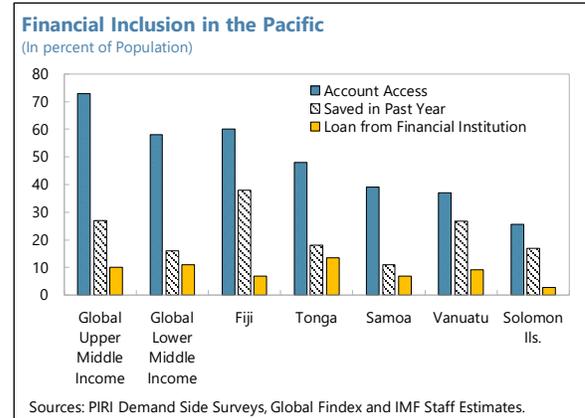
In general, countries with a higher level of income are associated with higher levels of financial inclusion (Figure 5, left panel). Advanced economies such as Singapore, Luxemburg, or Norway almost have universal financial access and most advanced economies outperform EMs and LIDCs. However, economies at similar income levels can differ in their levels and attributes of financial inclusion particularly for EMs and LIDCs (Figure 5, right panel). For example, per capita income in India is higher than that of Cambodia, and a higher percentage of people in India have bank accounts than in Cambodia. However, Cambodia's strong public-private partnership in promoting mobile financial services allows for greater financial inclusion via mobile payments. The Reserve Bank of India, on the other hand, has adopted a bank-led model for achieving financial inclusion which includes not only providing institutional support for banks in accelerating their financial inclusion, but also supports financial literacy.

Similarly, two island states with similar income levels —Sri Lanka and Indonesia—have significantly different financial inclusion levels (based on access to accounts), which could be due to country characteristics. Unlike Sri Lanka, Indonesia's faces the problem of geographic dispersion with around 17,500 islands and a land mass of almost 2 million square kilometers (similar in size to Mexico, or 1/5 of the size of China). The island of Java has 7 percent of land area but is home to nearly 60 percent of the population and a similar share of GDP. Branch and ATM networks have tended to follow this concentration. The lowest access to banking financial services is in East Indonesia where geography is a challenge (Bank Indonesia 2013). To overcome these geographical challenges, a possible solution for Indonesia to reach the underbanked could be to push for policies to boost mobile banking or use non-traditional methods such as providing basic banking services via agents on fishing boats (Dhoni banking units) as was done in the Maldives in their efforts to provide financial services in the remote islands.



Fact VI: Small states, which account for one-third of the countries in the Asia-Pacific region (13 out of 37), face special challenges to financial inclusion.

Several unique physical characteristics of Asia-Pacific small states create natural challenges to financial inclusion. Many of these countries consist of widely dispersed small islands which complicates the delivery of financial services. These countries also tend to have small domestic economies with a relatively small financial sector consisting of only a few financial entities. Severe infrastructure gaps, narrow production bases and high dependence on imports from distant markets all contribute to high transaction costs, including the cost of financial services which limits financial inclusion. The consequence of these challenges is that financial inclusion is relatively low and relevant indicators, such as account access, lag below the average for the region's middle-income peers (see text chart).



An illustrative example would be the high interest rate spreads in many of these countries, curtailing credit access to households and enterprises. This is further exacerbated by the high vulnerability to natural disasters, which increases the perceived risk premium associated with doing business in these economies. Given the geographical constraints faced by many of these countries, digital financial services have emerged as viable channels for the promotion of financial inclusion (see Fact XII).

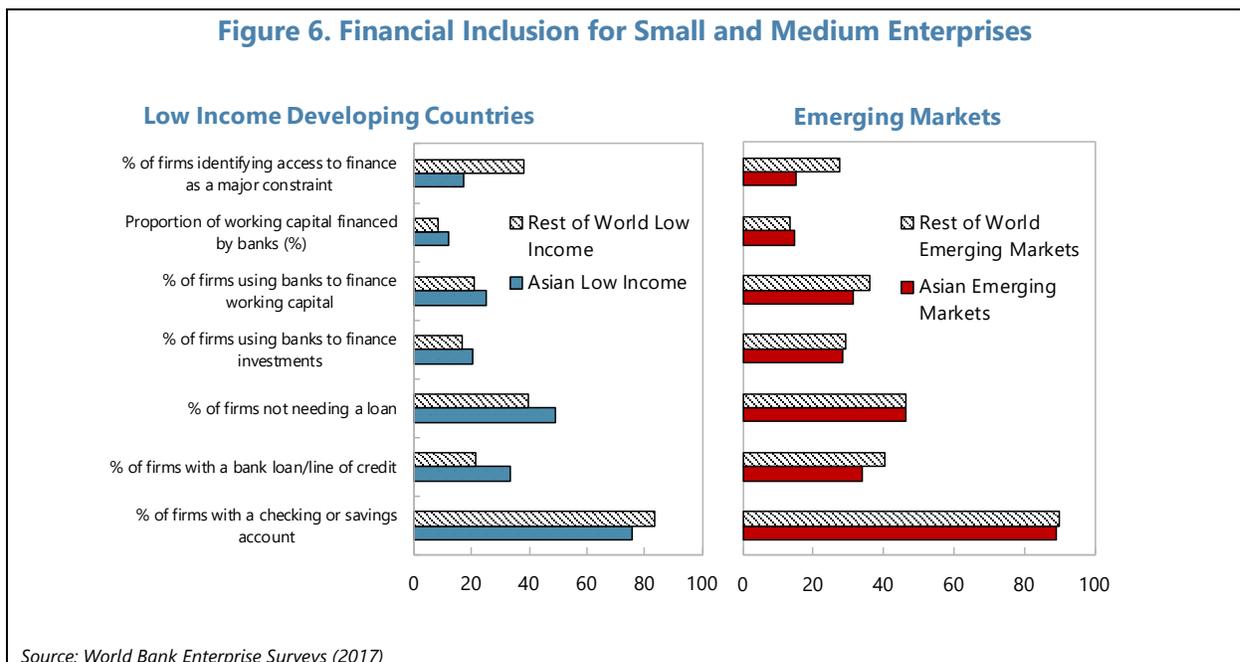
Asia-Pacific small states are, on average, highly dependent on remittance flows due to their small size and extensive economic linkages with global and regional economies. With remittances amounting to as much as between one-fifth (Samoa) and one-third of GDP (Tonga) in some countries, access to remittance services forms an important component of financial inclusion. In recent years, greater scrutiny of Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) compliance globally has raised concerns over the compliance with international practices, including by money transfer operators. As a result, many small states in the Pacific are facing increasing difficulties in either maintaining correspondent banking relationships (CBRs) or are experiencing rising costs and complexities in transferring money and repatriating remittances (Alwazir et al, 2017). Ensuring that the necessary frameworks are *de jure* and *de facto* on par with international best practices would be a good way to mitigate strains on CBR relationships. Strengthening AML/CFT compliance by setting up a national know-your-customer utility can help mitigate the strains in CBRs, as well as leveraging fintech-based solutions, including blockchain, although operationalizing such technology will only likely to be viable in the long run.

Fact VII: For Enterprises, Asia-Pacific economies tend to perform well in terms of financial access but in some cases access to finance remains a constraint.

Enterprises in Asia-Pacific, both EMs and LIDCs, do not identify that access to finance is a major constraint (Figure 6), when compared to those in other regions. Enterprises in Asia-

Pacific have access to checking or savings accounts and use the banking channel to facilitate their operations and investment in line with peers. Although enterprises in Asia-Pacific tend to need a higher amount of collateral to get a loan, this has not prevented Asia-Pacific firms from financial services. For example, based on an enterprise survey conducted by World Bank, the value of collateral for low-income countries in Asia Pacific is about 239 percent of the loan value while the global average for the other low-income countries is 196 percent (for Asia-Pacific EMs the average is about 220 percent compared to the global average of 192).

There are, however, inter-country differences. Out of the 24 EMs and LIDCs in Asia that took the World Bank's Enterprise Survey, Nepal, Mongolia and Sri Lanka were among the top 40 percent of the world-wide respondents that cited access to finance as a major problem despite enterprises in these countries tend to have above average access to loans or line of credit from banks. On the other hand, countries such as Cambodia rank among the lowest globally in terms of enterprises' access to bank or equity financing, but only about 17 percent of the enterprises in Cambodia identified financing as a major constraint (majority of the investment was financed internally).



C. Structural Issues: Does the Regulatory Environment and Financial Market Structure Play a Role in Financial Inclusion?

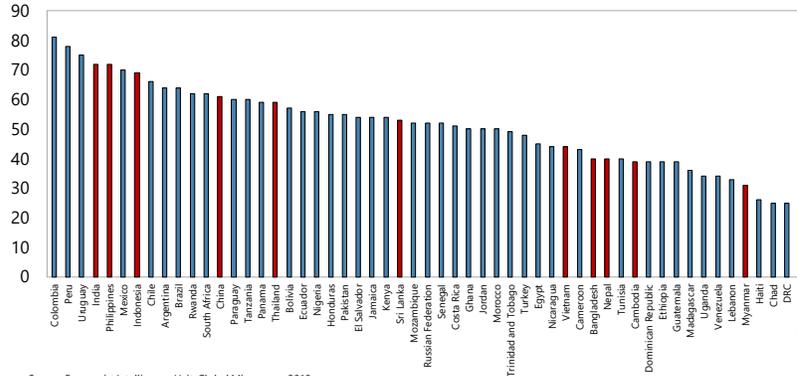
Fact VIII: A strong regulatory environment seems to be correlated with greater financial inclusion, although it is not the only determining factor.

Creating an enabling environment for financial inclusion through proper regulatory environment is often seen as a first step toward removing bottlenecks for financial inclusion. According to the Global Microscope survey, which assesses the regulatory environment for financial inclusion by evaluating 12 indicators for 55 EMs and LIDCs, India, Philippines, and Indonesia are now firmly among the top ten performers. Other Asia-Pacific countries, such as China and Thailand, are also

at par with their peer group. However, others such as Myanmar, Cambodia, or Bangladesh can benefit from improving their regulatory environment. A granular breakdown of the microscope survey reveals that each country also has its own strength. For example, Thailand ranks among the top ten countries that receive government support for financial inclusion and for the quality of its supporting infrastructure, but it is below average on the category of consumer protection regulations.

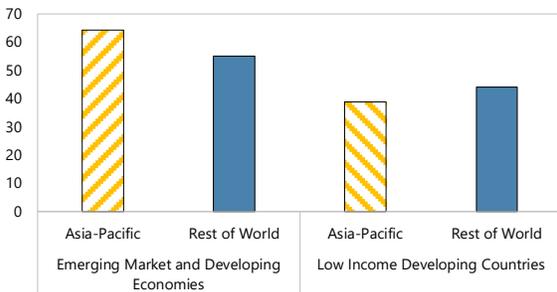
Figure 7. Regulatory Environment and Financial Inclusion

Regulation of Financial Inclusion
(EIU Microscope Score)



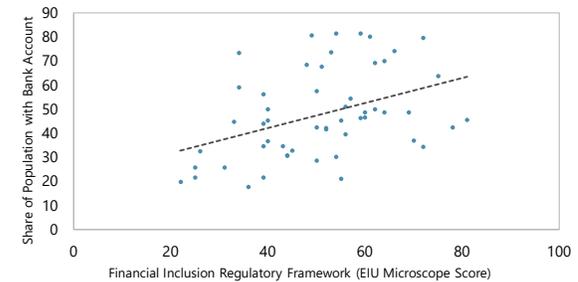
Source: Economist Intelligence Unit; Global Microscope 2018

Regulatory Environment for Financial Inclusion, 2018
(Microscope score, simple average)



Note: Microscope score provides a subjective assessment of the strength of a country's regulatory framework for financial inclusion.

Financial Inclusion: Regulatory Framework and Outcomes
(Index Score)



Note: The Economist Intelligence Unit's Microscope score provides a subjective assessment of the regulatory framework for financial inclusion by accounting for various regulatory provisions. (e.g. 'Are there clear rules requiring non-discrimination in financial services provision in terms of gender, race, religion, caste, ethnicity, etc.?')

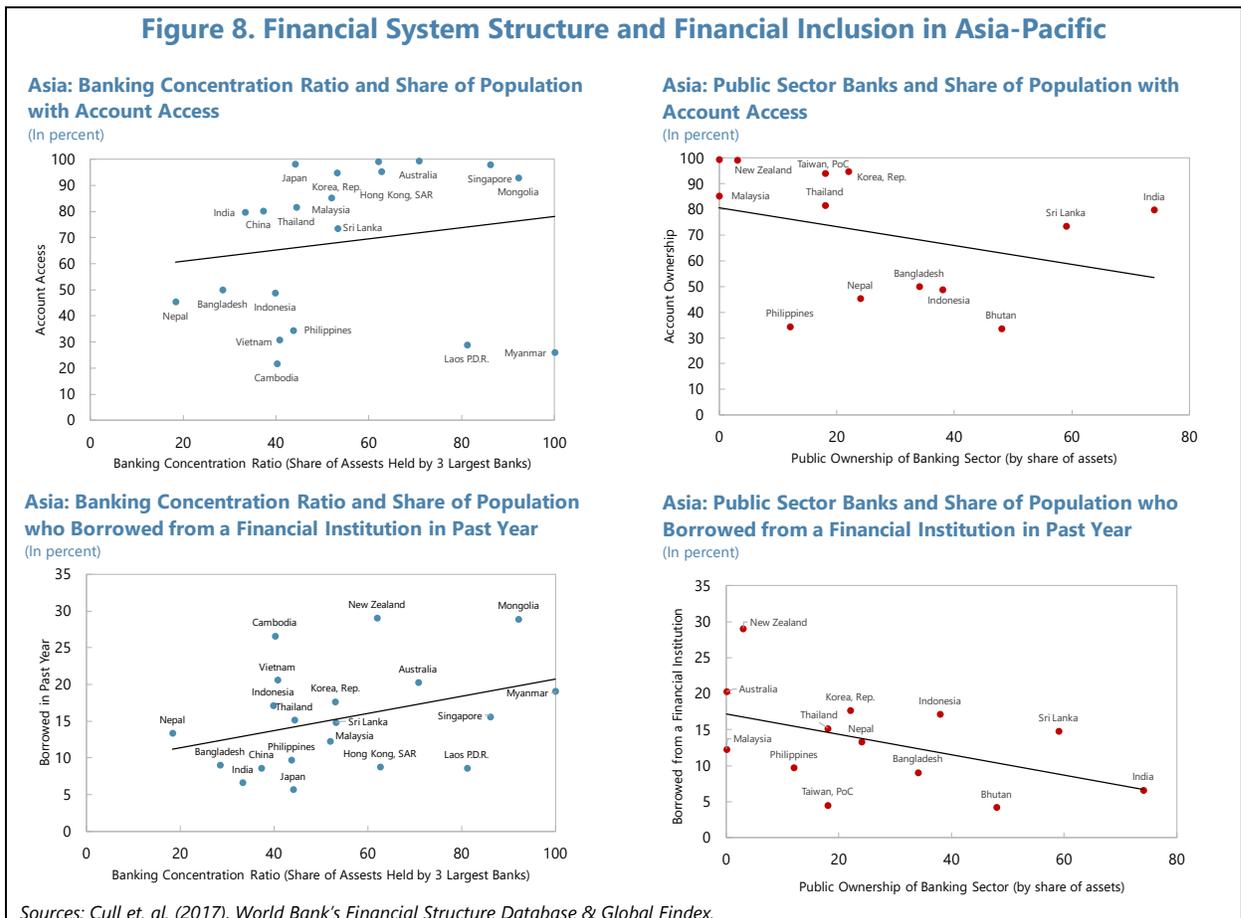
Note: Country coverage is a set of emerging markets and low-income countries selected by EIU to give an overview of regional trends.

Sources: Economist Intelligence Unit's Microscope Scores, World Bank's Global Findex and IMF Staff Calculations.

A simple scatter plot reveals a correlation between countries' regulatory performance and the actual level of financial inclusion, indicating that regulation can play an important role. For example, regulation aimed at increasing transparency and competition foster greater financial inclusion. In general, economies in Asia-Pacific are among the strongest in providing government support, particularly for financial and digital literacy, as well as regulations for stability and integrity. While these measures are important building blocks to create an enabling environment, economies in Asia-Pacific lag in policies that are likely to operate with a more impact, such as consumer protection, supervisory capacity, enforcing privacy laws and providing inclusive insurance.

Fact IX: The structure of the financial system, such as public ownership and market concentration, plays a role in determining financial inclusion outcomes, both globally and in Asia-Pacific.

Banking sector concentration is an important aspect of financial system structure which has implications for financial inclusion outcomes. High concentration, defined as the asset share of the 3 largest institutions, shows a positive correlation with financial inclusion (left panel, Figure 8). This is true both globally and in Asia-Pacific. It may indicate that in some circumstances institutions with dominant market positions are better placed to support financial inclusion because their secure market position permits them to make the large infrastructure investments needed to support high-volume, low-return financial products⁵. They also have increased security, allowing them to take positions which pay off only over the long-run. This result implies a potential trade-off between the efficiency and dynamism associated with competition on the one hand and the level of financial inclusion on the other. At a minimum, high concentration in financial markets does not preclude financial inclusion. Further analysis is needed to better understand these dynamics.



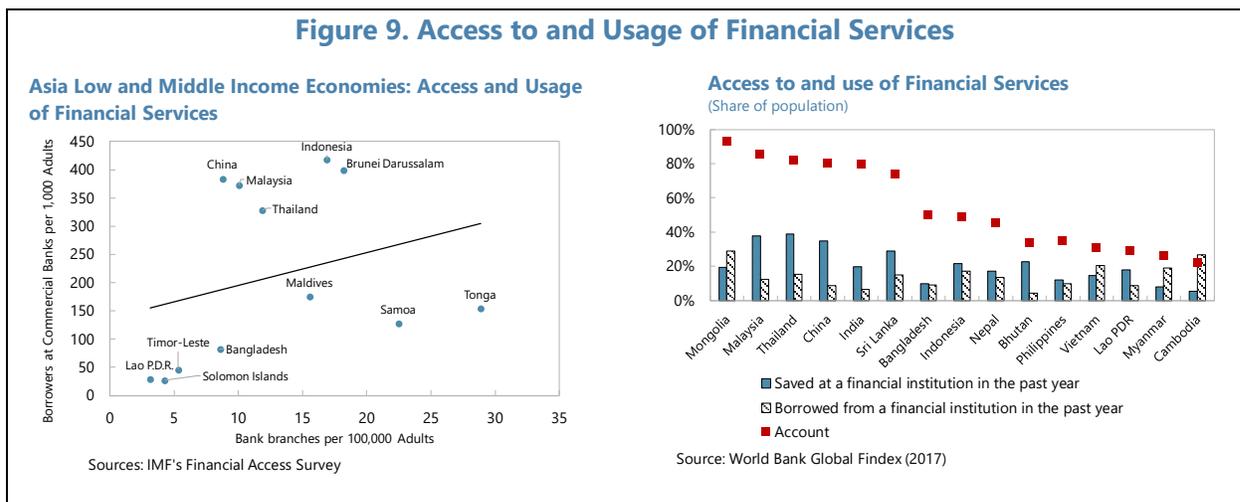
⁵ It is also possible that institutions might grow into dominant positions by offering financial services to a wider segment of the population.

Advocates of public ownership cite greater financial inclusion as a potential benefit. This is based on the rationale that publicly owned banks can provide financial services which are not commercially viable, where there are large information asymmetries or where the level of capital investment required would be prohibitive for the private sector. For example, running rural branches may not necessarily be highly profitable, except by cross-subsidizing with income generated by urban areas. It is, therefore, important to look at the relationship between financial inclusion and public-sector bank ownership. The evidence shows a negative relationship between presence of public sector banks and a variety of financial inclusion indicators (right panel, Figure 8). It appears that the potential benefits of public banking are overshadowed by the well-documented shortcomings associated with public-sector banks; namely, inefficient and costly service provisions to higher risk and developing sectors.

D. Future Challenges: Did Financial Access Translate to Greater Financial Usage, Financial Development and Adoption of Technology?

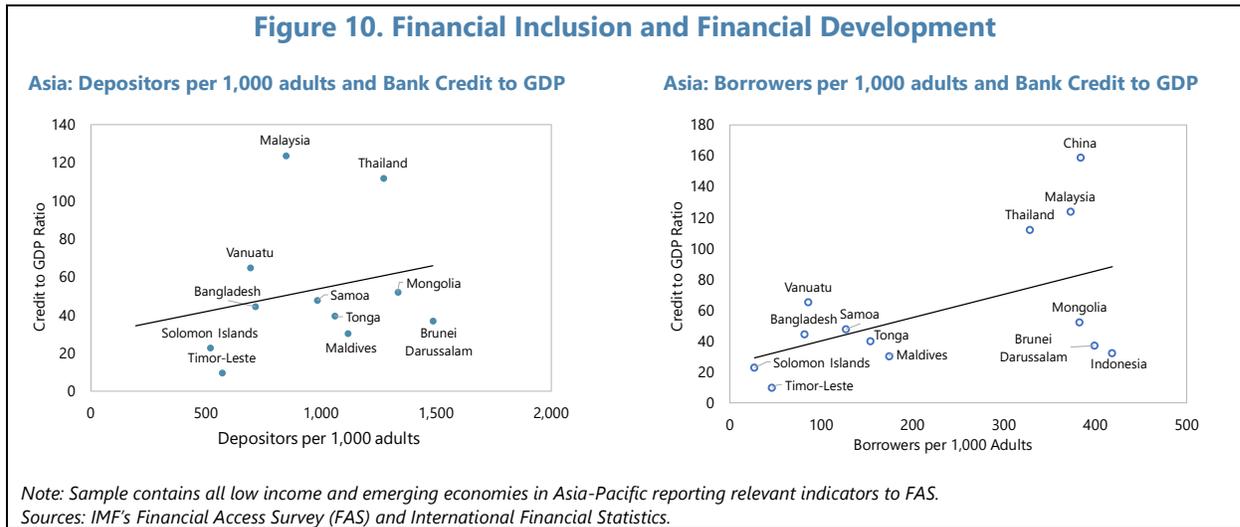
Fact X: Access to financial services does not necessarily translate to active usage in the financial system.

Countries vary greatly on how successful their efforts to enhance financial inclusion have led to effective usage of financial services. In Cambodia, the percentage of population having an account is much lower than similar Asian countries in its peer group. However, Cambodia has been successful in getting its population to use the banking services (right panel, Figure 9). On the other side of the spectrum, countries such as Sri Lanka or India perform well in terms of access, but the usage ratio is among the lowest. In fact, South Asia particularly lags behind other parts of Asia in terms of active use of financial services. Similarly, despite the recent increase in the number of bank branches (per capita), small states still lack adequate usage (left panel, Figure 9). This is due to several reasons including geographical dispersion, high value of collateral, and high interest rates.



Fact XI: Financial inclusion is associated with, but not equivalent to financial development.

Financial inclusion has not always translated into increased financial development (measured by credit-to-GDP ratio). EMs such as Malaysia or Thailand are exceptions where both financial inclusion and financial development has been achieved (Figure 10). Some other countries, such as Indonesia or Brunei Darussalam, have increased financial access to greater numbers of depositors or borrowers, but financial development remains low compared to the sample. This shows that progress in both financial inclusion and development may take greater effort in a multitude of policies as progress in one does not guarantee progress in the other.



Fact XII: Fintech is becoming an important provider of financial services in economies in the Asia-Pacific region, by either complementing or bypassing traditional banking.

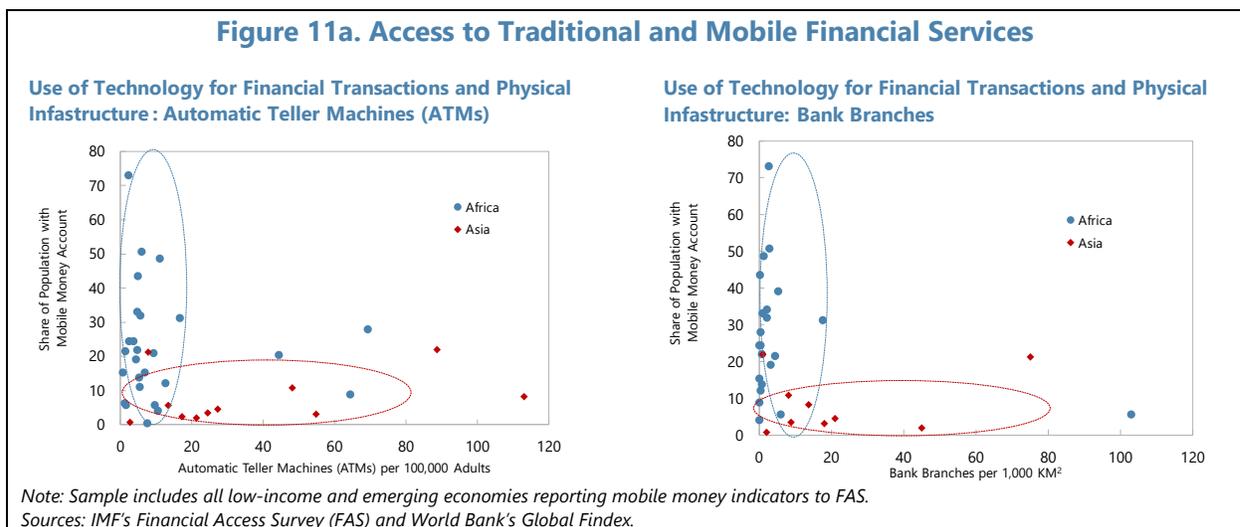
Many countries leveraged low-cost technology solutions to reach out to the unserved and underserved segments that financial institutions were not able to cover profitably. In the early days of Fintech development, there were three main modes of activity in the Asia-Pacific region: peer-to-peer lending, mobile payment, and robo advice. Since then, there have been several high-profile developments, such as the closely-watched deal on AI (artificial intelligence) between ChinaAMC, a Chinese mutual fund, and Microsoft first announced in June 2017; and a similar one between Bank of China and Tencent.

Countries in the Asia-Pacific region are at various stages of fintech development. Several Asia-Pacific EMs are at the forefront of fintech use. For example, China is a global leader in mobile payments, accounting for more than half of total mobile payments in the region at end-2015 (World Bank, 2018), reaching levels greater than those in most developed countries. Many Chinese consumers have moved directly from cash to mobile payments, bypassing debit and credit cards. The use of Fintech in China has also expanded to include savings and credit products. Likewise, the use of Fintech in a number country in the Association of Southeast Asian Nations (ASEAN) has also expanded beyond payments to

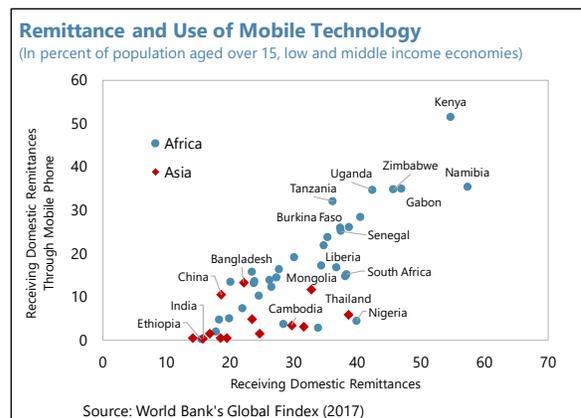
include lending, insurance, investment, and mobile money. In many of these countries, such as in Thailand, the rise of Fintech has already started to cause a decline in the number of physical bank branches.

Developing economies in the Asia-Pacific region have also started to make strides in fintech, given their conditions and needs. A few examples are provided below:

- Mobile Banking.** Mobile banking has provided citizens an alternative means of accessing financial services, particularly in areas that lack access to physical financial institutions such as bank branches. This said, mobile banking in most of Asia-Pacific countries is not as prevalent as it is in Sub-Saharan Africa (Figure 11a). In Africa, there is much greater usage of mobile technology compared to Asia, in part due to the limited availability of conventional financial infrastructure. On the other hand, Asia performs slightly better in traditional financial services (as measured by branches per 100,000 people). There is also a marked difference in terms of the geographic coverage of traditional infrastructure (as measured by branches per 1,000km²), which appears to be a driver of the adoption of technological solutions.

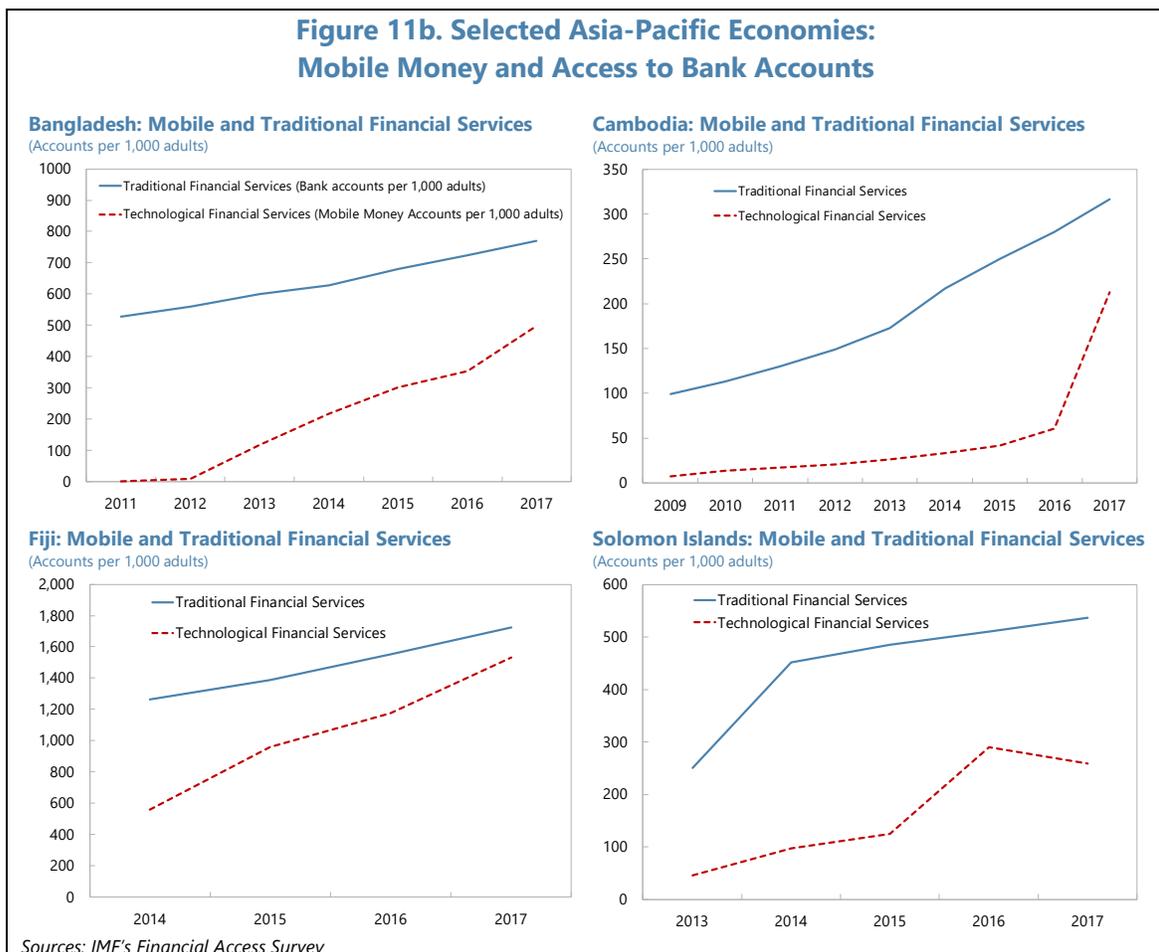


- Mobile Payments.** Several Asia-Pacific countries have been using mobile payments to receive remittances, notably Bangladesh, Cambodia and the Philippines. However, the region is still substantially behind several African countries in adopting mobile technology. On average, more than a third of the population in Kenya, Uganda, Tanzania or Zimbabwe use mobile technology for receiving domestic remittances. Asia-Pacific still has the scope to catch up with their peers in Africa in terms of the use of a mobile phone to make a financial transaction.



Based on Findex data, Bangladesh, China, and Mongolia are among the top Asia-Pacific performers when it comes to using mobile phone to receive domestic remittances. More recently, several Asia-Pacific countries are pushing for greater financial inclusion through mobile technology given the advantage of strong mobile penetration in these countries.

- Mobile Money.** Mobile money has grown noticeably, particularly in several LIDCs such as Bangladesh where the number of mobile money accounts rose from about 10 accounts per 1000 adults to about 500 in just five years between 2012-17. A similar trend is seen in Cambodia where the number of mobile money accounts tripled between 2016 and 2017 (Figure 11b). EMs such as Indonesia and Mongolia (not shown) also demonstrated rapid increase. Among many Pacific island countries, where geographical dispersion represents a major obstacle to the provision of financial services (such as Fiji and Samoa) mobile-based financial products have seen a substantial uptake, supported by the brisk pace of growth in access to mobile technology.⁶



⁶ During 2009-14, Pacific island countries recorded the fastest growth in unique subscribers to mobile phones in the world after Sub-Saharan Africa. Source: “[The Mobile Economy: Pacific Islands 2015](#),” GSM Association, 2015.

IV. CONCLUSION

The twelve facts presented in this paper reveal that the Asia-Pacific region has made significant strides in financial inclusion, and some countries in this region are at the forefront of emerging trends. Overall, the financial inclusion landscape has been changing in the Asia-Pacific region, although the mode of enhancing financial inclusion varies based on a country's needs and circumstances.

Trends

In general, Asia-Pacific countries have made significant improvement in financial inclusion although this region still has the widest disparity between economies (Fact I). This region also tends to perform well both in terms of financial access and usage by households (Fact II), although there is no uniform method that countries have adopted to reach greater financial inclusion (Fact III, Annex I).

Gaps

Despite progress, Asia-Pacific countries face within-country challenges. Remaining gaps in access and usage to financial services could be driven by inequality in income, gender, and opportunity (Fact IV). While the level of financial inclusion is partially correlated with the level of economic development and income, the determinants of financial inclusion go beyond income-level and are widely varied (Fact V). For example, small states in Asia-Pacific region tend to face additional challenges to financial inclusion due to their relatively small market size, and unique physical characteristics which add to costs of financial services (Fact VI). While most of the analysis in this paper focuses on households due to data availability, we find that credit constraints on enterprises in Asia-Pacific are not as binding as in other regions (Fact VII).

Structural Issues

Policymakers still have a very important role to play to boost financial inclusion. For example, higher financial inclusion seems to be correlated with a strong regulatory environment although it is not the only determining factor (Fact VIII). Several Asia-Pacific EMs have been able to create a proper regulatory environment. In addition, the structure of the financial system, such as public ownership and market concentration, appears to play a role in determining financial inclusion outcomes (Fact IX). This suggests that structural reforms in the financial sector may also induce financial inclusion.

Future Challenges

Despite major achievements, access to financial services does not necessarily translate to active participation in the financial system (Fact X), and financial inclusion is not equivalent to financial development (Fact XI).

To boost financial inclusion further, especially given its benefits⁷, the Asia-Pacific region is beginning to look to technology. For example, several countries in the region have made headway in developing mobile financial services such as Bangladesh (Fact XII). However, new technology also brings new challenges including with implementation of proper regulation and cybersecurity.

The overarching conclusion of this paper is that the varied approaches to financial inclusion in the Asia-Pacific region are a result of the need to tackle varying country specific conditions, challenges, and needs. As many factors affect financial inclusion outcomes, a holistic approach relying on complementary measures. These measures should be informed by country diagnosis to improve both access and usage. In this context, countries can learn from each other (and from other regions) but also need to calibrate their own strategies, including taking into account the increase in availability of technologies.

⁷ Emerging research indicates that financial inclusion is not only important for socio-economic outcomes such as boosting growth and reducing inequality but can also influence the effectiveness of macroeconomic policies (IMF, 2018a).

Annex I. National Strategies for Financial Inclusion

Greater financial inclusion allows for financially marginalized groups to increase their income, reduce its volatility, and build assets, thereby providing resilience to economic shocks and helping create jobs and promote business activities. Authorities in many emerging and developing countries in Asia-pacific have taken measures to include those previously excluded from the mainstream financial sector. This annex takes stock of some of these efforts in India, Indonesia, Malaysia, Myanmar, Nepal, Papua New Guinea, Solomon Islands and Vietnam.

India. The Pradhan Mantri Jan Dhan Yojana and the Pradhan Mantri Mudra Yojana schemes have been launched with the intention of providing universal banking, access to credit, financial literacy, insurance and pension to households and SOEs.⁸ The agent banking network of the state-owned banks has been expanded to cover geographically difficult and sparsely populated areas and debit cards, such as the RuPay card, with inbuilt accident insurance cover and life insurance have been introduced to allow domestic banks and financial institutions to participate in electronic payments at much lower costs. Other schemes, such as the Direct Benefit Transfer, have also been introduced to transfer money including for fuel directly to the intended beneficiaries without delays. Advancements in digital technology has made basic banking functions available on basic handsets removing the need to download complicated banking applications. Policies from the Reserve Bank of India, such as advising nationalized commercial banks to allocate at least twenty five percent of proposed new branches including mobile branches, service branches and administrative offices in underserved areas have also ramped up the financial inclusion agenda.

Indonesia. The Financial Services Authority (OJK), established in 2011, is currently implementing the Financial Services Sector Master Plan (2015-19) including the ambitious National Strategy for Financial Inclusion. This strategy has set a target that seventy five percent of the adult population will have access to formal finance by 2019. To achieve this target, the strategy focuses on financial literacy, financing facilities, financial information mapping, financial regulations, distribution networks and intermediation facilities and consumer protection. Special committees such as ‘Teams for Regional Financial Access Acceleration’ have been set up and schemes such as Laku Pandai and SimPel / SimPel iB, Laku Mikro have been launched by the OJK as part of the strategy.⁹ Additionally, several initiatives such as ‘Save Your Money in SimPel / SimPel iB, ‘Let’s Save in Stocks and Let’s

⁸ Pradhan Mantri Jan Dhan Yojana is aimed to ensure access to basic financial services for low income groups while the Pradhan Mantri Mudra Yojana scheme under the Micro Units Development and Refinance Agency is responsible for developing and refinancing micro enterprises by supporting financial institutions which lend to micro and small business entities engaged in manufacturing, trading and services.

⁹ Laku Pandai initiative promotes ‘branchless’ banking and financial services with the help of individuals and institutional agents, supported by mobile phones and IT facilities.

Invest in Mutual Funds, 'Let's Save in Gold' and 'Start Saving for Your Future' are being promoted to inculcate savings.

Malaysia. Over the recent decade, efforts such as the banking sector consolidation, Financial Sector Masterplan (2001–10) and Financial Sector Blue Print (FSBP, 2011–20) have significantly improved financial inclusion. The most recent of these – FSBP – has identified ten action plans under four broad strategic outcomes (innovative channels, innovative products and services, effective financial institutions and infrastructure, well informed and responsible underserved) which are currently being implemented. As part of these action plans, agent-based banking and advances in internet and mobile banking have greatly improved access to safe, reliable and affordable financial services especially in the rural areas while development financial institutions reforms, reducing banking transaction costs and fees for the vulnerable and setting up the office of the financial ombudsman for dispute resolution has helped boost overall inclusion efforts (Martínez, 2017). Additionally, a financial inclusion index for Malaysia has been developed by the Central Bank of Malaysia to track progress and impact of these efforts.

Myanmar. A financial sector development strategy along with a financial inclusion road map has been launched with the assistance of multilateral donors. Recommendations from the roadmap highlight the need for coordinated action by the government, private sector and development partners, working across institutions to address the various barriers to financial inclusion which amongst others are responding to the rapidly changing regulatory environment and the limited supervisory capacity (UNDCF, 2014). Some recent developments include enacting the Financial Institutions Law in 2016 to strengthen the overall financial sector legal, regulatory and supervisory framework (IMF Country Report No. 17/31). In addition, the Central Bank of Myanmar has taken important steps in establishing the regulatory framework for mobile financial services given the increasing use of mobile phones and point-of-sale devices, along with networks of small-scale agents, to offer basic financial services at greater convenience and lower cost than traditional banks.

Nepal. The Strategic Plan (2012 –16) of Nepal Rastra Bank prioritizes financial inclusion as part of its strategic vision. Various policies to improve financial inclusion such as mandating the opening of branches outside the capital with the provision of interest-free loans to facilitate this in underserved areas, licensing new microfinance institutions and providing them with low cost funds based on location and introducing branchless and mobile banking are already in place (Pant 2016; IMF Country Report No. 15/317). The final draft of the National Financial Literacy Policy is pending government approval.

Papua New Guinea. Building on the success of the National Financial Inclusion and Financial Literacy Strategy (2014-15) strategy, a second strategy was launched in 2016 to promote financial inclusion through shared public and private sector goals (IMF Country Report No. 15/319). Access to mobile services has been expanding and the newly implemented KATS system represents substantial progress in payment system development

and efficiency.¹⁰ The new credit union legislation will help to modernize the small but crucial sector, but still needs supporting regulations and guidelines. The authorities have also joined the Better Than Cash Alliance that accelerates the transition from cash to digital payments to reduce poverty and drive inclusive growth. In addition, with the support from PFIP, BIMA – an insurance provider – is now providing convenient, affordable life and hospitalization insurance over a mobile platform.¹¹ PFIP is also partnering with microfinance institution MiBank on a ‘pay-as-you-go’ solar energy kit loan pilot enabling access to cheap electricity and in the process introducing previously unbanked populations into the formal financial sector.

Solomon Islands. With the launch of the National Financial Inclusion Strategy 2011–2015 (NFIS1) in 2010, Solomon Islands became one of the first Pacific island countries to adopt a nationwide plan for financial inclusion (IMF Country Report No. 16/90). Notably, Solomon Islands was also the first country in the world to integrate financial inclusion targets for women.¹² NFIS1 sought to broaden financial inclusion on three fronts: digital financial services; financial; literacy; and community-based financial models. It saw the formation of the National Financial Inclusion Taskforce—spearheaded by the Central Bank of Solomon Islands and comprising representatives of the government, commercial banks, the private sector and NGOs—to facilitate coordination of financial inclusion efforts among key stakeholders. Under NFIS1, Solomon Islands also collected demand-side data on financial inclusion to better inform policy efforts. Mobile banking was introduced in 2013 and contributed towards integrating 78,000 new individuals to the formal financial sector under NFIS1. As at end-2016, the number of mobile banking transactions in Solomon Islands relative to the adult population was the highest among Pacific island countries. NFIS1 was succeeded by National Financial Inclusion Strategy 2016–2020 (NFIS2), which focuses on six key priority areas: digital financial channels; micro-, small and medium enterprises; women, youth and rural adults; household financial resilience; financial empowerment; and effective stakeholder coordination based on sound data.

Vietnam. The financial system remains dominated by the state and wide-ranging reforms for deeper financial markets and institutions are needed to boost access to credit, increase financial sector resilience and efficiency of investment (Pazarbasioglu, 2016: IMF Country Report No. 17/191). Surveys have highlighted that access to credit was the main business environment constraint for the SMEs and access to financial institutions via branches and ATMs is low per capita.¹³ Starting 2016, the State Bank of Vietnam has been assigned to develop a national strategy on financial inclusion focusing on enhancing the legal

¹⁰ Kina Automated Transfer System (KATS) allows checks to now be processed electronically as part of a larger batch which is automatically processed and settled between banks. The previous manual processing of checks is now replaced with less processing time.

¹¹ Pacific Financial Inclusion Programme (PFIP) launched in 2008 is jointly administered by the UNCDF and the UNDP and receives funding from the Australian Government, the European Union and the New Zealand Government. PFIP operates in Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu and works on improving access to safe and formal financial services in these countries.

¹² Solomon Islands National Financial Inclusion Strategy II (NFIS2) 2016–2020

¹³ The World Bank, Enterprise Survey, Vietnam 2015.

framework, improving financial technology with the aim to diversify financial products and services, and imparting financial education. Specifically, the strategy is going to focus on digital finance, boosting financial services to rural and agricultural communities and minorities, strengthening consumer protection and enhancing financial education.

Annex II. Data Sources

Annual Report on Exchange Arrangements and Exchange Restrictions (International Monetary Fund) (<http://www.elibraryareaer.imf.org/Pages/Home.aspx>)

Consolidated Banking Statistics (Bank of International Settlements) - (<http://www.bis.org/statistics/consstats.htm>)

Enterprise Surveys (World Bank) – (<http://www.enterprisesurveys.org/>)

Financial Access Survey (International Monetary Fund) - (<http://data.imf.org/FAS>)

Financial Development and Structure Dataset (World Bank) – (<http://www.worldbank.org/en/publication/gfdr/data/financial-structure-database>)

Global Competitiveness Index (World Economic Forum) – (<http://reports.weforum.org/global-competitiveness-index/#topic=data>)

Global Findex (both country level data and individual level microdata) - (<http://www.worldbank.org/en/programs/globalindex>)

Global Financial Development Database (World Bank) - (<http://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database>)

Global Microscope (Economist Intelligence Unit) – (http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=Microscope2016)

International Financial Statistics (International Monetary Fund) – (<http://data.imf.org/IFS>)

Information Notice System (International Monetary Fund)

Public Sector Ownership Data - Cull et al. IMF Working Paper No. 17/60: *Bank Ownership: Trends and Implications*

The Standardized World Income Inequality Database (Solt, F. 2016) –(<http://fsolt.org/swiid/>)

World Economic Outlook (International Monetary Fund) – (<http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx>)

World Development Indicators (World Bank) – (<http://data.worldbank.org/data-catalog/world-development-indicators>)

World Governance Indicators (World Bank) – (<http://info.worldbank.org/governance/wgi/#home>)

Annex III. Economy Groupings 1/

Advanced Economies	Emerging Market Developing Economies	Low Income Developing Countries
Australia	Albania	Macedonia, FYR
Austria	Algeria	Malaysia
Belgium	Angola	Maldives
Canada	Anguilla	Marshall Islands
Hong Kong, S.A.R.	Antigua & Barbuda	Mauritius
Macau, S.A.R.	Argentina	Mexico
Cyprus	Armenia	Micronesia
Czech Republic	Azerbaijan	Mongolia
Denmark	Bahamas, The	Montenegro
Estonia	Bahrain	Montserrat
Euro Area	Barbados	Morocco
Finland	Belarus	Namibia
France	Belize	Nauru
Germany	Bolivia	Oman
Greece	Bosnia	Pakistan
Iceland	Botswana	Palau
Ireland	Brazil	Panama
Israel	Brunei	Paraguay
Italy	Bulgaria	Peru
Japan	Cape Verde	Philippines
Korea, Republic of	Chile	Poland
Latvia	China	Qatar
Lithuania	Colombia	Romania
Luxembourg	Costa Rica	Russian Federation
Malta	Croatia	Samoa
Netherlands	Dominica	Saudi Arabia
New Zealand	Dominican Republic	Serbia
Norway	Ecuador	Seychelles
Portugal	Egypt	South Africa
San Marino	El Salvador	Sri Lanka
Singapore	Equatorial Guinea	St. Kitts and Nevis
Slovak Republic	Fiji	St. Lucia
Slovenia	Gabon	St. Vincent
Spain	Georgia	Suriname
Sweden	Grenada	Swaziland
Switzerland	Guatemala	Syria
Taiwan, PoC.	Guyana	Thailand
United Kingdom	Hungary	Timor-Leste
United States	India	Tokelau
	Indonesia	Tonga
	Iran	Trinidad & Tobago
	Iraq	Tunisia
	Jamaica	Turkey
	Jordan	Tuvalu
	Kazakhstan	Ukraine
	Kiribati	UAE
	Kosovo	Uruguay
	Kuwait	Vanuatu
	Lebanon	Venezuela
	Libya	West Bank & Gaza
		Afghanistan
		Bangladesh
		Benin
		Bhutan
		Burkina Faso
		Burundi
		Cambodia
		Cameroon
		CAR
		Chad
		Comoros
		D.R.C.
		Congo Rep.
		Côte d'Ivoire
		Djibouti
		Eritrea
		Ethiopia
		Gambia, The
		Ghana
		Guinea
		Guinea-Bissau
		Haiti
		Honduras
		Kenya
		Kyrgyz Republic
		Laos P.D.R.
		Lesotho
		Liberia
		Madagascar
		Malawi
		Mali
		Mauritania
		Moldova
		Mozambique
		Myanmar
		Nepal
		Nicaragua
		Niger
		Nigeria
		PNG
		Rwanda
		São Tomé
		Senegal
		Sierra Leone
		Solomon Islands
		South Sudan
		Somalia
		Sudan
		Tajikistan
		Tanzania
		Togo
		Uganda
		Uzbekistan
		Vietnam
		Yemen
		Zambia
		Zimbabwe

1/ Classification is based on IMF's *World Economic Outlook (Fall 2018)* and *Macroeconomic Developments and Prospects in Low-Income Developing Countries (2018)*.

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