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The Nature and Landscape of Financial Inclusion in Asia

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Abstract: *This paper presents an examination of the key impacts of financial inclusion on economic prosperity and wellbeing, and on other development indicators such as those pertaining to health, education, gender, and social capital for Asia. It attempts to answer specific questions such as: What are the main individual dimensions of financial inclusion? Which of those are more effective at capturing the salient characteristics of financial inclusion? Does financial inclusion differ by gender, education, poverty, and other development outcomes (i.e. are there 'gaps'?)? What is the role of policy? Might there be particular policies relating to financial inclusion that are more effective than others in addressing development outcomes? We find that the growth in financial inclusion has mainly occurred in the South Asian, CLMV, and ASEAN5 groups rather than in the more developed plus3 and ANZ nations, and that this occurs with both the traditional indicators (ATMs, branches), as well as in areas of fintech and digital finance. We also find systemic development gaps in financial inclusion – particularly between poor and non-poor segments of society, and rural vs urban populations.*

Keywords: financial inclusion, Asia
JEL Code: G20, O16, O57

1. Introduction

In a relatively short period, financial inclusion has become a dominant issue in the areas of financial development, policy, and inclusive growth. Globally, in 2017, 69% of adults had a bank account, an increase from 51% in 2011. The number of automatic teller machines (ATMs) per 100,000 adults globally increased from 41.6 in 2011 to 53.5 in 2017.

Despite substantial gains, barriers to complete financial inclusion exist. Globally, in 2017, a significant number of adults did not have access to a bank account because financial services were too expensive (18%), or because they were too far away (13%). Despite advances in the degree to which financial services were provided digitally and through the Internet, only 25% of people aged 15 years and above used a mobile phone to access a bank account, 22% used the Internet to pay bills, and 4% was the take-up for mobile money services.

The objective of promoting greater levels of financial inclusion has been embraced by a great many nations across the development spectrum. The World Bank considers financial inclusion as an enabler for at least 7 of the 17 United Nations' sustainable development goals (SDGs). These goals include ending extreme poverty (SDG 1), where access to financial services can assist with investment in education or business. If these investments are made part of planting and harvesting, higher yields may result – contributing to reducing hunger (SDG 2), which presumably would positively impact good health and well-being (SDG 3). Increasing financial inclusion would help the SDG of gender equality (SDG 5) by offering women greater control over their financial arrangements. Greater access to credit may contribute to gains in business innovation (SDG 9), and evidence suggests that financial inclusion reduced inequality within countries (SDG 10) (Park and Mercado, 2016). This paper presents evidence on the impact of financial inclusion on economic growth (SDG 8).

A recent work by the Consultative Group to Assist the Poor (Klapper et al., 2016) indicates that more SDGs can be potentially impacted by financial inclusion. For example, SDG 4, relating to quality education, can be attained through improvements in savings behaviour brought about by elevating levels of financial inclusion. Work by Prina (2015) and Chiapa et al. (2016) for Nepal supports this

view, as does that of Karlan et al. (2014) for developing economies in Asia and Latin America. SDGs 6 and 7 – on water and sanitation and energy infrastructure – are improved by developments in digital financial services. Digital financial services can lower transaction costs, increase flexibility, and facilitate payments that would otherwise be prohibitive. Finally, SDG 9 on promoting innovation is made achievable by easier access to credit that can be brought about by higher levels of financial inclusion.

Financial inclusion and its associated policy implications are an important issue for the Association of Southeast Asian Nations (ASEAN). They are explicitly presented as a key element (element A4) of the ASEAN Economic Community Blueprint 2025 and is also related to some of the strategic measures of the ASEAN Socio-Cultural Community (ASCC) Blueprint 2025, namely, measure A2 (empowering people and strengthening institutions), measure B (inclusivity), B1 (reducing barriers to financial products), and B2 (equitable access to financial products).

A final indication of the importance of this topic is that, to 2017, more than 60 countries had implemented or were seeking to implement national strategies for financial inclusion. These strategies were designed to expand opportunities for financial inclusion through policies and regulations that support financial development, the provision of digital financial services and financial literacy whilst being mindful of issues around consumer protection and the stability of the financial sector (World Bank, 2017b).

So, what is financial inclusion? Whilst a degree of consensus on the broad definitions of financial inclusion exists, those factors that constitute financial inclusion are not static. In broad terms, it refers to the ability of consumers and firms to utilise financial services (Allen et al., 2016). The World Bank adds an efficiency characteristic in defining it as '… access to useful and affordable financial products…'.[1] The EIU (2018) provides that financial inclusion should involve '…access to a full suite of quality financial services, … at affordable prices … convenient (provided with) respect and dignity'.[2]

[1] www.worldbank.org/en/topic/financialinclusion
[2] www.centerforfinancialinclusion.org/

Financial inclusion covers many categories and a typology is perhaps required to help organise its multifaceted nature. Some literature have attempted this exercise, and what emerges is that several individual measures of financial inclusion (indicators) can be grouped into categories (dimensions). A commonly used grouping of indicators is that employed by the Alliance for Financial Inclusion (AFI) and adopted by the G20 through the Global Partnership for Financial Inclusion.[3] The Alliance for Financial Inclusion categorises indicators into three main dimensions – access, usage, and quality. Access refers to the availability of financial services in terms of physical proximity and includes indicators such as number of ATMs per 100,000 adults; number of branches per 100,000 adults; and number of mobile agent outlets per 100,000 adults. Usage refers to the regularity, frequency, and duration of use of financial services, and includes the percentage of adults with a bank account and those who saved (or borrowed) from a financial institution. Quality refers to the design of financial services to the satisfaction of the customer. Indicators include the use of savings for emergency funds and barriers to financial inclusion (e.g. reasons for not having an account). Other contributors include Sarma (2012), for instance, who grouped indicators into penetration, availability, and usage. Hall (2014) grouped individual measures into financial participation, financial capability, and financial well-being whilst Camara and Tuesta (2014) employed usage, access, and barriers as dimensions.

This paper then examines the key impacts of financial inclusion on economic prosperity and well-being and other development indicators, such as those pertaining to health, education, gender, and social capital. It attempts to answer specific questions such as: What are the main individual dimensions of financial inclusion? Which are more effective at capturing the salient characteristics of financial inclusion? Financial inclusion landscapes vary significantly across countries. Thus, focusing on relatively few indicators is problematic as useful information relating to specific countries may be missed. But using too many is also difficult as it undermines effective interpretation of financial inclusion as it hampers the researcher's ability to isolate dominant indicators, and those which may drive significant policy implications.

[3] https://databank.worldbank.org/data/download/g20fidata/Indicators_note_formatted.pdf

Other questions in this paper relate to the possible impacts of financial inclusion. For instance, is there a link between financial inclusion and outcomes such as growth, income inequality, health, education, and gender outcomes? Does financial inclusion differ by gender, education, poverty, and other development outcomes (i.e. are there 'gaps'?)? What is the role of policy? Might there be particular policies relating to financial inclusion that are more effective than others in addressing development outcomes? The importance of examining the effects of financial inclusion is emphasised by Beck et al. (2018) who suggested the following questions for further research into financial inclusion:

(i) As financial inclusion increases, what are the financial and real consequences?

(ii) Whilst the literature suggests gains from financial inclusion, there is yet no clear road map for policymakers. What are the priorities for policymakers to further promote financial inclusion and maximise its real effects?

This paper is structured as follows. The next section presents an overview of recent important literature. Section 3 presents an analysis of the nature of financial inclusion in the region – by subregional categories. Section 4 examines the state of financial inclusion regulation and policy. Section 5 presents some key development gaps and Section 6 concludes.

2. Brief Comments on the Existing Literature

In broad terms, the literature on financial inclusion has proceeded down three paths – measurement, determinants, and effects. Below is a broad and brief summary of recent contributions.

The first strand of the literature has examined measurement issues pertaining to financial inclusion. Kempson et al. (2004) suggested that a good measure should incorporate as many dimensions as are practical, be simple to calculate, and be applied broadly and comparably across countries. As such, many academic contributions have employed various techniques to try to reduce the dimensionality of financial inclusion. As mentioned above, Sarma (2012), Hall (2014), and Camara

and Tuesta (2014) have attempted to group indicators by category. This helps add meaning to the derived 'indices' based on data reduction.

There are many ways this has been done. Sarma (2008) used a wide range of indicators combined into single country/single year measures by applying normalised inverse Euclidian distances. Park and Mercado (2016) used this method but Park and Mercado (2018a) utilised principal components analysis to allow the weights attributed to each indicator to be determined endogenously. Mialou et al. (2017) used factor analysis (for the same reasons as Park and Mercado, 2016) to combine various indicators from the International Monetary Fund (IMF) Financial Access Survey to form the financial institutions access index.[4] Different combinations of measures are used in different papers: Wang and Guan (2018) used two measures – access and usage – but use coefficients of variation to derive the weights whilst Kim et al. (2018) used three measures (penetration, usage, and availability) and equal weights.

A second strand examines the determinants of financial inclusion. A series of papers have focused on macro/aggregate determinants. Sarma and Pais (2011), using Sarma's 2008 index, examined the determinants of financial inclusion for 49 countries. They found that per capita gross domestic product (GDP) and adult literacy levels increase financial inclusion whilst rural population and inequality reduce the level of financial inclusion. Infrastructure is also found to be important in increasing financial inclusion (e.g. paved roads, phones, the Internet). Wang and Guan (2018) presented an analysis using Findex aggregate data and spatial techniques. They found that income, education, and use of communications equipment are important factors that explain the level of financial inclusion, whilst financial depth and banking health status are the main determinants.

More recent work has examined the micro-level determinants. Fungacova and Weill (2015) and Zins and Weill (2016) examined the determinants of financial inclusion for China and a set of African countries (respectively) using the World Bank Findex data for 2011 (World Bank, 2011). Both studies reported similar results, namely, being male, older, educated, and having higher incomes are all associated with higher financial inclusion, using a range of indicators. Allen et al.

[4] www.data.imf.org/FAS

(2016) examined factors underpinning a variety of inclusion indicators. It finds that lower transaction costs, the existence of legal rights, political stability, and physical proximity to financial institutions all increase the level of financial inclusion. Chakravarty and Pal (2013) investigated policy factors that may serve as determinants of financial inclusion. They examined the effect of banking policies for India using a long time series. Whilst social banking policies have assisted in developing financial inclusion across states in India, pro-market financial sector reform has adversely affected the pace of the development of financial inclusion.

Several recent studies have examined the effects of financial inclusion. Beginning with macro-level work, Rasheed et al. (2016), using data for 97 countries for 2004–2012, examined the impact of the number of ATMs and branches on the development of the banking sector (specifically, domestic credit to GDP and stocks traded turnover ratio to GDP). The reported impacts were generally positive and significant. Kim et al. (2018) examined the impact of (five indicators of) financial inclusion on per capita GDP for 55 Organisation of Islamic Cooperation countries for 2004–2012. Subject to country differences, the effects were generally positive and significant. Park and Mercado (2016) investigated the impact of their financial inclusion index on income inequality, and they found that the index impacts inequality negatively.

Cavoli et al. (2019a) examined the impact of financial inclusion (the IMF financial institutions access index composite measure, as well as individual measures) on output volatility. The effect is positive and significant regardless of the measure of inclusion employed, and is stronger for countries with lower incomes, and when interacted with credit. This shows that the impacts of financial inclusion are not all positive. On the policy side, Cavoli et al. (2019b) examined the effect of (different indicators of) financial inclusion on optimal interest rate–based monetary policy. Financial inclusion generally lowers the policy rate. The effect is stronger for access-based indicators and inflation-targeting regimes.

There is also a range of recent micro-based studies on the effects of financial inclusion. Chauvet and Jacolin (2017) assessed the effect of inclusion (loans, overdraft, and credit) on firm performance, controlling for bank concentration for over 55,000 firms in 79 countries. An increase in financial inclusion results in firm

growth, especially when bank concentration is low. Ahamed and Mallick (2019), using 2,635 banks in 86 countries, found that higher financial inclusion (using principal components analysis) results in greater bank stability (z-score). In an important study using data from China, Zhang and Posso (2019) examined the effect of a multidimensional index of financial inclusion on household income using least squares, quantile estimations, and propensity score–matching techniques. Employing household survey data (approximately 6,200 households) for China, this paper found that the effect is positive across all households. Swamy (2014) examined the effect of financial inclusion in poor Indian households for women compared to men. The paper found that men are favoured. Chiapa et al. (2016) examined the impact of poor women's access to a savings account on the educational attainment of children. Using data from a field experiment in Nepal, this paper found that access to savings can help overcome scarcity issues and help with educational expenditures.

An important strand of the literature also examines the relationships amongst indicators of financial inclusion. This allows us to ask the important questions of whether being financially included is itself a precondition for households and firms for further financial inclusion. Does financial inclusion exist in stages or types? Are there early stages or basic levels of financial inclusion which, if achieved, might contribute to the attainment of, and latter stages/more evolved and sophisticated, financial inclusion? Which indicators fall into these categories? This dichotomy can be viewed through the observation of differences between formal and informal finance. De Koker and Jentzsch (2013) examined the role of formal financial services in determining the level of engagement with both informal financial services and mobile financial services. The results indicated that increased levels of financial inclusion will not likely reduce the use of informal financial services – that is, people will continue to use informal services, despite being banked.

Whether or not to incorporate the informal sector into a formal financial system is an extremely important policy issue. Informal financial services are typically those that are less regulated or even unregulated where consumers conduct many of their financial transactions independently of the formal financial system.

This might involve financial transactions being conducted by savings groups and cooperatives that have carved out a niche, catering to specific groups of consumers.

There are two main points of view as to whether trying to (formally) financially include informal financial services makes for good policy. On one hand, it may bring about unintended negative consequences. The formal financial system is often heavily regulated, cumbersome, and inefficient such that policymakers risk introducing these inefficiencies into the informal sector and potentially driving consumers away completely (Swift Institute, 2019). On the other hand, through the existing networks and market knowledge gained by informal finance providers, linking the two may make the formal sector more efficient whilst being able to provide safety nets to vulnerable consumers (Sustainable and Inclusive DFS, 2018).

A related line of enquiry pertains to the possible existence of a causal relationship between developments in financial technology (fintech) and financial inclusion. Ouma et al. (2017) investigated the effect of access to mobile financial services on savings behaviour in Africa, using financial access survey data, and logit and least squares estimators. The effects were found to be positive. A similar, though more basic, study by the IMF (2018a) that examined the impact of a range of technology-related variables (e.g. Internet access and mobile phone activity) on basic financial inclusion indicators showed that a positive relationship generally exists between them. Interestingly, the effect of technology leapfrogging was also examined. Leapfrogging (measured by the ratio of mobile to fixed-line subscriptions) has a negative impact on traditional financial inclusion measures.

3. The Nature and Landscape of Financial Inclusion in Asia

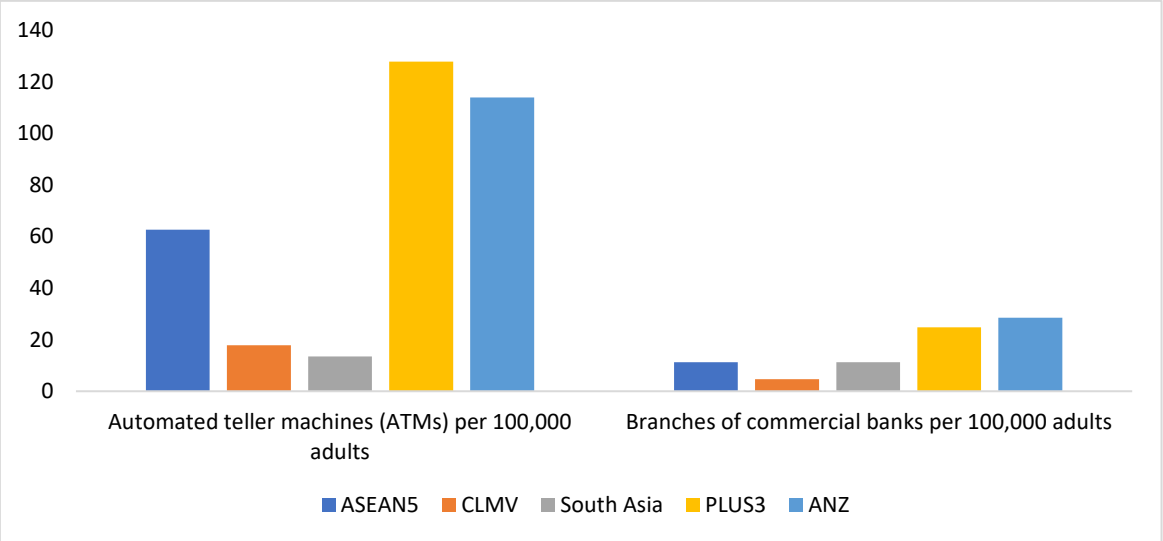
Using the dimensions of the Alliance for Financial Inclusion (access, usage, and quality) as a framing reference, this section presents some key stylised facts about the nature of financial inclusion, and the important policy and development implications for financial inclusion for ASEAN and Asia broadly. Rather than examine each country individually, this section mostly examines financial inclusion for countries belonging to the following regional groupings: ASEAN5 (Indonesia, Malaysia, the Philippines, Singapore, Thailand); CLMV (Cambodia, Lao PDR,

Myanmar, Viet Nam); Plus3 (China, the Republic of Korea, Japan); ANZ (Australia, New Zealand), and South Asia (Bangladesh, India, Pakistan, Sri Lanka).

Access

This section presents the two main access indicators – ATMs per 100,000 adults and branches of commercial banks per 100,000 adults. Both indicators are from the IMF Financial Access Survey (2018b).[5]

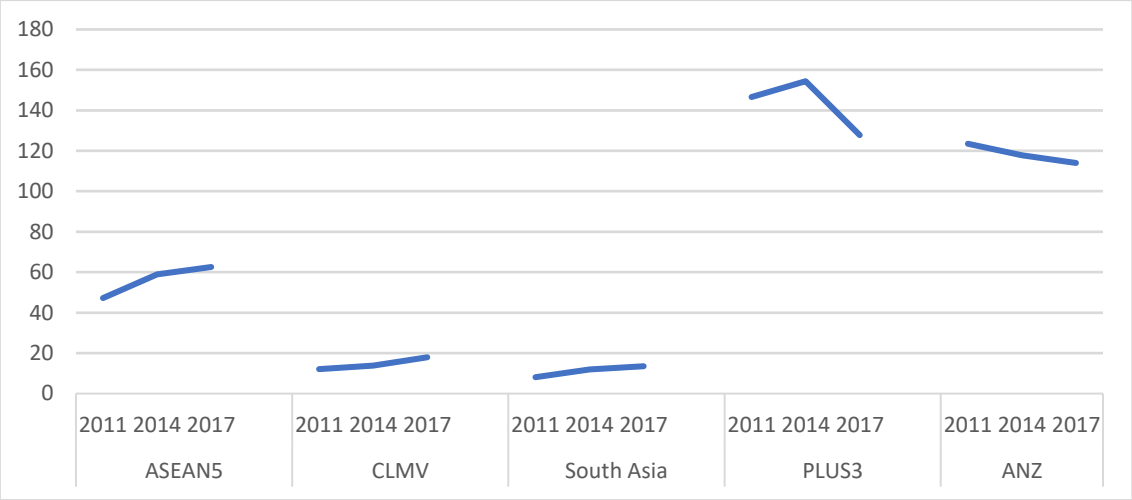
Figure 1: Automatic Teller Machines and Branches by Region, 2017



ANZ = Australia and New Zealand, ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam; Plus3 = China, Republic of Korea, Japan.Source: IMF (2018b).

Figure 1 shows that ATMs are more prominent generally. Further, the ASEAN Plus3 (China, the Republic of Korea, and Japan) and ANZ (Australia and New Zealand) present higher values – implying greater access – whilst South Asia and the CLMV have the lowest. Whilst expected, it is perhaps surprising to see just how low the ATM count is for South Asia and the CLMV, possibly indicating a lack of developed ATM infrastructure in those regions compared to a reliance on ATMs relative to branches for Plus3 and the ANZ.

Figure 2 ATMs Over Time per Region, per 100,000 Adults



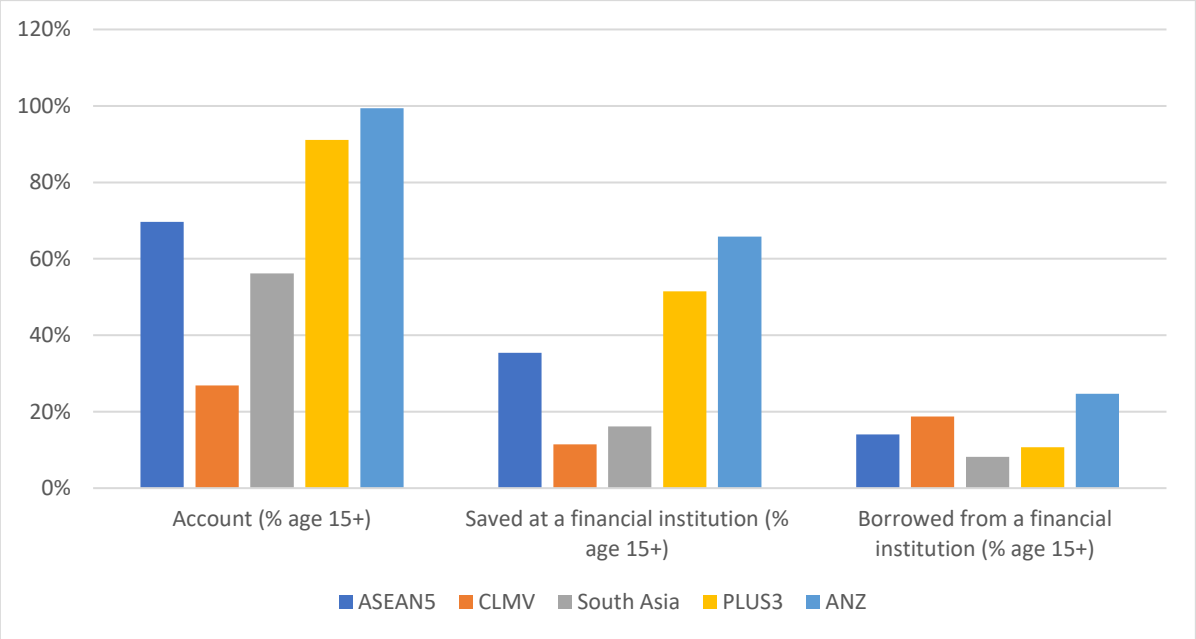
ANZ = Australia and New Zealand; ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; ATM = automatic teller machine; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam; Plus3 = China, Republic of Korea, Japan.
Source: IMF (2018b).

Figure 2 shows the change in ATMs over the three time points – 2011, 2014, and 2017. For ASEAN5, the CLMV, and South Asia, the numbers grew whilst for the Plus3 and the ANZ, ATM numbers fell. This perhaps suggests that these regimes had reached a natural upper bound in ATMs as other forms of payments technology render the use of, and need for, cash less important.

Usage

This section presents the three main usage indicators from the World Bank Global Findex database. They are the percentage of (survey) respondents aged 15+ years who (i) have an account with a financial institution, (ii) have saved at a financial institution, or (iii) have borrowed from a financial institution.

Figure 3: Financial Inclusion Usage Indicators, by Region (2017)

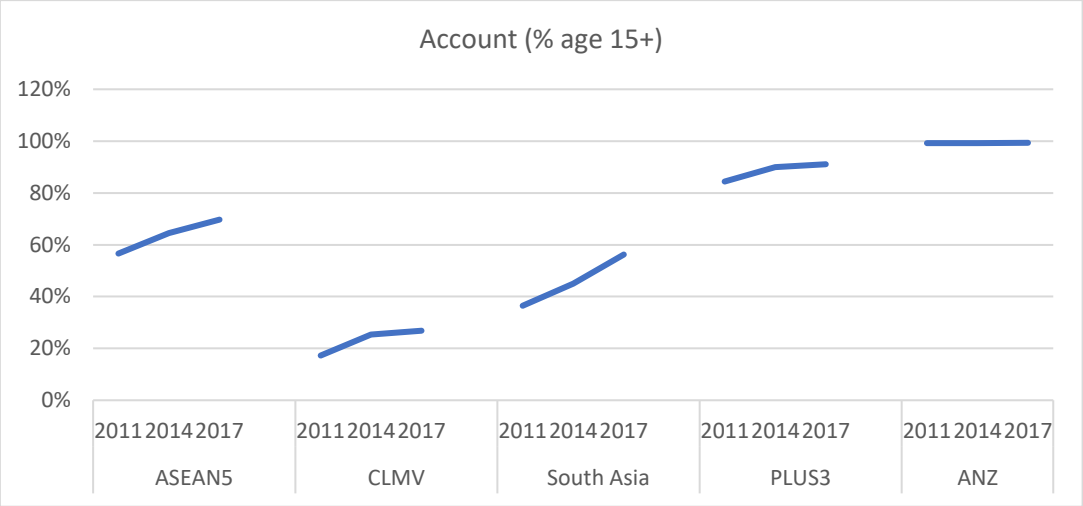


ANZ = Australia and New Zealand; ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam; Plus3 = China, Republic of Korea, Japan.
Source: World Bank (2017a).

Figure 3 shows that, as with Figure 1, the Plus3 and ANZ groups exhibit higher levels of usage generally. We also observe that saving is generally more prominent than borrowing, and that this is particularly acute for ASEAN5 and Plus3. The exception here is the CLMV where account ownership is relatively low, as is savings, but borrowing is relatively high.

If we observe the dynamics of the more prominent indicator, accounts, we see from Figure 4 that the number of accounts for ASEAN5, the CLMV, and South Asia is increasing over time, whereas those for the Plus3 and the ANZ have essentially plateaued, indicating a possible saturation point for accounts in those areas.

Figure 4: Possession of Bank Account over Time, by Region

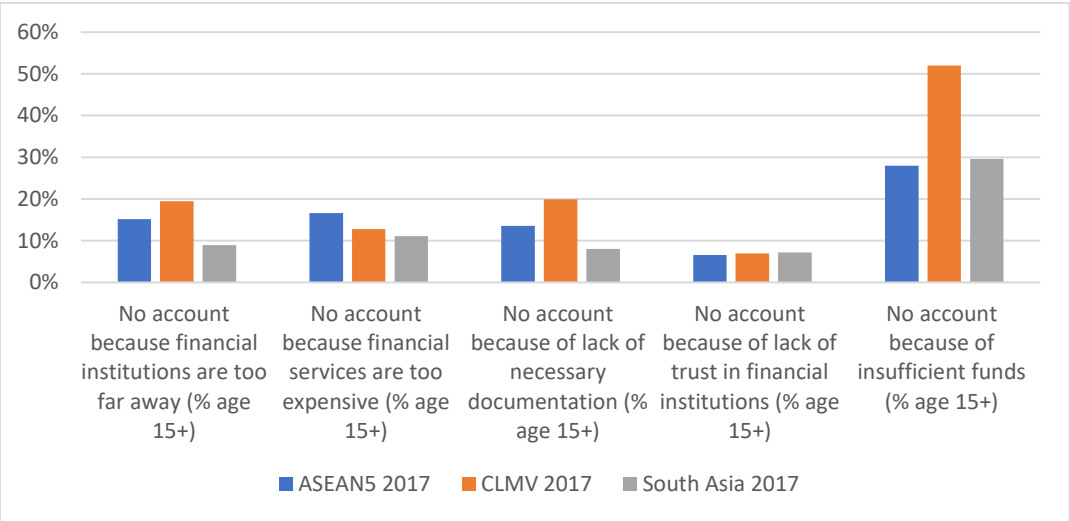


ANZ = Australia and New Zealand; ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam; Plus3 = China, Republic of Korea, Japan.
Source: World Bank (2011, 2014, 2017a).

Quality

Here, we examine some indicators that pertain to the quality of financial inclusion. These indicators include any barriers to financial inclusion on the part of households and firms.

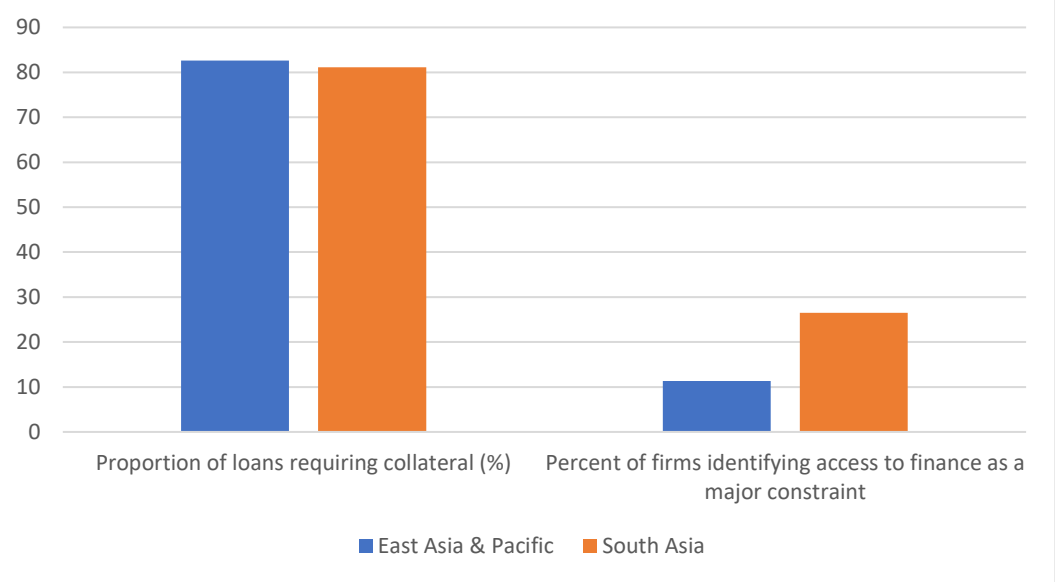
Figure 5: Reasons for Not Having an Account, by Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

Figure 5 shows that the most likely reason consumers do not possess an account is the lack of funds. Interestingly, there do not appear to exist any significant regional disparities across the candidate reasons, except possibly for the CLMV and lack of funds. The high score for lack of funds for the CLMV highlights a possible desire to borrow and, therefore, might be related to the relatively high degree of borrowing taking place in that region (Figure 5). Figure 6 examines the issues of barriers to financial inclusion from a firm perspective, using data from the World Bank Enterprise Survey (World Bank, 2017c). Whilst collateral requirements remain the same for firms in East Asia and the Pacific as it does for South Asia, the proportion of firms believing that access to finance is a significant constraint is materially higher for South Asia than for East Asia and the Pacific.

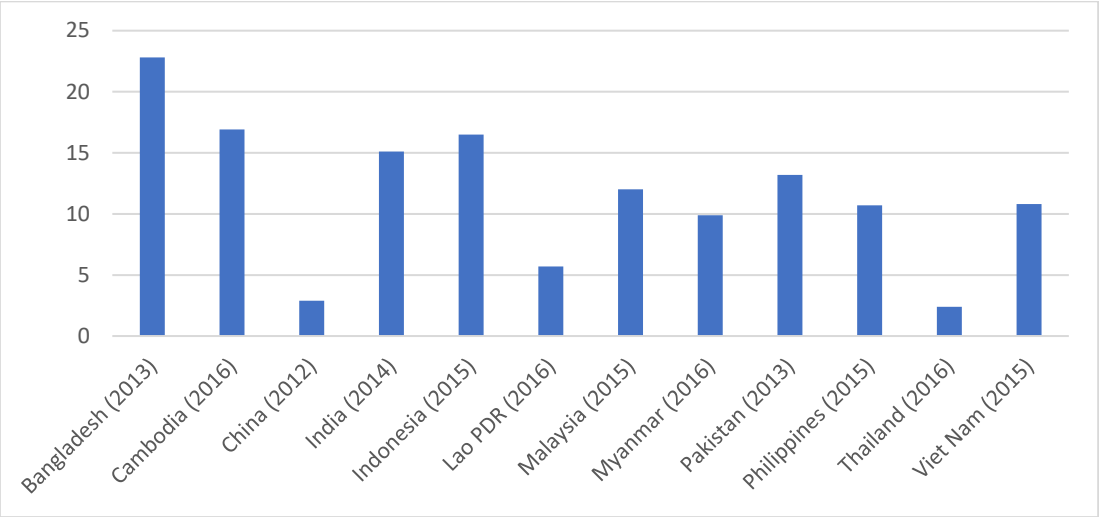
Figure 6: Barriers to Financial Inclusion for Firms



Source: World Bank (2017c).

Figure 7 provides the same information as the righthand side of Figure 6, the percentage of firms identifying access as a major constraint but for a selection of individual Asian nations. That South Asian nations occupy three of the top six positions here seems to confirm the notion that South Asian firms have greater difficulties with accessing finance.

Figure 7: Percentage of Firms Identifying Access to Finance as a Major Constraint



Source: World Bank (2017c).

4. Financial Inclusion Strategies and Policies

An important way through which financial inclusion impacts development outcomes and development policies is how instruments such as national financial inclusion strategies (NFIS), policies, and regulations have affected the extent of financial inclusion in the region. This section briefly overviews the extent and nature of NFIS instruments, policies, and regulations for ASEAN and Asia.

The World Bank financial inclusion and consumer protection survey (World Bank, 2017b) collected data on the extent to which countries are implementing NFIS. Globally, 84% of the countries surveyed possess at least one of the following policy frameworks to support financial inclusion:

- A comprehensive NFIS. This is a standalone comprehensive policy that captures many facets of financial inclusion.
- A more general financial sector strategy that contains one or more components pertaining to financial inclusion.
- A national development strategy that contains one or more components relating to financial inclusion.
- Narrower strategies that target specific objectives such as financial capability or financial literacy/education.

The survey reported that, of those countries surveyed, 63 (51%) either have implemented a standalone NFIS or have one under development. Further, 45 (39%) countries have implemented or are implementing a financial sector strategy (development strategy with a financial inclusion component). There are 33 countries with a microfinance strategy and 71 nations which have policies relating to financial education or financial capability.

Table 1 documents the extent to which these types of strategies have either been implemented or are under development for Asia and the Pacific countries.

The clear objective of the national strategies as they relate to financial inclusion is to positively impact the enabling environment for financial inclusion in a way that supports growth in financial inclusion and development, whilst maintaining consumer protection and financial sector stability. The Economist Intelligence Unit (EIU) Global Microscope 2018 report (EIU, 2018) presented rankings for 55 countries on the enabling environment for financial inclusion. This ranking is based on factors across five broad categories: (i) government and policy support, (ii) stability and integrity, (iii) products and outlets, (iv) consumer protection, and (v) infrastructure (EIU, 2018, p.7). Colombia, Peru, and Uruguay occupy the first three positions, respectively. Table 2 reports the ranks of the Asian countries sampled.

Table 1: National Financial Inclusion Strategies

	National Financial Inclusion Strategy		General Financial Sector Development Strategy with a Financial Inclusion Component		National Development Strategy with a Financial Inclusion Component		Microfinance Strategy		Financial Capability / Literacy / Education Strategy	
	Existing	In Development	Existing	In Development	Existing	In Development	Existing	In Development	Existing	In Development
Afghanistan	No	Yes	No	No	No	No	No	No	No	No
Australia	No	No	No	No	No	No	No	No	Yes	No
Bangladesh	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes
Bhutan	No	Yes	Yes	No	No	No	No	No	No	Yes
Cambodia	No	Yes	Yes	No	No	No	Yes	No	No	No
China	Yes	No	No	Yes	Yes	No	No	No	No	Yes
Hong Kong SAR, China	No	No	No	No	No	No	No	No	Yes	No
India	No	Yes	No	No	No	No	No	No	Yes	No
Indonesia	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No
Japan	No	No	Yes	No	No	No	No	No	Yes	No
Jordan	No	Yes	No	No	No	No	Yes	No	No	No
Korea, Republic of	Yes	No	No	No	No	No	Yes	No	Yes	No
Malaysia	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Myanmar	No	Yes	No	Yes	No	Yes	No	No	No	Yes
New Zealand	No	No	No	No	No	No	No	No	Yes	No
Pakistan	Yes	No	No	No	No	No	No	No	No	No
Philippines	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes
Sri Lanka	No	No	No	No	No	No	No	No	No	No
Thailand	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes
Viet Nam	No	Yes	No	No	Yes	No	Yes	No	No	No

Source: World Bank (2017b).

Table 2: Enabling Environment for Financial Inclusion, Asia

Country	Rank
India	= 4
Philippines	= 4
Indonesia	7
China	13
Thailand	= 16
Pakistan	= 21
Sri Lanka	26
Viet Nam	= 37
Bangladesh	= 40
Cambodia	= 43
Myanmar	= 51

Note: These are ordered by rank.
The '=' refers to the fact that a county shares a ranking with another in the survey.
Source: EIU 2018.

A popular vehicle through which governments are involved in promoting financial inclusion is via financial education and financial literacy programmes. Tables 1.3 and 1.4 reveal the extent to which financial education and financial literacy programmes exist in Asian countries. Table 3 presents the degree to which any agency is responsible for leading and/or coordinating financial education policy and programmes. Mostly, at least one agency is involved in this process – the exceptions being Afghanistan, Bangladesh, Pakistan, and Viet Nam.

Table 3: Agencies Involved in Financial Education Programmes

	Institutional Arrangements for Leading and/or Coordinating Financial Education			
	Single agency	Multiple agencies	Other	No agency
Afghanistan	No	No	No	Yes
Australia	Yes	No	No	No
Bangladesh	No	No	No	Yes
Bhutan	Yes	No	No	No
Cambodia	No	Yes	No	No
China	No	Yes	No	No
Hong Kong SAR, China	Yes	No	No	No
India	Yes	No	No	No
Indonesia	Yes	No	No	No
Japan	No	Yes	No	No
Jordan	Yes	No	No	No
Korea, Republic of	No	Yes	No	No
Malaysia	Yes	No	No	No
Myanmar	No	Yes	No	No
New Zealand	No	Yes	No	No
Pakistan	No	No	No	Yes
Philippines	No	Yes	No	No
Sri Lanka	Yes	No	No	No
Thailand	No	Yes	No	No
Viet Nam	No	No	No	Yes

Source: World Bank (2017b).

Table 4 shows at which education levels financial education is included as a topic in public school curricula, either current or planned. Except for those countries for which no data is available, there is no country where some degree of financial education does not exist at some level within the public education system.

Table 4: Financial Education in Schools and Universities

	Education Levels in which Financial Education is Included in the Curriculum			
	Primary	Junior secondary	Senior secondary	University level
Afghanistan				
Australia	Yes	Yes	Yes	No
Bangladesh	Yes	Yes	No	No
Bhutan				
Cambodia	Yes	No	No	No
China	Yes	Yes	Yes	Yes
Hong Kong SAR, China	Yes	Yes	Yes	No
India	No	Yes	Yes	No
Indonesia	Yes	Yes	Yes	Yes
Japan	Yes	Yes	Yes	No
Jordan	No	Yes	Yes	No
Korea, Republic of	Yes	Yes	Yes	Yes
Malaysia	Yes	Yes	Yes	No
Myanmar				
New Zealand	Yes	Yes	Yes	No
Pakistan				
Philippines	Yes	No	No	No
Sri Lanka	No	Yes	Yes	Yes
Thailand	Yes	Yes	Yes	Yes
Viet Nam				

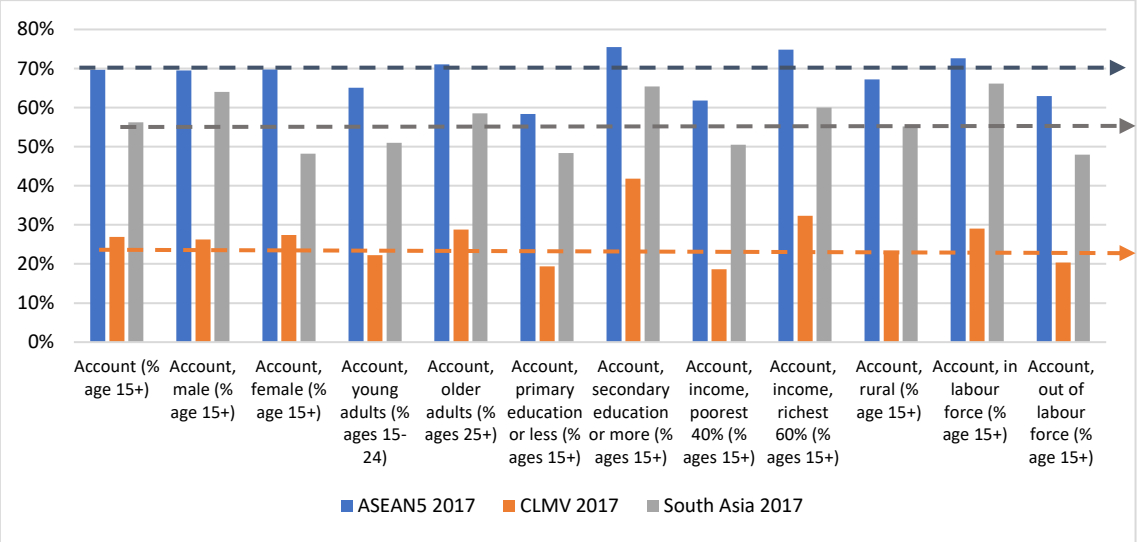
Source: World Bank (2017b).

5. Gaps in Financial Inclusion

This section examines some of the key relationships between financial inclusion and important development considerations such as those pertaining to gender, education, poverty, health, and rural vs urban populations. Particular attention will be paid to any 'gaps' that might exist in the level of financial inclusion based on those considerations. This is important for two reasons: First, it serves to motivate the work done on the effects of financial inclusion on income, education, health, and poverty outcomes. The second reason is that these gaps present opportunities for regulators and policymakers to employ strategies with financial inclusion that may impact development outcomes such that the SDGs of the United Nations can be adequately addressed.

We begin by examining the percentage of the adult population in possession of an account in a financial institution. Figure 8 shows account ownership for ASEAN5, the CLMV, and South Asia and shows whether any differences in account usage exist based on some of the development characteristics listed above. This figure and the others like it in this paper are presented in a certain way and summarise a great deal of information. The dotted line is configured to represent the baseline – the percentage of all adults with an account – for each region. From this, we can assess the difference between this value and the proportion of account holders for any specific characteristics (women, rural, poor, low education). We can also evaluate the account holders per specific characteristic across the three regional groups to allow for interregional comparison.

Figure 8: Account Holders by Region, 2017



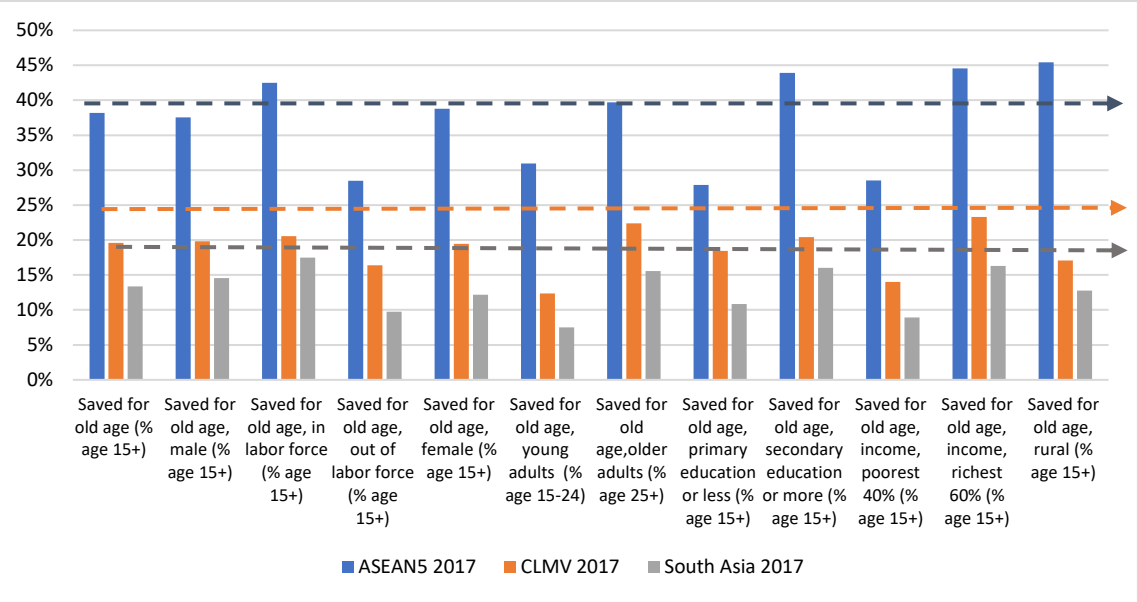
ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

Account ownership for the CLMV is materially lower than for the other regions examined. This backs up the analysis conducted above. The regional gap does not appear to differ significantly across the different characteristics – an indication perhaps that not one specific issue warrants more concern from a development perspective than any of the others. However, when we examine the gaps that might exist within the region, we find that the percentage of account holders between males and females are quite even for ASEAN5 and the CLMV; however, a large gender gap exists in South Asia. As for the other characteristics, Figure 8 shows that a negligible rural gap for all regions exists and that the findings concerning the other characteristics seem to be what one might expect to find – i.e. account holders are more likely to be older, wealthier, more educated, and employed.

We can also observe consumers' savings behaviour by examining the degree to which households saved for significant household considerations such as for old age or education, and whether any regional differences or gaps across specific demographics exist. Figure 9 shows the percentage of adults who saved for old age. Whilst the ASEAN5 levels are considerably higher, as they are for account holders, it is South Asia rather than the CLMV that exhibits the lowest levels. Also, as with

account holders, no gender gap appears for ASEAN5 and the CLMV, whilst a small gap exists for South Asia. Young adults across all regions are not saving for old age nor are the poorer segments of the communities surveyed, or those not working – a significant wealth gap in existence here. Interestingly, the rural gap is positive for ASEAN5 (that is, it is higher than for the average for all adults) whilst the rural gap is negative for the CLMV.

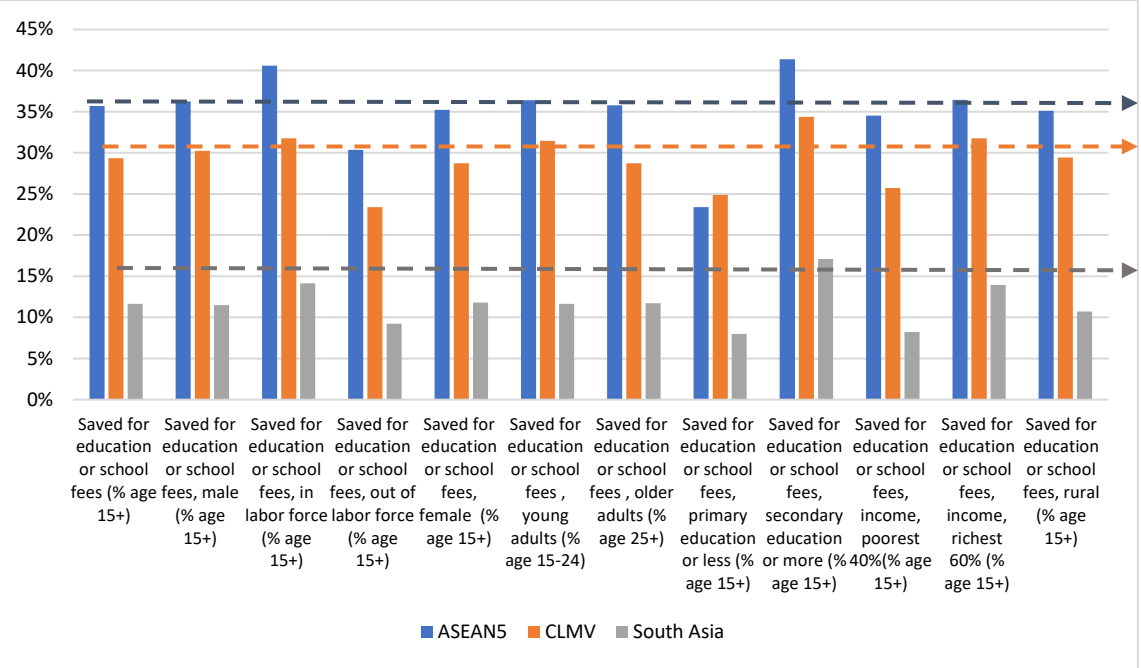
Figure 9: Saved for Old Age, by Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

Figure 10 presents the percentage of households saving for education and shows broadly similar results but for two main differences. The first is that the CLMV nations are much closer to ASEAN, thus revealing a significant general gap to South Asia. The second is that the gap for those out of the labour force and for the poor, whilst still negative, is much lower than for saving for old age. This suggests a value being placed on education as a development outcome.

Figure 10: Saved for Education, by Region (2014)



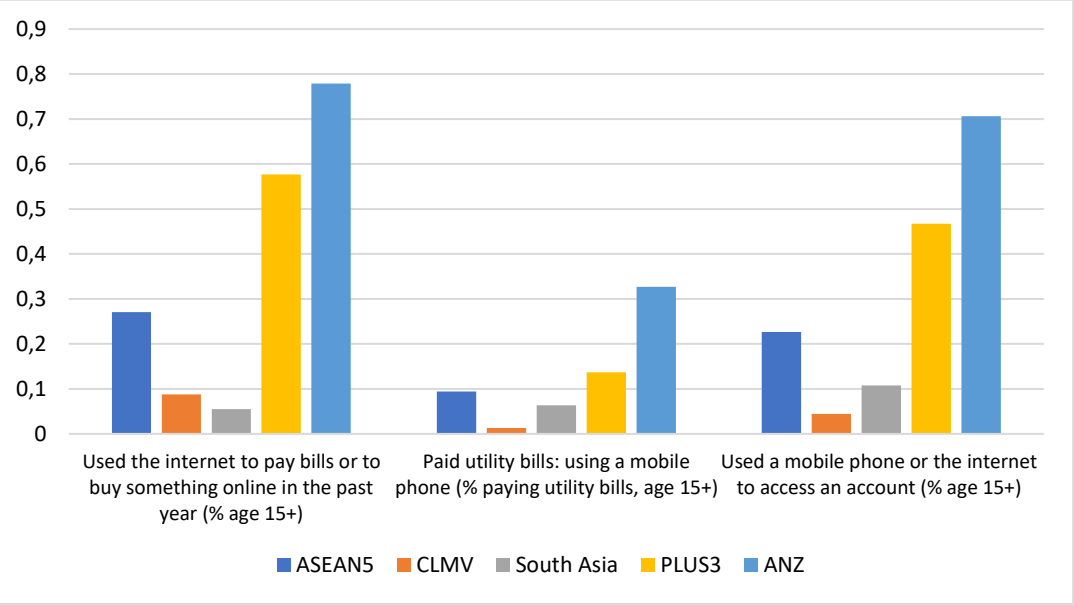
ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

6. Fintech and Financial Inclusion

Fintech – digital technologies as applied to finance – is playing an increasingly significant role in providing financial services and, therefore, in the degree to which communities are financially included. Here, we briefly examine the relationship between fintech and financial inclusion, and what impact this nexus might have on development outcomes such as gender, poverty, and the rural–urban divide. Fintech should not be viewed as a measure of financial inclusion in and of itself but as a means through which greater financial inclusion might be achieved. Fintech initiatives, such as mobile payments and peer-to-peer borrowing and lending, have decreased the costs of providing financial services, thus allowing households and firms great capacity to access these services. In the same way as the Internet and mobile communications have facilitated the provision of digital financial services, these services should lead to higher levels of financial inclusion.

Figure 11 presents three indicators of the use of the Internet and mobile communications for the five regions that are analysed here. The indicators are broad measures of the extent to which financial technologies are supporting the access and use of financial services either for payments or for banking services. They are, respectively, the percentage of adults (15+ years) who used the Internet to buy something online in the last year, the percentage of adults who used a mobile phone to pay bills in that last year, and those who used a mobile phone or the Internet to access a bank account in the last year. The ANZ and Plus3 countries clearly have a greater capacity to provide digital financial services, whilst South Asia and the CLMV, the least. This is consistent with the earlier analysis of the more traditional inclusion indicators.

Figure 11: Internet Use, by Region (2017)

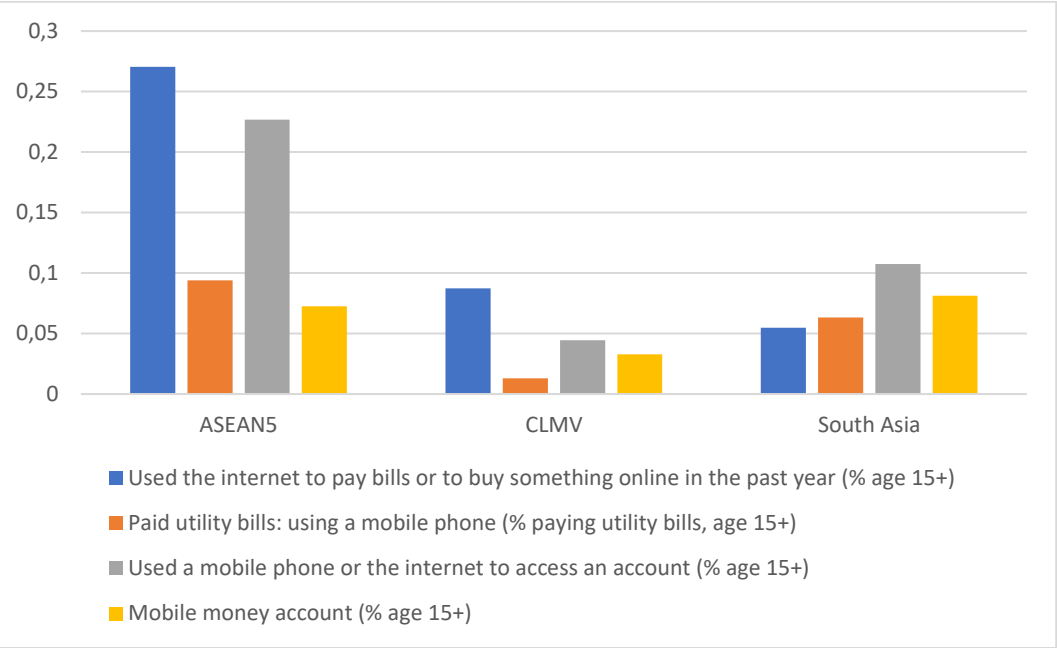


ANZ = Australia and New Zealand; ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam; Plus3 = China, Republic of Korea, Japan.
Source: World Bank (2017a).

Figure 12 focuses on ASEAN5, the CLMV, and South Asia and introduces a variable capturing what proportion of the population possesses mobile money accounts. Mobile money accounts are not tied to accounts with financial institutions but are accounts where funds are held in digital wallets as part of a mobile money

application. Interestingly, mobile money accounts are relatively more prominent in South Asia than in ASEAN5 and the CLMV.

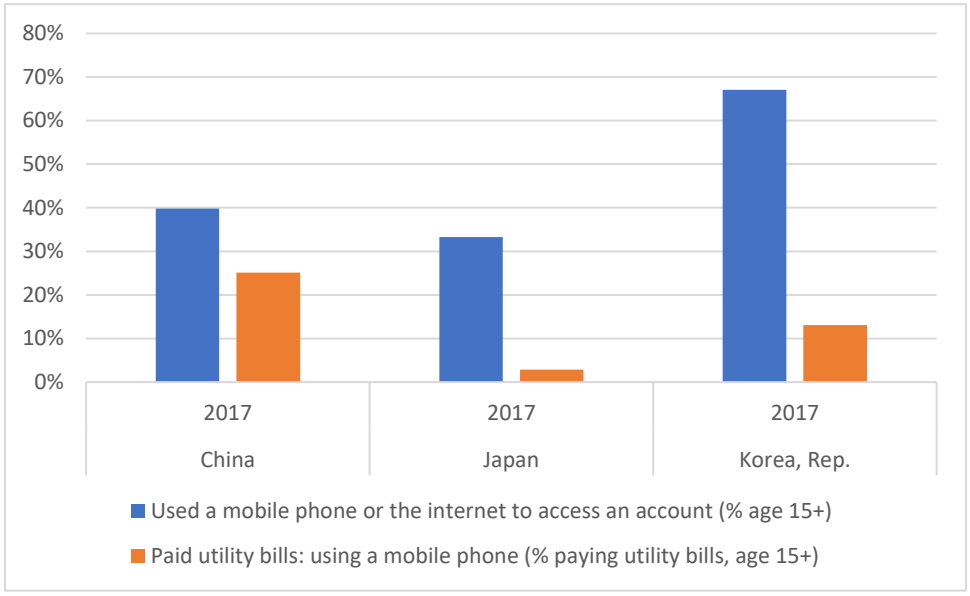
Figure 12: Internet Use and Mobile Money, by Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

Figure 13 provides another disconnect, in this instance, between the use of the Internet for banking versus for making payment. The Republic of Korea is higher in terms of the percentage of adults using the Internet to access existing accounts, whilst China leads (by double) the proportion of adults using the Internet to make purchases. This highlights China's leading position in the area of digital payments.

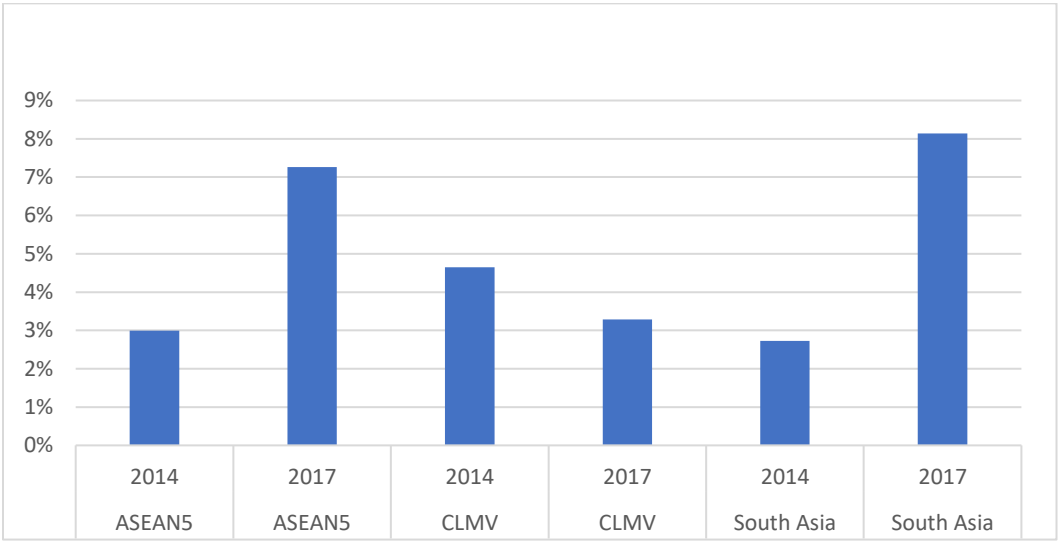
Figure 13: Use of Mobile Phones for Banking and Bills Payment



Source: World Bank (2017a).

Figure 14 shows the rate of growth in mobile money accounts between 2014 and 2017. These have clearly increased in ASEAN5 and South Asia (albeit from a low base) but have curiously decreased in the CLMV.

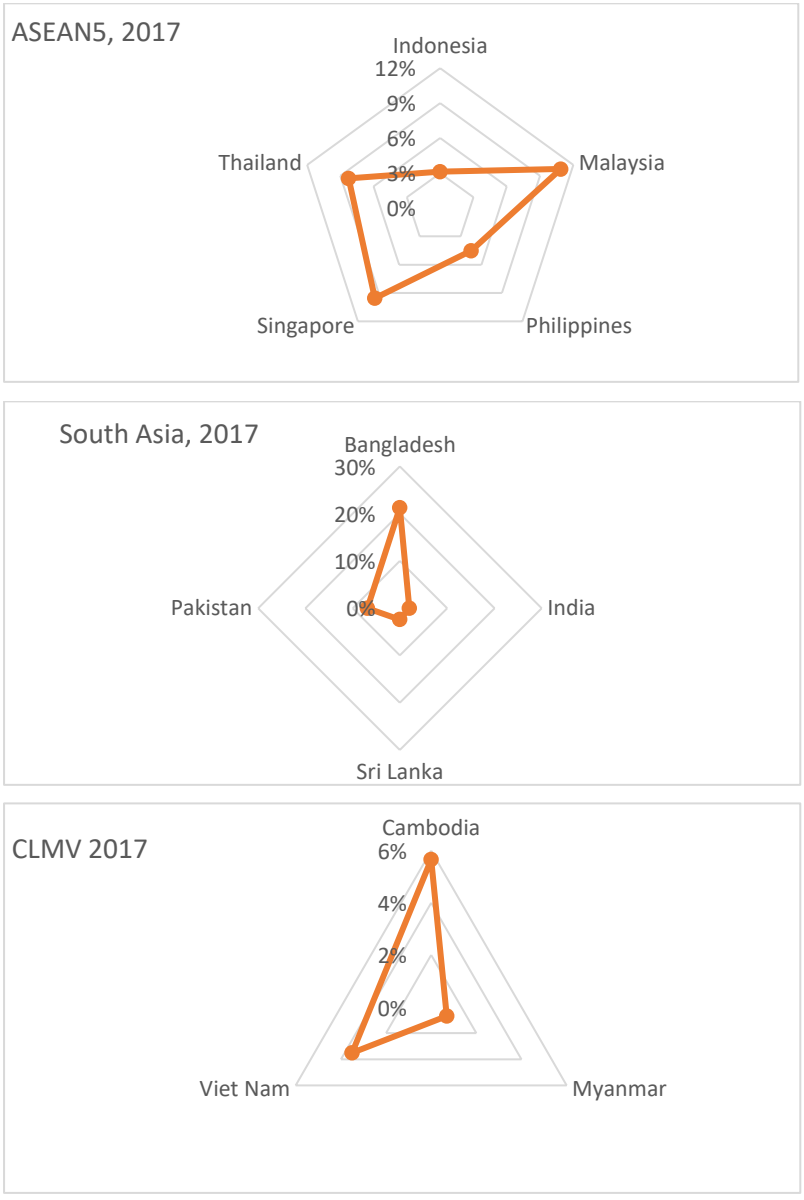
Figure 14: Mobile Money Account, by Region (2014 and 2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2014, 2017a).

Figure 15 reveals the mobile money account data for 2017 by country. The first panel reveals that Malaysia and Singapore possess a greater proportion of adult populations with mobile accounts. The second panel shows that the high level of mobile money account ownership (and indeed growth, though not shown here) in South Asia is being driven by Bangladesh. The third shows the mobile money accounts for the CLMV countries for which there is data. Cambodia records the highest proportions there.

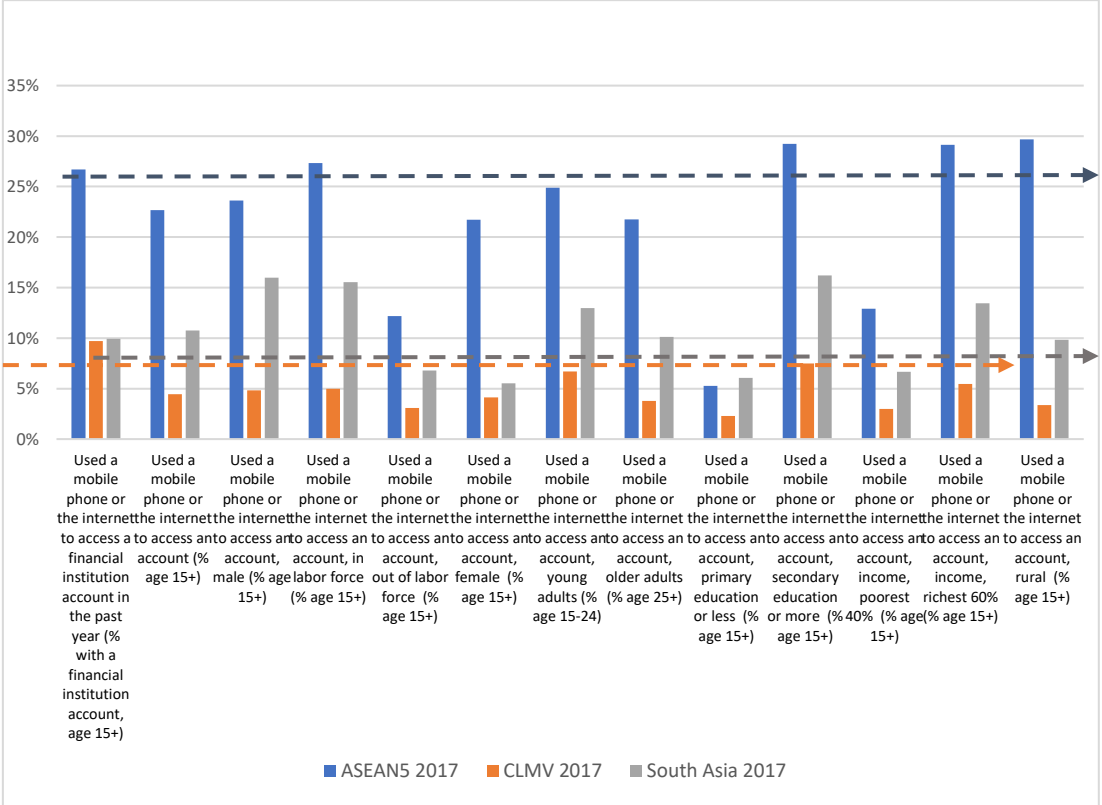
Figure 15: Mobile Money Account, by Country and Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand ;CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

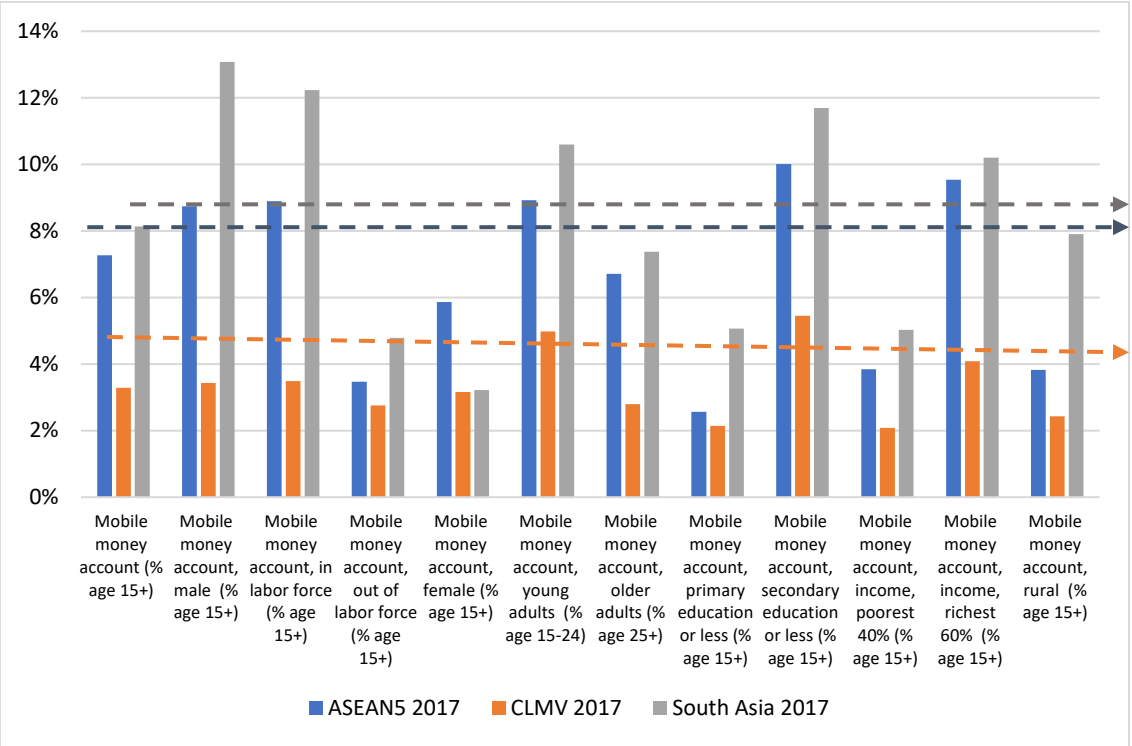
Figures 16 and 17 present some useful analysis on the possible gaps as they pertain to Internet use and mobile money accounts. Some interesting results emerge. A material gender gap is absent regarding the use of mobile phones or the Internet for ASEAN5 and the CLMV but is pronounced for South Asia. A gender gap exists for ASEAN5 and South Asia for mobile money accounts but not for the CLMV. The results for South Asia are consistent with the gender gaps that exist for traditional financial inclusion indicators, but the gap for ASEAN5 is quite unexpected when compared to those more traditional measures. Gaps exist for income and education levels in line with what would be expected. Finally, for ASEAN5, a positive rural gap exists for mobile phones and the Internet. This suggests that rural areas can be well serviced through digital financial services. However, a negative gap exists for mobile money – suggesting that those in rural areas favour the use of technologies to access existing financial services.

Figure 16: Use of Mobile Phone or Internet, by Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

Figure 17: Mobile Money Account, by Region (2017)



ASEAN5 = Indonesia, Malaysia, Philippines, Singapore, Thailand; CLMV = Cambodia, Lao PDR, Myanmar, Viet Nam.
Source: World Bank (2017a).

7. Concluding Remarks

This paper has presented some key patterns and stylised facts about the nature of financial inclusion, particularly at the regional level. Financial inclusion in ASEAN and East Asia has maintained steady growth in recent years as seen through the traditional indicators that measure the broader dimensions of financial inclusion, namely, access, usage, and quality. The growth has mainly occurred in South Asia, the CLMV, and ASEAN5. The more developed Plus3 and ANZ nations seem to exhibit saturation levels of financial inclusion, or perhaps a level of maturity, in the basic indicators such as ATMs, branches, and bank account ownership.

There is an increased focus on regulators to produce policies and regulations on financial inclusion. Most countries in the region now have an NFIS either in place or it is under development. Many also have policies attempting to increase

levels of financial literacy and financial education as a way for households and firms to access their respective financial systems more effectively.

A major component of most countries' NFIS is related to fintech and digital finance. As with the more traditional indicators, the ANZ and Plus3 are significantly ahead in those measures that might imply a strong presence in digital finance. That said, the main sources of growth in those measures are in ASEAN5 and South Asia. Financial inclusion is one area where developing countries of ASEAN can adopt modern technologies to quickly leapfrog to an advanced stage rather than incrementally follow the footsteps of developed countries a few decades ago.

Many development gaps can be observed when analysing the various financial inclusion indicators. These gaps present opportunities for regulators and policymakers to employ strategies with financial inclusion that may impact development outcomes such that the United Nations' SDGs can be adequately addressed. Most pervasive are gaps relating to the poor versus the non-poor (where the poor reported lower levels of financial inclusion), education levels (where the less educated were less included), and rural versus urban populations (where, generally, the rural communities reported lower levels of financial inclusion). The rural gap, however, was almost non-existent for some indicators pertaining to Internet use, suggesting that digital technologies may be used to help communities leapfrog more traditional ways of becoming more financially included.

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