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Overview of Financial Inclusion, Regulation, and Education

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Abstract

Financial inclusion is receiving increasing attention for its potential to contribute to economic and financial development while fostering more inclusive growth and greater income equality. Although substantial progress has been made, there is still much to achieve. East Asia, the Pacific, and South Asia combined account for 55% of the world's unbanked adults, mainly in India and the People's Republic of China.

This paper surveys the experiences of advanced and emerging economies—Germany, the United Kingdom, Bangladesh, India, Indonesia, the Philippines, Sri Lanka, and Thailand—to assess factors affecting the ability of low-income households and small firms to access financial services, including financial literacy, financial education programs, and financial regulatory frameworks, and to pinpoint policies that can improve their financial access while maintaining financial stability.

The study aims to take a practical, holistic approach to issues related to financial inclusion. For example, innovative methods for promoting financial access, such as mobile phone banking and microfinance, require corresponding innovations in regulatory frameworks, perimeters, and capacity. Moreover, programs in the areas of financial education and consumer protection are needed to enable households and small firms to take full advantage of improvements in financial access.

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1. INTRODUCTION AND PURPOSE OF THE STUDY

Financial inclusion is receiving increasing attention for its potential to contribute to economic and financial development while fostering more inclusive growth and greater income equality. G20 leaders recently approved the Financial Inclusion Action Plan and established the Global Partnership for Financial Inclusion [1] to promote the financial access agenda. Further, the Asia-Pacific Economic Cooperation (APEC) Finance Ministers' Process has a dedicated forum looking at financial inclusion issues,[2] and the implementation of the Association of Southeast Asian Nations (ASEAN) Framework on Equitable Economic Development has made the promotion of financial inclusion a key objective (ASEAN 2014). Development organizations have been responsive as well; for example, the Asian Development Bank approved 121 projects (amounting to $2.59 billion as of 2012) to support microfinance in Asia and the Pacific (ADB 2012). Many individual Asian economies have also adopted strategies on financial inclusion as an important part of their overall strategies to achieve inclusive growth.

One key indicator of household access to finance is the percentage of adults who have an individual or joint account at a formal financial institution, such as a bank, credit union, cooperative, post office, or microfinance institution (MFI), or with a mobile money provider. According to the Global Findex database for 2014, which is based on survey interviews, the worldwide average for this measure is 62%, and the total number of adults without accounts is about 2.0 billion, down substantially from 2.7 billion in 2011, but still high. Asia's statistics show that there is still much to achieve toward access to finance, as East Asia, the Pacific, and South Asia combined account for 55% of the world's unbanked adults, mainly in India and the People's Republic of China (Demirgüç-Kunt et al. 2015).

Within emerging economies in Asia, there is a high degree of variation of those who have accounts. Account penetration is nearly universal in Singapore and the Republic of Korea, but is much lower in some other economies—less than 2% in Turkmenistan and less than 20% in Afghanistan, the Kyrgyz Republic, Pakistan, and Tajikistan (Demirgüç-Kunt et al. 2015). A similarly wide range can be found for other indicators of financial inclusion, such as having a loan from a formal financial institution or the share of small firms having a bank loan.

The purpose of this study is to survey advanced and developing countries to assess factors affecting the ability of low-income households and small firms to access financial services, including financial literacy, financial education programs, and financial regulatory frameworks, and to identify policies that can improve their financial access while maintaining financial stability. It aims to identify successful experiences and lessons that can be adopted by other emerging economies. The countries examined are Germany, the United Kingdom, Bangladesh, India, Indonesia, the Philippines, Sri Lanka, and Thailand.

2. DEFINITIONS OF FINANCIAL INCLUSION

Financial inclusion broadly refers to the degree of access of households and firms, especially poorer households and small and medium-sized enterprises (SMEs), to financial services. However, there are important variations in term usage and nuance. The World Bank defined financial inclusion as "the proportion of individuals and firms that use financial services" (2014:

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1 Global Partnership for Financial Inclusion. http://www.gpfi.org/.
2 The annual forum was held most recently in the Philippines in March 2015 (APEC 2015).

1), while the Asian Development Bank stated it is “ready access for households and firms to reasonably priced financial services” (2015: 71). Atkinson and Messy defined it as

> the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches including financial awareness and education with a view to promote financial well-being as well as economic and social inclusion (2013: 11).

The *Alliance for Financial Inclusion* has “four commonly used lenses through which financial inclusion can be defined, in order of complexity: access…quality…usage… welfare” (2010: 6), and the Consultative Group to Assist the Poor (CGAP)’s vision is for “a world where everyone can access and effectively use the financial services they need to improve their lives [that] does not mean developing separate financial markets for the poor” (2013: 4). Finally, Chakraborty defined financial inclusion as “the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low income groups at an affordable cost in a fair and transparent manner by mainstream Institutional players” (2011).

The World Bank definition focuses on the actual use of financial services, while the other definitions focus more on the potential ability to use such services. Moreover, “access” does not mean any kind of access, but implies access at reasonable cost and with accompanying safeguards, such as adequate regulation of firms supplying financial services, and laws and institutions for protecting consumers against inappropriate products, deceptive practices, and aggressive collection practices. Of course, it is difficult to define “reasonable cost” in cases where amounts involved are small or information asymmetries exist. Therefore, a key question is the extent to which the government should subsidize such services or intervene in the market. This perspective also highlights the need for adequate financial education, as consumers cannot take proper advantage of access to financial services if they do not understand them properly.

The CGAP definition alludes to the issue of “mainstreaming,” that is, access to mainstream financial institutions. The positive effects of financial access may be limited if poor households are limited to specialized institutions and financial products, such as MFIs, which have unique aspects such as group responsibility and rigid payment schedules but do not necessarily provide a stepping stone to more conventional financial access.

Access to financial services has a multitude of dimensions, reflecting the range of possible financial services, from payments and savings accounts to credit, insurance, pensions, and securities markets. Another important dimension is actual usage of such products and services; for example, campaigns to increase the number of bank accounts fail if those accounts end up being rarely or never used.

Finally, the concept of financial inclusion also implies financial exclusion, also known as being “unbanked.” Financial exclusion is defined as not using any financial services or products of formal financial institutions, including MFIs. However, it is important to distinguish between those who, for whatever reason, do not wish to or need to use such services and products, and those who wish to use them but cannot do so due to insufficient funds, poor access, high costs, ignorance or lack of understanding, lack of trust, or identity requirements.

3. RATIONALE FOR FINANCIAL INCLUSION

There are various arguments in favor of greater financial inclusion. Poor households are often severely cash-constrained, so innovations that increase the efficiency of their cash management and allow them to smooth consumption can have significant impacts on welfare. Relying on cash-based transactions imposes many costs and risks; for example, the bulk of transactions can entail carrying large amounts of cash, possibly over long distances, which raises issues of safety. Also, many studies find that the marginal return to capital in SMEs is large when capital is scarce, which suggests that they could reap sizeable returns from greater financial access (Demirgüç-Kunt and Klapper 2013). This is particularly important in Asia due to the large contribution of SMEs to total employment and output.

Greater financial inclusion can also contribute to reducing income inequality by raising the incomes of the poorest income quintile (Beck, Demirgüç-Kunt, Levine 2007). It may also contribute to financial stability by increasing the diversity of, and thereby decreasing the risk of, bank assets and by increasing the stable funding base of bank deposits (Khan 2011, Morgan and Pontines 2014). Greater financial access can also support shifts by governments toward cash transfer programs rather than wasteful subsidies, and the greater transparency associated with electronic funds transfers can help reduce corruption.

A growing body of evidence suggests that access to financial services can reduce poverty, raise income, and promote economic growth. However, the conclusions are, in some cases, still tenuous, as many earlier studies relied on macro data, which were subject to numerous issues, such as endogeneity and missing variables.[3] There has also been a large volume of research on the impacts of microfinance,[4] but the reliability of the results of many studies suffers from possible selection bias (Karlan and Morduch 2009). More reliable studies with randomized control trials or natural experiments are rare. Some found evidence that increased numbers of bank branches reduced poverty and raised income and employment levels.[5] In fact, in a recent survey of the literature on the subject, the World Bank concluded that

> Considerable evidence indicates that the poor benefit enormously from basic payments, savings, and insurance services. For firms, particularly the small and young ones that are subject to greater constraints, access to finance is associated with innovation, job creation, and growth. But dozens of microcredit experiments paint a mixed picture about the development benefits of microfinance projects targeted at particular groups in the population (2014: 3).

Given that so much emphasis in the literature has been placed on microcredit, this assessment suggests caution in this area.

4. STATUS OF FINANCIAL INCLUSION IN ASIA

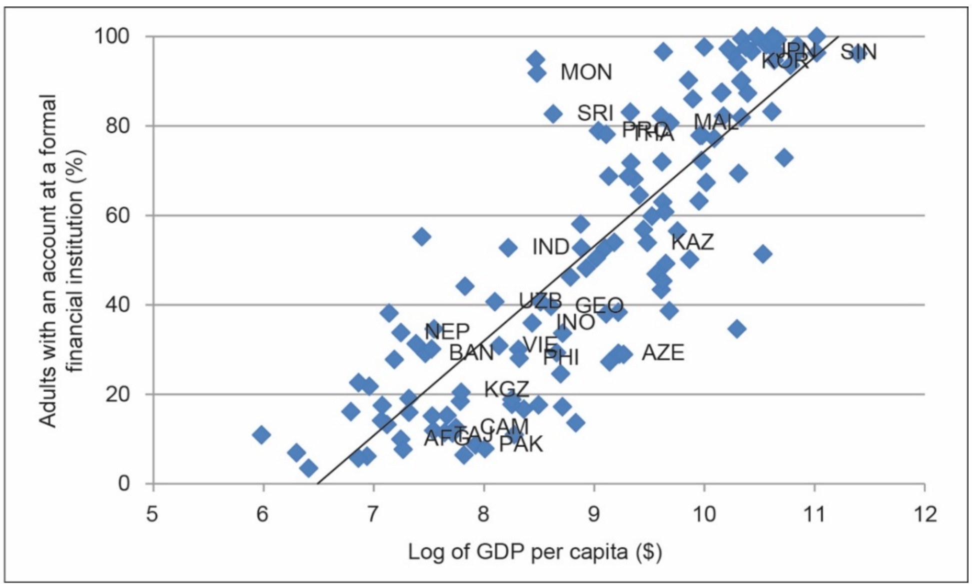
4.1 Households

The financial access of households tends to rise with per capita gross domestic product (GDP), as expected, but there is still huge variation across countries (Figure 1). The figure implies that

[3] See Honohan (2004); Beck, Demirgüç-Kunt, and Levine (2007); and World Bank (2008).
[4] McKernan (2003), Pitt et al. (2003), and Kaboski and Townsend (2005).
[5] Burgess and Pande (2005), and Bruhn and Love (2013).

countries with per capita income of over $30,000 have nearly full financial inclusion, and the large variation implies that other factors besides income play important roles, including overall financial development, and regulatory, institutional, social, and geographic factors. For example, Bangladesh has much higher deposit penetration than Nepal or Afghanistan, even though per capita income levels are similar. India lies on the trend line, while the Philippines and Indonesia are considerably below it, and Sri Lanka and Thailand are above it. More importantly, the majority of Asian economies (for which data are available) have penetration shares of less than 55%: Afghanistan, Azerbaijan, Bangladesh, Cambodia, Georgia, India, Indonesia, Kazakhstan, Kyrgyz Republic, Lao People's Democratic Republic, Nepal, Pakistan, Philippines, Tajikistan, Uzbekistan, and Viet Nam.

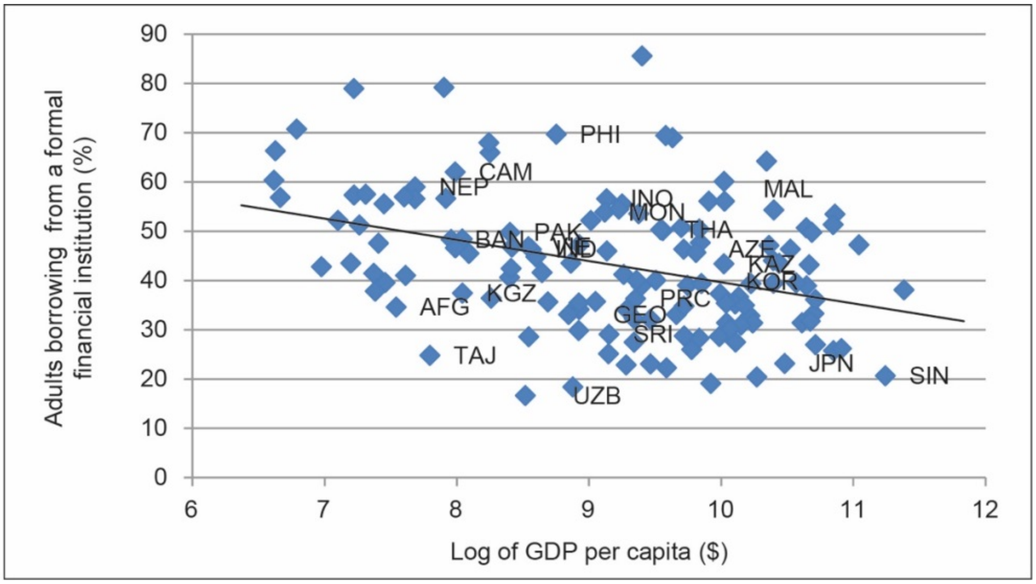
Figure 1: Relation of per Capita Gross Domestic Product to Deposit Penetration for Adults, 2014



GDP = gross domestic product.
Source: World Bank. Global Findex. http://www.worldbank.org/en/programs/globalfindex.

In contrast, Figure 2 shows that the relationship between per capita GDP and the share of adults obtaining loans from formal financial institutions is negatively sloped. For emerging economies, the relative positions are similar to those in Figure 1. However, high-income countries, such as Japan, the Republic of Korea, Malaysia, and Singapore, have relatively low ratios, which may reflect access to other forms of credit in those countries, such as credit cards. Borrowing rates for India, Indonesia, and Viet Nam are fairly close to the trend line, while that for the Philippines is relatively high.

Figure 2: Relation of per Capita Gross Domestic Product to Loan Penetration for Adults, 2014

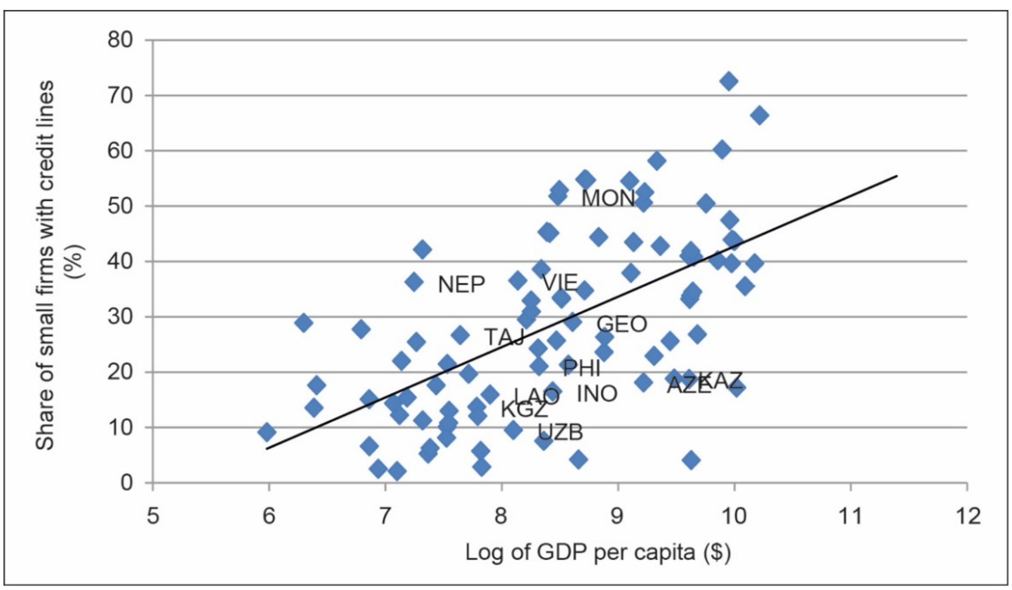


GDP = gross domestic product.
Source: World Bank. Global Findex. http://www.worldbank.org/en/programs/globalfindex.

4.2 Firms

Figure 3 shows a fairly strong overall relationship between per capita GDP and the share of small firms' credit lines, but, again, the pattern among emerging Asian economies shows a high degree of variation. Data are available for considerably fewer countries than for household financial access. Borrowing rates for Indonesia and the Philippines are relatively low compared to the trend line, around only 20%. Data are not available for the other emerging Asian economies in this study.

Figure 3: Share of Small Firms with Credit Lines, 2011



GDP = gross domestic product.
Source: World Bank. Global Findex. http://www.worldbank.org/en/programs/globalfindex.

5. BARRIERS TO FINANCIAL INCLUSION

Barriers to financial inclusion can be classified as either supply side or demand side. Supply-side barriers reflect limitations on the capacity or willingness of the financial sector to extend financial services to poorer households or SMEs. These can be further subdivided into three categories: market-driven factors, regulatory factors, and infrastructure limitations.

Market-driven factors include aspects such as relatively high maintenance costs associated with small deposits or loans, high costs associated with providing financial services in small towns in rural areas, lack of credit data or usable collateral, and lack of convenient access points. The provision of financial services in rural areas can pose particular problems in archipelagic countries, such as Indonesia or the Philippines, which calls for a focus on innovative delivery technologies that can break down transport-related barriers. Further, the lack of credit data and reliable financial records worsens the problem of information asymmetry that discourages banks from lending to poorer households and SMEs.

Regulatory factors include capital adequacy and supervisory rules that may limit the attractiveness of small deposits, loans, or other financial products for financial institutions. Strict requirements regarding the opening of branches or ATMs may also restrict the attractiveness of doing so in remote areas. Identification and other documentation requirements are important both with respect to know-your-client requirements and monitoring of possible money laundering and terrorist-financing activities, but these can pose problems for poor households in countries that do not have universal individual identification systems. Regulatory requirements, such as restrictions on foreign ownership and inspection requirements, can also restrict the entry of MFIs. Regulatory requirements need to be calibrated to be commensurate with the systemic financial risks posed by various financial institutions and the trade-off of financial stability with greater financial inclusion.

Infrastructure-related barriers include lack of access to secure and reliable payments and settlement systems, the availability of either fixed or mobile telephone communications, and the availability of convenient transport to bank branches or ATMs. Again, these can pose particular problems in archipelagic countries. Numerous studies have identified lack of convenient transport as an important barrier to financial access.[6]

Demand-side factors include a lack of funds, lack of knowledge of financial products (i.e., financial literacy), and lack of trust. Lack of trust can be a significant problem when countries do not have well-functioning supervision or regulation of financial institutions, or programs of consumer protection that require adequate disclosure, regulation of collection procedures, and systems of dispute resolution.

6. APPROACHES TO PROMOTE FINANCIAL INCLUSION

Strategies for financial inclusion can be implemented at the national level, as well as by central banks, financial regulatory agencies, private institutions, and nongovernment organizations (NGOs). Both the United Kingdom and Germany have had extensive policy interventions to

[6] See, for example, Tambunlertchai (2015).

promote financial inclusion, although with varying degrees of success. In Asia, Indonesia, the Philippines, and Thailand are relatively advanced in developing broad national strategies for financial inclusion. Efforts to promote SMEs in Thailand are well advanced and are organized through the SMEs Promotion Master Plan.[7] South Asian countries, such as Bangladesh, India, and Sri Lanka, are lagging at the national strategy level, but their central banks have been active in this area.

Strategies for promoting financial inclusion encompass five broad areas: (i) promotion of inclusion-oriented financial institutions, (ii) subsidized funding, (iii) development of innovative products and services, (iv) development of innovative delivery technologies, and (v) development of innovative systems to enhance access to credit (Table 1).

Table 1: Elements of Financial Inclusion Strategies

Country	Inclusive Financial Institutions	Subsidized Funding	Innovative Financial Products and Services	Innovative Delivery Technologies	Innovative Systems to Enhance Credit Access
Germany	Public savings banks, cooperative banks, guarantee banks		Guaranteed access to accounts with basic payment services	Internet, mobile phone banking	Credit database, loan guarantee programs
United Kingdom	Credit unions, community development financial institutions		"Basic" bank accounts to make and receive payments and withdraw cash	Internet, mobile phone banking	Credit database, loan guarantee programs
Bangladesh	Cooperative societies, postal savings bank, Grameen Bank, licensed NGO MFIs	Palli Karma Sahayak Foundation for MFIs, refinancing of bank loans to small and medium-sized enterprises	Microdeposits, microloans, Taka 10 bank accounts for farmers, school banking program	Mobile phone banking	
India	Regional rural banks, united community banks, local area banks, NBFC MFIs	Micro Units Development and Refinance Agency Bank	No-frills bank accounts (with additional services to be added), business correspondents	Telephone bill paying	Stock-exchange platforms for small and medium-sized enterprises, credit bureaus
Indonesia	Bank Perkreditan Rakyat, Bank Pembangunan Daerah, Bank Rakyat Indonesia		Grameen Bank-style microcredit products, Islamic microfinance products	Telephone banking, e-money	Loan guarantee programs
Philippines	Rural banks, cooperatives, credit cooperatives, credit NGOs		Microdeposits, microloans, and microinsurance products; agents for insurance, e-money, and payments	Telephone banking, e-money	
Sri Lanka	Cooperatives, NGO			Telephone	

[7] Current promotion policies for SMEs are detailed in the third master plan, which came into effect in 2012 and covers a 5-year period ending in 2016 (Tambunlertchai 2015).

Country	Inclusive Financial Institutions	Subsidized Funding	Innovative Financial Products and Services	Innovative Delivery Technologies	Innovative Systems to Enhance Credit Access
	MFIs, community-based organizations, Samurdhi, rotating savings and credit associations			banking via point of sale terminal, e-remittance services	
Thailand	State financial institutions, cooperatives and occupational groups, savings groups for production, village funds			Telephone banking, e-money	Loan guarantee program, credit database (in development)

MFI = microfinance institution, NBFC = nonbanking financial company, NGO = nongovernment organization.
Sources: ADBI (2014); BUCFLP (2014); Barua, Kathuria, and Malik (2016); Kelegama and Tilakaratna (2014); Khalily (2015); Lewis and Lindley (2016); Llanto (2015); Neuberger (2015); Tambunan (2015); Tambunlertchai (2015).

6.1 Inclusion-Oriented Financial Institutions

Inclusion-oriented financial institutions include MFIs, state-owned banks, post offices offering financial services, credit cooperatives, and community organizations. Among advanced economies, Germany has a long history of developing such institutions, including cooperative banks, promotional banks, and regional public savings banks (Neuberger 2015). India and Indonesia have also been active in this area. India has operated mainly through state-owned agricultural banks and local banks, such as local area banks, regional rural banks, and united community banks (Barua, Kathuria, Malik 2016).

Indonesia has established institutions, including Bank Pembangunan Daerah, Bank Perkreditan Rakyat, and Bank Rakyat Indonesia (Tambunan 2015). Thailand has also established a number of specialized financial institutions that operate as banks and cater to lower-income households and smaller firms, including the Bank for Agriculture and Agricultural Cooperatives, Government Savings Bank, and Small and Medium Enterprise Development Bank of Thailand. In addition, in Thailand, there are three main types of semiformal institutions: cooperatives and occupational groups, savings groups for production, and village funds (Tambunlertchai 2015).

Several types of MFIs exist in the Philippines: cooperatives, credit cooperatives, credit NGOs, and rural banks (Llanto 2015). Inclusive financial institutions in Sri Lanka include semiformal institutions (e.g., community-based organizations, cooperatives, and NGO MFIs), state programs (e.g., Samurdhi), and informal sources of finance (e.g., rotating savings and credit associations). Also, the post office was upgraded to provide banking and financial services, and banks employ mobile banking units to reach rural areas (Kelegama and Tilakaratna 2014).

MFIs are also active in most emerging Asian economies, although there are significant differences in their status and regulation across countries. There are also problems of access and coverage. For example, Tambunan (2015) noted that the key microfinance providers in Indonesia—Bank Rakyat Indonesia units and Bank Perkreditan Rakyat—tend to cover mostly the upper levels of micro and SMEs in district capitals, subdistrict towns, and economically active regions, while coverage is thinner elsewhere.

6.2 Innovative Products and Services

Innovative products and services include various microproducts, such as no-frills bank deposits, microcredit and microinsurance, agent banking, and microbranches. India saw an impressive rollout of 150 million no-frills accounts by mid-April 2015. However, 85 million of them contain no funds today, and many of those with funds are basically dormant (*Economist* 2015). Indonesia has introduced Grameen Bank-style credit products and also offers three types of Islamic microfinance products, including a profit-and-loss-sharing approach for credit and savings, Grameen-model Islamic microfinance, and Islamic-style microinsurance (Tambunan 2015). In the Philippines, regular insurance companies and mutual benefit associations have begun to provide microinsurance and similar products to help low-income sectors deal with vulnerability risks and catastrophic events (Llanto 2015).

In Europe, the European Commission has mandated that consumers be guaranteed access to basic payment services, including the facility to place funds and withdraw cash. To include unbanked vulnerable consumers, payment accounts with basic features must be offered free of charge or for a reasonable fee. European Union member states have to implement these new rules into national law by 2016. However, the rules do not include the right to an overdraft, so this does not protect consumers from illiquidity risks. The Government of the United Kingdom has persuaded its major banks to introduce basic bank accounts that allow people to make and receive payments and to withdraw cash, but also without an overdraft facility.

Use of agents or correspondents can help overcome problems of distance and shortages of branches. India has been promoting business correspondents who can provide connectivity for financial services in remote and underbanked locations. However, business correspondents largely facilitate payments and have a limited role in deposit opening or lending. Barua, Kathuria, and Malik (2016) argued that this skew in the service mix reflects a fundamental problem of the model, which is that the business correspondents are agents of banks, but have no capital invested of their own, making banks reluctant to allow correspondents to make loans on their behalf. Also, they cited evidence that over 75% of accounts opened with business correspondents in rural areas and over 25% those opened in urban areas are dormant. The Philippines allows agents in the areas of insurance, e-money, and payments, although not in banking.

6.3 Innovative Delivery Technologies

Innovative delivery technologies, such as mobile phones, e-money, and internet banking, can also help bridge distances and save time. Telephone banking has great potential as a result of the rapid diffusion of mobile phone ownership in many emerging economies; it has enjoyed substantial success in the Philippines (UNESCAP 2014). On the other hand, use of mobile phones to pay bills in India is still limited at only about 2% of the population, and at a much lower rate among the rural poor (Barua, Kathuria, Malik 2016). Similarly, although in Sri Lanka where bank representatives can visit rural homes and use point-of-sale electronic devices to connect to mobile phone networks to take deposits and to provide instant electronic confirmations, the use of telephone banking there is still miniscule (Kelegama and Tilakaratna 2014).

The development of e-money can make a substantial contribution to reducing the cost and inconvenience of making payments. Llanto (2015) noted that e-money accounts and e-money transactions have grown significantly in the past few years in the Philippines. For example, registered e-money accounts increased by 34% to 26.7 million accounts in 2013 from 2010. Also, as of 2013, there were 10,620 active e-money agents performing cash-in/cash-out transactions. However, there are issues with regard to identification and monitoring of money laundering and possible terrorism-related transactions. In Sri Lanka, commercial banks have introduced e-remittance services to capture large-scale inward remittance flows, although it is difficult to gauge their penetration of this market (Kelegama and Tilakaratna 2014).

Regarding internet banking, Lewis and Lindley (2015) cited data that around half of all adults in the United Kingdom now bank online, up from 30% in 2007.

6.4 Innovative Systems to Enhance Credit Access

Informational asymmetries, such as the lack of credit data, bankable collateral, and basic accounting information, often discourage financial institutions from lending to SMEs. Innovations to provide more information in this area, such as credit databases, credit guarantee systems, and rules to expand eligible collateral, can ease these asymmetries and increase the willingness of financial institutions to lend. Financial education for SMEs can also encourage them to keep better records. Finally, development of new investment vehicles, such as venture capital, specialized stock exchanges for SMEs and new firms, and hometown investment trusts, can expand the financing options of SMEs.

Some Asian economies have been active in expanding and consolidating credit databases on households and SMEs, but such efforts in most cases are still at an early stage, while in other economies, such efforts have not yet started. In Thailand, Tambunlertchai (2015) noted that the existing credit database of the National Credit Bureau of Thailand provides little credit information on low-income individuals or microenterprises. The issue of establishing a credit database for SMEs in Thailand has been raised in the current SME Promotion Master Plan, and there have been dialogues, training sessions, and workshops in preparation for the establishment of a credit risk database for SMEs for the implementing agencies, such as the Thai Credit Guarantee Corporation, Bank of Thailand, and Office of Small and Medium Enterprises Promotion.

There is no formal credit bureau in Indonesia to monitor the risk of over-indebtedness in areas of strong credit growth (Tambunan 2015). Llanto (2015) also cited the slow implementation of a credit information system in the Philippines. Similarly, in Sri Lanka, membership in the Credit Information Bureau of Sri Lanka is mandatory only for formal financial institutions, such as commercial banks, licensed specialized banks, leasing companies, and finance companies, while most MFIs are not integrated (Kelegama and Tilakaratna 2014).

Credit guarantees can also ease access to finance for SMEs, although they confront several problems, mainly issues of moral hazard and high costs due to nonperforming loans. In Thailand, the Thai Credit Guarantee Corporation offers credit guarantee products that assist SMEs in obtaining commercial bank loans (Tambunlertchai 2015). In Indonesia, loans to micro and SMEs under a program for people/community business credit are guaranteed 70% of the loan value by two insurance companies, PT Asuransi Kredit Indonesia and Perusahaan Umum Jaminan Kredit Indonesia, and by other companies that have voluntarily joined the program (Tambunan 2015). India and the Philippines do not have credit guarantee programs.

SMEs often find it difficult to access equity-related financing, but some governments have introduced measures in this area. India set up dedicated platforms for SMEs in both the National and Bombay stock exchanges, and Thailand has similar programs. One alternative is to develop hometown investment trust funds as a vehicle for financing local projects.[8] Cambodia, in particular, has been active in promoting such trusts as an alternative source of finance.

7. STRATEGIES FOR FINANCIAL INCLUSION

Strategies are needed to set priorities and coordinate overall approaches to expanding financial inclusion. National-level strategies are most desirable, followed by strategies of the central bank, ministries, and/or financial regulatory bodies. Table 2 shows a range of approaches in the subject countries. In Asia, the Philippines and Thailand have the most well-articulated financial inclusion strategies, which are incorporated into their national economic planning strategies. Bangladesh, India, Indonesia, and Sri Lanka have long-standing policies to promote financial inclusion through devices such as loan quotas for priority sectors, but no articulated national strategies exist.[9] At the regulatory level, Thailand's Master Plan for SME Promotion stands out, along with the Credit Policy Improvement Project of the Philippines.

Table 2: Strategies for Financial Inclusion

Country	National	Central Bank	Ministries and Regulators	Private Sector
Germany	Legal basis for promotional banks and guarantee banks, microloan fund to fund start-ups, European Commission directive on universal account access			
United Kingdom	Money Advice Service, automatic enrollment in company pension funds, subsidies for community development financial institutions		HM Treasury sets voluntary targets with banks, Financial Conduct Authority for consumer protection	
Bangladesh	No national strategy, legal basis for Grameen Bank, establishment of Microcredit Regulatory Authority	Taka 10 account for farmers, expansion of rural bank branches, refinancing, mobile banking, SME financing, and school banking		
India	Priority sector lending targets, Prime Minister's People Money Scheme bank account strategy, biometric identification program	Rural branch opening rules, establishment of innovative bank types, promotion of no-frills bank accounts, business correspondents; financial education		
Indonesia	Subsidized credit and bank lending targets for micro and SMEs and farmers; establishment of Grameen-type banks and other microfinance	National Strategy for Financial Inclusion (with Ministry of Finance), payment system infrastructure, financial education,	Ministry of Finance	

8 Described in Yoshino and Kaji (2013).

9 Indonesia does have the well-articulated National Strategy for Financial Inclusion, maintained jointly by Bank Indonesia and the Ministry of Finance.

Country	National	Central Bank	Ministries and Regulators	Private Sector
	institutions	credit-related information, supporting regulation, campaigns, consumer protection		
Philippines	Included in Philippine Development Plan 2011–2016 to increase confidence in the financial system, expand offerings of financial products, financial education	Lead government institution to formulate specific financial inclusion strategies, numerous circulars	Department of Finance-National Credit Council's Credit Policy Improvement Project	
Sri Lanka	10% bank loan target for agriculture, creation of Samurdhi banking societies	Branch opening regulations		Commercial bank campaigns to attract savings, services for overseas workers
Thailand	Aspects included in 11th National Economic and Social Development Plan: focus on SME finance, financial education		Ministry of Finance: National Strategy for Financial Inclusion; OSMEP: Master Plan of SME Promotion	

SME = small or medium-sized enterprise.
Sources: Barua, Kathuria, and Malik (2016); Kelegama and Tilakaratna (2014); Khalily (2015); Lewis and Lindley (2015); Llanto (2015); Neuberger (2015); Tambunan (2015); Tambunlertchai (2015).

8. REGULATORY ISSUES FOR FINANCIAL INCLUSION

Efforts to promote financial inclusion raise many challenges for financial regulators, and creative responses to these challenges can contribute to promoting financial inclusion. Traditionally, regulators have been skeptical of financial inclusion due to higher credit risks and lack of documentation associated with small borrowers. Khan (2011) cited a number of ways in which increased financial inclusion can contribute negatively to financial stability. The most obvious example is if an attempt to expand the pool of borrowers results in a reduction in lending standards.[10] Second, banks can increase their reputational risk if they outsource various functions, such as credit assessment, to reach smaller borrowers. Finally, if MFIs are not properly regulated, an increase in lending by that group can dilute the overall effectiveness of regulation in the economy and increase financial system risks.

However, more recent literature has focused on the positive implications of financial inclusion for financial stability. Khan (2011) suggested three ways in which greater financial inclusion can contribute positively to financial stability. First, greater diversification of bank assets as a result of increased lending to smaller firms can reduce the overall riskiness of a bank's loan portfolio. This would both reduce the relative size of any single borrower in the overall portfolio and its volatility. Adasme, Majnoni, and Uribe (2006) found that nonperforming loans of small firms have quasi-normal loss distributions, while those of large firms have fat-tailed distributions, implying that the former have less systemic risk. Morgan and Pontines (2014) found evidence that an increased share of lending to SMEs tends to reduce measures of financial risk such as bank Z-scores or nonperforming loan ratios. Prasad (2010) also observed that a lack of adequate access to credit for SMEs and small-scale entrepreneurs has adverse effects on

[10] This was a major contributor to the severity of the subprime mortgage crisis in the United States in 2007–2009.

overall employment growth, since these enterprises tend to be much more labor-intensive in their operations.

Second, increasing the number of small savers would increase both the size and stability of the deposit base, reducing banks' dependence on noncore financing, which tends to be more volatile during a crisis. Third, greater financial inclusion can also contribute to a better transmission of monetary policy, also contributing to greater financial stability. Hannig and Jansen (2010) argued that low-income groups are relatively immune to economic cycles, so including them in the financial sector will tend to raise the stability of the deposit and loan bases. Han and Melecky (2013) found that a 10% increase in the share of people who have access to bank deposits can reduce the deposit growth drops (or deposit withdrawal rates) by 3–8 percentage points, which supports this view. Therefore, regulators need to strike a balance between the need to provide a fertile environment for providers of financially inclusive services, while guaranteeing the stability of the financial system and protecting consumers.

Table 3 summarizes the major features of regulations related to financial inclusion in the subject countries, including regulatory agencies, identification-related measures, regulation of MFIs, regulation of lending (mainly interest rate caps), and consumer protection. Two broad conclusions emerge. First, programs to promote financial inclusion must be aligned with financial incentives; otherwise, they will face great difficulties in achieving their targets. Second, regulation of microfinance needs to be proportionate to the risks to financial stability involved.

Table 3: Financial Inclusion Regulatory Measures

Country	Regulatory Agencies	Identification-Related Measures	Regulation of Microfinance Institutions	Lending Regulations	Consumer Protection
Germany	Federal Financial Supervisory Authority		Not licensed, but accredited, trained, and monitored by the German Micro Finance Institute	MFIs do not lend directly, only act as agents	Federal Financial Supervisory Authority, Federation of German Consumer Organisations
United Kingdom	Prudential Regulation Authority, Financial Conduct Authority		Community finance development institutions regulated by the Financial Conduct Authority		Financial Conduct Authority
Bangladesh	Bank of Bangladesh, Microcredit Regulatory Authority, Insurance Development and Regulatory Authority		Licensing of MFIs over a certain size can take deposits	Interest rate cap, deposit rate floor	
India	Reserve Bank of India, Micro Units Development and Refinance Agency Bank	Aadhaar biometric identification program, linked to access to micro accounts	Not licensed, self-regulated, but rules on disclosure; can convert to small bank	Lending rate caps for banks, nonbank MFIs	Reserve Bank of India: grievance redressal mechanism in banks, banking ombudsman system

Country	Regulatory Agencies	Identification-Related Measures	Regulation of Microfinance Institutions	Lending Regulations	Consumer Protection
Indonesia	Bank Indonesia, Financial Supervisory Agency (OJK), and multiple others		Multiple regulatory entities	Interest rate caps: non-collateralized credit scheme for micro, small, and medium-sized enterprises (KUR) (22%), 5%–7% for agriculture/ energy programs	National Consumer Protection Agency, Consumer Dispute Settlement Board, Credit Information Bureau
Philippines	Bangko Sentral ng Pilipinas, Insurance Commission	Easier identification requirements in cases where documentation is lacking	Bangko Sentral ng Pilipinas regulates most entities; only rural banks and credit cooperatives can accept deposits	Only disclosure rules	Bangko Sentral ng Pilipinas: Consumer Affairs Group, Securities and Exchange Commission, National Credit Council and National Anti-Poverty Council Microfinance Consumer Protection Guidebook
Sri Lanka	Central Bank of Sri Lanka		Nongovernment organization MFIs can register under various acts; not licensed; only cooperative societies and Samurdhi banking societies can take deposits		Consumer Affairs Authority, Voluntary Financial Ombudsman system, Consumer Affairs Council, Credit Information Bureau of Sri Lanka
Thailand	Bank of Thailand, Ministry of Finance, and others		Various agencies depending on type of MFI, some not regulated at all	Interest rate cap of 28% for specialized financial institutions, 15% for nonformal lenders	Bank of Thailand: Financial Consumer Protection Center

MFI = microfinance institution.

Sources: Barua, Kathuria, and Malik (2016); Kelegama and Tilakaratna (2014); Khalily (2015); Lewis and Lindley (2015); Llanto (2015); Neuberger (2015); Tambunan (2015); Tambunlertchai (2015).

8.1 Need for Financial Inclusion Strategies to Be Aligned with Economic Returns

The performance of state-owned banks and government financial programs has been mixed, and there has been a gradual learning process that has shifted the emphasis away from specialized, state-owned lenders—often operating with subsidies—to more market-based solutions. In India, Barua, Kathuria, and Malik (2016) observed that many small local banks have been unviable, partly due to being vulnerable to the problems of capture and concentration risk owing to localization of their operations and political influence. Tambunan (2015) argued that the supply-led subsidized microcredit programs initiated by the Government of Indonesia do not provide a conducive environment for sustainable microfinance providers to operate, and that the government should shift resources from subsidized program credits to capacity building of existing MFIs for expanded outreach and their sustainability.

In the Philippines, Llanto (2015) noted that the government recognized the failure of subsidized or directed credit programs to reach the intended targets—mostly small farmers and other small-scale clients—in a sustainable manner, and reforms pursued by the government and regulators in collaboration with private sector stakeholders led to a greater private sector role, chiefly by MFIs, in providing credit, deposit services, and other services to low-income sectors. In the United Kingdom, Lewis and Lindley (2015) argued that community development finance institutions—small-scale social enterprises that lend money to businesses and individuals who cannot get finance from larger banks—are not financially viable. On the other hand, in Germany, Neuberger (2015) pointed out that the system of municipal public savings banks, public promotional banks, and guarantee banks using the "housebank" model, together with financial consumer protection and credit-reporting regulations and institutions, has been successful in achieving high levels of financial inclusion.

India is also promoting the "bank in a bank" model, where a commercial bank establishes a microfinance subsidiary. Barua, Kathuria, and Malik (2016) noted that this has been successful in furthering financial inclusion in several countries, and the limited experiments in India have been remarkably successful.

Regulatory Measures to Promote Access

Governments have relied on a number of different measures to promote financial access, but with varying degrees of success. India sets minimum lending quotas for banks in so-called "priority sector loans," such as for agriculture and SMEs. Also, the Prime Minister's Task Force on Micro, Small and Medium Enterprises stipulated a target of 20% credit growth to micro and small enterprises on a year-on-year basis (Barua, Kathuria, Malik 2016). In the Philippines, banks are required to allocate at least 8% of their loan portfolio for micro and small enterprises, and at least 2% for medium-sized enterprises (Llanto 2015). In Sri Lanka, the banking sector is required to allocate 10% of credit to agriculture, and the central bank required banks to open two branches in rural areas for every branch opened in a metropolitan area (Kelegama and Tilakaratna 2014). However, without adequate incentives, banks will not achieve such targets, and still have a tendency to choose customers within target groups and to leave the poorer segments unserved. For example, in the Philippines, only rural banks consistently achieved the required 8% target from 2008 to 2014.

In Thailand, banks receive various incentives to increase lending to lower-income groups. These efforts are undertaken as part of broader reforms of the financial sector, and are outlined in the various financial sector master plans (the latest from 2012 to 2016). These include the upward revision of the interest rate cap to 28% per year (i.e., interest and fees) for unsecured personal and microfinance loans, and the issuing of further guidelines to facilitate microfinance loan approvals by commercial banks (Tambunlertchai 2015).

In India, the Reserve Bank of India also established guidelines for convenient access, which stipulate that the number and distribution of electronic payment access points be such that every single resident is within a 15-minute walk from such a point anywhere in the country by January 2016. It also set a target of opening 80,000 new rural bank branches in 2013–2016 (Barua, Kathuria, Malik 2016). However, these targets seem very difficult to achieve.

Interest Rate Caps

Table 3 shows that many countries impose caps on loan interest rates. In India, the charge on all bank loans is linked to their base rate, except for farm loans, which are capped at 7%. However, the costs of making small loans to poor households and firms are inherently high, due to lack of economies of scale and information, and costs of access in remote areas. Therefore such limits can be counterproductive if they act to limit supply. In this regard, CGAP (2004) examined the experience of 30 countries and found that interest rate ceilings impeded the penetration of microcredit. The Reserve Bank of India took a major step in April 2014 by removing the price cap of 26% on loans advanced by nonbank financial company MFIs, the only lenders eligible to lend through the microfinance channel (Barua, Kathuria, Malik 2016).

Traditional moneylenders, in most cases, lie outside the range of formal financial institutions, which includes banks and MFIs. However, they still are an important source of credit for low-income households and SMEs, and pose a number of regulatory issues. Currently, in the Philippines, Bangko Sentral ng Pilipinas does not impose interest rate caps on moneylenders, relying only on disclosure requirements.

Insufficiency of Relying on Banks Alone

The bottom line is that conventional banks do not find it attractive to provide financial services to the unbanked because of high costs associated with maintaining small deposits and loans, especially in remote areas, and information asymmetries. On the other hand, NGO MFIs have shown that their business models can achieve satisfactory investment results, as long as the risks and costs of servicing their customer base are adequately reflected in the rates that they charge. Therefore, policies should aim to maximize the potential benefits from MFIs in terms of providing financial services at an affordable cost in efficient ways.

8.2 Proportionate Regulation

The observation that loans to poorer households and SMEs have less systemic risk than loans to large firms provides the basis for the concept of “proportionate regulation,” that is, that financial institutions should be regulated in a way commensurate with their potential benefits and financial systemic risks. The Philippines has perhaps implemented this concept most thoroughly in the region. The General Banking Act of 2000 and National Strategy for Microfinance provided the regulatory framework for proportionate regulation and risk-based supervision adopted by Bangko Sentral ng Pilipinas for microfinance (Llanto 2015). This legislation, in turn, provided the basis for Bangko Sentral ng Pilipinas regulations that sought to enhance the capacity of MFIs to provide financial services to small-scale clientele without jeopardizing financial stability.

Llanto (2015) noted that proportionate regulation requires a cultural change on the part of financial regulators, because the regulatory norms for banks frequently do not meet the needs of MFIs. Proportionate regulation means taking into account the features of the microlending methodology used by MFIs and adjusting prudential norms accordingly, including reduced capital and documentation requirements; loan appraisals based on personal contact rather than scoring; more emphasis on overall risk management practices than collateral; and development of appropriate microproducts such as microdeposits, microenterprise loans, micro agriculture loans, housing microfinance, and microinsurance. It also means being open to new delivery technologies and other systems to enhance access to credit. For example, microbanking offices have become important access points of financial services in areas where regular branch banking is not available.[11]

Finally, proportionate regulation also paved the way for adoption of innovative delivery technologies, such as telephone banking (Llanto 2015). According to Llanto's assessment, proportionate regulation has worked for the microfinance sector, but he cautions that as the microfinance sector grows in coverage and diversity of financial products and services offered to low-income clients, it becomes necessary to deepen the understanding of risks created in fostering "light-touch" regulation, and to find ways to manage those risks.

8.3 Regulatory Coordination and Regulation of Microfinance Institutions

A consistent financial inclusion policy requires a coordinated regulatory approach. Microfinance organizations typically have greater restrictions imposed on them in terms of their activities compared with banks. Therefore, they tend to be regulated separately from the system for banks, which are typically supervised by the central bank or financial regulator, and they are usually regulated more lightly than banks. However, having a variety of lenders can spawn a multitude of regulatory frameworks, which can lead to inconsistencies and gaps. Table 3 suggests that this is particularly the case for Indonesia, Sri Lanka, and Thailand. For example, in Indonesia, Tambunan (2015) argued that there are too many kinds of MFIs with overlapping regulations, coverage, and responsibilities that make it difficult for the monetary authority and government to evaluate and control the development of microfinance in the country. He noted that many semiformal and informal institutions have an unclear legal status in the financial system.

In Sri Lanka, the current regulatory framework for MFIs is weak and fragmented, as different institutions are regulated by different departments, ministries, and laws (Kelegama and Tilakaratna 2014). In Thailand, financial institutions in the semiformal group are not regulated by financial authorities, such as the Bank of Thailand or Ministry of Finance, and many operate under nonprudential regulations or no regulations at all (Tambunlertchai 2015). For example, cooperatives are overseen by the Cooperative Audit Department within the Ministry of Agriculture and Cooperatives. Informal community financial institutions typically are not subjected to regulatory controls. In India, nonbank financial company MFIs are likely to become self-regulated organizations under the purview of their industry association rather than being directly regulated by the Reserve Bank of India (Barua, Kathuria, Malik 2016).

Table 3 shows that many countries do not allow many MFIs to take deposits, including India, Indonesia, and Sri Lanka. In the Philippines, only rural banks and credit cooperatives are allowed to accept deposits (Llanto 2015). Bangladesh does allow MFIs of a certain size to be licensed and take deposits, and Bhakily (2015) found that this development has improved both the efficiency of MFIs and their attractiveness to customers. The proposed Microfinance Act in Sri Lanka provides for establishing the Microfinance Regulatory and Supervisory Authority that will be responsible for licensing, regulating, and supervising all NGO MFIs and cooperatives engaged in microfinance. Importantly, under the act, licensed and registered MFIs will be allowed to accept deposits from their members. This is expected to have significant positive effects for the development of Sri Lanka's microfinance sector (Kelegama and Tilakaratna

[11] Microbanking offices are scaled-down branches that perform limited banking activities, such as accepting microdeposits and releasing microloans to microfinance clients.

2014). It seems that more countries should consider a similar explicit licensing regime for MFIs to promote efficiency in the sector.

8.4 Identification Requirements

Banking transactions are normally subject to strict requirements regarding identification, both in view of know-your-client prudential norms and the need to monitor possible cases of money laundering or terrorist financing. However, proof of identification is often difficult in poorer rural areas. There are two main approaches: relaxing identification requirements and establishing a national identification system. As shown in Table 3, the Philippines has moved in the direction of relaxing identification requirements when such evidence is difficult to provide. On the other hand, India has an ambitious program of rolling out the biometric unique identity card, or Aadhaar, as the sole document for both account opening and access to other microfinance products. These cards have already been created for 850 million individuals (*Economist* 2015). However, evidence on the effectiveness of this program is still lacking.

8.5 Development of Regulatory Frameworks for Mobile Phones and e-Money

New delivery technologies, such as mobile phones and e-money, hold promise for promoting financial inclusion but need appropriate regulatory frameworks to achieve their potential while being consistent with financial stability and other regulatory requirements. In many cases, service providers are not banks, which makes a consistent approach more difficult. In India, currently 27 private prepaid instrument providers are allowed to offer digital wallets up to a maximum of Rs50,000. However, these payment systems pose many risks with regard to identification and monitoring of money laundering and financing of terrorism (Barua, Kathuria, Malik 2016). Barua, Kathuria, and Malik (2016) suggested that these prepaid instrument providers should be converted to payment banks, which would give mobile wallets the status of deposits.

In the Philippines, Bangko Sentral ng Pilipinas played an enabling role in developing the regulatory framework of e-money schemes for both bank and nonbank companies. It regulated e-money as a service independently of the legal character of the e-money issuer, while still imposing conditions to mitigate risks presented by nonbank e-money issuers. The regulations effectively created a level playing field between banks and nonbanks, ultimately enabling entry of a greater number of firms and products with the potential to promote financial inclusion (Ehrbeck, Pickens, Tarazi 2012).

8.6 Consumer Protection

Consumer protection programs are seen as a necessary support for financial inclusion efforts, together with financial education and effective regulation and supervision of financial institutions. Consumer protection can help address the issue of trust as a demand-side barrier to financial inclusion. Consumer protection programs are at various stages of development. In the United Kingdom, the Financial Conduct Authority regulates consumer credit. There is now a requirement for strict affordability checks to ensure that consumers can afford repayments, have protection from misleading adverts, and benefit from a robust authorization regime. However, in general, micro and SMEs do not have the same level of consumer protection as do retail consumers in the United Kingdom (Lewis and Lindley 2015). In Japan, the Financial Services Agency established a consumer hotline for consumer protection, and this has proved to be a valuable source of information for the regulator. In Thailand, the Bank of Thailand has the power to monitor consumer protection. In 2013, it opened its Financial Consumer Protection Center to inform consumers about their rights and responsibilities as consumers of financial services to reduce consumers falling prey to fraudulent practices, and to facilitate informed decision making by consumers. However, consumer protection programs seem less well developed in India, Indonesia, and the Philippines.

9. FINANCIAL LITERACY AND EDUCATION[12]

In the aftermath of the global financial crisis, financial literacy and financial education are receiving increasing attention. There were sobering lessons, for example, in how the misselling of financial products contributed directly to the severity of the crisis, both in developed economies and in Asia, which can partly be attributed to inadequate financial knowledge on the part of individual borrowers and investors.

Financial education can be viewed as a capacity-building process over an individual's lifetime, which results in improved financial literacy and well-being. Financial education is also necessary to prepare for old age. Financial education for SMEs is also important. Japan and Thailand have started to collect SME databases; as a result, SMEs have started to keep their books, leading them to become more aware of their daily revenues and expenses, and some SMEs have started to think long term. Therefore, collecting an SME database can be a good source of financial education for SMEs. At the same time, asset management by SMEs has become vital. SMEs have to prepare pension contributions for their employees, which leads to an accumulation of pension assets. Therefore, SMEs need to know how to manage their pension reserve assets.

9.1 Current Situation of Financial Literacy in Asia

Mapping the current status of financial literacy (or financial capability) in Asia presents challenges to researchers and policy makers alike. It is a new area with limited data. The coverage of available surveys is relatively spotty, and methodologies and results are not consistent. Only a limited number of Asian economies and target groups within them have been surveyed so far, and their results vary widely. There is some relation of financial literacy with per capita income, but rankings differ significantly across different studies. Greater coverage of target groups (e.g., students, seniors, SMEs, and the self-employed) is needed. It is desirable that international organizations, such as the Organisation for Economic Co-operation and Development, World Bank, and Asian Development Bank, sponsor surveys using the same kind of survey questionnaires and methodologies to establish a meaningful basis for international comparisons.

Table 4 shows one compilation of financial literacy surveys. The first column is the overall ranking based on the responses to three questions. The first question concerns the understanding of compound interest, the second question the impact of inflation, and the third question the understanding of risk diversification. Germany ranks highest overall, while Japan and Indonesia rank highly among Asian economies. However, since the results come from different surveys, they should not necessarily be regarded as being comparable.

[12] This section is based on Yoshino, Morgan, and Wignaraja (2015). Also, see the extensive discussion of issues related to financial education in Yoshino, Messy, and Morgan (2016).

Table 4: Selected Financial Literacy Survey Results from around the World

Country (year of survey)	Overall Ranking*	Q1. Compound Interest	Q2: Inflation	Q3: Risk Diversification	Survey Sample (number)
High-Income					
United States (2009)	60	65	64	52	1,488
Italy (2006)	48	40	60	45	3,992
Germany (2009)	74	82	78	62	1,059
Sweden (2010)	64	35	60	68	1,302
Japan (2010)	57	71	59	40	5,268
New Zealand (2009)	65	86	81	27	850
Netherlands (2010)	71	85	77	52	1,324
Upper Middle-Income					
Russian Federation (2009)	33	36	51	13	1,366
Romania (2010)	34	24	43		2,048
Azerbaijan (2009)	46	46	46		1,207
Chile (2006)	25	2	26	46	13,054
Lower Middle-Income					
Indonesia (2007)	56	78	61	28	3,360
India (2006)	38	59	25	31	1,496
West Bank and Gaza (2011)	58	51	64		2,022

Note: * Calculated as the average of questions 1, 2, and 3.
Source: Xu and Zia (2012).

Table 5 shows the results of another survey, the MasterCard Index of Financial Literacy (MasterCard 2013), which also illustrates the problem of comparability. The index is based on a survey of over 7,000 individuals aged 18–64 years on three aspects of basic financial literacy: money management, financial planning, and investment. As the table shows, New Zealand is ranked at the top, while Japan is ranked at the bottom. Strikingly, high-income Japan is ranked lower than less-developed economies like Bangladesh and Myanmar. The surprisingly low ranking of Japan may reflect the fact that the survey focuses on credit cards, which are not prevalent in Japan.[13]

Table 5: MasterCard Index of Financial Literacy Report, 2013

Rank	Economy	Overall Financial Literacy Index
1	New Zealand	74
2	Singapore	72
3	Taipei,China	71
4	Australia	71
5	Hong Kong, China	71
6	Malaysia	70
7	Thailand	68
8	Philippines	68
9	Myanmar	66
10	People’s Republic of China	66
11	Bangladesh	63
12	Viet Nam	63
13	Republic of Korea	62

[13] Therefore, surveys based on certain groups of people may not be representative. That is why different surveys can have very different results as a result of different survey forms and methodologies. This provides further evidence why an internationally coordinated survey effort is needed to be able to compare results across economies.

Rank	Economy	Overall Financial Literacy Index
14	Indonesia	60
15	India	59
16	Japan	57
Average for Asia and the Pacific		**66**

Source: MasterCard (2013).

9.2 Benefits and Costs of Financial Education

The conclusions of the empirical literature on the impacts of financial education on savings and other financial behavior are decidedly mixed.[14] Yet financial education will prompt households to take longer-term investment perspectives, and to make increased use of life insurance products and pension funds that will enhance the well-being of individuals in retirement. SMEs will think more about how to finance their businesses; furthermore, start-ups may find it easier to receive funds from households or financial institutions. These developments can also support higher economic growth.

Since many Asian economies have rapidly aging populations, pension funds are becoming increasingly important. For example, with a 401K-type defined-contribution pension scheme, people will have to think about what percentage of their money should be allocated to risky assets and safe assets. Pension funds, as well as life insurance plans, are important for self-protection after retirement. In Asia, assets of pension funds and insurance companies can be a very important source of financing for infrastructure investment. Given the critical role of infrastructure investment in supporting long-term and sustainable growth in Asian countries, promoting such savings can make a valuable contribution.

A simple macroeconomic model illustrates how financial education can potentially contribute to economic growth by expanding the funds available for investment in the economy and improving the allocation of those funds (Figure 4). Equation 1 is household after-tax income, which is distributed between savings and consumption. Savings consists of increases in deposits and securities (i.e., the capital market). Equation 2 shows aggregate supply, where Y is output, N is labor, and K is capital. Labor demand depends on the real wage rate. In equation 2, the aggregate supply curve is expressed as the expected price minus the actual price, and L represents bank loans producing capital. B is the money from the stock market. Investment (K) consists of $L + B$ in equation 2. Equation 3 is the aggregate demand curve. Aggregate demand depends on consumption, capital investment, government spending, and net exports. Since equation 3 is a reduced form equation, investment comes from bank loans and the capital market. Equation 4 shows the expected output, which is a function of the expected loans and capital from the capital market, plus a shock term, u, together with government spending and net exports.

[14] See, for example, Mandell and Klein (2009) and Braunstein and Welch (2002).

Figure 4: Macroeconomic Impacts of Financial Education

(1) Households' Asset Allocation (Diversification)

$Y - T = S + C = (D + B) + C$

Y = GDP, T = tax, S = savings, C = consumption, D = deposits, B = capital investment

(2) Aggregate Supply Curve (SMEs and Corporation)

$Y = F(N, K) = a_1(P - Pe) + a_2 L + a_3(B + u)$

F(..) = production function, N = labor, L = loan, Pe= expected price, P = price , u = shock term

(3) Aggregate Demand Curve

$Y = b_1 + b_2 L + b_3(B + u) + b_4 G + b_5 NX$

L = bank loan, B = capital investment, G = government spending, NX = net exports

(4) Increase of Expected Outputs

$E(Y) = a_2 E(L) + a_3 E(B + u)$ Aggregate supply

$E(Y) = b_1 + b_2 E(L) + b_3 E(B + u) + b_4 E(G) + b_5 E(NX)$ Aggregate demand

(5) Volatility $V(Y) = a_3 V(u)$ Aggregate Supply

$V(Y) = b_3 V(u)$ Aggregate Demand

Source: Authors.

If financial education can be well implemented, then the best allocation of funds between bank loans and the capital market can be achieved. Then, as shown in equation 4, the capital market, in principle, will seek a higher rate of return on capital; therefore, investment will be much higher compared with the case where banks are the dominant financial institutions. Equation 4 shows that expected output will increase if financial education can be implemented, so that the capital market is more developed. However, equation 5 shows the negative side of financial education, as the volatility of output will become higher compared to the case of bank loans being dominant.

Thus, more efficient allocation of assets by households can be established, and thereby greater risk capital can be provided by households. Then, the promotion of start-up businesses and SME financing can also be developed as a result of financial education, which can enhance economic growth. However, the main demerit is that increased volatility of asset allocation will also tend to increase the volatility of economy growth.

9.3 Current Policies and Gaps in Financial Education in Asia

There are still many policy gaps in Asia in the areas of financial literacy and financial education. A variety of programs exist, as summarized in Table 6, which shows national strategies, the roles of central banks, regulators, and private programs, and the channels and coverage of such programs. The starting point for financial education programs is to have a national strategy, but so far in Asia, only India, Indonesia, and Japan have established and implemented such strategies. Indonesia and the Philippines are relatively strong in this area compared to other countries.

There are several levels of financial education—national, school, and SMEs. The Philippines is in the process of finalizing its national policy in this area. Central banks active in this area include the Reserve Bank of India, Bank Indonesia, Bangko Sentral ng Pilipinas, and Bank of Thailand. Financial regulators active in this area include the Financial Services Authority of Indonesia (OJK). In Sri Lanka, however, measures to enhance financial literacy have been rather ad hoc in nature, and there is no national policy on financial education.

Indonesia's financial education program is particularly well developed, as it includes cooperative efforts by the Ministry of Finance, Bank Indonesia, and OJK. They have developed a variety of programs at both the national level and targeted at specific groups, including students and youth, migrant workers, fishers, communities in remote areas, and factory workers. One notable development is the TabunganKu ("My Saving") program jointly by the Ministry of Finance and Bank Indonesia that has helped promote savings in bank accounts. In this program, the government established a no-frills savings account with no monthly administration frees and a low initial deposit of Rp20,000 for commercial banks and Rp10,000 for rural banks. As of April 2014, the number of TabunganKu accounts reached 12 million (Bank Indonesia 2010; World Bank 2014). This shows the importance of having financial products that meet the demands raised by financial education programs.

Financial education programs are carried out both through schools and media. Bank Indonesia, in cooperation with all commercial banks and rural banks, conducted a series of campaigns, including the national "Let's Go to the Bank" campaign in 2008 onwards to improve consumer understanding of financial services, products, planning, management, and literacy. The OJK also has a National Financial Literacy Strategy program (Tambunan 2015).

In India, the Financial Stability and Development Council launched the National Strategy for Financial Education in 2012. The Reserve Bank of India's financial literacy program has developed teaching materials for a variety of target groups—including students, women, rural and urban poor, and the elderly—and these are promoted through schools. Private banks have also developed literacy centers to work with MFIs (Myrold 2014).

Table 6: Policies and Programs for Financial Education in Asia

Country	National	Central Bank	Other Regulators	Private Sector	Coverage	Channels
Germany	Courses on the public pension system	None	None	Nonprofit organizations and financial services industry	Schools	None
United Kingdom	Money Advice Service; financial education required in schools	None	None		Schools	
Bangladesh	None	Policy statement on financial literacy, but no specific strategy	None	None	None	None
India	National Strategy on Financial Education launched by the Financial Stability and Development Council	Financial literacy project to enhance financial literacy among target groups; standardized literacy	None	Bank literacy centers that work with microfinance institutions	Schoolchildren, senior citizens, and military personnel	Schools

Country	National	Central Bank	Other Regulators	Private Sector	Coverage	Channels
		material				
Indonesia	Financial education one pillar of National Strategy for Financial Inclusion organized by Bank Indonesia and Ministry of Finance "My Saving" program (2010)	Financial education, "Let's Go to the Bank" campaign (2008)	Financial Supervisory Agency (OJK): National Financial Literacy Strategy	None	Students, children and youth, migrant works, fishers, communities in remote areas, factory workers	Schools, media
Philippines	Included in Philippine Development Plan 2011–2016	Economic and Financial Learning Program to promote public awareness of economic and financial issues	None	None		None
Sri Lanka	None	Some activities	Some activities	Some activities	None	None
Thailand	None	Financial education programs for individuals, small and medium-sized enterprises	Government "Debt Doctor" program, Office of Small and Medium Enterprise Promotion	Civil society groups, commercial banks, Bank of Agriculture and Agricultural Cooperatives, independent organizations, nonprofit organizations	Generally small-scale programs, except "Debt Doctor"	Media

Sources: ADBI (2014); BUCFLP (2014); Barua, Kathuria, and Malik (2016); Kelegama and Tilakaratna (2014); Khalily (2015); Lewis and Lindley (2015); Llanto (2015); Neuberger (2015); Tambunan (2015); and Tambunlertchai (2015).

In the Philippines, Bangko Sentral ng Pilipinas has been active in developing strategies for financial education and has issued several circulars in this regard. The main focus is the Economic and Financial Learning Program to promote awareness of economic financial issues. The program targets specific audiences, such as schoolchildren, secondary and tertiary students, overseas Filipino workers, and microfinance clients. It also has the Credit Surety Program, a trust fund financed by contributions of a provincial government and a cooperative in the same province to encourage financial institutions to lend to micro and SMEs in the province using the surety cover as a collateral substitute. The Consumer Affairs Group of the Bangko Sentral ng Pilipinas is been in charge of programs for consumer protection, and the Monetary Board approved adoption of the Financial Consumer Protection Framework to institutionalize consumer protection as an integral component of banking supervision in the country (Tetangco 2014). In addition, the National Credit Council and Insurance Commission oversee financial education covering microinsurance in collaboration with the National Anti-Poverty Commission (Llanto 2015).

In Japan, the Central Council for Financial Services Information, sponsored by the Bank of Japan, has created an ambitious matrix of goals for implementing financial education at all levels of primary and secondary school education. Major topic areas include

(i) financial life planning and household expense management, including money management and decision making, significance of savings and effective use of financial products, understanding the importance of life planning and obtaining the skills for it, and provision against accidents, natural disasters, and illness;

(ii) mechanisms of finance and economy, including understanding the functions of money and finance, and understanding business cycles, the need for economic policies, and economic problems;

(iii) rights of and risks to consumers and prevention of financial trouble, including acquiring basic skills for independent and appropriate decision making to live better, and preventing consumer trouble concerning financial transactions and multiple debt problems; and

(iv) career education, including understanding the significance of work and occupational choice.

However, most financial education programs in Asia tend to be small and targeted at individual groups rather than the broad population. Only Japan actually includes financial education in its school curriculum, but the program faces many problems, including a lack of experienced teachers, lack of time, and lack of motivation of students. The experience of financial education in Japan was studied using a survey of 4,462 junior high schools and high schools sponsored by the Japan Securities Dealers Association (Study Group on the Promotion of Financial and Economic Education 2014). Regarding the number of hours that financial education was taught in junior high schools, in the first year, 74.2% of schools taught zero hours. The figure was only slightly better for high schools, with 34.5% of schools teaching zero hours in the second year. Many teachers recognized that time for financial education was required, but the actual allocation was much less. Also, the survey showed that teachers do not know the subject well, and textbooks contain only short statements about financial education.

Moreover, the background of most junior high school and high school teachers in Japan is not appropriate for the subject. Of the total number of teachers surveyed, 27% were from an education department and 29% from the home economics department, while only 13% had a background in economics and business. From the students' point of view, they reported that the subject was difficult to understand and had nothing to do with daily life, and they also noted the lack of textbooks on the subject.

Across Asia, few programs address the needs of seniors or SMEs as well. In many countries, financial education programs are conducted independently from one another. Japan has been consolidating financial education programs and a coordinated system has been created where duplication can be eliminated.

A national strategy for financial education needs to include the activities of private groups also engaged in this area. For example, the Asian Development Bank (2013) advocated establishing an oversight mechanism to operationalize a national financial education strategy, promote continuous learning among the various stakeholders, and serve as a point of contact with engagement with international initiatives to support financial education and consumer protection. It also recommended creating an innovation fund to encourage both private and public sector organizations to conduct research, innovate, and pilot new approaches to financial education that are appropriate to local contexts.

The process of developing financial education programs needs to address a complex set of interacting questions: What is the targeted audience and that group's information needs? When should individuals be exposed to both general and specific information about financial issues and options? Where should financial literacy education be provided to reach the broadest audience? How can financial literacy education be effectively delivered? How can the effectiveness and impact of financial literacy programs be measured (Braunstein and Welch 2002)?

10. CONCLUSIONS AND THE WAY FORWARD

There are numerous arguments in favor of increasing financial inclusion, and a large body of evidence shows that increased financial inclusion can significantly reduce poverty and boost shared prosperity, but efforts must be well designed. Greater access to financial services by households can help smooth consumption, ease cash shortages, and increase savings for retirement and other needs, although the evidence on microfinance is less positive. Greater access by SMEs can allow them to take greater advantage of investment projects with potentially high returns and participate in international trade. Greater financial access may provide side benefits as well, such as greater financial stability and efficacy of monetary policy. Governments can also take advantage of greater financial access to rely more on cash transfer programs and reduce corruption and money laundering.

Nonetheless, there are numerous barriers to financial inclusion both on the supply and demand sides. On the supply side, the high costs of handling small deposits and loans in physically remote areas, together with information asymmetries and a lack of documentation and collateral, deter financial institutions from extending financial services to lower-income households and SMEs. Regulatory restrictions on capital adequacy, identification requirements, and branch openings, as well as inadequate infrastructure for transport and payments systems, work in the same direction. On the demand side, the chief barriers are lack of cash, ignorance of financial products and services, and lack of trust.

As a result, financial inclusion in many emerging Asian economies is still relatively low. For the most widely used measure of financial inclusion, the share of adults with an account at a formal financial institution, many economies had shares of less than 55% as of 2014. Levels of financial literacy are also generally low, which contributes to the demand-side barriers to financial inclusion.

The following major categories of policies can help address supply-side barriers to access: (i) establishment of inclusive financial institutions, such as MFIs, credit cooperatives, special purpose state banks, post offices, and agents; (ii) subsidies for borrowing; (iii) low-cost and innovative financial products and services, such as no-frills accounts and microinsurance; (iv) innovative technologies, such as mobile phone banking and e-money; (v) innovative ways to increase credit access, such as credit databases, broader ranges of collateral, credit guarantee programs, and innovative financing vehicles; and (vi) innovative regulations, including proportionate regulation and national identification schemes.

Demand-side barriers can be addressed by (i) measures that directly increase the funds available to low-income households, such as cash transfer programs; (ii) effective supervision and regulation of financial institutions, including MFIs and moneylenders, to increase the general level of trust; (iii) implementation of strong consumer protection programs to ensure the sale of appropriate products and services, adequate disclosure, and the prevention of aggressive collection practices; and (iv) financial education programs for both households and SMEs so that they can make wiser choices related to financial products and services, as well as maintain better financial records to increase their bankability. Obviously, these measures require a high degree of capacity on the part of governments to carry them out, which requires focus on this area as well.

Financial literacy levels in Asia are generally low. Asia's experience in the area of financial education is still limited, but there are significant potential gains from more concerted policy efforts in this area. First, more national surveys of financial literacy are needed, particularly of poorer Asian countries, with consistent and internationally comparable methodologies. Second, effective national strategies for financial education seem to contain four key elements: (i) coordination among major stakeholders, including regulatory authorities, educational institutions, financial institutions, and civil society institutions; (ii) emphasis on customer orientation and addressing demand-side as well as supply-side gaps; (iii) combination of broad-based functional interventions, such as in school curricula, and targeted programs for vulnerable groups according to availability of resources; and (iv) adoption of a long-term time line with flexibility to respond to changing needs.

Third, monitoring and evaluation of national strategies for financial education is vital for experience and program adaptation. With the appropriate incentives, think tanks and universities can help in monitoring and evaluation efforts. Finally, since government support programs will not be enough to maintain adequate financing, the private sector, such as life insurance firms, must supply long-term financial products suitable for self-protection. Long-term asset allocation by households can support infrastructure and other investments where long-term finance is required.

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