# IMPROVING FINANCIAL INCLUSION IN ASIA AND THE PACIFIC

## CONSTRAINTS, APPLICABILITY, AND LESSONS FROM DIGITAL FINANCIAL SERVICES

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# Improving Financial Inclusion in Asia and the Pacific—Constraints, Applicability, and Lessons from Digital Financial Services

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## ABBREVIATIONS

| | |
|---|---|
| ADB | Asian Development Bank |
| AFI | Alliance for Financial Inclusion |
| AML | Anti-Money Laundering |
| BCBS | Basel Committee for Banking Supervision |
| BFA | Bankable Frontiers Associates |
| BIS | Bank for International Settlements |
| BNM | Bank Negara Malaysia |
| BOG | Bank of Ghana |
| BPI | Bank of the Philippines Islands |
| BPNG | Bank of Papua New Guinea |
| BSP | Bangko Sentral ng Pilipinas |
| BTCA | Better Than Cash Alliance |
| CDD | Consumer Due Diligence |
| CFT | Countering the Financing of Terrorism |
| CGAP | Consultative Group to Assist the Poor |
| CPSS | Committee on Payment Settlements and Systems |
| DFAT | Department of Foreign Affairs and Trade |
| DFID | Department for International Development |
| DFS | Digital Financial Services |
| FATF | Financial Action Task Force |
| FCAG | Financial Consumer Affairs Group |
| GPF | Global Policy Forum |
| GPFI | Global Partnership for Financial Inclusion |
| GSPWG | Global Standards Proportionality Working Group |
| GSMA | Groupe Speciale Mobile Association |
| GSSC | Global Standards Sub-Committee |
| GXI | A subsidiary of Globe Telecom |
| ICCC | Independent Consumer and Competition Commission |
| IFC | International Finance Corporation |
| KYC | Know Your Customer |
| MNO | Mobile Network Operator |
| MTO | Money Transfer Operator |
| NPPS | New Payment Products and Services |
| PFIP | Pacific Financial Inclusion Programme |
| PIWG | Pacific Islands Working Group |
| PNG | Papua New Guinea |
| RBA | Risk Based Approach |
| RBF | Reserve Bank of Fiji |
| SSB | Standard Setting Bodies |

# EXECUTIVE SUMMARY

Digital technology plays a critical role in the lives of many people in developing countries. Poor people living in remote regions in developing countries can now access digital technology relatively easily. In contrast these people still face considered barriers when accessing formal financial services through traditional channels. Technological developments provide the opportunity to overcome these barriers, allowing formal financial services to be delivered through digital channels to unbanked people. Consequently, financial inclusion advocates have focused enormous efforts on providing access to financial services through digital channels for the poor.

It has been expected that delivering financial services through digital channels (Digital Financial Services, DFS) should mean the services are more accessible and have a greater impact. To date, however, a number of DFS still experience low uptake or infrequent usage. Constraints and solutions have been identified. A more critical eye is now being applied to DFS roll-outs to ensure greater applicability for the end-users. Furthermore, a much greater emphasis is now being placed on how to build consumer trust in DFS so as to encourage its wider use which will, in turn, improve financial inclusion. Creating enabling regulatory frameworks which support innovation but also protect end-users and build trust in the new systems will also underpin the safety and soundness of the broader payments and financial systems of these countries.

This report presents the results of a study undertaken by the author on the constraints, applicability and lessons from using DFS for improving financial inclusion. This report presents the results of emerging empirical and anecdotal evidence which strongly supports the notion that using DFS does improve financial inclusion with benefits for the broader economy and consumers on both macroeconomic and microeconomic levels (Section 1). This report identifies a number of constraints and challenges to be overcome before DFS are widely used and sustainable, including: infrastructure and resource constraints; establishing the customer value proposition; and uncertainties surrounding the role of interoperability in creating more sustainable digital ecosystems (Section 2).

The solutions and initiatives to address the challenges and constraints range from cutting-edge approaches on incorporating behavioral research into product design to financial regulatory efforts which attempt to minimise the regulatory burden in order to support continued innovation and inclusive policies. This report presents a detailed overview of these initiatives and solutions (Section 3). This overview is a clear indication of the widely held belief by market participants, regulators and international development organisations that DFS can be used to improve financial inclusion despite challenges faced to date. There is substantial support being provided to designing solutions to the challenges and constraints.

This report concludes with a specific focus on the challenge of understanding the new consumer risks which arise when using DFS and how financial consumer protection frameworks can be strengthened to address these new consumer risks (Section 4). Mini-case studies are presented of countries' approaches to financial consumer protection and DFS in Asia and the Pacific. Countries reviewed include the Philippines, Malaysia, Papua New Guinea and Fiji. These studies highlight a common trend across countries—financial consumer protection frameworks are being viewed as one component of broader national financial inclusion strategies. Frameworks are being strengthened as part of a heightened focus on financial education and also by incorporating the latest research on financial inclusion and on how best to reach the unbanked.

This common trend to improve financial consumer protection frameworks for financial inclusion purposes should have the same outcome as would be the outcome of strengthening frameworks to address the specific consumer risks arising from using DFS. That outcome is improved economic well-being for the unbanked. However, in view of the importance of building consumer trust in DFS and protecting end-users, this report recommends that financial regulators should also assess how well financial consumer protection frameworks provide for identifying and mitigating the consumer risks arising from the use of DFS. Further, this report recommends that financial regulators conduct surveys with new digital payments providers to understand consumers' concerns in using DFS. Strengthening financial consumer protection frameworks by specifically incorporating the needs and concerns of end-users will enable regulators and market participants to create digital ecosystems which will be relevant and used, thereby improving financial inclusion, and ultimately improving people's economic well-being.

## SECTION 1: USING DIGITAL FINANCE SERVICES TO IMPROVE FINANCIAL INCLUSION

Financial inclusion means the opportunity for low-income groups to have affordable access to basic financial services. Inclusive financial systems are important because they contribute towards alleviating poverty and promoting a country's broader economic development. The focus on financial inclusion has sharpened and intensified in recent years following the G20s adoption of financial inclusion as one of its main policy goals.[1]

Digital financial services (DFS) provide an accessible and affordable entry point into financial systems for many unbanked and under-banked people and have consequently been the focus of those developing inclusive financial systems. DFS refers to the broad range of technologies available to deliver financial services from a broad range of providers to a broad range of recipients.[2] DFS offer more than simply being technologically advanced remittance channels which facilitate cash-in and cash-out processes. DFS provides a safe place to store money electronically (known variably as mobile money, e-money or e-wallets) and other financial products and services, such as credit and insurance, can be added to the basic savings product providing the end-user with access to a greater range of formal financial services.

Using DFS to improve financial inclusion has significant merit because digital technology itself plays a critical role in the daily lives of many poor people in developing nations. Accessing digital technology has not presented near so many barriers for poor people as has accessing formal financial services, as the following section illustrates. Delivering financial services through digital means should mean the services are more accessible and have a greater impact.

### 1.1 Digital Technology in the Lives of the Poor

Digital technology is not an anathema to the poor. For 20 out of 45 economies of developing Asia, mobile phone subscriptions surpassed total population count in 2013.[3] While such data is skewed as the same person may possess a number of subscriptions for various reasons including pricing variations or network coverage concerns, it is nonetheless a reasonable indicator of mobile penetration. Signal coverage is also an important indicator of people's access to mobile phones and digital technology; recent World Bank data suggests mobile signals now cover 90% of the world's poor.[4]

Mobile phones are not considered a luxury in emerging markets. Costs associated with mobile phone ownerships have been driven down with the rise of local mobile operators in China, India, Africa and the Middle East successfully challenging and reinventing business models of Western mobile

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[1] The focus on financial inclusion is seen in many international forums: G20 Summits, the G20's Global Partnership for Financial Inclusion (GPFI), the Global Policy Forum (GPF) of the Alliance for Financial Inclusion (AFI), the Better Than Cash Alliance (BTCA), the Financial Action Task Force (FATF), and the Bank for International Settlements' Basel Committee on Banking Supervision (BCBS).

[2] Digital Financial Services (DFS) refers to a range of financial services (including credit, savings, loans, insurance and payments services) accessible via digital remote means (including e-money, mobile money, card payments and electronic funds transfers). This is in contrast to cash payments or traditional financial services accessed through physical means, such as visiting a bank branch. For more terminology definitions see Alliance for Financial Inclusion, Mobile Financial Services Working Group, March 2013, *Mobile Financial Services: Basic Terminology*, Guideline Note, No 1, http://www.afi-global.org/sites/default/files/publications/mfswg_gl_1_basic_terminology_finalnewnew_pdf.pdf

[3] Asian Development Bank, 2014, *Key Indicators for Asia and the Pacific 2014: Framework of Inclusive Growth Indicators, special supplement*, 4th Edition, Manila, p48. http://www.adb.org/publications/key-indicators-asia-and-pacific-2014

[4] Kendall, Jake and Roger Voorhies, March/April 2014, The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs,* http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

operators.[5] The usage of smartphones and tablets are also set to spread more widely as mass-market smartphones for emerging markets such as India become more affordable.

Many households now regard mobile phones as critically important to stay connected to family and friends, obtain information about prices in markets where they will be selling their farm outputs or buying farm inputs, or to obtain information on weather forecasts which could affect crops.[6] Farmers use mobile phones to obtain up-to-date information on market prices allowing them to negotiate better on terms of trade.[7]

Given the integral role that technology now plays in the lives of poor people, it is a natural step to pursue leveraging this technology for financial inclusion purposes.

### 1.2 Digital Financial Services—Financial Inclusion and Economic Activity

Poor people in developing economies already use a number of informal financial mechanisms to manage their daily lives. Poor people in informal economies often organise their financial affairs for the household and their small business as a merged entity and so there is no clear separation between the household which predominantly saves and the business which borrows and invests—the underlying assumption of traditional economic analysis of households and firms.[8] The informal financial services include loans from family members, rotating savings schemes, savings stored using alternative methods (cattle or cutlery—to be sold at a time when cash is needed), the pawnbroker or money lender—services which may be critical but also expensive and unreliable.

Therefore the objective of increasing the accessibility of DFS for the poor is not to introduce the poor to the concept of financial management but to provide them with a more reliable, affordable and accessible financial experience. There is now mounting empirical evidence indicating using DFS to have access to a greater range of financial services improves financial inclusion which ultimately contributes towards improving standards of living for the poor and increased economic activity.[9] Cull et al (2014) canvass the results of a number of randomized evaluations which assess whether interventions aimed at including the poor in formal financial services have worked.[10] The authors note that while such evaluations do have limitations and only a small number have been done to date, evidence from these evaluations suggest financial services do have a positive impact on microeconomic indicators including self-employment business activities, household consumption and well-being. Results are reviewed from studies across a range of financial services including credit, savings, insurance and payments and mobile money. For those services most closely associated with DFS, payments and mobile money, the authors note that "(d)ue to the relative newness of mobile

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[5] The Economist, 2009, Mobile Marvels, *Online article*, 24 September. http://www.economist.com/node/14483896

[6] Babcock, Lee, 2014, Revolutionizing agricultural value chain finance: a digital perspective, *Report presented to the 35th Brussels Development Briefing on "Revolutionizing Agricultural Value Chain Finance,"* prepared with support from The Technical Centre for Agricultural and Rural Cooperation (CTA). https://brusselsbriefings.files.wordpress.com/2014/07/revolutionising-agricultural-value-chains-finance-digital-perspective.pdf

[7] World Bank, October 20, 2014, How Telecommunications Changed the Lives of Herders in Mongolia, *Feature Story*, http://www.worldbank.org/en/news/feature/2014/10/20/how-telecommunications-changed-the-lives-of-herders-in-mongolia?

[8] Cull, Robert, Tilhman Ehrbeck and Nina Holle, April 2014, Financial Inclusion and Development: Recent Impact Evidence, *CGAP Focus Note*, No. 92.

[9] Ibid.

[10] Cull, et. al., 2014, note their review is an update and expansion on earlier work by Bauchet, Jonathan, Cristobal Marshall, Laura Starita, Jeanette Thomas, and Anna Yalouris, 2011, Latest Findings from Randomized Evaluations of Microfinance, *Forum 2,* Washington, DC: CGAP, Financial Access Initiative, Innovations for Poverty Action, and Abdul Latif Jameel Poverty Action Lab.

money and product-specific issues in conducting welfare impact studies such as disentangling channel and product" it would be some time before there was sufficient reliable evidence "to determine how payments and mobile money impact the lives of poor people."[11] However early studies indicated two main results: transaction costs are lower with mobile money and it seems to improve households' ability to share risk. Kendal and Voorhies also summarized the findings of these studies noting that "households with access to M-Pesa received more financial support from larger and more distant networks of friends and family (compared to non-M-Pesa households). As a result, they were better able to survive hard times, maintaining their regular diets and keeping their children in school."[12]

Cull et al (2014) do temper these broadly positive findings for the relationship between DFS, financial inclusion and improved economic growth by highlighting the importance of local context. They note that the positive relationship between financial intermediation and growth and employment at the macroeconomic level does not hold in economies with weak institutional frameworks (e.g. with limited financial regulation capacity) or with high-inflation environments.[13] However, the authors quote other studies which support the notion that financial inclusion reduces income inequalities.[14] On balance, it could be concluded that evidence exists that using DFS to deepen the degree of financial intermediation in an economy can have a positive impact on poverty reduction and economic growth. However, the benefits of DFS in terms of improved financial inclusion and economic activity will not necessarily be realized for countries dealing with weak institutional frameworks or with high-inflation environments.

### 1.3 Microeconomic Benefits from Using Digital Finance Services in Emerging Countries

At a microeconomic level it is increasingly evident that there are a number of benefits from using DFS in emerging countries. Examples of various microeconomic benefits are sited below. These examples have been drawn from various sources, as referenced. In particular, a recent report by the World Bank Development Research Group, the Better Than Cash Alliance and the Bill & Melinda Gates Foundation to the G20 Global Partnership for Financial Inclusion, "The Opportunities of Digitizing Payments," (hereon in referred to as the "G20 Report") has highlighted a number of recent studies and surveys demonstrating the benefits for governments, recipients and providers of digital payments.[15] The summary below draws largely on this G20 Report with additional references to a number of other articles and studies pointing to microeconomic benefits of DFS.

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[11] Cull, et. al. (2014), Ibid, page 5.

[12] Voorhies, Rodger, 2014, Conference Call on Mobile Finance, Cash Grants, and Poverty Relief, *Interview with Foreign Affairs,* May. http://www.cfr.org/global/conference-call-mobile-finance-cash-grants-poverty-relief/p33033

[13] Cull, et. al. (2014), refer to literature summarized by Levine, 2005 and Pasali, 2013 as supporting this conclusion on financial intermediation, growth and employment. Levine, Ross, 2005, Finance and Growth: Theory and Evidence. In Philippe Aghion and Steven Durlauf, eds, *Handbook of Economic Growth*, edition 1, volume 1. Amsterdam. Pasali, Selahattin Selsah. October 2013. Where Is the Cheese? Synthesizing a Giant Literature on Causes and Consequences of Financial Sector Development, *World Bank Policy Research Working Paper 6655*. Washington D.C..

[14] One study indicates that as financial intermediation deepens poorer segments of the population benefit (Jahan and Macdonald, 2011); another indicates that increased financial depth is associated with increased income share by the poorest segments of the population (Clarke, Xu and Zhou 2006); and another shows that rates of poverty reduction could be attributed to cross-country variations in financial development (Beck, Demirguc-Kunt and Levine, 2007).

[15] World Bank Development Research Group, the Better Than Cash Alliance and the Bill & Melinda Gates Foundation, August 2014, *The Opportunities of Digitizing Payments,* A report to the G20 Global Partnership for Financial Inclusion ("G20 Report").

### 1.4 Reduced Costs for Governments

When governments digitise payments they can expect an improved delivery of government social payments with significant cost savings. The G20 Report highlights studies from a number of countries illustrating such cost savings, noting this is particularly applicable for "large-scale government-to-public payments."[16] These country examples are listed below:

- Niger—the variable cost of administering social transfers were found to be 20% lower when done by mobile channels versus cash channels;[17]
- South Africa—the cost of disbursing social grants in 2011 by smart card were a third of that of manual cash disbursements;[18]
- Mexico—various efforts of the Government to move towards digital payments has reduced spending on wages, pensions and social welfare by 3.3%;[19] and
- Brazil—the Bolsa Familia program (a conditional cash transfer program) reduced transaction costs from 14.7% of total payments to 2.6% when a number of benefits were bundled on to one electronic payment card.[20]

### 1.5 Increased Transparency in Government Transfers

The increased transparency in government transfers when done through digital channels leads to less "leakage" and better traceability of payments. This should ultimately benefit the end-user in that they actually receive what is due to them. The G20 Report refers to a study in India on the comparison of making social security payments digitally via smart cards, compared to manual cash payouts at a village.[21] This study found statistical evidence supporting the use of biometrically-authenticated payments systems as they improved the reliability and speed of welfare payments and reduced corruption by minimising opportunities for "leakage."

### 1.6 Reduced Costs for Recipients

Reduced costs for recipients of payments when using digital channels has been highlighted as one of the main benefits of DFS from very early days. A 2009 study by Department for International Development (DFID) found cost savings to be as high as 75 per cent on remittance activities using mobile channels as compared to traditional channels (DFID, 2009). The G20 Report highlights recent research from Niger where researchers from Tuft University considered what the savings in travel and wait time would translate to in terms of time available for more productive tasks. The researchers

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16 Ibid, p. 8.

17 Aker, J., R. Boumnijel, A. McClelland, and N. Tierney, 2013, How Do Electronic Transfers Compare? Evidence from a Mobile Money Cash Transfer Experiment in Niger, *Tufts University Working Paper.* Quoted in G20 Report. p. 8.

18 CGAP, 2011b. "CGAP G2P Research Project: South Africa Report." Washington, DC. Quoted in G20 Report. p. 8.

19 Babatz, G., 2013, Sustained Effort, Saving Billions: Lessons from the Mexican Government's Shift to Electronic Payments, *Better Than Cash Alliance Evidence Paper: Mexico Study.* Quoted in G20 Report. p. 8.

20 Lindert, Kathy, Anja Linder, Jason Hobbs, and Bénédicte de la Briére, May 2007, The Nuts and Bolts of Brazil's Bolsa Família Program: Implementing Conditional Cash Transfers in a Decentralized Context, *Social Protection Working Paper No. 0709*. Washington, D.C.: World Bank. Quoted in G20 Report. p. 8.

21 Muralidharan, Karthik, Paul Niehaus, Sandip Sukhtankar, March 2014, Building State Capacity: Evidence from Biometric Smartcards in India, National Bureau of Economic Research, Working Paper 19999. http://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/Building%20State%20Capacity%20%28NBER%20WP%2019999%29.pdf

found that the time saved could translate into an amount "large enough to feed a family of five for a day."[22]

### 1.7 Increased Control for Recipients Leading to Greater Usage and Impact

Research indicates that using digital methods for remittances increases remitters feeling of control over the funds being remitted which had a positive effect on the amount of funds being remitted. The G20 Report cites one study which found that remitters with increased control over the use of the funds being remitted would open and use a savings account with a partner bank in the recipients' country ultimately increasing the amount they sent home.[23] In another study, the 'increased control' was as simple as being able to use a method which allowed the remitter to label the remittance as being for education. [24]

### 1.8 Improved Credit Portfolios for Providers of Digital Finance Services

The use of digital financial services creates a greater and more reliable pool of information on customers. This can lead to improved loan repayment behavior and improved portfolio management for providers. The G20 Report highlights the results of a "randomized field experiment" in Malawi which found some evidence that once borrowers are aware that lenders have better information about them, they tend to be better at repaying loans. Providers were also able to make better credit assessments and withhold future loans for defaulters.[25]

Kendall and Voorhies (2014) note that the poor are often without formal financial and identification records or financial histories and by using products such as mobile money there is the capacity for banks and other providers to "generate copious amounts of data" to be used in place of traditional credit risk assessments.[26] Using biometric information alone allows for improved customer identification.

### 1.9 Benefits for Providers Leveraging on New Low Cost Infrastructure

Cull et al (2014) highlight the benefit for private-sector business models which are able to leverage on the new financial infrastructure which has lower transaction costs and a wider reach. They highlight the example of the second generation of innovative businesses riding on the M-Pesa infrastructure such as M-Kope in Kenya which has created microleasing off-grid, community based solar power. The possible household welfare impact from such innovations has not yet been studied. These benefits arise from using low-cost payments infrastructure as the "economic rails" for economies.

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[22] Aker, J., R. Boumnijel, A. McClelland, and N. Tierney, 2013, How Do Electronic Transfers Compare? Evidence from a Mobile Money Cash Transfer Experiment in Niger, *Tufts University Working Paper.* Quoted in G20 Report, p 8.

[23] Ashraf, N., D. Aycinena, C. Martinez, and D. Yang, 2014, Savings in Transnational Households: A Field Experiment Among Migrants from El Salvador, *Review of Economics and Statistics*, forthcoming. Quoted in G20 Report, p 9.

[24] De Arcangelis, G., M. Joxhe, D. McKenzie, E. Tiongson, and D. Yang, 2014, Directing remittances to education with soft and hard commitments: Evidence from a lab-in-the-field experiment and new product take-up among Filipino migrants in Rome, *Working paper*. Quoted in G20 Report, p 9. On this discussion of increased control of remittances, the G20 report also refers to McKenzie, D., C. Theoharides, and D. Yang, 2014. Distortions in the International Labor Market: Evidence from Filipino Migration and Wage Responses to Destination Country Economic Shocks, *American Economic Journal: Applied Economics,* forthcoming, p8.

[25] Gine, X., J. Goldberg, and D. Yang, 2014, Credit Market Consequences of Improved Personal Identification: Field Experimental Evidence from Malawi, *American Economic Review* 102(6): 2923–54. Quoted in the G20 Report, p 11.

[26] Kendall, Jake and Roger Voorhies, 2014, The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs* March/April, http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

### 1.10 Benefits for Agents

Evidence is now emerging of successful agent networks in DFS. In South East-Asia, of particular note, is the success of agents in Cambodia using the WING mobile money product. Since 2008, when WING was established, many agent outlets have "morphed in many cases from mobile phone shops or general grocery stores to become primarily agents."[27] WING agents have developed their infrastructure including some with "small branch and teller areas" and "agents are now competing to provide the WING business, and will invest in their own shops to attract customers." In Bangladesh, agents are also found to be making profits.[28] The Microsave Agent Network Accelerator Country Survey Results for Bangladesh show agents are making profits despite very low transaction volumes compared to East Africa but possibly due to the low operational costs. In addition, a majority of agents in Bangladesh are what is termed as "nondedicated"; their mobile money business is in addition to existing business and so they have not had the substantial outlays in operational costs which agents in other countries have had.[29]

## SECTION 2: BARRIERS AND CONSTRAINTS IN USING DIGITAL FINANCE SERVICES TO IMPROVE FINANCIAL INCLUSION

Despite the promise which DFS offers for improved financial inclusion and more broadly for improved economic activity, both on a microeconomic and macroeconomic level, successful roll-outs of DFS have been few and far between; at the time of the GSMA Mobile Money Adoption Survey 2012 there were 150 mobile money deployments (currently 246) of which GSMA considered 14 as "sprinters" or successes in mobile money deployment. GSMA viewed these as successes as they had incorporated best practice in terms of investment, organisational structure, distribution and marketing.[30]

The success of M-Pesa has been difficult to replicate largely because it was underpinned by a number of unique characteristics. Few developing countries possess these characteristics; Kenya has a large population, economic activity, urban-rural family connections, existing extensive bank infrastructure and a dominant Mobile Network Operator (MNO) flushed with funds.[31]

In describing the environment required to replicate M-Pesa's success, the "father" of M-Pesa, Michael Joseph (former CEO of Safaricom and current Director of Mobile Money for Vodafone Group) considers there to be three "ideal conditions" for successful mobile money deployments:

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27 Jones, Brad, July 2014, Cambodia Embraces Mobile Money, *Mobile Money Asia Blog*, http://www.mobilemoneyasia.org/2014_07_01_archive.html

28 Helix Institute of Digital Finance Agent Network Accelerator Survey: Bangladesh Country Report 2014, produced with support from MicroSave, Bill & Melinda Gates Foundation, UNCDF, IFC, October, p5.

29 Helix Institute of Digital Finance Agent Network Accelerator Survey: Bangladesh Country Report 2014, produced with support from MicroSave, Bill & Melinda Gates Foundation, UNCDF, IFC, October, p5.

30 These highlights from GSMA's Mobile Money Adoption Survey were described in Mondato's blog: "Finding the Recipe for Success in MFS." http://mondato.com/blog/cambodia-wing/

31 These unique characteristics of M-Pesa and Kenya were highlighted in: UNCDF, Mobile Money for the Poor, *Concept Note*, p3. http://aid.dfat.gov.au/aidissues/foodsecurity/Documents/mm4p-concept-note.pdf. MM4P attributed the comment to Mas and Radcliffe of the Gates Foundation aside from the comment which MM4P added in relation to Safaricom being flushed with funds.

1. Low levels of financial inclusion;
2. Poor fixed line telecommunication but high mobile penetration; and
3. Little or poor infrastructure in the country.[32]

However, Joseph concedes that if these were the only pre-conditions needed for success then there would be more success stories. Joseph argues M-Pesa's success was underpinned by five "essential components": management buy-in; regulatory regime; technology; strength of brand; and distribution network. It is also important to note that MNO deployments of mobile money generally take five to six years before a return on investment is realized.[33] In less developed countries where markets have a relatively small number of active users, it is possible the time taken to break-even may take longer.[34]

Analysing the barriers and constraints which countries have faced in DFS roll-outs further explains why successful DFS have been the exception rather than the norm thus far. Barriers and constraints include:

- limited resources and unreliable infrastructure to implement product roll-outs properly (including agent network management problems);
- an inability to shift end-users from a reliance on cash methods for payments to digital methods, also referred to as a lack of a clear customer value proposition; and
- a lack of interoperability in new systems.

These barriers and constraints are discussed in turn below.

### 2.1 Infrastructure and Resources

The G20 Report emphasizes the importance of investing in the physical infrastructure for DFS. The physical infrastructure is defined broadly to include electricity, mobile network coverage, roads and transport networks and agent networks providing adequate cash-in/out points with reliable liquidity flows. The development of the physical network needed for delivering digital payments has been challenging. The G20 Report notes that these challenges were evident in the experience of implementing digital payments for government transfers in Haiti, Kenya, Uganda, and the Philippines as discussed in detail in Zimmerman et al 2014.[35]

Of these physical infrastructure requirements the one which presents the greatest challenge facing DFS is that of agent networks. The importance of agent networks was underestimated in the early years of mobile money largely because widespread mobile phone usage was relied on as a good reason in itself to attempt large-scale roll-outs of DFS. It was assumed that mobile money would be successful in reaching the unbanked in many countries because it could ride on the low-cost rails of existing mobile network operator's infrastructure networks. However, it is now recognized that high mobile phone penetration and the MNO's network are not sufficient conditions for the success of DFS. They are

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[32] These views were made by Joseph at a Mondato Summit in Africa in June 2014 and recorded on Mondato's blog: "Finding the Recipe for Success in MFS." http://mondato.com/blog/cambodia-wing/

[33] Microsave cite the cases of Safaricom in Kenya, MTN in Uganda and Vodacom in Tanzania as examples of taking 5-6 years from launch of a service to profitability. Chopra, Puneet and Sonum Puri, November 2014, Market Readiness for Mobile Money Interoperability, *Microsave blog*, http://blog.microsave.net/market-readiness-for-mobile-money-interoperability/

[34] UNCDF, Mobile Money for the Poor, *Concept Note*, p3. http://aid.dfat.gov.au/aidissues/foodsecurity/Documents/mm4p-concept-note.pdf

[35] Zimmerman, J., K. Bohling, and S. Rotman Parker, 2014, Electronic G2P Payments: Evidence from Four Lower-Income Countries, *CGAP Focus Note 93/2014*.

necessary, but not sufficient. What is also needed is for the payments systems networks and the underlying public infrastructure (e.g. electricity supply, roads and transport networks) to be reliable and combined with well-functioning agent networks. Investing in the basic infrastructure and distribution network is critical.

Agent networks provide the cash-in/cash-out points for DFS. The accessibility to and existence of sufficient cash-in/cash-out points with sufficient liquidity remains a core challenge for successful DFS. Without accessible cash-in/out points which have reliable stocks of liquidity, consumers will not be able to rely on the systems for their payment transaction needs and the product will suffer from low product uptake and low usage. Kendall and Voorhies (2014) cite studies of the M-Pesa program in Kenya where it is evident that the location of the agent vis a vie the M-Pesa household was a determining factor in how much the user benefited from the service.[36] Kendall and Voorhies (2014) also site studies in India which found that Government policies requiring banks to open rural branches if they wanted licenses in more profitable urban areas had a positive effect on agricultural output in the area as well as 4-5 per cent reductions in the number of people living in poverty.[37]

Under-investment in resources and infrastructure also impinges on the development of successful and sustainable agent networks. The Reserve Bank of India's initiative to improve financial inclusion through the use of correspondent bankers looks a success from the fact that there are now at least 200 000 correspondent bankers in India (including shopkeepers and small business owners) and more than 100 million Indians brought into the financial system. However, there appears to be a high level of risk associated with being an agent for Indian banks because banks are not providing the required level of security/insurance for the agents handling the cash. Agents have reported theft and violent attacks on them as becoming increasingly frequent. The Reserve Bank of India places the responsibility on banks for handling all cash by agents; however, banks do not appear to be following through with appropriate support for agents. One banker (Sribash Sen, Assam-based Assistant General Manager for Outreach at State Bank of India) was quoted in a Bloomberg news article on this situation: "There are so many bank branches where we don't have the budget to have a guard, so how can I afford guards for these people?...They have to find their own ways to provide security."[38]

On the issue of agents and liquidity management, Joey Mendoza, Chief of Party, USAID in Indonesia, e-Mitra, has questioned why, given agents usually very limited means, providers would expect agents to have liquidity.[39] Mendoza suggests that instead, more focus could be directed towards allowing for different levels of agents to manage the training and liquidity problems. Mendoza also questions the reliance on product design which still revolves around 'cash-in' and 'cash-out' where it is clear from on-the-ground experiences that 'cash-out' is incredible challenging. Mas (2014) argues "there isn't a competitive supply of digital financial services because few find a way to overcome the tough realities of cash distribution." Mas puts forward a proposal for regulatory change in the form of a new license

[36] Kendall, Jake and Roger Voorhies, March/April 2014, The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs*, http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

[37] Kendall, Jake and Roger Voorhies, March/April 2014, The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs*, http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

[38] Narayan, Adi and Anto Antony, August 12, 2014, Bankers Pack Pistols to Chase $21 Billion of Indian Clients Without Accounts, *Bloomberg*, http://mobile.bloomberg.com/news/2014-08-12/bankers-pack-pistols-chasing-21-billion-of-india-clients.html

[39] Joey Mendoza, Chief of Party, USAID. Comments at RFF forum, Perth, 29 August 2014.

category for cash-in/cash-out agent network managers who are authorized to operate independently of the product providers. [40]

## 2.2 The Customer Value Proposition

The G20 report refers to the "digital ecosystem"—a concept which refers to keeping "cash-in" "in". That is, extending digital remittance methods or mobile money services beyond simple 'cash-in'/'cash-out' services to be services where users maintain funds in the digital format because they can be used in that format for savings, purchases, bill payments or loan repayments leading to less reliance on cash and a deepening of financial intermediation with benefits for poverty reduction and economic growth. The G20 Report emphasizes that shifting from cash-based systems to digital ecosystems is "especially important in rural areas that are typically net-recipients of remittance and social transfer payments and where cash-management issues are a considerable challenge."[41]

Building a digital ecosystem requires strategic thinking by governments and cooperation of many participants in local economies. For example in order to accept digital funds as payment for goods and services or for bill payments, merchants and utility providers will often need to adjust their payment processes. This change requires a certain degree of technical capability which may not be readily available in many developing countries. However, there is now an increasing awareness of the importance of building these technical capabilities, improving connections between merchants and payments providers in order to realise the goal of an ecosystem and not simply building the technological infrastructure necessary for digital payments.[42] For example, a payments provider may organise for a wholesaler to be established as a biller for its merchants, so goods delivered by the wholesaler to the merchant for retail are paid for using the merchant's electronic stored value (mobile money) account.

From the end-user's perspective, the digital ecosystem must offer a clear customer value proposition. This requires end-users needs to be kept at center focus when new products are being designed.[43] Manoj Sharma, Managing Director—Asia at MicroSave, has urged product developers to talk to clients/end-users in order to assess whether there is a clear customer value proposition[44] Sharma suggests product developers focus on a number of issues for customers, including: the "pain points" addressed by the new system; whether it more convenient and easier to use; whether it provides value for money; and whether it is it more secure than alternatives?[45]

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[40] Mas, Ignacio, 13 November 2014, Free the Cash Networks! How one small regulatory change could have a huge positive impact on mobile money's development, *Next Billion Blog*. http://nextbillion.net/blogpost.aspx?blogid=4165

[41] Faz, X. and T. Moser, 2013. Advancing Financial Inclusion through Use of Market Archetypes, *CGAP Focus Note 86/2013*, and CGAP, 2012, *Social Cash Transfers and Financial Inclusion: Evidence from Four Countries,* Washington, DC. Quoted in G20 Report, p 14.

[42] Selma Ribica pointed out that most projects funded in the field ignored the economic challenges of how to create a "healthy ecosystem" and instead focused on "the simpler task of building the technology infrastructure" (Ribica leads the M-Pesa commercial strategy for international remittances, interoperability and global strategic partnerships in Vodafone Group in London), see Ribica's comments on NexThought Monday – Mobile Money Interoperability is Not A Silver Bullet for Financial Inclusion, Monday 17 November, 2014, NextBillion Blog post, http://nextbillion.net/blogpost.aspx?blogid=4173

[43] Sharma, Manoj, 18 November 2013, Sustainable Nonbanking Financial Institutions, *MicroSave Presentation*, http://www.microsave.net/resource/sustainable_non_banking_financial_institutions#.U5royViSw00

[44] Sharma, Manoj, October 2013, DFS for the Under-Banked MicroSave, *Presentation at Pacific Microfinance Week*, http://www.microsave.net/files/pdf/MicroSave_DFS_for_the_Under_Banked.pdf

[45] Sharma, Manoj, October 2013, DFS for the Under-Banked MicroSave, *Presentation at Pacific Microfinance Week*, http://www.microsave.net/files/pdf/MicroSave_DFS_for_the_Under_Banked.pdf

Sharma also notes that when designing products for consumers more focus should be on the "consumer pull." He highlights the "natural pull" of particular products such as "money transfers/remittances and welfare receipts" which contrasts with other products, such as savings products, that do not have the benefit of a natural pull."[46] For example, while consumers may want to save they may be unable to use a savings account due to expenditure shocks and having very little income to keep as savings. Therefore resources channelled towards financial literacy and marketing for such savings products may be futile and have little effect on long-term usage. In contrast, for products with a "natural pull," such as remittances, the need for marketing and consumer education will be lower.[47]

Tilman Ehrbeck, CEO of the Consultative Group to Assist the Poor (CGAP), has emphasized the need for new thinking on how products are designed and how their usage and functionality is communicated to end-users who may be linguistically illiterate and so have different lenses through which they view the world. Ehrbeck argues that instead of focusing on financial literacy programs, product designers need to take responsibility by designing products which translate the formal financial concepts "into language consistent with the everyday realities of poor people."[48]

Product designers also need to take into account the existing social norms on how family finances are managed when introducing new products. This can avoid, unintentionally, creating a negative effect as a result of product design features. For example, in Kenya the provision of ATM cards enabling more convenient access to cash with lower transaction fees was found to have a positive effect on men, whereas it negatively affected the welfare of women. The women had less control on savings in a joint account. Previously men had relied on their wives to go to the bank branch during office hours while the husband was at work, however the ATM card allowed men to access the cash themselves.[49]

## 2.3 Interoperability

The payment systems underlying DFS are often being built as proprietary stand-alone systems (also known as closed-loop systems). With many competing closed-loop systems it is difficult for any one system in particular to build the critical mass necessary to be successful and benefit from the resulting economies of scale. If the payments system infrastructure was developed in a manner which enabled interoperability, network benefits could be more fully realized and DFS would be more sustainable and successful.

Interoperability from the end-user's perspective is where they can access their payment instrument of choice through any institution's payments system and send or receive funds to another end-user

[46] Sharma, Manoj, October 2013, DFS for the Under-Banked MicroSave, *Presentation at Pacific Microfinance Week*, http://www.microsave.net/files/pdf/MicroSave_DFS_for_the_Under_Banked.pdf

[47] Gosh, Ishita, 23 July 2013, Remittances vs. Savings on the Mobile Money Platform (Part 2), *Institute for Money, Technology and Financial Inclusion,* http://blog.imtfi.uci.edu/2013/07/remittances-vs-savings-on-mobile-money.html

[48] Ehrbeck's comments followed "recent human-centered research and product design efforts in Pakistan....by Rachel Lehrer from the Boston-based design firm Continuum on behalf of CGAP"; Ms Lehrer spent six weeks in Pakistan studying how 'poor women in rural area use (or don't use) the accounts linked to the transfer benefits that they are paid by a large-scale Pakistani social protection program'. See Ehrbeck, Tilman, 19 December 2013, Avoid Blaming the Victim in the Financial Literacy Debate, *Huffington Post,* http://www.huffingtonpost.com/tilman-ehrbeck/the-financial-literacy-debate_b_4459311.html

[49] The G20 Report, 2014, and Kendall and Voorhies, 2014, both cite this finding illustrating the importance of focusing on product design, referencing research of Schaner, S., 2013. The Cost of Convenience? Transaction Costs, Bargaining Power, and Savings Account Use in Kenya, *Russell Sage Foundation Working Paper*.

irrespective of who the end-users' "bank with."[50] However, interoperability can function on many levels in these systems: at the end-user access point; at the cash-in/cash-out point where an agent is able to receive and pay funds to any user of any digital financial service; or at the system level, where platform infrastructure may be shared or systems interfaced.

Interoperability faces challenges as market participants are often concerned that any market share which they have built through investments in agent training and consumer education may be diluted by interoperability and they may not be adequately compensated. As a consequence, market forces are often not sufficient to guarantee interoperability and many systems remain closed-loop with low impact and low usage. However, mandating interoperability through regulation also presents difficulties as innovation may be dampened as potential new participants hold-off from developing a new product because of uncertainty over how they will be compensated if they are required to share product platforms.[51]

Regulators can, and do, seek to encourage industry collective efforts on interoperability. However, providing the right incentives is challenging and industry cooperation is also often slow—as slow as the slowest participant. It is a balancing act for industry and regulators to navigate. Section 3 provides further discussion on this issue, highlighting examples of how regulators have responded along with recent market initiatives to establish interoperability.[52]

## SECTION 3: SOLUTIONS TO THE CONSTRAINTS FROM USING DIGITAL FINANCE SERVICES TO IMPROVE FINANCIAL INCLUSION

A number of initiatives are underway which seek to learn from the constraints and challenges experienced so far and spearhead more successful efforts promoting the use of DFS to improve financial inclusion. These initiatives include:

- improving the design of products and services so as to encourage customers to keep their funds stored electronically,
- building consumer trust in the products and services so they are more widely used;
- development organisations efforts to overcome challenges and also move their own disbursement mechanisms from cash to digital channels; and

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[50] Here "bank with" is in inverted commas to indicate that an end-user may not be using a traditional bank account at all. One example of this is GCash where the sender can either use their own e-money GCash Account to remit funds to anyone using a Globe SIM card (Globe is the Mobile Network Operator who operates the mobile money system known as GCash) and these funds are then stored as e-money on the recipients mobile phone and the funds can be cash-out at any GCash agent.

[51] The challenges with interoperability are explored in: USAID, 24 April 2013, Building Consensus Towards Enabling an Efficient and Inclusive National Payments System in the Philippines: A Significant Step, http://www.simmphil.org/misc/building-consensus-towards-enabling-an-efficient-and-inclusive-national-payments-system-in-the-philippines-a-significant-first-step and BizTech Afrika, 28 July 2014, Airtel wins case to open up M-Pesa, *BizTech Afrika*, http://www.biztechafrica.com/article/airtel-wins-case-open-m-pesa/8514/#.U9nGzYCSw00; and for further background see Nduku, Agatha, 8 May 2014, Safaricom, Airtel seeks extension in talks over M-Pesa fees, *Humanipo*, http://www.humanipo.com/news/43623/safaricom-airtel-seek-extension-in-talks-over-m-pesa-fees/

[52] The challenges of interoperability have recently been outlined by Selma Ribica who leads M-Pesa commercial strategy for international remittances, interoperability and global strategic partnerships in Vodafone Group in London, see NexThought Monday – Mobile Money Interoperability is Not A Silver Bullet for Financial Inclusion, Monday 17 November, 2014, NextBillion Blog post, http://nextbillion.net/blogpost.aspx?blogid=4173

- international and national efforts to promote enabling legal and regulatory frameworks to support DFS.

Examples of these initiatives are discussed below.

## 3.1 Improving the Design of Products and Services

### 3.1.1 Nudge Features

Changes in consumer behavior are made possible using nudge features in the design of products and services using mobile phones.[53] Kendall and Voorhies (2014) refer to studies which indicate that when customers receive reminders via text messages to make regular deposits then their balances are found to improve over time. More "draconian features have also proved effective, such as so-called commitment accounts, which impose financial discipline with large penalty fees."[54] As the use of commitment accounts has been shown to improve financial discipline and subsequently improve people's livelihood, incorporating the design feature of commitment accounts into DFS could be beneficial. Kendall and Voorhies site the example of an experiment in Malawi where farmers were offered an option of having harvest proceeds directly deposited into commitment accounts. It was found that for the farmers who chose this option, their investment in farm inputs was 30 per cent more than those farmers not offered the option, and farmers with the commitment accounts also had a 22 per cent increase in revenues and 17 per cent increase in household consumption following the harvest. The authors also noted that it was likely that the existence of commitment accounts allowed farmers to rightly claim that they couldn't access their savings if friends or families wanted to borrow or share in their savings which may have led to increased savings.[55]

### 3.1.2 Leveraging on Bank Deposit Accounts

ANZ's goMoney involves using a mobile phone to conduct funds transfers in and out of an ANZ customer's bank account, and not from a customer's mobile wallet. This model is attractive from the perspective of 'protection of funds' because the customer's funds remain stored as a bank deposit until withdrawn as cash or used to make purchases or bill payments. This model does not give rise to the need for a separate regulatory framework for the protection of customers' funds like that for models which use an e-wallet. Furthermore, the agents in the ANZ goMoney Pacific model are drawing funds from their ANZ bank account when providing cash-out services to customers. The customer electronically sends funds from their deposit account to the merchant's deposit account and once the merchant confirms the funds are received they provide the corresponding amount as "cash-out" to the customer.

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[53] Using nudge features has been studied by behavioural economists where they have found that particular human traits can be used to nudge people in a certain direction, i.e. make people take different choices or do things differently. The term nudge, in this sense, was explored in Richard H. Thaler and Cass R. Sunstein book, *Nudge: Improving Decisions About Health, Wealth, and Happiness*, Yale University Press (2008).

[54] Kendall, Jake and Roger Voorhies, March/April 2014, The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs,* http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

[55] Kendall and Voorhies (2014) source: Brune, L., X. Gine, J. Goldberg, and D. Yang, 2011, Commitments to Save: A Field Experiment in Rural Malawi, *World Bank Policy Research Working Paper 5748*.

ANZ has still maintained a degree of flexibility in account opening practices for these deposit accounts, whereby the level of functionality associated with the goMoney account is directly related to the level of customer identification provided to ANZ.

A similar product exists in the Philippines and is the result of a joint venture between Globe Telecom, the Bank of the Philippines Islands (BPI) and Ayala known as BanKO. BanKO was established in 2009 and is a bank with no physical establishments. The mobile money service is called BPI Globe BanKO. Transactions are conducted using mobile phones connected to both GCash (Globe's mobile money service, operated by its subsidiary, GXI) and BPI bank accounts. Like goMoney, BanKO customer funds are drawn from bank accounts and so enjoy "depositor protection provisions" when stored in bank accounts. However, when the funds are being transferred they do move across to an e-wallet managed by Globe's e-money service provider and regulated under a separate e-money issuer regime of the Philippines central bank.

#### 3.1.3 Building Consumer Trust

In order to build consumer trust in DFS there needs to be clear and transparent product disclosure, the products need to be kept simple and relevant to users' needs and there must be consumer education on how to use new products as and when consumers are using the products.

For example, for cash transfer programs which are moved to electronic transfer methods the G20 Report emphasizes it is important for customers to understand all aspects of the new method—the program, the payment process, how the conditional payment is calculated and recourse mechanisms. The G20 Report highlights as an example evidence from social transfer programs in Brazil, Colombia and Mexico which suggests recipients are unlikely to use bank accounts for more than simply withdrawing their benefit. The G20 Report notes this could be for a range of reasons including not understanding how formal financial products work, not understanding that amounts not withdrawn are still stored electronically, or not having clarity on the costs associated with managing the account.[56]

On product design and consumer education, the G20 Report highlights a study of a government cash transfer program in Bangladesh for low-income women. The women did not understand the cash-out process; they did not know how to use an ATM and the product design did not meet their needs. Adjustments in the product design were subsequently made as well as consumer education on how to use the product and this eventually led to an increased understanding of the product and its increased use.[57]

Mobile money provider, GXI (a subsidiary of Globe Telecom), offering the service GCash is an example of a provider focusing on customer trust. When GCash partnered with PR Savings Bank to offer payroll services through mobile money it invested substantial effort in ensuring the service was available and reliable. GXI appointed special regional point persons to ensure operations were sound.[58]

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[56] The G20 Report cites research undertaken by the Consultative Group to Assist the Poor (CGAP, 2012. "Social Cash Transfers and Financial Inclusion: Evidence from Four Countries." Washington, DC.

[57] P14/15 (Their source West, H. and R. Lehrer, 2014. "Working with the Poorest Women in Bangladesh." Available at http://www.cgap.org/blog/working-poorest-women-pakistan.)

[58] Owens, John, Offering Digital Financial Services to Promote Financial Inclusion: Lessons We've Learned, *Innovations: Technology, Governance, Globalisation*, Volume 8, Issue 1/2, 2013, pp271-282. P 279.

#### 3.1.4 Role of Development Organisations

Development organisations are involved in various initiatives to support financial inclusion efforts which involve the use of digital channels. Some examples include:

- The Australian Government's Department of Foreign Affairs and Trade (DFAT) funding efforts to improve disclosure on remittance costs. This has assisted consumers in the Pacific to make better informed decisions on the most cost-effective remittance channels; www.sendmoneypacific.org, established with DFAT funding, is credited with facilitating the fall in remittance costs for sending money to the Pacific region from Australia, New Zealand the US. Between January 2009 and June 2014, the cost of remitting money from Australia to the Pacific Island countries fell by 23%, from New Zealand the fall was 28% and from the US, where there is less competition, the fall was 9%.[59]
- The Australia-New Zealand-International Finance Corporation (IFC) Pacific Partnership's National Payments System Reform project is aimed at "improving, through the development of effective legislation and oversight, the efficiency and safety of financial transactions, fulfilment of payments, protection of consumer deposits and dispute resolution.[60]
- The ADB, IFC and the Pacific Financial Inclusion Programme (PFIP) jointly sponsored the 4th Pacific Microfinance Week, held in October 2013—a financial inclusion learning and networking event in the region which had a particular focus on DFS.[61]

Development organisations are also looking to shift their *own* disbursements from cash based payment methods to channels using DFS. This shift will avoid the inefficiencies and leakage experienced with cash-based payment systems. Muralidharan, K. et. al. (2014) found statistical evidence supporting the use of biometrically-authenticated payments infrastructure in welfare payments to improve the reliability and speed of such payments and reduce corruption; the authors referenced case studies which indicated the amount of money meant for the poor but stolen by corrupt officials ('leakage') could be as high as 75–80 per cent.[62]

Development organisations are aware of the leakage issues and are beginning to disburse funds via DFS.[63] This is also being done simply to further promote the use of digital payment channels. However the systems themselves are still not ubiquitous and have often experience low activity levels; the

[59] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p5.

[60] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p5.

[61] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p7.

[62] Muralidharan, Karthik, Paul Niehaus, Sandip Sukhtankar, March 2014, Building State Capacity: Evidence from Biometric Smartcards in India, National Bureau of Economic Research, Working Paper 19999. http://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/Building%20State%20Capacity%20%28NBER%20WP%2019999%29.pdf

[63] Lauler, Julienne, April 22, 2014, How Can Development Organisations Shift From Cash to Mobile, *Mondato Blog*, http://mondato.com/blog/how-can-development-organizations-shift-from-cash-to-mobile-money/

GSMA State of the Industry Report 2013 highlighted the low activity prevalent in many deployments, noting that, globally in 2013, only just under 30 per cent of mobile money accounts were active.[64]

Even for countries that have mobile money deployments with high activity, the barrier of gaining senior-level support for changing payments processes must still be overcome. It is often the expected characteristic of finance teams to be conservative and so shifting to DFS to payments disbursements requires "exhaustive analyses of risk."[65] However, success stories do exist, such as Mercy Corps in the Philippines, providing development organisations with many good examples to follow.[66]

A report by Bankable Frontiers Associates, commissioned by the Better Than Cash Alliance, highlights that barriers faced by donors may be decreasing.[67] The report cites a survey by Cash Learning Partnership which highlights regulatory changes allowing for easier basic account opening processes for poor recipients of cash transfers as well as improved information sharing mechanisms which overcome knowledge barriers.

Sustained development efforts directed towards transitioning to a digital financial ecosystem will be critical for systems to become more ubiquitous, to increase activity levels and realise profitability.[68]

### 3.1.5 Developing Enabling Legal and Regulatory Frameworks

Financial regulators in developing countries are now firmly involved in both their traditional policy objectives of promoting safe and efficient financial systems and promoting financial inclusion.[69] In particular, regulators are developing enabling legal and regulatory frameworks which support the use of DFS for financial inclusion and include new participants introducing innovative methods using DFS to reach the unbanked and under-banked.[70]

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64 Penicaud, Claire and Arunjay Katakum, February 2014, State of the Industry 2013: Mobile Financial Services for the Unbanked, GSMA Report, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

65 Lauler, Julienne, April 22, 2014, How Can Development Organisations Shift From Cash to Mobile, *Mondato Blog*, http://mondato.com/blog/how-can-development-organizations-shift-from-cash-to-mobile-money/

66 Lauler, Julienne, April 22, 2014, How Can Development Organisations Shift From Cash to Mobile, *Mondato Blog*, http://mondato.com/blog/how-can-development-organizations-shift-from-cash-to-mobile-money/

67 Bankable Frontier Associates (BFA) Report commissioned by Better Than Cash Alliance, 2012 *The Journey Towards Cash Lite*, http://betterthancash.org/wp-content/uploads/2012/09/BetterThanCashAlliance-JourneyTowardCashLite.pdf. The survey cited by BFA is Smith, G., Macauslan, I., Butters, S., & Tromme, M., 2011, *New Technology in Cash Transfer Programming and Humanitarian Assistance, A Report for the Cash Learning Partnership (CaLP)*.

68 Almazan, Mireya and Nicolas Vonthron, GSMA, November 2014, Mobile Money Profitability: A digital ecosystem to drive healthy margins, *GSMA MMU Report*, p17. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/11/2014_Mobile-money-profitability-A-digital-ecosystem-to-drive-healthy-margins.pdf

69 Financial inclusion goals are being pursued in tandem with efforts directed toward financial stability, integrity and consumer protection because they are seen as complementary and because financial inclusion is considered an important means for alleviating poverty and promoting a country's broader economic development. The focus on financial inclusion is seen in many international forums: G20 Summits, the G20's Global Partnership for Financial Inclusion (GPFI), the Global Policy Forum (GPF) of AFI, the Better Than Cash Alliance (BTCA), the Financial Action Task Force (FATF), and the Bank for International Settlements' Basel Committee on Banking Supervision (BCBS).

70 An 'enabling' regulatory environment is described in Gutierrez, Eva, and Sandeep Singh, 2013, What Regulatory Frameworks are More Conducive to Mobile Banking? Empirical Evidence from Findex Data, *World Bank Policy Research Working Paper No 6652*, 1 October 2013, http://ssrn.com/abstract=2338858

#### 3.1.6 International and Regional Regulatory Initiatives

The Alliance for Financial Inclusion (AFI) is the driving force behind coordinating international initiatives for developing enabling legal and regulatory frameworks for financial inclusion purposes. AFI promotes proportional regulation in line with the "proportionality principle" promoted in the G20 Principles for Innovative Financial Inclusion which focuses on ensuring regulations are proportionate with the risks and benefits so innovation is not unnecessarily stifled as a result of regulation, i.e. regulations need to be carefully analysed to identify barriers they present to market developments which could otherwise promote financial inclusion.[71] AFI is an implementing partner of the G20 Global Partnership for Financial Inclusion (GPFI) and was a significant contributor to the G20 Principles for Innovative Financial Inclusion.

AFI's efforts are also given significant weight through countries supporting the Maya Declaration. By supporting the Maya Declaration a country makes measurable commitments to increase financial inclusion in four broad areas, including a focus on harnessing new technologies such as DFS. To date, more than 90 countries, representing more than 75 per cent of the world's unbanked population, have supported the Declaration.[72]

AFI has a number of mechanisms in place which are focused on ensuring the development of international financial regulation standards which are consistent with financial inclusion goals. AFI's Global Standards Proportionality Working Group (GSPWG) is the primary technical and implementation support for the Global Standards Sub-Committee (GSSC). The GSSC is the high level advisory body to the AFI Peer Learning Program. As outlined on AFI's website, the GSPWG supports GSSC in "three principal areas:

- Document country case studies of the proportionate implementation of global standards;
- Identify potential points of friction between global standards and national policy objectives, based on members' experiences; and
- Contribute to the development of an extended risk framework which takes account of the risks and consequences of financial exclusion."[73]

More recently, there has been an increased level of commitment and collaboration between AFI's GSSC and the international Standard Setting Bodies (SSBs).[74] The Chair of AFI's GSSC, along with the Executive Director of AFI, met with representatives of the international SSBs in mid-2014 in Basel. The meetings between AFI and the SSBs focused on how AFI members could contribute to the SSBs work-streams. In mid-October 2014 further high-level meetings were held between AFI the

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[71] Principle 8 of the G20 Principles for Innovative Financial Inclusion is: "Build a policy and regulatory framework that is proportionate with the risks and benefits involved in such innovative products and services, and is based on an understanding of the gaps and barriers in existing regulation." The Principles were developed in 2010 by the Access Through Innovation Sub-Group (ATSIG) of the G20 Financial Inclusion Experts Group (FIEG). The Principles can be accessed at http://www.afi-global.org/sites/default/files/afi%20g20%20principles.pdf.

[72] Details on the Maya Declaration can be found on the Alliance for Financial Inclusion's website at http://www.afi-global.org/maya-declaration-afi-member-commitment-financial-inclusion.

[73] Details on the Global Standards Proportionality Working Group (GSPWG) can be found at http://www.afi-global.org/news/2014/6/20/afi-launches-global-standards-proportionality-working-group

[74] The SSBs include: the Basel Committee for Banking Supervision (BCBS), the International Association of Deposit Insurers (IADI), and the Committee on Payment Settlements and Systems (CPSS), the Committee on Payments and Markets Infrastructures (CPMI) and the FATF, the International Association of Insurance Providers (IAIP) and the International Organisation of Securities Commission (IOSCO). (Note: The CPSS is sometimes not included in references to international SSBs).

international SSBs. In late October 2014 AFI participated in the second conference of the G20 Global Partnership for Financial Inclusion/Bank for International Settlements (GPFI/BIS) Conference on Standard Setting Bodies and Financial Inclusion in late 2014. The conference's theme was "Standard-setting in the changing landscape of financial inclusion."[75] This conference included representatives from all six on the international standard setting bodies.

It is expected that this level of collaboration and cooperation on global standards between developing countries and developed countries will contribute to successful and sustainable initiatives in DFS. As Amando M Tetangco, Jr, Governor of Bangko sentral ng Pilipinas (BSP) stated at AFI GPF 2014: "Global standards greatly affect the level of exclusion, as well as the range, quality and affordability of financial products available to clients at the bottom of the pyramid."[76] Tetangco highlighted that AFI members are able to contribute significantly to SSB discussions because they have "first hand experience in practicing proportionality for the purpose of improving financial inclusion." In addition to its direct work with AFI, BSP also chairs the Basel Consultative Group Workstream on Financial Inclusion. The aim of the working group is to "form an overall risk picture on financial inclusion that would be of particular relevance to banking supervisors around the world." [77]

AFI has working groups and knowledge exchanges which facilitate collaboration and cooperation in the international community with respect to financial inclusion issues. The working groups provide a forum for peers to discuss and exchange policy ideas and developments. Outputs are produced which include "guideline notes, discussion papers, surveys, data indicators, case studies and peer reviews," collectively referred to as knowledge products. AFI's forums provided the platform for sharing between regulators. For example the Philippines' consumer protection framework and financial education program were "inspired" by what BSP learning from Bank Negara Malaysia and AFI's forums also enabled BSP to share its regulatory experiences with Bank of Tanzania and comment on its draft e-money regulations.[78]

Regulatory cooperation also occurs at a regional level on issues related to financial inclusion and DFS. Financial regulators in the Pacific region have a strong reputation for collaboration and cooperation. This was reflected by the establishment in 2009 of the Pacific Islands Working Group (PIWG) under AFI—the first, and for a long time—only, working group established with a geographical basis. In 2014, PIWG was relaunched as the Pacific Islands Regional Initiative. Its mission is to "create conditions that lead to the financial empowerment of Pacific Islanders in the short to medium term." Utilising technology for financial service provision and access is one of its key objectives.[79]

The central banks of the Pacific have been active in working together on and seeking resolution for is the issue of Money Transfer Operators (MTOs) having their bank accounts closed, thus restricting remittance flows into the Pacific by formal electronic banking channels and necessitating the likely use of informal (nondigital) channels. The MTOs' accounts have been closed due to concerns associated

[75] Further details on this conference and its participants can be found from the Bank for International Settlements Press Release at http://www.gpfi.org/sites/default/files/documents/Press%20Release_GPFI-BIS%20conference.pdf

[76] Tetangco, Jr, Amando M., Governor of Bangko sentral ng Pilipinas at AFI GPF 2014, Port-of-Spain, The three Cs of Alliance for Financial Inclusion's Success, Speech in Trinidad and Tobago, 10 September 2014. (Tetangco noted the success of AFI could be attributed to three Cs: commitment, collaboration and concrete results.)

[77] Tetangco, Jr, Amando M., Governor of Bangko sentral ng Pilipinas at AFI GPF 2014, Port-of-Spain, The three Cs of Alliance for Financial Inclusion's Success, Speech in Trinidad and Tobago, 10 September 2014.

[78] Tetangco, Jr, Amando M., Governor of Bangko sentral ng Pilipinas The three Cs of Alliance for Financial Inclusion's Success, *Speech* at AFI GPF 2014, Port-of-Spain, Trinidad and Tobago, 10 September 2014.

[79] Background on the Pacific Islands Regional Initiative can be found at http://www.afi-global.org/about-us/how-we-work/about-working-groups/pacific-islands-regional-initiative-piri.

with money laundering and the financing of terrorism, however, it is widely considered that the banks have over-reacted by closing the accounts of MTOs. The issue is a concern for consumers who have, quite suddenly in some instance, lost access to a valid and formal means of transferring and receiving funds.[80] Efforts to resolve this issue extends to the international stage with the US Department of Treasury's Financial Crimes Enforcement Network, the World Bank, the G20 and the Financial Action Task Force all working together to develop a strategy to address the issue. The MTO account closures by banks is being referred to as derisking—where a business relationship is terminated by a financial institution to avoid perceived regulatory risk rather than responding to an assessment of risk.[81] The consequence of these actions is that, ironically, transactions are moved out of the formal economy (where they are digital and traceable) to the informal economy (where they are cash-based and anonymous), thereby actually reducing financial inclusion without necessarily improving the financial stability and integrity of global economies.

#### 3.1.7 National Regulatory Initiatives

Domestic legal and regulatory environments are being adjusted to support financial inclusion goals and accommodate the entry of new participants in digital financial services not previously captured by financial regulation.[82] Legal and regulatory frameworks are being adjusted to deal with the main priorities for promoting DFS which include: consumer protection, protecting customers' funds; promoting interoperability; implementing simplified Know Your Customer (KYC) processes; and ensuring agent networks are well-managed by providers (especially in terms of consumer protection issues).

Consumer protection is a key focus because those being financially included are generally from a low income socioeconomic group and with limited experience of formal financial services. Regulators are focused on balancing the need to protect consumers with the need to encourage service providers to introduce products and services for the unbanked in order to improve financial inclusion and improve standards of living. Regulating to mitigate risk without unnecessarily burdening market participants is proportional regulation (as referred to above). Regulators can maintain proportional regulation as their goal by considering the factors influencing the behavior of service providers and the range of regulatory responses available to best manage this behavior of service providers; regulatory responses may range from guidelines or recommendations through to regulatory mandates.[83]

The subsections below provide examples of regulatory responses to DFS in relation to: protecting customers' funds; promoting interoperability; implementing simplified KYC processes; and ensuring agent networks are well-managed by providers. Section Four, focuses specifically on financial

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80 PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p 5.

81 Background on this issue can be found at http://www.treasury.gov/press-center/press-releases/Pages/jl2692.aspx

82 See for example comments of John Owens, Senior Policy Advisor at AFI, on Tanzania's approach to the regulation of mobile money: Owens, John, 2014, Highlights on the Mobile Financial Services Landscape in Tanzania and Lessons for Regulators, Alliance for Financial Inclusion Blog, 24 February, http://www.afi-global.org/blog/2014/02/24/highlights-mobile-financial-services-landscape-tanzania-and-lessons-regulators; see also GSMA's article on the regulatory development for mobile money in Brazil and Peru – this provides a good overview of the benefits of leveling the playing field for nonbanks through regulation: Almazan, Mireya, 2013, Mobile Money Regulation in Latin America, Leveling the Playing Field in Brazil and Peru, *GSMA Mobile Money for the Unbanked Blog*, 19 December, http://www.gsma.com/mobilefordevelopment/mobile-money-regulation-in-latin-america-leveling-the-playing-field-in-brazil-peru.

83 Alliance for Financial Inclusion, 2014, Mobile Financial Services: Consumer Protection in Mobile Financial Services, *Guideline Note, No 13, Mobile Financial Services Working Group,* March, p 1. http://asbaweb.org/E-News/enews-37/incfin/06incfin.pdf

consumer protection frameworks and considers how these frameworks could be strengthened to build greater consumer trust in DFS.

#### *3.1.7.1 Protecting Customers' Funds*

One main aspect of DFS for which financial regulators need to adjust regulatory frameworks is "stored value." Stored value is a specific feature of some DFS, namely mobile moneys services, stored value cards, prepaid cards. Stored value refers to the situation where a customer's funds are held as stored value with a digital financial service provider, and are not generally considered to be deposit in a bank and so are not covered by depositor protection provisions or deposit insurance.[84] If a customer's funds are stored in a bank deposit account in the customer's name then these funds are protected by traditional bank regulation and deposit protection provisions and possibly also deposit insurance, irrespective of whether they are accessed through digital or physical access methods. With stored value, generally new regulatory requirements are needed for the purpose of protecting the customer's stored value. Regulatory requirements focus on fund isolation, fund safekeeping and operational risk management.

Some jurisdictions will require the service provider to hold liquid assets, such as bank deposits and government bonds, which are equivalent in value to the stored value. The objective being to ensure the provider has readily available liquidity to meet customer demands. Examples of developing countries within Asia using these liquidity requirements include Indonesia, Philippines, Sri-Lanka and Malaysia.[85]

Some common law jurisdictions, such as Fiji, use trusts to provide additional protection for customers' stored value which are not classified as deposits.[86] Trusts provide for three main protections: fund isolation, fund protection and reducing operational risk by providing the regulator with 'active' regulatory powers so it can enforce the terms of a trust on behalf of customers.[87]

#### *3.1.7.2 Promoting Interoperability*

Many regulators are now grappling with the issue of how best to promote interoperability as it is not necessarily clear that system infrastructure which enables interoperability and interconnectivity will automatically contribute towards sustainable DFS. Regulators can encourage systems which incorporate end-user interoperability where a customer accesses their funds using the system of another provider or bank. Regulators can also encourage industry participants to plan for compensation arrangements *by* system participants *for* the entities making the investment for the development of interoperable systems. However, market participants may be concerned that any market share which they build through agent training and consumer education may be diluted by interoperability and they may then allocate investment resources to other projects; it is difficult to negotiate and plan for adequate compensation on possible market share losses.

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[85] Indonesia (Circular Letter Concerning E-Money, No. 11/11/DASP, 13 April 2009); Bank Indonesia Regulation Concerning Electronic Money, No. 11/12/PBI/2009, 13 April 2009; and Circular Letter Concerning E-Money, No. 11/11/DASP, 13; see Philippines – Circular 649, Section 5(D); Sri Lanka (Mobile Payments Guidelines: 1) Art. 1.3, Art. 6.2 (d); Malaysia also (Guideline on Electronic Money BNM/RH/GL-16-3, July 2008).

[86] Greenacre, Jonathan and Buckley, Ross, with support from the Pacific Financial Inclusion Programme, 2013, *Trust Law Protections for E-Money Customers: Lessons and a Model Trust Deed Arising from Mobile Money Deployments in the Pacific Islands* ("Trust KP"), October.

[87] Information on these protections is available in the Trust KP.

The experience of the Bank of Ghana (BOG) with respect to interoperability provides an example of how regulators have had to navigate the interoperability challenges. BOG's initial e-money guidelines mandated a many-to-many approach in which bank-led models and mobile network operators (MNO) were required to partner with more than one bank.[88] Industry participants felt constrained by this regulatory approach and market development was stifled. In response BOG took steps to wind back this requirement and to allow MNOs and banks to deal with each other exclusively.[89] BOG's approach contrasts with the Bank of Papua New Guinea's (BPNG) approach. BPNG issued e-money guidelines in 2011 which encouraged interoperability but stopped short of mandating it. These guidelines were subsequently issued as prudential standards (not published) yet there remains a number of competing "closed-loop" mobile money systems operating in Papua New Guinea.

In the Philippines, the central bank is playing a lead role in initiatives around interoperability in an effort to see progress and avoid a repeat of the length of time it took for ATMs in that country to become interoperable (ATMs were introduced in the 1980s and were made interoperable in 2006). The central bank, BSP, is working with the two MNOs offering e-money services (Globe and Smart) and with industry expert consultants. BSP is now working on options such as a common switch which will operate as a utility to which payments participants can connect.[90]

Industry participants are also responding to the demands for interoperability. MicroSave has recently highlighted industry efforts towards interoperability, noting that nine mobile money services across Africa and the Middle East have pledged in 2014 to offer interoperable services, this includes Bharti Airtel, Etisalat, Millicom, MTN, Ooredoo, Orange, STC, Vodafone and Zain. In Asia in 2014, the mobile money service provider Dialog Axiata Sri Lanka announced other operators could offer its mobile money product, eZ Cash to their customers.[91]

#### *3.1.7.3 Implementing Simplified Know Your Customer Processes*

Simplified KYC refers to using a Risk Based Approach (RBA) which involves using reduced or simplified Consumer Due Diligence (CDD) for lower-risk products or an exemption from CDD measures in specific instances of proven low ML/TF risk. A RBA is in line with the aforementioned "proportionality principle" promoted in the G20 Principles for Innovative Financial Inclusion. A RBA is critical for countries building more inclusive formal financial systems and increasing financial access for the unbanked and underbanked.[92] Significant international and national efforts have focused on

[88] Bank of Ghana, 2008, *Guidelines for Branchless Banking*, http://www.bog.gov.gh/privatecontent/Monetary_Policy/2008/August/regulatory%20framework%20for%20branchless%20banking.pdf

[89] This recounting of BOG's experience is taken from comments by Elly Ohene-Adu, the Head of the Banking Department at the Bank of Ghana at the Responsible Finance Forum, 28-29 August 2014, Perth, Australia; and in an interview of Elly Ohene-Adu by Merene Botsio, Financial Inclusion 2020 Project Coordinator, CFI, July 18, 2013, http://cfi-blog.org/2013/07/18/moving-towards-a-more-financially-inclusive-ghana/

[90] USAID, 2013, *Building Consensus Towards Enabling an Efficient and Inclusive National Payments System in the Philippines: A Significant Step*, 24 April, http://www.simmphil.org/misc/building-consensus-towards-enabling-an-efficient-and-inclusive-national-payments-system-in-the-philippines-a-significant-first-step

[91] Camner, Gunnar, 2014, Etisalat joins Dialog Sri Lanka's mobile money deployment eZ Cash, *GSMA Mobile Money for the Unbanked Blog*, 28 February, http://www.gsma.com/mobilefordevelopment/etisalat-joins-dialog-sri-lankas-mobile-money-deployment-ez-cash

[92] The Alliance for Financial Inclusion members created the Financial Integrity Working Group (FINTWG) in September 2010 to provide a platform on which to focus on issues of balancing financial integrity with financial inclusion. In April 2013, AFI issued a Guidance Note developed by FINTWG for regulators on the risk based approach to Anti-Money Laundering (AML) and Countering the Financing of Terrorism (CFT) for balancing integrity and inclusion: FINTWG, 2013, Risk-Based Approaches to AML/CFT: Balancing Financial Integrity and Inclusion, *Guidance Note, AFI*, 16 May, http://www.afi-global.org/library/publications/risk-based-approaches-amlcft-balancing-financial-integrity-and-inclusion

implementing a RBA for new payment methods such as DFS because of the significance of DFS for improving financial inclusion.

In June 2013, the Financial Action Taskforce (FATF)[93] issued a guidance paper specifically focused on understanding how to apply a RBA when implementing AML/CFT measures for new payment methods—*FATF's Guidance for a Risk-Based Approach to implementing AML/CFT measures for Prepaid Cards, Mobile Payments and Internet-Based Payment Services, June 2013*.[94] These new payment methods are referred to collectively by FATF as New Payment Products and Services (NPPS). The June 2013 FATF guidance paper provides details on how to apply the risk assessment and risk mitigation processes, which underpin a RBA, for NPPS and how to undertake the regulation and supervision of entities involved in the provision of NPPS. FATF uses this guidance paper to encourage the application of simplified CDD for NPPS which are specifically aimed at promoting financial inclusion.

DFS often involve the use of agents for account opening purposes. Permitting agents to undertake CDD, such as customer verification, in remote locations has raised concerns around ML/FT.[95] However, by using a RBA with tiered KYC, the risks can be mitigated and financial inclusion supported. A number of countries permit agents to conduct basic CDD to facilitate the opening of accounts with basic functionality (Asia and Pacific country examples include the Philippines, Sri Lanka and Papua New Guinea (PNG)). Tiered KYC/CDD is applied where the functionality of the product (the transaction and payments limits) is varied depending on the level of CDD undertaken. The current FATF Recommendations allow for the application of simplified CDD in cases where there is a low risk of money laundering or terrorist financing. If simplified CDD is accepted then the product should have low transaction limits applied to its usage. The more comprehensive the CDD process, then higher limits or broader functionality of the product may be allowed.

An example of tiered KYC using the RBA is provided below:

- Tier One—Simplified CDD: minimum verification of identification which may include a registered SIM card, an electoral card, a beneficiary card, or a letter from a prominent person (such as a village chief) verifying the customer's identity;
- Tier Two—Basic CDD: verification requirements constitute a government-issued identification document such as a passport or other form of government-issued ID; and
- Tier Three—Enhanced CDD: Full KYC/CDD requirement as specified in AML/CFT legislation.

Risks can be further mitigated for Tier One and Tier Two customers by limiting these customers to one account per person per provider, in contrast to Tier Three customers, who could open more than one account.

93 FATF is the global standards setting body for AML/CFT.

94 The FATF Paper, June 2013, *Guidance for a Risk-Based Approach: Prepaid Cards, Mobile Payments and Internet-Based Payment Services* reiterates a great deal of the content of the FATF Guidance Paper, February 2013, *Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion*, but with an emphasis on applying a RBA to NPPS.

95 Tarazi, Michael and Breloff, Paul, 2011, Regulating Banking Agents, *CGAP Focus Note No. 68*, 10, March, http://www.cpag.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf

#### *3.1.7.4 Regulations on the Use of Agents*

A number of jurisdictions are now introducing specific regulation governing the use of agents in digital financial services. Regulators are adopting a broad definition of an agent, as opposed to a definition in the legal sense (both in common law and civil law). The broad definition is used to make it clear that the principal is responsible for the actions of its agents, so long as the agent is acting within the authority given to it by the principal. For example, an agent relationship may exist in "any type of outsourcing of client interface activities to third parties, be it through a formal agency relationship, a joint venture, or other type of business arrangement."[96] Regulations are also used to preclude attempts by principals to exclude their liability to customers for any acts, omissions or defaults of its agent.[97] Jurisdictions using regulations in this way include Fiji[98] and Bangladesh.[99]

The agent's role in the DFS model is critical because they provide the cash-in/cash-out service which is so heavily relied upon by customers, largely because of the continued absence of true digital ecosystems. Agents face liquidity constraints and security issues associated with cash handling responsibilities. Regulators are turning their attention to how to relieve the cash management problems faced by agents involved in DFS. The Governor of the Reserve Bank of India, Raghuram Rajan, proposed giving some portion of government welfare in the form of "electronic coupons" to be used for specific purposes such as for "food, education or healthcare." Rajan explained this approach could not only serve the intended purpose of building the recipients' capabilities through improved health and education but it could also assist in solving the cash handling security problems faced by agents.[100] Rajan also proposed that the government use the bank agent networks of "mini-banks" to issue subsidy payments which will enable the agents to charge "reasonable commissions."[101] Rajan emphasized that "financial inclusion cannot be achieved without it being Profitable.... There should be profits at the bottom of the pyramid." [102]

#### *3.1.7.5 Cross-Regulatory Cooperation*

Since DFS involves a range of market participants, there are involvement many regulators with different regulatory responsibilities. Cooperation among regulators is essential to ensure coordinated and consistent approaches to policy making. As there may be more than one regulator with responsibility for DFS market participants, it is important for a country to have clear lines of accountability within

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96 Dias, Denise and McKee, Katharine, 2010, Protecting Branchless Banking Consumers: Policy Objectives and Regulatory Options, September, *CGAP Focus Note No. 64*, 6, http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Protecting-Branchless-Banking-Consumers-Policy-Objectives-and-Regulatory-Options-Sep-2010.pdf; Tarazi, Michael and Breloff, Paul, 2011, Regulating Banking Agents, *CGAP Focus Note No. 68*, 6, March, http://www.cpag.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf

97 M-Pesa is often cited as an example of a principal claiming no liability for its agents both because no regulations existed for nonbank principals such as Safaricom and because the company specifically excluded itself from liability for the actions of its agents in the terms and conditions of its agreements with customers. In practice however, Safaricom has assumed liability for the actions of its agents and regulators have assumed that Kenyan common law principles of agent liability apply to Safaricom. If the issue went to court, Safaricom would likely be deemed liable. See Tarazi, Michael and Paul Breloff, March 2011, Regulating Banking Agents, *CGAP Focus Note No. 68*, 10, http://www.cpag.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf

98 Reserve Bank of Fiji, 2013, Agent Banking Guideline, *Banking Supervisory Policy Statement No. 18*, 4 (7.1.a.).

99 Bangladesh Bank, 2013, Guidelines on Agent Banking for the Banks, *PSD Circular No. 05*, 4 (10.2), 9 December.

100 Rajan, Rahhuram, 2014, Finance and Opportunity in India, *Address by Raghuram Rajan at the Twentieth Lalit Doshi Memorial Lecture*, 11 August at Mumbai. http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/LDMLF110814.pdf

101 Rajan, Rahhuram, 2014, Finance and Opportunity in India, *Address by Raghuram Rajan at the Twentieth Lalit Doshi Memorial Lecture*, 11 August at Mumbai, p7. http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/LDMLF110814.pdf

102 Rajan, Rahhuram, 2014, Finance and Opportunity in India, *Address by Raghuram Rajan at the Twentieth Lalit Doshi Memorial Lecture*, 11 August at Mumbai, p 7. http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/LDMLF110814.pdf

Government and for mechanisms to be in place which facilitate effective cooperation between the regulators.[103] Consumers need clarity on which regulator they should approach when their complaints are not addressed by the service provider.[104]

Distinct regulatory approaches will determine how cooperation between regulators work in practice. Regulators to operate with a silo approach if regulations are entity-focused because of a tendency to develop rules that reflect their areas of expertise rather than adopting a holistic risk-based approach. A range of problems such as disproportionate regulation or regulatory arbitrage can arise for regulated entities in the absence of a level playing field. Alternately, a risk-based regulatory approach that is activity-focused can encourage cooperation among regulators by leveling the playing field for the different entities engaged in activities similar to providing mobile money products and services.[105]

For DFS there is generally a need for the financial regulator to have close coordination with the telecommunication regulator. Telecommunication regulators and financial regulators benefit from close coordination on issues of consumer identification; SIM card registration requirements (often set-down by the telecommunications regulator) can be used to provide confidence in using SIM cards as a form of consumer identification verification. For example in Fiji, the financial regulator's KYC requirements for mobile money services were reduced in recognition of mobile operators already collecting information on customers from SIM registration processes.[106]

#### *3.1.7.6 Enabling Legal and Regulatory Frameworks—Looking Ahead*

At the AFI Global Policy Forum meeting in September 2014, the Governor of the Central Bank of the Solomon Islands, Governor Rarawa, identified what regulators need to focus on to continue to support financial inclusion using DFS:

- "Methods to further encourage digital financial service providers to take an applied product innovation approach to design more value-added digital financial service products that suit customers' needs;
- Ensure that appropriate consumer protection issues are addressed, especially for new clients entering the financial services market via the digital platform; and
- Continue to support financial education and client awareness of the responsible use of new digital financial service options."[107]

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[103] G20 Report, 2014, p 17.

[104] Alliance for Financial Inclusion, 2014, Mobile Financial Services: Consumer Protection in Mobile Financial Services, *Guideline Note, No 13, Mobile Financial Services Working Group,* March. http://asbaweb.org/E-News/enews-37/incfin/06incfin.pdf p 5.

[105] Greenacre, Malady and Buckley. 2014. *The Regulation of Mobile Money in Malawi Project Report.* http://www.uncdf.org/sites/default/files/Documents/the_regulation_of_mobile_money_in_malawi_project_report_final_version.pdf

[106] Zerzan, Andrew, November 2010, Is SIM Registration a backtrack on tiered KYC? *GSMA Mobile Money for the Unbanked Blog,* http://www.mobilemoneyexchange.org

[107] Owens, John, 2014, Digital Financial Services: Where are we headed?, *AFI Blog,* October, http://blogs.afi-global.org/2014/10/30/digital-financial-services-where-are-we-headed/

## SECTION 4: CONSUMER PROTECTION FRAMEWORKS FOR DIGITAL FINANCE SERVICES

While DFS increases the accessibility of a range of financial services for consumers in developing countries, there are new consumer risks and challenges which arise due to the reliance on digital channels. Identifying, assessing and mitigating these new risks and challenges will be essential to building and maintaining consumer trust in DFS, encouraging its wider use by consumers and improving financial inclusion.

As noted above, in Section 3, financial regulators have been focused on developing enabling legal and regulatory environments for financial inclusion purposes and this has included strengthening and developing consumer protection frameworks. This Section presents the results of this author's cross-country review of financial consumer protection frameworks which assessed the extent to which the risks arising from using DFS have been considered and/or incorporated into financial consumer protection frameworks. Countries reviewed include the Philippines, Malaysia, Papua New Guinea and Fiji.

The methodology for the cross- country review involved firstly identifying the new consumer risks and challenges associated with DFS and secondly identifying how consumer protection frameworks could be, and are being, strengthened in the face of these new risks and challenges. The selected countries' financial consumer protection frameworks were then reviewed against the backdrop of this understanding of new risks and how the risks could be mitigated. The results of this review are presented below along with recommendations for further steps on strengthening financial consumer protection frameworks to address the consumer risks arising from the use of DFS.

### 4.1 Identifying Consumer Risks and Challenges in Digital Finance Services

A number of international organisations have conducted in-depth analyses of the consumer risks and challenges arising from the use of DFS. These organisations include: the Alliance for Financial Inclusion[108], the OECD,[109] the Better Than Cash Alliance (BTCA),[110] and the Consultative Group to

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[108] Alliance for Financial Inclusion, 2014, Mobile Financial Services: Consumer Protection in Mobile Financial Services, *Guideline Note, No 13, Mobile Financial Services Working Group,* March. http://asbaweb.org/E-News/enews-37/incfin/06incfin.pdf

[109] The OECD report identifies a set of issues which policy makers need to address in order to strengthen consumer confidence in new and emerging e-commerce payment systems. While OECD recommendations relate to developed countries, it is considered relevant to consider these issues for this report. The OECD report cover five principal areas:
- Clarity, transparency and completeness in information disclosure.
- Variability in regulatory and protection regimes.
- Fraudulent, misleading and deceptive commercial practices.
- Dispute resolution and redress.
- Security and interoperability.

OECD (2012), Report on Consumer Protection in Online and Mobile Payments, OECD Digital Economy Papers, No. 204, OECD Publishing. http://dx.doi.org/10.1787/5k9490gwp7f3-en.

[110] The specific consumer risks to be mitigated in relation to DFS have been identified by CGAP and UNCDF's Better Than Cash Alliance to include:
- "Fraud types that have potential negative effects on customers, such as SIM swaps and card skimming.
- Breaches of data privacy and protection, as inadequate data handling can trigger other risks such as identity theft, misuse by government, sale of one's data without knowledge or consent, etc.
- Agent misconduct that causes financial loss, poor service quality, or mistrust in the agent network.
- Ineffective or inadequate consumer recourse and its effect on consumer trust as well as financial services uptake and usage.
- Customer risk implications of the predicted rapid transition to smartphones in BOP [Base of the Pyramid] markets."

Assist the Poor (CGAP), MicroSave and Bankable Frontiers Associates (BFA).[111] Based on a review of this body of work, the list below is considered broadly representative of the main risks and challenges identified in relation consumer protection and using digital channels for financial services:

- The consumers being targeted may have *limited experience* in dealing with such formal technology-based financial services and so may initially find the products and services *complex* to understand;[112]
- There is increased security and technology risk due to the *technology dependent nature* of the financial services being provided. For example there is the need for reliable mobile telecommunications infrastructure and network coverage in order to conduct transactions safely and efficiently and there is a reliance on customers keeping their PINs and mobile phones safe and secure;[113]
- As a result of the broader range of participants involved in the delivery of DFS the services may appear *less transparent* to consumers with respect to who they should consider as the product/service provider and who should be held accountable/responsible when things go wrong with their transactions;
- In relation to the above point, the particular reliance on agent networks in DFS to provide the essential role of cash-in and cash-out for consumers gives rise to new concerns with respect to principal and agent management behavior; and
- A range of regulators may be involved in regulating DFS because of the broad range of participants involved in providing DFS. This has two effects: it can *complicate accountability* in the minds of the consumer; and it can create *variability in regulatory and protection* regimes.

### 4.2 Enhancing Consumer Protection Frameworks for Digital Finance Services

Consumer protection frameworks need to address the above risks and challenges. These frameworks need to guide service providers and their agents towards behavior and actions which contribute towards the best outcomes for those being financially included.

Consumer protection frameworks for DFS can be enhanced by ensuring:

- Consumers understand their rights and obligations when using DFS (disclosure is clear, transparent and complete). In particular, consumers must understand their obligations to keep PINs safe and confidential;
- Dispute resolution mechanisms are clear, easily understood and available;[114]

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Jamie Zimmerman, The Emergence of Responsible Digital Finance, Centre for Financial Inclusion (21 July 2014). http://cfi-blog.org/2014/07/21/the-emergence-of-responsible-digital-finance/

111 MicroSave, CGAP and BFA undertook collaborative research in four countries (Uganda, the Philippines, Bangladesh and Colombia) to understand how consumers *perceive* risks in DFS. The results of this research, Consumer Protection and Emerging Risks in Digital Financial Services, were presented by MicroSave at the Responsible Finance Forum in Perth, 28 August 2014, http://responsiblefinanceforum.org/publications/consumer-protection-emerging-risks-digital-financial-services/

112 G20 Report, 2014, p 16.

113 This point is made by in the Alliance for Financial Inclusion Mobile Financial Services Working Group Guideline note on consumer protection in Mobile financial service, March 2014, p4.

114 Information disclosure, dispute resolution and redress mechanisms are very important when considering the sophistication of the end-user in relation to experience with formal financial services and formal financial literacy.

- Providers of DFS understand their role and responsibility to end-users evidenced by well-functioning disclosure and consumer recourse mechanisms;
- Regulators identify, and act on, any gaps or weaknesses in consumer protection arrangements for DFS. This extends to assessing business contingency plans for dealing with disruptions in consumer transactions due to network coverage problems or disruptions in telecommunication services; and
- Governments and regulators identify, and act on, issues concerning regulatory capacity, mandates or inter-regulatory cooperation. Regulation which is activity focused and technology neutral can assist in minimising duplication in regulation or regulatory overlaps.

### 4.3 Financial Literacy and Consumer Protection Frameworks

Consumer protection frameworks can also be strengthened and supported by ensuring roll-outs of new DFS are accompanied by sound financial literacy programs. Financial literacy programs should be designed around educating the customer at the point when they are first using the product or service as research indicates consumer experience in using new products is more important than pre-education which may be expensive.[115] In order to build consumer trust and retain it even in case of negative experiences, education should focus on the cost of using the service and identifying for the customer the redress mechanisms available.[116] More recent research continues to support findings that specific, targeted and simple consumer education is most important.[117]

### 4.4 Behavioral Research and Consumer Protection Frameworks

Policy makers in developing countries can also use behavioral research to inform their consumer protection policies. Behavioral research is now used to shed light on the financial behavior and decision making processes of different segments of the population.[118] CGAP's Focus Note, *Applying Behavioural Insights in Consumer Protection Policy*, outlines how to incorporate insights from behavioral research into policy-making and implementation of consumer protection regulation and supervision.[119] The CGAP Focus Note identifies four priority consumer protection topics for exploring how behavioral research can offer tools to support policy-making. These four topics are:

1. Disclosure, transparency and product choice;
2. Complaints handling and recourse;
3. Credit market regulation and debt stress; and
4. Fair treatment.[120]

CGAP highlights that emerging findings from behavioral research, in particular on the role of scarcity in financial decision making for low-income consumers, underscores the importance of policies that

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115 Collins, D. and Zollman, J. 2010. Financial capability and the Poor: are we missing the mark? FSD Insights. December. p. 4.

116 Collins, D. and Zollman, J. 2010. Financial capability and the Poor: are we missing the mark? FSD Insights. December. p. 4.

117 *Davis, A., 2014. Improving Everyday Financial Decisions: Brief, specific and targeted education could help the poor make better choices,* NextBillion Online Blog. 24 October. http://nextbillion.net/blogpost.aspx?blogid=4130

118 Mazer, R., McKee, K. and Fiorillo, A., Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June 2014, p1.

119 Mazer, R., McKee, K. and Fiorillo, A., Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June 2014, p2.

120 Mazer, R., McKee, K. and Fiorillo, A., Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June 2014, p2.

better protect consumers from providers.[121] CGAP emphasizes that local context still matters in such policy decisions; insights specific to each market and consumer segment within that market should be sourced and applied as opposed to attempting a "one-size-fits-all approach to behaviorally informed consumer protection policy making"[122]

## 4.5 Case Studies of Countries' Approaches to Consumer Protection for Digital Finance Services

Appendix 1 presents the results of a review of approaches to consumer protection for financial services in the Philippines, Malaysia, Papua New Guinea (PNG) and Fiji. Each of these countries is active in the DFS sector. These countries' consumer protection arrangements were reviewed in order to assess how well countries involved in DFS are addressing the consumer risks and challenges specific to DFS.

From this review, it does not appear that the Philippines, Malaysia, PNG and Fiji are developing specific consumer protection regulatory responses for financial services and products delivered through digital channels. However, what is a common trend across these countries is that they view financial consumer protection frameworks as but one component of broader national financial inclusion strategies. To this end, consumer protection frameworks are being strengthened in conjunction with a heightened focus on financial education and also by incorporating the latest research on financial inclusion and on how best to reach the unbanked. This common trend to improve financial consumer protection frameworks for financial inclusion purposes should bring the same outcome as would be the outcome of strengthening frameworks to address the consumer risks arising from using DFS. That outcome is improved financial inclusion and economic well-being for the unbanked.

## 4.6 Next Steps for Consumer Protection Frameworks and Digital Finance Services

### 4.6.1 Assessments of Consumer Protection Frameworks in Context of Digital Finance Services Consumer Risks

This report recommends that financial regulators specifically assess how well financial consumer protection frameworks provide for identifying and mitigating the consumer risks arising from the use of DFS. Such an assessment will contribute to building consumer trust in DFS and ensuring appropriate protections are in place; consumer trust and protection are paramount to the success of using DFS to improve financial inclusion.

Individual countries are best placed to conduct these assessments as they have a detailed understanding of their own consumer protection frameworks and, importantly, their plans for improving these frameworks in the broader context of national financial inclusion strategies.

This report has identified a number of the specific consumer risks and challenges arising from the use of DFS and provided recommendations on how to enhance consumer protection frameworks in light of these risks and challenges (Section 4, above). This risk identification and mitigation framework can be referred to by financial regulators when undertaking assessments of their financial consumer protection frameworks.

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[121] Mazer, R., McKee, K. and Fiorillo, A., Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June 2014, p2 Box 1.

[122] Mazer, R., McKee, K. and Fiorillo, A., Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June 2014, p17.

### 4.6.2 Survey to Assess Consumers' Concerns

This report also recommends that financial regulators conduct surveys with new digital payments providers to understand consumers' concerns in using DFS. Regulators can analyse consumer complaints to identify areas of concern and developments of trends in market practices. From this analysis regulators can respond, either through regulation or enforcement.[123]

In order to systematically analyse consumer complaints, regulators could undertake a survey on payments providers' processes for dealing with consumer complaints specifically for DFS, including focusing on:

- What is the nature of consumer complaints received?
- Time taken to resolve the complaints (are the consumer protection policies successful?).
- Problems in resolving the complaints (this can give an understanding of gaps in consumer protection policies).
- Where do consumers lodge complaints (i.e. is it a regulator or provider)?
- Who generally resolves consumer complaints?
- Do consumers know who to lodge complaints with to seek redress?
- Would consumers see a need for changes to consumer protection policies?
- Would consumers see a need for education processes to be improved?
- Do consumers see existing disclosure as adequately covering: nature, risks and benefits of products?

Strengthening financial consumer protection frameworks to incorporate the needs and concerns of end-users will enable regulators and market participants to create digital ecosystems which are relevant, used and ultimately improve financial inclusion.

## SECTION 5: CONCLUSION

This report has canvassed in detail the constraints, applicability and lessons from using DFS to improve financial inclusion. This report has demonstrated the case for using DFS to improve financial inclusion is clear. While challenges and constraints are still be to resolved, there are a number of solutions and ongoing initiatives which demonstrate considerable commitment from market participants, regulators and international development organisations to DFS and financial inclusion. This report concludes with specific recommendations on how financial regulators can build consumer trust and ensure the new consumers (previously unbanked) are protected when using DFS. Consumer trust and protection are of critical importance to the creation of successful digital ecosystems which will support improved economic well-being for people in developing countries.

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[123] IFC. 2010. *Consumer Protection Leveling the Playing Field in Financial Inclusion*, http://www.ifc.org/wps/wcm/connect/fe7cc88049585e949cf2bd19583b6d16/Tool+5.10.+AFI+Report+-+Consumer+Protection+Policy.pdf?MOD=AJPERES, p3.

## APPENDIX 1: COUNTRY REVIEWS

### Methodology for Cross Country Assessment

Background information on selected countries' consumer protection frameworks was collected using the following questions for guidance:

- Who is the primary regulator—financial regulator, telecommunication regulator or another regulator?
- What are the laws and regulations? Do they specifically focus on DFS or can they be generally applied to DFS?[124]
- Does the regulation involve supervision/enforcement or is it more high-level oversight?
- Where there is overlap in regulatory responsibilities what mechanisms are in place for sharing information/inter-regulatory cooperation?
- What are the arrangements in place for disclosure requirements?
- What are the processes in place to monitor dispute resolution and redress mechanisms?
- What consumer education arrangements are in place?
- At what point is consumer education attempted, pre-use, at time of use, ongoing?
- What are the processes for responding to consumer complaints?[125]

### Country Summaries

#### Philippines

The Philippines, through its lead regulator, the central bank of the Philippines (Bangko Sentral ng Pilipinas, BSP) has a comprehensive approach to consumer protection issues for financial services. It recently adopted a Financial Consumer Protection (FCP) Framework to institutionalise consumer protection as an integral part of its banking supervision.[126] BSP's consumer protection focus extends to both traditional channels and digital access channels and its comprehensive nature reflects the Philippines' commitment to incorporate responsible finance and financial inclusion as guiding principles in the development of policies and regulations for financial services. The BSP has a dedicated consumer protection unit within its organisation—the Financial Consumer Affairs Group (FCAG). FCAG does not currently have the mandate to provide supervision; FCAG must pass possible violations to the examination group. BSP is seeking to change FCAG's mandate so it can do direct supervision including surveillance and on-site examinations.[127]

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124 This includes both government regulation for consumer protection and self or coregulatory models where industry develops and enforces the rules. Providers play an important role in consumer protection. Countries may not have specific DFS consumer protection policies in place but there is likely to be general consumer protection policies which a regulator may be able to extend over DFS.

125 Consumer complaints provide insight into areas where there may be gaps in existing legislative/regulatory frameworks.

126 BSP Governor Amando M Tetangco, Jr, Speech to Shareholders Association of the Philippines 7th General Membership Meeting and Forum, Manila, 5 November 2014 "Improving financial literacy and increasing financial inclusion to sustain economic growth," p3.

127 See under Success Factors and Challenges at http://responsiblefinanceforum.org/map-case-study/philippines/. BSP notes that its examination group follow a risk-based approach and consumer protection concerns are not always addressed because they are considered low risk.

The Philippines has enacted The Truth in Lending Act which focuses specifically on the provision of credit and covers the entire financial sector, regardless of the type of financial service provider.[128] This legislation promotes full disclosure of the costs of credit and other terms and conditions associated with accessing credit. The objective is to prevent the uninformed use of credit.[129]

The BSP Circular 649 (9 March 2009) provides the guidelines governing the issuance of e-money and covers consumer protection issues. The circular requires that adequate disclosures are in place, along with appropriate redress mechanisms to address consumer complaints and procedures to ensure the clear identification of users for Know-Your Customer purposes. Disclosure requirements include requiring fees to be explained up front and making it clear that the stored value funds are not deposits. Such requirements ensure the customer understands how and where their e-money is stored.

BSP coordinates with other regulators. For example it has harmonized its policy on disclosure reform with the Securities and Exchange Commission, the Insurance Commission and the Cooperative Development Authority.[130]

BSP has shared its key lessons learned from revising its consumer protection framework which include: Learn from peers, involve all stakeholders as it facilitates adoption; ensure the regulatory framework is comprehensive for all Financial Service Providers (FSPs); engage with other regulators; maintain ideals as a learning institution; and collect baseline data and design systems to measure impact.[131]

Financial Consumer Protection is part of BSP's "three pronged framework" for its financial inclusion agenda. The two other prongs are "Access to Financial Products and Services" and "Financial Education and Literacy."[132] This three pronged framework enables BSP to keep focused on initiatives that improve access to financial services without jeopardising consumer protection. BSP also does not solely rely on digital financial services to improve financial inclusion. It looks to improving access through other channels such as microfinance channels, savings and loans providers and building ATM networks. The success of BSP's work in recent years in improving financial inclusion is evidenced by recent statistics indicating that as of June 2014 they had 46.9 million deposit accounts versus 39.7 million deposit accounts two years earlier. And of the 7.2 million increase in accounts, 6.6 million were those with balances of less than Php100,000.[133]

### Malaysia

Financial consumer protection forms a key component of the central bank of Malaysia's (Bank Negara Malaysia, BNM) financial inclusion and education initiatives. BNM is the lead regulator for financial consumer protection. In 2005 BNM set up BNMLINK "to assist the public and business with issues concerning financial products and services, in particular complaints and credit reporting."[134] In 2006

[128] See under Key Elements of the Disclosure Reform at http://responsiblefinanceforum.org/map-case-study/philippines/
[129] http://responsiblefinanceforum.org/map-case-study/philippines/
[130] http://responsiblefinanceforum.org/map-case-study/philippines/
[131] http://responsiblefinanceforum.org/map-case-study/philippines/
[132] BSP Governor Amando M Tetangco, Jr, Speech to Shareholders Association of the Philippines 7th General Membership Meeting and Forum, Manila, 5 November 2014 "Improving financial literacy and increasing financial inclusion to sustain economic growth."
[133] BSP Governor Amando M Tetangco, Jr, Speech to Shareholders Association of the Philippines 7th General Membership Meeting and Forum, Manila, 5 November 2014 "Improving financial literacy and increasing financial inclusion to sustain economic growth."
[134] AFI Case study "Empowering and protecting financial consumers; Bank Negara Malaysia's consumer and market conduct framework" 2011, p1.

BNM established the Credit Counselling and Debt Management Agency (AKPK), a financial advisory center.[135] Since AKPK's inception its financial education has benefited more than 260,000 people throughout Malaysia.[136] BNM's financial education efforts are "reinforced" by what its Deputy Governor has referred to as its "holistic consumer protection framework" which focuses on responsible finance, product transparency and disclosure and appropriate debt collection practices.[137]

BNM highlights its highly banked population as evidence that its financial inclusion initiatives are working; 92% of adults (aged 15 and above) have access to a deposit account and basic banking services.[138]

In the Central bank of Malaysia Act 2009, financial inclusion is legislated as one of the Central bank's primary functions. In 2013, protecting the rights and interests of consumers of financial services and products was enshrined as one of the BNM's regulatory objectives in the Financial Services Act 2013 and the Islamic Financial Services Act 2013.[139]

BNM also has a tradition of working closely with industry and other government regulators.[140] BNM's Deputy Governor has highlighted the collaboration between BNM and the industry to educate consumers on the benefits and security of e-payment transactions including efforts such as road shows, payment system forums and other outreach programs.[141]

More recently, BNM has partnered with CGAP in relation to incorporating behavioral research findings into consumer protection policy. The objective is to identify potential behavioral issues relevant to disclosure and sales practices in the insurance sector and ultimately use the findings to develop further consumer research for testing improvements to disclosure, consumer education and other related policies. A "behavioral diagnostic" has been used which incorporates a variety of methods including a review of complaints data, mystery shopping with bottom of the pyramid customers, and interviews with sales staff and customers.[142]

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135 AFI Case study "Empowering and protecting financial consumers; Bank Negara Malaysia's consumer and market conduct framework" 2011, p1.

136 Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia, Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region*, August 2014, p3. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

137 Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia, Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region*, August 2014, p3. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

138 Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia, Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region*, August 2014, p3. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

139 Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia, Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region*, August 2014, p12. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

140 AFI Case study "Empowering and protecting financial consumers; Bank Negara Malaysia's consumer and market conduct framework" 2011, p4–5.

141 Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia, Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region*, August 2014, p12. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

142 Information on this CGAP-BNM Behavioural Diagnostic are from the CGAP Focus note: "Applying Behavioural Insights in Consumer Protection Policy," No. 95 June 2014, Rafe Mazer, Katharine McKee and Alexandra Fiorillo, p 14.

### Papua New Guinea

The Bank of Papua New Guinea (BPNG) is the lead regulator for financial consumer protection issues. In August 2013 BPNG announced the importance of consumer protection and empowerment for financial inclusion and undertook to invite industry comments on practical suggestions for strengthening consumer protection and market conduct.

In November 2013, PNG launched its "National Financial Inclusion and Financial Literacy Strategy (2014-2015).[143] A Working Group on Consumer Protection has been established to determine priorities when implementing the national financial inclusion and financial literacy strategy. The group acts as a coordinating body for consumer protection and market conduct issues. The group works with industry standard bodies and regulators focusing on protecting end-users needs.[144]

As part of its National Financial Inclusion strategy, BPNG conducts adult financial literacy training throughout the country in conjunction with NGOs, church groups and partner financial institutions.[145] The Centre for Excellence in Financial Inclusion (CEFI) has developed several financial literacy modules. CEFI target rural communities and train trainers. [146]

PNG's Independent Consumer and Competition Commission (ICCC) was created in 2002 following the enactment of the Independent Consumer and Competition Commission Act 2002. ICCC's mandate extends to consumer protection. It is responsible for advising the government on consumer protection policies as well as investigating consumer complaints and undertaking consumer education. One of ICCC's key functions involves liaison with other Departments and government agencies in relation to consumer protection legislation.[147]

### Fiji

The Reserve Bank of Fiji (RBF) and the Commerce Commission (CC) are both responsible for financial consumer protection issues in Fiji. The two regulators have both introduced initiatives to strengthen Fiji's financial consumer protection arrangements. In March 2013 the CC issued Draft Guidelines for Financial Services in Fiji in March 2013. It targets providers and end-users, focusing on ensuring they understand their rights and responsibilities.[148] The Reserve Bank of Fiji convenes regular meetings of

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[143] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p2.

[144] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p4.

[145] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p3.

[146] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p3.

[147] Background information on the ICCC was sourced from http://www.iccc.gov.pg/index.php/consumer-protection/intro and http://www.allens.com.au/pubs/asia/fopngoct02.htm#Consu

[148] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p4.

stakeholders in a Complaints Management Forum.[149] The July 2013 Forum resolved to have all licensed financial institutions display "complaints posters" in their branches. In November 2013, The Fiji Government also announced a proposal for a Consumer Complaints Tribunal, with the objective of having a more "affordable, effective and efficient manner" in which to resolve consumer complaints. The RBF and the CC signed a Memorandum of Understanding on 17 April 2014 to "address overlaps in regulation and promote information sharing between the two institutions to further strengthen consumer protection in the financial services sector."[150] In July 2014, the RBF's supplementary policy notice to all licensed financial institutions came into effect to make standardized and minimum disclosure requirements on financial institutions' consumer credit products.

Fiji's Financial Education initiative has been reported as representing "global best practice" with both developing and developed countries following Fiji's model.[151] Financial education in Fiji has been integrated into the school curriculum from Years 1 to 12 in subjects ranging from English, Maths, Social Science, Economics, Commerce and Accounting.[152] Between 2010 and early 2014, Fiji reported that "approximately 58, 627 adults have received financial literacy training offered in the community by various providers…"[153]The Reserve bank of Fiji holds Financial Inclusion Expos throughout the country and there is a Financial Literacy Working Group comprising multi-stakeholders coordinating financial empowerment and education activities. [154]

[149] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p4.

[150] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p4.

[151] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p2.

[152] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p2.

[153] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014 p3.

[154] PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages – Regional Efforts to Support Financial Inclusion and Awareness," July 2014, p3.

## APPENDIX 2: BIBLIOGRAPHY


Asian Development Bank. 2014. *Key Indicators for Asia and the Pacific 2014: Framework of Inclusive Growth Indicators, special supplement*, 4th Edition. Manila. http://www.adb.org/publications/key-indicators-asia-and-pacific-2014.

Alexandre, C., I. Mas, and D. Radcliffe. 2010. *Regulating New Banking Models that can Bring Financial Services to All.* Bill & Melinda Gates Foundation. 10 August. http://ssrn.com/abstract=1664644.

Alliance for Financial Inclusion. 2013. *Mobile Financial Services: Basic Terminology*, Guideline Note No. 1. http://www.afi-global.org/sites/default/files/publications/mfswg_gl_1_basic_terminology_finalnewnew_pdf.pdf

Alliance for Financial Inclusion. 2014. 'Mobile Financial Services: Supervision and Oversight of Financial Services' Guideline Note No. 12. http://www.afi-global.org/sites/default/files/publications/mfswg_guidelinenote12_oversight_and_supervision_of_mfs_2.pdf

Alliance for Financial Inclusion. 2014. Mobile Financial Services: Consumer Protection in Mobile Financial Services, *Guideline Note, No 13.* http://asbaweb.org/E-News/enews-37/incfin/06incfin.pdf

Almazan, M. 2013. Mobile Money Regulation in Latin America, Leveling the Playing Field in Brazil and Peru, *GSMA Mobile Money for the Unbanked Blog*, 19 December. http://www.gsma.com/mobilefordevelopment/mobile-money-regulation-in-latin-america-leveling-the-playing-field-in-brazil-peru.

Almazan, M. 2013. 'G2P Payments and Mobile Money: Opportunity or Red Herring?' *GMSA (online)*. 30 September. http://www.gsma.com/mobilefordevelopment/g2p-payments-mobile-money-opportunity-or-red-herring

Almazan, M. and N. Vonthron. 2014. Mobile Money Profitability: A digital ecosystem to drive healthy margins. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/11/2014_Mobile-money-profitability-A-digital-ecosystem-to-drive-healthy-margins.pdf

Babcock, L. 2014. Revolutionizing agricultural value chain finance: a digital perspective, *Report presented to the 35th Brussels Development Briefing on "Revolutionizing Agricultural Value Chain Finance,"* prepared with support from The Technical Centre for Agricultural and Rural Cooperation (CTA) https://brusselsbriefings.files.wordpress.com/2014/07/revolutionising-agricultural-value-chains-finance-digital-perspective.pdf

Bankable Frontier Associates (BFA) Report commissioned by Better Than Cash Alliance, 2012. *The Journey Towards Cash Lite*. http://betterthancash.org/wp-content/uploads/2012/09/BetterThanCashAlliance-JourneyTowardCashLite.pdf

Better Than Cash Alliance. 2014. http://betterthancash.org/

Bhattacharjee, N. and T. Wilkes. 2014. Google launches $105 Android One: eyes low-price smartphone boom, *Reuters online article*. 15 September. http://in.reuters.com/article/2014/09/15/google-india-smartphone-idINKBN0HA0E520140915

BizTech Afrika. 2014. Airtel wins case to open up M-Pesa, *BizTech Afrika*, 28 July. http://www.biztechafrica.com/article/airtel-wins-case-open-m-pesa/8514/#.U9nGzYCSw00

Brune, L., X. Gine, J. Goldberg, and D. Yang. 2011. Commitments to Save: A Field Experiment in Rural Malawi, *World Bank Policy Research Working Paper 5748*.

Chopra, P. and S. Puri. 2014. Market Readiness for Mobile Money Interoperability, *Microsave blog*. http://blog.microsave.net/market-readiness-for-mobile-money-interoperability/

Camner, G. 2014. Etisalat joins Dialog Sri Lanka's mobile money deployment eZ Cash, *GSMA Mobile Money for the Unbanked Blog*. 28 February. http://www.gsma.com/mobilefordevelopment/etisalat-joins-dialog-sri-lankas-mobile-money-deployment-ez-cash

Collins, D. and Zollman, J. 2010. Financial capability and the Poor: are we missing the mark? *FSD Insights*.

Consultative Group to Assist the Poor and World Bank Group. 2010. *Financial Access 2010, The State of Financial Inclusion Through the Crisis.*

Cull, R., T. Ehrbeck and N. Holle. 2014, Financial Inclusion and Development: Recent Impact Evidence, *CGAP Focus Note*, No. 92.

Davis, A., 2014. Improving Everyday Financial Decisions: Brief, specific and targeted education could help the poor make better choices, NextBillion Online Blog. 24 October. http://nextbillion.net/blogpost.aspx?blogid=4130

Davis, B. and Owens, J. 2009. *Choosing a Mobile Phone Banking Format*, MicroSave Briefing Note #67. Available: www.microsave.org

Davis, B. and Owens, J. 2009. *Incentivising 3rd Party Agents to Service Bank Customers*, MicroSave Briefing Note #69. Available: www.microsave.org

Davis, B. and Owens, J. 2009. *POS vs. Mobile Phone as a Channel for M-Banking,* MicroSave Briefing Note #66. Available: ww.microsave.org

Deyners, L. 2014. How Do Smallholder Farmers Access Information. *GCAP (online)*. 31 January. http://www.cgap.org/blog/how-do-smallholder-farmers-access-information

Dias, D. and McKee, K. 2010. Protecting Branchless Banking Consumers: Policy Objectives and Regulatory Options, September, *CGAP Focus Note No. 64*. http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Protecting-Branchless-Banking-Consumers-Policy-Objectives-and-Regulatory-Options-Sep-2010.pdf

Ehrbeck, T. 2013. Avoid Blaming the Victim in the Financial Literacy Debate, *Huffington Post*. http://www.huffingtonpost.com/tilman-ehrbeck/the-financial-literacy-debate_b_4459311.html

Financial Integrity Working Group. 2013. Risk-Based Approaches to AML/CFT: Balancing Financial Integrity and Inclusion, *Guidance Note, AFI*. 16 May. http://www.afi-global.org/library/publications/risk-based-approaches-amlcft-balancing-financial-integrity-and-inclusion

Fung, B., M. Molico, G. Stuber. 2014. 'Electronic Money and Payments: Recent Developments and Issues'. *Bank of Canada*, Discussion Paper 2014-2 April. http://www.bankofcanada.ca/wp-content/uploads/2014/04/dp2014-2.pdf

Gosh, I. 2013. Remittances vs. Savings on the Mobile Money Platform (Part 2). *Institute for Money, Technology and Financial Inclusion.* http://blog.imtfi.uci.edu/2013/07/remittances-vs-savings-on-mobile-money.html

Gutierrez, E. and S. Singh. 2013. What Regulatory Frameworks are More Conducive to Mobile Banking? Empirical Evidence from Findex Data, *World Bank Policy Research Working Paper No 6652*. 1 October. http://ssrn.com/abstract=2338858

Greenacre, J. and R. Buckley. 2013. *Trust Law Protections for E-Money Customers: Lessons and a Model Trust Deed Arising from Mobile Money Deployments in the Pacific Islands* ("Trust KP"), October.

Hannig, A. 2013. 'Developing Countries Focused on Financial Inclusion are Reshaping Central Banking' *Alliance for Financial Inclusion (online)*. 25 November. http://www.afi-global.org/blog/2013/11/25/developing-countries-focused-financial-inclusion-are-reshaping-central-banking

Hannig, A. 2014. 'Financial Inclusion a New Common Ground for Central Banks', *Alliance for Financial Inclusion (online)*. 14 May. http://www.afi-global.org/blog/2014/05/14/financial-inclusion-new-common-ground-central-banks

Heinrich, E. 2014. "The apparent M-Pesa monopoly may be set to crumble," Fortune Magazine. 27 June. http://fortune.com/2014/06/27/m-pesa-kenya-mobile-payments-competition/

Helix Institute of Digital Finance. 2014. Agent Network Accelerator Survey: Bangladesh Country Report 2014. http://www.helix-institute.com/sites/default/files/Publications/Agent%20Network%20Accelerator%20Bangladesh%20Country%20Report%202014.pdf

IFC. 2010. *Consumer Protection Leveling the Playing Field in Financial Inclusion*, http://www.ifc.org/wps/wcm/connect/fe7cc88049585e949cf2bd19583b6d16/Tool+5.10.+AFI+Report+-+Consumer+Protection+Policy.pdf?MOD=AJPERES

Jones, B. 2014. Cambodia Embraces Mobile Money, *Mobile Money Asia Blog*, http://www.mobilemoneyasia.org/2014_07_01_archive.html

Kendall, J. and R. Voorhies. 2014. The Mobile-Finance Revolution: How Cell Phones Can Spur Development, *Foreign Affairs*. http://www.foreignaffairs.com/articles/140733/jake-kendall-and-rodger-voorhies/the-mobile-finance-revolution

Lauler, J. 2014. How Can Development Organisations Shift From Cash to Mobile, *Mondato Blog*. http://mondato.com/blog/how-can-development-organizations-shift-from-cash-to-mobile-money/

Lyman, T. 2013. 'Building an Enabling and Protective Policy Environment', *CGAP*. 24 May. http://www.cgap.org/blog/building-enabling-and-protective-policy-environment

Mas, I. 2010. *Priorities for branchless banking (part 1 of 3.)* Available: http://technology.cgap.org/2010/09/13/priorities-for-branchless-banking-part-1-of-3/

Mas, I., ‘Digitizing the Kaleidoscope of Informal Financial Practices’, *Journal of Business Management and Social Science Research,* 3(5) 2014, 50–61.

Mas, I. 2014. Free the Cash Networks! How one small regulatory change could have a huge positive impact on mobile money’s development, *Next Billion Blog,* http://nextbillion.net/blogpost .aspx?blogid=4165

Mazer, R., K. McKee and A. Fiorillo. 2014. Applying Behavioural Insights in Consumer Protection Policy, *CGAP Focus Note No. 95,* June.

Mondato. 2014. Finding the Recipe for Success in MFS, *Blog article*. http://mondato.com/ blog/cambodia-wing/

bin Ibrahim, M. 2014. Developing a Safe and Secure Electronic Payment Ecosystem to Promote Financial Inclusion, *Keynote speech at MasterCard Regulatory Forum for the Asia Pacific region.* August. http://www.bnm.gov.my/index.php?ch=en_speech&pg=en_speech_all&ac=512

Muralidharan, K., P. Niehaus, S. Sukhtankar. 2014. Building State Capacity: Evidence from Biometric Smartcards in India, National Bureau of Economic Research, Working Paper 19999. http://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/Building%20 State%20Capacity%20%28NBER%20WP%2019999%29.pdf

Narayan, A. and A. Antony. .2014. Bankers Pack Pistols to Chase $21 Billion of Indian Clients Without Accounts. *Bloomberg*. http://mobile.bloomberg.com/news/2014-08-12/bankers-pack-pistols-chasing-21-billion-of-india-clients.html

Nduku, A. 2014. Airtel seeks extension in talks over M-Pesa fees, *Humanipo*, http://www.humanipo .com/news/43623/safaricom-airtel-seek-extension-in-talks-over-m-pesa-fees/

OECD. 2014, Consumer Policy Guidance on Mobile and Online Payments, *OECD Digital Economy Papers*, No. 236, OECD Publishing. http://www.oecd.org/sti/consumer/mobile-and-online-payments.htm

OECD. 2012. Report on Consumer Protection in Online and Mobile Payments. *OECD Digital Economy Papers ,No. 204,* OECD Publishing. http://dx.doi.org/10.1787/5k9490gwp7f3-en

Owens, J. 2009. *Pilot and Rollout Issues for Mobile Phone Banking Services*, MicroSave Briefing Note #70. February. www.microsave.org

Owens, John, 2009, *The Role of Partnerships and Strategic Alliances to Promote Mobile Phone Banking at the Bottom of the Pyramid*, MicroSave Briefing Note #68. February. www.microsave.org

Owens, J. 2014. ‘Highlights on the Mobile Financial Services Landscape in Tanzania and Lessons for Regulators’, *Alliance for Financial Inclusion (online)*. 24 February. http://www.afi-global.org/blog/2014/02/24/highlights-mobile-financial-services-landscape-tanzania-and-lessons-regulators

Owens, J. 2013. Offering Digital Financial Services to Promote Financial Inclusion: Lessons We’ve Learned, *Innovations: Technology, Governance, Globalisation*, Volume 8, Issue 1/2, 2013, pp 271–282.

Owens, J. 2014. Highlights on the Mobile Financial Services Landscape in Tanzania and Lessons for Regulators. *Alliance for Financial Inclusion Blog*. 24 February. http://www.afi-global.org/blog/2014/02/24/highlights-mobile-financial-services-landscape-tanzania-and-lessons-regulators

Penicaud, C. and A. Katakum. 2014. State of the Industry 2013: Mobile Financial Services for the Unbanked, GSMA Report. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

PFIP and AFI PIWG "Out of Session Paper" paper prepared for Pacific Islands Forum Secretariat for the Forum Economic Ministers Meeting and the Forum Economic Officials Meeting, entitled "Strengthening Economic Linkages—Regional Efforts to Support Financial Inclusion and Awareness," July 2014.

Rajan, R. 2014. Finance and Opportunity in India, *Address by Dr Raghuram Rajan at the Twentieth Lalit Doshi Memorial Lecture*. Mumbai. 11 August. http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/LDMLF110814.pdf

Sharma, M. 2013. Sustainable Nonbanking Financial Institutions, *MicroSave Presentation*, 18 November. http://www.microsave.net/resource/sustainable_non_banking_financial_institutions#.U5royViSw00.

Sharma, M. 2013. DFS for the Under-Banked MicroSave, *Presentation at Pacific Microfinance Week*.http://www.microsave.net/files/pdf/MicroSave_DFS_for_the_Under_Banked.pdf

Smart Campaign. 2014. 'Client Protection Principles', *The Smart Campaign (online)*, http://www.smartcampaign.org/about/smart-microfinance-and-the-client-protection-principles

Tarazi, M. and Breloff, P. 2011. Regulating Banking Agents, *CGAP Focus Note No. 68*, Washington, DC http://www.cpag.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf

Tarazi, M. and P. Breloff. 2010. Non-Bank E-Money Issuers: Regulatory Approaches to Protecting Customers Funds, *CGAP Focus Note 63*, Washington, D.C. July. http://www.cgap.org/gm/document-1.9.45715/FN63_Com.pdf

Tetangco, Jr. A. 2014. The three Cs of Alliance for Financial Inclusion's Success. Speech in Trinidad and Tobago. 10 September.

The Economist, 2009, Mobile Marvels, *Online article*, 24 September. http://www.economist.com/node/14483896

Thomas, J. 2012. Regulation Spurs Innovation in the Philippines, *CGAP*, 5 November. http://www.cgap.org/blog/regulation-spurs-innovation-philippines

USAID. 2013. *Building Consensus Towards Enabling an Efficient and Inclusive National Payments System in the Philippines: A Significant Step*. 24 April. http://www.simmphil.org/misc/building-consensus-towards-enabling-an-efficient-and-inclusive-national-payments-system-in-the-philippines-a-significant-first-step

Voorhies, R., J. Lamb and M. Oxman. 2013. Fighting Poverty Profitably—Transforming the Economics of Payments to Build Sustainable, Inclusive Financial Systems, *Special Report, Financial Services for the Poor, Bill and Melinda Gates Foundation*. September.

Voorhies, R. 2014. Conference Call on Mobile Finance, Cash Grants, and Poverty Relief, *Interview with Foreign Affairs*. http://www.cfr.org/global/conference-call-mobile-finance-cash-grants-poverty-relief/p33033

World Bank. 2014. How Telecommunications Changed the Lives of Herders in Mongolia, *Feature Story*. 20 October. http://www.worldbank.org/en/news/feature/2014/10/20/how-telecommunications-changed-the-lives-of-herders-in-mongolia?

World Bank, the Better Than Cash Alliance and the Bill & Melinda Gates Foundation. 2014. *The Opportunities of Digitizing Payments*, A report to the G20 Global Partnership for Financial Inclusion.

World Economic Forum. 2011. *The Mobile Financial Services Development Report 2011*—prepared in collaboration with The Boston Consulting Group. Available: http://www.weforum.org/issues/mobile-financial-services-development

Wright, G. 2014. 'The Mor Committee Report—the Demand Side Conundrum'. MicroSave. http://blog.microsave.net/the-mor-committee-report-the-demand-side-conundrum/

Zerzan, A. 2010. Is SIM Registration a backtrack on tiered KYC? *GSMA Mobile Money for the Unbanked Blog*. http://www.mobilemoneyexchange.org.

Zimmerman, J., K. Bohling, and S. Rotman Parker. 2014. Electronic G2P Payments: Evidence from Four Lower-Income Countries, CGAP (Consultative Group to Assist the Poor) *Focus Note 93/2014*.Zimmerman, Jamie, and Kristy Bohling, 'E-Payments in Low-Income Settings: Cutting-Edge or High Risk?' *CGAP*. 12 March. http://www.cgap.org/blog/e-payments-low-income-settings-cutting-edge-or-high-risk

## Improving Financial Inclusion in Asia and the Pacific

*Constraints, Applicability, and Lessons from Digital Financial Services*

This paper presents the results of a study on the constraints, applicability, and lessons from using digital financial services (DFS) for improving financial inclusion. It focuses on the challenge of understanding new consumer risks which arise when using DFS and how financial consumer protection frameworks can be strengthened to address these risks. It also includes case studies of countries' approaches to financial consumer protection and DFS in Asia and the Pacific. The countries reviewed include the Philippines, Malaysia, Papua New Guinea, and Fiji. These case studies highlight a common trend across countries—financial consumer protection frameworks are being viewed as one component of broader national financial inclusion strategies. Frameworks are being strengthened as part of a heightened focus on financial education and by incorporating the latest research on financial inclusion and on how best to reach the unbanked.

### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to half of the world's extreme poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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