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A U S T R A L I A

# Regulatory Handbook

## The Enabling Regulation of Digital Financial Services

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## Executive Summary

Financial inclusion is now a significant international policy goal. In developing countries, over one billion people are currently excluded from the financial system. Digital financial services (DFS) offer an effective means to include these people in the formal financial system and to thereby improve standards of living and reduce poverty.

In order for DFS to promote financial inclusion, regulation must be enabling and supportive of innovation and highly cost-effective. This involves taking a proportionate, risk-based approach tailored to the local environment – not simply applying existing regulatory frameworks to DFS.

DFS are essentially retail payment systems. Payment services are critical to financial inclusion; for without payment services financial services cannot be delivered. In the design of legal and regulatory frameworks, regulators must now consider financial inclusion objectives alongside safety and efficiency objectives.

The successful regulation of DFS requires a fresh approach from central banks and regulators. In addition to developing enabling, risk-based DFS regulations, regulators should promote financial literacy, and work with DFS providers to create new products that are directly responsive to market need in their countries. This calls for a major reassessment of the role of central banks, requiring them, for instance, to understand the detailed needs and demand of consumers in their country for DFS.

Regulators need to understand the risks inherent in different DFS models. DFS transactions are unique in that they usually involve agents and collaboration among a bank and telecommunications company. Unlike traditional banking, customer funds in DFS are not typically deposits and are not safeguarded by prudential regulation or deposit insurance. DFS models can subject customer funds to a range of risks, including insolvency, liquidity and operational risks of the provider but also the agent. Understanding these risks is essential to developing effective and enabling regulation for DFS.

DFS ecosystems will not thrive unless consumers are well-treated and trust the service and system, so consumer protection regulation is essential for a thriving DFS ecosystem. It is important that regulators view DFS from the consumers' perspective and understand how the consumer interacts with each participant involved in the typical DFS value chain.

In addition, as DFS delivery requires the use of agents, regulators need to develop an appropriate legal framework that clearly and effectively allocates agent liability. Without a clear liability chain, customer funds will not be adequately protected, and customers won't know where to seek redress when they need it. Regulators need to understand the factors that shape the liability chain and then determine which liability rules to adopt to effectively allocate liabilities among principal, agent and customer.

The fear of failing to comply with international anti-money laundering and counter-terror financing (AML/CFT) rules has deterred most countries from taking advantage of the flexible Customer Due Diligence (CDD) requirements advocated by Financial Action Task Force (FATF) in 2013. DFS regulation should embrace tiered CDD requirements and flexible approaches to verification of customer identity suited to national conditions. National biometric identification initiatives will permit DFS to simply and cheaply achieve the CDD required to comply with AML/CFT requirements, and should be pursued by national governments.

This handbook has been designed to assist those responsible for regulating and supervising the use of DFS in emerging markets. A conservative one-size-fits-all regulatory approach is not appropriate for DFS because it is likely to stifle innovation, discourage new market entrants and inhibit the use of DFS to improve financial inclusion. By analysing the nature, risks and regulatory issues associated with different DFS models this handbook aims to equip regulators with the understanding necessary to develop effective and appropriate DFS regulation in their particular local context.

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## Foreword

Present approaches to regulating Digital Financial Services (DFS) have limited the opportunities for the deepening of financial inclusion, and suggest an urgent need to reconceptualise regulatory approaches.

This handbook, in response to these challenges, aims to provide policy makers and financial regulators in emerging markets a practical and comprehensive guide on how to effectively regulate DFS. It analyses why the regulation of DFS requires a different approach to the regulation of other financial activities, and outlines key elements of a new regulatory paradigm going forward. This handbook offers regulators policy recommendations to help achieve the following objectives:

- Enabling regulation to build sustainable DFS ecosystems;
- Understanding the mechanics of different DFS models and developing risk-based regulatory frameworks;
- Protecting customers' funds from insolvency, liquidity and operational risks;
- Regulating the use of agents and understanding factors that shape the liability chain;
- Building effective consumer protection frameworks;
- Balancing the implementation of appropriate anti-money laundering/countering the financing of terrorism (AML/CFT) measures and the promotion of financial inclusion; and
- Enhancing oversight of payment systems and promoting interoperability and inclusive finance.

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**The content of this regulatory handbook is intended only to provide a summary and general overview. It is not intended to be comprehensive. It does not constitute legal or other advice. You should seek legal or other professional advice before taking, or refraining from taking, any action in reliance on any information in this handbook.**

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## Acronyms and Abbreviations

ACH	Automated Clearing House
ADB	Asian Development Bank
AFI	Alliance for Financial Inclusion
AML	Anti-Money Laundering
BIS	Bank for International Settlements
BSP	Bangko Sentral ng Pilipinas
CDD	Customer Due Diligence
CFT	Countering the Financing of Terrorism or Combating the Financing of Terrorism (also referred as Counter-Terrorism Financing or CTF)
CGAP	Consultative Group to Assist the Poor
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payments and Settlement Systems (now CPMI)
DFS	Digital Financial Services
EFTPOS	Electronic Funds Transfer at Point of Sale
E-money	Electronic Money
E-wallet	Electronic Wallet
FATF	Financial Action Task Force
G20	Group of 20
G2G	Government-to-Government
GPFI	Global Partnership for Financial Inclusion
ICT	Information and Communication Technology
ID	Identification
IT	Information Technology
KYC	Know Your Customer
MFI	Micro Finance Institutions
MNO	Mobile Network Operator
NPS	National Payments System
P2P	Person-to-Person (or Peer-to-Peer)
PAFI	Payment Aspects of Financial Inclusion
PFIP	Pacific Financial Inclusion Programme
POS	Point of Sale
PSO	Payment Service Operator

PSP	Payment Service Provider
RBA	Risk-Based Approach
RTGS	Real-Time Gross Settlement
SEPA	Single Euro Payments Area
SME	Small and Medium-sized Enterprise
SMS	Short Message Service
UFA	Universal Financial Access
WBG	World Bank Group

**A Glossary of Terms appears at Annex 1**

# 1. Introduction and Overview

This handbook has been prepared for financial regulators with responsibility for overseeing and supervising Digital Financial Services (DFS) in emerging markets. In emerging markets DFS offer an effective means to promote financial inclusion so as to improve standards of living and economic activity. While half the world's adult population is unbanked, many people in developing countries have access to mobile phones and, consequently, potentially to DFS.

DFS refer to the extensive range of financial services offered by a broad range of providers to a wide range of recipients using digital remote means (including e-money, mobile money, card payments and electronic funds transfers).<sup>1</sup> At their most basic level DFS facilitate financial transfers and provide a safe place to store money electronically.

Financial inclusion initiatives have, in recent years, taken centre stage for many global regulatory development bodies and donor organisations. The World Bank's Universal Access 2020 initiative includes a focus on enabling policy and regulatory frameworks in order to assist reaching the Universal Financial Access (UFA) goal by 2020.<sup>2</sup> While this strong focus from international donors, regulators and standard setting bodies is welcome, it could result in the development of overly structured legal and regulatory frameworks for DFS. What is needed are less complex approaches which promote the main objective – creating opportunities for innovative ways to provide the unbanked with access to formal financial services. A proportional risk-based approach which is specifically tailored to local settings and local user needs is required.

We believe there is a need for a revolution in regulating DFS. It is not sufficient, deliberately or otherwise, to apply and adjust existing regulatory frameworks to the new activity of DFS. Regulators are responding in this way because of their inherent frame of reference as regulators and the forces of inertia and history.

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<sup>1</sup> DFS include a range of financial services (including credit, savings, loans, insurance and payments services) accessible via digital remote means. 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, Mobile Financial Services Working Group, *Guideline Note No 1: Mobile Financial Services: Basic Terminology* (March 2013) Alliance for Financial Inclusion <[http://www.afi-global.org/sites/default/files/publications/mfswg\\_gl\\_1\\_basic\\_terminology\\_finalnewnew\\_pdf.pdf](http://www.afi-global.org/sites/default/files/publications/mfswg_gl_1_basic_terminology_finalnewnew_pdf.pdf)>.

<sup>2</sup> Committee on Payments and Market Infrastructures, Bank for International Settlements and World Bank Group, *Consultative Report: Payment Aspects of Financial Inclusion* (September 2015) BIS, 23 <<http://www.bis.org/cpmi/publ/d133.htm>>.

Regulatory blinkers must be removed when it comes to DFS so a 'light-touch' approach can be adopted. This is because:

- In most emerging markets, particularly in less developed countries, DFS are not likely to become systemically important financial activities any time soon;
- DFS attract attention from a range of regulators and it is important to get the regulatory mix right without over-regulation due to 'too many cooks'; and
- Innovation is dampened by over-regulation and so long as financial stability is not at stake and market conduct issues are dealt with, financial regulators should enable innovation to thrive.

### ***1.1 DFS Using Stored Value Generally Not Systemically Important***

DFS using stored-value (i.e. customers' funds are stored electronically in the form of mobile money or e-money) generally exist as 'closed-loop' systems. This has proven important in terms of innovation; as providers do not need to rely on the cooperation of other financial service providers when designing and implementing their product. However, 'closed-loop' systems are often not widely used or widely accepted as a means of payment so users still need to transfer funds in and out of these systems. This means such 'closed-loop' systems are often limited in size and are not of systemic importance. From a prudential risk and systemic risk perspective, the best regulatory option for such 'closed-loop' systems is to largely leave them alone until the activity reaches a level of system-wide importance. In emerging markets, and in particular less developed countries, consumer protection is the most important risk to address with such 'closed-loop' systems because the newly banked should not be any worse off as a result of financial inclusion goals and because if the newly banked have bad experiences with DFS they will stop using them.

### ***1.2 DFS Crosses Many Financial Regulatory Territories***

DFS are also unique in that they attract the attention of a range of regulators because they involve the functionality of a payment instrument and a transaction account (in which the value is stored electronically). The regulators include: prudential regulators (using enforcement and supervision powers to ensure the safety and soundness of DFS providers and to ensure the stored value is protected); payments system regulators (focused on ensuring the payments transactions are processed with safety and certainty); market conduct regulators (focused on supervising the use of agents and consumer protection issues); and telecommunications regulators (as often DFS involve a Mobile Network Operator (MNO) in some capacity). This range of regulators, all needing to cooperate and

coordinate, makes regulation tricky. It is also not necessarily the best solution to decide on just one regulator to be responsible for DFS because the regulator may not have the resources or legislative mandate to effectively regulate the multiple functionalities and the end-result may be a regulatory framework which is either too onerous or partial and ineffective.

### ***1.3 Innovation Is Dampened by Over-Regulation***

A conservative one-size-fits-all regulatory approach is not appropriate for DFS because an overly structured regulatory approach is likely to stifle innovation, discourage new market entrants and inhibit movement towards the goal of using DFS to improve financial inclusion.<sup>3</sup> However, the market requires clarity on regulators' expectations in terms of criteria which providers must meet when offering DFS to consumers and operating payment systems. Such clarity on standards assists in setting clear parameters in which innovation can thrive without the threat of encountering regulatory barriers.

For the above reasons, we recommend that existing financial regulatory frameworks may be best put to one side. We present a new approach, built from the ground up. We focus in particular on DFS which use stored value and involve the use of agents, and we ask what are the risks involved with these types of activities. Armed with this understanding of the risks we then provide the basis for regulators to develop legal and regulatory frameworks which are truly appropriate and proportional to the risks. We outline basic regulatory approaches which can be considered by regulators when deciding how best to regulate DFS in their particular local context.

This handbook is organised as follows:

- Chapter 2 offers a new perspective on how central banks and financial regulators should approach the regulation of DFS which centres around **regulators as promoters of DFS and not simply overseers or regulators**;
- Chapter 3 analyses **how stored value DFS operate** so as to understand the financial risks inherent in these models;
- Chapter 4 provides regulatory approaches to **ensuring customers' funds are protected at law in both common law and civil law jurisdictions**;

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<sup>3</sup> David S Evans and Alexis Pirchio, 'An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries But Flounder in Most' (Working Paper No 723, Coase-Sandor Institute for Law and Economics, 14 March 2015) 1.

- Chapter 5 canvasses **liability issues associated with the principal-agent model used in DFS and appropriate regulatory responses**;
- Chapter 6 outlines an approach for assessing the **effectiveness of consumer protection frameworks to deal with risks peculiar to DFS**;
- Chapter 7 explores the issues associated with **complying with international AML/CFT standards for newly included customers** and considers the options for regulators to use simplified consumer due diligence; and
- Lastly, chapter 8 canvasses payments aspects of DFS such as safety, stability and efficiency (including interoperability). DFS are, in essence, mostly retail payment systems. The issues in overseeing and regulating these DFS from a retail payments perspective are not new. What is new is the need to consider the issues in the context of promoting the use of innovative DFS for addressing financial inclusion.

## 2. Building the DFS Ecosystem

To create the incentive to use DFS, financial regulators must first work to understand and build consumer demand by seeking to minimise the gap between what markets may provide and what end-users may need, understand, want and afford. Building consumer demand is critically important to the success and sustainability of DFS ecosystems. Regulatory efforts to understand and build consumer demand should focus on:

1. Understanding the financial needs of the unbanked and under-banked;
2. Building consumer trust in DFS;
3. Promoting financial literacy to encourage the uptake and use of DFS; and
4. Being an enabling regulator to support DFS providers to develop new products.

This chapter explores the above four points.<sup>4</sup>

### *2.1 Understanding End-Users' Needs*

Regulators can assess a DFS product's potential for promoting financial inclusion by considering how well the initiative focuses on **local context** and the **customer value proposition**. Any DFS product that ignores local context and the customer value proposition is highly unlikely to succeed, and consequently regulatory efforts to promote such DFS will also fail.

#### 2.1.2 Local Context

To determine whether a product will be successful, one needs insight into the local customer base, locally specific needs, and the services already available and used by customers.<sup>5</sup> For example, in the Philippines, the principal demand is to move money between urban and rural areas and from overseas. MNOs have therefore enjoyed a distributional advantage over banking networks. In contrast, in South Africa, consumers either have a bank account to receive their salary or access to a cash-out facility provided by the government. South

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<sup>4</sup> This chapter draws on a briefing note we prepared for UNCDF's MM4P programme, entitled 'The Role of Regulators in Building Consumer Demand for Mobile Money' (Briefing Note, UNCDF, 2015), it is available [here](#).

<sup>5</sup> Debbie Watkins, *Context and Culture: Designing Relevant Financial Services* (13 August 2013) CGAP <<http://www.cgap.org/blog/context-and-culture-designing-relevant-financial-services>>.

African consumers thus have far less incentive to replace their existing methods of receiving funds, compared to their Philippine counterparts.<sup>6</sup>

### 2.1.3 Customer Value Proposition

Assessing the customer value proposition means making sure that new product offerings are aligned with services people actually need and will use. Capturing customer perceptions through surveys is important. Surveys of existing access to financial services (formal and informal) and of what is valuable in a new product or service are both useful. However, care should be taken in interpretation because results depend on the precise questions asked.<sup>7</sup>

Many regulators already play a role in surveys and research financial services access and use. For those that do not, there are many ways for regulators to understand these issues by speaking to providers or looking at existing research such as FinScope Surveys, Financial Diaries and Financial Inclusion Tracker Surveys that are increasingly available in many countries. Regulators can also push for more of these issues to be addressed in regular government household surveys.

## 2.2 Supporting Consumers to Value and Trust DFS

Strengthening financial consumer protection frameworks to incorporate the needs and concerns of end-users will enable regulators and market participants to create financial ecosystems which are relevant, used and ultimately improve financial inclusion. Consumers will not value and trust DFS if there are inadequate recourse mechanisms available to them when using the services.

The newly banked must be confident in storing and accessing what little savings they have in a digital format. To date the adoption of DFS has required 'a leap of faith' on the part of consumers. This is because these consumers are often previously unbanked with limited familiarity with formal financial services, particularly when offered in a digital format. These consumers may also have low levels of financial literacy and may be overwhelmed with information provided in relation to the new DFS. All these factors combined have made it difficult for consumers to understand the value of, and to trust the DFS. This has dampened the demand for DFS. The supply-side has also faced challenges in attracting consumer

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<sup>6</sup> Ben Davis and John Owens, *MicroSave Briefing Note 66: POS vs. Mobile Phone as a Channel for M-Banking* (January 2009) CGAP <[http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-pos-vs-mobile-phone-as-a-channel-for-m-banking-2009\\_0.pdf](http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-pos-vs-mobile-phone-as-a-channel-for-m-banking-2009_0.pdf)>.

<sup>7</sup> Lesley Denyes, 'How Do Smallholder Farmers Access Information?' on *CGAP Blog* (31 January 2014) <<http://www.cgap.org/blog/how-do-smallholder-farmers-access-information>>.

adoption – often the DFS interfaces are complex (SMS menus on mobile money products may be difficult to follow or not in native languages), the sign-up processes may be unnecessarily complex and, even if such initial hurdles are overcome, the consumer may be left with a product that is only accessible if they remember their password and their network carrier's service is working.<sup>8</sup>

Studies have investigated the effects of **empowering** customers to help them overcome the challenges they encounter in using DFS and to create familiarity and trust. Empowering customers means making sure customers know what they can do with the DFS and what demands they can make of the provider.<sup>9</sup> Empowering customers requires **time** and **opportunity**:

- The **relationship** with their provider must be seen as **ongoing** and as building over time;
- The customer needs the opportunity to use the DFS – be it through receiving regular payments through the DFS channel, or being given digital games to practise using the channel; and
- The consumer needs the **opportunity to use recourse mechanisms** – to ensure the mechanisms work and to provide consumers with experience in using the mechanisms, increasing familiarity and thereby trust. Without these opportunities, consumers will not learn to become more capable users of DFS and providers will not learn how to be more supportive of consumers in order to build the relationship. The absence of timely and accessible complaint and dispute resolution mechanisms has been found to decrease customer trust.<sup>10</sup>

### ***2.3 Promoting Financial Literacy***

Promoting financial literacy can help build consumer demand by increasing understanding of how, why and when to use DFS products.

Financial literacy programmes need to be tailored to the needs and circumstances of the under-banked and in a language the financially excluded can understand and with which

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<sup>8</sup> Antonique Koning and Monique Cohen, *CGAP Brief: Enabling Customer Empowerments: Choice, Use, and Voice* (March 2015) CGAP, 2-3 <[http://www.cgap.org/sites/default/files/Brief-Enabling-Customer-Empowerment-Mar-2015\\_0.pdf](http://www.cgap.org/sites/default/files/Brief-Enabling-Customer-Empowerment-Mar-2015_0.pdf)>.

<sup>9</sup> Ibid 3.

<sup>10</sup> Megan Chapman and Rafe Mazer, *CGAP Focus Note: Making Recourse Work for Base-of-the-Pyramid Financial Consumers* (13 December 2013) CGAP, 1 <[http://www.cgap.org/sites/default/files/Focus-Note-Making-Recourse-Work-for-Base-of-the-Pyramid-Financial-Consumer-Dec-2013\\_1.pdf](http://www.cgap.org/sites/default/files/Focus-Note-Making-Recourse-Work-for-Base-of-the-Pyramid-Financial-Consumer-Dec-2013_1.pdf)>.

they feel comfortable. New products should not simply be built and rolled out along with training on how to use them; rather, it is necessary to explicitly focus on how DFS can help consumers and to explicitly address consumer fears about using the services.

The regulator's role in consumer education can be very influential and must be considered carefully. Clear public statements on the safety of DFS can influence public opinion and should be provided fairly for all DFS providers based on the regulator's assessment. Alternatively, regulators may choose to incorporate DFS in their general financial education efforts. For example, the Reserve Bank of Malawi, in cooperation with the Ministry of Finance and the Malawi Institute of Education, has implemented a financial literacy syllabus as part of Malawi's secondary school curriculum, and there are plans to introduce such programmes at the tertiary level.

## ***2.4 Creating a Supportive Regulatory Regime – Enabling Regulation***

Enabling regulation supports the use of DFS for financial inclusion by, for example, allowing the entry of new participants with innovative methods of using DFS to reach the unbanked and under-banked.<sup>11</sup> This changing role of central banks to focus on financial inclusion, particularly in emerging countries, is 'reshaping the approach of central banking'.<sup>12</sup>

Enabling regulation goes beyond proportional regulation. Overly burdensome regulation, or an insistence that traditional financial institutions, such as banks, continue to play a central role in DFS schemes, can quickly seal the fate of innovative DFS schemes.<sup>13</sup>

The 'proportionality principle' promoted in the G20 Principles for Innovative Financial Inclusion focuses on ensuring regulations are proportionate to the risks and benefits.<sup>14</sup> The

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<sup>11</sup> An 'enabling' regulatory environment is described in Eva Gutierrez and Sandeep Singh, 'What Regulatory Frameworks are More Conducive to Mobile Banking? Empirical Evidence from Findex Data' (Policy Research Working Paper No 6652, The World Bank, October 2013). See also, e.g., David Porteous, 'The Enabling Environment for Mobile Banking in Africa' (Report, United States Department for International Development, May 2006) 4; Simone di Castri, *Mobile Money: Enabling Regulatory Solutions* (February 2013) GSMA <<http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf>>.

<sup>12</sup> Alfred Hannig, 'Developing Countries Focused on Financial Inclusion are Reshaping Central Banking' on *Alliance for Financial Inclusion Blog* (25 November 2013) <<http://blogs.afiglobal.org/2013/11/25/developing-countries-focused-on-financial-inclusion-are-reshaping-central-banking/>>.

<sup>13</sup> David S Evans and Alexis Pirchio, 'An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries But Flounder in Most' (Working Paper No 723, Coase-Sandor Institute for Law and Economics, 14 March 2015) 1, came to this conclusion based on an empirical study (using both qualitative and quantitative data) of mobile money schemes in 22 countries, expressing the view that '[h]eavy regulation, and in particular an insistence that banks play a central role in the schemes, together with burdensome KYC and agent restrictions, is generally fatal to igniting mobile money schemes'.

objective is to ensure innovation is not unnecessarily stifled as a result of regulation, and market developments are not inhibited which could otherwise promote financial inclusion.<sup>15</sup> However, while adopting the ‘proportionality principle’ is important, it is not enough. Regulators, in promoting DFS for financial inclusion, need to change their frame of reference, and not simply seek to make existing regulatory frameworks proportional. Existing frameworks must be put to one side. A new mindset and approach are needed. Global standards do not go far enough and simply achieving proportionality is insufficient.

When it comes to DFS it is critical that regulators adapt their frame of reference so that new participants are not unnecessarily prevented from operating in the DFS ecosystem. While the entry of new participants will largely be driven by market factors, the regulatory environment will also be a key determining factor in the extent of new participants’ (non-banks’) involvement in retail payments.<sup>16</sup> Differences in the way new participants versus existing participants are regulated can also translate into different approaches to risk mitigation and therefore potentially different consequences, should risks materialise.<sup>17</sup>

Regulators can encourage the development of successful and sustainable DFS ecosystems by:

1. Supporting innovation in the DFS market by establishing level-playing fields;
2. Enabling partnerships between the various market players, such as banks and MNOs;
3. Encouraging the movement of government payments to DFS channels; and
4. Developing interoperable or interconnected systems.

Each of these measures is now considered.

### 2.4.1 Supporting Innovation in the Digital Financial Services Market

The Philippines’ central bank, Bangko Sentral ng Pilipinas (BSP), is renowned as an enabling regulator. It focuses on creating space for private sector innovation in DFS by

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<sup>14</sup> Access Through Innovation Sub-Group, G20 Financial Inclusion Experts Group, ‘Innovative Financial Inclusion: Principles and Report on Innovative Financial Inclusion’ (Report, G20 Financial Inclusion Experts Group, 25 May 2010) <[http://www.gpfi.org/sites/default/files/documents/Principles%20and%20Report%20on%20Innovative%20Financial%20Inclusion\\_0.pdf](http://www.gpfi.org/sites/default/files/documents/Principles%20and%20Report%20on%20Innovative%20Financial%20Inclusion_0.pdf)> (*‘G20 Principles for Innovative Financial Inclusion’*).

<sup>15</sup> Ibid. 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.’

<sup>16</sup> Committee on Payments and Market Infrastructures, Bank of International Settlements, *Non-Banks in Retail Payments* (September 2014) BIS, 1 <<http://www.bis.org/cpmi/publ/d118.pdf>>.

<sup>17</sup> Ibid 2.

adopting a regulatory approach of allowing the private sector to learn and test. It also has regulations for mobile money that enable MNOs to compete with banks. Two main benefits of this ‘test and learn’ approach have been increased competition, which leads to a greater range of services, and decreased remittance costs, which support the uptake of DFS. The latter is particularly important in the Philippines where external remittances comprise 10 percent of GDP and internal remittances are substantial, with people working in urban areas regularly sending money to family members in remote rural areas.<sup>18</sup>

BSP also established a new supervisory unit bringing together the skills of regulators from its information technology and banking supervisory areas to strengthen its regulatory capacity to oversee e-money issuers. BSP is an example of a central bank that has sought to build regulatory frameworks and supervisory capacity specifically tailored to new DFS—rather than forcing innovative financial services to conform to the existing regulatory architecture.

Supporting innovation by creating a level-playing field is an ideal approach but not always possible. In Kenya, the Central Bank implicitly supported the innovative development of Safaricom’s M-PESA by not regulating it formally in its start-up phase. Banks argued they were at a disadvantage because they were regulated and in particular banks were liable for the actions of their agents (under Kenya’s Guideline on Agent Banking) whereas regulations were silent as to whether non-bank principals (such as Safaricom) were liable for the actions of their agents. Furthermore, Safaricom’s M-PESA contract with customers states that ‘[y]ou acknowledge that M-PESA cash merchants are independent contractors and Safaricom shall not be liable for the acts or omissions of M-PESA cash merchants.’<sup>19</sup> The M-PESA contract essentially limits customer recourse solely to agents, although, in practice, we suspect that Safaricom usually accepts liability in situations of agent misconduct in order to preserve its reputation. Arguably, this favourable position for M-PESA assisted it in establishing market dominance, which was highly favourable for financial inclusion in Kenya. This dominance must now be addressed for a number of reasons (including the effect it has had on the central bank’s ability to implement monetary policy). Some regulators have prohibited MNOs from issuing e-money in response to concerns of monopolistic behaviour or the risk that they will become difficult for financial regulators to supervise.<sup>20</sup>

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<sup>18</sup> Jeanette Thomas, ‘Regulation Spurs Innovation in the Philippines’ on *CGAP Blog* (5 November 2012) <<http://www.cgap.org/blog/regulation-spurs-innovation-philippines>>.

<sup>19</sup> Safaricom, ‘M-PESA Customer Terms and Conditions’ (March 2012) Safaricom, cl 18.11 <[http://www.safaricom.co.ke/images/Downloads/Terms\\_and\\_Conditions/CUSTOMER\\_TERMS\\_Mar\\_ch\\_2012.pdf](http://www.safaricom.co.ke/images/Downloads/Terms_and_Conditions/CUSTOMER_TERMS_Mar_ch_2012.pdf)>.

<sup>20</sup> See Simone di Castri, ‘What Could We Learn From Nigeria Barring MNOs From Participating in the Mobile Money Market?’ on *GSMA Blog* (29 April 2013)

## 2.4.2 Enable Partnerships Among Participants

Partnerships between banks and non-banks allow for deeper product offerings and a greater range of services beyond basic payments and remittances, including savings, credit and insurance.<sup>21</sup> For example, in MNO-bank/Microfinance Institution (MFI) partnerships, customers holding a mobile money account with the MNO and a deposit account with the partner bank or MFI are able to transfer money between these accounts.<sup>22</sup> Partnerships may also involve more basic cooperation where mobile money customers are able to use a partner bank's ATM to withdraw money.<sup>23</sup> Deeper product offerings can also contribute to the sustainability of DFS by broadening the scope of services available to consumers and creating alternative revenue streams for providers.

Furthermore, MNOs have skills and expertise that are central to the delivery of DFS, such as mass marketing, building distribution networks and training agents.<sup>24</sup> Banks, on the other hand, are experienced in providing diversified financial services and are better positioned to manage regulatory compliance.<sup>25</sup> When the two parties collaborate, DFS may well be able to be delivered more effectively.

Partnerships can assist in addressing regulatory concerns surrounding the protection of stored value or the float held by a non-bank. End-users can be encouraged to transfer stored value into deposit accounts at a bank such that the funds then enjoy depositor protection provisions.<sup>26</sup>

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<<http://www.gsma.com/mobilefordevelopment/what-could-we-learn-from-nigeria-barring-mnos-from-participating-in-the-mobile-money-market>>. See also Simone di Castri, above n 4, 11-13.

<sup>21</sup> Michael Tarazi and Paul Breloff, *CGAP Focus Note No 63: Nonbank MNOs: Regulatory Approaches to Protecting Consumer Funds* (July 2010) CGAP <<http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Nonbank-E-Money-Issuers-Regulatory-Approaches-to-Protecting-Customer-Funds-Jul-2010.pdf>>.

<sup>22</sup> Jonathan Greenacre, Louise Malady and Ross Buckley, *The Regulation of Mobile Money in Malawi: Project Report* (March 2014) Centre for Law Markets and Regulation, 42 <[http://www.clmr.unsw.edu.au/sites/default/files/attached\\_files/the\\_regulation\\_of\\_mobile\\_money\\_in\\_malawi\\_project\\_report.pdf](http://www.clmr.unsw.edu.au/sites/default/files/attached_files/the_regulation_of_mobile_money_in_malawi_project_report.pdf)>.

<sup>23</sup> Nicole Cassandra Naidoo, 'MTN, Ecobank Partner in Mobile Money Venture' on *CNBC Africa Blog* (17 March 2014) <<http://www.cnbc.com/news/technology/2014/03/17/mtn,-ecobank-partner-in-mobile-money-venture>>. Countries where MTN and Ecobank plan to launch such services include Benin, Cameroon, Ivory Coast, Ghana, Guinea Bissau, the Republic of Guinea, Liberia, Congo Brazzaville, Rwanda, South Sudan, Uganda and Zambia.

<sup>24</sup> Neil Davidson, *Mapping and Effectively Structuring Operator-Bank Relationships to Offer Mobile Money for the Unbanked* (7 March 2011) GSMA, 4-12 <<http://www.gsma.com/connectedwomen/wp-content/uploads/2012/03/mappingandeffectivelystructuringfinal2643.pdf>>.

<sup>25</sup> Ibid 3.

<sup>26</sup> See Tarazi and Breloff, above n 14.

Regulators need to consider the following issues with respect to partnerships between non-banks and banks:

1. Oversight mandates for the participants in partnerships;
2. Collaboration risk arising from partnerships; and
3. Increased consumer risk as a result of partnerships.

#### **1. Oversight Mandates for Participants in Partnerships**

Regulators may find themselves in a situation where they have a regulatory mandate over one of the participants in a partnership (the bank) but not the other (the MNO), which may, for example, fall under the jurisdiction of a telecommunications regulator. Therefore, regulators need to innovate both in rule-making and in cross-regulatory collaboration in order to effectively regulate such partnerships.

#### **2. Collaboration Risk from Partnerships**

Partnerships between MNOs and banks/MFIs can be structured in a number of ways and the differing methods of collaboration can raise risks.<sup>27</sup> The two entities can enter into a legal partnership, but are in practice unlikely to want to do so because in law, partners are often liable for each other's obligations.

The more likely structure to be adopted is therefore some form of joint venture. Joint ventures can be incorporated which means a new corporate legal entity is created in which the MNO and bank or MFI would each hold shares. Alternatively they can be unincorporated, which means that although the two entities conduct business together this is not through the vehicle of a new legal entity, i.e. the unincorporated joint venture is the two entities working together in a business.<sup>28</sup>

The limitation of an incorporated joint venture from a regulatory point of view is that the venture will only have whatever assets the shareholders inject into it. This may raise concerns as it may not be a substantial organisation in financial terms.<sup>29</sup> For this reason, regulators may prefer an unincorporated joint venture or may ask that the shareholders give guarantees of the liability of an incorporated joint venture.<sup>30</sup>

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<sup>27</sup> Davidson, above n 17.

<sup>28</sup> See Tarazi and Breloff, above n 14; Kate Lauer and Michael Tarazi, *CGAP Brief: Supervising Nonbank E-Money Issuers* (July 2012) CGAP <<http://www.cgap.org/sites/default/files/CGAP-Brief-Supervising-Nonbank-Emoney-Issuers-Jul-2012.pdf>>.

<sup>29</sup> See Tarazi and Breloff, above n 14, 6.

<sup>30</sup> Ibid 3.

### 3. Consumer Risks from Partnerships

Consumer protection issues which arise as a result of a greater range of product offerings being available via a mobile phone need careful assessment by the regulator. Ideally, this assessment should occur before the end-users confront issues which may deter their further use of formal financial services. For example, when providing loans to customers of the MNO-bank/MFI partnerships, the partnership needs to be wary of excessive interest rate charges or poor credit risk assessments which may lead to client indebtedness and potential loan defaults.<sup>31</sup>

#### 2.4.3 Shifting Government Payments to Digital Financial Service Channels

Governments already use mobile money services to make salary, pension and welfare payments. In India, mobile money is being used to deliver welfare and social aid payments; in the United Republic of Tanzania, the Government accepts tax payments through mobile money services; and Ethiopia recently launched its first nationwide mobile money service, M-Birr, which will be used to deliver welfare payments to poor households in rural areas.

Regulators can work with governments to shift government payments to DFS payment systems. Doing so will help end-users build experience, trust and familiarity with DFS and bring payments closer to the beneficiaries, thereby decreasing leakage of payments due to inefficiencies or corruption. Regulators can support such initiatives through, for example, instituting policy changes to support the required payments infrastructure for mass payments and ensuring that the DFS payment systems used are safe and stable. They can also encourage payments to be provided in a manner that supports the use of DFS and promotes financial inclusion (for example, regulators can encourage providers to offer low-cost, and preferably, interest-paying, savings account in which to store the funds as a way to encourage beneficiaries to not withdraw all of their funds at once.

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<sup>31</sup> See a discussion of high interest rates in banking from Charles A Bruch, 'Taking the Pay Out of Payday Loans: Putting an End to the Usurious and Unconscionable Interest Rates Charged by Payday Lenders' (2001) 69 *University of Cincinnati Law Review* 1257. High interest rates and customer over-indebtedness have contributed to micro-credit market meltdowns in a number of countries such as Morocco, Nicaragua, Pakistan. See Milford Bateman and Ha-Joon Chang, 'Microfinance and the Illusion of Development: From Hubris to Nemesis in Thirty Years' (2012) 1 *World Economic Review* 13, 16. Perhaps the most spectacular example of this process was the 2010 micro-credit market meltdown in Andhra Pradesh: Oya Ardic, Joyce Ibrahim and Nataliya Mylenko, 'Consumer Protection Laws and Regulations in Deposit and Loan Services: A Cross-Country Analysis with a New Data Set' (Policy Research Working Paper No 5536, The World Bank, January 2011) <<http://www.cgap.org/sites/default/files/CGAP-Consumer-Protection-Laws-and-Regulations-in-Deposit-and-Loan-Services-Jan-2011.pdf>>.

#### **2.4.4 Promoting Interoperability across the Space**

The development of payment system infrastructure that enables interoperability and interconnectivity will promote consumer demand. Experience suggests that regulators need to encourage DFS providers to move towards interoperability because market forces alone are unlikely to provide sufficient incentive in the medium-term. The case for interoperable systems is growing stronger with the success of Tanzania in this area. However, in the absence of strong regulatory leadership on this issue, providers are highly unlikely to prioritise interconnection with competitors. Chapter 8 provides further detail on how regulators can enable interoperability.

#### ***2.5 Concluding Comments***

If regulators focus only on determining how to devise risk-based regulations for DFS, the result may be sound and supportive regulatory frameworks for services with low uptake and limited success. A dual regulatory focus on ensuring safe and sound financial systems while promoting financial inclusion starts with understanding and building consumer demand so that DFS innovation can reach the financially excluded with safe, accessible and useful services.

### 3. Mechanics of DFS Models

This chapter explains how basic models for DFS using stored value work. Once it is understood how the models work, it is then possible to identify the risks associated with the functioning of the models. Once the risks are identified and assessed, regulators can develop risk-based regulatory frameworks. These regulatory frameworks should be proportional to the risks present, facilitate innovation and be appropriate for the local context.

#### 3.1 Theoretical Analysis of Bank-Led and Nonbank-Led Models for DFS

##### 3.1.1 Brief Introduction of the Two Models

There are two primary models for DFS using stored value: Bank-led models and Nonbank-led models. The latter have been dominated by MNOs, so are also widely referred to as MNO-led models. The distinctive feature of the two models lies in *who holds the customer's funds*. In a Bank-led model, it is the bank that holds customers' funds on its own books and it may issue e-money in exchange for the customer's funds or record the customer's funds as bank deposits. In a Nonbank-led model, in contrast, it is the MNO that holds the customer's funds and issues the e-money. The MNO may place these funds in a bank account in its name or in a trust account with a bank where the customers are beneficiaries of the trust. How the MNO approaches the placement of funds might be determined by regulation. Figures 1, 2, 3 and 4 respectively, demonstrate how each of the two models works under the circumstance of cash-in and cash-out.

Figure 1: Bank-led Models (Cash-in)

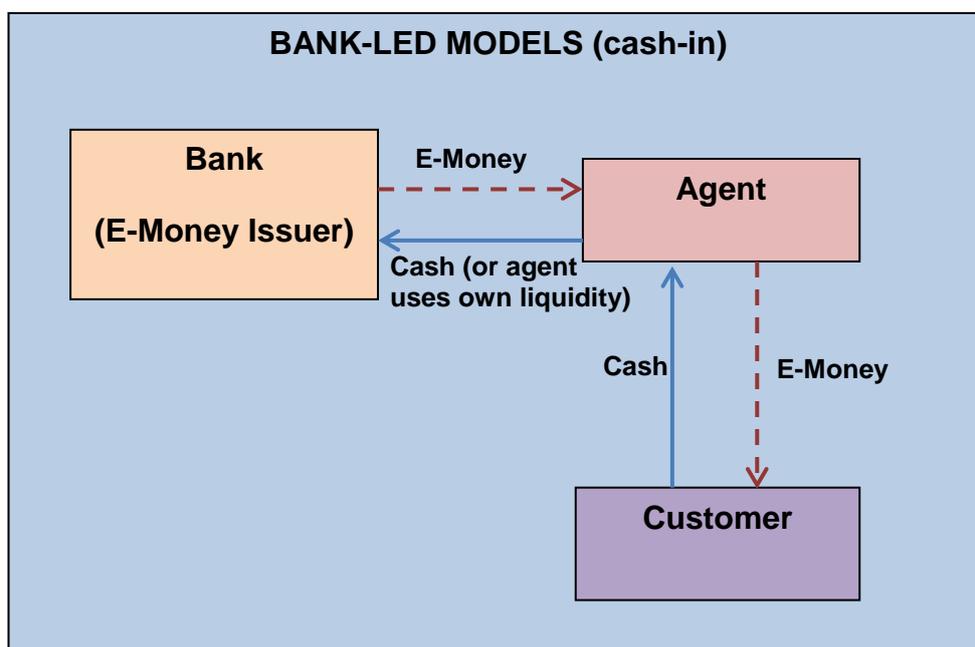


Figure 2: Bank-led Models (Cash-out)

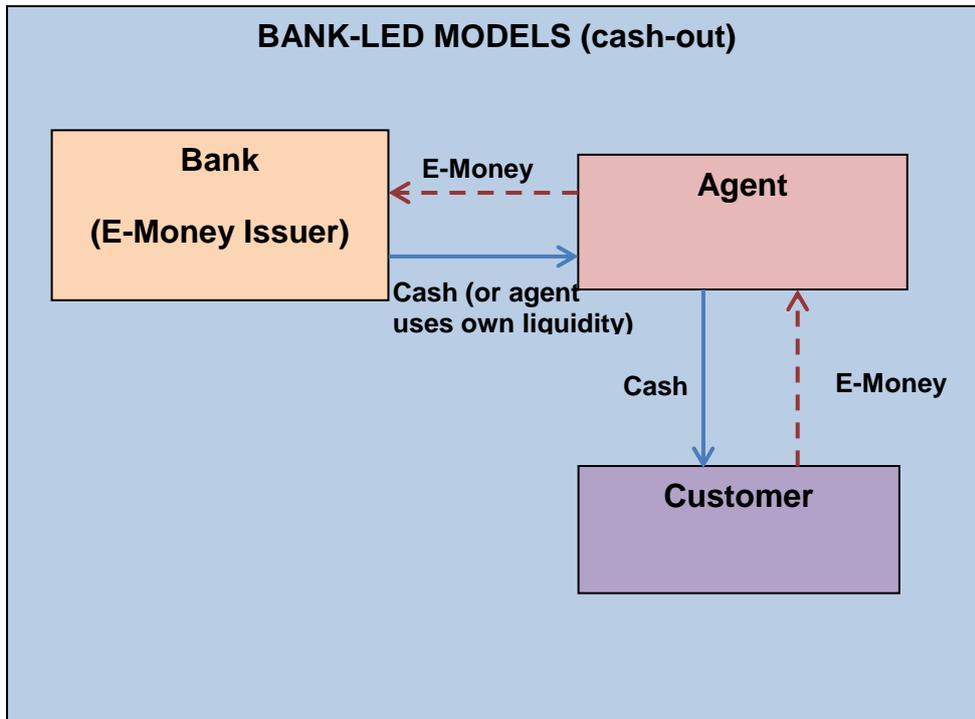


Figure 3: MNO-led Models (Cash-in)

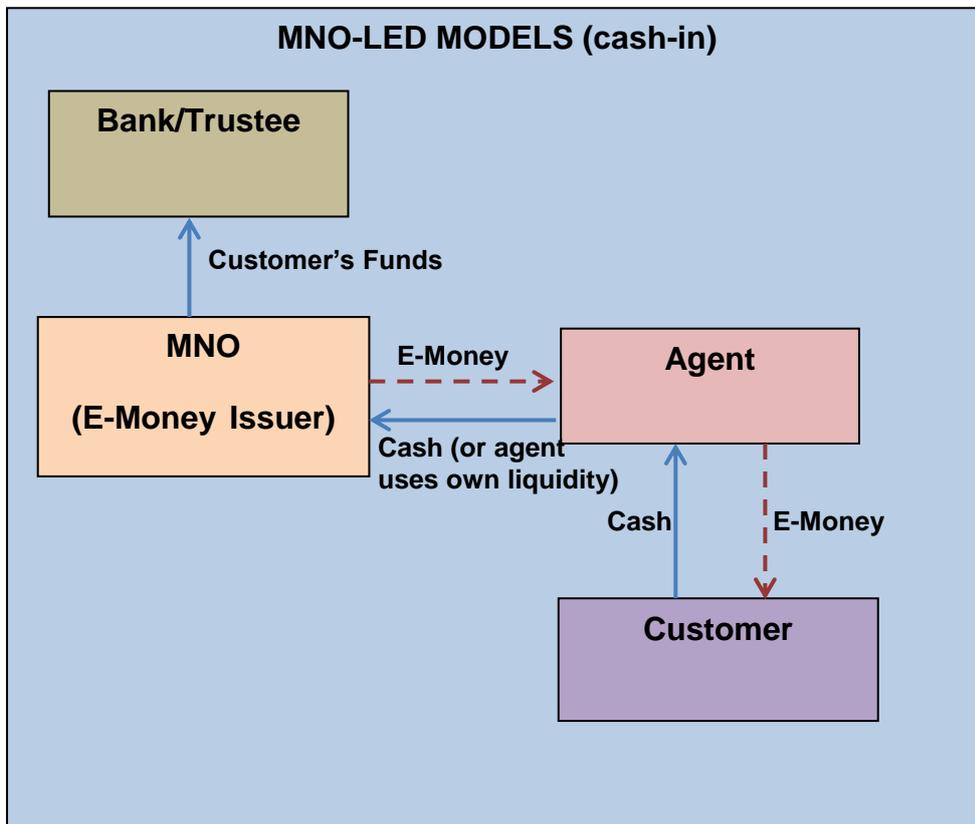
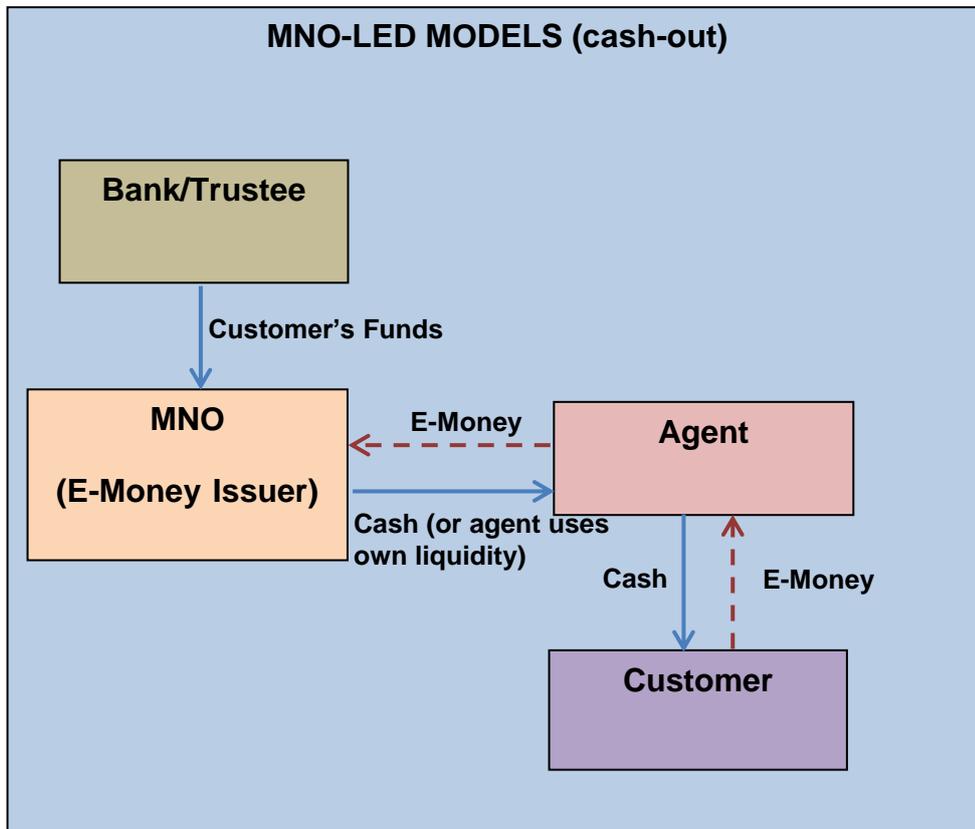


Figure 4: MNO-led Models (Cash-out)

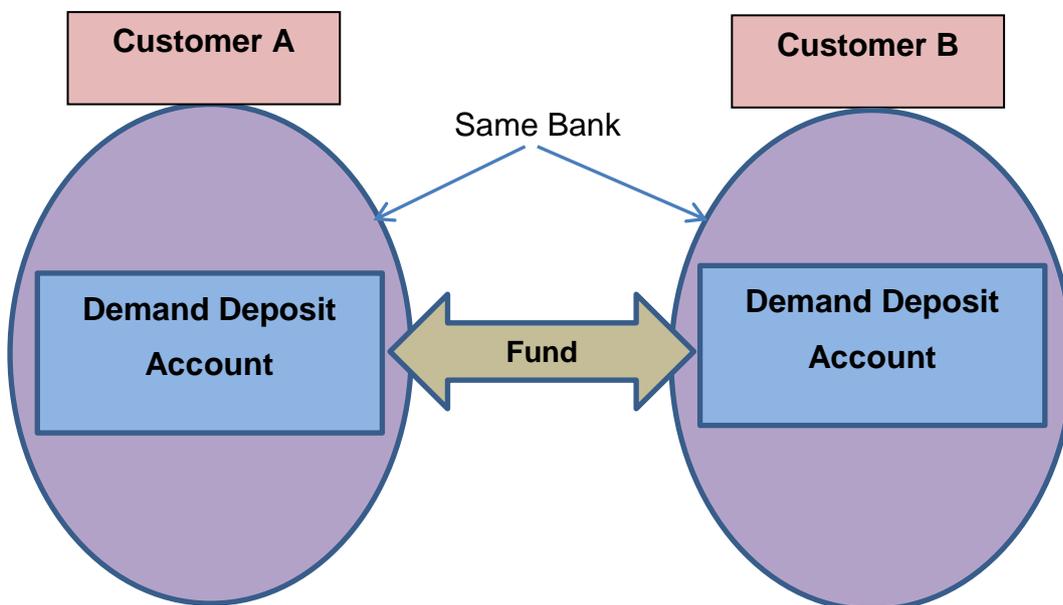


Bank-led models can be more complicated. We explain this by describing below two types of the Bank-led models: the Mobile-banking model (as shown in Figure 5) and the E-wallet model (as shown in Figure 6). Both models allow banks' customers to conduct electronic fund transfers through their mobile devices. However, the Mobile-banking model does not result in the creation of e-money. Under the Mobile-banking model, funds are moved from a customer's deposit account with the bank and there is no stored value or e-money involved. Under the E-wallet model, the funds are placed in a stored value or e-money account. Below are detailed analyses for each.

#### Mobile-banking Model

A mobile banking transaction is the same as a normal banking transaction, as funds are stored in and transferred to and from normal bank deposits. The only difference is that customers can do so without the need to physically visit a bank branch to conduct the transaction. This model requires that (1) customers already have a bank account with the bank, and (2) the bank has a DFS platform which can be accessed through a mobile phone or internet device. Customer A may exchange funds with Customer B (see Figure 5). Customer B may be an agent of the bank.

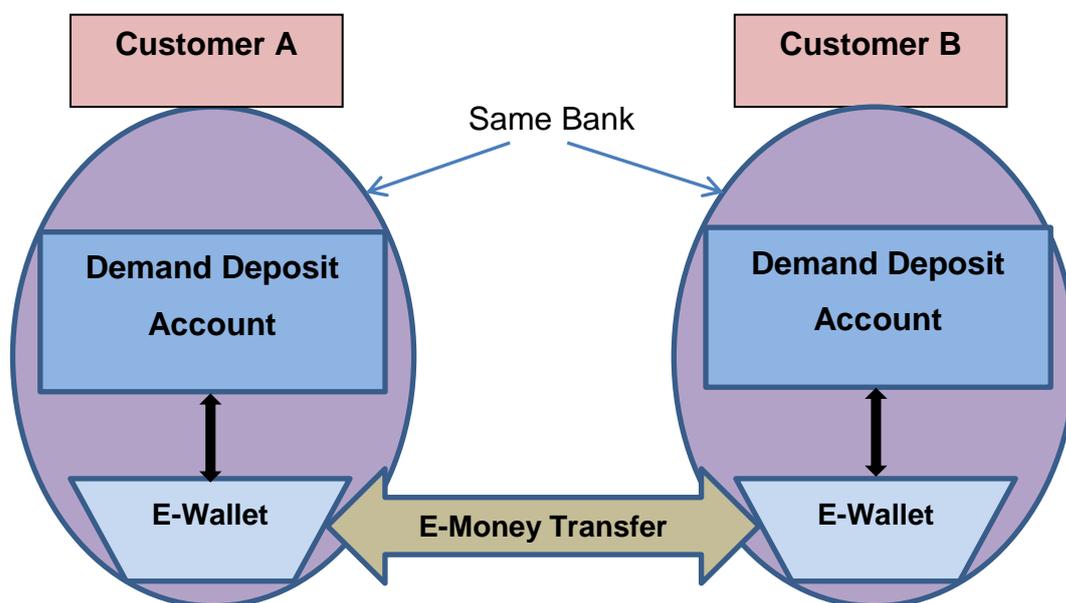
**Figure 5: Electronic Funds Transfer in a Mobile-banking Model**



## E-wallet Model

Under an E-wallet model, funds may be drawn from a customer's deposit account (or a separate e-money account) and stored as e-money in an e-wallet or the customer may put funds directly into the e-wallet account by visiting a branch or an agent and exchanging their cash for e-money (cash-in). That money may then be transferred to another user, used to purchase goods and services or simply stored as e-money. The transactions are made using the e-wallet, rather than drawing funds directly from the deposit or savings account.

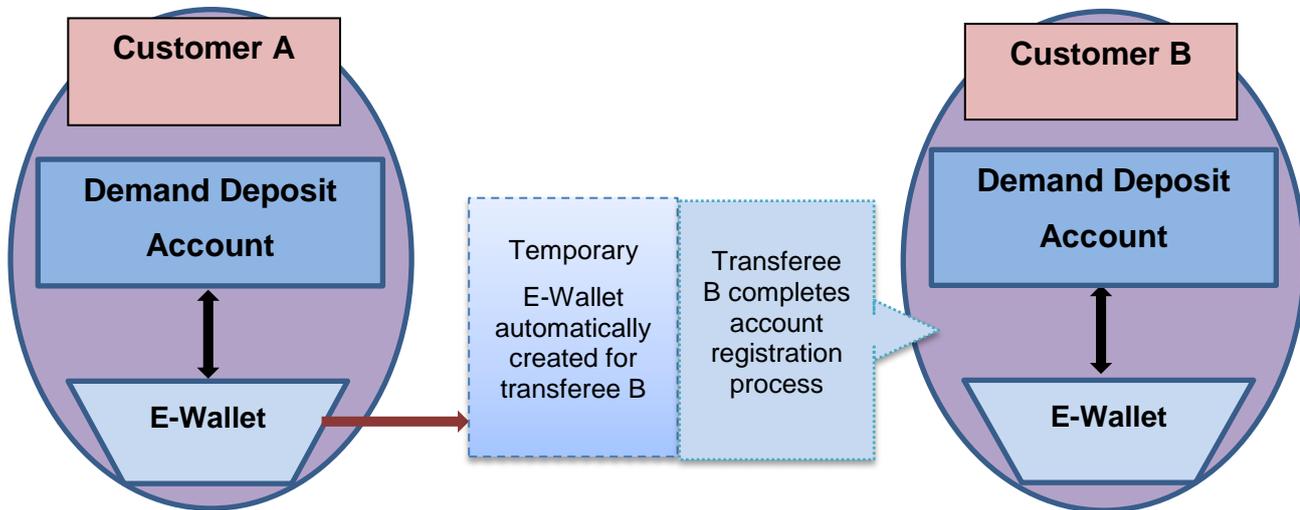
**Figure 6: Fund Transfer in an E-wallet Model (Transfers Between Customers of the Same E-wallet Service Provider)**



This E-wallet model has two forms. In its simplest form, a customer transfers part of their deposit into an e-wallet, and, from there, to other customers or agents, who are clients of the same bank or users of the same MNO network (as described above in Figure 6). A more complex form (see Figure 7) would involve non-bank-customers subscribing to the e-money service offered by the bank. For example, the customer deposits cash with an agent authorised to open an e-money account on behalf of a bank. This 'e-money customer' may then also be able to transfer funds to a 'non-e-money customer'. When the non-bank/non-e-money customer receives the funds, an e-wallet is automatically created under his or her mobile phone number. To access the e-money, the non-bank/non-e-money customer will

generally need to complete a customer registration process (equivalent to opening an e-money account) with either an agent or the bank in order to access the funds.

**Figure 7: Fund Transfer in an E-wallet Model (Transfers Between Customer and Non-customer of the E-wallet Service Provider)**



### 3.1.2 Identifying the Risks Associated with the Functioning of the Models

As noted above, the distinctive feature of the DFS models lies in *who holds the customer's funds*. Identifying who holds the funds and how those funds are treated from a legal perspective will determine the degree of insolvency, liquidity and operational risks associated with the DFS model. Additional risks which arise in the use of DFS include the usual risks associated with customers' financial transactions, including: Anti-Money Laundering/ Know Your Customer (AML/KYC) risks; payment system risks; and consumer protection risks. There are also more specific risks which arise in the use of DFS which include: risks associated with the use of agents as the providers of the cash-in/cash-out points and collaboration risks because neither MNOs nor banks can offer DFS in the absence of assistance from the other. From a market-wide perspective, there is also competition risk which is the risk a provider becomes a monopoly, stifling competition and innovation. Figure 8 provides a summary of the risks listed above. The remaining chapters of this handbook present regulatory approaches which respond to these risks which arise in the use of DFS models.

Figure 8: Summary of the Types of Risks Associated with the DFS Models



Immediately below is a theoretical discussion on whether, in a Bank-led model, the e-money is considered a deposit. It is often assumed that Bank-led models provide customers' funds with the same protection as bank deposits and so such models may not be the chief concern of regulators. Or, in other words, the prudential regulations governing bank deposits should provide adequate protection for the e-money when it is bank issued. However, this is not necessarily so.

### 3.1.3 Is the E-money in a Bank-led Model Considered a Bank Deposit?

To assess the adequacy of relying on depositor protection arrangements, it is **first** necessary to clarify whether the stored value (or e-money) used in DFS models can be legally considered a bank deposit. **Second**, it is necessary to assess whether the level of protection granted to bank deposits adequately guarantees their safety and availability. The section immediately below presents a theoretical analysis of this first issue. The second issue is not addressed in this handbook as it is considered beyond its scope in that it requires an analysis of a country's specific depositor protection arrangements.

In Bank-led models an important issue to consider is whether e-money can be legally considered a deposit under local law. Only under this circumstance will e-money customers enjoy the legal protection accorded to depositors under the banking law. This protection comes about because the total amount of e-money in circulation is equal to the amount of cash originally deposited with the bank in exchange for the e-money. This cash is a liability of the bank and if the bank is able to use this cash to make loans to other customers (asset-transformation) this will increase the level of capital required under Basel capital adequacy and liquidity rules.<sup>1</sup>

In a standard banking transaction, when a customer deposits cash in a branch, a legal relationship between the bank and the customer is created in which the bank is obliged to return to the customer the same amount of money at their request. DFS, on the other hand, generally rely on an intermediary – the agent – who provides customers with a cash-in and cash-out service by using his or her own DFS account (see Figure 9 below).

From a financial viewpoint, when a customer buys e-money from an agent, on the face of it the transaction involves only the customer and the agent. Bearing this in mind, depending on how one interprets the cash-in or cash-out transactions between the banks and their customers or agents, the issuance of e-money in return for cash by bank agents can be seen from different perspectives – not all of which assume e-money is a deposit.

**From a very narrow perspective**, one could see the e-money sold by the agent to the customer (through the agent's account) as a simple commercial transaction between the agent and the customer. In this context, e-money would be simply treated as a commodity, not differently from a pack of rice. In turn, the relationship between the customer and the agent would be similar to that between a customer and a trader, while the bank would simply be the original supplier of the commodity. Some authors argue that, in this context, the role of the bank is simply that of a 'trusted supplier of the technology that underpins the electronic side of the transaction'.<sup>2</sup> More specifically, the role of the bank would be simply to guarantee the ownership of the e-money traded for cash, and to register the transactions between the two sides. As Mas puts it, when an agent trades on its own account, it never trades the bank's money or the bank's customers' money.<sup>3</sup> This is in contrast with a normal bank

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<sup>1</sup> One of the fundamental functions of banks is the so-called asset-transformation. More specifically, banks use deposits to reinvest in loans to other customers. To offset the risks associated with this practice, banks need to maintain a percentage of regulatory capital against the total value of liabilities (including deposits).

<sup>2</sup> Ignacio Mas, 'Shifting Branchless Banking Regulation from Enabling to Fostering Competition' (2015) 30(2) *Banking & Finance Law Review* 186.

<sup>3</sup> *Ibid.*

deposit. Indeed, when a customer deposits cash in a bank, the liabilities of the bank increase as registered in the bank's balance sheet.

If we interpret e-money as a commodity, the only role of a bank with regard to its DFS customers would be to register the transactions correctly. This would also imply that customers would be legally able to claim the redemption of their e-money only from the agent that conducted their transactions. More specifically, if we accept that the bank's role is simply that of a 'registrar' of the transactions between the agent and the customers, customers could not claim a legal relationship with the bank that would eventually entitle them to redeem their e-money for cash. Only agents, who have bought the e-money from the bank, could do so. However, this would create the situation whereby agents would act as mini-banks, independently responsible for their liquidity and solvency. Regulators and supervisors may be faced with having to license and supervise hundreds of small agents. Moreover, since the financial and business capacity of agents is clearly only a small fraction of that of banks, customers would be faced with a much lower level of protection compared to that which they would have if they had dealt directly with the bank.

This narrow interpretation of the exchange of e-money for cash between an agent and its customer obviously works against promoting confidence in DFS and ensuring newly banked consumers' funds are well-protected. This narrow interpretation also ignores the existence of the principal-agent relationship, and prevailing laws and regulations, which govern that relationship in which the bank is responsible for the actions of its agents. One of the fundamental implications of such a relationship is that customers dealing with bank agents are given the same level of legal protection they would have received had they dealt directly with the bank. Thus, when a bank issues e-money for cash to its agent, it automatically accepts the responsibility for the protection of the monetary value that is associated with the e-money that the agent will put in circulation.

In conclusion, the issuance of e-money cannot be seen as the trading of a commodity but only as a virtual receipt that records a legal claim of the e-money holder on the bank entitling the holder to redeem the same amount in cash.

From a purely economic perspective, attributing to e-money (issued through Bank-led models) the legal status of a bank deposit will support improved financial inclusion: the core objective of using DFS to reach the unbanked. Various studies show that many e-money customers around the world already use their electronic accounts as a means of safe storage. For instance, one study showed that Kenya's M-PESA service was used for both

long- and short-term savings.<sup>4</sup> As Ehrbeck and Tarazi argue, 'it is this storage function that distinguishes e-money from a payments product and makes it more akin to a savings account than to a Western Union transfer'.<sup>5</sup>

### ***3.2 Liquidity and Solvency Risks in Bank-led Models***

This section describes how a DFS transaction works, from a financial and legal perspective. The purpose of providing this description is to understand the relationships between the different actors involved in a DFS transaction. Understanding these relationships assists in understanding how solvency and liquidity risks can impact the different actors in a DFS transaction. We consider this process as unique to DFS, particularly when agents are used.

DFS systems can be thought of as silos in which the provider, the agent and the customer are separate, as illustrated in Figure 9 below.

The first relationship is between the **provider and its agent**. The goal of DFS is to offer financial services to customers without the need for them to go to a branch. Therefore, generally, in a DFS operation, the provider does not issue e-money directly to customers in return for cash, but does so through the intermediation of an agent. In order to offer his/her customers e-money in return for cash, the agent must deposit with the provider an amount of money equivalent to the value of e-money he/she wants to hold in his/her virtual account. Thus, when the agent deposits the cash with his/her provider, the agent has a legal claim on the provider which entitles him/her to redeem his/her e-money for cash at any time.

Once the agent holds a sufficient balance in his/her own virtual account, he/she can conduct cash-in and cash-out activities with the customer. Thus, the second relationship is between **the agent and the customers**. A customer wishing to enrol in a DFS program with a bank must transfer cash to the agent, who will credit it immediately onto the customer's e-wallet. The agent will transfer value from his/her e-wallet to the customer's e-wallet as an amount equivalent to the amount of cash received (cash-in). Accordingly, the agent's balance in his/her e-wallet will decrease.<sup>6</sup> Conversely, when a customer wishes to redeem e-money for

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<sup>4</sup> Olga Morawczynski and Mark Pickens, 'Poor People Using Mobile Financial Services: Observations on Customer Usage and Impact from M-PESA' (Brief, CGAP, August 2009); Jack William, Caroline Pulver and Tavneet Suri, 'The Performance and Impact of M-Pesa: Preliminary Evidence from a Household Survey' (Financial Sector Deepening Kenya, 2009).

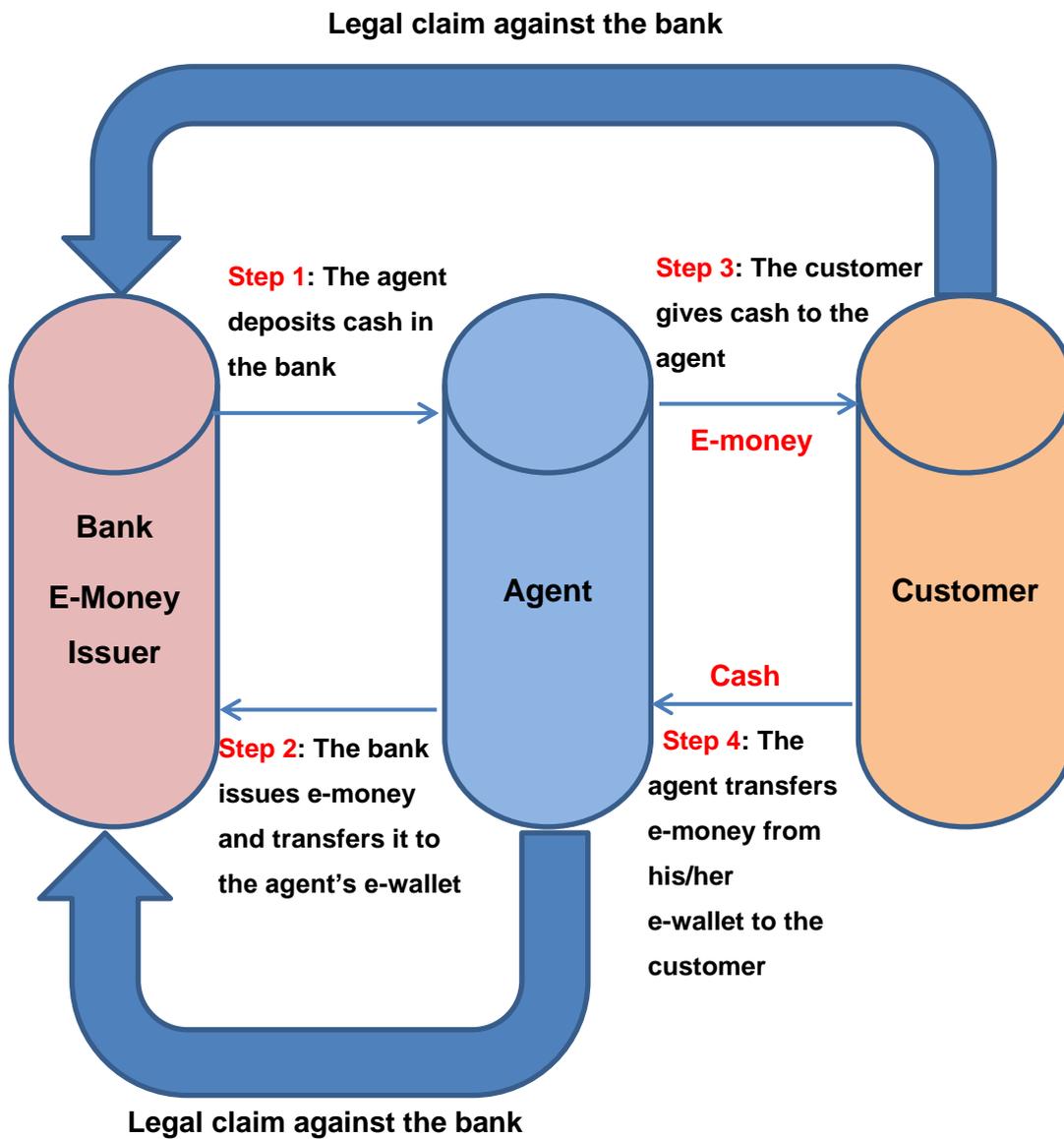
<sup>5</sup> Michael Tarazi and Tilman Ehrbeck, 'Putting the Banking in Branchless Banking: Regulation and the Case for Interest-Bearing and Insured E-money Savings Accounts' in World Economic Forum, *The Mobile Financial Services Development Report 2011* (World Economic Forum, 2011) 38.

<sup>6</sup> The agent's net assets remain the same, he/she simply now has more cash holdings and less e-money.

cash (cash-out), the customer must transfer e-money from his/her e-wallet onto the agent's account (whose e-money balance will increase).

The third relationship is between **the provider and those who hold e-money issued by the provider**: the agent and the customers. E-money is a monetary claim on the provider. For the agent this is straightforward, as he/she directly bought the e-money from the provider. However, since agents work for and legally represent providers to the providers' customers, the e-money bought from agents legally entitles customers to redeem their e-money for cash from the provider.

Figure 9: The E-money Flow from the Provider to the Customer using an Agent (Bank-led Models)



**Step 5:** The customer can: store the e-money in their e-wallet, transfer e-money to another customer, purchase goods or services using the e-money, or later perform a 'cash-out' transaction with an agent.

### 3.2.1 Solvency Risk

Solvency problems impact on the ability of a financial institution to honour its debts when they come due even after selling all the institution's remaining assets. In an insolvency scenario, the provider's equity may be exhausted and the provider's total assets may be insufficient to cover all the outstanding debts. When a provider is deemed insolvent, regulators have two choices: to force the provider to declare bankruptcy and commence bankruptcy proceedings, or to restore the provider's balance sheet to a viable level by injecting new equity through a government-funded bailout, or by artificially creating new equity through a bail-in of creditors.<sup>7</sup>

From a creditor's perspective, a bailout is the preferable option, as it transfers all the financial costs of the recapitalisation to the public sector, thereby leaving the creditors untouched. However, bailouts are obviously not always possible, practical or fair on the public purse. In all other options, creditors have to bear part of the losses. The extent of the losses imposed on each creditor depends on the ranking of the creditor in the bankruptcy or bail-in proceeding. In the situation where the provider is a bank, the depositors are usually very well protected. First, depositors generally stand 'first in line' among creditors, which means that in a bankruptcy proceeding on division of assets, they will be paid first. Secondly, in most jurisdictions, deposits are protected by an insurance scheme, which guarantees their value up to a maximum threshold.<sup>8</sup>

When it comes to DFS, solvency risks can arise in two different ways. First, the **provider** offering the DFS can become insolvent. In this situation, all the provider's outstanding debts will be affected. When e-money is bank issued, it is a claim against the bank, and in the event of insolvency of the bank, e-money will be affected like any other deposit. The agent is exposed to the risks associated with provider insolvency as the agent has funds stored with the provider.

Second, the **agent** providing cash-in and cash-out functions can become insolvent. The insolvency of the agent is relevant, from a consumer's viewpoint, only if the agent has not yet credited the cash received from the customer to the customer's virtual account. However, this risk can be greatly reduced by the adoption of real-time payment systems which

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<sup>7</sup> In the situation where the provider is a bank, this can be done either by writing down part of the bank's liabilities or by converting them into equity in order to preserve the bank as a going-concern. For a good discussion on crisis resolution tools see Thomas Huertas, *Safe to Fail: How Resolution Will Revolutionise Banking* (Palgrave Macmillan, 2014).

<sup>8</sup> Daniel C Hardy, 'Bank Resolution Costs, Depositor Preference, and Asset Encumbrance' (Working Paper WP/13/172, IMF, 2013).

guarantee that the money received by the agent is immediately credited to the customer's account.

To conclude, it is important to note that, when it comes to solvency, the provider is the most protected among the three actors, as the provider does not incur any solvency risks towards its agents or customers. These would be present for the provider only if the provider extended short-term e-money to the agent without requiring the agent to deposit cash with the provider. This situation could occur, in theory, if an agent operating far away from the closest branch of the provider suffered a sudden e-money shortage that made him or her unable to offer cash-out services to his or her customers. In this situation, the provider could agree to offer an emergency discount window and provide e-money to the agent on the promise of his or her future repayment.<sup>9</sup>

### 3.2.2 Liquidity Risk

Liquidity problems impact on the ability of a provider to pay its debts on time due to a temporary lack of disposable funds. Contrary to the previous scenario, the provider has enough assets to cover all its debt, but it cannot access the funds due to an inability to collect them as needed from its creditors. For example, in the case where the provider is a bank, because banks typically borrow short and lend long a bank will invest most of the money it receives from its depositors in long term assets (for instance, into 20-year housing loans), counting on the fact that only a small fraction of the short-term creditors will withdraw their cash at any point in time. In the rare occurrence in which creditors rush *en masse* to the bank to withdraw their money, the bank will be forced to seek financial support from the country's central bank as lender of last resort or ultimately be forced to declare bankruptcy.<sup>10</sup>

In the context of DFS, liquidity problems could present fundamental risks for the stability of a DFS system.<sup>11</sup> However, the DFS would need to be very widely accepted and used to cause stability concerns. Of more concern would be the consequence of DFS customers having limited confidence in, or familiarity with, the broader financial system, such that an isolated instance of a liquidity problem could increase the distrust of these consumers towards financial institutions and discourage the use of DFS.

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<sup>9</sup> Gates Foundation, 'Assessing Risks in Digital Payments' (Special Report Financial Services for the Poor, February 2015) 49.

<sup>10</sup> George G Kaufman, *Bank Runs, the Concise Encyclopaedia of Economics* (Library of Economics and Liberty, 2<sup>nd</sup> ed, 2008); Douglas W Diamond and Philip H Dybvig, 'Bank Runs, Deposit Insurance and Liquidity' (1983) 91(3) *Journal of Political Economy* 401.

<sup>11</sup> Gates Foundation, above n 9, 31-33.

Liquidity problems can occur at both the provider and the agent levels. The illiquidity of the **provider** can affect DFS operations in two circumstances. First, it can impact the customer if the customer wants to withdraw funds directly from his or her account. If the provider does not have enough cash to meet the customers' requests, it may incur a liquidity problem that, in the case where the provider is a bank, necessarily requires the central bank's intervention or the suspension of the withdrawals. However, in a DFS scenario, this would be considered a rare occurrence, as customers would generally use agents to withdraw cash. However, the illiquidity of the provider may transmit the liquidity problem onto the agents. The agents' demands for exchanging e-money for cash from the provider may not be met if the provider is facing its own liquidity problems and the agents will then not have enough cash to disburse to their customers wishing to cash-out their e-money. In a different scenario, even if the agent holds enough cash to distribute to his/her customers, he/she might be unwilling to do so because of the fear that he/she will not be able to get it back from the provider. If rumours of problems in the provider spread, agents (who trade on their own accounts) might fear that they will be unable to redeem their e-money for cash from the provider. This may result in agents refusing to handle customers' cash-out requests.<sup>12</sup>

The illiquidity of the **agent** can occur in different circumstances. Besides the provider liquidity problem discussed before, agents may incur liquidity problems even when the provider is stable. The illiquidity of the agent could be the result of the inability of the agent and the provider to calculate the adequate amount of cash that the agent should hold to meet a customer's request.<sup>13</sup> In general, the cost of holding cash for an agent is the result of (i) the risk of theft, and (ii) the cost of transport. The agent must be able to calculate an adequate amount of cash that balances the two. If the costs incurred by the agent to reach the closest branch are very high, the agent will be forced to make only a few trips and keep a large amount of cash, thereby increasing his/her risk of theft. As an example, as is often the case, if an agent primarily provides cash-out services and only limited cash-ins, he/she might be able to conduct only a limited number of transactions before running out of cash. If the revenues accrued through these transactions are not enough to match the cost of cash, the DFS business will not be profitable for the agent.<sup>14</sup> For this reason, often the parties best

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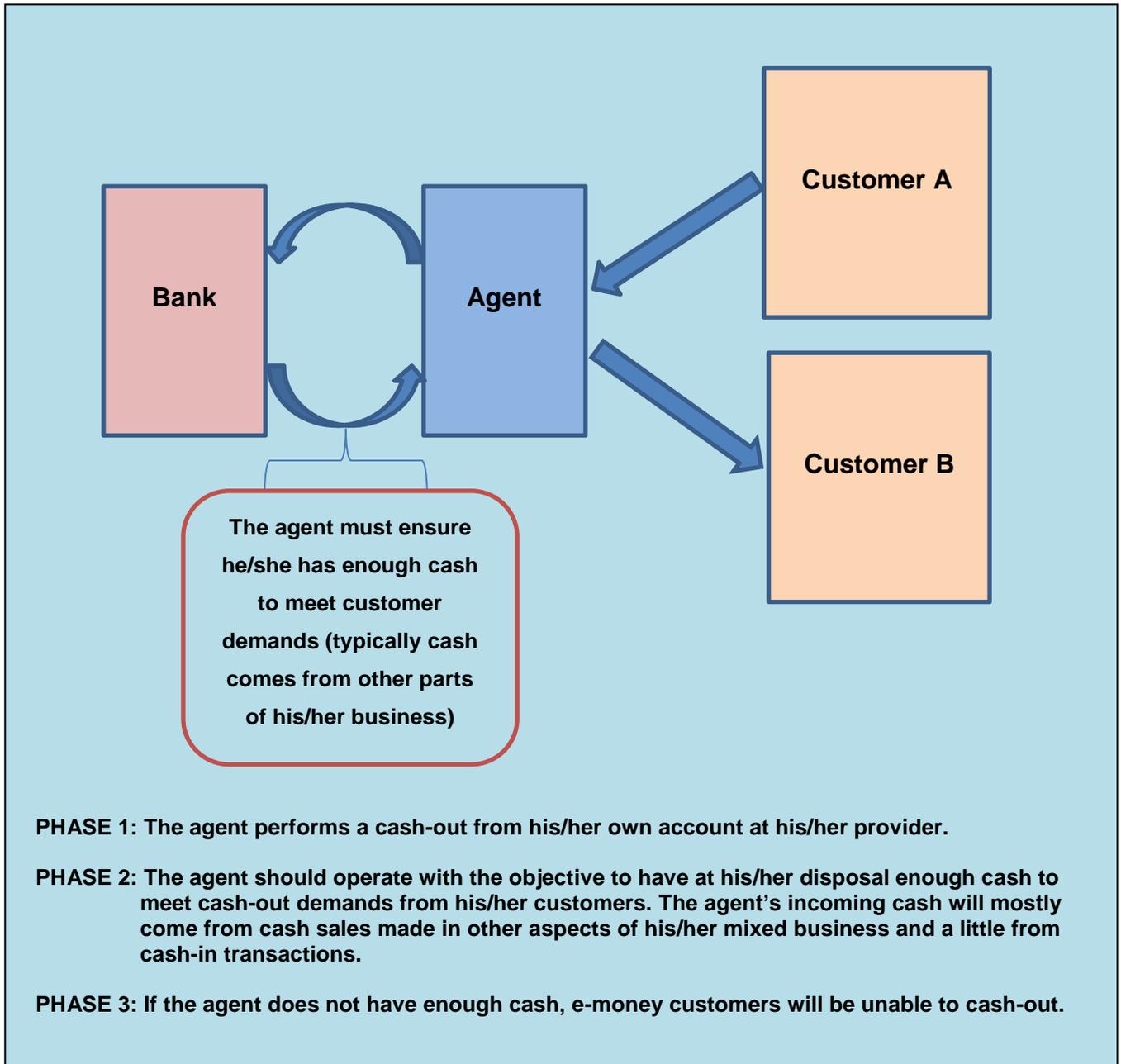
<sup>12</sup> Gates Foundation, above n 9, 41.

<sup>13</sup> Neil Davidson and Paul Leishman, 'Building, Incentivising and Managing a Network of Mobile Money Agents: A Handbook for Mobile Network Operators' (GSMA Mobile Money for the Unbanked, 2014); David Cracknell, 'Banking Liquidity Management' (Briefing Note 78, MicroSave, April 2010).

<sup>14</sup> Mark Flaming, Claudia McKay and Mark Pickens, *Agent Management Toolkit: Building a Viable Network of Branchless Banking Agents: Technical Guide* (2011) CGAP, 9 <<http://www.cgap.org/sites/default/files/CGAP-Technical-Guide-Agent-Management-Toolkit-Building-a-Viable-Network-of-Branchless-Banking-Agents-Feb-2011.pdf>>.

placed to be DFS agents are those with significant cash in-flows from other parts of their mixed business.

Figure 10: Agent Liquidity Flow and Risks



### *3.3 Concluding Comments*

DFS transactions are unique in that they usually involve the use of agents and collaboration among several different parties. Unlike traditional banking transactions under which customers' funds are stored in the form of deposits and safeguarded by prudential regulation, customers' funds in DFS are not typically considered as deposits and, if not adequately protected, are susceptible to insolvency, liquidity and operational risks incurred by not only the provider but also the agent. Different DFS models subject customers' funds to different types of risks, and thus a clear understanding of the mechanics of these models is essential.

## 4. Protection of Customers' Funds

### 4.1 A Risk-Based Approach

Customers' funds should be well protected as their availability and accessibility are essential to the formation and maintenance of market-wide confidence in DFS. Financial regulators are increasingly paying greater attention to DFS using 'e-money'—given concerns around the potential risk of loss or misuse of customers' funds.<sup>1</sup> Customers' funds are susceptible to the same types of risks faced by bank deposits, however, the latter are used by banks for financial intermediation and so are protected through prudential supervision frameworks, complemented by deposit protection schemes.<sup>2</sup> In contrast, e-money funds are not designed to be financially intermediated and so should not bear the burden of prudential regulation or the cost of deposit protection schemes. However, the risk of loss of funds must still be mitigated.

In either a Bank-led model or MNO-led model, there are three major risks to customers' funds: *insolvency risk*, *liquidity risk* and *operational risk*.<sup>3</sup> Insolvency risk occurs when the provider becomes insolvent or otherwise fails, and customers' funds are used to repay debts of the provider. Liquidity risk arises when the provider uses customers' funds for its own purposes and cannot repay customers when asked to do so. Operational risk denotes the loss of customers' funds due to fraud, misuse or poor administration by the provider or its employees. A regulator's primary mission with respect to DFS, accordingly, is to safeguard customer funds against these three risks.

We advocate a risk-based approach which utilises different legal mechanisms in different contexts to fulfil three common objectives that are critical to the prevention of each risk. To minimise insolvency risk, it is essential to achieve 'fund isolation', which aims to segregate customers' funds from the provider's own funds, a financial institution's proprietary funds or other customers' funds. To minimise liquidity risk, 'fund safeguarding' should be used in order to prevent the providers from using customer funds for their own purposes. Finally, to

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<sup>1</sup> Committee on Payments and Market Infrastructures, Bank for International Settlements and World Bank Group, *Consultative Report: Payment Aspects of Financial Inclusion* (September 2015) BIS, 23 <<http://www.bis.org/cpmi/publ/d133.htm>>.

<sup>2</sup> Ibid.

<sup>3</sup> In theory, each risk relates to both the provider and its agents, however the analysis below focuses on risks to customers' funds relating to the provider. Risks induced by the agents can be effectively managed by an appropriate legal framework that allocates liability between the provider and agents. We address the issue of liability allocation in Chapter 5: The Use of Agents.

protect customer funds from operational risk, it is important to establish the ‘protection of customers’ interests’ as the central implementing principle to facilitate customer fund protection.

This chapter presents a risk-based approach in the context of common law jurisdictions and civil law jurisdictions. In the context of common law jurisdictions, this chapter proposes the use of trusts and the appointment of an active regulator as the protector under the trust deed to audit the trustee and enforce the terms of the trust. In the context of civil law jurisdictions, where the legal instrument of trusts is absent, this chapter outlines a range of policy options that combine private law institutions and regulatory interventions from which regulators can choose.

## ***4.2 In Common Law Jurisdictions***

### **4.2.1 Introduction**

The most effective way to safeguard customer funds against the foregoing three risks is to use trusts, a readily available legal instrument in common law countries. A number of jurisdictions, for instance, have sought to protect customer funds by requiring the provider to hold the funds in a trust account. These include Malawi,<sup>4</sup> Afghanistan,<sup>5</sup> Kenya,<sup>6</sup> Sri Lanka,<sup>7</sup> and several Pacific Island countries.<sup>8</sup> In this situation, the provider (or a designated company) will be the trustee, the customers’ funds are the trust assets, and the customers are the beneficiaries (see Figure 11). This section introduces the basic concept of trusts, and explains how trusts can be used to protect customers’ funds.<sup>9</sup>

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<sup>4</sup> Reserve Bank of Malawi, ‘Guidelines for Mobile Payment Systems’ (March 2011).

<sup>5</sup> Da Afghanistan Bank, Islamic Republic of Afghanistan, *Article Two: Money Service Providers Regulation* <[http://dab.gov.af/Content/Media/Documents/MoneyServiceProvider\\_English251220133464233553325325.pdf](http://dab.gov.af/Content/Media/Documents/MoneyServiceProvider_English251220133464233553325325.pdf)>.

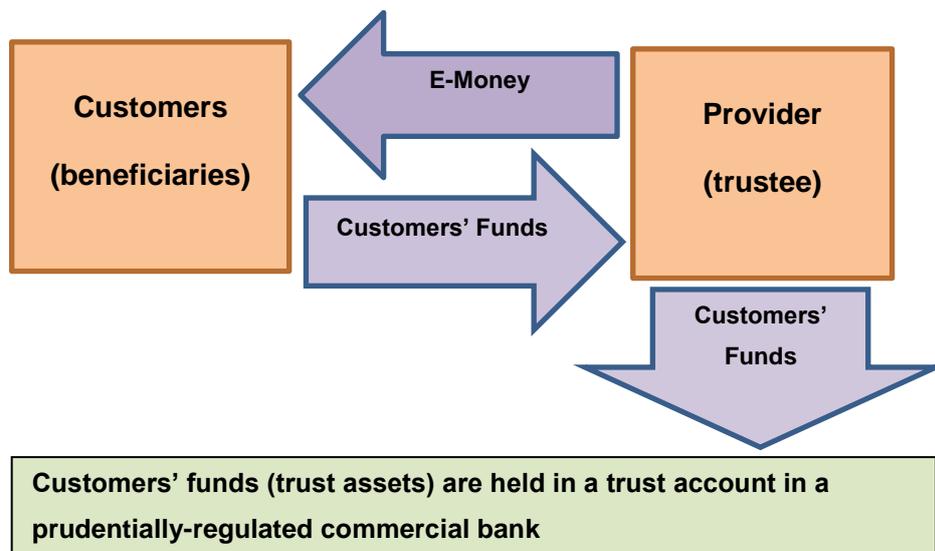
<sup>6</sup> Alliance for Financial Inclusion, ‘Case Study: Enabling E-money Transfer – The Central Bank of Kenya’s Treatment of M-PESA’ (Report, AFI, 2010).

<sup>7</sup> Simone di Castri, ‘Enabling E-money Policies in Sri Lanka: The Rise of eZ Cash’ (Report, GSMA, July 2013).

<sup>8</sup> E.g., Fiji, Papua New Guinea, Vanuatu, Samoa and Tonga: Joep Roest, ‘E-Money Trust Arrangements Review in the Pacific’ (Speech delivered at the APEC Conference, Pacific Financial Inclusion Programme, 18 October 2012).

<sup>9</sup> This section draws on a detailed knowledge product by Jonathan Greenacre and Ross Buckley, ‘E-Money Knowledge Product: Trust Law Protections for E-Money Customers’ (Working Paper, 09/2014), available [here](#). This section (including Box 1) also draws on a briefing note we prepared for UNCDF’s MM4P programme, entitled ‘Using Trusts to Protect Customers’ Mobile Money Funds’, available [here](#); and Jonathan Greenacre and Ross P Buckley, ‘Using Trusts to Protect Mobile Money Customers’ 2014 *Singapore Journal of Legal Studies* 59.

Figure 11: How a Trust Applies to Customers' Funds



#### 4.2.2 What is a Trust?

A 'trust' is a legal instrument used in common law countries. It is a relationship whereby one person (trustee) holds property (trust assets) for the benefit of another (beneficiary). The trustee can use the asset but must comply with prescribed duties when doing so. These duties are express (set out in the 'trust deed' that establishes the trust) or implied (by the law imposing the duties and conferring powers when these are missing in the trust deed).

#### 4.2.3 How Can Trusts be Used to Protect Customers' Funds?

Trusts can be used to address the three main risks facing DFS customers. First, a trust creates a relationship of trustee and beneficiary between the provider and customers, which legally isolates customers' funds and protects them from the potential insolvency of the provider. Second, a well-crafted trust deed can limit the way in which customers' money is used and thereby reduce potential liquidity risk. Third, effective oversight of the provider's compliance with the terms of the trust helps reduce operational risk in relation to customers' funds. Three specific ways to protect customers' funds through the use of trusts are as follows:

1. **Establishing a trust** over customers' funds protects the funds from **insolvency risk** because a trust isolates the funds. Fund isolation rules address the problem of

loss of customer or agent funds. This problem occurs because of the way laws tend to classify ownership of funds. Usually, customers' funds are stored in aggregate in one or more bank accounts in the name of the provider, not the customer. This structure means the provider is the legal owner of the account. In the event of insolvency the provider can use the customers' funds to pay off debts. With a trust, the provider holds the trust funds on trust for the benefit of customers, and beneficial ownership of the funds rests with the customers so that the trust funds cannot be used to meet the provider's non-trust debts.

To establish a trust, a provider should enter into a trust deed that states that the provider (or a designated third party) holds customers' funds 'on trust' for the customers and includes a role for a protector to enforce the terms of the trust.

**2. Fund safeguarding:** Fund safeguarding rules aim to minimise the loss of agents' or customers' funds and liquidity risk by ensuring the provider always has a 1:1 ratio between e-money and the float. Maintaining this 1:1 ratio protects customers' funds against *liquidity risk* as the ratio ensures the provider will always have enough funds to repay the customers when they want to cash out their remaining e-money.

Technically, the 1:1 ratio can be achieved by the terms of the trust deed serving as a 'rule book' that requires the provider (as trustee) to always keep a strict 1:1 ratio between issued e-money and customers' funds held on trust.

To achieve fund safeguarding, the trust deed should provide the following:

- **Liquidity:** The provider must hold an amount of liquid assets such as bank deposits and government securities that can quickly be converted to cash and equals the amount of issued e-money;<sup>10</sup>
- **Restrictions on use:** The provider can only store customers' funds, and not use them for other purposes. Several common examples of restrictions on the use of customers' funds include requirements that the provider cannot use customers' funds to finance its own business expenses;<sup>11</sup> can only use customers' funds to

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<sup>10</sup> Some jurisdictions require the provider to hold customers' funds as deposits in a bank as a 100% reserve requirement. For example, Indonesia (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), Malaysia (Guideline on Electronic Money BNM/RH/GL - 16-3, July 2008), and the Philippines (Circular 649, 9 March 2009). Some jurisdictions, on the other hand, allow the provider to hold safe, liquid assets such as government securities. The Central Bank of the Philippines, for instance, requires providers to hold the equivalent amount of e-money purchased by customers in bank deposits, government securities or 'such other liquid assets as the BSP may allow': Bangko Sentral ng Pilipinas, Circular No 649 (2009) art 5(D).

<sup>11</sup> See Indonesia (Circular Letter Concerning E-Money) above 10.

repay customers who want to cash out their remaining e-money;<sup>12</sup> cannot use customers' funds as collateral or guarantees; and cannot use customers' funds to extend credit; and<sup>13</sup>

- Diversification: The provider must hold a range of liquid assets or hold customers' funds as deposits in multiple banks.<sup>14</sup>

**3. Using the protector to ensure trust deed compliance:** Under a trust, it is generally the responsibility of the beneficiaries to enforce the rules of the trust. However, most DFS customers will lack the financial experience to enforce their rights as beneficiaries under the trust. In this instance the country's DFS regulator should take an active approach that involves monitoring and enforcing the terms of the trust on behalf of the customers. That is to say the regulator or its delegate should be appointed as protector under the trust to audit the trustee and enforce the terms of the trust. The deed should expressly empower the protector to do the following:

- Monitor the trustee's compliance with the terms of the deed, particularly in relation to the trust account (through, for example, auditing the trust account); and
- Take enforcement action against the provider (which may include revoking its licence) if it fails to comply with the terms of the trust deed.

The power given to a protector may create a fiduciary relationship with the beneficiaries—a relationship which may not be desirable or feasible between a regulator and e-money customers. We suggest the issue be approached on a case-by-case basis. The regulator can promulgate legislation to expressly denote whether the protector is a fiduciary, or the regulator can leave the question to contractual arrangements. In several jurisdictions, statute provides that the protector will undertake its powers as a fiduciary, unless a contrary intention is expressed in the trust deed.<sup>15</sup> Some statutes provide that a protector is not a fiduciary unless the trust

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<sup>12</sup> See, e.g., Reserve Bank of Malawi, above n 4, s 8.

<sup>13</sup> See, e.g., Bangko Sentral ng Pilipinas, above n 10, art 5(C). See Indonesia (Circular Letter Concerning E-Money), above n 10.

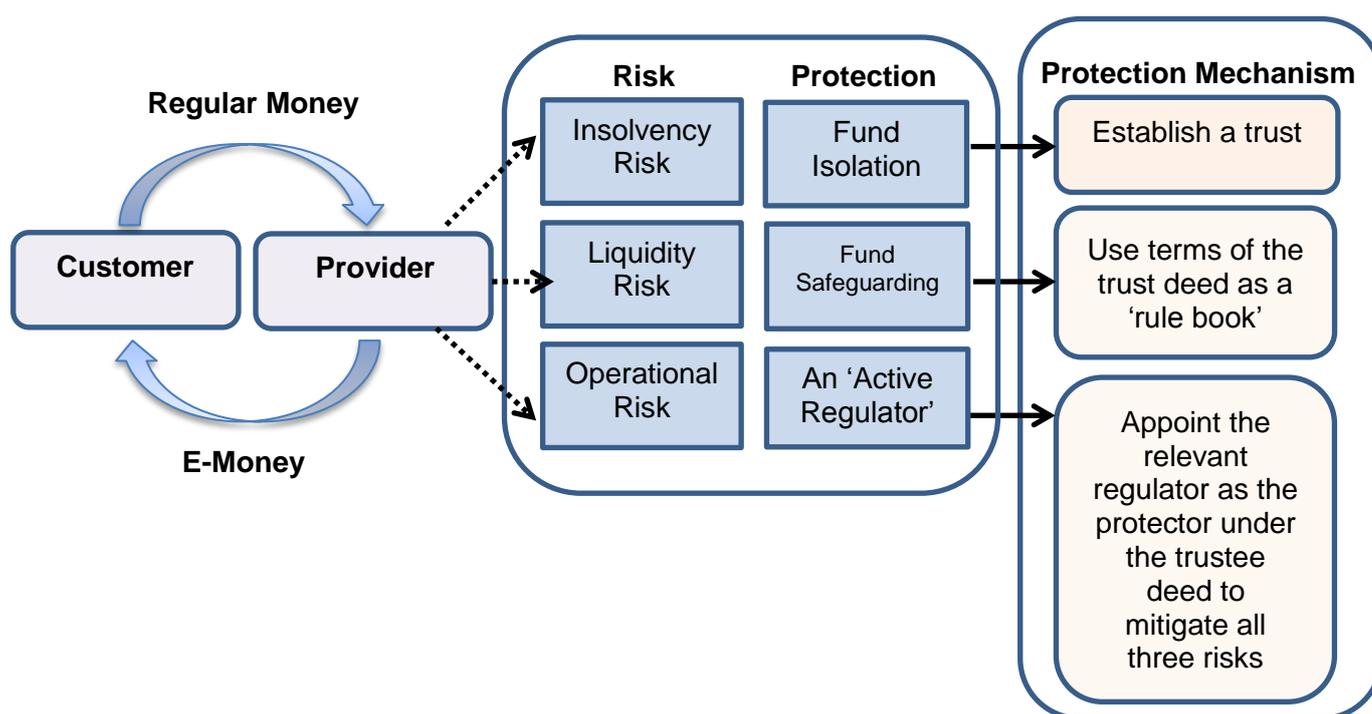
<sup>14</sup> For instance, Safaricom originally held all customer funds in a single bank account at the Commercial Bank of Africa, however, following the exponential growth of M-PESA in Kenya, it has opened several additional accounts across different banks to diversify risk. See William Jack and Tavneet Suri, 'The Economics of M-PESA' (Working Paper 16721, National Bureau of Economic Research, 2011) 10. While cash deposits in a trust account will generally not be considered property of the custodial bank in the case of receivership, diversification of funds will provide added protection in the case of uncertainty. Deposit insurance schemes may also help to alleviate some of the risk arising from a bank's insolvency.

<sup>15</sup> These jurisdictions include Anguilla, Belize, Nevis, and jurisdictions governed by the Uniform Trust Code of the United States: Uniform Trust Code (US) § 808(b).

deed provides that the protector is a fiduciary.<sup>16</sup> In the absence of any legislation, a party can contract out of a fiduciary duty by explicit language in the trust deed.<sup>17</sup> This means that the regulator can contract out of any fiduciary duties that might arise through it serving as a protector, unless such duties are imposed by legislation.

The abovementioned framework for trust protections can be summarised as shown in the following Figure 12.

**Figure 12: Regulatory Framework for Using Trusts to Protect Customers' Funds**



In order to help regulators better implement such a trusts protection framework, we also include a Model Trust Deed (Annex 2) that provides a model template of the specific terms of a preferred trusts protection mechanism. It is noted, however, we *DO NOT* recommend that a regulator necessarily adopt all of the clauses from the Model Trust Deed. Each country should be mindful of its distinct market conditions and special legal context when applying the model template. Specifically, regulators can follow the four implementation principles below to determine which aspects of the terms listed in the Model Trust Deed are appropriate for their jurisdiction and the specific commercial context of the industry:

<sup>16</sup> E.g., Alaska and Arizona: Alaska Stat. (Alaska) § 13.36.370(d); Ariz. Rev. Stat. Ann. (Arizona) § 14-18018(D).

<sup>17</sup> See, eg, *Kelly v Cooper* [1993] AC 205; *ASIC v Citigroup Global Markets Australia Pty Limited* (No 4) [2007] FCA 963.

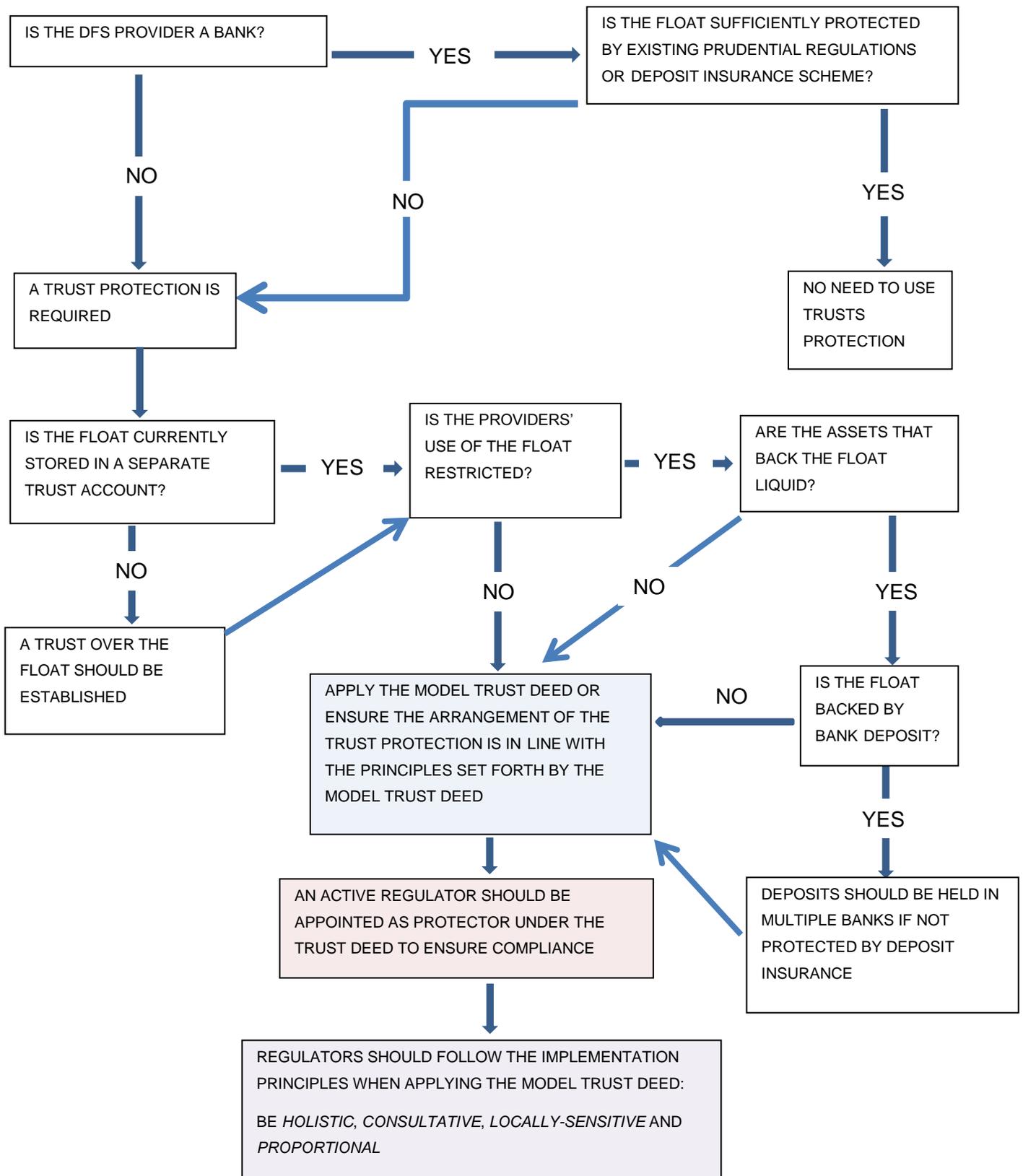
- (1) Approach DFS Regulation Holistically: Regulators should keep in mind that there are various issues that cannot be adequately addressed through the implementation of a trust deed, and overlooking these issues may create regulatory gaps that distort the operation of the market.<sup>18</sup> Trusts protection should be utilised and contemplated in a wider, holistic regulatory context for DFS.
- (2) Implement a Consultative Approach: Regulators should collaborate with providers and other industry players to determine policies that can protect customers without preventing providers from continuing to develop their products.
- (3) Consider Local Circumstances: Each jurisdiction requires a customised approach and regulators should be mindful of local differences.
- (4) Adopt a Proportional Approach: Regulators must understand the risks presented by DFS and then design regulation in a way that the costs to the regulator, the provider and customers are proportionate to the risks that relate to customers' funds.

To help regulators decide when the Model Trust Deed can be applied, Figure 13 below provides a step-by-step guidance.

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<sup>18</sup> E.g., limits on the amounts of e-money that can be held by a customer, operational and verification issues and competition concerns. For an overview of those issues, see C Alexandre, I Mas and D Radcliffe, 'Regulating New Banking Models to Bring Financial Services to All' (2011) 54(3) *Challenge* 121.

Figure 13: Step-by-step Guidance for Applying the Model Trust Deed



## Box I: Benefits of Using Trusts to Protect Customers' Funds

The use of a trust to protect customers' funds usually results in earnings, which raises the question: who should be the beneficiary? Many regulators have hesitated to require or allow proceeds from a trust to be paid to clients because it mimics the benefits of a savings-type account.

In February 2014, the Tanzanian central bank issued a circular, which directed that interest accrued on the trust account held at a bank should directly benefit mobile money customers and agents. It specified that this could be done in several ways:

- To fund customer education campaigns;
- For customer care;
- To subsidise operations in rural areas;
- To provide other benefits to customers such as insurance; or
- To be paid out directly to customers.

In September 2014, Tigo Tanzania announced that it would distribute US\$8.7 million of returns generated by its Tigo Pesa Trust to its 3.5 million Tigo Pesa mobile money customers and agents, and that it would continue to make payouts of accrued interest every quarter. Other countries such as Ghana, Kenya and Liberia have recently introduced regulations that also permit interest to be paid to customers. This recent innovation further supports the value of using a trust to protect and benefit the customer by providing further value to mobile money customers as a means to encourage and increase financial inclusion.

### 4.3 In Civil Law Jurisdictions

#### 4.3.1 Introduction

Unlike in common law jurisdictions where trusts are available to protect customer funds, protection of customer funds in civil law jurisdictions is relatively difficult and complicated because the trust concept does not exist. This section explores three main options (legal instruments) that regulators in civil law countries can utilise to protect customers' funds: **proprietary option** (fiduciary transactions), **contractual option** (mandate contracts) and

**regulatory interventions** (direct regulation or insurance).<sup>19</sup> The analysis of the three options suggests that none of them can provide sufficient protection to customers' funds independently, and thus regulators should adopt a mixed strategy, flexibly using a combination of the three instruments.

The common law trust regulates rights *in personam* (e.g. customer rights against the provider of e-money services) and rights *in rem* (e.g. customer rights over funds) together, whereas the civil law makes a sharp distinction between the Law of Obligations (for rights *in personam*) and the Law of Property or "Real" Rights (for rights *in rem*). Consequently, civil law institutions conceived to regulate one type of right may fall short on the protection of other rights. To provide customers' funds with similar protection to that provided by the common law trust, regulators should adopt strategies that flexibly combine private law solutions and regulatory institutions. On this basis, we examine the three common legal instruments in civil law countries and analyse how each of them can help achieve the three functions (*fund isolation, fund safeguarding and protection of customers' interests*) provided by the common law trust.

#### 4.3.2 Three Main Legal Instruments to Protect Customers' Funds in Civil Law Jurisdictions

1. **Proprietary option:** The legal instrument that most closely resembles the trust in a civil law jurisdiction is the *fiducia*.<sup>20</sup> We refer to *fiducia* as "fiduciary transactions" or "fiduciary contracts", and define it as an arrangement under which one party—the settlor—conveys property to another—the fiduciary—and the latter agrees to use that property for a specific purpose. Under such a transaction, the fiduciary agrees to transfer the fiduciary assets to one or more beneficiaries upon fulfilment of the agreed purpose. When using the fiduciary assets, the fiduciary will be subject to a series of duties agreed upon with the settlor or determined by law.

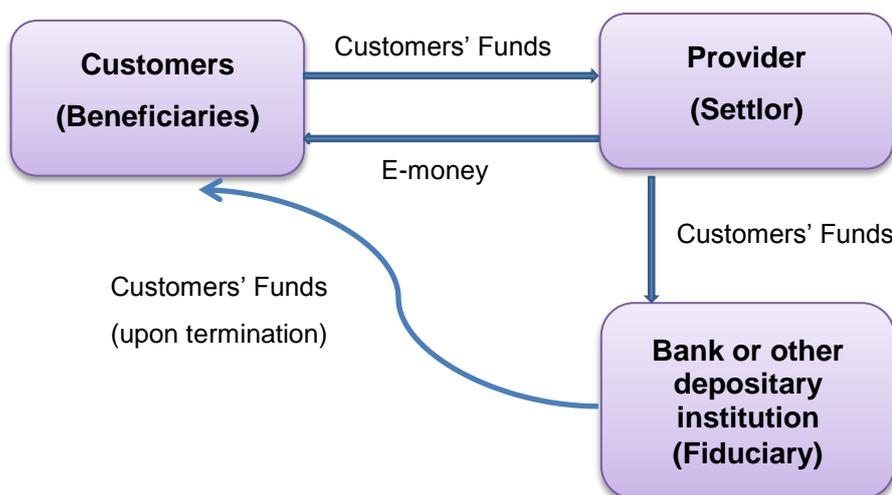
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<sup>19</sup> This section draws on the following article that can be found [here](#) by David Ramos, Javier Solana, Ross P Buckley and Jonathan Greenacre, 'Protecting the Funds of Mobile Money Customers in Civil Law Jurisdictions' (Working Paper 2015/102, The Global Economic Governance Programme, University of Oxford, June 2015) 1-48 <<http://www.globaleconomicgovernance.org/geg-wp-2015102-protecting-funds-mobile-money-customers-civil-law-jurisdictions>>. This section also draws on a briefing note we prepared for UNCDF's MM4P programme, entitled 'Protecting Customers' Mobile Money Funds in Civil Law Jurisdictions', it is available [here](#).

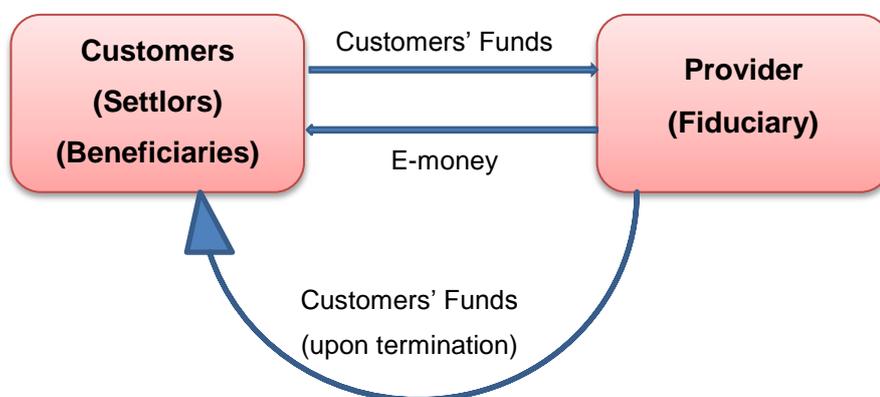
<sup>20</sup> It is generally understood that the beneficiary under a *fiducia* is not equivalent to the beneficiary under a trust. For a detailed analysis of the *fiducia* and the common law trust, see Dante Figueroa, 'Civil Law Trusts in Latin America: Is the Lack of Trusts an Impediment for Expanding Business Opportunities in Latin America?' (2007) 24 *Arizona Journal of International and Comparative Law* 701; Rafael Sánchez Aristi, *Property and Trust Law in Spain* (Kluwer Law International, 2<sup>nd</sup> ed, 2014) para 243.

The fiduciary transaction in the context of mobile money using stored values has two typical forms: the *Third-Party Fiduciary Model* and the *Provider Fiduciary Model*. The former requires a third-party to serve as the fiduciary institution, whereas with the latter the provider serves as fiduciary to hold the assets for the benefit of the customers. Figures 14 and 15 demonstrate the differences between the two models.

**Figure 14: The Third-Party Fiduciary Model**



**Figure 15: The Provider Fiduciary Model**



The three functions of customers' funds protection can be achieved through fiduciary transactions:

- **Fund Isolation**

Under the Third-Party Fiduciary Model, if property over the funds were transferred to the third party fiduciary, customers' interests in the fiduciary assets would only be protected against insolvency risk if those assets were

separated from the fiduciary's patrimony. If there is no transfer of property under the fiduciary contract, the protection of customers' interests in the fiduciary assets will require the segregation of those assets from the patrimony of the provider.

Under the Provider Fiduciary Model, protecting customers' interests in the assets requires segregating the fiduciary assets from the personal patrimony of the provider. If the provider deposits the assets with a bank, protection of customers' funds would also require segregating the fiduciary assets from the bank's patrimony.

- **Fund Safeguarding**

Fund safeguarding in civil law jurisdictions relates to the personal obligations imposed on the fiduciary by legal institutions. Most statutes and courts in civil law countries tend to limit a fiduciary's duties to the terms of the fiduciary contract and will not imply other duties unless the fiduciary is considered as acting expressly in the beneficiary's interests and not simply holding different interests in a patrimony.

For instance, under a common law trust, beneficiaries (customers) have an equitable right in the trust assets that allows them to trace the proceeds resulting from an unauthorised deposition by the agent.<sup>21</sup> Such a claim, however, would be problematic in civil law countries as the remedy of tracing is far less developed.<sup>22</sup> Therefore the best available strategy is for the parties to a fiduciary contract to agree expressly on duties that will bind the fiduciary's use of the fiduciary assets.<sup>23</sup>

There are three ways fiduciary contracts could provide for specific rules to ensure fund safeguarding: (1) the parties could expressly restrict the provider's rights to use customers' funds; (2) the provider could be required to manage customers' funds within very narrow parameters, e.g. investing the

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<sup>21</sup> See Geraint W Thomas and Alastair Hudson, *The Law of Trusts* (Oxford University Press, 2<sup>nd</sup> ed, 2010) 33.01–33.120. For tracing in general, see Louise Gullifer, *Goode on Legal Problems of Credit and Security* (Sweet & Maxwell, 4<sup>th</sup> ed, 2009) 1–57.

<sup>22</sup> Martín Padilla, 'La Formación del Concepto de Subrogación Real' (1975) 1111; Roca Sastre 'La Subrogación Real' (1949) 281; Vallet de Goytisolo, 'Pignus Tabernae' (1953) 483.

<sup>23</sup> See, eg, Ley 17.703, signed into law on 4 November 2003, regulating fideicomiso in Uruguay ('Uruguayan Fideicomiso Act') art 4.3; French Civil Code arts 2018.6<sup>o</sup>, 2022, 2026; Luxembourg Fiduciary Contracts Act art 7(3).

cash in highly liquid assets such as bank deposits or highly rated government securities;<sup>24</sup> and (3) the parties could agree that the provider will diversify the assets in which it will invest the customers' funds. These duties can be imposed explicitly in the fiduciary contract, in specific e-money regulation, or in fiduciary legislation.

- **Protection of Customers' Interests**

Fiduciary contracts can provide two mechanisms to reduce operational risk in relation to customers' funds. First, the fiduciary can be required to keep records of the accounts where it keeps the fiduciary assets and to have those accounts audited by an authorised auditor.<sup>25</sup> Second, the parties may provide for a third party expert to monitor the fulfilment of the fiduciary's duties. Normally, parties will specify in the terms of their agreement whether the settlor or beneficiary can delegate their supervisory powers over compliance of fiduciary duties to a third party ('the protector').<sup>26</sup>

In summary, fiduciary transactions can effectively achieve fund isolation, but only provide limited comfort in terms of preventing liquidity and operational risks.

2. **Contractual option:** One option to help protect customers' funds in civil law countries is to use the mandate contract. Under a mandate contract, one party (the agent) commits to act on behalf of another (the principal) for a fee, unless otherwise specified.<sup>27</sup> However, in the context of mobile money using stored value, the mandate contract cannot be used as the sole mechanism to regulate directly the way in which customers' funds are disposed of by the provider. This is because by purchasing e-money from the provider, the customer relinquishes proprietary rights over his/her funds in exchange for the e-money. The customer thus cannot mandate

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<sup>24</sup> It is very common among Latin American regulators to restrict the securities in which e-money customers' funds can be invested to securities issued by the federal government or central bank. See eg, Reglamento de Fideicomiso contenido en la Recopilación de Normas para Bancos y Entidades Financieras (RNBEF), Chapter XVII ('Bolivian Regulation on Fideicomiso') art 12; Circular no 3681 de 4 de Noviembre de 2013 do Banco Central do Brasil ('Circular BC Brasil no 3681') art 12.1.II; the Resolución de la Superintendencia de Banca y Seguros (SBS) nº 6283-2013 that regulates the Reglamento de Operaciones con Dinero Electrónico ('Peruvian Regulation on E-Money Transactions') art 16.

<sup>25</sup> Auditing can help ensure the integrity of the system. See Michael Klein and Colin Mayer, 'Mobile Banking and Financial Inclusion: The Regulatory Lessons' (Working Paper 5664, World Bank Policy Research, 2011) 13.

<sup>26</sup> If the delegation of supervisory powers were to be challenged, a court could find that some default rules also allow the settlor to delegate those powers.

<sup>27</sup> See, eg, French Civil Code, art 1984 et seq.

the provider to dispose of funds since he/she no longer owns the funds as such in a legal sense.

Unlike fiduciary transactions, the mandate contract cannot provide protection against the risk of the provider or the bank becoming insolvent. The segregation of funds would require an express legal mandate or the creation of a separate patrimony from that of the provider or the bank. However, at a minimum, mandate contracts can provide an important body of default rules that regulate the duties of the provider towards the customer, arising from the statutory duties of an agent to act in the interest of the principal,<sup>28</sup> and to exercise due care and skill.<sup>29</sup> In other words, although the mandate contract cannot protect customers' funds from insolvency risk, it can help prevent liquidity and operational risk. The mandate contract, therefore, can fill a gap by providing general rules to regulate the fiduciary's duties towards the customer.

- 3. Regulatory interventions:** The respective insufficiency of the proprietary and contractual options demonstrates the difficulty of providing a single solution for the effective protection of customers' funds in civil law jurisdictions. In response, policy makers have two options: ***Imposing Direct Regulation*** or ***Requiring Insurance***. Imposing direct regulation means introducing specific legislation or regulation to require providers to adopt protective mechanisms that can achieve the three main functions of customers' funds protection. Such regulation can also grant e-money customers the right to monitor the provider's compliance with the regulator-imposed duties, or require the appointment of a protector to do so. The European Union's 2009/110/EC E-Money Directive of 16 September 2009 is an example of direct regulation in this regard.<sup>30</sup> Likewise, the European Union's 2007/64/EC Payment Services Directive also provides for specific safeguarding requirements (in case the provider undertakes other activities), with a specific direction to avoid commingling of funds, and protection against the provider's other creditors in the event of insolvency.<sup>31</sup> Imposing direct regulation, however, is not without challenges. For example, the imposed-regulations may not be flexible and forward-looking enough to accommodate new situations as the market and technology evolves and new problems arise.

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<sup>28</sup> See, eg, Spanish Commercial code, art 225; Spanish Supreme Court decision of 5 February 1964.

<sup>29</sup> See, eg, German Civil code, s 276.

<sup>30</sup> For duties applicable to e-money issuers see the E-Money Directive, arts 10 to 13.

<sup>31</sup> See the Payment Services Directive, arts 9(1)(a) and (b).

Mandatorily requiring insurance of e-money customers' funds, against any of the three risks, can serve as either a complementary mechanism (used to strengthen the protection an existing legal instrument has provided) or a standalone mechanism (used in jurisdictions where no legal instrument is available). However, there are at least four drawbacks to consider if requiring insurance:

- (1) The e-money market conditions may not be ideal for the viability of an insurance scheme, as the number of potential e-money customers may be small.<sup>32</sup>
- (2) Providers may pass on the cost of mandatory insurance to customers, which may have a serious impact on the demand for e-money services and on its potential as a tool for financial inclusion.
- (3) In the event of a provider's insolvency, insurers may refuse to compensate customers until the end of the insolvency proceedings, which may impose hardship on e-money customers. Also, insurance will only give customers a personal claim for damages against the insurer in the event of the provider's insolvency. This protection is not as strong as that provided by other mechanisms where customers retain the ownership of their funds or where those funds, despite being owned by the provider, are separated from their personal patrimony.
- (4) Insurance may introduce moral hazard, as providers would have less incentive to comply with existing protection rules. Effective monitoring by regulators will be essential.

Table 1 below provides a summary for each legal mechanism.

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<sup>32</sup> Insurance companies require large numbers of clients in order to avoid the risk of facing numerous simultaneous payouts that would deplete their resources in a short period of time.

**Table 1: The Protection of Customers' Funds under Civil Law**

<b>Function</b>	<b>Specification</b>	<b>Fiduciary Transaction</b>	<b>Mandate Contract</b>	<b>Regulatory Interventions</b>
Fund isolation	Segregation from the provider's funds	If customers are beneficiaries, funds are protected	Customers have no legal capacity to mandate the provider to dispose of funds, as they no longer own the funds in a legal sense	Depends on coordination with insolvency rules – can be achieved with appropriate rules
	Segregation from the depository institution's funds	Depends on the fiduciary arrangement and whether the provider accounts are fiduciary accounts	As above	As above
	Segregation from other customers' funds	Depends on the terms of the fiduciary structure: if each fiduciary arrangement is contemplated as a separate transaction where the customer is the beneficiary, funds are protected	As above	As above
Fund safeguarding	Liquidity	Can be achieved by specifying explicit fiduciary duties in the fiduciary contract	Can complement fiduciary transactions by providing general background rules to regulate the duties of the fiduciary towards the customer	Achievable with appropriate rules
Protection of customers' interests	Fiduciary duties	As above	As above	As above

The analysis of the three legal instruments demonstrates that none can serve as a standalone mechanism to protect customers' funds in civil law jurisdictions. Fiduciary transactions, while reducing insolvency risk, provide limited protection against liquidity and operational risks. Mandate contracts, while unable to achieve fund isolation, lay out the basic scope of the provider's duties toward the customer. Direct regulations can bridge the gap between the foregoing two instruments, but are not themselves immune from drawbacks. Therefore we anticipate any comprehensive regulatory strategy will include a combination of the three different mechanisms.

### **4.3.3 A Summary of Options Available to Protect Customers' Funds in Civil Law Jurisdictions**

Figures 16 and 17 illustrate how regulators can choose from different policy options to achieve protection of customers' funds. Figure 16 summarises options to achieve fund isolation, and Figure 17 shows policy options for achieving fund safeguarding and the protection of customers' interests against operational risk. When implementing the options, regulators should give careful consideration to the interaction of new regulation with existing statutes and private law rules, and should bear in mind issues of regulatory capacity and customer vulnerability.

Figure 16: A Summary of Policy Options to Achieve Fund Isolation

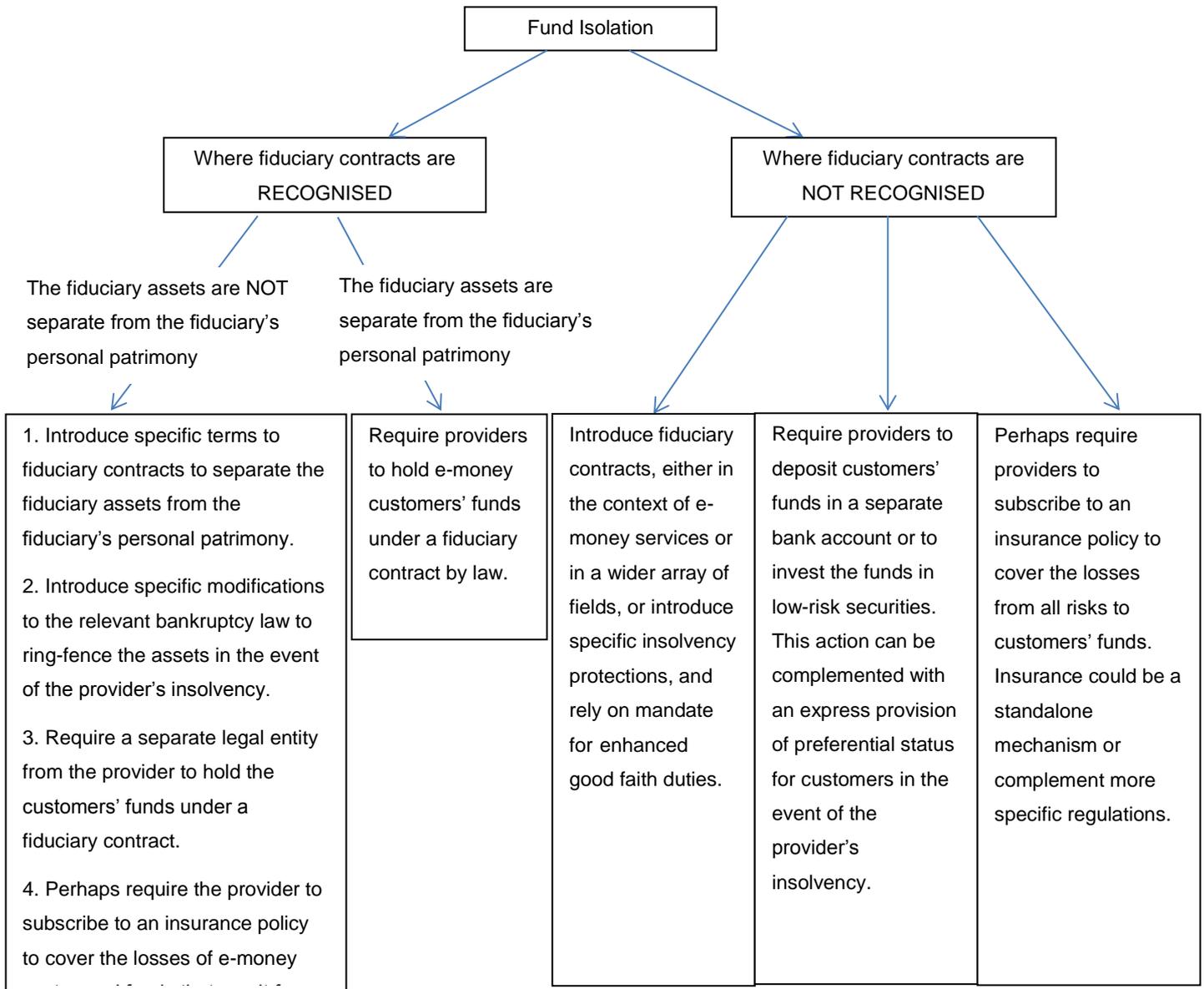
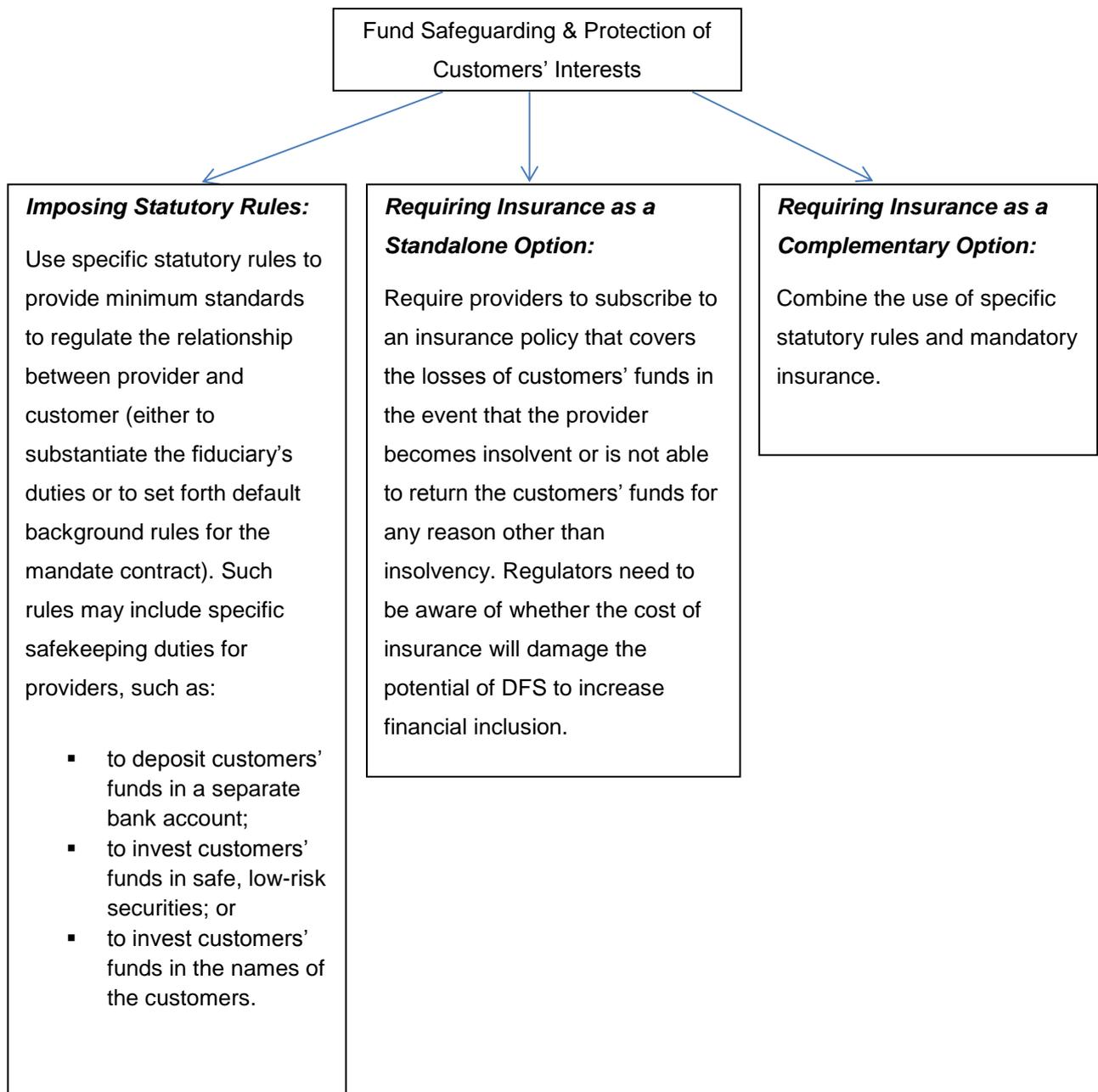


Figure 17: Policy Options for Achieving Fund Safeguarding and Protection of Customers' Interests



#### *4.4 Concluding Comments*

The two fundamental components of DFS regulation are consumer protection and protection of customers' funds because DFS ecosystems will not thrive unless consumers are well treated and trust the service and system.

Protection of customers' funds is relatively simply achieved in common law jurisdictions by requiring a 1:1 ratio between issued e-money and funds on deposits in a trust account at a prudentially-regulated commercial bank. The central bank serving as the protector under the trust deed adds a further layer of protection.

In civil law jurisdictions protection of funds is less simple but is eminently achievable by using a mix of fiduciary transactions, mandate contracts and regulatory rules as outlined in this chapter.

## 5. The Use of Agents

DFS provided by banks and MNOs through agents can help advance financial inclusion by overcoming the barriers to access to traditional bank branches in developing countries. Agents play a pivotal role in facilitating DFS, as they are responsible for the primary DFS functions of cash-in and cash-out. The use of agents, however, may pose various risks to customers' funds, such as fraud.<sup>1</sup> It is necessary to understand where liability rests in the principal-agent relationship in the event of disputed transactions (which can arise due to agent negligence, fraud and theft; violations of customer privacy; or customer misdemeanours), and how the liability chain among providers, agents and customers may vary when adopting different rules for liability allocation. A sound legal and regulatory framework to govern agent and principal liability is important, and a clear understanding of the liability chain is essential.

The first section of this chapter analyses how liabilities should be allocated between a principal (the provider) and an agent, and the second section helps regulators better understand how the choice of different rules for liability allocation would shape the liability chain. Regulating the use of agents under the liability chain framework would help regulators protect customers' funds more effectively.<sup>2</sup>

### *5.1 Regulate to Allocate Liability*

#### 5.1.1 Introduction

This section identifies the primary areas to be considered when structuring agent liability and outlines key factors for consideration when crafting a legal and regulatory framework to govern the use of DFS agents. It recommends the adoption of rules that make principals vicariously liable for the actions of their agents, coupled to an explicit agreement as to agent penalties and rewards, and supported by a functional approach to regulation.

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<sup>1</sup> Risks involved when using agents include credit risk, operational risk, legal risk, and reputational risk. See Kate Lauer, Denise Dias, and Michael Tarazi, 'Bank Agents: Risk Management, Mitigation, and Supervision' (Focus Note No 75, December 2011) 4-5. Some of the risks only apply to the providers (credit and reputational risk), whereas some of them will pose threats to the customers (operational and legal risk). This handbook focuses on risks to customers, as the providers are generally able to manage and prevent the risks facing them.

<sup>2</sup> This chapter draws on a briefing note we prepared for UNCDF's MM4P programme, entitled 'Regulating the Use of Digital Financial Services Agents in Developing Countries', it is available [here](#). The briefing note was drawn from an article by Evan Gibson, Federico Lupo-Pasini and Ross P Buckley, 'Regulating Digital Financial Services Agents in Developing Countries to Promote Financial Inclusion' [2015] *Singapore Journal of Legal Studies* 26.

## 5.1.2 How Should Agent Liability be Allocated?

The liability allocation between a DFS agent and a principal can be broadly structured in two ways:

- **Agent Personal Liability Rules** under which only agents are held accountable for their conduct, or
- **Principal Vicarious Liability Rules** under which the principal (typically a bank or MNO) will be vicariously liable for their agents' conduct.

Three issues determine the best liability rules in any context.

### 1. Allocation of risk and economic incentives

The first issue is which liability rules best incentivise agents and principals to act in ways that promote long-term market sustainability. Agents decide whether to engage in DFS business by weighing risks and compliance costs against profitability. If agents are required to bear all liability for disputed transactions, then they are likely to want either higher commissions from the principal or higher fees from the customer. An agent may ultimately exit the DFS business if compensation is unsatisfactory.<sup>3</sup> Furthermore, principals are constrained by the low margins in DFS as to the commissions they can offer agents. Compensation for regulatory costs aside, agents may try to avoid the costs of regulatory compliance altogether if for some reason the effective and direct monitoring of agents is absent or weak. On the other hand if principals are vicariously liable for disputed transactions they will be incentivised to monitor agents' behaviour.

### 2. Agent insolvency

The second issue is insolvency risk, and which liability rules can better protect customers from such risk. In general, agents are far more likely to become insolvent than principals who are typically well-resourced corporations. Under a regime of agent personal liability, an agent may be discouraged from investing in loss-avoidance strategies (e.g. indemnifying customers against loss) if they anticipate their insolvency will be the end result of a major customer loss.<sup>4</sup> Customers may therefore not be compensated under the agent personal liability model. In contrast, under the principal vicarious liability model, customers should be better protected, as principals are more able than agents to absorb liabilities and remain solvent. Also, being vicariously liable should incentivise principals to monitor agents, ensure high quality service delivery, and mitigate litigation risks.

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<sup>3</sup> Agents will usually not be able to dictate commissions earned or fees charged to the customers.

<sup>4</sup> Alan O Skyes, 'The Economics of Vicarious Liability' (1984) 93 *Yale Law Journal* 1231, 1244.

### 3. Agent supervision

The third issue concerns the question of whether the financial supervisor or the principal is better suited to monitor and supervise agents. Agent personal liability may well require the financial supervisor to supervise agents, as agents may lack incentive to supervise themselves. A principal vicarious liability model, on the other hand, should incentivise the principal to train and monitor agents in order to reduce its own risk exposure. Without doubt, principals are better positioned and resourced to monitor agents than supervisors. The activities being undertaken by agents are outsourced by the principal, whereas financial supervisors are essentially third parties to an agent's activities. Financial supervisors are better placed to supervise the principal's activities and can require the principal to adopt specific risk management procedures and policies relating to the appointment and supervision of agents.<sup>5</sup> The principal vicarious liability model therefore works well in the usual situation where the principal, not the financial supervisor, is expected to appoint, monitor and supervise agents directly.

#### 5.1.3 Regulating the Use of Agents

Regulating banks' and MNOs' use of DFS agents requires an appropriate legal framework. Factors influencing the framework's design include the following:

- Business relationship;
- Principal-agent contract;
- Supervisory and regulatory structure; and
- Legal foundation of the economy (common or civil).

The nature of the business relationship will determine the extent of the principal's vicarious liability and the agent's personal liability. In broad terms, the business relationship between a principal and agent is known as 'outsourcing'. Rather than being treated as employees of the principal, agents are generally viewed as independent contractors and therefore the principal is not necessarily vicariously liable for their conduct. A principal-agent contract can serve to clarify the legal relationship and allocate liability between principal and agent. Nonetheless, liability allocation should not depend solely on contractual arrangements as the bargaining power between principals and agents is typically asymmetric. Principals are almost invariably better placed than agents in terms of financial resources, regulatory compliance

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<sup>5</sup> Basel Committee on Banking Supervision, Bank for International Settlements, *Range of Practice in the Regulation and Supervision of Institutions Relevant to Financial Inclusion* (January 2015) <<http://www.bis.org/bcbs/publ/d310.htm>>.

skills, DFS experience and financial literacy. Agents are thus at a disadvantage when negotiating with a principal to allocate liability.

A statutory legal framework that predetermines the allocation of risk and liability is therefore distinctly preferable. Furthermore, the efficient allocation of risk will depend on the judicial system to interpret the relevant contract and/or statutory regulations that allocate liability. Therefore, the role played by a jurisdiction's supervisory and regulatory structure and its legal principles are also significant.

The dynamic interplay of the foregoing factors can be better understood through three brief country analyses as shown in Box 2. These analyses underscore the importance of a clear supervisory and regulatory structure, and illustrate how such a structure can help clarify the scope of vicarious liability and facilitate the governing of the use of agents.

## Box 2: Case Study – Agent Liability in Fiji, Kenya and Malawi

The details below are drawn from Briefing Note on Regulation and Digital Financial Services, UNCDF and MM4P, 2015<sup>6</sup>

In Fiji, the Agent Banking Guideline states that a commercial bank shall: ‘Be liable for the actions and omissions of its Agent relating to Agent Banking services or matters connected therewith, as agreed to in their contracts with Agents.’<sup>7</sup> Though it is obvious that banks under the Guideline should be primarily liable for their agents’ conducts, it is not clear whether such a liability can be significantly or entirely waived or excluded by the principal-agent contract. In contrast, Kenya’s Guideline on Agent Banking requires that a bank principal is ‘wholly responsible and liable for all actions or omissions of its agents and this responsibility shall extend to actions of the agents even if not authorised in the contract as long as they relate to agent banking services or matters connected therewith’.<sup>8</sup> This provision excludes the possibility of a principal’s liability being waived through contractual arrangements.

Both Fiji and Kenya’s Guidelines, however, apply only to banks and are silent about liability allocation between agents and non-banks principals. This has left room for MNOs to contract around their liability. For instance, Safaricom in Kenya states in its M-Pesa contract with customers that ‘[y]ou acknowledge that M-Pesa cash merchants are independent contractors and Safaricom shall not be liable for the acts or omissions of M-Pesa cash merchants’.<sup>9</sup> The M-Pesa contract essentially limits customer recourse solely to agents, although, we suspect, in practice, Safaricom usually accepts liability in situations of agent misconduct in order to preserve its reputation. In Malawi, unlike in Fiji and Kenya, there are no agent banking guidelines and the existing E-Money Regulations do not explicitly allocate agent liability. Liability

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<sup>6</sup> UNSW Digital Financial Services team, ‘Regulating the use of Digital Financial Service Agents in Developing Countries’ (Briefing Note on Regulation and Digital Financial Services, UNCDF and MM4P, 2015) <[http://uncdf.org/sites/default/files/Documents/unsw\\_bn3\\_useofdfsagents\\_0.pdf](http://uncdf.org/sites/default/files/Documents/unsw_bn3_useofdfsagents_0.pdf)>.

<sup>7</sup> ‘Agent Banking Guideline 2013’ (Banking Supervisory Policy Statement, Reserve Bank of Fiji, 2013), no 18 part II, art 4.1 <<http://www.rbf.gov.fj/docs2/Banking%20Supervision%20Policy%20Statement%20No%2018-Agent%20Banking%20Guidelines%201.pdf>>.

<sup>8</sup> ‘Guideline on Agent Banking’ (CBK/PG/15, Central Bank of Kenya, 2010), part V, art 5.1.1 <<http://www.bu.edu/bucflp/files/2012/01/Guideline-on-Agent-Banking-CBKPG15.pdf>>.

<sup>9</sup> ‘M-PESA Customer Terms and Conditions’ (March 2012) Safaricom, cl 18.11 <[http://www.safaricom.co.ke/images/Downloads/Terms\\_and\\_Conditions/CUSTOMER\\_TERMS\\_March\\_2012.pdf](http://www.safaricom.co.ke/images/Downloads/Terms_and_Conditions/CUSTOMER_TERMS_March_2012.pdf)>.

allocation, then, will be determined by contractual arrangements or the general law.

Despite the differences among the three countries, since they all are common law jurisdictions, liability allocation is also subject to common law principles. The law generally holds that a valid contract between the customer and agent, within the scope of the agent's actual authority, will render a disclosed principal vicariously liable for the agent's acts or omissions.<sup>10</sup> So in the case of Kenya's M-Pesa, despite the inclusion of Safaricom's disclaimer in the contract, Safaricom as a principal, may still be deemed liable if the issue comes before the courts.<sup>11</sup> Furthermore, the agent in this instance may well be personally liable to the principal for damages.<sup>12</sup>

The proposition that the principal should be vicariously liable has been made even more explicit with the introduction of Kenya's National Payments System Regulations (NPSR) in 2014. The NPSR provides that a payment system provider (bank or non-bank provider) is liable to its customers for the conduct of its agents within the scope of the agency agreement, and such a liability cannot be excluded by the agency agreement.<sup>13</sup> An agent is defined as 'a person who, for a fee, provides limited payment services on behalf of a payment service provider', so as to capture all outsourced persons.<sup>14</sup> This functional approach to regulation creates an incentive for principals like Safaricom to carefully monitor the conduct of agents or other agent-like entities. This functional approach to regulating the principal's use of DFS agents is distinctly preferable as it captures all principals regardless of whether they are banks, MNOs or other entities.

### 5.1.4 Rebalancing Economic Incentives

The weakness of allocating liability to the principal can be that agents are insufficiently incentivised to comply with regulations. To overcome this problem, incentives need to be rebalanced between principal and agent. This rebalancing can be achieved by a mandatory vicarious liability rule that imposes liability upon the principal, supported by a mandatory

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<sup>10</sup> Peter Watts and F M B Reynolds, *Bowstead & Reynolds on Agency* (Sweet & Maxwell, 20<sup>th</sup> ed, 2014), para 8–001.

<sup>11</sup> Michael Tarazi and Paul Breloff, 'Regulating Banking Agents' (Focus Note no 68, CGAP, March 2011) 10, Box 3 <<https://www.cgap.org/sites/default/files/CGAP-Focus-Note-Regulating-Banking-Agents-Mar-2011.pdf>>.

<sup>12</sup> Watts and Reynolds, above n 10, para 9–002.

<sup>13</sup> 'The National Payment System Regulations' (Reg. 14(4) and 14(5), Central Bank of Kenya, 2014) <<http://www.centralbank.go.ke/images/docs/legislation/NPSRegulations2014.pdf>>.

<sup>14</sup> *Ibid* Reg 2.

explicit agreement between the agent and principal. This agreement should include a mechanism of penalties and rewards to link the agent's remuneration to its regulatory and contractual compliance, in order to align the incentives of the agent and the principal. The mechanism should reward the agent when they are compliant and impose penalties when they are not.

### **5.1.5 Concluding Comments on Regulating to Allocate Liability**

Successful DFS delivery is contingent on an appropriate legal framework that allocates agent liability effectively and properly. The choice is between agent personal liability and principal vicarious liability. Neither liability regime is perfect. Each can impede DFS delivery and financial inclusion. Furthermore, existing agent guidelines typically apply to bank principals and not MNOs, and are typically less than clear when it comes to whether or not the principal's vicarious liability can be excluded by the principal-agent agreement. A more efficient approach, therefore, is to adopt clear principal vicarious liability rules coupled with an explicit contractual agreement regarding agent penalties and rewards, supported by a functional regulatory approach that applies to all DFS agent activities irrespective of the type of entity offering the DFS.

## ***5.2 Understanding the Liability Chain***

### **5.2.1 A High-Level Framework**

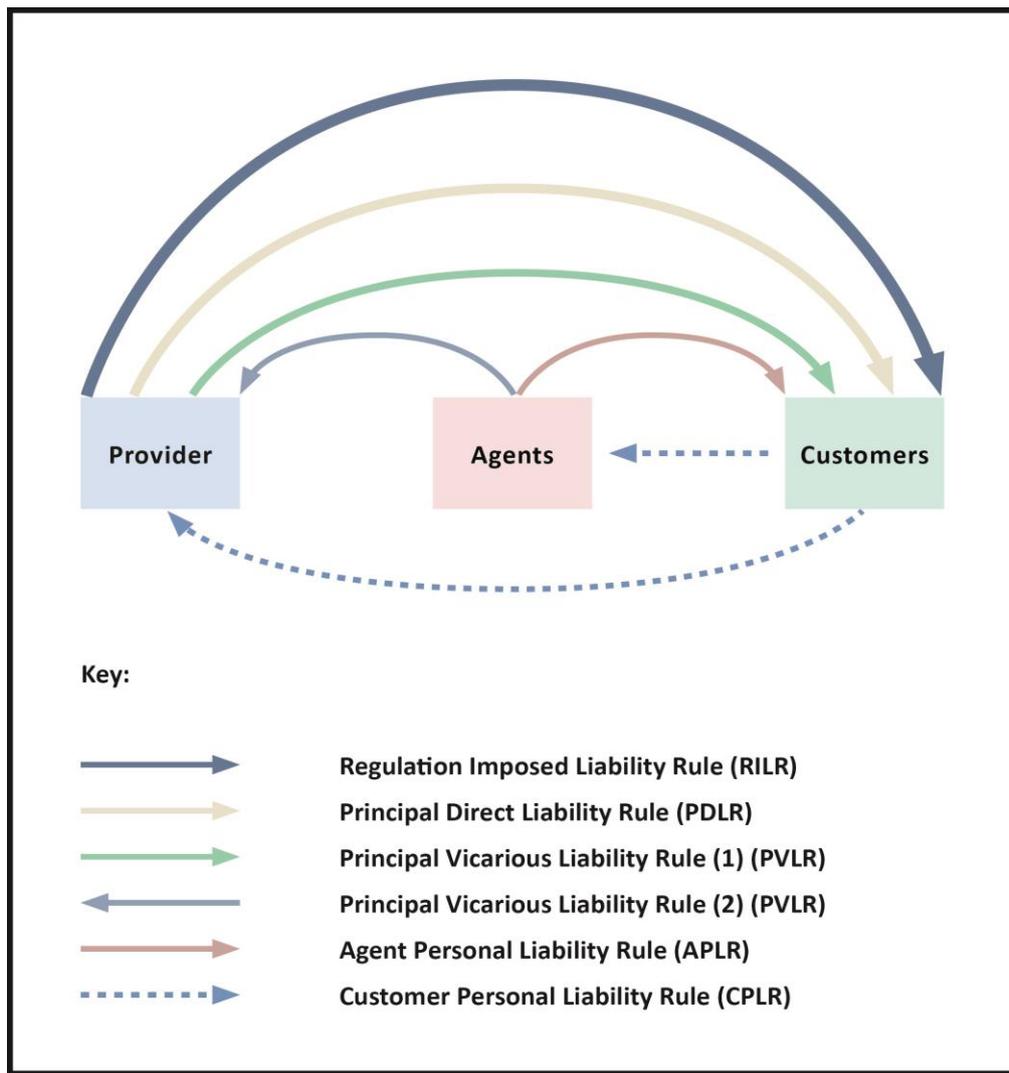
In the previous section, we examined two primary rules for allocating agent liability: the Principal Vicarious Liability Rule and the Agent Personal Liability Rule. Having an understanding of the concept of each and how agent liability can be structured, we now provide regulators with a high-level framework (as shown in Figure 18) to understand the liability chain when taking into account not only the wrongdoings of agents but also misconduct of the providers and customers. Each jurisdiction has its own legal traditions and rules for allocating liabilities, so the framework proposed does not necessarily cover all types of liability rules, nor does it encompass all kinds of possible errors and misconduct. This framework, however, includes basic liability rules that are applicable to almost any context, and informs regulators on how the liability chain will change when different liability rules are adopted or involved. Regulators can then fill liability gaps by choosing a certain liability rule, and thereby regulating to allocate liability more efficiently.

Different misconduct or accidents may subject different parties to different types (and degrees) of losses and harm. Our framework merely addresses misconduct that will cause

losses or harm to customers or their funds. As shown in Figure 18, different misconduct should involve or invite different liability rules. The Principal Direct Liability Rule means the principal should be held liable for its own conduct. The Customer Personal Liability Rule means the customer should absorb losses incurred by its own misconduct or should be held liable for the provider's (and its agents') losses if the conduct is itself malicious or tortious. The Regulation-Imposed Liability Rule applies when the provider is a bank and is required by certain prudential regulation to assume liabilities and bear losses even though the provider may not be legally liable in that situation; or when the provider is a nonbank and regulators deem it necessary for the provider to assume liability in order to better protect the customer or agent. The meaning of the Agent Personal Liability Rule and the Principal Vicarious Liability Rule has been introduced in the previous section.

Each liability rule is represented in Figure 18 by an arrow in different colour, and the direction of the arrowhead shows *who is liable to whom*. The arrow for the Customer Personal Liability Rule is dashed as misconduct by a customer does not necessarily cause losses or harm to his/her agent or provider. To use this framework, regulators start by answering the question of *who is/are involved in the misconduct at issue*. Regulators can then further determine which available liability rule listed by the framework should/would be applied. Regulators should take into account the factors identified below to determine the liability rule to be applied. Once the liability rule is chosen, regulators would be able to depict a liability chain for the misconduct at issue and see whether extra regulatory intervention is needed to fill the liability gap, if any.

Figure 18 A High-Level Framework for Liability Chain



Provider	Agents	Customers
<b>Intentional Misconduct</b> Fraud Theft Misuse of customer data Abusive services	<b>Intentional Misconduct</b> Fraud Theft Misuse of customer data Abusive services (e.g. charging unauthorised fees)	<b>Intentional Misconduct</b> Fraud
} <b>PDLR</b>	} <b>APLR</b> or <b>PVLR (1)+(2)</b> or <b>RILR</b>	} <b>CPLR</b>
<b>Negligent Misconduct</b> Loss of customers' funds Loss of transaction records Data entry errors Leakage of customer data	<b>Negligent Misconduct</b> Loss of customers' funds Loss of transaction records Data entry errors Leakage of customer data Poor cash management Failure to resolve/forward consumer complaints	<b>Negligent Misconduct</b> Misdemeanours (e.g. erroneous transactions)
} <b>PDLR</b>	} <b>APLR</b> or <b>PVLR (1)</b> or <b>RILR</b>	} <b>CPLR</b> or <b>RILR</b>

## 5.2.2 Factors Shaping the Liability Chain

In general, factors that shape the liability chain include the following:

- The default legal rule and legal tradition in the jurisdiction;
- The nature of the misconduct;
- The type of DFS model; and
- Regulatory interventions.

Each jurisdiction may have its own default legal rules for liability allocation. In common law countries, for instance, the law generally holds that a valid contract between the customer and agent, within the scope of the agent's actual authority, will render a disclosed principal vicariously liable for the agent's acts or omissions.<sup>15</sup> Civil law jurisdictions, on the other hand, may not have a common, specific set of default rules, as the governing principles for liability allocation differ from statute to statute. The nature of the misconduct is undoubtedly decisive, as intentional or malicious misconduct generally triggers strict liability and the actor is usually held liable. Even under the Principal Vicarious Liability Rule in common law jurisdictions, the agent may well be personally liable to the principal for damages if the agent wilfully acts beyond his/her actual authority.<sup>16</sup> The type of DFS model adopted by a provider will also affect the formation of the liability chain. Banks, for example, being subject already to detailed prudential regulations may sometimes have stricter liability rules imposed upon them when acting as DFS providers than would non-banks. Kenya's Guideline on Agent Banking, for instance, holds the bank principal liable even for its agents' tortious acts.<sup>17</sup> Lastly, regulators can choose to intervene if they believe the existing liability chain fails to allocate liability and protect customers' funds effectively. A Regulation-Imposed Liability Rule often will profoundly change the layout of a liability chain.

## 5.2.3 Concluding Comments on the Liability Chain

The liability chain for DFS is jurisdiction-dependent and can be shaped by various factors. Regulators can use the high-level framework we propose to decide which liability rules to adopt and design an optimal regime to effectively allocate liabilities for not only the

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<sup>15</sup> Peter Watts and F M B Reynolds, *Bowstead and Reynolds on Agency* (Sweet & Maxwell, 20<sup>th</sup> ed, 2014) para 8–001.

<sup>16</sup> *Ibid* para 9–002.

<sup>17</sup> 'Guideline on Agent Banking' (CBK/PG/15, Central Bank of Kenya, 2010) part IV, art 5.1.1.

wrongdoings of agents but also the misconduct of providers and customers. An effective regulatory regime for liability allocation is fundamental to the protection of customers' funds, and will not be achieved without a clear liability chain.

## 6. Consumer Protection

Consumer trust is the foundation for achieving sustainable uptake and active usage of DFS. The newly banked must be confident in storing and accessing the savings they have in a digital format. To build the necessary trust and confidence, it is essential to have in place effective consumer protection frameworks for DFS.<sup>1</sup>

This chapter provides guidance for regulators when assessing the effectiveness of their consumer protection frameworks for DFS. We advocate that designing and developing such frameworks requires regulators to view DFS from the consumers' perspective, and to identify consumer risks resulting from the different characteristics of each participant involved in the typical DFS value chain. Armed with this particular view of consumer risks from DFS, we present a set of key principles to target these risks along with responsibilities which regulators should take in applying the key principles.<sup>2</sup>

Section 6.1 identifies consumer risks from a DFS value chain perspective. Section 6.2 outlines key principles for regulators to follow in the design and development of consumer protection frameworks for DFS. Lastly, section 6.3 highlights five responsibilities for regulators to undertake in implementing the principles and conducting oversight of consumer protection in DFS.

### 6.1 Consumer Risks

Factors in the DFS value chain that may potentially give rise to consumer risks include the following: the *nature* of the newly banked customer; the *reliance* on technology and mobile network operators; the *use* of agents to facilitate use of the service in remote and rural areas; and the nature of the *relationship* between the issuer of the DFS and the end-user. Below we present a brief analysis of each major participant involved in the DFS value chain to help regulators understand how the characteristics of these participants are connected to consumer risks.

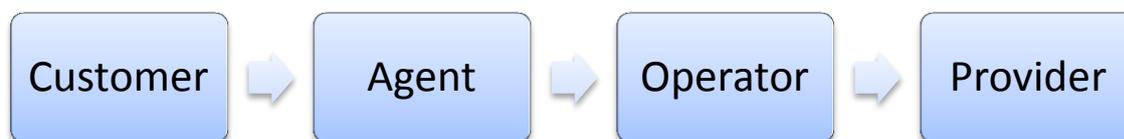
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<sup>1</sup> Kate McKee and Jamie Zimmerman, *Do Mobile Money Clients Need More Protection?* (14 March 2014) CGAP <<http://www.cgap.org/blog/do-mobile-money-clients-need-more-protection>>.

<sup>2</sup> This chapter draws on one of our team members' working papers, Louise Malady, 'Consumer Protection Issues for Digital Financial Services in Emerging Markets' (Working Paper, Centre for International Finance and Regulation, September 2015) <[http://www.cimr.unsw.edu.au/sites/default/files/attached\\_files/consumer\\_protection\\_for\\_dfs\\_in\\_emerging\\_markets\\_-\\_working\\_paper\\_draft\\_18092015.pdf](http://www.cimr.unsw.edu.au/sites/default/files/attached_files/consumer_protection_for_dfs_in_emerging_markets_-_working_paper_draft_18092015.pdf)>.

As shown in Figure 19 major participants in the DFS value chain include: customers, agents, mobile network operators and providers.

**Figure 19: Payment Value Chain by Participants for Typical DFS**



### 6.1.1 The Customers

Customers are often previously ‘unbanked’ and unfamiliar with formal financial services, let alone technology-based financial products and services. Customers may have low financial literacy. If, for example, SMS menus on mobile phones are difficult to follow or not in local languages, or sign-up processes are unnecessarily complex or time-consuming, the customer may find the products and services complex and difficult to understand.<sup>3</sup> This ‘newly banked nature’ may mean users find interfaces confusing and they may have limited understanding of terms and conditions set forth in the DFS contract.<sup>4</sup> Furthermore, newly banked customers may be concerned as to how their transaction history data can be used. Consumers may fear this data could be used to exclude them from eligibility for social benefits. While the opposite effect may in fact be the case, and the transaction history of data can be used to provide positive credit ratings for the consumer, the point to be made is that consumers must be comfortable as to how their data will be used.<sup>5</sup>

### 6.1.2 The Agents

Agents are the ‘human face’ of the DFS provider for consumers in remote areas where providers are not physically present. The success of DFS as the key enabler of financial inclusion rests on agent behaviour contributing to the best outcomes for customers. The reliance on non-bank agent networks in DFS to provide the essential role of cash-in and

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<sup>3</sup> World Bank Development Research Group, Better Than Cash Alliance and Bill & Melinda Gates Foundation, ‘The Opportunities of Digitizing Payments’ (Report, International Bank for Reconstruction and Development/The World Bank, 28 August 2014) 16.

<sup>4</sup> Katharine McKee, Michelle Kaffenberger and Jamie M Zimmerman, ‘Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks’ (Focus Note no 103, CGAP, June 2015) 7-11 <<http://www.cgap.org/sites/default/files/Focus-Note-Doing-Digital-Finance-Right-Jun-2015.pdf>>. See also Committee on Payments and Market Infrastructures (CPMI) and World Bank Group (WBG), *Payment Aspects of Financial Inclusion* (September 2015) BIS, 29-30 <<http://www.bis.org/cpmi/publ/d133.pdf>>.

<sup>5</sup> See CPMI and WBG, above n 4, 30.

cash-out means consumers directly interact with entities that are generally undertaking their activities as an agent for a bank or an MNO. The provider/principal will have less than complete control of the agent's behaviour, yet this agent's behaviour will be critical to building consumer trust in the DFS. The need to use agents extensively subjects consumers to potential risks such as poor liquidity management by agents, agent fraud, and unauthorised transactions or sharing of customers' private information by agents.<sup>6</sup>

### 6.1.3 The MNO and Infrastructure Used by the MNO

DFS in emerging markets are, by their very nature, mobile technology-dependent financial services. Reliable mobile telecommunications infrastructure is necessary, particularly reliable network coverage. Consumers will not be confident they can conduct transactions safely and efficiently, if they have no access to reliable infrastructure and network coverage.<sup>7</sup> The dependence on technology subjects consumers to risks such as the inability to transact or access funds due to service downtime.<sup>8</sup> Indeed, network downtime and service unreliability are typically a leading concern of DFS customers.<sup>9</sup>

### 6.1.4 The Providers

A provider is the entity that issues the customer with the e-payment instrument used in making transactions. It is the entity with primary responsibility to safeguard the customer's funds and private data. However, for most DFS products, the provider will never physically meet the customer. This 'faceless' nature of the provider-customer relationship makes consumer trust particularly vulnerable in situations such as inadequate recourse and dispute resolution mechanisms. Therefore, it is very important for providers to empower customers so customers know what they can do with the DFS and what demands they can make of the provider.<sup>10</sup>

Empowering customers requires time and opportunity. First, the relationship between the provider and the customer must be seen as ongoing and as building over time. Second, customers need the opportunity to use the DFS—be it through receiving regular payments, or being given digital games to practise using the DFS channel. This assists consumers in

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<sup>6</sup> McKee et al, above n 4, 5-7, 13-14. See also CPMI and WBG, above n 4.

<sup>7</sup> Antonique Koning and Monique Cohen, *Enabling Customer Empowerments: Choice, Use, and Voice* (March 2015) CGAP, 2-3 <[http://www.cgap.org/sites/default/files/Brief-Enabling-Customer-Empowerment-Mar-2015\\_0.pdf](http://www.cgap.org/sites/default/files/Brief-Enabling-Customer-Empowerment-Mar-2015_0.pdf)>.

<sup>8</sup> McKee et al, above n 4, 4-5.

<sup>9</sup> Ibid 16-17.

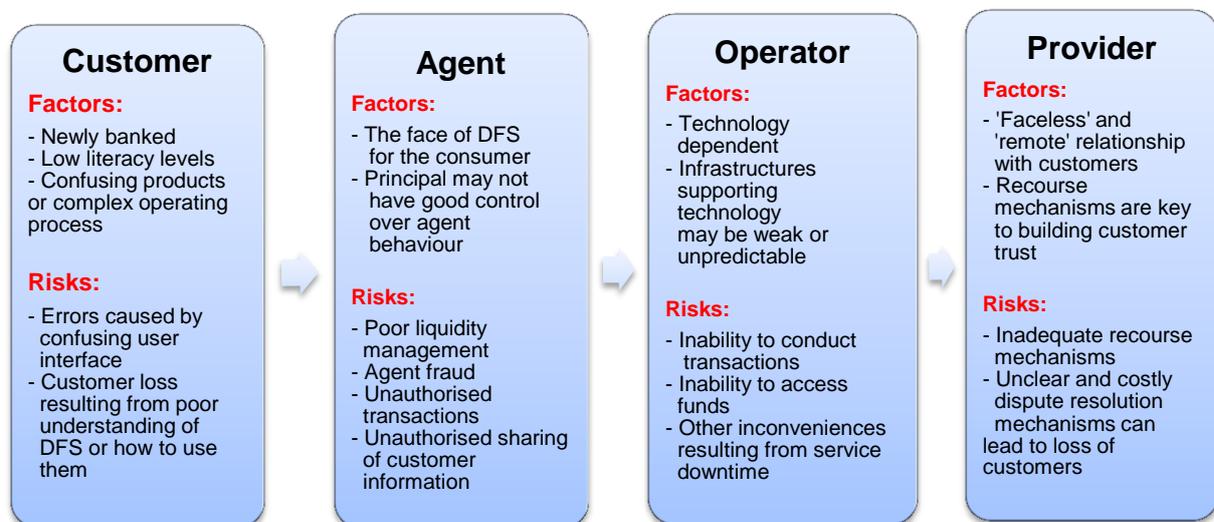
<sup>10</sup> Koning and Cohen, above n 7, 3.

remembering their passwords and remembering how to use the product and further appreciating why PINs and mobile phones should be kept safe and secure. Finally, customers need the opportunity to use recourse mechanisms—to ensure the mechanisms work and to increase familiarity and trust. Without these opportunities, consumers will not learn to become more capable users of DFS and providers will not learn how to be more supportive of consumers in order to build the relationship.

Consumers will not value and trust DFS if there are inadequate recourse mechanisms available to them when using the DFS. The absence of timely and accessible complaint and dispute resolution mechanisms has been found to have a negative effect on customer trust.<sup>11</sup> Consumers will not want to return to using products if they are not satisfied with the experience. Providers play a crucial role in creating the right customer experience so the customer becomes an active user. Often this may require providers to provide a complaint hot-line that is free to call and sufficiently well-staffed to answer calls promptly.

Figure 20 shows the participants in the DFS payments chain and maps factors that give rise to consumer risks in DFS to each participant.

**Figure 20: DFS Value Chain and Factors Affecting Consumer Risks**



<sup>11</sup> Megan Chapman and Rafe Mazer, 'Making Recourse Work for Base of Pyramid Financial Consumers' (Focus Note no 90, CGAP, December 2013) 1  
<http://www.cgap.org/publications/making-recourse-work-base-pyramid-financial-consumers>.

## 6.2 Key Principles for DFS Consumer Protection

This section outlines key principles for regulators to follow when designing and developing consumer protection frameworks for DFS. The principles below draw on existing proposed standards, codes of conduct and priorities for financial consumer protection, but target specifically the consumer risks of DFS in emerging markets as identified in the last section.<sup>12</sup> Figure 21 below summarises these principles.

Figure 21: Key Principles for DFS Consumer Protection



### 6.2.1 Transparent Product Disclosure and Clear User Interface

Product disclosure must be clear, transparent and complete. Consumers need to understand fees involved and their rights and obligations when using DFS.<sup>13</sup> Fees, terms and conditions can be complex, especially for newly banked customers in environments where agents are used to convey fees, terms and conditions.<sup>14</sup> Consumers should understand their obligations to keep PINs safe and confidential. In addition, a friendly, easy and clear user interface

<sup>12</sup> For the existing principles or codes of conduct for financial consumer protection, see, eg, OECD, 'Report on Consumer Protection in Online and Mobile Payments' (Digital Economy Papers no 204, OECD, August 2012); Jamie Zimmerman, 'The Emergence of Responsible Digital Finance' on *The Centre for Financial Inclusion Blog* (21 July 2014) <<http://cfi-blog.org/2014/07/21/the-emergence-of-responsible-digital-finance>>. CGAP also highlights five priority areas for industry actors to follow. For a detailed introduction, see McKee et al, above n 4, 16-22.

<sup>13</sup> See CPMI and WBG, above n 4, 56. The proposed Guiding Principle 2, in its 'Key actions for consideration' requires that payment service providers should 'clearly disclose, using comparable methodologies, all of the various fees they charge as part of their service, along with the applicable terms and conditions, including inability and use of customer data'.

<sup>14</sup> See CPMI and WBG, above n 4, 29.

enhances customers' trust and confidence in using DFS. A friendly user interface also ensures accuracy of transactions and reduces processing mistakes resulting from confusing and unfriendly mobile menus.<sup>15</sup> Regulators can collaborate with providers to ensure the delivery of clear product disclosure and user interface.

### 6.2.2 Clear Recourse and Dispute Resolution Mechanisms

Recourse and dispute resolution mechanisms must be clear, easily understood, available and accessible without call charges.<sup>16</sup> Uncertainty about how to report service problems, erroneous transactions, fraudulent activities and concerns about data privacy, as well as opacity about how these issues might be addressed, often reduces customer trust in, and uptake of, DFS. Liability for unauthorised transactions is also important. Stored value DFS are not yet commonly issued with the protection of limited customer liability that comes with many credit and debit card products.<sup>17</sup> Regulators should require that providers thoroughly review all existing liability arrangements and recourse options and identify barriers that prevent customers from understanding or using those recourse mechanisms.<sup>18</sup>

### 6.2.3 Well-functioning Consumer Recourse Mechanisms

Newly-banked consumers may not be accustomed to lodging formal complaints or using redress mechanisms no matter how clear or well-thought through such processes may be. Therefore having in place clear recourse mechanisms *per se* is not enough. Evidence that these mechanisms are being used and are functioning well is needed. Regulators can carry out routine, independent oversight of these mechanisms to ensure adequate and effective function, and to help customers to exercise their rights properly.<sup>19</sup>

### 6.2.4 Control Agent Behaviour

Providers must take steps to ensure agents act appropriately when undertaking the agent role. Regulators can adopt regulatory regimes that allocate agent liability efficiently to motivate industry self-oversight of agents' behaviours.

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<sup>15</sup> McKee and et al, above n 4, 7-8.

<sup>16</sup> See CPMI and WBG, above n 4, 56. The proposed Guiding Principle 2, in its 'Key actions for consideration' requires that payment service providers should 'implement a transparent, user-friendly and effective recourse and dispute mechanism to address consumer claims and complaints'.

<sup>17</sup> See CPMI and WBG, above n 4, 29.

<sup>18</sup> McKee and et al, above n 4, 21.

<sup>19</sup> CPMI and WBG, above n 4, 30.

## 6.2.5 Business Continuity Plans to Factor in End-user Concerns

Providers must ensure their responsibilities to consumers are considered in business contingency plans for dealing with disruptions in consumer transactions due to network coverage problems or disruptions in telecommunication services. Regulators can help review these contingency plans and require providers to carry out regular network system testing to ensure service stability and reliability.<sup>20</sup>

Figure 22 below highlights some strategies that help implement each principle.

Figure 22: Mapping Strategies to the Key Principles



## 6.3 Primary Responsibilities for Regulators

In order for regulators to facilitate consumer protection proactively, we highlight five responsibilities upon which regulators should focus their resources when implementing the foregoing principles of consumer protection in DFS:

1. Clarifying accountability for mitigating consumer risks;
2. Clarifying lines of regulatory responsibility and enhancing inter-regulatory collaboration;

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<sup>20</sup> McKee and et al, above n 4, 17.

3. Integrating financial education and financial literacy into consumer protection frameworks;
4. Using behavioural research to inform policy making; and
5. Leveraging the use of digital channels to conduct supervision.

### 6.3.1 Clarifying Accountability for Mitigating Consumer Risks

A DFS transaction involves multiple parties. It requires the consumer to engage with not only the provider of the DFS but also an agent (and sometimes an operator) that help the provider to deliver the service. Furthermore, the agent, the operator and the provider may all be different types of entities that adopt different activities and responsibilities within the payment value chain. This multiple engagement on multiple levels can create confusion for the customer as to who *is* (and *should be*) accountable for product delivery and reliability. Even if a customer is not confused, simply having a broader range of participants involved in the delivery of DFS makes the question of *who is accountable* less transparent to consumers.

Regulators need to ensure lines of accountability to consumers are clear for all participants in the payment value chain. Customers need to know which entity to approach when seeking recourse and redress, and regulators should help ensure such knowledge is accessible and easily understood. Regulators can encourage financial institutions to focus on improving consumer awareness of how to have grievances addressed at the institution level.

Regulators may also consider requiring ancillary consumer protection arrangements. For example, customers may prefer to approach a DFS ombudsman, as an independent and trustworthy body, when making complaints.

### 6.3.2 Clarifying Lines of Regulatory Responsibility and Enhancing Inter-Regulatory Collaboration

There are a range of regulators involved in regulating DFS because of the extensive range of participants involved in providing DFS. This has two effects: it can complicate regulatory accountability in the minds of the consumer, and it can give rise to variability in regulatory and protection regimes. DFS regulators have a responsibility to ensure transparency in oversight and supervision and to work with other regulators to reduce variabilities in regulatory requirements—with the aim of creating level playing fields.

Governments and regulators need to identify, and act on, issues concerning regulatory capacity, mandates or inter-regulatory cooperation. Regulation that is activity-focused and provider-neutral can minimise duplication in regulation or avoid regulatory overlaps. This is

because, under ‘entity focused regulation’, different entities that undertake the same activity might be governed by different regulatory requirements. When regulation is activity-focused or provider-neutral, it can facilitate a more consistent supervisory approach across different entities that conduct the same activities. In other words, it can provide an ‘even playing field’ for entities offering similar services, and thereby reduce the likelihood of regulatory arbitrage.

### 6.3.3 Integrating Financial Education and Financial Literacy into Consumer Protection Frameworks

Financial education and financial literacy need to be closely inter-linked with consumer protection. Newly-banked consumers need to know how to respond if they encounter a problem when using the DFS. For example, without sufficient consumer education consumers may misunderstand the availability of redress mechanisms and thus resist using the DFS in the first place. Consumer education provides the foundation for building consumer trust and increases the likelihood and frequency of DFS being used.

Financial literacy programs, as a fundamental element of financial education, should also be introduced to educate consumers, especially when they are first using the service. Research suggests that consumers rely on experiences to learn how to use a new financial service and their learning experience can be greatly advanced if a literacy program is offered at the very beginning of their use of the service.<sup>21</sup> The providers can achieve this objective by offering hands-on training as part of a product launch.<sup>22</sup>

In order to build consumer trust and retain it even in cases of negative experiences, education programs should be used to enhance consumers’ understanding of the cost of using the service and their understanding of the accessibility and availability of redress mechanisms.<sup>23</sup> More recent research continues to support findings that specific, targeted and simple consumer education is most important.<sup>24</sup> Consumers who know how to respond when problems are encountered are more likely to use and trust the new services.

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<sup>21</sup> Julie Zollman and Daryl Collins, *Financial Capability and the Poor: Are We Missing the Mark?* (December 2010) FSD Kenya, 4-5 <<http://fsdkenya.org/publication/financial-capability-and-the-poor-are-we-missing-the-mark-fsd-insights-issue-02>>.

<sup>22</sup> See CPMI and WBG, above n 4, 58 (Guiding Principle 6).

<sup>23</sup> Zollman and Collins, above n 21, 4-5.

<sup>24</sup> Amber Davis, ‘Improving Everyday Financial Decisions: Brief, Specific and Targeted Education Could Help the Poor Make Better Choices’ (24 October 2014) NextBillion <<http://nextbillion.net/blogpost.aspx?blogid=4130>>.

By offering consumer education or literacy programs, providers can then also understand the weaknesses in their product disclosure and redress mechanisms. As a country study on how consumers perceive risks in DFS found, unclear pricing and customer recourse were considered 'high' risks by customers.<sup>25</sup> Providers should, therefore, seek to reduce uncertainty in both pricing and in redress mechanisms through consumer education.

Regulators, on the other hand, need to ensure consumer education and financial literacy initiatives are woven into the existing consumer protection frameworks. For example, regulators should conduct financial education campaigns with the assistance of the product providers. This could include interactive role-play sessions where consumer protection mechanisms are demonstrated 'live'; consumers are given the opportunity to use the product's recourse mechanisms in a training environment.

#### **6.3.4 Using Behavioural Research to Inform Policy Making**

Behavioural research in the context of DFS consumer protection aims to explore how a consumer's financial behaviour and decision making is shaped by psychological and socioeconomic factors.<sup>26</sup> Such research is of paramount importance in developing countries, as consumers there generally have limited financial experience and bargaining power and thus the negative consequences of behavioural factors may be amplified and cause greater losses to the consumers.<sup>27</sup> Policy makers in developing countries should incorporate relevant findings and insights from this type of research into consumer protection frameworks.

A number of these findings have provided important guidance for policy making. For instance, emerging findings have shown that scarcity and poverty have played a very important role in consumers' financial decision making.<sup>28</sup>

Behavioural research also highlights that it is important for regulators to, for example, understand how customers perceive a product's terms and conditions. Are customers comprehending the terms and conditions as intended? Are they reading the conditions at all,

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<sup>25</sup> MicroSave, CGAP and BFA, 'Consumer Protection and Emerging Risks in Digital Financial Services' (Paper presented by MicroSave at the Responsible Finance Forum, Perth, 28 August 2014) 4 <<http://responsiblefinanceforum.org/publications/consumer-protection-emerging-risks-digital-financial-services>>.

<sup>26</sup> Rafe Mazer, Katharine McKee and Alexandra Fiorillo, 'Applying Behavioral Insights in Consumer Protection Policy' (Focus Note no 95, CGAP, June 2014) 1 <<http://www.cgap.org/sites/default/files/Focus-Note-Applying-Behavioral-Insights-in-Consumer-Protection-Policy-Jun-2014.pdf>>.

<sup>27</sup> Ibid 1-2.

<sup>28</sup> Ibid 2, box 1.

or just checking the 'I accept' box? Customer behaviour research has found that some customers do not perceive borrowing digitally to be the same as, or as serious as, borrowing 'real money'.<sup>29</sup> This is not surprising in emerging markets where the culture is not steeped in 'Western' traditions of borrowing and repayment but in shared community obligations such as debts for marriages or funerals, for example. In such cultural settings simply rolling out digital products based on traditional 'Western' borrowing concepts could lead to significant credit problems for consumers, bad debts for providers and a general mistrust of DFS.

### 6.3.5 Leveraging on the Use of Digital Channels to Conduct Supervision

Regulators must explore, and make better use of, digital capabilities for oversight and supervision as well as expecting industry players to use digital channels to deliver financial services. Digital channels can be used to gain feedback on agents' conduct. Where consumers are not necessarily best placed to give feedback on agents, field inspectors can be used, armed with mobile technology, to report back on the use of DFS in the field and the behaviour of agents.

The use of mystery shopping techniques or online surveys can also leverage the use of digital channels to conduct supervision.<sup>30</sup> Mystery shopping can provide regulators with a better understanding of how the products work on a number of fronts, including:

- How terms and conditions are being conveyed to customers;
- How providers are educating consumers with respect to keeping PINs safe and confidential;
- The effectiveness of customer support and redress mechanisms;
- What agent behaviour is like in the field; and
- How information is conveyed to consumers if there are disruptions in transactions due to technological problems.

On-line surveys can be devised for providers to complete with the objective of developing a better understanding of consumer concerns when using DFS. Regulators can analyse

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<sup>29</sup> Rafe Mazer and Alexandra Fiorillo, *Digital Credit: Consumer Protection for M-Shwari and M-Pawa Users* (April 2015) CGAP <<http://www.cgap.org/blog/digital-credit-consumer-protection-m-shwari-and-m-pawa-users>>.

<sup>30</sup> For a comprehensive technical guide for how mystery shopping can be designed and implemented, see Rafe Mazer, Xavier Gine, and Cristina Martinez, *Mystery Shopping for Financial Services - What Do Providers Tell, and Not Tell, Customers about Financial Products?* (October 2015) CGAP <<http://www.cgap.org/sites/default/files/Technical-Guide-Mystery-Shopping-for-Financial-Services-Oct-2015.pdf>>.

responses to identify areas of concern and developing trends in market practices. From this analysis regulators can respond, either through regulation or enforcement.<sup>31</sup> Surveys could include the following:

- What is the nature of consumer complaints received?
- What is the time taken to resolve the complaints? (Are the consumer protection policies successful?)
- What are the problems in resolving the complaints? (This can give an understanding of gaps in consumer protection policies.)
- Where do consumers lodge complaints? (Is it with a regulator or provider?)
- Who generally resolves consumer complaints?

The foregoing responsibilities, in summary, suggest the need for regulators to adopt a risk-based, technology-sensitive and collaborative approach in the oversight of consumer protection in DFS. Regulators should be mindful of the distinctive roles and characteristics of the four key players in the payment value chain, and design corresponding initiatives around the proposed Key Principles. Regulators should stand ready to address gaps in DFS consumer protection where industry actions fall short.<sup>32</sup>

## ***6.4 Concluding Comments***

Consumer protection is fundamentally important for building trust and achieving the sustainable uptake and active usage of DFS by the newly banked. The newly banked must be confident in storing and accessing the savings they have in a digital format. This chapter has provided guidance for regulators when assessing the effectiveness of their consumer protection frameworks for DFS. Viewing DFS from the consumers' perspective and understanding how the consumer interacts with each participant involved in the typical DFS value chain is important. We outlined key principles to target these consumer risks, along with responsibilities which regulators should take in applying the key principles. We believe this approach provides a clear framework for regulators to use in navigating the numerous global best practice approaches on consumer protection that currently exist. The objective of

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<sup>31</sup> Alliance for Financial Inclusion, *Consumer Protection: Levelling the Playing Field in Financial Inclusion* (2010) IFC, 3  
<<http://www.ifc.org/wps/wcm/connect/fe7cc88049585e949cf2bd19583b6d16/Tool+5.10.+AFI+Report+-+Consumer+Protection+Policy.pdf?MOD=AJPERES>>.

<sup>32</sup> See McKee et al, above n 4, 23.

this approach is to encourage the uptake of DFS to advance financial inclusion and the benefits that come with improved financial inclusion for individuals and the economy.

## 7. Proportionate AML/CFT Measures for Digital Financial Services

Balancing financial integrity and enhancing financial inclusion continues to be a challenge for national authorities. FATF's risk-based approach to implementing AML/CFT measures has not provided many countries with sufficient comfort to enable them to avoid using rules-based AML/CFT regimes.<sup>1</sup> Countries are concerned that without a rules-based approach they will be found to be non-compliant with the FATF Recommendations.<sup>2</sup> Yet a rules-based approach has proven to be a major barrier to enhancing financial inclusion, as it has repeatedly been found to be insufficiently flexible for newly included customers who may not have the standard identification required.

While concerns about the appropriate regulatory approach mount, there have been continuing fears that DFS could increase the risk of money laundering and terrorism financing by facilitating the instantaneous transfer of funds over long distances. However, in the main, these fears are misplaced. DFS tend to work well for smallish amounts, but are an expensive way to transfer large amounts (of the scale of interest to money launderers). With appropriate AML/CFT protections in place, DFS can in fact reduce the risk of criminal activity by bringing anonymous cash transactions into the formal financial system, where they can be monitored for suspicious activity.

The challenge is how to implement appropriate AML/CFT protections without incurring unduly onerous compliance costs. In recent years, the risks and costs associated with AML/CFT compliance have led to banks in Australia, the United States and the United Kingdom closing the accounts of money transfer operators. This large scale 'de-risking' has severely damaged financial inclusion by shutting down affordable remittance channels.

This chapter revisits the proportionate AML/CFT measures describing, at a basic level, how these measures can be implemented. We also highlight the recent successes in establishing robust national electronic identification systems. These national identification systems can be used by DFS providers to reduce their CDD costs. Providers can rely on the streamlined and standardised approach to identification of customers facilitated by government agencies. The Committee on Payments and Market Infrastructures (CPMI) and World Bank Group

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<sup>1</sup> Committee on Payments and Market Infrastructures (CPMI) and World Bank Group (WBG), *Payment Aspects of Financial Inclusion* (September 2015) BIS, 31 <<http://www.bis.org/cpmi/publ/d133.pdf>>.

<sup>2</sup> The FATF Recommendations are the global standards against money laundering and terrorist financing. See FATF, *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation – the FATF Recommendations* (February 2012).

(WBG) report—‘Payment Aspects of Financial Inclusion’, September 2015—identified two country cases where these national identification systems have been successful: Aadhaar in India and the RUT number in Chile.<sup>3</sup>

## ***7.1 Proportionate AML/CFT Measures***

In 2013 FATF released a revised guidance paper,<sup>4</sup> which sought to assist countries to implement effective AML/CFT measures that do not inhibit financial inclusion. This guidance paper provided further assistance on how to use a proportionate, risk-based approach (RBA) to implement AML/CFT measures. This approach allows for the use of simplified CDD for low-risk scenarios.

In calculating the level of risk, regulators need to consider the place in which the money is transferred, as well as the type of financial product being used. FATF advises that regulators can infer ‘the purpose and intended nature of the business relationship from the type of transaction or business relationship established’.<sup>5</sup> This is important in the context of DFS, as regulators can infer that people using stored-value products with small amounts stored and with strict limits are likely to be low-risk.

When designing AML/CFT regulations for DFS, there are three practical solutions which regulators can implement to ensure that AML/CFT measures do not inhibit financial inclusion:

1. Introducing tiered CDD requirements;
2. Creating flexible identification processes; and
3. Placing limits on transactions and account balances.

### **7.1.2 Tiered CDD Requirements**

Tiered account structures introduce flexibility into the CDD required when opening an account with a bank or payments provider. The more limited the functionality of an account the less CDD is required. Tiered account structures can promote financial inclusion because those without any traditional form of identification can still open a basic savings account and make small transactions. Then, over time, customers can gain increasing levels of access and functionality based on the level of identification they are able to provide.

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<sup>3</sup> CPMI and WBG, above n 1, 33-34.

<sup>4</sup> FATF, above n 2.

<sup>5</sup> Ibid 6.

The FATF Recommendations prohibit the use of ‘anonymous accounts’, but do not define what constitutes anonymity. When poor people use cash, their transactions are clearly anonymous. Providing them with stored value products with limited functionality enables them to build financial identities. This brings the transactions of poor people into the formal financial system and, while this group clearly poses low risk in terms of ML/FT, if the transactions are within the formal financial system then better monitoring of transactions for suspicious activity is possible.

Country examples: Mexico and Nigeria

### 1. Mexico

In 2011, Mexico introduced a four-tiered scheme for opening deposit accounts. The most basic account allows customers to be completely anonymous, but sets a very low transaction and deposit limit (US\$280 transaction limit and US\$370 maximum balance) and does not permit transfers via mobile phones. Tier 2 accounts are of particular interest to mobile money regulators, as they allow customers to deposit up to US\$570 per month and transfer money via mobile phone. New customers can open these accounts remotely via text message. When doing so, customers need to self-report basic details such as their name, gender, date of birth and address, but banks are not required to open a physical file with the customer’s identification information. Tier 3 and Tier 4 require full CDD and face-to-face account opening.<sup>6</sup>

### 2. Nigeria

Nigeria has a three-tiered banking scheme. Customers can open a low-value account by providing a photograph and their name, place and date of birth, gender, address and telephone number (if applicable). Customers do not need to provide evidence with the information, and banks are not required to verify it. These accounts allow customers to deposit a maximum of around US\$100 per day, and to hold a maximum balance of US\$1000 at any time. Customers can use mobile phones to transfer money, but each transfer is limited to US\$15, with a daily transfer limit of US\$150. These limits increase when

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<sup>6</sup> For more information, see Xavier Faz and Denise Dias, ‘A Bold Move Toward Simplifying AML/CFT: Lessons from Mexico’ on *CGAP Blog* (19 May 2011) <<http://www.cgap.org/blog/bold-move-toward-simplifying-amlcft-lessons-mexico>>; Xavier Faz, ‘Mexico’s Tiered KYC: An Update on Market Response’ on *CGAP Blog* (25 June 2013) <<http://www.cgap.org/blog/mexicos-tiered-kyc-update-market-response>>.

customers hold medium-value accounts, which require evidence of identification information and verification by the bank.<sup>7</sup>

### 7.1.3 Flexibility with Identification and Verification of Customer Identity

Very poor people in rural or remote areas do not always have formal identification documents. This is a major cause of financial exclusion. Providing flexibility around the identity verification process for low-risk customers can help people without formal identification to access financial services.

The FATF Recommendations require banks to verify a customer's identity using 'reliable, independent source documents, data or information.'<sup>8</sup> However, it is each country's responsibility to define what this means. This means that regulators can apply a creative, practical approach to the form of identification permitted for the purpose of CDD.

In addition to the type of identification accepted, regulators can be flexible regarding the verification process. For low-risk, basic stored value accounts providers could be allowed, for instance, to postpone the verification of customer identification.

Country examples: Fiji and India

#### 1. Fiji

In Fiji, customers who are unable to provide formal identification documents can use a letter from a suitable referee as a means of identification. Suitable referees can include school principals (for customers who are students), community leaders such as church pastors (for customers who are elderly or not formally employed) or a village headman (for customers in rural areas).<sup>9</sup>

#### 2. India

In 2012, India introduced "Small Accounts" with simplified CDD measures for low-risk customers. Customers can open small accounts by affixing their signature or thumbprint to the back of a photo in front of a designated officer, who certifies that the photo is of the

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<sup>7</sup> For more information, see Central Bank of Nigeria, 'Introduction of Three-tiered Know Your Customer (KYC) Requirements' (Circular to all banks and other financial institutions, 18 January 2013) <<http://www.cenbank.org/Out/2013/CCD/3%20TIERED%20KYC%20REQUIREMENTS.PDF>>.

<sup>8</sup> Ibid 31.

<sup>9</sup> For more information, see Fiji Financial Intelligence Unit, 'Advisory: Financial Transactions Reporting Act -- Customer Due Diligence of Customers who have Insufficient or No Official Identification Documents' (11 April 2007) <[http://www.fijifiu.gov.fj/getattachment/Pages/Guidelines-and-Policy-Advisories/Policies-advisories-on-the-FTR-Act/Advisory-2\\_2007-CDD-of-Customers-Who-Have-Insufficient-or-No-Official-Identification-Documents-\(1\).pdf.aspx](http://www.fijifiu.gov.fj/getattachment/Pages/Guidelines-and-Policy-Advisories/Policies-advisories-on-the-FTR-Act/Advisory-2_2007-CDD-of-Customers-Who-Have-Insufficient-or-No-Official-Identification-Documents-(1).pdf.aspx)>.

customer. Customers then have 12 months to provide a formal means of identification. After this time customers can continue using their accounts for a further 12 months if they can prove that they have applied for formal identification.

India is also pressing ahead with its Aadhaar initiative, which aims to issue a unique identity number to every resident in India, supported by comprehensive biometric identification.<sup>10</sup> This is but one of the many biometric identification initiatives underway in a range of countries.<sup>11</sup> Such initiatives are complex and their implementation takes time. Nonetheless they represent a longer-term solution to many of the current challenges of CDD in countries implementing them.<sup>12</sup>

#### 7.1.4 Transaction Limits and Maximum Balance Limits

Simplifying CDD and identification requirements may appear to pose a ML/FT risk. Regulators can reduce these risks by setting limits on the number of accounts a customer can hold, the value and frequency of transactions, and the total balance held in accounts.

Country examples: Namibia and Kenya

##### 1. Namibia

In 2012, the Central Bank in Namibia set limits on the amount of money that could be transferred between individual e-money accounts—\$470 per day, \$2,350 per month and \$11,750 per year. In May 2014, this requirement was changed, allowing banks and e-money providers to set their own limits, subject to the Central Bank's approval.<sup>13</sup>

##### 2. Kenya

M-PESA in Kenya is one of the most successful mobile money stories. While the service is used by over 70% of households in Kenya, M-PESA accounts are subject to both transfer and balance limits. The maximum amount a customer can hold in their account at any one

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<sup>10</sup> Unique Identification Authority of India, *Why Aadhaar* <<https://uidai.gov.in/why-aadhaar.html>>.

<sup>11</sup> Peter B Counter, *National ID Month: 4 Biometric Countries* (24 September 2015) Find Biometrics <<http://findbiometrics.com/national-id-month-29240>>.

<sup>12</sup> For more information, see FATF, *FATF Guidance: Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion* (February 2013) 58; Reserve Bank of India, *Basic Savings Bank Deposit Account – Frequently Asked Questions* <<https://rbi.org.in/scripts/FAQView.aspx?Id=97>> and Unique Identification Authority of India <<https://uidai.gov.in/index.php>>.

<sup>13</sup> For more information, see *Mobile for Development – Namibia* (6 December 2012) GSMA <<http://www.gsma.com/mobilefordevelopment/namibia-11>>; 'Transaction and Balance Limits for Electronic Money Accounts and Fees Payable' (Circular PSMA no 1, Bank of Namibia, 23 May 2014) <<https://www.bon.com.na/CMSTemplates/Bon/Files/bon.com.na/03/03b0186e-6c8a-4c6c-bea3-838d938a600e.pdf>>.

time is Ksh100,000—the equivalent of about US\$980. No more than Ksh140,000 can leave the account per day, and deposits, transfers and withdrawals are limited to Ksh70,000 per transaction.<sup>14</sup> At an agent, customers cannot deposit money directly into another M-PESA's customer's account.<sup>15</sup>

## *7.2 Concluding Comments*

The importance of strictly constraining money laundering and terrorism financing is self-evident. However, most simple DFS are poorly adapted to be used for these ends. It is for this reason, and the general importance of promoting financial inclusion, that FATF produced its revised guidance paper in 2013. However, few countries have taken advantage of the flexibility made available in that guidance. The fear of appearing on a FATF blacklist has in the main deterred nations from taking a balanced, flexible and nuanced approach to CDD requirements for DFS. We strongly endorse national policy makers introducing tiered CDD requirements, with little or no identification required to open accounts with the strictest limits, and, furthermore, generally enforcing quite rigorous limits on balances and transfer amounts. We also strongly urge policy makers to implement flexible approaches to verification of customer identity that are well suited to national conditions.

National biometric identification initiatives offer strong prospects of allowing DFS to simply and cheaply achieve the CDD required to comply with AML/CFT requirements, and for this reason should often prove attractive to national governments.

Finally, the impact of AML/CFT regulations upon the operations of international money transfer operators has been deeply regrettable. Remittances are a crucial source of income in many poor countries, and while closing the bank accounts that money transfer operators require to operate is 'de-risking' for the banks, it is not necessarily de-risking at all in a systemic sense. Forcing small, economical money transfer operators to close is as likely to force remittances underground, or out of the formal economy, as it is to drive them into higher cost, better regulated services. Highly affordable, creative solutions using technology from the banking sector are urgently needed on the remittances issue.

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<sup>14</sup> Safaricom, *M-PESA rates* <<http://www.safaricom.co.ke/personal/m-pesa/get-started-with-m-pesa/m-pesa-tariffs>>.

<sup>15</sup> Safaricom, *Deposit Cash to your Account* <<http://www.safaricom.co.ke/personal/m-pesa/get-started-with-m-pesa/deposit-cash-to-your-account>>. For more information, see Claire Alexandre, '10 Things You Thought You Knew About M-PESA' on *CGAP Blog* (22 November 2010) <<http://www.cgap.org/blog/10-things-you-thought-you-knew-about-m-pesa>>.

## 8. DFS, Financial Inclusion and Payments System Oversight

DFS are, in essence, mostly retail payment systems. While the issues in overseeing and regulating these DFS from a retail payments' perspective are not new, what is new is the need to consider the issues in the context of promoting the use of innovative DFS for addressing financial inclusion.

Traditionally payment system regulators have focused on the efficient and smooth operation of payment systems as they are fundamental to the stability and efficiency of the broader financial system. For this reason, the legal and regulatory frameworks which support a regulator's payments system oversight role have generally been designed with the objective of ensuring systemic stability and efficiency. In central banking circles, particularly in emerging markets, it is now recognised that financial inclusion objectives must also be incorporated into the design of the legal and regulatory framework for payment systems so as to more fully exploit the potential, yet also manage the risks, that come with the opportunity to broaden access to the financial system presented by innovations such as DFS.

In this chapter we highlight the following issues for payments system regulators to focus on:

- Recent international initiatives on the **payments aspects of financial inclusion**;
- **Operational resilience** of DFS systems so as to avoid disruptions leading to consumer confidence crises;
- The importance of **data** to measure the relative importance of the system in terms of stability issues; and
- **Interoperability** options between DFS so as to reap the significant network benefits for providers, users and more broadly for the national payments infrastructure of the particular country in question.

These issues are by no means exhaustive of those considered by payments system regulators. However, we consider these issues to be of key importance in promoting the use of innovative DFS for financial inclusion.

### *8.1 Financial Inclusion as a Payments System Oversight Objective*

The CPMI at the Bank for International Settlements (BIS) and the WBG established a task force in 2014 which was responsible for analysing the role of payments and payment services in financial inclusion—the taskforce is referred to as the Payment Aspects of Financial Inclusion (PAFI) Taskforce. The objective of the PAFI Taskforce is to analyse the links between payments and financial inclusion and to establish a set of guiding principles

aimed at advancing financial inclusion worldwide. In September 2015, the PAFI Taskforce released a consultative report with guiding principles to central banks, financial supervisors, regulators, policymakers, and private sector stakeholders for advancing financial inclusion in their markets through payments.<sup>1</sup>

This report highlights the critical nature of payments and payment services in financial inclusion because without a payment or payment service there would be no access to a financial service:

[p]ayments and payment services are, in their own right, an important part of the overall package of financial services. Moreover, under certain circumstances they can not only facilitate access to other financial services, but, in many cases, be critical to those services' efficient provision...[because]...practically all of these services (ie credit, savings and investments) are tied or linked to transaction accounts.

The report also highlights the fundamental importance of national payments infrastructure to support a countries' ability to transact in financial services and so improve financial inclusion. The 'virtuous circle' arising from the 'broader adoption and usage of transaction accounts' is noted. Broader adoption and usage of transaction accounts 'can contribute to an improvement of the national payment system which in itself can further improve conditions for access and usage'.<sup>2</sup> For example, more people using the payment systems leads to a better expected return on investment as well as benefits from economies of scale and network externalities. This increased level of efficiency of the system overall is beneficial for users encouraging greater adoption and usage.

The report provides a framework in which the various stakeholders responsible for advancing financial inclusion through payments can operate. This framework involves the identification of:

- Key objectives for financial inclusion efforts from a payments angle;
- Core elements to be included in a framework for enhancing access to and usage of transaction accounts in order to support the achievement of the above key objectives; and
- Guiding principles for each of the core elements along with key actions to take in order to achieve the guiding principles.

Boxes 3—5 below summarise this framework.

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<sup>1</sup> The taskforce has invited consultation on this report and a final version of the report will be published following consultation.

<sup>2</sup> 'Payment Aspects of Financial Inclusion' (Consultative Report, Committee on Payments and Market Infrastructures, World Bank Group and Bank for International Settlements, September 2015) 54.

### Box 3: Key Objectives for Financial Inclusion Efforts – Payments Angle

All individuals and businesses to have and use at least one transaction account operated by a regulated payment service provider:

- (i) to perform most, if not all, of their payment needs;
- (ii) to safely store some value; and
- (iii) to serve as a gateway to other financial services.

‘Payment Aspects of Financial Inclusion,’ (Consultative Report, Committee on Payments and Market Infrastructures, World Bank Group and Bank for International Settlements, September 2015) 54.

### Box 4: Core Elements to Enhance Access to and Usage of Transaction Accounts

The Core Elements identified to support the achievement of the above key objectives comprise a number of ‘foundations/critical enablers’ which support ‘catalytic pillars/drivers’ that facilitate access to and promote wide usage of transaction accounts.

The foundations/critical enablers are:

- stakeholders’ commitment;
- the legal and regulatory framework; and
- the financial and information and communications technology (ICT) infrastructures.

The catalytic pillars/drivers to facilitate access to and promote wide usage of transaction accounts are:

- the transaction account and payment product design;
- readily available access points;
- financial literacy; and
- leveraging large-volume and recurrent payment streams for financial inclusion objectives.

‘Payment Aspects of Financial Inclusion,’ (Consultative Report, Committee on Payments and Market Infrastructures, World Bank Group and Bank for International Settlements, September 2015) 54.

## Box 5: Guiding Principles

The report sets out guiding principles for each of the core elements to provide broad-based guidance on the issues that the taskforce identified as highly relevant. A holistic approach in applying the guiding principles and key actions, with tailoring of their application to each country's stage of financial inclusion is recommended.

**Guiding principle 1: commitment**

*Commitment from public and private sector organisations to broaden financial inclusion is explicit, strong and sustained over time.*

**Guiding principle 2: legal and regulatory framework**

*The legal and regulatory framework underpins financial inclusion by effectively addressing all relevant risks and by protecting consumers, while at the same time fostering innovation and competition.*

**Guiding principle 3: financial and ICT infrastructures**

*Robust, safe, efficient and widely reachable financial and ICT infrastructures are effective for the provision of transaction accounts services, and also support the provision of broader financial services.*

**Guiding principle 4: transaction account and payment product design**

*The transaction account and payment product offerings effectively meet a broad range of transaction needs of the target population, at little or no cost.*

**Guiding principle 5: readily available access points**

*The usefulness of transaction accounts is augmented with a broad network of access points that also achieves wide geographical coverage, and by offering a variety of interoperable access channels.*

**Guiding principle 6: financial literacy**

*Individuals gain knowledge, through financial literacy efforts, of the benefits of adopting transaction accounts, how to use those accounts effectively for payment and store-of-value purposes, and how to access other financial services.*

**Guiding principle 7: large-volume, recurrent payment streams**

*Large-volume and recurrent payment streams, including remittances, are leveraged to advance financial inclusion objectives, namely by increasing the number of transaction accounts and stimulating the frequent usage of these accounts.*

'Payment Aspects of Financial Inclusion,' (Consultative Report, Committee on Payments and Market Infrastructures, World Bank Group and Bank for International Settlements, September 2015) 55-58.

The PAFI Taskforce's mandate and guiding principles are very broad and far-reaching in terms of the range of stakeholders required to embrace the principles so as to achieve the objectives. However, it represents the beginning of a coherent framework which may lay the groundwork for the eventual establishment of internationally accepted practices for advancing financial inclusion through payments.

## ***8.2 Operational Resilience of Digital Financial Service***

While many DFS are not yet operating on a scale that would threaten the stability of the broader financial system in a systemic risk sense, it is possible that significant disruptions in these systems could threaten consumer confidence leading to decreased usage of these systems or, in worst case scenarios, disruptions could result in small to moderate income households experiencing losses of funds. Such consequences would be contrary to the objectives of financial inclusion. Payments system oversight frameworks must take into account the importance of ensuring those who are vulnerable (the newly banked) do not suffer losses as a result of payment system disruptions. It is critical that the operational resilience of the DFS systems is assessed and risk-mitigating action taken where necessary.

As noted in chapter 1, DFS systems are essentially retail payment systems. DFS systems are subject to the same risks as more traditional payment systems such as Automated Clearing Houses (ACH). However, they may also, arguably, be more susceptible to risks such as cyber-attacks, as many DFS involves the use of infrastructure and technology which may not be considered as safe and secure as that used by more traditional payment systems.<sup>3</sup> Oversight frameworks must also be flexible to address new risks such as cyber-attacks.

## ***8.3 Data Analysis of Digital Financial Service***

To avoid stifling innovation, it is important to maintain a proportional risk-based approach with respect to the legal and regulatory requirements placed on payment service providers by payments system regulators. Such perspective can be achieved through data analysis. Data can be used to track the growth in the aggregate value of payment flows through DFS. This data on transaction values can be compared to the values passing through more traditional payment systems (such as ACHs which clear and settle payments arising from the use of instruments such as cheques, credit and debit cards and direct entry).<sup>4</sup> Data can also be collected on other usage aspects of DFS, such as the number of agents and the number of registered customers and active accounts. The Central Bank of Kenya, for example, collects data on the number of agents and the number of registered customers and

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<sup>3</sup> Tanai Khaonarong, 'Oversight Issues in Mobile Business' (IMF Working Paper WP/14/123, International Monetary Fund, July 2014) 22-23.

<sup>4</sup> Ibid 23: data collected in Kenya indicates that the mobile money systems are approaching the size of the ACH in terms of aggregate transaction values.

accounts.<sup>5</sup> Datasets including the aforementioned information will assist regulators in determining the level and type of payments system regulatory attention warranted by new DFS.

#### ***8.4 Interoperability between DFS***

DFS using stored-value generally exist as ‘closed-loop’ systems. This has proven important in terms of innovation; as providers do not need to rely on the cooperation of other financial service providers when designing and implementing their product and they have the first-mover advantage of locking users into their DFS. However, ‘closed-loop’ systems often serve a limited purpose and so users still need to transfer funds in and out of this system in order to conduct transactions for purposes outside that offered in the ‘closed-loop’ system. Interoperability between DFS can overcome this limited purpose problem.<sup>6</sup> Interoperability can unlock significant network benefits for providers, users and more broadly for the national payments infrastructure of the particular country in question. This would also benefit financial inclusion. However a balance between encouraging innovation and achieving network benefits is difficult to achieve.

There are many levels of interoperability—system-wide, cross-system and at an infrastructure level.<sup>7</sup> Central banks, in endeavouring to improve financial inclusion through interoperable networks, need to think and act strategically. Acknowledging the presence and importance of new payments players in the payments space and navigating the path towards open and interoperable systems will be challenging but is important and potentially productive of major improvements in financial inclusion.

Regulators need to consider overall policy objectives. Regulatory involvement is likely to be necessary to provide the drive towards interoperable systems so that the systems reach a critical mass and provide significantly greater access to financial services. Market forces left alone in this regard may result in duplicated networks, which is a waste of resources, particularly in countries where resources are limited.

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<sup>5</sup> Ibid.

<sup>6</sup> The PAFI Taskforce report defines interoperable systems as those that ‘enable the seamless interaction of two or more proprietary acceptance and processing platforms, and possibly even of different payment products, thereby promoting competition, reducing fixed costs, enabling economies of scale that help in ensuring the financial viability of the service, and at the same time enhancing convenience for users of payment services’. ‘Payment Aspects of Financial Inclusion,’ above n 2, 35.

<sup>7</sup> ‘Developing a Comprehensive National Retail Payments Strategy’ (Financial Infrastructure Series, Payment Systems Policy and Research, World Bank, 2012).

Regulators may ask: where to start? At a minimum we would recommend standardisation initiatives such as the adoption of ISO 20022 message standards to facilitate interoperability in payment systems.<sup>8</sup> As noted by the PAFI Taskforce, the adoption of such standards to improve efficiency and interoperability depends on ‘achieving a good level of cooperation among stakeholders for the definition and generalised adoption of all such standards’.<sup>9</sup> The Taskforce report includes a discussion of these concepts in the European Union in the context of the Single Euro Payments Area (SEPA) project.<sup>10</sup>

## ***8.5 Concluding Comments***

In the design of legal and regulatory frameworks, payments system regulators must now consider financial inclusion objectives alongside safety and efficiency objectives. Payments and payment services are critical to financial inclusion; without payments and payment services, financial services cannot be delivered. This chapter has highlighted issues of key importance for payments system regulators to consider when promoting DFS for financial inclusion purposes. The PAFI Taskforce report will continue to shape this discussion on the international stage, potentially laying the groundwork for the establishment of internationally accepted practices for advancing financial inclusion through payments. We urge regulators in emerging markets to remain closely engaged with this process to ensure practices do not become overly complex or burdensome for both regulators and industry.

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<sup>8</sup> The PAFI Taskforce report describes ISO 20022 as ‘a “recipe” proposed by ISO for the development of message standards in all domains of the financial industry. Thus, ISO 20022 is a standard for developing standards, so to speak. The most innovative characteristic of ISO 20022 is its modelling methodology, which decouples the business rules from the physical message formats. The models evolve with the business, while the formats evolve with the technology to benefit from the latest innovations. This results in the highest possible degree of automation, ease of implementation, openness and cost-efficiency’: ‘Payment Aspects of Financial Inclusion’ above n 2, 35, fn 57.

<sup>9</sup> Ibid 35-36.

<sup>10</sup> Ibid 36.

## Annex I: Glossary

**Agent banking:** A situation or an arrangement in which banks or non-bank providers use agents such as small shops or retail stores to provide cash-in and cash-out services on their behalf.<sup>1</sup>

**Automated clearing houses:** An interbank network that banks use to conduct retail electronic funds transfers with one another.

**Branchless banking:** The delivery of financial services outside bank branches, usually facilitated by the use of agents, mobile phones or other communication technologies.<sup>2</sup>

**Bank-led model:** A digital financial service business model under which a bank is the issuer of the e-money and the primary driver for the delivery of the service.<sup>3</sup>

**Cash-in:** Exchanging cash for e-money.<sup>4</sup>

**Cash-out:** Exchanging e-money for cash.<sup>5</sup>

**Collaboration risk:** Risks arising from the legal structure of a joint venture. For example, while the finances of each partner in a joint venture might be robust, the joint venture vehicle itself may be poorly capitalised and carry a real risk of insolvency.<sup>6</sup>

**Consumer risk:** Risks consumers are directly exposed to by their use of a service, such as fraud or breach of privacy.<sup>7</sup>

**Customer due diligence:** policies and procedures that set forth to obtain customer information and assess the information so as to detect and report suspicious activities.<sup>8</sup>

**Customer value proposition:** The benefits a product and service holds for a customer, and the reason why a customer might buy that product or service.<sup>9</sup>

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<sup>1</sup> Committee on Payments and Market Infrastructures and the World Bank Group (CPMI & WBG), 'Payment Aspects of Financial Inclusion – Consultative Report' (September 2015) 66, <<http://www.bis.org/cpmi/publ/d133.pdf>>.

<sup>2</sup> *Branchless Banking Diagnostic Template* (2010) CGAP, 1 <<http://www.cgap.org/sites/default/files/CGAP-Branchless-Banking-Diagnostic-Template-Feb-2010.pdf>>.

<sup>3</sup> *Guideline Note Mobile Financial Services: Basic Terminology* (2013) Alliance for Financial Inclusion (AFI), 4 <<http://www.afi-global.org/sites/default/files/publications/MFSWG%20Guideline%20Note%20on%20Terminology.pdf>>.

<sup>4</sup> Ross P Buckley and Louise Malady, 'The New Regulatory Frontier: Building Consumer Demand for Digital Financial Services—Part II' (2015) 132(1) *The Banking Law Journal* 52.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

<sup>8</sup> AFI, above n 3, 6.

<sup>9</sup> Buckley and Malady, above n 4.

**Digital financial services:** Financial services that are delivered through the use of extensive technologies available, including a broad range of providers, to a wide range of recipients using digital remote means, such as e-money, mobile money, card payments and electronic funds transfers. This is in contrast to traditional financial services accessed through physical means.<sup>10</sup>

**E-money:** Monetary value being electronically stored and recorded which has the following attributes: (i) issued upon receipt of funds in an amount no lesser in value than the value of the e-money issued; (ii) stored on an electronic device; (iii) accepted as a means of payment by parties other than the issuer; and (iv) convertible into cash.<sup>11</sup>

**Enabling regulation:** A set of regulatory initiatives and measures aimed at encouraging the formation and development of sustainable ecosystems for digital financial services. The common goals of enabling regulation include but are not limited to; establishing a level playing field, building consumer demand and collaborating regulators and industry players.

**Financial literacy:** Fundamental financial knowledge and skills that enable people to reach informed financial decisions and to learn how to use specific financial products, such as saving and calculating interests, using a credit card or applying for a loan.<sup>12</sup>

**Float:** The combined total amount of customers' stored value represented electronically or e-money.<sup>13</sup>

**Fund isolation:** Arrangements designed for isolating customers' funds from other funds of the provider or from funds that may be claimed by the provider's creditors.<sup>14</sup>

**Fund safeguarding:** Arrangements designed for ensuring that funds are available and accessible for customers to use.<sup>15</sup>

**Interoperability:** Technological and legal infrastructure that make possible the following: (1) platform-interoperability that enables users to send funds across different digital financial services providers; (2) agent-interoperability that allows agents to act on behalf of different services providers at the same time and (3) mobile network-interoperability that allows customers to access digital financial services irrespective of which mobile network operator the customer uses.<sup>16</sup>

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<sup>10</sup> Ibid.

<sup>11</sup> Adopted from AFI, above n 3, 4.

<sup>12</sup> CPMI & WBG, above n 1.

<sup>13</sup> 'Protection of the E-Money Float in Timor-Leste' (Internal paper and presentation by Louise Malady and Federico Lupo-Pasini to Banco Central de Timor-Leste, Timor-Leste, July 2015) (on file with authors).

<sup>14</sup> AFI, above n 3, 5.

<sup>15</sup> Ibid.

<sup>16</sup> Ross P Buckley and Louise Malady, 'Digital Financial Services for the Poor in the Pacific', currently with the Asian Development Bank to be published in-house, 22 (on file with authors).

**Know your customer:** Identification process and due diligence measures designed to check and determine a customer's true identity.

**Mass marketing:** A marketing strategy that aims to promote or sell a product or service to the entire market or at least to as many audiences as possible.

**Mobile banking:** Using mobile phones to access or deliver banking and financial services.

**Mobile money:** A type of e-money that can be transferred via mobile networks and recorded on the SIM cards of mobile phones.<sup>17</sup>

**Mobile network provider:** A licensed telecommunications company that provides wireless communication services through mobile devices.<sup>18</sup>

**Mystery shopping:** A technique used by service providers to measure quality of service or compliance with laws and regulations. It usually requires trained secret shoppers to disguise themselves as ordinary consumers and to visit stores and report back their observations to the service provider or the recruitment agency who hires them.

**Nonbank-led model:** A digital financial service business model under which a nonbank entity (usually a Mobile Network Provider) is the issuer of the e-money and the primary driver for the delivery of the product or service.<sup>19</sup>

**Payment service provider:** An entity that provides services relevant to payments, such as remittances or third-party payment processing.<sup>20</sup>

**Payment system operator:** An entity that operates a payment network or payment infrastructure.<sup>21</sup>

**Proportional regulation:** A set of regulations that is proportionate to the risks and benefits it intends to address and provide.

**Recourse mechanism:** A mechanism or a set of rules and procedures through which concerns or disputes raised by customers can be addressed and solved. Sometimes used synonymously with 'redress mechanism' in the context of digital financial services.

**Stored value:** The underlying funds which e-money represents. Stored value can be accessed and transferred using various payment methods involving mobile phones, the internet and prepaid cards.

**Transaction account:** Accounts held with banks or other licensed service providers, which can be used to make and receive payments. Transaction accounts can be further categorised into deposit transaction accounts and e-money accounts.<sup>22</sup>

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<sup>17</sup> AFI, above n 3, 3.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid, 4.

<sup>20</sup> CPMI & WBG, above n 1.

<sup>21</sup> Adopted from Ibid.

**Trust:** A legal relationship under which a person (the settlor), gives legal title in property to a 'trustee', who must then hold the property (the trust property) on behalf of the beneficiary (a third person), who holds the 'beneficial interest' in the property.<sup>23</sup>

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<sup>22</sup> Adopted from *ibid.*

<sup>23</sup> Frederic William Maitland, *Equity: A course of Lectures* (Cambridge University Press, 2<sup>nd</sup> ed, 1949), 44 and Jonathan Greenacre and Ross P Buckley, 'Using Trusts to Protect Mobile Money Customers' 2014 *Singapore Journal of Legal Studies* 66.

## Annex 2: Model Trust Deed

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[This model Trust Deed will use the fictional “E-Mobile Pacific” company and its “MobilePAC” service to outline the operation of this Model Trust Deed].

This Trust Deed is made on the date of [\_\_\_\_\_] between:

[E-Mobile Pacific] (as **Settlor and Trustee**); and

The Central Bank of [\_\_\_\_\_] in its capacity as the Protector.

#### ***Background:***

- a) E-Mobile Pacific operates an electronic mobile money service under the name of “MobilePAC”.

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<sup>24</sup> The Model Trust Deed is from a knowledge product we prepared earlier, ‘Trust Law Protections for E-Money Customers’ (Special Reports, AFI, February 2014), available from [here](#).

- b) E-Mobile Pacific may enter into contractual arrangements with Customers to provide this service.
- c) A Customer may purchase E-Money with Conventional Money. The amount of E-Money purchased is equal in value to the Conventional Money paid to E-Mobile Pacific and that amount shall be held by E-Mobile Pacific on trust on the terms of this Trust Deed.
- d) The money received from Customers for E-Money may be combined and held by E-Mobile Pacific in one or more bank accounts as required by this Trust Deed.
- e) Using mobile phone technology, the Customer may transfer and receive E-Money, redeem it for Conventional Money or use it for other purposes as provided for in the contract with E-Mobile Pacific.
- f) It is intended that at all times the balance of the E-Money of a Customer shall match the amount of Conventional Money held in respect of the customer in the Trust Fund.
- g) There may be charges payable by Customers in relation to the operation of the System which may include payments to agents in the system who amongst other functions, act as an intermediary with a cash-in/cash-out function, and E-Mobile Pacific who operates the service. These charges will be credited to the charge-receiving party in E-Money and debited from the charge-paying Customers' E-Money account. The amount of these charges will be specified in contracts between the relevant parties.
- h) This Trust Deed sets out the terms of the Trust under which the Conventional Money received from Customers is held and shall be known as the MobilePAC Trust.

**It is agreed** as follows:

## **1. Definitions**

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In this Trust Deed, including the Background, the terms below have the following meanings:

**Agent** means a person who has entered into an E-Mobile Pacific Agent Agreement with E-Mobile Pacific.

**Agent Agreement** means the agreement entered into by an Agent for the supply and provision of the Mobile Money Service as an agent for E-Mobile Pacific.

**Appointer** means E-Mobile Pacific.

**Beneficiaries** means the Customers of the MobilePAC Mobile Money Service, from time to time.

**Business day** means a day on which banks are open for business in [\_\_\_\_\_] [name of country].

**Conventional Money** means non E-Money either in its physical form, cheque or held in a bank account [e.g. PNG Kina].

**Customer** means a person who holds E-Money under the MobilePAC Mobile Money Service.

**E-Money** means an electronic value which reflects a customer credit, which is owed by the Trustee to the Customer. This credit balance can be transferred between Customers of the Mobile Money Service, or redeemed for Conventional Money.

**Mobile Money Service** means a mobile based transaction service that allows the transfer of electronic value in the form of E-Money. **Protector** means the institution defined in sub-clause 8.1.

**Trustee** means a person who has been appointed pursuant to the declaration of trust in this Trust Deed, or any new Trustee appointed under the terms of this Trust Deed.

**Trust Fund** means:

- (a) The funds initially transferred to the Trustee by the Settlor;
- (b) All amounts of Conventional Money that the Customers of the Mobile Money Service provide to the E-Mobile Pacific from time to time; and
- (c) All interest earned on the amounts described in (b).

**Trust Deed (or Instrument)** means this Deed, and any subsequent amendment or revocation of this Deed.

**Unclaimed Monies** is defined in sub-clause 7.4(a).

## **2. Establishment of Trust Fund**

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### **2.1. Conventional Money to be Placed into Trust Fund**

- (a) All Conventional Money received from Customers in exchange for an equal amount of E-money in respect of the Mobile Money Service must be:
  - a. Held in trust; and
  - b. As soon as practicable, paid into the Trust Fund.
- (b) In the event that E-Mobile Pacific is replaced as Trustee of the Trust Fund, E-Mobile Pacific must:
  - a. Transfer the Trust Fund to the care of the new Trustee; and
  - b. Ensure that all Conventional Money received from Customers in respect of the Mobile Money Service must be:
    - i. Held in trust; and

- ii. As soon as practicable, paid into the Trust Fund.
- (c) E-Mobile Pacific will make all reasonable efforts to ensure that its Agents comply with sub-clauses 2.1(a) and 2.1(b).

## **2.2. Customers' Interest in Trust Fund**

The Customers' interest in the Trust Fund is equivalent to the following:

$$(A/B) \times C$$

Where:

- A is the customer's balance of E-money at any particularly point in time;
- B is the total amount of E-money on issue; and
- C is the value of the Trust Fund including interest earned on the Fund, subject to clause 6.

## **3. Operation of Trust**

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### **3.1. The Trustee**

E-Mobile Pacific is the Trustee of this Deed.

### **3.2. Declaration of Trust**

The Trustee declares that:

- (a) It holds the Trust Fund on trust for the benefit of the Beneficiaries; and
- (b) The Trust Fund will be maintained and applied by the Trustee subject to the powers and provisions of this Trust Deed.

## **4. Application of Trust Fund**

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### **4.1. Establishment of Bank Account**

For the purpose of holding and investing the Trust Fund:

- (a) The Trustee must establish and maintain at least one deposit account at a prudentially regulated banking institution; and
- (b) The Trustee may open more than one deposit account at any number of prudentially regulated banking institutions.

## **4.2. Payment of Trust Fund**

- (a) The Trustee must pay all monies held in the Trust Fund into the account or accounts established under sub-clause 4.1., as soon as reasonably practicable, and all money that comprises the Trust Fund from time to time;
- (b) The Trustee may apply the money in the Trust Fund between any of the accounts specified in sub-clause 4.1.

## **4.3. Unauthorised Payments**

The Trustee must not deal with the money otherwise than in accordance with this Trust Deed and the contract with the Customer.

# **5. Trustee Duties' to Maintain Balanced Account**

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## **5.1. Balance of E-Money to Money held in Trust Fund**

The Trustee must ensure that at all times the amount of money held in the Trust Fund is at least equal to the amount of outstanding credits owed to Customers in the form of E-Money.

## **5.2. Duty to Correct Shortfall**

- (a) To the extent to that there is a shortfall in the amount of Conventional Money held in the Trust Fund relative to the total value of E-Money held by Customers, the Trustee must pay into the Trust Fund sufficient money to comply with sub-clause 5.1.
- (b) The Trustee must correct any shortfall under this clause 5 within one business day of discovering that shortfall.

# **6. Entitlement to Interest from Trust Fund**

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## **6.1 Application of Interest from Trust Fund**

The Trustee must apply the interest earned on the Trust Fund, at least once every three calendar months.

## **6.2 Order of Application of Interest**

Any interest earned in the Trust Fund must be applied in the following way and following order of priority:

- (a) Pay any operating expenses of the Trust Fund including any bank fees;
- (b) Pay the reasonable remuneration of the Trustee;

- (c) Any remaining balance must be paid to E-Mobile Pacific.

### **6.3 Remuneration and Operating Costs of Trustee**

For the avoidance of doubt, this clause 6 means the Trustee can be remunerated for operating fees and for services rendered in operating the Trust Fund.

### **6.4 Limitations of Remuneration**

The amount of remuneration that may be paid to the Trustee unclear this clause 6 may not exceed the amount of interest available from the Trust Fund.

### **6.5 Instance in Which E-Mobile Pacific is not Trustee**

In the event that E-Mobile Pacific is replaced as Trustee of the Trust Fund, any remaining interest will be transferred to the new Trustee.

## **7. Entitlement to Redeem E-Money**

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### **7.1. The Entitlement of the Customer**

If a Customer is entitled, in accordance with the terms and conditions of a customer contract with E-Mobile Pacific, to exchange E-Money for Conventional Money, the Trustee must, upon notification of the debit and cancellation of E-Money, transfer an equivalent amount of Conventional Money to the Customer or as the Customer directs.

### **7.2. The Death of a Customer**

In the event of the death of a Customer, the Trustee must, on the production of appropriate documentation showing the person as the legal representative, recognise a legal representative of a deceased Customer and the person legally entitled to the interests of the Customer as a person who may exercise the power under sub-clause 7.1.

### **7.3. The Bankruptcy or Liquidation of a Customer**

In the event of bankruptcy or liquidation of a Customer, the Trustee must recognise a trustee in bankruptcy or liquidator of the Customer, or the person legally entitled to the interests of a Customer as a person who may exercise the power under sub-clause 7.1.

### **7.4 Unclaimed Monies**

- (a) Any monies held by the Trustee in the Trust Fund for more than two years that have not been redeemed by a Customer are "Unclaimed Monies" for the purposes of this Trust Deed.

- (b) The Trustee must make reasonable efforts to locate the Customer who is entitled to the Unclaimed Monies.
- (c) After making such efforts in sub-clause 7.4(b), the Trustee must transfer such monies to [\_\_\_\_\_] [insert name of Government agency that handles unclaimed monies in trust funds and bank accounts].

## **8. The Protector**

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### **8.1. The Protector**

The Protector shall be the Central Bank of [\_\_\_\_\_].

### **8.2. Duties of the Protector**

The Protector must:

- (a) Consider the appropriateness of any act before exercising any of its powers;
- (b) Exercise its power to protect the best interests of the Beneficiaries as a whole; and
- (c) Not exercise a power conferred in a manner inconsistent with the purpose of providing this power.

### **8.3. Powers of the Protector**

The Protector may, but is not required to, enforce the terms of the Trust on behalf of the Beneficiaries.

### **8.4. Powers of the Protector**

Without limiting the powers that the Protector may have in law or otherwise, the powers include the following:

- (a) Review audits obtained through sub-clause 9.3;
- (b) Refuse to agree to the Trustee's application to amend the Trust Deed under sub-clause 10.4;
- (c) Refuse to provide consent to the Trustee's proposed application to terminate or wind up this Trust Deed under sub-clause 11.4;
- (d) Refuse in writing to provide consent to the Trustee's proposed application to appoint a new person as a new Trustee under sub-clause 12.4;
- (e) Remove and appoint Trustees under Clause 13; and
- (f) Enforce the terms of Trust Deed, and is authorised to take legal proceedings for this purpose on behalf of the beneficiaries.

## **9. Accounts for Trust Fund**

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### **9.1. Books of Account**

The Trustee must ensure that proper books of account are kept in regard to the Trust and the Trust Funds according to accounting standards which are generally accepted, or required by law.

### **9.2. Audit**

The Trustee must ensure that the financial affairs of the Trust Fund are audited by a registered auditor at least once each financial year and at intervals of twelve months or less.

### **9.3. Oversight of Accounts**

The Trustee must provide the Protector with:

- (a) The audited statement produced pursuant to sub-clauses 9.1 and 9.2; and
- (b) A written statement at least once a month which outlines the balance of the bank accounts holding the Trust Fund and the amount of E-Money in circulation.

## **10. Amendment of Trust Deed**

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### **10.1. Trustee Power to Amend Instrument**

This Trust Deed may be amended by a later Instrument executed by the parties to this Deed.

### **10.2. Amendment Cannot Be Adverse to Beneficiaries**

No amendment to the Trust Deed is permitted if its effect would be adverse to the Beneficiaries, unless the Protector authorises such amendment.

### **10.3. Application to Protector**

Before exercising the power under sub-clause 10.1, the Trustee must:

- (a) In a written application to the Protector, detail the manner in which it proposes to amend this Trust Deed;
- (b) Obtain the written consent of the Protector to amend this Trust Deed.

### **10.4. Refusal by the Protector**

- (a) The Protector may refuse in writing to provide consent to the Trustee's proposed application to amend this Trust Deed.
- (b) The Protector must provide reasons for its refusal under cause 10.4(a) no later than

five business days after notifying the Trustee of such refusal.

## **II. Termination of the Trust Deed**

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### **11.1. Perpetuities and Accumulations**

Subject to the terms of this clause, the Trustee may hold the Trust Funds for a period of [\_\_\_\_\_] years less one day from the date of execution of this Trust Deed [Requires the perpetuities law in the jurisdiction].

### **11.2. Trustee May Terminate the Trust Deed**

Further to any other powers provided by law, the Trust Deed may be terminated in the following circumstances:

- (a) E-Mobile Pacific suspends or has suspended, or ceases to offer or provide the Mobile Money Service; or
- (b) E-Mobile Pacific becomes insolvent or is otherwise unable to repay debts to creditors; or
- (c) The Trustee applies to terminate the Trust Deed, and the Protector agrees to such termination.

### **11.3. Application to Protector**

In obtaining the written consent of the Protector under sub-clause 11.2(c), the Trustee must in a written application to the Protector, detail the request to terminate this Trust Deed.

### **11.4. Refusal by the Protector**

The Protector may refuse in writing to provide consent to the Trustee's proposed application to terminate Trust Deed.

### **11.5. Termination of the Trust Deed**

On termination of the Trust Fund, the Trustee must pay each Customer their beneficial interest in the Trust Fund as calculated under clause 2.2.

## **12. E-Mobile Pacific Power to Appoint New Trustee**

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### **12.1. Power to Appoint and Remove Trustees**

The Appointer may:

- (a) Remove a Trustee; and

- (b) Appoint a new Trustee.

## **12.2. Limitations on this Power**

The Appointer in exercising the power in sub-clause 12.1 must:

- (a) Ensure that the new Trustee is a corporation of good standing and that it is under the control of fit and proper persons; and
- (b) Obtain the written consent of the Protector to appoint a new person as the new Trustee of the Trust.

## **12.3. Application to Protector**

In obtaining the written consent of the Protector under 12.2(b), the Trustee must in a written application to the Protector, detail the request to appoint a new person as a new Trustee of the Trust.

## **12.4. Refusal by the Protector**

- (a) The Protector may refuse in writing to provide consent to the Trustee's proposed application to appoint a new person as a new Trustee.
- (b) The Protector must provide reasons for its refusal under cause 12.4(a) to the Trustee no later than five business days after notifying the Trustee of such refusal.

# **13. Protector Power to Remove Trustee**

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## **13.1. Removal of Trustee**

The Protector may remove a Trustee if the Protector reasonably believes that:

- (a) A Trustee is not complying with the terms of the Trust Deed, or any other duties according to law; and/or
- (b) A Trustee is not a corporation of good standing or is not under the control of people who are fit and proper to control the Trustee.

## **13.2. Notice Period**

The following procedure must be followed before the Protector can exercise its powers in sub-clause 13.1:

- (a) The Protector must notify the Trustee in writing that it (the Trustee) is:
  - (i) Not complying with the terms of the Trust Deed, or any other duties according to law; and/or
  - (ii) Not a corporation of good standing or is not under the control of people who are fit and proper to control the Trustee.
- (b) Five business days must have passed since the Protector notified the Trustee under sub-clause 13.2(a), during which time, in the Protector's opinion, the Trustee has not

remedied the grounds for removal listed in sub-clauses 13.1(a) and/or 13.1(b).

### **13.3. Appointment of New Trustee**

If the Protector exercises the power in sub-clause 13.1, it must appoint a new Trustee which is a corporation of good standing under the control of fit and proper persons.

## **14. General Provisions**

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### **14.1. Governing Law**

This Deed is governed by the laws of [\_\_\_\_\_].

### **14.2. Severability of Provisions**

If part or all of any clauses in this Deed are illegal or unenforceable the offending clause or part thereof may be severed from this Deed and the remaining clauses of this Deed will remain in effect.

## **SIGNATURE PAGE**

To be inserted in accordance with local rules and regulations.

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