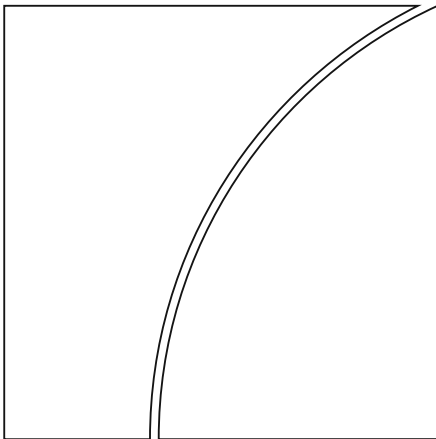


Committee on
Payments and Market
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Payment aspects of
financial inclusion

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Acronyms and abbreviations

ACH	automated clearing house
AFI	Alliance for Financial Inclusion
AML	anti-money laundering
ASEAN	Association of Southeast Asian Nations
ATM	automated teller machine
B2B	business-to-business
B2G	business-to-government
B2P	business-to-person
BIS	Bank for International Settlements
CDD	customer due diligence
CEMLA	Center for Latin American Monetary Studies
CFT	countering/combating the financing of terrorism
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems (now CPMI)
CRSP	credit reporting service provider
ECB	European Central Bank
e-commerce	electronic commerce
EEA	European Economic Area
EFT	electronic funds transfer
e-government	electronic government
e-ID	electronic identification
EMD	Electronic Money Directive
EMI	electronic money institution
e-money	electronic money
EU	European Union
FAS	Financial Access Survey
FATF	Financial Action Task Force
FDIC	Federal Deposit Insurance Corporation (United States)
FIAP	Financial Inclusion Action Plan (G20)
FIDWG	Financial Inclusion Data Working Group
FIEG	Financial Inclusion Experts Group
G20	Group of Twenty
G2B	government-to-business
G2G	government-to-government

G2P	government-to-person
GIS	geographic information system
GPII	Global Partnership for Financial Inclusion
HKMA	Hong Kong Monetary Authority
ICT	information and communication technology
ID	identification
IMF	International Monetary Fund
ISO	International Organization for Standardization
IT	information technology
KPI	key performance indicator
KYC	know your customer
MNO	mobile network operator
MTO	money transfer operator
NFC	near field communication
NPC	national payments council
NPS	national payments system
OECD	Organisation for Economic Co-operation and Development
P2B	person-to-business
P2G	person-to-government
P2P	person-to-person
PAFI	payment aspects of financial inclusion
PI	payments institution
POS	point of sale
PPI	prepaid payment instrument
PSD	Payment Services Directive
PSO	payment system operator
PSP	payment service provider
RBI	Reserve Bank of India
RSP	remittance service provider
RTGS	real-time gross settlement
SEPA	Single Euro Payments Area
SME	small and medium-sized enterprise
SSB	standard-setting body
SVF	stored-value facility

UFA	universal financial access
USSD	unstructured supplementary service data
VAT	value added tax
WB	World Bank
WBG	World Bank Group

Foreword

In recent years, a number of reports have been prepared by organisations on financial inclusion, a topic whose importance is increasingly being recognised. However, few of these reports have addressed what may be called the “payment aspects” of financial inclusion. In cases where the topics of payment systems and payment services have been raised in the context of financial inclusion, discussion has focused only on specific aspects of payments, such as mobile payments, rather than on the payment system in its entirety. Understanding payments in a holistic sense, including how individual elements relate to one other, is crucial to an understanding of financial inclusion and to promoting broader access to and usage of financial services.

This report provides an analysis of the payment aspects of financial inclusion, on the basis of which it sets out guiding principles designed to assist countries that seek to advance financial inclusion in their markets through payments. The report was first issued in September 2015 as a consultation document, and we are very grateful to the people who provided comments. As a result of the comments, we have made changes to the report to strengthen the analysis and sharpen the message.

The report has been prepared for the Committee on Payments and Market Infrastructures (CPMI) and the World Bank Group by a task force consisting of representatives from CPMI central banks, non-CPMI central banks active in the area of financial inclusion and international financial institutions. The CPMI and the World Bank Group are very grateful to the members of the task force and its co-chairmen, Massimo Cirasino (World Bank Group) and Marc Hollanders (Bank for International Settlements), for their excellent work in preparing this report.

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Committee on Payments and Market Infrastructures

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Executive summary

The CPMI-World Bank Group Task Force on the Payment Aspects of Financial Inclusion (PAFI) started its work in April 2014. The Task Force was mandated to examine demand and supply side factors affecting financial inclusion in the context of payment systems and services, and to suggest measures that could be taken to address these issues.

This report is premised on two key points: (i) efficient, accessible and safe retail payment systems and services are critical for greater financial inclusion; and (ii) a transaction account is an essential financial service in its own right and can also serve as a gateway to other financial services. For the purposes of this report, transaction accounts are defined as accounts (including e-money/prepaid accounts) held with banks or other authorised and/or regulated payment service providers (PSPs), which can be used to make and receive payments and to store value.

The report is structured into five chapters. The first chapter provides an introduction and general overview, including a description of the PAFI Task Force and its mandate, a brief discussion of transaction accounts, and the barriers to the access and usage of such accounts. The second chapter gives an overview of the retail payments landscape from a financial inclusion perspective. The third chapter forms the core analytical portion of the report and outlines a framework for enabling access and usage of payment services by the financially excluded. Each component of this framework is discussed in detail in the report.

The fourth chapter of the report describes the key policy objectives when looking at financial inclusion from a payments perspective, and formulates a number of suggestions in the form of guiding principles and key actions for consideration.

In this context, financial inclusion efforts undertaken from a payments angle should be aimed at achieving a number of objectives. Ideally, all individuals and businesses – in particular, micro-sized and small businesses - which are more likely to lack some of the basic financial services or be financially excluded than larger businesses – should be able to have access to 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.

The guiding principles for achieving these objectives of improved access to and usage of transaction accounts are the following:

- Commitment from public and private sector organisations to broaden financial inclusion is explicit, strong and sustained over time.
- 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.
- 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.
- The transaction account and payment product offerings effectively meet a broad range of transaction needs of the target population, at little or no cost.
- 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.

- Individuals gain knowledge, through awareness and 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.
- 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.

Finally, the fifth chapter of the report addresses a number of issues in connection with measuring the effectiveness of financial inclusion efforts in the context of payments and payment services, with a particular emphasis on transaction account adoption and usage.

1. Introduction and general overview

1.1 Financial inclusion, payments and the role of the CPMI-WBG Task Force

1. Over the last decade, many national authorities have engaged in efforts to improve financial inclusion in their respective countries. National and international organisations have been contributing to these efforts through various means, by collecting experiences, developing specific knowledge and providing guidance, among other activities.

2. Simply put, financial inclusion may be interpreted as having access to and using the type of financial services that meet the user's needs. A small farmer, for example, might find the services of a money transfer operator or a mobile money account for person-to-person funds transfers sufficient to meet his/her specific needs at a certain point in time. In contrast, the person next door may operate a small business and may need a larger variety of financial services, such as the ability to accept non-cash payments from customers, a savings or investment account in which to deposit the proceeds of the business, and probably even a form of credit. While the need for and use of financial services by the latter may be higher than that of its neighbour, this rather simple conceptualisation of financial inclusion would regard both households as "financially included".

3. The real needs for financial services of individuals, businesses¹ and public administrations² are, however, likely to be higher than is apparent from the actual use of a specific financial service at a given point in time. In addition, those needs tend to change over time. In this sense, a more desirable steady state for financial inclusion would entail universal access to a wide range of financial services that can be used when and as needed.

4. Beyond achieving access, there is also the key issue of whether a financial service is actually valuable to its users, which is very often reflected in how frequently that service is used.

5. Based on a number of indicators, the World Bank *Global Financial Development Report 2014* suggests that access to and usage of financial services has been "slowly, but steadily, expanding over time". However, there is still much room for improvement. For example, the Global Findex Database 2014 shows that nearly 40% of the adult population worldwide – about 2 billion people – still do not have a formal account for payments (ie with an authorised payment service provider). In low-income countries, the percentage is significantly higher than the global average.

6. In this context, the Committee on Payments and Market Infrastructures (CPMI) at the Bank for International Settlements (BIS) and the World Bank Group (WBG) created a task force to analyse the role of payments and payment services in financial inclusion.

7. Payments 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.³ The objective of the CPMI-WBG Task Force is to analyse, in detail, these links between payments and financial inclusion, building on the work

¹ When referring to businesses, this report focuses on micro-sized and some small businesses, which are more likely to lack some of the basic financial services or be financially excluded than larger ones.

² Some public administrations, especially at the local level, also face challenges in accessing financial services. However, this report focuses on the challenges faced by individuals and micro-sized and small businesses. Hence, the challenges public administrations may face in their role as users of financial services will not be discussed in the remainder of this report.

³ In fact, practically all of these services (ie credit, savings and investments) are tied or linked to transaction accounts.

already carried out by each of these institutions⁴ and by other relevant bodies,⁵ and to come up with a set of guiding principles aimed at advancing financial inclusion worldwide.

1.2 Transaction accounts: the cornerstone for providing electronic payment services

8. People worldwide have a need to make and receive payments in their daily lives. Banknotes and coins (hereinafter “cash”) are one of the instruments available for this purpose, although they are not well suited for some payment transaction types.⁶ Electronic payment services have been developed by banks and a variety of other PSPs both to address the limitations of cash as a payment instrument and to provide new opportunities for increased speed, safety, convenience and other relevant features in a rapidly changing world.

9. Most of these electronic payment services are based on an account which acts as the funding source for the corresponding payment or payments being made, and to which the funds from payments received are credited. In addition to payments, these accounts, referred to as “transaction accounts” in this report, also offer the possibility of storing monetary value with a bank or other PSP. Indeed, transaction accounts typically require that sufficient funds be available in the account in order for payments to be made and, as a result, inherently require some level of monetary value to be stored in the account for some period. While cash is, by its own nature, a store of value, banks and other service providers can provide money safekeeping in ways that are safer, more convenient and in general more effective for their customers.⁷

10. All deposit accounts held with banks and other authorised deposit-taking financial institutions,⁸ referred to in this report as “deposit transaction accounts”,⁹ that can be used for making and receiving payments qualify as transaction accounts. Prepaid instruments based on e-money, referred to as “e-money accounts”, can be offered by banks and other authorised deposit-taking financial institutions, as well as by authorised non-deposit-taking PSPs such as mobile network operators (MNOs). In this case, the payments function is often the key selling proposition, and they therefore also qualify as transaction accounts. As payment products, both types of transaction account offer the same basic functionalities, ie to make and receive payments and to store value. However, beyond that basic service offering there can be significant differences between the two types of transaction account as well as within each type. Transaction accounts and other relevant elements of retail payments are analysed in further detail in Chapter 2.

1.3 Financial inclusion efforts from a payments perspective

11. The wide adoption of transaction accounts will, from a payments perspective, have a number of important effects, both for the individuals gaining access to financial services and for the country’s national

⁴ Some of the recent work of the CPMI in the area of retail payments includes the reports *Innovations in retail payments* (2012) and *Non-banks in retail payments* (2014), while recent reports of the WBG include the *General Guidelines for the Development of Government Payment Programs* (2012) and a series of other documents published as part of the so-called *Retail payments package* (2012). In addition, in 2007 both institutions jointly issued the *General principles for international remittance services*. Additional CPMI and WBG publications are listed in the References section of this report. See also www.bis.org/list/cpmi/index.htm and <http://www.worldbank.org/en/topic/paymentssystem/remittances>.

⁵ The References section also lists publications in the area of financial inclusion from other Task Force member institutions and from other organisations.

⁶ Such as remote payments. The various payment transaction types are explained in detail in Chapter 2 of this report.

⁷ For example, some transaction accounts pay interest.

⁸ Depending on the specific legal framework, this could include credit unions, savings and loans associations, and cooperatives.

⁹ These accounts are known in some countries as current accounts, chequing accounts or other similar terms.

payment system. Financial inclusion efforts therefore are not only beneficial for those that will become financially included, but also for the national payments infrastructure and, ultimately, the economy.

12. As mentioned in Section 1.2, transaction accounts can help individuals and businesses in managing their daily financial affairs. For this reason, transaction accounts are an essential financial service. Access, in the sense of having a transaction account and the ability to use it, is a precondition, but it does not guarantee actual usage of that account. At the core, regular usage of payment and other financial services is a consequence of those services fulfilling customer needs as regards pricing, product features and physical and/or remote accessibility.

13. While of utmost importance, access to and usage of a transaction account to facilitate payments and to store value is just an initial step in becoming fully financially included, which involves having access to the whole range of financial products and services that meet the user's needs. For individuals, for example, credit, insurance, savings and investments are, together with transaction accounts, key elements of the overall package of financial services.

14. In this regard, an additional noteworthy feature of transaction accounts is that some of them may, under certain circumstances, facilitate access to broader financial services. For example, often the underlying PSP itself provides some or even all of those other financial services, and by operating the transaction account, it can more easily obtain some of the key information it needs to offer those additional services, such as whether the customer has a regular income flow. At the same time, payment patterns of the holders of transaction accounts may be used to help in establishing a financial transaction profile of the end user. The transaction account can also play an important operational role in facilitating the repayment of loans and other financial services that are paid in instalments – for example, through the possibility of making a periodical direct debit to the account.¹⁰

15. Furthermore, broader adoption and usage of transaction accounts and in general higher levels of financial inclusion can positively affect a country's national payments system (NPS)¹¹ from at least three perspectives. First, continuous modernisation and improvement of payment systems and services requires significant upfront investments, and a crucial element to determine whether such investments are financially viable is the frequency or intensity with which the upgraded/new systems and services are expected to be used. Broader adoption and usage of transaction accounts increases the viability of such investments. Second, the channelling of larger volumes of payments through transaction accounts increases the overall efficiency of the NPS.¹² Finally, payments-related legal reforms that originated in financial inclusion goals can also trigger positive developments for the NPS as a whole. All these positive effects can, in turn, further improve conditions for access to and usage of transaction accounts, therefore resulting in a virtuous circle.

1.4 Barriers to transaction accounts access and usage

16. Multiple factors can adversely affect access to transaction accounts and their regular use. The most relevant ones are high fees in connection with transaction accounts as well as high indirect costs (eg the cost of transportation to a branch or other point of service), low income levels of large segments of a country's

¹⁰ In some cases, for salaried individuals the direct debit is executed on payday, even before those funds are released to the account holder.

¹¹ The term "national payment system" as used in this report encompasses all payment-related activities, processes, mechanisms, infrastructure, institutions and users in a country.

¹² For example, increasing the volume of electronic payments helps payment infrastructures benefit from economies of scale and network externalities. These and other relevant concepts of payments markets are discussed in further detail in Chapter 2 of this report.

population, economic and labour informality, insufficient attention to gender-specific aspects, religious and cultural needs and beliefs, limited awareness and financial literacy, transaction account/payment product design that fails to meet the needs of the different types of end users, and a perception on the part of users that transaction accounts are unsafe. All these factors can act in practice as barriers to the adoption and regular usage of transaction accounts. Box 1 illustrates how some of these factors reflect in the adoption of bank accounts in the United States. Each of these barriers is then described in further detail below.

Box 1

Unbanked households in the United States

Reasons for not having a bank account

While it is generally known that access to transaction accounts is a challenge in low-income and medium-income countries, it is not always recognised that, even in high-income countries, a substantial share of the adult population is unbanked. In the United States, 16.7 million adults or 6.7% of the adult population (ie 16 years and older) were unbanked in 2013 and an additional 50 million adults (20% of the adult population) were underbanked.^{13, 14}

Unbanked households in the United States cited both economic and attitudinal reasons for remaining outside the banking system. A majority (57.5%) of unbanked households reported not having enough money to keep in an account or to meet a minimum balance as one reason they did not have an account, and slightly more than one third (35.6%) of all unbanked households reported this to be the main reason. Roughly one in three (34.2%) unbanked households reported their dislike of or distrust in banks as one reason they were unbanked and slightly more than one in seven (14.9%) unbanked households reported this to be the main reason.

Almost one in three unbanked households (30.8%) reported high or unpredictable account fees as one reason they did not have accounts and about 13% (13.4%) of unbanked households reported this to be the main reason. Previously banked households (almost one in five or 17.7%) were more likely to say high or unpredictable fees were the main reason they were unbanked compared with households that never had an account (almost one in 10, or 9.8%).

Sources: US Census Bureau; US Federal Deposit Insurance Corporation (FDIC).

1.4.1 High fees and low income levels

17. Fixed costs represent an important share of total costs for PSPs.¹⁵ Opening and maintaining transaction accounts entails fixed costs for PSPs, such costs being largely independent of the number and size

¹³ The “unbanked” are defined by the FDIC as those that do not have an account at an insured depository institution, the “underbanked” as those that do have an account at an insured depository institution but used at least one financial service, such as cheque cashing, remittance services, money order or a payday loan, from an “alternative” financial service provider in the prior 12 months. Alternative service providers refer to financial service providers that are not federally insured deposit-taking institutions; these include small retail outlets such as grocery stores, larger retail stores, post offices, pawnshops, rent-to-own stores and money transfer operators (MTOs).

¹⁴ In the case of the European Union (EU), the European Commission estimates that around 58 million individuals over the age of 15 do not have a transaction account. These 58 million individuals represent nearly 17% of the total population in the EU that is 15 or older.

¹⁵ Fixed costs stem from the operation of physical branches and from the usage of technological platforms and of legal, accounting and security services, among other sources. For regulated service providers, other sources of fixed costs include regulatory costs and the fixed costs to access financial infrastructures, such as interbank payment systems. Fixed costs in turn are affected by other variables, such as the conditions of the overall telecommunications infrastructure or the cost of enforcing contracts.

of payment transactions the customer makes. Consequently, in order to recover such fixed costs, PSPs will often charge a fee which generally has little or no relation to the number and value of payment transactions entered into by account holders.¹⁶

18. In practice, many PSPs price their transaction account services on the basis of a fixed periodic fee, often monthly, which may include some basic services such as funds transfers within the same institution or a number of cash withdrawals at automated teller machines (ATMs) operated by the same institution.¹⁷ Very often the monthly fee is waived if the account holder maintains a certain minimum monthly balance in the account.¹⁸

19. The size of the fixed monthly fee (and of some of the variable/per-transaction fees) depends on a number of factors. For example, a small financial system may not be able to reap the necessary economies of scale and network externalities to operate on an efficient scale.¹⁹ As a result, it may be trapped in a suboptimal equilibrium characterised by high average costs per account and low usage (ie few clients and few transactions).²⁰

20. Other relevant factors that can result in high fees include little competition in the market for payment services, including significant barriers to entry for new PSPs (eg lack of access to infrastructure or high prudential requirements), underdeveloped basic infrastructure and high sunk costs (eg as a result of lack of interoperability of infrastructures).

21. High fees affect all end users, although their negative impact is magnified for those with a low income. On the one hand, these end users may lack the minimum monthly balances, on a stable basis, that would be needed to avoid paying the fixed monthly fee or account maintenance fee. On the other hand, high per-transaction fees have a proportionately larger impact on small-value payments, which with few exceptions are the ones that low-income end users make. Hence, an important share of individuals, and micro-sized and small businesses may not be able to afford the costs of opening, maintaining and operating a transaction account.²¹

1.4.2 Indirect costs

22. In addition to their impact on fees, high fixed costs also adversely affect the geographical coverage of PSPs. For example, banks and other PSPs will not open a branch or put an ATM in smaller towns if there is not sufficient market potential (eg enough demand for transaction accounts) to cover the fixed costs of setting up and running that infrastructure on an ongoing basis. Limited coverage/permeability of PSPs, in turn, raises

¹⁶ In some countries, certain types of accounts carry no explicit fees. In such cases, PSPs recover the costs through cross-selling other products, or the underlying costs are paid by someone other than the customer (eg a government agency operating a cash transfer programme). Also, in some countries banks are required by law to offer a specific type of account that carries no fees for customers. The latter case is discussed in further detail in Section 2.2 of this report.

¹⁷ Additional services (eg funds transfers to other PSPs) are normally charged separately, often on a per-transaction basis.

¹⁸ The service provider can invest those funds and through this means compensate its fixed costs.

¹⁹ The role of economies of scale and network externalities in payments is discussed in Chapter 2. See also Beck and de la Torre (2006).

²⁰ Conversely, in a financial system that has seized economies of scale and network externalities, some PSPs may even offer “no fee” transaction accounts because the challenges of cost recovery for such accounts are relatively minor. These accounts typically exhibit very low, but still positive profitability.

²¹ Some research suggests that affordability might be the single most important factor explaining why certain individuals do not hold an account with a regulated financial institution, and that reducing charges and fees could make those accounts more attractive to more than 500 million adults worldwide who currently do not have one. For additional details, see eg Demirgüç-Kunt and Klapper (2012).

indirect costs for service users, such as transportation costs or the time spent in accessing the closest service point.

23. High indirect costs for individuals and businesses in connection with using transaction accounts are therefore another important barrier for usage of such accounts. Moreover, high indirect costs may deter potential users from opening a transaction account in the first place, and can therefore become a significant obstacle at the access level.

1.4.3 Economic and labour informality

24. In both developed and developing economies, there are users of payment services that *choose not* to have a transaction account even if they could afford the direct costs associated with it and do not face significant geographical challenges for access. In other words, they have excluded themselves voluntarily from having and using this financial service.²² The essence of the “self-excluded” is that they appear to have no incentives or need to operate through accounts or have had negative experience with regulated PSPs, and as a result they rely on cash and other types of payment service to satisfy their payment needs. Others may actually satisfy those needs by using someone else’s transaction account, and may therefore not need an account of their own.

25. In practice, many of the self-excluded operate under conditions of economic informality, in particular labour informality,²³ and making payments and storing value with means other than formal transaction accounts is to a large extent a natural extension of that situation. Avoiding the payment of taxes, other government charges and social security contributions is an important feature of informality, and reliance on cash serves this purpose especially well. Therefore, many of the individuals and businesses operating in informality will not want to have a transaction account.

26. In addition, the fact that these individuals and businesses rely exclusively or almost exclusively on cash for receiving and making payments – and for storing value – automatically reduces the overall extent to which non-cash payment instruments can be used as a means of payment in that community, region or country. This, in turn, reduces the value proposition of transaction accounts for all economic agents, including those that already have a transaction account. Labour informality – and economic informality more broadly – therefore not only reduces the demand for transaction accounts but also reduces their overall attractiveness to current and potential users, while at the same time raising the relative attractiveness of cash. The higher the prevalence of informality, the greater its undesirable effects on transaction accounts.

1.4.4 Insufficient attention to gender-specific aspects, cultural and religious needs and beliefs, and limited awareness and financial literacy

27. Other end users that have excluded themselves from using transaction accounts may have done so for other reasons, such as cultural or religious reasons. These end users may believe that adopting and/or using transaction accounts in the way these are currently offered would somehow interfere or be inconsistent with some of their cultural or religious traditions or beliefs.

28. Gender can also play a significant role in preventing or deterring the adoption and use of transaction accounts. The most explicit form of gender bias exists in countries where social customs limit the financial

²² Some users may have had an account in the past, but decided not to keep it.

²³ Labour informality generally refers to individuals who are self-employed or who are salaried workers without access to social security benefits and whose income is not reported to tax authorities. Such salaried workers very often do not have a signed contract in compliance with labour regulations.

independence and autonomy of women. More typically, however, the barriers are subtle and in some cases unintentional. They involve many of the factors discussed in the body of this report, including accessibility of access points, financial literacy and product design. While these factors typically treat men and women the same way, they can affect women more acutely due to observed differences in underlying propensities, responsibilities and needs. In general, women and men differ in terms of risk aversion, rates of technology adoption, financial literacy and responsibilities at home, as observed by the 2015 G20 report on the economic participation of women.²⁴

29. Moreover, even in the presence of positive conditions for the uptake of transaction accounts – such as wide acceptance of non-cash payment instruments, low prices of transaction account services relative to typical income levels, proximity of account service points and low levels of economic informality – some individuals may not be aware of the options available to them and/or the potential benefits they may derive from using this financial service, or may lack the basic knowledge for applying for the service and/or using it. Furthermore, some individuals in this situation may fear being discriminated against if they were to approach PSPs (or certain types thereof) or may fear being defrauded by PSPs if they were to acquire a transaction account service. Lack of awareness and basic financial literacy and capability on the part of some individuals is therefore another obstacle to broader adoption and usage of transaction accounts.²⁵ In this context, the fear of interacting with banks and other authorised PSPs may specifically act as a deterrent at the access level.

1.4.5 Design of transaction accounts and related payment services that do not meet the needs of end users

30. Collectively, the combination of features, or the design of the transaction account and associated payment services, determine whether that account meets the needs of actual or potential customers, or at least comes close enough to be of value to such customers. The features that meet the needs of the more traditional bank client base may not meet the needs of individuals and businesses that currently do not have a transaction account. This is because many of the individuals and businesses currently excluded from this service tend to have lower and more variable incomes, live in financially isolated communities and/or are ill at ease with technology.

31. It should be said, however, that there are factors that can help reduce the fees associated with transaction accounts, such as the use of electronic payments, no cheque facilities, use of standing orders (eg recurrent credit transfers) or direct debit orders for the payment of utilities. Lower overall costs of holding and using transaction accounts might make these accounts more attractive to customers and, at the same time, change the cost-benefit balance for the providers of such accounts.

32. Poor design of transaction accounts and the underlying payment services therefore also acts as a barrier to transaction account adoption, especially for the regular usage of such accounts.

1.4.6 Customers' perception of transaction accounts being unsafe and/or that the payment services associated with them are unreliable

33. Some end users may be deterred from storing value in transaction accounts and/or making and receiving payments through such accounts. This might be the result of past experiences in which these individuals or businesses suffered losses in their transaction accounts – for example, because the PSP went into bankruptcy, because of measures taken by country authorities (eg blocking customer funds or devaluing the funds on deposit) or because of fraud. Events like these, even if from the past, may also lead other end

²⁴ G20 GPFI (2015).

²⁵ For the definition of “financial literacy” used throughout this report, see Section 3.2.3.

users that have not experienced such losses themselves to consider transaction accounts unsafe. In other cases, a lack of reliable availability of the payment access channel(s), whether in the form of branch offices, ATMs, POS terminals, PSP agents, etc, could lead end users to doubt the reliability of transaction accounts and to prefer to use cash instead.

1.5 Addressing the barriers to transaction account access and usage, and measuring success

34. In any given country, the generalised adoption and usage of transaction accounts will be bounded by a number of elements that act as barriers.²⁶ In preparing this report the CPMI-WBG Task Force has placed special emphasis on analysing and proposing actions that may be taken to address these barriers.

35. Actions proposed by the CPMI-WBG Task Force are directed at all relevant public and private sector stakeholders. The guiding principles and accompanying key actions presented in Chapter 4 of this report include the barriers represented by high direct and/or indirect costs of transactions accounts, lack of basic financial capability, poor design of transaction accounts and related payment services, and the perception that transaction accounts might be unsafe. Other identified barriers, such as the low income level of a country's population and the high prevalence of labour and broader economic informality, fall outside the direct scope of financial sector authorities and other financial sector stakeholders, and therefore need to be addressed through broader policy efforts.

36. To complement the guiding principles, the CPMI-WBG Task Force also stresses the importance of tracking progress in achieving the underlying financial inclusion goals. A strong consensus has emerged among the many institutions involved in financial inclusion efforts on the importance of implementing robust measurement methods for identifying obstacles, demonstrating results, efficiently allocating resources, and in general for making evidence-based policy decisions.

37. In this regard, many countries are already quantifying their national financial inclusion objectives and commitments and progress achieved to date. Notably, these efforts have yielded certain important by-products. For example, the process of designing a national measurement framework has often generated meaningful dialogue among and between public and private sector stakeholders on issues such as priorities, coordination and capacity. Likewise, the design of specific indicators and targets has proved useful for rallying stakeholders, creating accountability and reinforcing national policy objectives. Chapter 5 presents a detailed discussion of these issues.

1.6 Organisation of the report

38. The remainder of this report is organised as follows: Chapter 2 describes the retail payments landscape, emphasising those aspects that are especially relevant in the context of financial inclusion; Chapter 3 provides a framework for addressing the barriers to transaction account access and usage; Chapter 4 summarises the key findings of the previous analyses in the form of guidance to central banks, financial supervisors, regulators and policymakers, and private sector stakeholders for advancing financial inclusion objectives in their jurisdictions, in particular as regards the adoption of and the frequent usage of transaction accounts. Lastly, Chapter 5 discusses the measurement of the effectiveness of financial inclusion efforts in the context of payment systems and services.

²⁶ Clearly, however, not all of these elements will have the same magnitude in all countries.

2. The retail payments landscape: properties of relevance for financial inclusion

2.1 Overview

39. Increasingly, authorities are recognising the relevance of sound and efficient retail payment systems and services for financial inclusion. At the same time, payment systems overseers and other authorities are also interested in the efficiency gains that enhanced financial inclusion can bring to the retail payment system and to the NPS as a whole.

40. Retail payment services are used daily for numerous types of transaction among and between individuals, businesses and public administrations. Hence, improving the safety and efficiency of, and access to, electronic retail payment services can bring important benefits to commerce and overall business activity, to the distribution and collection of payments made by/to government agencies, and to payments between individuals, among other possibilities.

41. As discussed above, transaction accounts are at the heart of retail payment services. End users without access to transaction accounts are basically restricted to cash as their only means of initiating retail payments.²⁷ While cash might serve the purpose for some day-to-day, low-value payment needs, especially in-person payments, it comes with considerable disadvantages for remote and/or higher-value payments, potentially higher charges for cash-on-delivery payment methods, or increased risk of loss or theft.

42. Certain relatively recent innovations appear promising to increase the share of individuals and businesses served with transaction accounts. For example, properly regulated e-money payment services through mobile phones seem to be especially well suited for rural and isolated areas, where providing physical points of access to payment services can be expensive relative to the potential revenue streams.

43. At the same time, and notwithstanding the potential of innovations, making improvements to the provision of traditional payment instruments and products is also critical for financial inclusion. For example, providers of these traditional payment services may achieve cost savings through improving national financial infrastructures and/or through adopting new service delivery models. In these circumstances, customers previously not served by them due to the small or zero profit margin could now become an attractive market segment from a business standpoint.

44. This chapter analyses some of the most relevant aspects of retail payments in the context of financial inclusion, including the typical difficulties that have been observed in translating modern technology and other innovations into increased access to and usage of transaction accounts.

2.2 Retail payment instruments and transaction accounts

45. Payment instruments are means of exchange that facilitates the transfer of funds/value, and can be broadly grouped into cash (banknotes and coins) and cashless instruments. Cashless retail payment instruments can be paper-based or electronic instruments. Paper-based instruments include cheques and credit transfers initiated on a paper form. Nowadays, paper-based instruments are often converted into electronic format at some point in the retail payment processing chain.

46. Electronic payment instruments have evolved as the preferred cashless instrument. They are issued by PSPs, which are the actors on the supply side of the retail payments chain. PSPs include banks and other

²⁷ There are certain exceptions to this general rule. See Section 2.2.

deposit-taking institutions, as well as specialised entities such as money transfer operators (MTOs) and e-money issuers.

47. Electronic payment instruments can be classified in three broad categories:²⁸

- Electronic funds transfer (EFT)-based instruments: These are direct (ie account-to-account) credit transfers and direct debit transfers. As account-to-account payments, EFT-based instruments can be processed fully electronically (ie end-to-end).
- Payment card-based instruments: These include credit card payments, charge card payments and debit card payments,²⁹ and typically still involve a physical plastic card.³⁰ With few exceptions, payments with cards are initiated, authorised, authenticated, cleared and settled fully electronically.
- Electronic money (e-money)-based instruments: In general terms, these instruments involve the payer maintaining a pre-funded transaction account with a PSP, often a non-bank. Specific products include online money when the payment instruction is initiated via the internet, mobile money when initiated via mobile phones, and prepaid cards. Box 2 describes some examples of the legal and regulatory treatment of e-money services in a variety of countries.

Box 2

E-money in selected markets

In the European Union, the first step in the regulatory approach on e-money was taken in 2000 with the Electronic Money Directive (EMD),^① which aimed to increase competition and innovation in retail payments without compromising security. Since then, it has been possible to authorise entities other than banks – namely electronic money institutions (EMIs) – to issue electronic money. In 2007, the Payment Services Directive (PSD) introduced payments institutions (PIs) as a new non-bank category of PSPs that are entitled to provide payment services under a single licence valid throughout the EU.^② The EMD was reviewed in 2009 to bring the prudential regime for EMIs into line with the PSD.^③ Hence, non-banks are permitted to offer payment services to end users according to the two directives. EMIs, in addition to issuing e-money, can offer the full range of services envisaged by the PSD; PIs can offer payment services, but are not allowed to issue e-money. Compared with other electronic payments, the relative importance of e-money purchase transactions in the euro area is limited, with a 2.62% share in 2013. E-money issued in the euro area stood at EUR 6.6 billion in 2014. Licensed EMIs established in the EU are mostly concentrated in the United Kingdom (48 out of a total of 177) and in Denmark (38 out of a total of 177).

In India, the Payment and Settlement Systems Act 2007, which came into effect in August 2008, empowers the Reserve Bank of India (RBI) to regulate and supervise payment systems in the country. Under this legislation, no person can operate a payment system in the country unless authorised by the RBI. In April 2009, the RBI, under Section 18 of the Act, issued Policy Guidelines for Issuance and Operation of Prepaid Payment Instruments in India. Based on these amended guidelines, 63 non-banks have been permitted to operate various payment systems in India (as of early 2015). Out of these authorised non-bank entities, 33 are authorised for prepaid payment instruments. The non-bank entities issuing payment instruments are required to maintain their outstanding balance in a trust account with a commercial bank, and the balance must only be used to redeem e-money. For the schemes operated by banks, the outstanding balance shall be part of the Net Demand and Time Liabilities for the purpose of maintaining reserve requirements.

²⁸ In some countries, other innovative electronic payment methods may exist or emerge.

²⁹ Prepaid cards are generally considered to be part of e-money-based instruments.

³⁰ This is because the plastic card contains account identification information that is necessary to make the payment.

E-money services in Russia are regulated by the provisions of the federal law "On the National Payment System" (NPS law), according to which those services are provided only by credit institutions. Over 90 credit institutions were providing e-money services at the beginning of 2015. As of end-2014, more than 350 million active e-money accounts (prepaid cards, e-wallets, etc) were reported in Russia and over 1.1 billion e-money transactions were conducted in that year. The NPS law considers lower capital requirements for credit institutions specialised in e-money issuing. The NPS law also allows credit institutions to use agents for the provision of e-money services (including services such as the distribution of payment instruments or the funding of e-money accounts).

In Turkey, the Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions from 2013 (PS law) opens the way for non-banks to serve as PSPs by creating two new categories of financial service providers: PIs and EMIs. PIs can provide transaction services, but cannot issue e-money. EMIs, which are subject to higher capital requirements (TRY 5 million compared with TRY 1–2 million for payment institutions)^④ can provide e-money accounts to their customers. The Banking Regulation and Supervision Agency is empowered by the PS law to license and supervise both PIs and EMIs. EMIs are obliged to hold the funds received from their clients in a trust account with a bank. Banks holding those accounts are required to block the funds deposited by the EMI in their accounts held at the Central Bank of the Republic of Turkey.

In Uruguay, the Financial Inclusion Law was enacted in April 2014. Among other objectives, this law regulates e-money through the licensing of a new type of service provider denominated Emisor de Dinero Electrónico (e-money issuer). The Central Bank of Uruguay regulates different business and service delivery models with the flexibility provided by the e-money issuer model. It has already approved three e-money issuer applications and has eight proposals in review. Moreover, with the full implementation of the law, a positive impact in e-payments and the development of e-business infrastructure has been recorded.

Sources: ECB; Reserve Bank of India; Central Bank of the Russian Federation; Central Bank of the Republic of Turkey; Center for Latin American Monetary Studies; Payment Systems Market Experts Group.

① Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking-up, pursuit and prudential supervision of the business of electronic money institutions. ② Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC Text with EEA relevance. ③ Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking-up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC. ④ TRY 1 million was equivalent to approximately USD 380,000 as of early 2015.

48. Electronic payment services are typically associated with transaction accounts held by the payee and/or payer.³¹ These transaction accounts act as the funding source for payments being made, and in which the funds from payments received are credited. As per the discussion in Section 1.2 of this report, transaction accounts can be broadly classified into deposit transaction accounts and e-money transaction accounts. The two types of transaction account can be interoperable if e-money transaction accounts can be credited directly from deposit transaction accounts, and vice versa.

49. Transaction accounts can vary in price and service offering and range from accounts with a limited set of services typically offered at very low or no fees at all, to a fully fledged retail customer or corporate account.

50. Prepaid instruments based on e-money transaction accounts have been used, on some occasions, to provide access for previously financially excluded individuals to their first transaction account, partly because these instruments and accounts are sometimes associated with lower fees and/or lower customer due diligence requirements. Very often, however, e-money transaction accounts consist of limited purpose payment solutions with limited connectivity to other transaction services, and hence do not allow their holders

³¹ In some countries, some end users transact by giving cash to PSP agents for the latter to make electronic payments on their behalf.

to enter the payments mainstream (eg make a payment to/receive a payment from an account held in a bank). Still, some of these products may help individuals to get acquainted with more sophisticated financial products, thus potentially contributing to financial inclusion.

Box 3

Key outcomes from a PAFI survey of basic accounts in selected countries

As part of its analytical work, the PAFI Task Force obtained information among its members on basic accounts in their jurisdictions (some members also provided information from other jurisdictions in their region).^① This box summarises the key observations from the information collection.^②

In general terms, the various countries recognise the importance of basic accounts as part of their overall financial inclusion strategy: almost all countries that provided information indicated that a form of a basic account was offered in their jurisdiction. For a majority of respondents, basic accounts were being offered via deposit-taking institutions (including banks), although in some cases authorised agents, post offices and selected retailers were also involved in the provision of basic accounts.

Basic accounts that are offered without any associated fees often have a requirement for a minimum balance. In other countries, basic accounts do involve a fee, although that fee is invariably very low. In the latter case, these basic accounts do not tend to require the maintenance of a minimum balance.

The provision of basic accounts is reported to be a market-led initiative in the majority of countries. The countries in which providers were obliged by legal/regulatory requirements to offer basic accounts were the exception.

A number of regulatory and economic factors seem to potentially hinder further availability and use of basic accounts in some jurisdictions. These include:

- (i) the relatively high regulatory burden for account providers related to the requirements in connection with know-your-customer (KYC) and anti-money laundering (AML) policies;
- (ii) thin profit margins for basic account providers. Some respondents noted that there is little economic incentive for private sector parties to provide these accounts; and
- (iii) limited scope for product cross-selling. Some respondents highlighted that, given the low balances in basic accounts and thin profit margins, there was not a lot of scope for offering (higher-profit-margin) additional products to these groups.

In terms of improving access to and usage of basic accounts, there was relatively broad agreement on the efficacy of enhancing public awareness about the benefits of basic accounts (and of being financially included more generally). Respondents also pointed to the potential benefits of imposing maximum balances on basic accounts to assuage AML concerns, and augmenting the shared use of infrastructures and access points to reduce costs for basic account providers.

Source: Based on data from a survey carried out in the context of the CPMI-WBG PAFI Task Force.

^① The term “basic account” is used functionally in this box. In some of the responding countries, this term is not used as such, although there is a product in the marketplace with essentially the same characteristics (eg salary accounts). ^② Brazil, China, El Salvador, Germany, Hong Kong SAR, India, Italy, Korea, Mauritius, Mexico, Mozambique, Namibia, Russia, the Seychelles, South Africa, Turkey, the United States, Uruguay and Zimbabwe.

51. In contrast, most deposit transaction accounts can be used in connection with a larger variety of payment instruments and access channels, and in consequence for a larger variety of payment purposes. Typically, a debit card is issued to the account holder to be used as a means of payment at the point of sale as well as for cash withdrawals. While those two features are in some cases also available to holders of e-money transaction accounts, holders of deposit transaction accounts are normally also able to initiate credit

transfers via online banking or via an ATM (or dedicated terminal) and/or authorise a mandate for a direct debit to be executed on their accounts.

52. Having more services often comes at a price, though. In this regard, so-called “basic accounts” have been developed and are nowadays offered in many countries with varying degrees of success. Providers of these accounts are often banks, but some non-bank PSPs (eg post offices) also offer them. Some key features of basic accounts drawn from the experiences of selected countries are outlined in Box 3.

53. A number of countries have introduced or are considering introducing legislation that gives citizens a right to a basic bank account that is typically focused on payment services and characterised by low-cost and no-frill features. These accounts are often offered in combination with a debit card. Box 4 discusses the case of the European Union.

Box 4

European Union directive on the access to a basic payment account

Directive 2014/92/EU concerns three areas: the comparability of fees related to payment accounts, payment account switching, and access to payment accounts with basic features.^① With regard to the third area, all EU consumers – without having to be residents of the country where the credit institution is located and irrespective of their financial situation – shall have the right to open a payment account that allows them to perform essential operations, such as receiving their salary, pensions and allowances or payment of utility bills. The account does not include access to an overdraft or credit facility. Member states will determine whether payment accounts with basic features should be offered to consumers for free or at a reasonable fee. A reasonable fee should be identified at the national level on the basis of a set of criteria, such as national income levels, average fees paid for an account in that member state and the cost associated with the provision of payment accounts. The directive will not oblige all credit institutions to provide basic payment accounts to all consumers. It will be for the member states to decide whether payment accounts with basic features are offered to consumers by all credit institutions or by a sufficient number of credit institutions. However, member states will have to guarantee easy access to basic accounts for all consumers in that country. The aim of this directive is to enable consumers who want to open and use a payment account to access basic payment services anywhere in the European Union for their everyday payment transactions. Residency should not be used as a barrier to accessing payment services for those who need them. However, member states may require consumers who wish to open a payment account with basic features in their territory to show a genuine interest for doing so.

Source: ECB.

^① Directive 2014/92/EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features. This directive has been published in the Official Journal of the European Union. By 18 September 2016, member states must adopt and publish the laws, regulations and administrative provisions necessary to comply with the directive. Member states shall apply these measures from the same date.

2.3 Types of retail payment and how end users can be negatively affected by the lack of access to a transaction account

54. Depending on the purpose of a payment and whether the actors are individuals, businesses, or government agencies, the implications for those financially excluded might be different. For that purpose it is useful to classify retail payments to first identify the types of payment service user and the interactions among and between them.

55. A key characteristic of a retail payment is that at least one of the parties to the transaction, either the payer or the payee, is not a financial institution. In this context, users of retail payments can be broadly

categorised into consumers, businesses,³² and government agencies. All of them have a dual role, being the payer for certain transactions and the payee for others. Depending on the payer-payee combination, retail payments can be categorised into different types. The possible combinations are shown in Table 1.

Types of retail payment

Table 1

Payer \ Payee	Person	Business ¹	Government entity
	Person	P2P	P2B
Business	B2P	B2B	B2G
Government entity	G2P	G2B	G2G

P = person, B = business; G = government.

¹ This report focuses on micro-sized and small enterprises to the extent that they might be financially excluded.

56. If the payer and the payee are both individuals, the payments are referred to as person-to-person (P2P) payments. P2P payments include transfers of money to family members/friends, without an underlying economic transaction (eg remittances).³³ Payments to other individuals in the social context (eg to repay for a shared restaurant bill) also fall into this category.

57. These payments, when conducted in person, are still typically effected in cash. In this specific case, a financially excluded individual does not face major disadvantages compared with individuals that have a transaction account, since the payment instrument of choice would most likely be cash anyway.

58. Innovative services offered in several markets are nevertheless challenging the dominance of cash for in-person P2P payments. For example, some PSPs are leveraging databases that link a mobile phone number with an account identifier and offering instantaneous confirmation and availability of funds for the payee (even though the settlement between PSPs is often effected at a later point in time). Individuals without a transaction account would not be able to use these innovative services.

59. Furthermore, when P2P payments need to be effected remotely (ie the payer and the payee are not at the same physical location), cash is often no longer the most suitable payment instrument. Sending cash physically (eg via mail or an individual) is risky and may be impractical. In this context, lack of access to transaction accounts limits the choice of payment instruments, some of which are better suited for remote payments such as account-to-account direct credit transfers or mobile money. While it is still possible to use other services such as initiating a credit transfer with cash over the counter or resorting to MTOs for this same type of service, the "all-in" costs of these services (ie direct and indirect costs) are often higher than those of account-to-account transfers.³⁴

60. Person-to-business (P2B) payments include retail payments associated with the purchase of retail goods and services from businesses irrespective of the size of the business. This category also covers consumer

³² Including retailers, sole proprietorships and self-employed providers of goods and services.

³³ Payments between individuals with an underlying economic transaction would fall under the person-to-business category, as in this report the definition of businesses includes sole proprietors and self-employed providers of goods and services.

³⁴ While this is normally the case in the context of domestic P2P transfers, when it comes to cross-border P2P payments the "all in" costs of cash-to-cash services are in many cases lower than those of account-to-account services.

payments to individuals that are providers of goods and services (eg one-person companies and individuals receiving compensation for services rendered). Within an economy, a large share of the total volume of retail payments falls into the category of P2B payments. The value per transaction, however, can vary widely.

61. Person-to-government (P2G) payments include obligations that individuals pay to central, regional and local public administrations. Typical cases include income and property tax payments, the employee's share of social security contributions,³⁵ fines (eg traffic fines), duties, and certain fees (eg fees for government-issued documents such as passports or driving licences).

62. For P2B and P2G payments, individuals without a transaction account basically face the same disadvantages as for remote P2P payments. In addition, consumer choice in terms of the goods and services to be acquired is restricted if the provider that constitutes the best option – or the government agency branch – is located far away so that paying on-site is nearly impossible, is highly inconvenient or very costly in terms of time and money spent just to get there. Moreover, the possibilities and benefits of e-commerce and e-government are, with few exceptions,³⁶ not available to such individuals.³⁷

63. If a business is in the role of the payee and another business in the role of the payer, these payments are referred to as business-to-business (B2B) payments. B2B payments range from large-value payments associated with large intra-industry transactions (which are not in the focus of this report), to retail payments between small, medium-sized and large enterprises. Typically, payments for procurement of consumer goods, supply chain products and professional services are included under this payment type. In addition, the B2B category includes payments for regular transport expenses, payments for utilities and other periodic bills.

64. Business-to-person (B2P) payments typically involve periodic transactions in compensation for the work rendered by employees (ie payrolls and other compensation-related payments such as incentives), and are therefore normally characterised by a large number of transactions of relatively small value.

65. Business-to-government (B2G) payments are typically periodic payments, characterised by a large number of transactions of varying sizes. B2G payments include corporate tax payments (eg income taxes, sales taxes and value-added taxes), fees for government services (eg company registration, business permits or licences), penalties (eg fines) and the employer's share of social security contributions.

66. Disadvantages for business without access to transaction accounts can be compared with those faced by individuals. Moreover, in their role as payers, micro-sized and small enterprises without access to transaction accounts might be excluded from certain supply channels or may not be able to take full advantage of trade credit. As payees, they could forego business with customers that make payments with electronic instruments only. At a more general level, micro-sized and small enterprises that do not use electronic payments either as payers or payees are not able to automate some internal processes (eg accounting, treasury) and therefore forego certain efficiency gains and internal control improvements.

67. Finally, public administrations make payments to individuals (ie government-to-person (G2P)), businesses (ie government-to-business (G2B)) and to other government bodies or agencies (ie government-

³⁵ In many cases, income taxes and employees' contributions to social security are paid directly by the employers, after the relevant amounts have been deducted from the payroll.

³⁶ For example, in some cases it is possible to purchase (with cash) a prepaid card for e-commerce or to pay in cash on delivery.

³⁷ In some cases, merchants and even government agencies offer discounts when payment instruments other than cash are used. And/or there are rewards programmes associated with certain non-cash payment instruments, in particular credit and debit cards. Customers without access to transaction accounts also do not have access to those benefits.

to-government (G2G)).³⁸ These three types of payment are typically a significant proportion of a nation's overall retail payment volume and value.

68. G2P payments are characterised by a very large number of transactions, normally of small individual value. G2P payments are typically associated with social benefit transfers (eg conditional cash transfers, child support payments and student allowances), government employee salaries, pensions and tax refunds, among others.

69. G2B payments are characterised by a large number of transactions with values varying widely, ranging from large-value procurement contracts to very small payments made with a government credit card or debit card. One major type of G2B payment includes those made by government entities from a business angle, such as for the procurement of consumer goods (eg stationery), capital goods (eg equipment and computers), services (eg cleaning, maintenance and professional services), transport expenses (eg travel expenses and gasoline) and periodic bills (eg rent). Other categories include corporate tax refunds, or the disbursement of loans, subsidies or business assistance provided by public administrations.

70. Public administrations – with the likely exception of local and regional ones – do not normally face problems in having access to transaction accounts, although in some cases they might find it difficult to use those accounts for their purposes. For example, for some G2P payments such as social transfers or pensions (and even some G2B payments such as small purchases), government agencies may opt for paying with cash rather than directly from their transaction account. This is often the case in an environment characterised by lack of infrastructure (eg ATMs, POS terminals and bank branches) to support the usage of transactions accounts.³⁹ Situations like this not only curtail the overall efficiency of government agencies and government payment programmes, but also hamper the potential catalytic effects of government payments on financial inclusion and on the NPS. This specific subject is explored in further detail in Section 3.2.4 of this report.

2.4 Market dynamics of retail payments

71. Market competition and level playing fields are critical to establishing an enabling environment for the provision of inclusive retail payment services. Competition tends to facilitate the emergence of new players and innovative products to meet the needs of the unserved and underserved. It may also stimulate improvements in the quality, convenience and efficiency of available services, and exert downward pressure on pricing. In addition, level playing-field conditions, in terms of PSP access to key infrastructures and the overall regulatory environment, play a significant role in shaping a competitive environment.

72. Retail payments markets display a network market structure characterised by the following: (i) economies of scale in messaging, clearing and settlement services due to the fixed costs of the infrastructure; (ii) economies of scope in clearing and settlement, as well as in messaging services, due to technology flexibility; and (iii) network externalities in messaging, clearing and settlement services produced by complementarities of users and/or products and compatibility of products. Under certain circumstances, these characteristics of retail payments markets may yield suboptimal results in terms of the efficiency, innovation, scope and reach of retail payment services, and thus may adversely affect financial inclusion. These characteristics, along with some relevant market dynamics of retail payments markets, are described in further detail in Table 2.

³⁸ G2G payments are not discussed in this report.

³⁹ It can also be the case, particularly at regional and local levels, where the government agency's financial and account management is still primarily performed manually rather than digitally.

Characteristics and market dynamics of retail payments markets

Table 2

Characteristics	
Economies of scale	Reduction in average costs per unit of output with the increase in the scale or magnitude of the output being produced by a firm. Economies of scale positively affect market development, but tend to result in a smaller number of competitors in the marketplace.
Economies of scope	Cost advantages resulting from provision of various services/products rather than specialising in the production of a single service/product. The economies of scope positively affect market development and could result in a more competitive environment.
Network externalities	The value of a payment system increases with the number of its users. In the case of indirect network externalities, complementarities are found between products or services in different markets. Indirect network externalities arise when the value of the product increases as the number of complementary goods or services increases.
Market dynamics	
Switching costs	Such costs exist at the platform level (for platform participants), at the cross-product level (among payment instruments) and within the same type of product. Switching costs may prevent the adoption of better technologies and social optimisation.
Path dependence	The legacy of previous technology developments and implementations typically influences later choices and outcomes, thus restricting investment decisions and possibly negatively affecting innovation and adoption of more efficient technologies.
Tipping point	Once a retail payment system has reached the tipping point, this system tends to emerge as the dominant one. Since the network externalities dictate higher utility for each participant by adding more participants, the participants' individual and group utility can be raised if everybody participates in one single network, and if there are no significant capacity limitations that can give rise to serious congestion effects. Safeguards should be in place to avoid tendencies that restrict competition and innovation of the dominant retail payment service, eg by facilitating interoperability.
Multihoming and stickiness	In mature markets at least, it is common for both sides in a payments market to use several platforms, ie they multihome. Customers have more than one type of payment instrument, and merchants accept several types of instrument. This multihoming also takes place within one type of instrument (eg credit cards). Often, however, consumers favour one specific payment instrument over others, ie their usage is sticky. For example, consumers tie a specific instrument to bill payments, to a social benefit payment or to a bundled financial service account. Loyalty programmes offering rewards can reinforce stickiness.

Economies of scale and scope and network externalities are characteristics of network markets in general.

For additional details, see World Bank (2008, 2012b).

73. Effective cooperation among infrastructures providers and service providers may help exploit economies of scale and scope and network externalities in a cost-efficient way, and is likewise crucial for setting standards that will secure compatibility between the various products.⁴⁰ The challenge is to achieve the appropriate balance where infrastructures and network may be cooperatively built and operated, but the end markets in payment services (ie at the product/service level) are competitive.

⁴⁰ The role of standards is discussed in further detail in Section 3.1.3.3.

2.5 Roles of central banks in retail payments

74. Central banks have a variety of roles, responsibilities and interests in fostering the safety and efficiency of the NPS, including for retail payment systems, services and payment instruments. More recently, accessibility and coverage, the effective protection of customers and the existence of a competitive environment are also being considered as important objectives by many central banks.⁴¹ To fulfil these goals, central banks can use one or more of the following roles in retail payments: (i) an operational role; (ii) a catalyst role; and (iii) an overseer and/or regulator role.⁴²

75. In an operational role, the central bank typically provides settlement services for one or more retail payment systems in a country. In some countries, central banks also play a more direct operational role by operating a retail payment system.

76. In their role as catalysts in retail payments, central banks maintain close relationships with commercial banks and other PSPs in order to discuss priorities with regard to improvements to payment systems and/or the development of new services, and to facilitate the materialisation of all such projects. In some countries, central banks have established and usually chair a so-called national payments council (NPC) that serves as a forum for multi-stakeholder consultations.

77. With regard to oversight, not all central banks have explicit legal powers to oversee retail payment systems, payment services and related arrangements. Central banks that do have such powers exercise this function through monitoring and assessing existing and proposed systems, services and payment instruments, and, if necessary, inducing change, including through the issuance of formal regulations. Many of the central banks that do not have explicit legal powers still monitor developments in retail payments through tools such as frequent dialogue with market participants and/or through an active research agenda in this field.

⁴¹ The World Bank's *Global Payment System Survey 2010* shows that 52 central banks – 42% of the total surveyed – had already included these other objectives in their payments oversight framework.

⁴² In several countries, some of the aforementioned policy objectives are not the sole or even a direct responsibility of the central bank. For example, while the central bank may be interested in avoiding anti-competitive practices that may lead to lower levels of efficiency, the regulatory powers or tools to act upon such practices could be vested in a different authority, such as the antitrust (or competition) agency and/or the consumer protection agency.

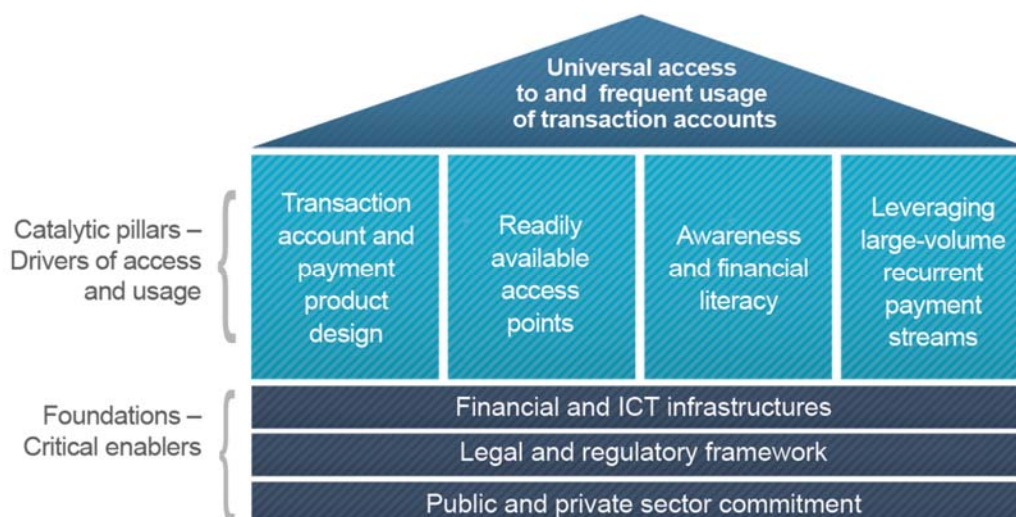
3. Enhancing access to and usage of transaction accounts

78. As discussed in Chapter 1, a number of barriers affect transaction account access and usage. This chapter analyses the elements that, based on the evidence from many financial inclusion efforts around the world, have consistently proved useful in addressing those barriers, in particular those that fall within the scope of financial sector authorities and other financial sector stakeholders.

79. The analysis of these elements is structured below into foundations and catalytic pillars. The foundations – commitment from stakeholders, the legal and regulatory framework, and financial and ICT infrastructures – are the critical enablers for payment systems and the provision of payment services in general. Specifically, however, they are important for the access to and usage of transaction accounts. Based on these, the catalytic pillars – ie payment product design, the ease with which accounts can be reached for usage, awareness and financial literacy,⁴³ and leveraging large-volume recurrent payment streams for financial inclusion purposes – form the drivers for access and usage. Figure 1 illustrates the interrelation between the foundations, the catalytic pillars and the end objective of achieving universal access to and usage of transaction accounts.

Interrelation of foundations, catalytic pillars and effective usage

Figure 1



3.1 Foundations: critical enablers of financial inclusion from a payments perspective

3.1.1 Public and private sector commitment

80. Implementing change in the NPS and the broader financial sector, fostering the adoption of new payment methods and other key actions that are necessary to advance financial inclusion require strong commitment from all the relevant stakeholders.

⁴³ For the definition of “financial literacy” used throughout this report, see Section 3.2.3.

81. Piecemeal financial inclusion efforts have been under way for decades. However, such efforts tended to focus on one part of the problem, such as opening banks accounts for individuals that do not have one, providing financial education, or allowing the use of PSP agents. Such disjointed approaches typically failed to yield sustainable, safe and efficient access to payment services. Rates of financial exclusion – particularly among the poor – remain high around the world.

82. At the global level, financial inclusion initiatives launched, almost simultaneously, by the Alliance for Financial Inclusion (AFI), the Association of Southeast Asian Nations (ASEAN), the Center for Latin American Monetary Studies (CEMLA), G20, the World Bank and others marked the turning point at which political leaders at the highest level moved financial inclusion to centre stage. In the wake of this call to action, multilateral institutions, think tanks, private sector coalitions, non-government organisations, policymakers and regulatory authorities stepped up to support such commitments with research and fact-finding, enhanced data collection, technical assistance, pilot projects, changes in policies and regulations and funding. More recently, international efforts have taken on a more systematic and consolidated effort to realise global inclusion targets. Efforts such as the World Bank's Universal Access 2020 initiative and the launch for the Global Partnership for Financial Inclusion (GPFI) of a new subgroup focused on payment services typify such actions. These are discussed in some detail in Box 5.

Box 5

Global initiatives to advance financial inclusion

G20 initiatives

In September 2009, G20 leaders presented "A Framework for Strong, Sustainable and Balanced Growth", which included a commitment "to support the safe and sound spread of new modes of financial service delivery capable of reaching the poor and, building on the example of microfinance, will scale up the successful models of small and medium-sized enterprise (SME) financing". In order to take this commitment forward, the G20 Financial Inclusion Experts Group (FIEG) was formed to identify lessons learned from innovative approaches to providing financial services, promote successful regulatory and policy approaches, and elaborate standards on financial access, financial literacy and consumer protection. The FIEG developed the G20 Principles for Innovative Financial Inclusion, which were endorsed by leaders at the Toronto Summit in 2010.

In 2010, the G20 endorsed a Financial Inclusion Action Plan (FIAP) and established the GPFI to coordinate and implement FIAP. FIAP was updated at the 2014 G20 Leaders Summit in Brisbane and includes the following action areas: commitment to (i) implementing the G20 Principles for Innovative Financial Inclusion under a shared vision of universal access, (ii) improving data, (iii) supporting capacity-building and training, and (iv) improving national, regional and international coordination.

Since the launch of FIAP, successive G20 presidencies have endorsed its key components and added commitments on financial education and financial consumer protection, financial services for vulnerable groups (including women and young people), expanding opportunities for innovative technologies to advance financial inclusion, and reducing the cost of remittance transfers.

The GPFI implements FIAP and G20 commitments through various subgroups: (i) Regulation and Standard-Setting Bodies (SSBs); (ii) SME Finance; and (iii) Financial Literacy and Consumer Protection (established in 2013).^① In 2014, the GPFI stepped up its efforts by launching a new subgroup, the Markets and Payment Systems subgroup. This subgroup was tasked with advancing the commitment made in 2013 by G20 Leaders to "harness innovative mechanisms such as mobile instruments and technology, especially in the remittances area". The subgroup is co-chaired by Australia, Mexico and South Africa, and its goal for the next five years is to advance utilisation of payment systems, including remittances, in the pursuit of increased and sustainable financial inclusion. The subgroup focuses on emerging technologies and business models, and incorporates strong links to market-based approaches through

engagement with financial service providers. A key input into this analysis has been the World Bank Group's *Report on G20 Remittance Commitments*, published in early 2014. In this context, the subgroup will initially focus primarily on actions related to remittances, specifically to meet existing G20 commitments to reduce the cost of sending remittances, in coordination with the Regulation & SSBs subgroup.

Universal financial access 2020

In late 2013, the President of the World Bank Group, Dr Jim Yong Kim, set a goal of achieving Universal Financial Access (UFA) by 2020. The UFA goal was explicitly defined as "universal ownership of a store-of-value transaction account". In order to achieve this goal, the WBG scaled up its investment, financial, advisory, knowledge and convening resources, including through increased engagement with key partners in the private sector and donor community.

In April 2015, a broad coalition of partners gathered for a flagship event at the World Bank headquarters to galvanise private sector investment and innovation to accelerate UFA, including through enabling policy and regulatory frameworks. The event brought together private sector leaders, government regulators and the UN Secretary-General Ban Ki-moon. At the event, Dr Kim committed the WBG itself to enabling as many as 1 billion financially excluded adults to gain access to a transaction account. A broad range of the coalition partners – including multilateral agencies, banks, credit unions, card networks, microfinance institutions and telecommunications companies – joined Dr Kim by issuing their own quantitative commitments to advancing the achievement of the UFA target.

More concrete UFA efforts include the identification of 25 target countries, heightened engagement on financial inclusion with these countries, the launch of efforts to foster alliances with large retailers and distributors, and the development of a set of tracking and measurement tools to gauge progress and adjust course when needed.

Sources: World Bank Group; Better Than Cash Alliance; Bill and Melinda Gates Foundation; Global Partnership for Financial Inclusion.

① The Data and Measurement subgroup completed its work programme in 2013.

83. As mentioned above, access to and effective use of transaction accounts requires a well functioning retail payments ecosystem, which is characterised by a complicated balance between cooperation and competition, safety and efficiency issues, as well as specific regulations for innovative/inclusive payment schemes. Fostering change in such an environment requires the ability to bring together diverse interests, launch policy research and development, change laws, mobilise funding to modernise financial infrastructures, and other similar requirements. Explicit, strong and sustained commitment from public and private sector organisations to broadening financial inclusion will be indispensable if this agenda is to be effectively advanced.

84. Public sector authorities play a key role in creating an adequate, enabling environment for financial inclusion in their respective jurisdictions. For example, many central banks are already working to better leverage the various roles they play in the retail payments space, including, where appropriate, their role as a payment system operator, to advance inclusion.

85. Strong commitment from the private sector has also proved valuable in efforts to further the reach of transaction accounts that meet the needs of the unserved or underserved. As noted in Box 3, for example, in several cases the industry has led the effort to provide basic accounts in their respective jurisdictions.

86. Translating commitment at the highest level into concrete and effective action is not always easy. One of the first and most critical activities in this regard is for the various stakeholders to allocate the necessary human and financial resources to the various tasks envisaged.

87. The development of national financial inclusion strategies has been an important tool to advance financial inclusion objectives in several jurisdictions. Strategies with clear objectives and milestones are strongly preferred by the various stakeholders involved in financial inclusion efforts due to the need of assessing the effectiveness of such efforts. In this context, the robust measurement of progress and results vis-à-vis the stated objectives and milestones is a key component of financial inclusion strategies (see Chapter 5).

3.1.2 Legal and regulatory framework

88. The legal and regulatory framework plays a critical role in creating an enabling environment for inclusive payment services. Retail payment services involve a complicated mix of infrastructures, networks and services with both public and private sector investment, and benefit from varying degrees of competition and collaboration, as well as standardisation and innovation. In addition, adequate risk management, mitigation of fraud and abuse, and protection of consumer interests are key supervisory and oversight considerations.

89. Establishing a legal and regulatory framework that is sound, predictable and non-discriminatory, and at the same time proportional and balanced with respect to these considerations, is particularly challenging. A failure to establish and effectively oversee adherence to such a framework can stifle competition and innovation, threaten the safety, soundness and efficiency of retail payment services, lead to inadequate protection of customers, and deter usage.

90. By and large, the key legal and regulatory issues for retail payments are not new. What is new is the attempt to bring it all together in the context of low-value, potentially high-volume retail payment services offered by old and new types of PSP through traditional and innovative approaches, and provide guidance specifically tailored to addressing financial inclusion aspects. In this regard, consultation with relevant stakeholders could prove useful.

91. The following five key aspects of the legal and regulatory framework are analysed in detail below: (i) regulatory neutrality and proportionality; (ii) risk management; (iii) protection of deposits and e-money customer funds; (iv) financial customer protection; and (v) financial integrity.

3.1.2.1 *Regulatory proportionality, neutrality and predictability*

92. A key challenge for regulatory authorities is to encourage innovation without compromising the safety and soundness of the NPS. Non-bank PSPs and innovative business and technological approaches have contributed to expanding access to payment services. However, management of the risks associated with the new players, innovative approaches and, for that matter, new customers is challenging.⁴⁴

93. Adopting a highly cautious stance towards innovative approaches tends to stifle competition and innovation. At the other end, a very light or lenient approach to innovation can fail to address risks and market failures and weaken the predictability of the overall legal and regulatory framework.

94. The challenge is therefore to design a legal and regulatory framework that is fair and balanced for all stakeholders, addresses risks and promotes innovation. In essence, this requires that the framework be risk-based, provider- and instrument-neutral, and forward-looking. In other words, the framework must be proportional to the risks that non-bank PSPs and new products and business models might create.⁴⁵ At the same time, predictability and clarity must be provided on the criteria that must be met by PSPs in order to

⁴⁴ Significant insights on the issues associated with non-banks and innovation in the retail payments space are provided in recent CPPI reports. See CPPI (2012, 2014).

⁴⁵ Risks vary across payment products types, eg whether the solution is open- or closed-loop, if it is prepaid, or if it is a multipurpose or a single purpose vehicle.

offer specific types of payment service, by payment system operators (PSOs) for the operation of payment networks and other infrastructures, by PSP agents and by other third-party payment intermediaries.

3.1.2.2 Risk management

95. Transaction accounts and retail payment services, more generally, are subject to a variety of risks, including operational, liquidity, reputational, business and fraud. Innovation may introduce new dimensions to these risks and new challenges in terms of detecting, managing and mitigating them.

96. Regulators need to address these challenges by requiring PSPs and PSOs to develop, implement and maintain a risk management framework that is adequate for their role in the industry. Once again, the challenge resides in right-sizing the regulatory requirements for this framework. In this context, the challenge for regulators is fourfold: (i) correctly identifying the risks; (ii) designing right-sized risk management requirements; (iii) strengthening the capacity of stakeholders to effectively implement such measures; and (iv) ensuring ongoing compliance with the framework.

97. In the financial inclusion context, six key risks in transaction accounts are of special relevance. A failure to address/manage these risks effectively could result in a loss of confidence in electronic payments, and thus slow or reverse their adoption, which would directly impact the achievement of financial inclusion goals:

- IT security/fraud: Security breaches and an increased sophistication of cyber attacks place the services of individual PSPs and even a country's entire retail payment system at risk. Implementation of adequate information security controls and fraud prevention and detection systems requires significant investment in people and system resources. This could be especially challenging for newer and smaller PSPs.
- Reliability and business continuity: The delivery of electronic transaction account services involves the use of a variety of equipment, communication networks and other technological means. Weaknesses in the management, maintenance or soundness of any of these can result in the failure of an individual PSP transaction account service, or even of the inter-institution transaction processing system. While the frequency, length and severity of these disruptions may vary, all such events can affect uptake and usage of transaction accounts.
- Business risk: A PSP could sustain large losses in other parts of its business, which would make it impossible to continue operations and services as a going concern. Even if the funds in transaction accounts held with the PSP were adequately protected (see Section 3.1.2.3 on customer funds protection), in the event of a bankruptcy these transaction accounts would no longer be operational and would need to be transferred to another PSP, or be shut down and the funds returned to their owners.
- Contractual relations and enforceability: In the course of providing payment services, PSPs typically have business relationships with a range of entities, including providers of payment infrastructures and networks, as well as providers of banking services and other non-banking services. At the same time, as a supplier of services themselves, the PSPs have a business relationship with their customers. Given the risks and liabilities associated with payments, as well as the need for clarity regarding the aspects or features of a payment service or the functioning of a payment infrastructure, the business relationship between parties should be governed by contractual agreements. Furthermore, the contractual agreements between entities along the payments chain (ie PSPs, PSOs and other stakeholders) as well as between the PSPs and end users (ie customers) should be clear and comprehensive. Finally, parties to such contracts, including users of payment services, need certainty regarding the legality and enforceability of their contractual relationships, as well as the legality of specific protections, liabilities and obligations that may be stipulated in the contracts (eg the use of

exclusivity agreements, customer lock-in provisions and liability for unauthorised payments). In this context, some of the key underlying aspects include whether the legal and regulatory framework is comprehensive enough to provide clarity, whether disclosures in contracts are sufficient and understandable, and whether clear and effective dispute management and redress mechanisms are covered in such contracts.

- Use of third parties as agents, and the outsourcing of back office and IT operations: These mechanisms can enhance the ability of PSPs to offer services at a low cost.⁴⁶ However, shifting operations and/or customer contact/interaction to third parties can dilute responsibility for risk management and overall control functions – including for KYC and AML aspects⁴⁷ – and thus place both the PSP and its customers at risk and make it more difficult for payment system overseers to execute their duties effectively.
- Credit and liquidity risks to customers in their role as account holders: Transaction accounts entail the storage of funds. Transaction account customers place funds with the PSPs for safekeeping until such time as the customer needs those funds to conduct a payment transaction or make a cash withdrawal. For a variety of reasons, PSPs may not be able to make the funds available to their customers when needed. Given its importance, this specific risk and its implications are discussed in further detail in Section 3.1.2.3 below.

3.1.2.3 *Protection of customer funds*

98. Customer funds will normally be reflected in the total balance of a transaction account. However, for electronic payments that are not settled in real time, the funds that were withdrawn from the account of the payer are not reflected immediately in the account of the payee, originating what is referred to as “float”. In the e-money context, float is typically referred to as the total value of outstanding customer funds (hereafter the term “customer funds” is intended to cover all these possibilities).

99. For deposit transaction accounts, the protection of customer funds against misuse and loss has traditionally been one of the major objectives of banking supervision. Supervision (and accompanying regulation) is used as a preventive mechanism, which is often complemented with deposit protection schemes (eg deposit insurance) that are triggered in the event a financial institution covered by the scheme goes bankrupt and is liquidated.⁴⁸

100. With the growth of e-money products and of the aggregate value of funds stored in the underlying e-money accounts, financial authorities are paying increasing attention to the risk of misuse or loss of these customer funds. E-money funds are subject to some of the same types of risk as traditional sight deposits, including the risk that the PSP, or an employee of the PSP, misuses or absconds with the funds, that the PSP faces bankruptcy, or that the financial institution that holds the underlying funds (but is not the actual PSP operating the e-money accounts) faces bankruptcy.

101. Furthermore, e-money transaction accounts differ fundamentally from deposit transaction accounts in that e-money accounts are not designed to facilitate financial intermediation. In this context, clarity regarding the potential use of funds held in e-money accounts becomes important. Thus, unlike traditional

⁴⁶ These mechanisms can also enhance the overall efficiency of the retail payment system: the first, by tapping into potential network economies and advanced technologies; and the second, by exploiting economies of scale and scope in back office and IT operations.

⁴⁷ The FATF has clarified the applicable requirements. See FATF (2013b).

⁴⁸ Deposit protection schemes vary widely, including with regard to whether they are implicit or explicit, thresholds, types of accounts covered, funding of the scheme, etc. For detailed information, see Basel Committee on Banking Supervision (1998, 2014).

deposit transaction accounts whose providers are subject to strict banking supervision, onlending e-money funds (or investing those funds) by the PSP would normally constitute fund misuse.

102. In this context, one of the most common set of risk mitigation measures that regulators adopt is to require the PSP that is the issuer of e-money products to place the totality of the underlying funds in an account at one or more banks, and that such funds be segregated from the operating funds of that PSP and protected against seizure by creditors and/or the government. In parallel, regulators may decide to impose caps on e-money funds and transactions to reduce the potential size of the loss to holders of e-money accounts and/or for AML/CFT purposes. Box 6 discusses approaches on protecting customer funds in different jurisdictions. In general, deposit insurance schemes do not cover e-money accounts. In at least one case, though, protection is available through “pass-through” deposit insurance. Under this scheme, the deposit insurance on the bank account in which the underlying customer funds are held by the PSP passes through to the e-money account holders.

Box 6

Safeguards for customer funds

Hong Kong Monetary Authority's study on measures for safeguarding customer funds in e-money schemes

As part of the implementation of a new regulatory regime for stored-value facilities (SVFs) and retail payment systems, the Hong Kong Monetary Authority (HKMA) conducted a study of safeguards for customer funds in e-money schemes and SVFs adopted in some major markets.

One objective of a safeguard is to ensure that sufficient funds are available to meet redemption from customers. The SVF features make them more like a means of e-money and e-payment than a means of saving. Therefore, in the markets reviewed by the HKMA, SVFs are normally not treated as a deposit and hence are not covered by deposit insurance.

The study indicates that SVF issuers are normally required to safeguard customer funds by: (i) placing the relevant funds in segregated accounts or (ii) setting up appropriate measures to protect customer funds. With regard to the latter, the study identified two typical types of requirement: (i) funds must be placed in a trust account, administered by a trustee, solely for the benefit of the customers; or (ii) customer funds must be covered by insurance or a comparable guarantee from an insurer or a bank.

Generally, when the SVF issuer becomes insolvent, the effectiveness of these safeguards largely hinges on the solvency of the supporting entities (ie the bank, custodian or insurer). Hence it is a general requirement that the supporting entities must not belong to the same group as the SVF issuer. Also, depending on the size of the customer funds, the SVF issuer may be required to involve more than one supporting entity to ensure the robustness of the safeguards.

Pass-through deposit insurance in the United States

In the United States, the FDIC offers deposit insurance pass-through protection on prepaid transaction accounts, including prepaid cards and e-money products issued in the United States, if specific conditions are met. First, the prepaid transaction service must be open-loop. Second, the underlying funds must be held in a segregated deposit account at a depository institution that is covered by FDIC deposit insurance. Third, the e-money account holders must be the principal owners of the funds in the account, not the PSP that set up the account on behalf of the e-money account holders. Fourth, up-to-date records on the identity of the e-money account holders and the amount of funds in the accounts must be kept.

Notably, US federal government payments, such as tax refunds and social security payments, can only be directly deposited into prepaid accounts that meet the requirements for FDIC pass-through insurance coverage. This requirement prompted at least one major retailer in the United States to modify the design of its prepaid card account service in order to qualify for FDIC pass-through insurance.

Customer funds protection in Colombia, India and Turkey

In Colombia, Law 1735 of 2014, the Financial Inclusion Law, created a new type of financial intermediary: the Societies Specialised in Electronic Deposits and Payments. These societies, known as SEDPEs, are considered deposit-taking institutions, and as such they are supervised by the Financial Superintendence and the deposits they receive are protected by the deposit insurance institution (ie FOGAFIN), just like the deposits at any commercial bank. On the other hand, as SEDPEs provide limited deposit and transactional services and are not allowed to provide credit, they are subject to a lighter regulatory framework (ie lower capital requirements, lower risk-weighted capital regulation and a simplified KYC and AML framework that facilitate broad access to deposit accounts and transactional services).

In India, amendments to the Payment and Settlement Systems Act 2007, which came into effect in June 2015, provide for the protection of customer funds if the issuer of prepaid payment instruments (PPIs) becomes insolvent. To protect customers who purchase PPIs, retailers who accept PPIs and payment system operators, the RBI has stipulated that the outstanding funds should be deposited in a designated account (escrow account) maintained with a licensed commercial bank. The float deposited in the escrow account is immune from the powers of the liquidator in the event of the insolvency of the PPI issuer or the bank concerned, to ensure customer protection.

Turkey's Payment System Law requires that funds received from the customers of e-money institutions and payment institutions be held in specific trust fund accounts at a licensed bank. The law further protects those customer funds from the insolvency of payment and e-money institutions by stating that the funds in those trust accounts must be used to compensate the customers (ie the funds holders) for any losses incurred and to fulfil the liability arising from the law regardless of the priorities given under other laws.

Sources: Bank of the Republic (Colombia); Hong Kong Monetary Authority; Reserve Bank of India; Central Bank of the Republic of Turkey; US Federal Deposit Insurance Corporation.

3.1.2.4 Financial customer protection and transparency

103. Transparency and customer protection are particularly relevant in the context of efforts to advance financial access, as such efforts naturally target first-time customers, who by definition lack experience and often have limited financial literacy. These efforts often also involve the introduction of new products and services, new PSPs and/or new service delivery models.⁴⁹

104. Five financial customer protection issues merit particular attention:⁵⁰

- Transparency on terms, conditions, fees and customer rights: The fees, terms and conditions associated with transaction account services and/or individual payment instruments can be quite complex, particularly for first-time customers. This can be further complicated in an environment in which new PSPs, new payment products and services are added. Moreover, in some innovative service models characterised by an absence of direct interaction with the PSP, the potential for miscommunication and misunderstanding of product features and costs is quite high. Also, with regard to transparency, the timeliness of the provision of information is of relevance, particularly as

⁴⁹ Service providers sometimes voluntarily agree on a code of conduct to address these issues, eg in November 2014 11 GSMA members representing 82 mobile money services in 51 countries publicly endorsed a Code of Conduct for Mobile Money Providers.

⁵⁰ Further detailed guidance on consumer protection in the context of financial services may be found in the G20's *High-Level Principles on Financial Consumer Protection* (OECD (2011)), the accompanying reports on effective approaches to implement the High-Level Principles (G20/OECD (2013, 2014)) and also in the World Bank Group's *Good Practices for Financial Consumer Protection* (World Bank (2012c)).

it pertains to comparison shopping and informed decision-making by customers. Box 7 describes transparency requirements in connection with transaction accounts and payment services in a number of markets.

Box 7

Transparency requirements in the context of payment services

Transparency and comparability of account fees in the European Union

Directive 2014/92/EU requires the provision of a fee information document, which is a standard form that must be given to consumers before they enter into a contract for a payment account. It must also be made available by banks and other PSPs at all times and in an easily accessible manner, including on the bank's or PSP's website. It should list the services most commonly offered on an account and the relevant fee. It should make use of standard terms to facilitate comparison between payment accounts offered by different providers. A glossary providing the definitions of the services listed in the fee information document should also be made available to consumers free of charge. The European Banking Authority will develop technical standards regarding a standardised presentation format of the fee information document and submit them to the Commission by 18 September 2016.

In addition, consumers who have a payment account must be provided with a statement of fees at least annually. The statement of fees contains information on the fees and interest paid by the consumer on the account, as well as any interest earned in the previous year. PSPs may decide to supply consumers with this information more than once a year. The statement of fees will also make use of standard terminology. The directive also states that consumers should have access, free of charge, to at least one comparison website for payment accounts in each member state. In addition, it establishes essential quality criteria for such comparison websites, including a requirement to be operationally independent of any PSP and to ensure that the information provided to consumers is up-to-date and accurate.

Transparency requirements for payment services in Turkey

The Payment Systems Law and regulations issued by Turkey's Banking Regulation and Supervision Authority include transparency requirements for the provision of payment services. Under these provisions, PSPs are required to provide specific information to their customers for both one-time and recurrent payment transactions. For example, PSPs must inform their customers of the maximum time required for finalising a payment transaction, the total fees and other charges for the service and, if applicable, the exchange rate that will be used for the transaction. In addition, the PSP must disclose all the information that customers need to provide in order to conduct a transaction.

For transaction accounts, the PSP must sign a contract with its customers. The contract must meet certain requirements as outlined in the regulation. Provisions regarding the amendment and revocation of these contracts by the PSP are also defined in the consumer protection regulations. Notably, PSPs are explicitly prohibited from charging a fee or commission for the provision of the required disclosures.

Sources: ECB; Central Bank of the Republic of Turkey.

- Liability for unauthorised transactions: While well established payment instruments such as credit cards and debit cards normally provide customer protection against unauthorised transactions in the form of limited customer liability, few e-money products do so. In the absence of such protection, newly included customers using such e-money products could suffer significant losses.
- Customer support, recourse and dispute resolution: Users of electronic retail payments are often uncertain about how to address service problems, whom to contact, how to report unauthorised transactions or errors, and how these issues will be resolved. Dispute resolution mechanisms play an important role in preventing customer abuse and motivate PSPs to address operational weaknesses that may be causing low-quality service, errors or security breaches. In this sense, such mechanisms

help build confidence in retail payment services. Clarity for clients on how to access the helpdesk and recourse mechanisms, the possibility to file the recourse complaint via the same channel as the original transaction, some degree of separation of the unit responsible for recourse from the PSP's profit centres, and independent oversight of the recourse mechanisms are often critical to ensuring that they operate properly, enabling new as well as existing customers to exercise their rights effectively.

- The privacy of customer transactional and/or personal data: PSPs can gather a significant range of customer data and information, including sensitive and/or personal data such as name, address, age, marital status, account number and balance, and transaction activity. PSPs might use this information inappropriately or without the customer's permission. A lack of clarity regarding what can be disclosed, and to whom, may deter the use of a payment service by some potential customers. For example, lower-income individuals may fear their transaction history could be used to disqualify them for social assistance or reduce their benefit value. At the same time, the disclosure of some types of data – with permission and prior notification – to some third parties may prove valuable to the client. For example, data provided to credit bureaus may facilitate access to credit for individuals whose transaction data indicates sound account management.
- Protections and due process related to the potential seizure of a customer's funds: Some instances arise in which a customer's creditors and/or government entities may seek to exercise a claim on that customer's assets, including funds held in, or en route to, the customer's transaction account(s). In the absence of clarity on the legality of such claims and the process necessary to exercise such a claim (and seize the funds), the funds of customers could be at risk.

3.1.2.5 *Financial integrity*

106. Financial integrity concerns can pose challenges to enhancing financial inclusion. In some countries, national authorities struggle to achieve an appropriate balance in the regulatory regime to protect the financial system from money laundering and terrorist financing risks, on the one hand; and, on the other hand, to build in sufficient flexibility to address customer identification issues in an uncumbersome way, enable the entry of non-bank PSPs, and allow the use of innovative payment instruments and services.

106. The Financial Action Task Force (FATF) supports a risk-based approach to implementing the FATF Recommendations.⁵¹ However, many jurisdictions have found it difficult to determine how to design a risk-based regime that would be seen to be in full compliance with the FATF Recommendations. Many country regulatory authorities have therefore opted to adopt rules-based, somewhat restrictive AML/CFT regimes, rather than risk being found non-compliant with the FATF Recommendations.

107. In order to assist jurisdictions in implementing the risk-based approach in their national context, the FATF has issued guidance on AML/CFT and financial inclusion, specifically designed to support the efforts of countries to design and implement a risk-based approach that protects the integrity of the financial system and at the same time supports efforts to deepen financial inclusion. Since the revision of the Recommendations in 2012, the risk-based approach forms the basis on which all AML/CFT measures should be implemented (see Box 8).⁵²

⁵¹ The FATF Recommendations are the global standards against money laundering and terrorist financing. See FATF (2012).

⁵² For the complete revised guidance, see FATF (2013).

Risk-based approach to AML/CFT regimes and financial inclusion

In 2012, the FATF revised the FATF 40 Recommendations to combat money laundering and the financing of terrorism. In the revision, the FATF stated that countries should identify, assess and understand the money laundering and terrorist financing risks for the country, and should take action to mitigate those risks effectively (Recommendation 1). Based on that assessment, the FATF also requires countries to apply a risk-based approach commensurate with the risks identified. This requirement for risk assessment applies at the national level, as well as at the level of obligated financial institutions and designated non-financial businesses and persons (such as lawyers, notaries and real estate agents).

The reinforcement of the risk-based approach (which previously was only an option for countries) allows for greater flexibility in the application of certain elements of a country's AML/CFT regime, which could support and advance national financial inclusion efforts. The FATF further states in Recommendation 1 that "where countries identify lower risks, they may decide to allow simplified measures for some of the FATF Recommendations under certain conditions".

The area where this is most relevant is in the context of customer due diligence (CDD). In the past, it has been suggested that overly strict requirements regarding customers' identification and verification has had unintended effects on financial inclusion. For example, in a country where many people may lack official documentation to prove identity, strict application of CDD requirements (such as requiring a formal address, which is not part of the FATF requirements) may exclude them from the formal financial system. Or, strict CDD procedures that lead financial institutions to pass on costs to the customer could act as a disincentive for customers – especially the poor – to use those services. Under the revised FATF Recommendations, should a country be able to identify lower-risk scenarios or products (eg a prepaid low-value product or a basic account with strict deposit/withdrawal thresholds), the country may allow simplified CDD processes for those situations.⁵³

In addition, and of particular relevance in a payment context, Recommendation 16, which addresses the requirements related to electronic funds transfer ("wire transfer" in the terminology used by the FATF) activity, allows countries to simplify CDD in relation to cross-border transfers where transactional value is below USD/EUR 1,000.

Source: Based on FATF publications.

3.1.3 Financial and ICT infrastructures

108. Reliable financial, communications and other types of infrastructure are widely recognised as critical to the provision of efficient and cost-effective payment services.⁵⁴ In this sense, infrastructure components of the NPS are a fundamental foundation for financial access and inclusion.

109. While service point and access channel networks (eg branches, PSP agents and ATMs) are often discussed in the overall context of payment infrastructures, when analysing financial inclusion aspects it is preferable to look at them separately. This section focuses, therefore, on the core payments and ICT infrastructures that provide the foundation for the operation of electronic payment instruments and services, and concludes with a discussion on the characteristics of infrastructures that effectively support financial inclusion. Service points and access channels networks are analysed in Section 3.2.2.

⁵³ In some countries, this alternative has resulted in so-called "tier-based" requirements for account opening, whereby low-risk products are subject to lower CDD/KYC requirements. Then, as the AML/CFT risks of the products increase, the CDD/KYC requirements for opening the underlying accounts also increase.

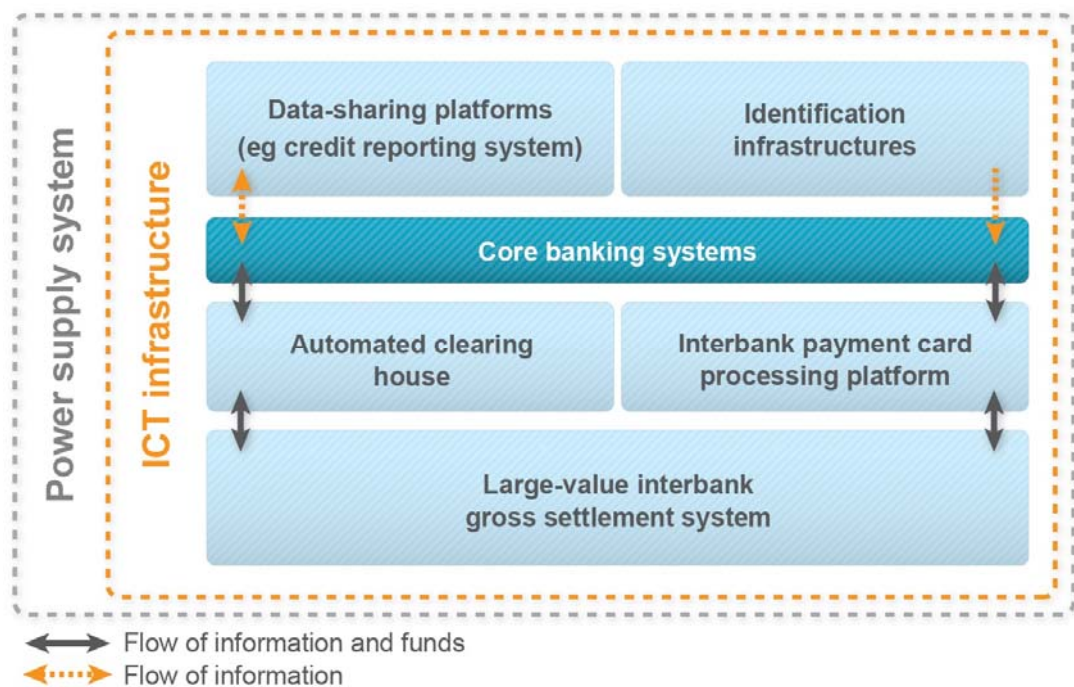
⁵⁴ See World Bank (2012a).

3.1.3.1 Types of infrastructure providing the foundation for inclusion

110. Key infrastructures include an interbank system for retail electronic funds transfers (ie an automated clearing house (ACH)), a payment card processing platform or platforms (ie a payments switch) and a large-value interbank settlement system (ie a real-time gross settlement system (RTGS)); a robust communications infrastructure; and an effective and efficient identification infrastructure. Absence of any of these infrastructure components hinders the national payment system in exploiting the potential benefits of modern payment instruments, and therefore adversely affects financial inclusion.⁵⁵ Credit reporting and other data-sharing platforms also play an important role, especially for transaction accounts to become an effective gateway for broader financial services. The interactions between these infrastructure components are shown in Figure 2.

Interplay of relevant infrastructures – stylised model

Figure 2



Source: PAFI Task Force.

111. Large-value interbank settlement systems have been a focus of central banks for more than three decades and, as a result, they are nearly universally implemented nowadays.⁵⁶ While these systems are only rarely associated with financial inclusion efforts, they are a critical foundation as they enable the safe and

⁵⁵ In order for PSPs to fully benefit from these infrastructure components, they need to have certain basic internal operating systems in place, namely an automated and centralised account management infrastructure (ie a core banking system), in order to process electronic payment mechanisms efficiently.

⁵⁶ The World Bank's *Global Payment System Survey 2012* shows that RTGS systems are operating in 127 countries.

efficient settlement of many other interbank payments infrastructures. Moreover, there are a number of countries in which the RTGS system is also used for retail payments.⁵⁷

112. Interbank systems for retail payments – often referred to as ACHs – and interbank payment card processing platforms (card switches) play a more direct role in financial inclusion as these infrastructures are designed for the daily processing (including clearing and often netting) of a large number of payments of typically low value. ACHs have generally focused on two distinct retail payment products: direct credit transfers and direct debit transfers (collectively defined above as EFT-based instruments as per Section 2.2).

113. The existence of a national ACH effectively increases the network size of access points (eg ATMs or branches) for individual customers, since it acts as a hub for processing interbank transactions and consequently exhibits positive network externalities. Any branch of a bank or other PSP member of an ACH can be used to initiate a funds transfer to a customer of another ACH member. This supports countrywide reachability, even if a bank does not have access points deployed in specific regions.

114. An interbank payment card processing platform is a mechanism that connects various payment card issuers, typically banks. It allows the exchange of payment card transactions of a bank's cardholders with another bank's merchant, ATM or another card acceptance device – provided that both banks are participating in the platform.⁵⁸ Payment card processing platforms also play an important role in increasing the effective size of the access channel network by interconnecting the ATMs and POS terminals of different issuing banks. By doing so, they increase the positive network externalities to the benefit of customers. For example, in certain cases,⁵⁹ PSPs with a regional or local focus can offer their customers nationwide and even international coverage via card payment platforms.

115. There are other infrastructures that, while not being part of the clearing and settlement process (ie the exchange of payment information and funds), are also of major relevance for financial inclusion as they provide critical information to PSPs and other financial service providers. These include ID infrastructures and credit reporting and other data-sharing platforms.

116. Central to providing any kind of financial service such as transaction accounts is the ability of a PSP to accurately identify its current and potential new customers. Poor identification mechanisms for individuals and firms can impede access to transaction accounts. In addition, PSPs have become increasingly cautious with regard to AML/CFT procedures, in particular KYC requirements. Hence, individuals and small businesses that do not have the ID documentation needed to open an account could be excluded from the service due to this reason.⁶⁰

117. In this context, a modern and robust ID system (eg an electronic ID or e-ID system)⁶¹ can help PSPs and other financial sector providers reduce their customer due diligence costs. For example, e-ID systems can

⁵⁷ For example, Mexico and Saudi Arabia.

⁵⁸ Payment card switches are also increasingly used for processing card transactions initiated through channels such as the internet and mobile phones.

⁵⁹ For this, a requirement would be that the respective payment card can be processed by the card payment platform(s) in the country and abroad. Typically, this is made possible by having the card issued under one of the brands accepted worldwide such as VISA and MasterCard, although for domestic and even for regional use some other brands are also widely accepted.

⁶⁰ Most low- and middle-income countries have weak national ID systems. In the countries comprising sub-Saharan Africa, for example, as many as 55% of individuals do not have an official identification record. For additional information, see World Bank (2014).

⁶¹ Identification systems that use electronic and biometric technology are often referred to as digital ID systems or electronic ID systems. In those systems, the identity can be securely and unambiguously asserted and verified through electronic means for delivery of services across sectors, including health care, safety nets, financial services and transport.

help open up new distribution channels, allowing PSP agents to reliably validate customer identity. Box 9 illustrates two country cases where e-ID systems are being used successfully.

Box 9

ID systems and financial inclusion: select country examples

Chile

RUT is the taxpayer ID number in Chile. Banco Estado, a state-owned commercial bank, has opened a Cuenta RUT for every Chilean who holds an RUT, using the RUT number as the bank account number. A Cuenta RUT is similar to basic transaction account and is being used to promote financial inclusion. An RUT account is often an easy gateway to other financial services and can facilitate transfers to and from the government or other bank accounts as well as retail payments or transactions at ATMs or at PSP agents. As of October 2014, nearly 7 million Chileans used Cuenta RUT, with an average of 8.5 transactions per customer per year.

India

Aadhaar was developed to provide a unique identifier and an e-KYC tool. As of April 2015, 818 million Aadhaar numbers, and associated cards, had been issued. With 85% of those issued to residents over the age of 19, the adult population coverage climbed to an estimated 91%. The information containing demographic details and photographs made available from the Unique Identification Authority of India as a result of the e-KYC process (which is in an electronic form and accessible so as to be available for subsequent reference) may be treated as an "Officially Valid Document" under the Prevention of Money Laundering Rules. The recent introduction of direct benefit transfer for validating the identity of the beneficiary through Aadhaar will help facilitate delivery of social welfare benefits by direct credit to the bank accounts of beneficiaries. The government has already started routing the subsidy for cooking gas and also social benefits through the banking network using the Aadhaar-based platform as a unique financial address for beneficiaries.

Sources: Reserve Bank of India; Inter-American Development Bank/Multilateral Investment Fund; Unique Identification Authority of India.

118. In essence, credit reporting systems consist of databases on debtors,⁶² together with the institutional, technological and legal framework supporting the efficient functioning of such databases. Credit reporting systems try to mitigate the fundamental challenge of asymmetric information between service providers and their customers. While credit reporting systems are only rarely used as a means of increasing access to transaction accounts, they can be especially useful to open up the path to broader financial services (eg granting overdraft facilities for a transaction account, offering certain payment instruments with a built-in credit facility such as a credit card, and granting personal loans). The respective decision-making is often based, at least in part, on data collected by credit reporting service providers (CRSPs). Credit reporting systems in which CRSPs collect comprehensive credit and credit-related data from a large variety of financial and non-financial sector lenders and other data providers (eg utilities) have generally proved effective in supporting access to broader financial services. In contrast, access may be inhibited when CRSPs collect a limited set of data solely from financial sector lenders. This is because an individual's contractually compliant behaviour would not be adequately reflected in that case. For example, individuals who do not have or have not had a loan with a financial institution would not be captured by CRSPs, even if they were otherwise creditworthy as reflected by their payment record for utility bills or loan repayments with non-financial sector lenders.

⁶² Some credit reporting systems specialise in individuals and some in businesses and public administrations, while others cover all debtor types.

119. Finally, it needs to be noted that all the infrastructures discussed in this section are dependent on more basic infrastructure elements, such as a smoothly functioning ICT network with broad coverage throughout the country and a reliable power supply.

3.1.3.2 *Characteristics of infrastructures that effectively support financial inclusion*

120. The following key elements or characteristics of financial and ICT infrastructures are deemed crucial for effectively supporting financial inclusion and are therefore discussed in detail in this section: (i) interoperability and coverage; (ii) accessibility; (iii) efficiency and standardisation; and (iv) safety and reliability.

121. Broadly speaking, interoperable payment systems⁶³ 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. The consequences of low interoperability are overlapping or limited coverage,⁶⁴ sunken investment costs and inefficiency. For example, a proprietary payments infrastructure, such as a bank's own ATM or POS network that is not interoperable with other similar networks has limited impact on financial inclusion due to its limited network size. Certain payments infrastructure pricing and access policies can negatively affect interoperability.

122. Restricted access to financial and ICT infrastructures, especially of new or non-traditional service providers, tends to constrain the supply of payment services to users. Often incumbents with a dominant position in one infrastructure have the incentive to create barriers for access to new entrants. However, there are some more fundamental challenges to accessing the messaging, clearing and settlement service infrastructures, including those associated with technical, legal/regulatory and/or financial viability issues (ie direct access might be too expensive). For example, direct access to payment infrastructures (retail or large-value) is governed by a number of regulatory provisions (eg fulfilment of minimum capital requirements) and requires compliance with a number of technical considerations in order to mitigate potential risk. Fulfilling all these considerations might be especially challenging for newer and non-traditional PSPs.⁶⁵ At the same time, accessing payments infrastructures indirectly through banks or other direct participants may not be straightforward. Banks see other PSPs as competitors and hence will have incentives to create access barriers to new entrants. Finally, when it comes to accessing telecommunications infrastructure such as mobile phone networks, both banks and PSPs might face challenges if an MNO itself is also a PSP (or is partnering with a specific PSP for this purpose) and decides not to provide other PSPs access to certain technologies, eg unstructured supplementary service data (USSD) services.

123. Efficiency implies that the costs in the retail payments value chain are as low as possible. Efficiency depends upon factors such as technology and innovation and the level of competition within the retail payments market. Efficiency also depends on the broad usage of technical standards to enable straight through processing of payments, as well as the use of harmonised procedures and business rules. In fact, standardisation initiatives such as the adoption of ISO 20022 message standards can facilitate the

⁶³ In the context of retail payments, there are multiple levels of interoperability – system-wide, cross-system and infrastructure-level. For more details, see World Bank (2012b).

⁶⁴ The cost of deploying and maintaining ATMs and/or POS terminals might also adversely affect the density of bank ATM networks, with the rural, lower-income and less populated parts of a country being at a comparative disadvantage.

⁶⁵ In practice, direct access of non-deposit-taking PSPs to payment infrastructures is the exception rather than the rule.

interoperability between PSPs and retail payment systems.⁶⁶ Hence, efficiency also depends on achieving a good level of cooperation among stakeholders for the definition and generalised adoption of all such standards.⁶⁷ Box 10 discusses these concepts in the European Union in the context of the SEPA project, and some of the expected effects on financial inclusion.

Box 10

The Single Euro Payments Area and the payment services directive

Efficiency, standardisation, innovation and financial inclusion

Efficiency, innovation and standardisation are key objectives of the European System of Central Banks and the European Commission for the European retail payments market – characteristics which can positively impact financial inclusion too. The aim of the Single Euro Payments Area (SEPA) is to overcome technical and market barriers between countries in order to create a single market for retail payments in euros in which payments are as fast, safe and efficient as national payments.^① The project was launched by the European banking and payments industry and is supported by EU governments, the European Commission, the Eurosystem and other public authorities. Agreed standards and technical requirements, and a common legal basis, notably the PSD, serve as the foundation for payments within SEPA.

The PSD, adopted in 2007, was aimed at increasing competition, by easing market entry for new actors (namely payment institutions) and enhancing transparency for consumers by introducing information requirements for PSPs (eg execution time and fees) and by reinforcing the rights and obligations linked to payment services (eg shorter execution time, refund rights, liability of consumers and payment institutions). On 24 July 2013, the European Commission proposed a revised PSD (known as PSD2) with the aim of further harmonising the legal framework throughout the EU and of fostering technological developments spurring the most innovative payment services while preserving adequate consumer protection.

With a view to sustaining financial inclusion, the PSD2 consolidates the options allowing member states to extend the provisions on transparency in terms of fees and certainty of conditions applied to the so-called “two-leg” transactions to those for which only one PSP (“one-leg” case) is located in the European Economic Area (EEA), as in the remittances case. The PSD2 aims to better protect consumers against fraud and other abuses and payment incidents. It further streamlines and harmonises the liability rules in case of unauthorised transactions, ensuring enhanced protection of the legitimate interests of payment users. Except in cases of fraud or gross negligence on the part of the payer, the maximum amount a payer could, under any circumstances, be obliged to pay in the case of an unauthorised payment transaction has been decreased from EUR 150 to EUR 50.

The PSD2 also maintains, in the negative scope, “independent ATMs” (ie ATMs that are independent from banks or other PSPs); this avoids overburdening such providers in order to continue to ensure the provision of these services, which are of particular relevance in less populated areas, but at the same time requiring ATM operators to comply with specific transparency provisions in order to ensure clarity about withdrawal charges. The PSD2 opens the EU payments market to intermediaries – so called “payment initiation services providers” and “account information services providers” – offering consumer- or business-oriented payment services based on access to payment accounts issued by other PSPs. The PSD2 was published in the Official Journal of the European Union on 23 December 2015 and entered into force on 13 January 2016. From the date of publication, member states have two years to introduce the necessary changes in their national laws in order to comply with the new rules.

⁶⁶ ISO 20022 is 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.

⁶⁷ Lack of cooperation, on the other hand, may lead to the use of proprietary standards, often resulting in path dependence and lock-in effects.

SEPA became a reality in August 2014. Since then, existing national euro credit transfer and direct debit schemes have been replaced with SEPA instruments, thus providing the basis for an integrated euro retail payments market characterised by a harmonised set of basic payment instruments, transparent rules and standards. All in all, SEPA has enlarged the market for payment services compared with the one seen in nationally segregated markets. This development is expected to enable the entities involved in retail payments to realise economies of scale and to compete in terms of the quality of their services, and hence it is expected that it will foster financial inclusion. Ultimately, technical standardisation and a sound legal framework will help make electronic payment instruments more widely available not only to end users currently excluded, but also to those that already have access to financial services.

Sources: ECB; Bank of Italy.

① The SEPA consists of 34 European countries: the 28 EU member states plus some non-EU member states.

124. Payment and ICT infrastructures are required to function securely and smoothly, which is critical to maintaining public confidence in the reliability of payment services. Ensuring adequate safety and overall reliability levels requires appropriate identification and management of the underlying risks. Fraud prevention and detection are an area that is especially critical when it comes to financial inclusion efforts, especially in the context of new market players, new technologies, products and services, and new service delivery models.

3.2 Catalytic pillars: drivers of access and usage

3.2.1 Transaction account and payment product design

125. Despite the number and range of innovative products and services launched in recent years, success in achieving long-term and effective adoption of transaction accounts – as reflected in the actual usage of the payment instruments embedded in the service – remains relatively limited. This is particularly evident in the context of large-volume government payment programmes: while electronic disbursement to transaction accounts, as opposed to cash payouts, offers an important tool to increase financial inclusion, recipients in many cases do not make use of the store of value and electronic payment service functions made available to them. Instead, recipients have a high propensity to fully cash out their payment cards immediately or shortly after receipt. A similar pattern can be observed for many mobile money solutions, since beneficiaries tend to withdraw the full amount received at once. Insufficient attention to product design is one of the explanations behind this situation.⁶⁸

126. Effective design of payment products involves the identification of customer needs and the selection of the mix of product features that offer the potential to meet those needs at a reasonable cost for customers. These issues are explored in the following two subsections. Then, some of the challenges PSPs face to effectively match customer needs with product features are discussed.

3.2.1.1 Identifying customer needs

127. Identifying and understanding the needs of the customer segments that are being targeted by financial inclusion efforts is critical in order to develop products (eg transaction accounts) that effectively meet

⁶⁸ In government cash transfers programmes, for example, having customer-friendly features in the payment products that are provided to programme beneficiaries has not been, so far, a primary consideration. Lower administrative costs, greater control over the distribution of funds to reduce leakage, and modest payment service fees top the list of motivations of those responsible for such programmes.

the needs of such customers. While there is no novelty in this statement, the relationship between features and product uptake is often overlooked.

128. Knowledge of the target population's existing payment habits is usually an important first step. End users currently excluded from transaction account services are often already engaged in making regular payments (eg utility or loan payments). Leveraging existing payment habits can be a way to introduce a transaction account product or service that is likely to be appealing to those end users.

129. Obtaining an accurate picture of the transaction needs and habits of the target population is, nevertheless, a significant challenge. Gathering the necessary information, for example through market research campaigns, can be expensive, especially in poor and isolated communities, relative to expected revenue and profit margins. Some central banks conduct specific studies that can provide a valuable source of information on the payments behaviour and preferences of users. Box 11 describes various approaches taken by PAFI member countries to gather information on how customers use transaction services.

Box 11

Different approaches in surveying customer use of transaction account services

Results of a survey of PAFI Task Force members

As part of a broader internal survey, PAFI Task Force members provided information on nationwide surveys conducted in their countries on consumer payment service access and usage. Nine of the 11 PAFI members that completed the survey reported that at least one such survey had been conducted in their country. In most cases, the surveys were designed to gather high-level information on consumer transaction habits – such as the transaction instruments used, the use cases by instrument and the reasons why the consumer did not have transaction accounts or preferred to use cash. In all but three cases, the surveys were commissioned by the central bank, alone or in collaboration with other government agencies or financial sector industry groups. In one case, the social benefit agency conducted the survey; in another case, the nation's card switch conducted the survey. In those two cases, the purpose and scope of the surveys were more narrowly defined than in the central bank commissioned surveys. Only one country reported that their primary consumer payments survey is integrated into a broader consumer survey. In this case, the payments survey is conducted as part of the semiannual national survey of household income and expenditures. For the rest of the countries, the surveys are conducted on a standalone basis, with half being one-time surveys and the other half annual or periodic surveys. Several countries also reported that smaller surveys of payment behaviour – typically regional or community specific – are conducted as needed.

Source: Based on information gathered via an internal survey carried out in the context of the CPMI-WBG PAFI Task Force.

3.2.1.2 *Transaction account and payment product features*

130. Transaction account products are defined by the combination of features associated with the service. These product-specific features, in combination with broader market practices (eg consumer protection), affect the attractiveness of the respective product for customers. Product-specific features also impact the cost for PSPs of providing the payment service. In general, the more generous the features in a payment product, the more attractive/useful it will be to existing or potential customers, and the more costly it will be for PSPs to provide. However, the success of a payment product is not necessarily related to the overall generosity of features, but rather to whether the features can satisfy, to a reasonable degree, the needs of the intended customers.

131. Product features include the cost of the service, types of point of service or access channel that can be used, the speed of transaction completion, ease of use, the possibilities for storing value, whether there are

limits on the number and/or value of transactions that can be performed during a set period, and the periodicity or frequency with which detailed account statements are to be provided. Box 12 provides an example of transaction accounts with built-in budgeting tools. In addition, as noted above, there are other features that typically affect all products or one or more subset(s) of products. These broader features were discussed above in this chapter and include the protection of customer funds, protection of customer data and responsibility for unauthorised transactions.⁶⁹ This section focuses on the features that are generally associated with individual product design.

Box 12

Transaction account and payment product design – built-in budgeting tools

Customers with low and irregular incomes may be accustomed to physically setting aside cash (in purses, envelopes, etc) to meet specific needs, such as school fees or rent. They may be reluctant to shift to electronic store of funds and transactions, particularly if that means losing their ability to establish various stores of funds for specific purposes and to keep track of the value of their set-asides. This concern could be addressed by building into transaction accounts various tools for budgeting funds and monitoring payments.

In the case of cash, a quick look inside the purse – recalling the initial content and calculating the difference from the remaining content – provides an immediate picture of total expenses made. For electronic transactions, the user needs to consult an account statement. The time frame within which this is available varies from almost immediate (if the statement is available online or on a mobile app) to a few days/weeks (if it is made available in paper form). Furthermore, there may be a time lag between the moment the payment is made and the moment it appears in the account statement. With regard to monitoring the nature of the expenses, cash leaves no trace of the type of purchase made, whereas electronic transactions are reported individually in a transaction account statement. When it comes to setting pre-defined budgets and monitoring the amount left to spend, customers can stick to a predetermined budget by cashing out the amount of money allowed to be spent during a particular period and paying only in cash. This makes overspending impossible. Actually, customers may further refine their budget by subdividing their cash into various purses/envelopes (one or several purses/envelopes for fixed costs such as rent, utilities and school fees for children, one or several purses/envelopes for variable costs such as food and sundry expenses, etc). Electronic retail payment instruments require spending constraints to be set mentally; they leave more freedom to spend more/for other purposes than the pre-defined purposes if there is a positive balance in the account.

Commercial or free online banking software tools (eg StarMoney, Hibiscus) or apps (eg Centralway Numbrs) provide (inter alia) expense monitoring and spending analysis. However, it seems that development of easy and low- or no-cost electronic budgeting tools is still pending. For example, an earmarking function in a transaction account, which allows reserving amounts for certain purposes (rent, utilities, school fees, etc), could encourage customers targeted by financial inclusion efforts to use the electronic payment functions embedded in the service.

Source: ECB, with reference to research on the role of budget control in the use of cash and debit cards by L Hernandez, N Jonker and A Kosse in "Cash versus debit card: the role of budget control", Netherlands Bank, *DNB Working Paper*, no 429, 2014.

132. Service cost refers to the combined fees charged to end users, including the cost of maintaining a transaction account, fees to conduct transactions via in-network access channels, and fees to conduct transactions via out-of-network access channels. The cost of the service for end users depends basically on the PSP's costs to provide the service, the level of competition in the market, and market demand for the service. The latter will depend on the value of the service to users. The former – the PSP's cost to provide the

⁶⁹ In some cases, especially in the context of e-money accounts, the protection of customer funds may not be required by law or regulation, therefore leaving the decision to individual PSPs on whether or not to offer such protection for their specific products.

service – will depend on the PSP’s internal operating expenses, as well as the cost to the PSP to access the relevant payment infrastructures and access networks.

133. With regard to the points of service and access channels that can be used with a given transaction account, the most relevant aspect is whether these meet the target community’s needs in terms of the usability of the account and its associated payment instruments. For example, whether those points of service/access channels are located within a convenient distance, and whether their mix is broad enough (ie PSP agents, ATMs, bank branches, POS terminals and internet access).^{70, 71}

134. Usability of a payment product also depends on whether that product is accepted by all or at least many of the private and public sector entities with whom an end user regularly conducts transactions. Until acceptance of that product reaches critical mass – at least, among the end user’s main payment counterparts – the product will be of limited value to that end user.⁷² Clearly, to gain broad acceptance, the needs of those private and public sector entities must also be taken into account as part of the product’s design.

135. Ease of use refers to the extent to which a payment product is easy to use by the target customer group(s). To a large extent, ease of use depends on the number and coverage points of service/access channels where the payment product can be used, as previously explained. The type of access channel and of the payment instrument(s) associated with the service also affect ease of use, as some of them may require higher overall literacy on the side of the customer or may require the latter to know/memorise more information to make a payment. Other aspects – such as the types of transaction, maximum amounts per transaction and types of payee that can be reached – also tend to vary across access channels and payments instruments.

3.2.1.3 Design constraints

136. Typically, PSPs have control over some of the features they can offer in a payment product, but others may lie outside their control. In other words, the enabling environment can impose constraints on effective product design. Such constraints can include regulatory restrictions – for example, on the types of PSP that can offer certain payment and payment-linked products, the regulatory framework being inflexible and not allowing for a reasonable trade-off between account functionalities and cost, cumbersome and costly customer due diligence (CDD) requirements – as well as weak or inaccessible retail payment infrastructures, limited interoperability of points of service/access channels, and unreliable communication networks. These constraints and/or their underlying costs are usually an important factor that prompts PSPs – or the administrators of large-volume payment programmes that promote financial inclusion and who make use of those PSPs to conduct the respective disbursements (see Section 3.3) – to launch products with generic but often quite basic features that fail to meet the needs of the target population.

3.2.2 Readily available access points

137. Service points and access channels can be classified on the basis of how payments are initiated from the payers’ perspective. Conceptually, there are two main types of payment initiation: in-person payments and remote payments (see Table 3).

138. In-person payments are initiated at the point of sale of a good or service or at an outlet (eg a bank branch and PSP agent) or machine (eg an ATM) provided by the PSP and involve an in-person interaction

⁷⁰ As discussed above, interoperability can play a critical role in expanding the effective size of service points/access channel networks. In contrast, exclusivity agreements limit the interoperability of service/access points that are otherwise interoperable.

⁷¹ The types of service point or access channel and related issues are discussed in more detail in Section 3.2.2 of this report.

⁷² The value of the service to customers increases as the number of payees that accept a payments instruments increases. See the discussion of the “tipping point” in Table 2.

between the payer and a representative or machine of the payee or the PSP. The point of sale can be any place where the payer and the payee physically converge. Cash and cheques are often used for in-person payments at the point of sale. POS terminals are also an important access channel for the use of payment cards for such purposes. Likewise, in some cases, mobile phones are being used for in-person payments with the funds being transferred directly from the payer’s mobile money account to that of the merchant.

139. A remote retail payment can be initiated in the course of the economic transaction between the payer and the payee (eg mail order/telephone order or e-commerce) or it can be separated from the underlying economic transaction (eg bill payment). Remote payments are initiated via regular mail, the internet/designated lines or via the telephone/mobile phone network.

140. The same payment instrument can typically be used in different service points/access channels. Cheques, for example, can be used for in-person payments (eg at the grocery store) or remote payments (eg by mailing the cheque). Debit and credit cards can be used for in-person payments (eg at a POS terminal at restaurant), or remote ones (eg over the internet for e-commerce or by mailing a purchase order with payment card information).

Categorisation of different access points/channels for retail payments

Table 3

	In-person payments	Remote payments
Payment access point/channel	<ul style="list-style-type: none"> • Personal exchange of cash or cheques • POS terminal • Bank branch • Post office • Automated teller machine • PSP agent office • Collection office 	<ul style="list-style-type: none"> • Regular mail • Internet/designated lines • Telephone/mobile phone network

Source: World Bank (2015c).

141. The success of retail payment services depends critically on the availability, quality and reliability of customer service and access points. Historically, one of the greatest barriers to transaction accounts and other financial services has been the lack of physical proximity of the respective service providers and/or the access points/channels they are offering. Customers’ payment behaviour is especially sensitive to the density of access points in close proximity to their home or workplace. Limited access to physical access points may reduce the probability that a transaction account or a payment instrument are adopted and, even if they are adopted, it may reduce the effective use of available payment instruments. Innovative payment services and business models offer the promise to bridge the physical divide without necessarily expanding the (physical) branch network.

3.2.2.1 Creation and expansion of an access point network

142. From a customer perspective, it is important to differentiate between those access points to be visited for the initial opening of a transaction account and/or the acquiring of specific payment instruments, and those access points utilised for the regular use of the transaction account and/or a specific payment instrument. The set of requirements to open a transaction account usually oblige the applicant to go in person to a PSP branch. However, in some countries individuals can open a simplified transaction account at a PSP agent location or online. For the ongoing use of the account through the payment instruments associated with it, a physical presence is in principle no longer necessary, as today’s technology makes it possible to

execute and receive all or nearly all types of transaction remotely. This, however, depends in part on access points for a transaction account being sufficiently close to the user.⁷³ Box 13 shows an example of how ATMs are being brought closer to transaction account customers in Vietnam.

Box 13

Mobile ATMs in Vietnam

Since their first appearance in Vietnam in 1996, bank cards have become a popular non-cash payment instrument and are used throughout the country. The number of bank cards issued and the number of transactions with them have been increasing annually by 30% and 20%, respectively, in recent years. As of end-2014, the number of bank cards issued reached nearly 80 million. By end-March 2015, 16,112 ATMs and 192,255 POS terminals had been installed.

As the demand for banking services has risen rapidly following fast-growing urbanisation, banking infrastructure, especially card payment services, has been put under pressure. According to the General Statistics Office, over the last 10 years 15% of the total population, some 13 million people, have moved from rural areas to urban locations to work. This is one of the main groups that usually use ATMs to withdraw cash from salaries as well as bonuses every month. On paydays and holidays, ATMs are always overloaded and are generally not able to meet the demand peaks, upsetting workers and companies and weakening the reputation of banks.

The State Bank of Vietnam has proposed several solutions to deal with this overload. For example, commercial banks cooperate with companies to make sure that they pay salaries on different days. Additionally, to create cash payment points in companies on paydays, some commercial banks are being authorised to utilise mobile ATMs.

Technically, mobile ATMs are similar to traditional ATMs. Two or more mobile ATMs are installed on one truck. Mobile ATMs can move to different places and use wireless telecommunication mechanisms. For this reason, mobile ATMs require higher levels of security, including solutions to prevent customers falling victim to fake ATMs. Technical requirements for mobile ATMs were formulated in a circular by the State Bank of Vietnam.

Currently, the state bank has allowed two commercial banks to provide mobile ATMs in certain areas of the country, particularly in industrial zones. One bank provides trucks with four ATMs set up in one truck and the other bank provides trucks with two ATMs in one truck. The service has cut costs and has proved to be an effective means of popularising electronic payment services, and also of easing the pressure on traditional ATMs.

Source: State Bank of Vietnam.

143. In a market economy, private PSPs will try to maximise their profit and will therefore focus on those geographic areas and customer segments that promise the largest margin. Since the establishment of outlets involves considerable fixed costs, suppliers will first focus on areas with a higher user frequency and wealthier customers, which are typically urban areas. In several countries, post offices have historically offered certain financial services and very often have a much more extensive branch network than banks, including in more remote parts of the country. Box 14 illustrates the case of Turkey's post office.

144. PSPs extend their network of access points beyond the urban areas for several reasons, including for a niche market strategy (eg focusing especially on farmers). New business models allowing for a reduction in the fixed costs (eg through the use of third-party businesses as PSP agents) and/or a decreasing importance of manual physical contact points (eg growing incorporation of bill payment functionality in POS and ATM

⁷³ Among developing economies, there is a significant relationship (after accounting for GDP per capita) between distance as a self-reported barrier to financial inclusion and objective measures of PSP penetration. For additional details, see Demirgüç-Kunt and Klapper (2012).

kiosks, and expanding payment options via the internet and mobile phone technology) enable PSPs' rural expansion without necessarily expanding the physical branch network. On the other hand, factors such as small or zero expected profit margins (eg due to high costs of infrastructure deployment and/or low demand for the service) deter PSPs from expanding their network of access points.⁷⁴

Box 14

The role of Turkey's post office in financial services

The post office offers financial services in many countries, typically through a very extensive branch network. In the case of Turkey, the publicly owned post office, with more than 4,300 post office outlets throughout the country, has become a relevant provider in the domestic retail payments market. It offers a variety of transaction services, including bill collection and domestic and international remittances, as well as non-interest bearing accounts called "postal cheque" accounts. Furthermore, customers of the post office can deposit and withdraw money from all over the country and also can deposit money to any other person's account. Its bill payment service was initially launched in 1999, in conjunction with Garanti Bank. In 2004, the name "PTT Bank" was officially registered.

Pension and unemployment benefits are paid out via the post office. Recipients can either cash out the funds or have them sent to their home. Since 2011, recipients have been provided with ATM cards (PTTcards), which allow them to withdraw their payments from ATMs. As of end-2014, 1,610,598 out of a total of 3,729,696 PTTcards were specifically issued to receive pension payments.

Since 2013, the Ministry of Family and Social Policies has started to channel payments to prepaid PTTcards, which can be used for both cash withdrawals and payments. Recipients can register their phone number and are notified by SMS upon receipt of funds. PTT Bank offers these prepaid cards free of any charges to the cardholder. Recipients get their prepaid card when they obtain their first benefit payment from a post office. As of end-2014 there were 596,459 issued prepaid cards.

Since 2009, financial services have been provided to customers around the clock through ATM devices named "PTTmatic". As of end-2014, 2,126 PTTmatic devices had been installed.

PTT Bank also offers agent services to other banks and insurance companies. Currently, it is discussing an increase in the number of its services with the Central Bank of the Republic of Turkey, the Banking Supervision and Regulation Agency, the Interbank Card Centre and other financial market regulators.

Source: General Directorate of Post and Telegraph Organization of the Republic of Turkey.

145. In the quest to expand access to payment services cost-effectively, banks and other PSPs have developed a business arrangement of using local entities such as small shops to provide basic payment and banking services on their behalf. This arrangement is often referred to as agent banking, banking through business correspondents, or mobile money agents in the case of mobile money services. The technological developments in computing, payment devices and mobile phones have been leveraged to equip agents with tools to service customers more efficiently and effectively. Box 15 describes several successful cases of agent banking.⁷⁵

146. In addition, PSP agents are, in principle, in a better position to serve customers that may pose special challenges due to cultural, gender and religious diversity. This is because many small PSP agents are closer,

⁷⁴ Other supply factors, such as monopolistic or oligopolistic market structures and entry barriers, may lead to the creation of proprietary (ie non-interoperable) networks of access points.

⁷⁵ This service model relies on the quality and reach of the nation's financial and ICT network and an enabling legal and regulatory framework. Low density of physical access points often coincides with low ICT network coverage and/or a legal and regulatory environment that does not allow for alternative service delivery models such as agent banking.

from both a geographical and a cultural standpoint, to these customers. However, some of these aspects may be especially significant, and for this reason PSPs need to be specifically sensitive to such issues and design and train their agent networks accordingly.

Box 15

Successful examples of agent banking

Brazil has significantly increased the availability of transaction account service points throughout the country through the use of agent banking/correspondents. Development of the current model began in the late 1990s, and its stability and ongoing improvement are a permanent part of the agenda of the Central Bank of Brazil. Today, there are correspondent outlets in all of Brazil's municipalities, and those outlets now account for over half of all financial service access points in the country. The proportion of municipalities with more than five service points per 10,000 adults rose from 18% in 2000 to 94% in 2010. As of end-February 2015, the total number of PSP agents was 343,741.

Other countries in Latin America and the Caribbean have also extended transaction account service points to unserved and underserved areas through the use of PSP agents. There are an estimated 500,000 bank agents in the region, comprising merchants such as corner stores, pharmacies and hardware stores. These agents give clients easier access to payments services and other transactions, including deposits and withdrawals of cash, saving clients the time and cost of travelling to a bank branch to complete these transactions. Some banks have also created simplified accounts with reduced opening requirements that can be opened and accessed through agents.

In India, the RBI has opted for a bank-led model for financial inclusion. Given the large population and the size of the country, all policymaking must take into account scalability and outreach. In this context, the RBI designed a business correspondence model in 2006 that allows banks to provide banking services through nominated third-party agents. To further the efforts of financial inclusion, the RBI simplified the KYC guidelines for basic savings bank accounts, which can be remotely opened via business correspondents. Keeping in mind the costs of providing banking services in remote areas through the traditional brick and mortar model, the RBI has encouraged banks and other financial intermediaries to exploit technology and to see financial inclusion as a business opportunity. Therefore, the RBI has encouraged banks to adopt a structured and planned approach to financial inclusion with commitment at the highest level through preparation of financial inclusion plans approved by the banks' board of management, who should also monitor the implementation of these plans.

In Russia, the NPS law allows bank payment agents to be involved in providing a wide range of banking operations (under contract with the credit institution), including cash-related operations such as topping up an e-wallet or cash withdrawals from the bank account, and the transmission of account holders' instructions to credit institutions. Bank payment agents do not need to obtain a banking licence because they do not conduct banking operations by themselves. Bank payment agents' activities are controlled by the credit institution (including AML/CFT compliance). Moreover, the NPS law in Russia stipulates a possibility for bank payment agents to organise sub-agent schemes and provide services via automated devices (ie ATMs and payment terminals). All these factors have led to the spread of payment infrastructure in Russia and have had a positive effect in terms of financial inclusion.

Sources: Central Bank of Brazil; Reserve Bank of India; Central Bank of the Russian Federation; Inter-American Development Bank/Multilateral Investment Fund.

3.2.2.2 Geographical distribution of access points

147. Traditional data on the availability of access points provide only a broad indication of their reach throughout the country. For example, a frequently collected and reported statistic is the number of ATMs or POS terminals per 100,000 adults. While the aggregate figure provides some indication of the magnitude of the penetration of these access channels, it does not say anything about their regional distribution within a country.

148. Some recent initiatives specifically associated with financial inclusion focus on new methods (eg use of geographic information systems (GIS)) to provide more granularity in statistics on how easy it is for individuals in different parts of a country to access their transaction account and/or other financial services.

3.2.2.3 *Interoperability of access points*

149. Close proximity to bank branches or other points of access and channels is, generally, insufficient if there is limited or no interoperability between those points of access. In fact, at present, most innovative payment solutions are based on proprietary payment schemes that are not interoperable and as such can only be used at a limited number of access points.

150. Offering a proprietary solution can help innovative service providers exploit their first-mover advantage, create path dependence and lock users into their service. The legitimate interest of first movers in capitalising on their high infrastructure investments has to be balanced against the overall policy objectives. In the absence of moral suasion or regulatory intervention, there is a risk that inefficient and duplicative networks may emerge in some locations, while other communities may be left unserved.⁷⁶ However, the scope and timing of such regulatory interventions need to be carefully considered to avoid market distortion and support the overall policy objectives.

3.2.3 Awareness and financial literacy

151. Obtaining access to a transaction account is a necessary but not sufficient condition for the effective use of the electronic payment instruments associated with such accounts. Educational and outreach efforts are often needed to support the necessary awareness and financial literacy that enable new and even existing account holders to make effective use of retail payment services and to expand their broader financial capabilities.

152. The process of transferring knowledge on the management of financial resources and on the usage of financial products and services is referred to as financial literacy, financial education or other similar terms. In the payments context, some of the key efforts in this regard include demonstration of the advantages of using electronic payment services – ie the safety, protections, recourse mechanisms, speed and convenience – learning how to use specific payment instruments, such as a debit card or an electronic funds transfer, and building clients' trust in and comfort with a transaction account and its use. Factual information on the reliability of the available services, including information on the operational performance of ATMs and POS devices, can also help address potential customer concerns regarding the accessibility of their funds. For the purposes of this report, such efforts are referred to generally as "financial literacy efforts".⁷⁷

153. Another relevant aspect in this context is financial awareness, ie the level to which end users are aware, or could become aware, of the financial product and service options available to them. End users, even some of the most knowledgeable ones, may not have easy access to, or be familiar with, certain tools that can assist them in accessing useful, trustable and updated information on such options. Suboptimal choices are frequent under such circumstances.

154. Hence, individuals interested in opening a transaction account should be able to access clear and comprehensive information on account-opening requirements, and also enough details to make a well informed decision on the type of transaction account and payment instruments best suited to meeting their needs.

⁷⁶ For example, due to lack of interoperability, the networks may be unable to reach critical mass.

⁷⁷ The World Bank Group's Responsible Finance website (responsiblefinance.worldbank.org), among others, has a range of relevant resources in the area of financial literacy and other related topics.

155. Once customers adopt a transaction account, it is important that new (as well as existing) customers receive sufficient information on what payment instruments are associated with these accounts, how and where these can be used, how they can reduce costs in using these services, the basic security measures, and their overall obligations and rights.

156. Financial service and product rollout strategies, especially in communities with limited first-hand exposure to electronic payment instruments and services, are important to enhance not only access but also sustained usage of such instruments and services. For example, these strategies have proved particularly useful in the case of government benefit payment programmes, where beneficiaries otherwise tend to fully cash out the payments received on or soon after payday.

Box 16

Financial literacy: experiences from India and Latin America and the Caribbean

Financial literacy within India's financial inclusion strategy

The ultimate goal of India's financial inclusion strategy is to provide all households, a total of more than 1.25 billion people, with access to safe and appropriate financial services while supporting inclusive and sustainable economic growth. With the focus on bringing more people into the financial sector, the RBI has stressed the importance of financial education and consumer protection, regarding it as one of the key pillars of its strategy. This is being accomplished primarily through the launch of financial literacy campaigns that target young people as well as the rural and urban poor. Moreover, banks are helping to establish financial literacy centres in all the districts of the country. The RBI has also undertaken initiatives to have financial education included in the school curriculum.

Results of a recent study by CEMLA

CEMLA recently completed a study of the role of 20 Latin American and Caribbean central banks in advancing their nation's national financial inclusion strategy. The study found that one of the key roles of central banks is to lead their nation's financial literacy programmes. Among the diverse range of instruments and goals of the programmes, most of the financial literacy programmes share the common goal of helping the population make better daily financial decisions. Furthermore, the study found that the central banks believe that financial literacy programmes promote and facilitate participants' access to financial and payment services. Based on this, several central banks have drawn on the experience gained from implementing financial literacy programmes to support their financial inclusion work.

Notably, one of the findings of the research was that it is critically important that a high degree of institutional cooperation should exist among the different players – generally through the creation of committees – when implementing a financial literacy programme or a national financial inclusion strategy.

Sources: Reserve Bank of India; CEMLA.

157. The actual delivery of effective educational and outreach programmes presents several challenges. Cost and programme design are among the greatest hurdles. Programme design challenges include decisions such as content, format, language and cultural context, as well as whether the programmes should be designed by the government, a public/private sector coalition or the individual PSPs. Other issues include who should deliver the training – the government, the PSP, an agent of the PSP, community organisations, etc – and the specific moment at which training is more likely to be effective.^{78, 79} It is also important to develop a

⁷⁸ For example, the precise role of the financial authorities in designing and delivering such financial education and outreach typically varies from country to country.

⁷⁹ Many research efforts have concluded that training is especially effective if delivered very close to the moment at which an end user is actually engaging in obtaining a financial service, eg when he/she is opening a transaction account or applying for a loan.

mechanism to track the effectiveness of the training. A separate, but closely related issue, is by whom or how the training will be funded and how often it will be offered. Box 16 illustrates the importance that India has assigned to financial literacy efforts as part of its financial inclusion strategy, and also discusses the main outcomes of a survey carried out in Latin America and the Caribbean on the role of central banks and other authorities in the financial literacy space. Box 17 then presents financial literacy activities in the context of a broader World Bank programme for improving market efficiency for remittances.

Box 17

Project Greenback

Financial literacy in the context of remittances

Project Greenback 2.0 aims to increase efficiency in the market for remittances through an innovative approach: promoting change inspired by the real needs of the ultimate beneficiaries of international money transfers – that is, the migrants and their families at home.

In Project Greenback 2.0, cities referred to as Remittance Champion Cities are selected. Turin, Italy, was chosen first, followed by Montreuil, France.^① In both of these Champion Cities, the first phase of the project included a survey to collect data on the most representative migrant communities and the largest in terms of remittances sent to the country of origin. The surveys were aimed at describing the economic and financial inclusion profile of migrants as well as their remittance behaviour.

The research findings have been the starting point for Project Greenback 2.0 activities, which include:

- (i) providing financial education focused on remittance services;
- (ii) supporting projects of migrant associations in order to promote information, awareness, education and implementation of best practices on remittance behaviour;
- (iii) facilitating and maintaining an active dialogue between migrant citizens and market players, encouraging the latter to develop new services or approaches that are better suited to migrants' needs; and
- (iv) generally monitoring the remittance market.

Source: World Bank Group.

^① At present, the World Bank Group is working to expand Project Greenback 2.0 to other countries. For additional information, see <http://remittanceprices.worldbank.org/en/project-greenback-20-remittances-champion-cities>.

3.2.4 Leveraging large-volume, recurrent payment streams

158. Large-volume recurrent payment streams can be leveraged to advance financial inclusion objectives through various channels. The most obvious one is by directly providing transaction accounts to unserved and underserved end users, mainly individuals. In addition, these streams can be leveraged to drive investment in core retail payments infrastructure as well as in distribution channels and in the development of new payment products and services.

159. Several large-volume payment streams are characterised by the fact that one party to the transactions (eg the national treasury, an employer, or a provider of a utility) has significant control over the terms and features of the payment product, which offers the potential to drive financial inclusion. The most obviously relevant streams in this context are government payment programmes. However, utility payments, public transit payment programmes and employer payroll programmes are also drawing increased attention. However, the potential to leverage these payment streams for financial inclusion purposes is unlikely to be

pursued if the technical and business considerations are not supportive of the primary objectives of the driving party (eg to cut costs or reduce leakage).

160. Remittances, both cross-border and domestic, are another type of large-volume and recurrent payment stream that can be leveraged to advance financial inclusion. For example, receivers of remittances very seldom have a transaction account, despite having a reasonably constant inflow of cash to help them manage their daily financial affairs. Remittances differ significantly from the types of large-volume payment streams mentioned above, in that neither the sender nor the receiver of a remittance transaction has significant control over the terms and features of the payment product.⁸⁰

161. The role of all these payment streams as catalytic pillars to advance the adoption and usage of transaction accounts is described in further detail below. However, it is important to note that, in order to realise the potential of such payment streams, other measures to encourage and facilitate the use of payment services are often needed. For example, pairing the launch of government payment programmes with product rollout strategies, educational and outreach efforts, and incentives for the use of electronic payments may boost the success of both approaches. In this regard, offering rebates for using electronic payments (eg VAT rebates, discounts for adopting direct debit of recurrent payments to the transaction account) can prove effective in triggering usage.⁸¹

3.2.4.1 *Government payment programmes*

162. By far, public administrations constitute the single largest user of payment services. Increasingly, they are adopting electronic mechanisms to distribute and collect payments. Government payment programmes, especially benefit programmes, have the potential to directly advance financial inclusion by providing transaction accounts, and also by stimulating greater investment in the infrastructures and networks necessary to support those accounts. It is in the context of these aspects that government payments have received the most attention as a potential conduit for financial inclusion.

163. However, given the sheer magnitude of government payments, regardless of whether financial inclusion is an explicit goal or not, a switch from cash and paper-based payments to electronic payments mechanisms for government transactions offers the potential to support the deepening of national retail payment systems. This potential structural impact can, in turn, strengthen the enabling environment for improved access to and usage of transaction accounts.

164. Government wage and benefit payments are made in cash to 160 million unbanked adults worldwide.⁸² These programmes include recurrent payments of social benefits, wages and pensions. As governments switch to electronic payment solutions, they typically transition their wage and pension payment programmes first. The pace of transitioning G2P benefit payments to electronic mechanisms has accelerated significantly over the past few years, but in the majority of cases this has not significantly advanced financial inclusion. Box 18 discusses the main outcomes of the Global Findex Database 2014 with regard to government payment programmes.

⁸⁰ It should be noted, however, that the price of international remittances has declined considerably over the last 10 years or so, through significant efforts from all relevant stakeholders, following the demand from consumers for cheaper services.

⁸¹ Governments can also create disincentives to the usage of transaction accounts – for example, through taxation of non-cash payments.

⁸² Global Findex Database 2014.

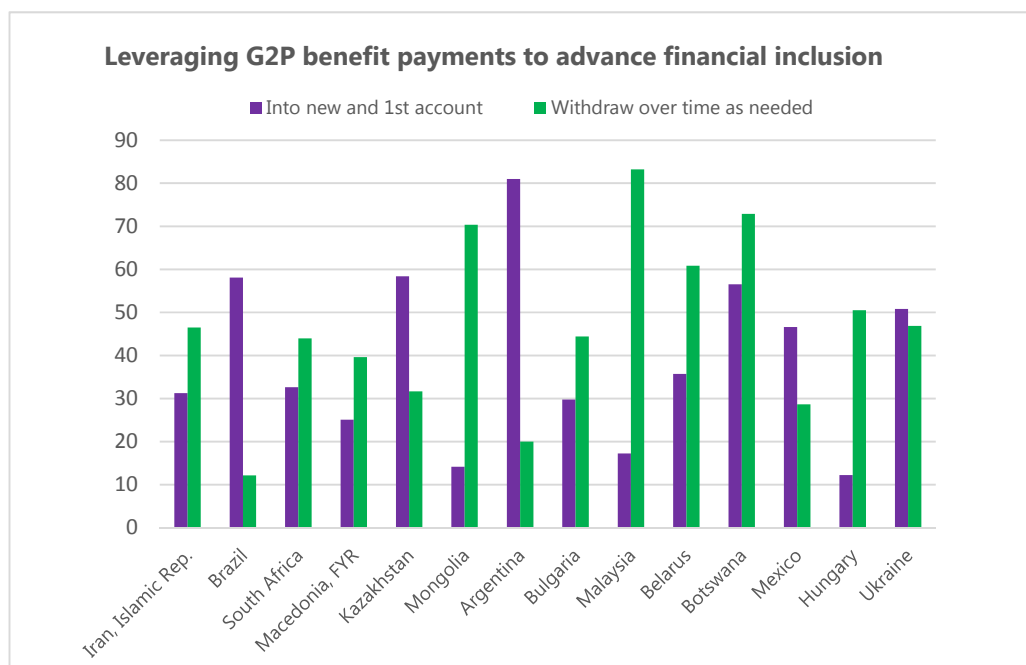
Government payment programmes and financial inclusion

Outcomes of the 2014 Findex Survey

Few developing countries can claim significant success in shifting their G2P transfer payments from cash to direct deposit into an electronic transaction account. According to the Global Findex Database 2014, only nine developing countries have achieved success, which is defined as two thirds or more of the recipients of G2P transfer payments reporting that they receive their payments into an account. Of these nine countries, all but one, Mongolia, is an upper-middle-income country. Another 15 developing countries have achieved some degree of success, with 40–61% of recipients of G2P transfer payments reporting that they receive their payments electronically. Notably, only two of the countries whose efforts to shift to electronic payments are often cited as case studies – Brazil and South Africa – are among the top nine.

In terms of success in leveraging electronic G2P payments to advance financial inclusion, two additional questions are of relevance: (i) among recipients receiving their transfers into an account, is the account new and is it their first? and (ii) are recipients withdrawing the funds in their accounts over time as needed? The first of these questions provides some indication of the extent to which previously unserved adults are being reached. The second question provides information on how useful the accounts are to the recipients. Both of these questions were asked in the 2014 Findex Survey as part of the new payments module. However, for many of the top 24 developing countries in terms of electronic G2P transfer payments, the sample sizes were too small to provide reliable statistics.

For the countries where the results are available, rates of success in leveraging G2P payments to advance financial inclusion are relatively modest (see chart below). A few countries stand out for advancing access to transaction accounts (eg Argentina, Botswana, Brazil, Kazakhstan and Ukraine). A different set of countries stand out on delivering payments to accounts from which at least 50% of the recipients withdraw the funds only gradually, as and when they are needed (eg Belarus, Botswana, Malaysia and Mongolia).



Source: Based on data from the World Bank Group's Global Findex Database 2014.

165. In most cases, the electronic benefit payments are loaded onto a prepaid card for each recipient or the funds are directly deposited into a transaction account for each recipient, and funds can be accessed via

an associated debit card. However, recipients typically do not use the underlying store-of-value and electronic payments functionalities of such products. They instead choose to cash out the full amount at an ATM, bank branch or PSP agent as soon as the funds are deposited. Factors that contribute to this outcome include:

- absence of a sufficient network of points of access in recipient communities and/or limited acceptance of the relevant payment instrument(s) among merchants and other potential transaction counterparts to the recipients;
- high transaction fees and other costs of usage for the card/account holder;⁸³
- a failure of the payment product to meet the needs of the card/account holders – for example, by not enabling bill payment;
- unreliable service or unpredictable processing times when payments are being made;
- limited or no recourse mechanisms for card/account holders;
- lack of trust in the institution or the instrument holding the funds; and
- absence of a robust rollout and support strategy for benefit recipients as they adjust to the new means of benefit payment delivery.

166. Government collections (ie P2G and B2G payments) can also be leveraged for financial inclusion purposes, as individuals and businesses without access to transaction accounts have to make payments to government entities. Therefore, broadening the acceptance of electronic payment instruments for a wide variety of government collections can be a natural and meaningful means of making the accounts and other products issued in connection with G2P payment programmes – and, in general, all transaction accounts – more useful to account holders.

167. Moving to electronic P2G and B2G payments can also help PSPs achieve stronger commercial viability of their low-cost payment solutions due to higher levels of activity. From a broader perspective, P2G experiences in an increasing number of countries show that robust e-government programmes foster the use of electronic payments, thus boosting the efficiency of public administrations, businesses and individuals, and that of the national payment system.⁸⁴

3.2.4.2 *Utility payments*

168. Among the various large-volume recurrent payment streams, utility payments are the single most common type of payment made by adults. In the 2014 Global Findex survey, 60% of adults globally reported that they pay utility bills. In middle- and low-income countries, utility payments match the share of adults that report receiving remittances as the two most common forms of large-volume payments. Yet an overwhelming majority of adults in those countries – 98% – pay their utility bills in cash. In high-income countries, a surprisingly high percentage of adults, nearly 40%, pay utility bills in cash.

169. These figures suggest that significant scope exists to facilitate the electronic payment of utilities by all adults – including by those that already have transaction accounts. Hence, utilities providers can help advance financial inclusion objectives by facilitating the payment of their services through electronic means.

⁸³ This could be due to inappropriate contract and/or fee arrangements between the PSP and the government.

⁸⁴ In some e-government programmes, national and/or local governments deliver one or more services electronically, fully or partially (eg construction permits and driver's licence renewals). Such programmes often include the possibility to pay electronically via the internet for the underlying service. In other cases, an e-government initiative refers to the possibility to pay taxes, utilities and other services electronically, via the internet or through other channels.

Clearly, however, the electronic payment options made available must be generally compatible with the needs of their utility customers.

3.2.4.3 Public transit payment programmes⁸⁵

170. Public transit systems serve an important share of a country's population, very often including economically disadvantaged individuals who tend to be financially excluded. In this context, these systems also offer the potential to support efforts to expand financial inclusion.

171. Public transit systems were among the early innovators in the use of smartcard technology and, as a result, introduced many public transit users to their first stored-value cards. However, with a few exceptions, the link between electronic transit payment programmes and financial inclusion ends there.

Box 19

Transit payment schemes and financial inclusion

Multipurpose transit card systems

In the United States, several transit agencies are considering or have launched work to transition from their ageing proprietary electronic fare collection systems to systems that can collect fares from multipurpose payment accounts – via payment card and mobile payments – that transit customers already hold.

Among these systems, the Southeastern Pennsylvania Transit Authority is at an advanced stage in modernising its fare collection system. Its new system will accept existing branded payment cards as well as offer and accept multipurpose reloadable prepaid cards. The dual approach is deemed necessary to enable customers that are not financially included to use the transit system. Notably, the new system will offer customers – and even those that are not transit customers – an easy and low-cost means of obtaining a multipurpose transaction account.

In Hong Kong SAR, the Octopus Card is a multipurpose stored-value smartcard that is accepted by all public transport services and over 15,000 retail outlets. So far, over 27 million Octopus Cards have been issued to the public. Over 99% of Hong Kong people aged 15–64 possess one or more Octopus Cards. In a city of 7.8 million people, over 13 million transactions are processed by Octopus per day. In recent years, the acceptance network of Octopus Card has gone cross-border to cities nearby (eg Macau, and Shenzhen in mainland China). With the popularity of smartphones, the Octopus company has extended its payment solution to support online payment and mobile payment through NFC (near field communication)-enabled smartphones.

The features of the Octopus Card bring some important benefits to lower-income or less privileged groups. For instance, it is possible to enjoy electronic, cashless payment services with the basic Octopus product by placing a card deposit of HKD 50 (USD 6.4) and storing some initial value. Basically, there is no restriction on the purchase of an Octopus Card by any individual. Moreover, under the current Government Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities, the target beneficiaries of the scheme are eligible for a concessionary rate using their Octopus Cards. This can be done as Octopus offers, among other products, an Elderly Octopus Card and personalised cards for Persons with Disability Status. This is an example of how a social welfare programme can be supported by a multipurpose stored-value facility.

Sources: HKMA (2015); CPMI (2012); Keitel (2012); Southeastern Pennsylvania Transportation Authority's website.

172. Public transit fare schemes differ significantly from government payment programmes in that the point of payment, that is, fare collection, takes place at the point of usage, ie at transit stations or public transit

⁸⁵ Public transit systems can include toll roads and the means of collecting road tolls.

vehicles.⁸⁶ This eliminates the challenge associated with the need for a vast separate network of payment distribution/collection points of access. For the most part, it also places the cost of the payment scheme development, installation, operation, maintenance and modernisation on the shoulders of the public transit operators.

173. Most transit payment schemes are single purpose, closed-loop systems, ie stored-value cards that do not offer a means of conducting transactions outside the transit system or even a gateway to gain access to other electronic payment services. However, with the ageing of the existing payment schemes and advancements in the multipurpose prepaid card industry, several transit system authorities and operators are considering adopting open-loop payment services (see Box 19).⁸⁷ The adoption of such approaches, while not without complications, would increase the value of transaction accounts to end users, thereby increasing demand for, and usage of, those accounts.

3.2.4.4 Employer payroll programmes

174. Many employers worldwide have turned to direct deposit in bank accounts, other transaction accounts and open-loop prepaid cards as convenient and cost effective ways to pay employees. Like the case for government, this trend is motivated primarily by cost and risk management considerations for the firm itself (eg in the context of adopting an electronic financial management and payment system to meet its broader financial needs).⁸⁸

175. In high-income countries, the direct deposit of payroll in bank accounts is now the most frequently used means of paying employee wages and salaries for all but the smallest entities. In developing economies, direct deposit is commonly used by governments and medium-to-large private sector entities. The use of prepaid cards and, in some cases, of mobile money to deliver employee wages is a relatively new phenomenon.⁸⁹

176. Like other large-volume payment programmes, the impact of direct deposit and payroll prepaid cards on financial inclusion (eg on the actual usage of the underlying products and payment instruments) depends significantly on the features, terms and conditions associated with the specific payment product selected by the employer. The trade-off for the employer is often between the cost to themselves and the payment product features that are favourable to employees, including the fees that the latter will be charged for using the product/service.⁹⁰ Larger employers are likely to have some degree of negotiating power with PSPs.

⁸⁶ In the case of prepaid instruments, the actual collection of funds may take place through the internet, payment kiosks, mobile phones, merchant locations, etc. In such cases, the acceptance infrastructure at the point of usage is used to deduct the trip fare or toll amount from the prepaid instrument.

⁸⁷ This is already the case with the Hong Kong Octopus Card, for example.

⁸⁸ The payroll cost savings to employers can be considerable. For example, according to VISA, employers (presumably in the US market) that have switched to payroll prepaid cards have saved up to 65% in payroll processing costs. For additional details, see Schneiderman (2014).

⁸⁹ In the United States, for example, these prepaid cards, which are often referred to as “payroll cards” in this context, are predominately used by employers of part-time, minimum wage employees and/or of young adults – population segments which are likely to be financially unserved or underserved. In 2013, an estimated 5.8 million workers (about 4% of non-farm employment) received their wages via prepaid payroll cards in this country. For additional details, see Schneiderman (2014).

⁹⁰ Cost savings for employers might come at the expense of their employees. For example, reports of egregious fees and hidden costs associated with some employer payroll prepaid card programmes in the United States prompted the US Consumer Financial Protection Bureau to remind employers that those cards are subject to federal consumer protections, including fee disclosure, limited liability for unauthorised use, and error resolution rights. For additional details, see Consumer Financial Protection Bureau (2013).

3.2.4.5 Remittances

177. Migrants represent an estimated 14% (one in seven) of the world's population.⁹¹ Over three quarters of these migrants are internal migrants. Cross-border migrants number an estimated 232 million, or 3.2% of the world's population.⁹² Both groups of migrants send significant amounts of money home. These flows are commonly referred to as "remittances".

178. International remittances to developing economies reached an estimated USD 414 billion in 2013 and USD 435 billion in 2014,^{93, 94} nearly four times greater than official development assistance. Moreover, for certain countries, international remittances are equivalent to 20% or more of their GDP. Given these magnitudes, significant global attention continues to be paid to lowering the cost of sending such remittances.

179. In this regard, from 2009 the global average cost of sending international remittances fell by 2.3 percentage points to 7.37% as of the end of 2015.⁹⁵ These cost reductions reflect, in part, changes in the regulatory environment, including an expansion of the range of entities eligible (and granted a licence) to offer remittance services, greater price transparency and competitive pressure on pricing, and enhancements to payment systems and payment services.⁹⁶

180. Significantly less is known about domestic remittances, although the flows are thought to be substantial in most countries. Currently, there are no internationally comparable estimates of domestic remittance flows or their costs. However, there is some evidence that domestic remittances reach a larger number of poor, often rural, households than international remittances.⁹⁷

181. Generally, migrants and their families back home are among those less likely to be financially included. In this regard, there would appear to be space to leverage the periodic and ongoing use of remittance services to foster financial inclusion, at least among these population groups. However, this potential remains largely untapped. This is due, in part, to a lack of robust analysis of the dynamics between the remittance services market – which is largely served by non-bank remittance service providers (RSPs) and often subject to a different regulatory regime – and the broader domestic retail payments space. As a result, there is limited understanding of factors that perpetuate this fragmentation of the payments market. However, it also reflects some of the same factors that affect the adoption of transaction services in the first place, including the accessibility and reliability of points of access and product design.

⁹¹ World Bank Group (2014b).

⁹² United Nations (2013).

⁹³ International remittances are defined as cross-border, person-to-person payments of relatively low value, typically sent by migrants. For additional details, see CPMI and World Bank (2007).

⁹⁴ World Bank Group (2014c).

⁹⁵ World Bank Group (2015a).

⁹⁶ During the G8 L'Aquila Summit in 2009, the member countries committed to reducing the cost of remittances from 10% to 5% in five years, which became known as the "5x5 Objective". The G20 officially endorsed the Global Remittances Working Group and the international efforts to reduce the cost of remittances during its 2010 Summit in Seoul. For more information, see <http://www.worldbank.org/en/topic/paymentsystemsremittances/brief/global-remittances-working-group>

⁹⁷ See eg A McKay and P Deshingkar, "Internal remittances and poverty: further evidence from Africa and Asia", *University of Sussex Working Paper*, no 12, 2014.

182. Remittance services, both domestic and cross-border, are largely initiated as well as paid out in cash. Even remittance service users who use banking services tend to avoid the use of bank-provided, account-to-account remittances services in favour of less costly and more convenient cash-to-cash or card-to-cash services (or other arrangements offered by non-bank RSPs). Some of the largest RSPs report that, even where their services enable competitively priced delivery of remittances to a transaction account – such as a prepaid card or mobile e-money account – such service options gain little traction unless there is a robust merchant POS network in the receiving community.

4. Guidance on improving access to and usage of transaction accounts

183. The first three chapters of this report analysed the role of payments, payment services and payment systems in financial inclusion. This chapter *summarises* the key findings of the analysis in the form of guidance to central banks, financial supervisors, regulators, policymakers and private sector stakeholders for advancing financial inclusion in their markets through payments.

4.1 Improving financial inclusion from a payments perspective: the objectives

184. As discussed in Chapter 1, financial inclusion efforts undertaken from a payments angle should aim to achieve a number of objectives. Ideally, all individuals and businesses⁹⁸ should be able 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.

Furthermore, the positive effects of the 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, ideally resulting in a virtuous circle.

As explained in Section 1.2, transaction accounts are broadly defined as accounts held with banks or other authorised and/or regulated service providers (including non-banks), which can be used to make and receive payments. Transaction accounts include both deposit transaction accounts and e-money accounts.

185. For these objectives to be achieved, the core elements identified in the framework presented in Chapter 3 of this report and summarised in Figure 1 should operate effectively. These core elements are: (i) stakeholders' commitment, the legal and regulatory framework, and the financial and ICT infrastructures, which constitute the foundations/critical enablers; and (ii) the transaction account and payment product design, readily available access points, financial literacy, and leveraging of large-volume and recurrent payment streams for financial inclusion objectives, which act as catalytic pillars/drivers to facilitate access to and promote wide usage of transaction accounts.

186. Guiding principles for each of these core elements are presented in the next section of this chapter, along with key actions for consideration that might be taken to foster the achievement of the guiding principles. These guiding principles and key actions have been developed on the basis of the experience and evidence related to a variety of financial inclusion and payment system development efforts from different parts of the world. They are not intended to be prescriptive, but rather to provide broad-based guidance on the issues that the CPMI-WBG PAFI Task Force considers highly relevant.

187. The PAFI Task Force believes that adopting a holistic approach with regard to these considerations is an effective way to ensure that the various barriers and weaknesses currently hindering broader access to and usage of transaction accounts – and from there to additional financial services – are identified and effectively addressed. The Task Force, nevertheless, recognises that the status of financial inclusion varies from one country to the other and, as a result, the specific approach to be followed will need to be customised. For example, in countries at a more advanced stage of financial inclusion, some or probably most of the elements in the framework may have been already achieved. As a result, supplemental action with regard to one or

⁹⁸ When referring to businesses, this report focuses on micro-sized and some small businesses, which are more likely to lack some of the basic financial services or be financially excluded than larger ones.

more of the elements in the framework may no longer be warranted. In such cases, efforts with regard to the guiding principles may focus primarily on maintaining alignment in the context of ongoing innovation and change in the marketplace.

4.2 Guiding principles and recommended key actions for consideration

188. This section outlines guiding principles for the achievement of the above objectives and contains some possible key actions for countries that want to put into practice these guiding principles. These possible actions are based on the analysis in this report and on experiences of countries that are promoting financial inclusion. However, as there are many differences among countries – economic, cultural and political – key actions that are helpful in one country may not be equally helpful in another. The suggestions below should therefore not be taken as a checklist of what needs to be done to foster the guiding principles.

Guiding principle 1: Public and private sector commitment

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

Key actions for consideration:

- All relevant public and private sector stakeholders support the objective that all eligible individuals – regardless of culture, gender or religion – and businesses should be able to have and use at least one transaction account, and develop an explicit strategy with measurable milestones to that end.
- All relevant public and private sector stakeholders allocate the appropriate human and financial resources to support financial inclusion efforts.
- Central banks, financial supervisors, regulators and policymakers effectively coordinate their efforts with regard to financial inclusion.
- Private sector stakeholders engage with relevant public sector counterparts on initiatives that promote the adoption and usage of transaction accounts, and financial inclusion more broadly.
- Private sector stakeholders cooperate constructively and meaningfully with each other to discuss and find solutions to issues that are best addressed by the industry as a whole.
- Central banks, in line with their roles, responsibilities and interests in fostering the safety and efficiency of the payments system, leverage their catalyst, oversight, supervisory and other powers as relevant and appropriate to promote financial inclusion.

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.

Key actions for consideration:

- A robust framework is established to foster sound risk management practices in the payments industry, including through the supervision/oversight of PSPs and PSOs by regulatory authorities.
- The framework requires PSPs and PSOs to develop and implement risk management measures that correspond to the nature of their activities and their risk profile.
- The framework aims to promote the use of transaction accounts in which customer funds are adequately protected through appropriate design and risk management measures, such as deposit

insurance or functionally equivalent mechanisms as well as through preventive measures (eg supervision, placement of customer funds held by non-deposit-taking PSPs in high-quality and liquid assets, and, depending on the legal regime, specially protected accounts at banks and possibly trust accounts).

- The framework requires PSPs to 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 liability and use of customer data.
- The framework requires PSPs to implement a transparent, user-friendly and effective recourse and dispute resolution mechanism to address consumer claims and complaints.
- The framework preserves the integrity of the financial system, while not unnecessarily inhibiting access of eligible individuals and businesses to well regulated financial services.
- The framework promotes competition in the marketplace by providing clarity on the criteria that must be met to offer specific types of service, and by setting functional requirements that are applied consistently to all PSPs.
- The framework promotes innovation and competition by not hindering the entry of new types of PSP, new instruments and products, new business models or channels – as long as these are sufficiently safe and robust.

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.

Key actions for consideration:

- Key payments infrastructures are built, upgraded or leveraged as needed to facilitate the effective usage of transaction accounts.
- Additional infrastructures are appropriately designed and operate effectively to support financial inclusion efforts by providing critical information to financial service providers, including an effective and efficient identification infrastructure, a credit reporting system and other data-sharing platforms.
- The geographical coverage of ICT infrastructures and the overall quality of the service provided by those infrastructures are enhanced as necessary by their owners/operators so as to not constitute a barrier for the provision of transaction account services in remote locations.
- Increased interoperability of and access to infrastructures supporting the switching, processing, clearing and settlement of payment instruments of the same kind are promoted, where this could lead to material reductions in cost and to broader availability consistent with the local regulatory regime, in order to leverage the positive network externalities of transaction accounts.
- Payment infrastructures, including those operated by central banks, have objective, risk-based participation requirements that permit fair and open access to their services.
- Financial and ICT infrastructures leverage the broad usage of open/non-proprietary technical standards, harmonised procedures and business rules to enhance their efficiency and therefore their ability to support transaction accounts at low costs.
- The safety and reliability of financial and ICT infrastructures, including their resilience against fraud, are tested on an ongoing basis and are enhanced as necessary to keep up with all emerging threats for holders of transaction accounts, PSPs and PSOs.

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.

Key actions for consideration:

- Where reasonable and appropriate, PSPs provide a basic transaction account at little or no cost to all individuals and businesses that do not hold such an account and that wish to open such an account.
- PSPs offer transaction accounts with functionalities that, at a minimum, make it possible to electronically send and receive payments at little or no cost, and to store value safely.
- PSPs leverage efficient and creative approaches and effective management practices in their efforts to offer transaction accounts and functionalities in a commercially viable and sustainable way.
- The payment services industry, operators of large-volume payment programmes and other stakeholders recognise that the payment habits and needs of currently unserved and underserved customers are likely to differ, and therefore engage in market research and/or other similar efforts to identify and address those payment habits and needs.
- PSPs work to ensure that the payment needs of the private and public sector entities with whom holders of transaction accounts regularly conduct payments are met as well.
- PSPs work to ensure that the products that target unserved or underserved population segments are easy to use.
- PSP efforts to continuously improve their transaction account offering include both traditional and innovative payment products and instruments.

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.

Key actions for consideration:

- PSPs provide convenient access to transaction accounts and services by offering an effective combination of own and third-party-owned physical access points (eg branches, ATMs, POS terminal networks and PSP agent locations) and of remote/electronic access channels (mobile phones, internet banking, etc).
- PSPs work to provide service levels at various access points and channels that are reliable and of high quality (PSP agents have the necessary liquidity and are equipped with effective tools to service transaction account users reliably and in an efficient manner, ATMs are highly reliable, etc) and to ensure that opening hours are broadly aligned with customers' transacting needs.
- The payments industry works on ensuring that access points and channels are appropriately interoperable, further contributing to expanding the reach of available service access points and the overall convenience to holders of transaction accounts.
- PSPs adequately train their own front office staff and their agents to understand and appropriately address cultural, gender and religious diversity when servicing holders of transaction accounts.
- The payments industry and authorities monitor access channels and access points and their usage to obtain an accurate picture of the availability and proximity of service points to the different population segments.

Guiding principle 6: Awareness and financial literacy

Individuals gain knowledge, through awareness and 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.

Key actions for consideration:

- All relevant public and private sector stakeholders engage in ongoing and effective educational and outreach to support awareness and financial literacy with an appropriate degree of coordination.
- Awareness and financial literacy efforts specifically address how payment and store-of-value needs can be met through the usage of transaction accounts. In this context, individuals that do not have a transaction account and those that obtained one only recently are a primary target of these financial literacy efforts.
- Awareness and financial literacy efforts make it possible to easily obtain clear and accurate information on the various types of account that are available in the market, on the general account opening requirements, and on the types of account and service fee that may be encountered.
- Awareness, financial literacy and financial transparency programmes make it possible for transaction account users to easily obtain clear and accurate information on the risks embedded in the usage of these accounts, how the costs in using the associated services can be minimised, how the potential benefits can be maximised, the basic security measures associated with these accounts, and the overall obligations and rights of PSPs and users.
- PSPs provide hands-on training where needed as part of a product rollout, particularly for users with limited first-hand exposure to electronic payment services and the associated technologies (eg PSPs show customers how transaction accounts and the associated payment products work in practice).

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.

Key actions for consideration:

- Ad hoc incentives are considered, where appropriate, to foster adoption and usage of transaction accounts for large-volume and recurrent payments, including not only government payment programmes but also government collections and utility bill payments, transit fare payments, employer payrolls and, where relevant, remittances.
- PSOs and PSPs take into consideration the needs and requirements of the key counterparties involved in large-volume payment streams, such as employers, large-volume billers, the national treasury and others in the design and provision of the related payment services.
- The government considers making its G2P and G2B payments through a choice of competitively offered transaction accounts that meet the payment and store-of-value needs of the recipients so that these accounts are useful to them.
- The government enables and encourages individuals and businesses to make their P2G and B2G payments through electronic means in order to, among other objectives, increase the overall usefulness of transaction accounts.

- Medium-sized and large firms, along with government entities, consider disbursing salaries and other payments to employees via transaction accounts at the PSP of the employees' choice.
- The payments industry proactively seeks new ways to make transaction accounts a competitive and convenient option for usage in connection with all large-volume payment streams.

5. Measuring the effectiveness of financial inclusion efforts: a payments perspective

189. Keeping track of financial inclusion implementation efforts is essential to determine whether the actions adopted are being effective in helping to achieve the underlying objectives. A consensus has grown throughout the financial inclusion community in recent years on the importance of developing a robust measurement methodology for this purpose.

190. This chapter discusses the development of a results framework as the basis for measuring progress and the overall success in achieving the intended financial inclusion objectives, in particular those that are deemed most relevant from a payments perspective (see Section 4.1).

5.1 Developing a comprehensive national results framework

191. A comprehensive financial inclusion results framework is characterised by the following elements: (i) thematic alignment with key policy pillars and actions; (ii) development of key performance indicators (KPIs); (iii) setting quantitative KPI targets, including baseline values and timeline for achievement; and (iv) reliance on robust data sources. Each of these elements is discussed below.

5.1.1 Thematic alignment with key policy pillars and actions

192. A results framework must be aligned with the project's or programme's key policy objectives. For example, if a national financial inclusion strategy defines as key objectives the universal access to transaction accounts, frequent usage of such accounts, and that these accounts serve as a gateway to other financial services, then these three objectives should be reflected in the structure of the framework.

193. Beyond objectives, financial inclusion strategies may also define action areas, specific actions areas and/or target populations, in which case these variables should also be incorporated into the structure and content of the results framework. As an example, if a target population of a national financial inclusion strategy is rural populations, then the results framework should report specifically and/or separately on this population segment, and indicators should track the outcomes of the key actions targeting rural populations.

194. In this regard, the guiding principles and key actions described in Chapter 4 of this report provide a foundation for the design of a results framework in the form of overarching objectives, thematic areas for action (ie the foundations and catalytic pillars framed in the form of guiding principles) and specific actions (ie the key actions for consideration under each guiding principle).

5.1.2 Key performance indicators

195. Key performance indicators (KPIs) consist of a set of core indicators, very often complemented with a number of supporting indicators. Most KPIs found in national financial inclusion results frameworks measure outcomes at the national level. These performance or outcome indicators facilitate measurement of progress in achieving a certain final objective (eg universal access to transaction accounts).

196. Each country's KPIs should be designed to reflect the unique financial sector context and financial inclusion priorities in that country. Nevertheless, policymakers can usefully draw on certain financial inclusion databases with a global or near global reach. Table 4 provides a non-exhaustive list of payments-related financial inclusion quantitative indicators that are widely available through these databases and that can be

easily customised to country-specific situations. These performance/outcome indicators are a powerful communication tool for the general public, policymakers and private sector stakeholders.⁹⁹

Sample financial inclusion core and supporting indicators

Table 4

	Indicator	Global data source	Potential breakdown
Examples of core national indicators	% of adults that own a transaction account	Global Findex (2011, 2014)	Target population, region
	% of adults using a transaction account to make/receive payments	Global Findex (2014)	Target population, region
	% of adults using a transaction account for P2P, P2B, G2P	Global Findex (2014)	Target population, region
Examples of supporting national indicators	No of financial access points per 100,000 adults and per 1,000 square kilometres	IMF Financial Access Survey (FAS)	Type of financial access point ¹⁰⁰
	% of districts with a financial access point	MIX FinClusion Lab	Type of financial access point
	% of adults living within 5 km of a financial access point	FSP Maps	Type of financial access point
	No of cashless retail payments per capita	WBG Global Payment Systems Survey	Type of payment
	% of adults citing documentation as barrier to account ownership	Global Findex (2011, 2014)	Target population, region
	% of adults citing cost as barrier to account ownership	Global Findex (2011, 2014)	Target population, region
	% of adults citing distance as barrier to account ownership	Global Findex (2011, 2014)	Target population, region
% of government payments delivered through electronic channels	Country sources	G2P, G2B, G2B and by programme	

Source: World Bank Group.

197. While successfully measuring progress towards nationally set objectives, national performance/outcome indicators may not capture some important aspects such as the quality or strength of the enabling environment. For example, when observing financial inclusion from a payments perspective, relevant aspects include the quality of the underlying payment system/ICT infrastructure, or of the payments regulatory/oversight framework. Indicators can be explicitly designed to capture these quality dimensions. In

⁹⁹ Some countries have developed financial inclusion indices by distilling several indicators into one number. Although potentially effective for communication purposes, indices are associated with a number of caveats. For example, an index value and associated increase often have little inherent meaning (eg a value of 2.3, or an increase of 0.19).

¹⁰⁰ For example, specific IMF FAS indicators include commercial bank branches per 100,000 adults, commercial bank branches per 1,000 square kilometres, ATMs per 100,000 adults and ATMs per 1,000 square kilometres.

this regard, one useful option is to develop a measurement system that allows the quality of the enabling environment to be translated into levels of readiness or of development.¹⁰¹

5.1.3 Setting quantitative targets for key performance indicators, including baseline values and a timeline for achievement

198. Setting national targets for financial inclusion is as much an art as a science. The target-setting process should be grounded in a robust analysis of the current financial inclusion landscape, but should also be politically salient and designed with an eye towards generating a rallying effect. It is therefore critical that national financial inclusion targets be developed and accepted by a broad group of stakeholders, including the private sector.

199. Quantitative performance/outcome indicators such as those listed in Table 4 are conducive to target-setting. A number of important lessons in setting targets for KPIs may be drawn from experience.¹⁰² First, targets should be achievable but ambitious in order to generate the intended rallying effect. Conversely, targets that are not realistic may be seen as overly political and could even generate perverse incentives for both public and private sector actors. Second, targets should not threaten, in any way, the stability or efficiency of a country's financial system. For example, setting a target for an indicator such as "percentage of adults with a loan" may introduce distortions into the financial sector and encourage reckless or unsustainable levels of lending.

5.1.4 Reliance on robust data sources

200. Data are the bedrock of measurement systems. Both demand side and supply side data collection tools are critical to financial inclusion measurement, each with distinct comparative advantages. Each of these is described in some detail below. When used in conjunction, they effectively support target-setting and monitoring efforts.

5.1.4.1 Demand side data collection

201. Demand side surveying of individuals, households and firms has long been a critical tool for policymaking. Survey data can provide uniquely valuable insights into the state of financial inclusion in a given country for several reasons. First, surveys are ideally representative at the national level, but also for key segments including regions or provinces, income segments and rural/urban populations, thus facilitating identification of trends across a range of subgroups. Secondly, demand side data can provide insights into perceptions and the thought processes behind certain behaviours such as perceived barriers to accessing financial products, unmet demand for certain products or product features, and underlying psychological attitudes that may affect financial decisions. Thirdly, demand side data can be evaluated within the context of other behaviours of the same individual, household, or firm. Hence, the way in which certain financial behaviours overlap and/or correlate with other key behaviours related to income, employment, education, age, marital status etc may be analysed.

202. However, survey data come with caveats. Demand side surveys are costly and therefore are generally carried out at relatively infrequent intervals. Second, all household survey data are subject to biases stemming from coverage, sampling, non-response and respondent comprehension. For example, demand side

¹⁰¹ This methodology was applied, for example, in the paper "Measuring payment system development", published by the World Bank. For details, see Cirasino and García (2009).

¹⁰² The AFI has been a key player in encouraging national target-setting for financial inclusion. In 2011, the AFI established the Maya Declaration, in which AFI members commit to national financial inclusion targets and priorities. As of 2014, 47 economies had made a commitment under the Maya Declaration.

questionnaires on financial inclusion naturally deal with complex, subjective and sensitive topics, and responses are inherently dependent on the memory, comprehension and honesty of the respondent. Thus, demand side survey statistics should be interpreted with margins of error in mind.

203. To guide and/or complement their efforts, policymakers can draw on certain global or international demand side surveying efforts, including notably the Global Findex Database.¹⁰³

204. Yet the most sustainable approach to demand side data collection is through the integration of those efforts into national statistical systems, whether as a standalone survey on financial inclusion or through a module on an existing household survey.¹⁰⁴ In this way, technical and financial support can be institutionalised, and the questionnaire and resulting data can be tailored to the unique financial sector context, financial inclusion priorities and socioeconomic conditions of a given country.¹⁰⁵

5.1.4.2 *Supply side data collection*

205. Supply side data collection, on the other hand, relies mostly on collection efforts conducted by financial regulators as part of the discharge of their regulatory, supervisory and oversight responsibilities. While in many cases obtaining inclusion data is not the primary purpose of financial authorities' data collection efforts, data items that are relevant to measure financial inclusion can usually be embedded into existing reporting systems or mechanisms. In this context, supply side efforts can provide critical data on product uptake, usage (including frequency and volume), or the physical reach of the financial system, among other important variables.

206. Supply side financial inclusion data provide a relatively cost-effective and frequent resource for measurement. However, an often noted and significant concern in the use of supply side data to monitor financial inclusion is that these data do not provide insights into the distribution of financial services. For example, if a country's total number of accounts is equal to its population, it is generally not possible to determine whether this refers to a one-to-one ratio of adults-to-accounts, or whether it is driven instead by some individuals having multiple accounts. Furthermore, with few exceptions, the aggregate product density and volume numbers cannot be analysed by a full range of individual characteristics, which limits insights into the reach of the financial sector for priority populations.

207. Moreover, the ability of authorities to collect financial inclusion data from financial service providers is often determined by the legal and regulatory framework which defines the mandate, perimeter (in terms of which institutional forms are supervised by which entity), supervision/oversight procedures and reporting requirements. Hence, some authorities may find themselves without a mandate to collect data from some PSPs or other financial service providers.

¹⁰³ The Global Findex database contains indicators on accounts, savings, payments and credit, collected from nationally representative samples in 148 countries via the Gallup World Poll. National authorities interested in improving the scope and quality of demand side data related to the payment aspects of financial inclusion could use the 2014 Global Findex module on digital payments as a starting point. Another relevant demand side survey is Finscope, covering 18 (mostly sub-Saharan African) countries as of 2015. Finscope's financial access strand segments the adult population into those that are served through banks, served through formal non-bank financial service providers, served by informal providers, and unserved.

¹⁰⁴ The first approach has been observed, for example, in Malaysia, Mexico and the Philippines, while the second one has been observed in, for example, Peru.

¹⁰⁵ Coordination is key for the effective collection of household data. National statistics agencies are often not included in the planning of financial inclusion data collection, and thus their resources and expertise are not fully leveraged. On the other hand, national statistics agencies in some countries are likely to require additional human and financial resources to be able to produce robust and reliable indicators and track them effectively.

208. Some additional considerations that may impact the quality of supply side data are: (i) accuracy of the reported data; (ii) independence of the collecting entity; and (iii) adequacy of resources. For example, from the financial service provider standpoint, compiling data reports is often costly, and especially during the first several iterations some of the reported data are usually inaccurate. From the perspective of authorities, there are often challenges in establishing a uniform reporting system given the range of financial institutions, the associated capacities at those institutions and those of authorities themselves, the potential limitations in data management systems, etc.

209. As it is the case with demand side data, authorities or other stakeholders putting together supply side financial inclusion data may rely, to some extent, on some relevant international efforts on this field. Some of the most relevant ones include the International Monetary Fund's Financial Access Survey (FAS),¹⁰⁶ the World Bank's Global Payment Systems Survey¹⁰⁷ and the World Bank's Global Survey on Consumer Protection and Financial Literacy.¹⁰⁸

¹⁰⁶ As of 2014, the IMF FAS covered 189 jurisdictions and included 47 key indicators covering geographical outreach and use of financial services. From 2014, the FAS also includes indicators for mobile money.

¹⁰⁷ The Global Payment Systems Survey is a tool to collect information on the status of payment and settlement systems worldwide. Conducted every two years among national central banks, it covers several aspects of the national payment system (the legal and regulatory environment, large-value/retail payments infrastructure, innovations in retail payments, payment system oversight arrangements, etc) in approximately 150 economies.

¹⁰⁸ This survey collects data from over 100 central banks and bank supervisors on key areas of consumer protection and financial literacy, including institutional arrangements, legal framework, fair treatment, disclosure, responsible lending, dispute resolution and recourse, and financial education. The complete data are published on an interactive platform at <http://responsiblefinance.worldbank.org>.

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Members

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Annex 2: Glossary

This glossary covers selected terms used in this report. A more extensive glossary of terms used in the context of payments and settlement systems can be found online at: www.bis.org/cpmi/glossary_030301.pdf.

Access point: point that is necessary to initiate a payment. Access points can include branch offices, ATMs, terminals at the POS, or a personal device of the user (for access via the internet or other telecommunication networks).

Agent banking: business arrangements of banks and non-bank payment service providers using local entities (ie "PSP agents") such as small shops to provide basic payment and transaction account-related services on their behalf. This arrangement is also referred to as banking through business correspondents.

Basic account: a bank account that is typically focused on payment services and characterised by low-cost and no-frill features. These accounts are often offered in combination with a debit card.

Deposit transaction account: deposit account held with banks and other authorised deposit-taking financial institutions that can be used for making and receiving payments. Such accounts are known in some countries as current accounts, chequing accounts or other similar terms. *See also "Transaction account".*

E-money account: prepaid instrument based on e-money that can be offered by banks and other authorised deposit-taking financial institutions, as well as by non-deposit-taking payment service providers such as mobile network operators. Such accounts include prepaid accounts. *See also "Transaction account".*

End user: individual, business and/or government agency that is a customer of a payment service provider and is in the role of a payer or a payee of a retail payment transaction. *See also "Payment service provider".*

Float: the amount of funds withdrawn from the account of the payer but not reflected immediately in the account of the payee. In the e-money context, float is typically referred to as the total value of outstanding customer funds.

Money transfer operator (MTO): a non-deposit-taking payment service provider where the service involves payment per transfer (or possibly payment for a set or series of transfers) by the sender to the payment service provider (for example, by cash or bank transfer) – ie as opposed to a situation where the payment service provider debits an account held by the sender at the payment service provider.

National payment system: encompasses all payment-related activities, processes, mechanisms, infrastructure, institutions and users in a country or a broader region (eg a common economic area). This could also be referred to in the report as "payments system".

Payment service provider: an entity that provides payment services, including remittances. Payment service providers include banks and other deposit-taking institutions, as well as specialised entities such as money transfer operators and e-money issuers.

Payment system operator: an entity that operates a payment network and/or other payment infrastructures.

PSP agent: local entities such as small shops that provide basic payment and transaction account-related services on behalf of banks and/or non-bank payment service providers based on business arrangements with them. *See also "Agent banking".*

Transaction account: broadly defined as an account held with a bank or other authorised and/or regulated service provider (including a non-bank) which can be used to make and receive payments. Transaction accounts can be further differentiated into deposit transaction accounts and e-money accounts.

Trust account: account by held by non-bank payment service provider issuing e-money with a deposit-taking institution to deposit the outstanding e-money float.

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