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THE GLOBAL DIGITAL FINANCIAL SERVICES: A CRITICAL REVIEW TO ACHIEVE FOR DIGITAL ECONOMY IN EMERGING MARKETS

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ABSTRACT

Digital Financial Services(DFS) have significant potential to provide a range of affordable, convenitent and secure banking services to poor people in Emerging Economies.Digital financial inclusion promotes efficient interconnection among participants in economic activities. There are unbanked individuals are increasingly gaining access to financial services through digital channels. Banks, microfinance institutions, mobile operators, and third party providers are leveraging mobile phones, point-of-sale devices, along with networks of small-scale agents, to offer basic financial services at greater convenience, scale and lower cost than traditional banking allows. Yet there remains a long way to go in digital finance. Ecosystems take time to develop and can take years before one-quarter to a half of adults begin to use basic payment services. In addition, many financial services such as savings and loans require significant physical touch points between customers and providers, making them difficult to scale. The researher analysed the importance of Digital Financial Infrastructure development and suitable Mobile payment national Policies as well as initiatives carried out in cooperation with or by other experts and relevant institutions in the various fields of financial infrastructure. Finally, the researcher has been suggested the important policy recommendations that it is crucial to take concrete and significant actions to advance digital financial based on the specific circumstance of each country members to taking concrete actions for promotioin of digital financial inclusion at their own country level.

Key Words: Digital Financial Services, Emerging Economies, Infrastructure development and suitable Mobile payment national Policies

Introduction

There are many positive trends towards the digital financial inclusion ranging from more representation of disadvantaged groups in political processes to a reduction of inequality in access to finance, education, technology, market and resources. However, group-based disparities vary significantly across countries and by group. Whether development is leaving some people behind and, consequently, whether or not it is promoting socio-economic and digital inclusion depends on context as well as on the indicators used to measure progress. Beyond the foundational role of digital financial inclusion and the moral imperative to correct imbalances in power, voice and influence. There are also practical reasons to ensure that no one is left behind. Inclusion strengthens not only the social, but also the economic and environmental dimensions of sustainable development. Awareness of the importance of inclusion, however, has not yet been translated into political commitment or the necessary normative shifts that are imperative for inclusive development, as argued in the report. Instead, overreliance on market mechanisms, a retrenchment of the redistributive role of the State and growing economic inequalities have contributed to social exclusion and have even put the social contract under threat in many countries in the last few decades (**UNO Report, 2016**)[1].

Functioning of Digital Financial Inclusion

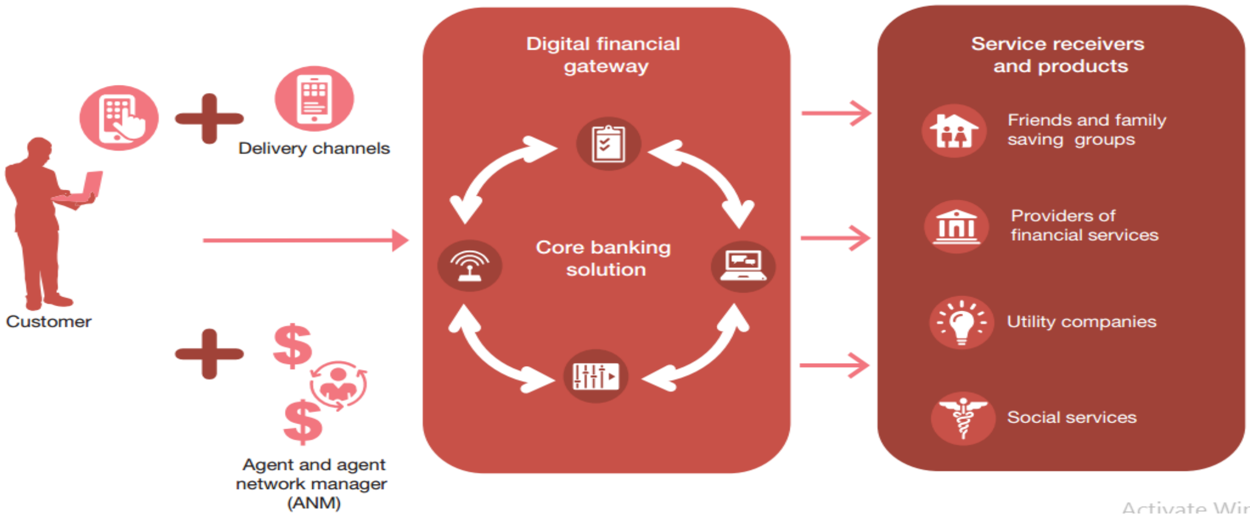
A digital finance platform enables the unbanked masses to convert their physical cash into digital/electronic money. The digital platform is integrated with the core banking system of banks/telcos and other financial and non-financial institutions. DFI is considered a success when a poor, and thus far unbanked, customer starts transacting digitally with his/her family and friends, formal banking and financial institutions and utility companies, and receives government to-person (G2P) payments directly into his/her bank account. DFI can be categorised into two types, i.e. assisted and self-service. While financial transactions availed of using agent networks especially for cash-in and cash-out services are considered assisted

[1]UNO Report. (2016). *Leaving no one behind:the imperative of inclusive development.* New York: Published by United Nation Organisation, Department of Economic & Social Affairs.

DFI, payments and transfers made through use of own mobile phone are called self-service DFI. The following infrastructure needs to be in place to facilitate DFI:

- A transaction platform which connects the customer/ agent to the core banking systems for electronic deposit, withdrawal and transfer. It also records customer transaction details.
- A CSP/agent who passes on/receives customer transaction details from the transaction platform. The agent converts cash into electronic money and vice versa. This agent is also involved in enrolling a customer into the financial system and complying with Know Your Customer (KYC) requirements
- Digital delivery channels such as Point of Sale (POS), mobile phones and computer kiosks which facilitate customer authentication and real-time transactions.
- Internet connectivity which helps the digital delivery channels connect with the transaction platform for customer authentication and transactions on a real-time basis.
- A system for capturing and authenticating the identity of the customer.
- A virtual account for enabling digital payment connectivity.
- A payment platform that connects customers with other service providers and different platforms.
- Methodologies and a set of rules that enable payment and settlement across platforms.
- Ability of the system to connect with other systems through an Application Programme Interface (API).

Figure: 1 Schematic representation of DFI platform



Sources: Author Design

What is Digital Finance?

As a key area of financial innovation in this decade, digital finance (fintech) has natural advantages in financial inclusion in light of its characteristics such as sharing, convenience, low cost and easy access. Digital financial inclusion aims at harness digital technologies to improve financial inclusion and has drawn increasingly attention of many countries. However, there was no high-level guidance in this field

Define digital finance as financial services delivered over digital infrastructure including mobile and internet with low use of cash and traditional bank branches. Mobile phones, computers, or cards used over point-of-sale (POS) devices connect individuals and businesses to a digitized national payments infrastructure, enabling seamless transactions across all parties.

Current Situation of Social Exclusion and Inclusion

In aspiring to empower and promote the social, economic and political inclusion of all members of society, target 10.2 of the 2030 Agenda highlights attributes that have considerable influence on the risk of exclusion when it emphasizes that all should be included "irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status" **(UNO Report, 2016)**[2]. As such, social inclusion is presented as the process of improving the terms of participation in society for people who are disadvantaged on the basis of age, sex, disability, race, ethnicity, and economic and migration status. It is contended in the report that promoting social inclusion requires both removing barriers to people's participation, including certain laws, policies and institutions as well as discriminatory attitudes and behaviours, and taking active steps to make such participation easier.

In taking into account these challenges, the analysis of three sets of indicators: those that measure access to opportunities, namely education, health and other basic services; those that measure access to employment and income; and those that measure participation in political, civic and cultural life. A relative approach is taken to exclusion: instead of defining a threshold under which individuals or groups would be considered excluded, disparities in these indicators across selected social groups are construed as symptoms or outcomes of the exclusion of those who are being left behind (**UNO Report, 2016)**[3].

It is clear that the extent of social exclusion, the groups affected by it and the social problems it encompasses vary by context and also over time. In many ways, the world has

[2] UNO Report. (2016). *General Assembly resolution 70/1, para 4.* New York: Published by United Nation Organisation.
[3]Ibid..

become less tolerant of exclusion. The spread of democratic ideals and the demand for equal rights have led some Governments to loosen policies that sustain unfair treatment and have created opportunities for political participation.

Key Dimensions of Exclusion

1. ***Poverty, income inequality and exclusion***: Vicious cycle poverty is a major hindrance to social inclusion. The global progress made in reducing extreme income poverty well for inclusive development. While 37 per cent of the world's population lived under the international poverty line of $1.90 a day in 1990, the proportion had declined to 12.7 per cent by 2012. However, the situation of those living in deep poverty has not improved significantly and many people who have escaped poverty remain vulnerable to it **(World Bank Report, 2015**)[4].
2. ***Decent work deficits and exclusion:*** Over the last two decades, employment has helped millions of people to escape poverty and has economically empowered women and other disadvantaged groups. In some cases, it has promoted the social inclusion of these groups, while in others it has reinforced existing divides. However, economic growth and, more broadly, development have not been sufficiently inclusive, as they have failed to reduce deficits in decent work. Many people cannot rely on stable decent jobs as means to cope with risks or secure livelihoods. The risk of holding a poorly paid, precarious or insecure job is higher today than it was in 1995. Despite rapid progress made in reducing poverty, 13.5 per cent of workers in developing countries are living in extreme poverty (on less than $1.90 a day) and 34.3 per cent are living on less than $3.10 a day (**ILO Report, 2016**)[5].

Prejudice and Discrimination: Barriers to Social Inclusion

The prejudicial treatment of people on the basis of their identity or their characteristics is a common cause of exclusion. Across countries, there are still laws and policies that discriminate against individuals and groups in all spheres of life, despite the considerable progress that has been achieved in recent decades to end such practices. Even where

[4]World Bank Report. (2015). *World Bank released revised income poverty estimates based on a new set of purchasing power parity (PPPs)* . Washington D.C: Published by the World Bank .

[5]ILO Report. (2016). *World Employment and Social Outlook 2016: Transforming jobs to end poverty.* Geneva: International Labour Organization.

discriminatory laws have been eliminated, discriminatory practices continue to underpin group-based differences **(UNO Report, 2010)**[6].

Publicly registered incidents of discrimination, such as legal cases brought against employers or public authorities or reported incidents of hate crimes, have limited value for cross-country comparisons or even to assess trends over time. The willingness and opportunities to report discrimination depend on efficacy, real or perceived, of the police and the justice system in addressing this ill. Instead, some surveys have gathered information on perceived instances of discrimination. Results of the European Union Minorities and Discrimination Survey in 2008 showed, for instance, that one in four respondents felt discriminated against due to ethnic or immigrant origin, sex, age, disability, sexual orientation, religion or beliefs (European Union Agency for Fundamental Rights, 2009). Perceived discrimination on the basis of ethnicity or immigrant origin was the most significant of these areas. Experimental research also showed large differential treatment based on race, ethnicity and migrant status in various domains, including job interview call-backs, apartment rentals and examination results (European Union Agency for Fundamental Rights, 2009)[7].

Financial Exclusion: The Concerns Broaden

Regulators, particularly in poorer countries, often grapple with trade-offs relating to financial exclusion risks. These questions arise for example when features and control measures of products targeting the poor are considered, especially when the national crime or terrorism risk levels are high. The current debates around appropriate financial services for undocumented refugees in Europe illustrate the complexity of the questions policymakers in developed economies also face when confronted with vulnerable, excluded individuals. The financial exclusion discussion has broadened beyond individual customers. Now money service businesses, charities, fintech companies, diplomatic missions and even politicians are affected by banks' decisions to terminate accounts and services to certain groups of customers. Banks use the term "de-risking" to describe these actions, which enable the banks to move compliance, reputational, and other risks off their balance sheets. Yet the term "de-

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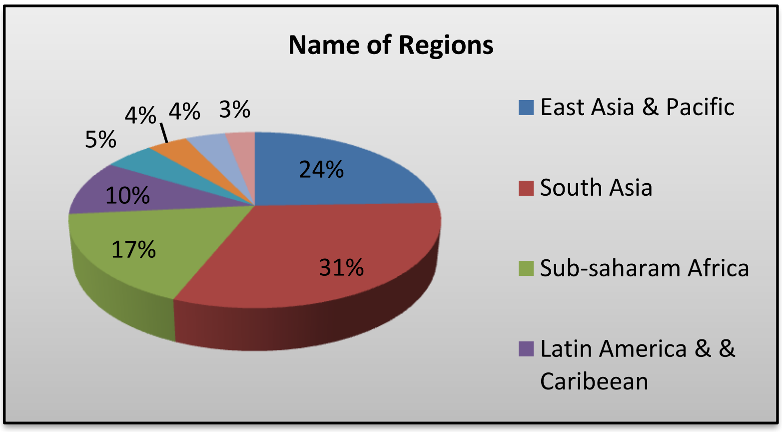
[6]UNO Report. (2010). *Combating Poverty and Inequality: Structural Change, Social Policy and Politics. Sales No. E.10.* New York: Published by United Nation OrganisationUnited Nation Organisation, Department of Economic & Social Affairs

[7]European Union Agency for Fundamental Rights. (2009). *European Union Minorities and Discrimination Survey (EU-MIDIS): main results report.* Retrieved 2017, from http://fra.europa.eu: http://fra.europa.eu/sites/default/files/fra_uploads/663-FRA-2011_EU_MIDIS_EN.pdf

risking" is misleading, as financial exclusion risks increase to the extent customers are forced instead to transact in cash**(Lyman, 2016)**[8].

According to Global Findex Globally, 2 billion adults remain unbanked. South Asia, East Asia and the Pacific having together account for more than half the world's unbanked adults. South Asia, home to about 625 million adults without an account, has about 31 percent of the global total; East Asia and the Pacific, with 490 million unbanked adults, accounts for about 24 percent (figure 1.2).

Figure:2The World's Unbanked Adults by Region



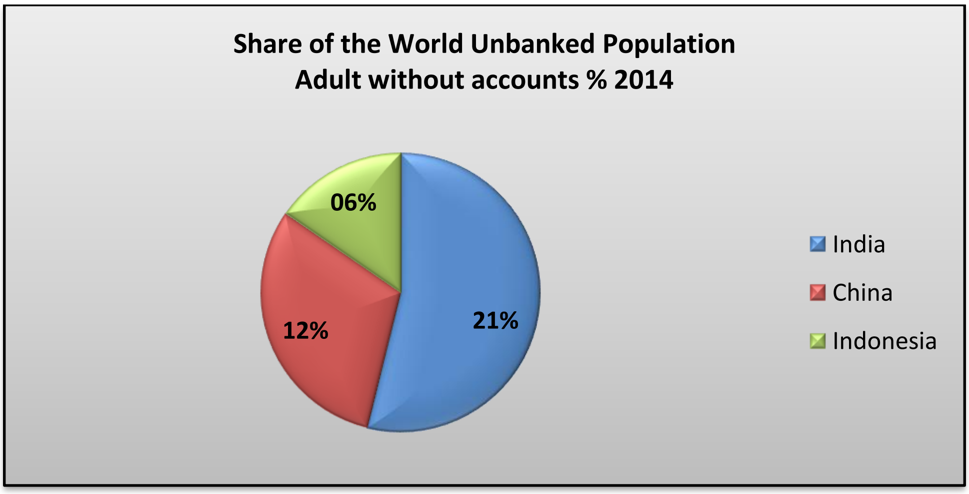
Note: Other economics included high-income non-OECD Economics Algeria and Tunisia

References: Global Findex Database 2014

This is no surprise, since these two regions are home to the developing world's three most populous countries like China, India, and Indonesia. Indeed, these three countries together account for 38 percent of the world's unbanked (figure 3)

[8] Lyman, L. d. (2016, June 9). *Deepening Insights on Financial Exclusion Risks.* Retrieved December 15, 2016, from CGAP: https://www.cgap.org/blog/deepening-insights-financial-exclusion-risks

Figure:3 Share of the World's Unbanked Adults in China, India and Indonesia



Source: Author Design based on World Bank Report, 2014

India is home to 21 percent of the world's unbanked adults and about two-thirds of South Asia's. China accounts for 12 percent of the worlds unbanked and Indonesia for 6 percent; together they account for three-quarters of the unbanked in East Asia and the Pacific. Globally, 38 percent of adults remain unbanked. Yet among the survey respondents who do not have an account, only 4 percent said that the only reason for not having one is that they do not need one. The Global Findex data point to several promising opportunities for expanding account ownership among the unbanked.There is approximately 2.5 billion adults lack a formal bank account. Most of these people are concentrated in developing economies, indicators showing how people around the world save, borrow, make payments, and manage risk (World Bank, 2016)[9].

Table: 1 Number of financially Excluded by World Bank Data

Number of Financially Excluded(Million in % of Adult Population)	Percentage	Share of financially excluded population		
		Poor	Women	Rural
South Asia	53%	46	57	71
Africa and Middle East	61%	46	54	61
Southeast Asia	59%	48	49	59
China	21%	53	54	23
Latin America	48%	48	54	23
Eastern Europe and Central Asia	39%	47	543	41

Source: Global Findex database 2014, World Bank; McKinsey Global Institute analysis

[9]World Bank . (2016). *World Development Indicators.* Washington D.C: Published by World Bank.

Women make up 55 percent of the world's unbanked adults: 1.1 billion. And adults in the poorest 40 percent of households within economies make up half of 1 billion. These shares vary little across developing regions. Why do almost 40 percent of adults around the world remain unbanked? The Global Findex survey asked adults without an account at a financial institution why they do not have one, providing insights into where policy makers might be able to remove barriers to financial inclusion. Yet transaction account penetration rates vary significantly based on geography. For example, 64% of the population of Indonesia do not have an account; in Egypt, the figure is 85%; 94% in Yemen; 87% in Pakistan; and 21% in Chin **(Asli Demirguc-Kunt, Leora Klapper,Dorothe Singer,Peter Van Oudheusden, 2014**)[10].

Status of Digital Finance Inclusion in Emerging Economies

A well-functioning financial-services sector is critical to the economic health of a country, allowing people to save for and insure against expected and unexpected events, enabling entrepreneurs and businesses to invest in new and productive businesses and to manage their supply chains, and making it possible for individuals, businesses, governments, and financial-services providers to conduct transactions efficiently. However, individuals and businesses in emerging economies do not have the same access to financial services enjoyed by their counterparts in advanced economies. Two billion people, or 45 percent of the developing world's adult population, lack an account with a bank, other financial institution, or mobile-money service. In addition, 200 million MSMEs, or half of all such businesses in emerging economies, lack sufficient access to the credit they need to thrive. The problem of financial exclusion goes far beyond the poor the majority of the developing world's consuming or middle class are also underserved. Those who do not use financial services face significant inefficiencies, leading to high prices and limiting their access to the broad range of savings, credit, and insurance products that is commonplace in advanced economies. Where good formal options do not exist, individuals and businesses must resort to cash and the informal financial system with high costs and greater risks both to themselves and to society at large or forgo business opportunities entirely (**Abheek Barua, 2016)**[11].

[10] Asli Demirguc-Kunt, Leora Klapper,Dorothe Singer,Peter Van Oudheusden. (2014). *The Global Findex Database 2014.* Washington, DC 20433, USA: Published by World Bank.

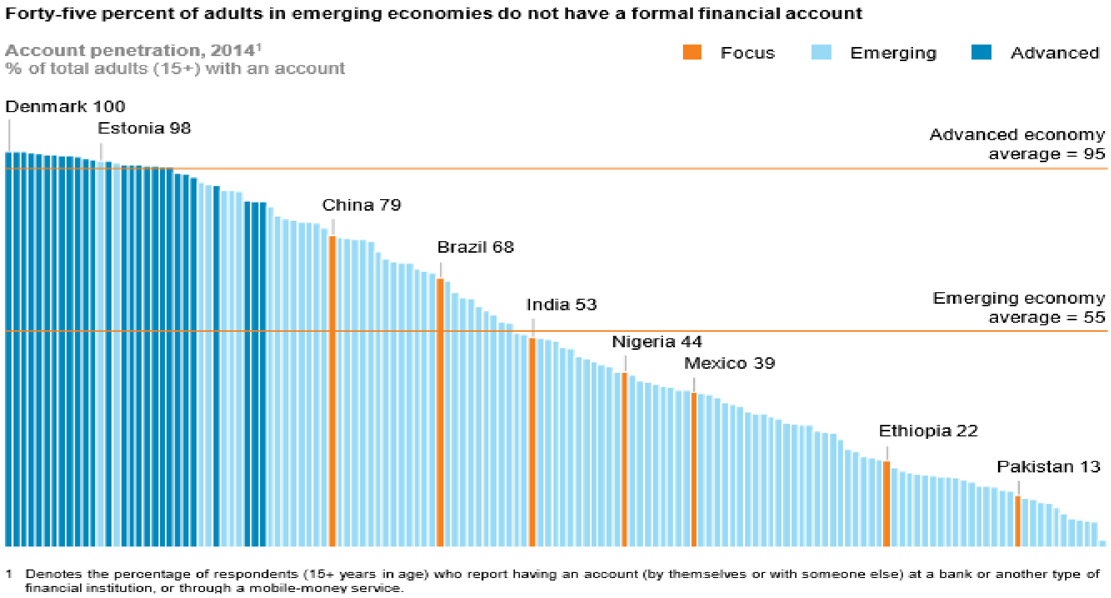
[11] Abheek Barua, R. K. (2016). *The Status of Financial Inclusion, Regulation, and Education in India* . Japan: published by ADBI Working Paper Series .

Analysing the Digital Financial Inclusion in Emerging Economies

A significant share of people in emerging economies are simply not part of the financial system, and an even larger number of adults do not use a full suite of financial services such as investment products, lines of credit, mortgage loans, and insurance. Limitations in financial access are particularly acute among women, people living in rural areas, and those who are less well off. However, even wealthier people in emerging economies transact more in cash, save more in hard assets, and borrow less from formal sources than do their counterparts in advanced economies. Difficult access, limited product choice, and high prices and other intangible costs such as travel time all are to blame. The resulting financial exclusion imposes costs and means that opportunities are lost.

Emerging economies lack broad financial access as a whole 60 percent of the richest three quintiles have formal accounts, while only 46 percent of the poorest two quintiles do. There is a similar urban versus rural divide: 61 percent of urban adults have formal accounts compared with only 48 percent of rural adults. While 59 percent of men have access to bank accounts, only 50 percent of women do. On the other side, only 5 percent of individuals in advanced economies lack a formal financial account, but across emerging economies the average is a striking 45 percent. A majority of adults do not have formal accounts in South and Southeast Asia, the Middle East, and Africa; sub-Saharan Africa, 66 percent of adults do not have formal accounts (**McKinsey Global Institute (MGI), 2016**)[12].

Figure: 4 Lack of Access to Finance Emerging Economies



Source: Author Desing based on Global Findex database 2014 Report,

[12]McKinsey Global Institute (MGI). (2016). *Digital Finance For All: Powering Inclusive Growth In Emerging Economies,*Washington, DC: Published by McKinsey & Company

In emerging economies as a whole, 60 percent of the richest three quintiles have formal accounts, while only 46 percent of the poorest two quintiles do. There is a similar urban versus rural divide: 61 percent of urban adults have formal accounts compared with only 48 percent of rural adults. While 59 percent of men have access to bank accounts, only 50 percent of women do.

The unbanked are not the only customers underserved by the financial sector. Many more people do not use their bank accounts actively and lack access to appropriate savings, credit, and insurance products. As a result, people in emerging economies rely heavily on cash only 3 percent of transactions made by individuals are made through digital means. Just 10 percent of individuals in emerging economies borrow money from financial institutions, and a similar share has a credit card. In Pakistan, this has an adult population of 120 million; formal banks hold only around 70,000 outstanding mortgages. Given the lack of mortgages, credit cards, auto loans, and other forms of financing, it is not surprising that average household debt in emerging economies is just 24 percent of GDP only one-third the level of advanced economies. Furthermore, the average private-sector (household and non-financial corporate) debt-to-GDP ratio in emerging economies, at 74 percent, is less than half the 181 percent average in developed countries **(World Bank , 2016**)[13].

Difficult physical access to branches can contribute to the limited scope of finance. People living in rural areas of emerging economies are typically less well off than their urban counterparts and are often physically far removed from bank branches. In Ethiopia, 80 percent of the population lives on rural smallholdings that can be ten kilometres or more from the nearest bank branch or ATM; just 22 percent of all adults have a formal financial account. In India it may take several hours to visit a rural bank branch that is open only on weekdays, forcing people not only to lose time and money on travel but also often requiring them to take a day off of work or keep a child out of school to make a simple deposit or withdrawal. We estimate that Indians lose more than $2 billion a year in forgone income simply because of the time it takes traveling to and from a bank.

Even those living near a branch may be intimidated by bank branches, mistrust formal financial institutions, or simply not feel that they have enough money or sufficiently stable cash flows for an account to be of benefit. Many urban dwellers in India live more than two kilometres from a bank branch; hawkers in Mumbai, for instance, struggle to visit branches

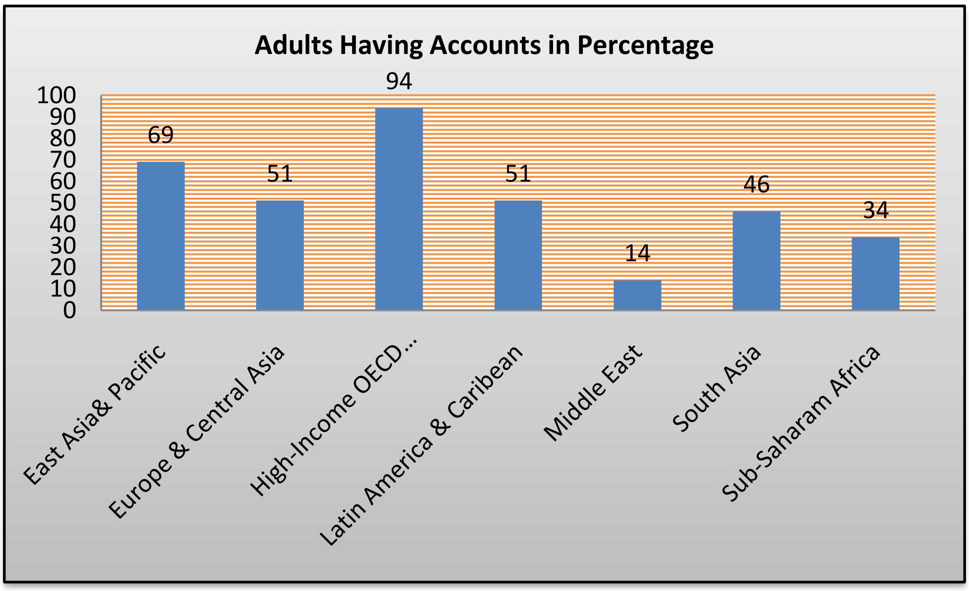
[13] World Bank. (2016, December 1). *Universal Financial Access 2020*. Retrieved December 15, 2016, from http://ufa.worldbank.org/: http://ufa.worldbank.org/

because they are open only during peak money-making hours. It is no wonder that because of the time and cost required to interact with a bank, many poor and rural individuals opt instead to use cash for transactions**(McKinsey Global Institute (MGI), 2016**)[14].

In the absence of adequate financial services, un-served and underserved households rely on cash and informal financial services that provide at best partial solutions for their financial needs. Many save cash at home or buy physical assets such as gold and livestock, or belong to informal savings groups, incurring risk and forgoing the opportunity to earn interest and build a credit history. Without access to formal credit, many must borrow from family and friends or illegal lenders, often paying very high interest costs. Without a secure and cost-effective way to save, households are limited in their ability to invest in their future, smooth their income over the year, or manage shocks such as illness or natural disasters **(McKinsey Global Institute (MGI), 2016**)[15].

The high cost of building and operating brick-and-mortar bank branches has been a major obstacle for extending financial services to the poor. Physical bank branches are expensive to maintain in far-flung communities, while traveling to urban areas is costly for many rural customers.

Figure: 5 Adults Having Account Percentages



Source: Author Design based on World Bank Report, 2014

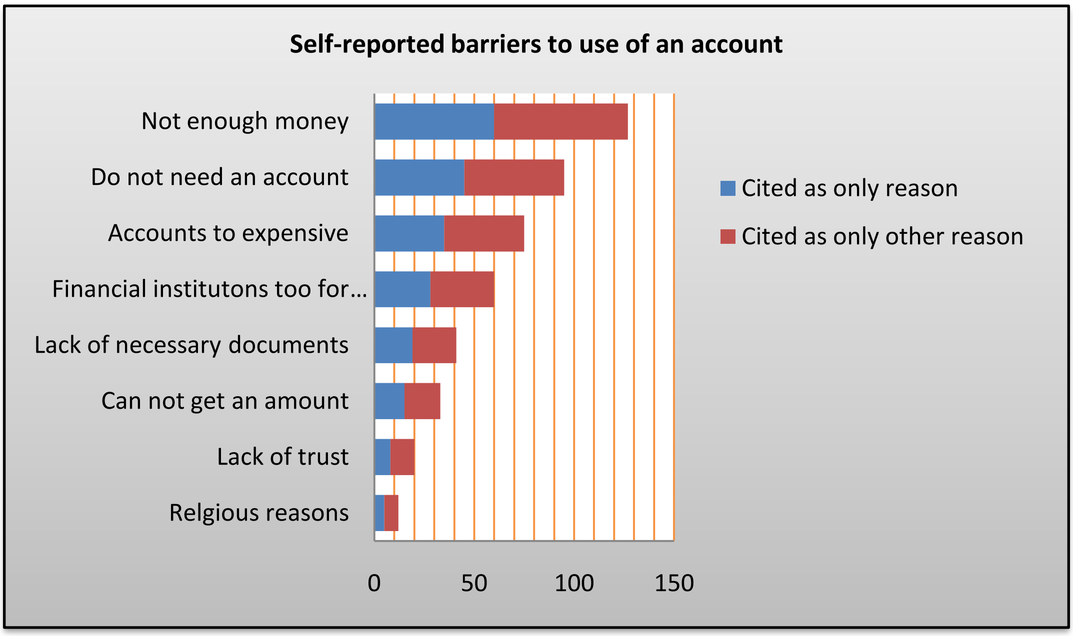
The Global Findex database reveals that between 2011 and 2014, 700 million adults worldwide became account holders. The number of adults without an account the unbanked

[14]McKinsey Global Institute (MGI). (2016). *Digital Finance For All: Powering Inclusive Growth In Emerging Economies,*Washington, DC: Published by McKinsey & Company
[15]Ibid…

dropped by 20 percent to 2 billion. Globally, 62 percent of adults have an account, up from 51 percent in 2011. Not surprisingly, account ownership varies widely around the world. In high-income OECD economies account ownership is almost universal: 94 percent of adults reported having an account in 2014. In developing economies only 54 percent did. There are also enormous disparities among developing regions, where account penetration ranges from 14 percent in the Middle East to 69 percent in East Asia and the PacificThe figure below shows the adults with account around the world as of 2014 (**Asli Demirguc-Kunt, Leora Klapper,Dorothe Singer,Peter Van Oudheusden, 2014**)[16].

While the digitization of financial services has significantly increased the number of financially included individuals over the past few years, in many instances, usage rates of accounts and other tools remain low to non-existent. For instance, the Indian government's Aadhaar biometric identification card programme has 85 million issuances, yet only a 25% utilization rate.

Figure: 6 Self-reported barriers to use of an account at a financial institution



Source: Author Design World Bank Report, 2014

[16] Asli Demirguc-Kunt, Leora Klapper,Dorothe Singer,Peter Van Oudheusden. (2014). *The Global Findex Database 2014.* Washington, DC 20433, USA: Published by World Bank.

Respondents were allowed to give multiple reasons for not having an account at a financial institution, and they cited 2.1 on average. Globally, the most common reason is lack of enough money to use an account: 59 percent of adults without an account identified this as a reason, and 16 percent cited it as the only reason **(World Bank Report, 2012)**[17].

Affordability is an important barrier to financial inclusion beyond just Latin America and the Caribbean. Globally, 23 percent of adults without an account at a financial institution cited this reason. Fixed transaction costs and annual fees tend to make small transactions unaffordable for large parts of the population in developing economies. These high costs often reflect a lack of competition and underdeveloped infrastructure, both physical and institutional. New technologies and innovative business models such as mobile banking and agent banking can help increase the affordability of financial services.

A. Utilization of Accounts

While 2 billion adults are unbanked, 3.2 billion do have an account. But how many of those with an account are actually using it? And how many are doing so in ways that allow them to fully benefit from financial inclusion? This section documents how people use their accounts and how intensely by constructing an indicator based on Global Findex data.

To assess how intensely accounts are used, four levels of use are defined:

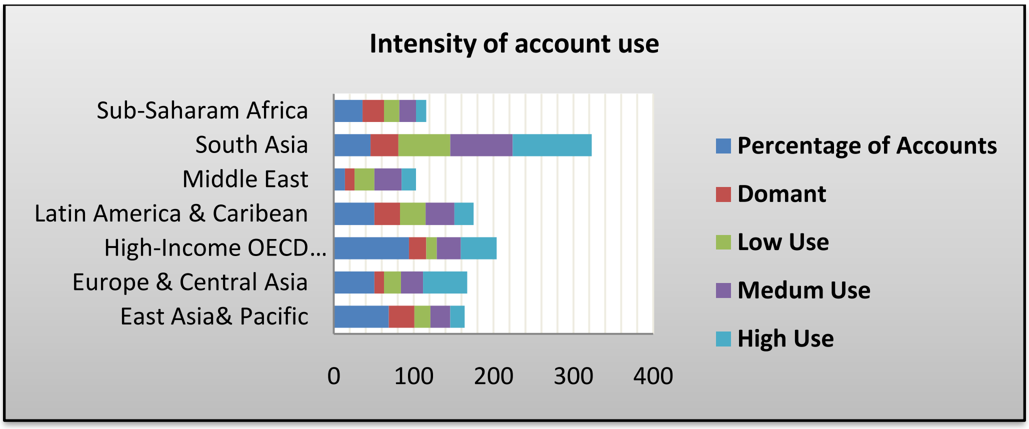
High use: account at a financial institution used for three or more monthly withdrawals, debit card used to make a direct payment in the past 12 months, account used to pay utility bills or school fees or to send remittances in the past 12 months, or account at a financial institution used for saving in the past 12 months

- **Medium use:** account used to receive wages, government transfers, payments for the sale of agricultural products, or remittances in the past 12 months
- **Low use:** account at a financial institution used for one or two monthly deposits or withdrawals or mobile money account used in the past 12 months
- **Dormant:** Account at a financial institution with zero deposits or withdrawals in the past 12 months

[17] World Bank Report. (2012). *World Bank: Who are the unbanked?* . Washingtong D.C: Published by World Bank Group.

This categorization differentiates between making a payment and receiving a payment. When people receive a payment, the choice about how they receive that payment whether into an account, in cash, or, in the case of remittances, through an over-the-counter transaction is often determined by the sender the employer, the government, the remittance sender. But when people make a payment, they can often choose how to do so again, whether through their account, in cash, or, in the case of remittances, through an over-the-counter transaction though their choice may be limited if, for example, a utility provider or school accepts payments only in cash. For this reason, an account used to make a payment in the past 12 months is put in the high-use category while an account used only to receive a payment is put in the medium-use category **(Allen, 2013)**[18].

Figure:7 Utilization of Accounts by Regions



Source: Author Desing based on Global Findex Database Report, 2014

An account is also assigned to the high-use category if it is actively used either for saving or for cash management purposes as proxied by three or more monthly withdrawals or the use of a debit card to directly make payments. By definition, mobile money accounts in the Global Findex database are never dormant (**World Bank, 2014a**)[19].

Intensity of Account Use by Vary Across Regions

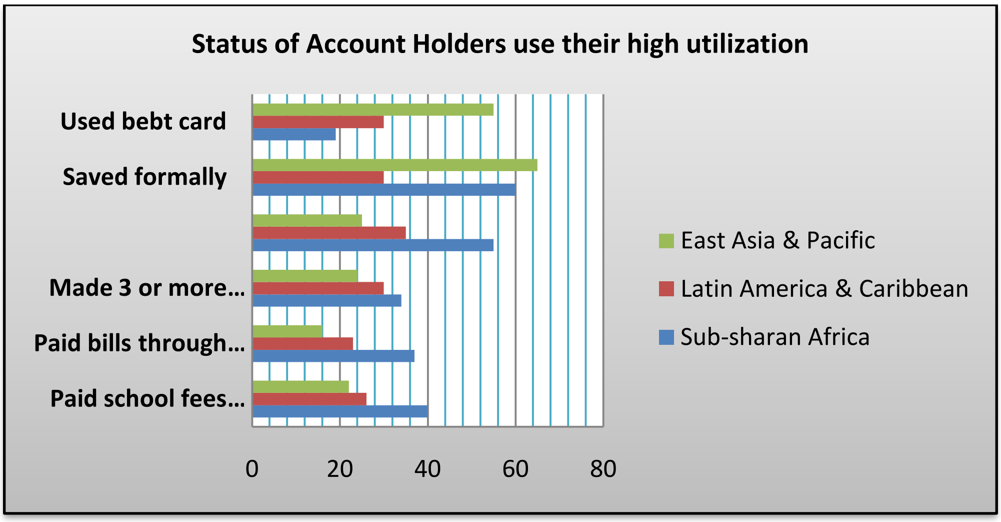
Globally, 460 million adults have a dormant account and 380 million a low-use account. These 840 million adults together make up a quarter of all adults with an account, suggesting that there is much room to increase the use of accounts. Not surprisingly, the

[18] Allen, F. A.-K. (2013). "Foundations of Financial Inclusion.". *World Bank Policy Research Working Paper*, 1-20.

[19] World Bank . (2014). *The Opportunities of Digitizing Payments* . Washington, DC USA: Published by World Bank Development Research Group

share of account holders with a high-use account is largest in high income OECD economies, at 91 percent (or 85 percent of all adults).

Figure:8Status of Account Holders use their high utilization



Source: Author Design based on World Bank Report, 2014

About three-quarters of those with a high-use account reported having made three or more monthly withdrawals, a similar share reported having used a debit card to directly make a purchase in the past 12 months, and yet again a similar share reported having made a utility payment from their account in the past 12 months. About 60 percent reported having used their account to save in the past 12 months. The intensity of account use differs markedly across developing regions. In East Asia and the Pacific, Latin America and the Caribbean, and Sub-Saharan Africa about 65 percent of account holders have a high-use account, and in Europe and Central Asia about 60 percent do. But in the Middle East and South Asia less than 40 percent have a high-use account (**Demirguc-Kunt, A., L. Klapper, and D. Singer, 2013**)[20].

In East Asia and the Pacific the relatively high intensity of account use is driven primarily by formal saving, reported by 72 percent of account holders with a high-use account. Sub-Saharan Africa reflects both formal saving (reported by 60 percent) and the use of accounts to send remittances (54 percent). And in Latin America and the Caribbean the main factor is the use of debit cards to directly make a purchase, reported by 80 percent of account holders with a high-use account. The Middle East and South Asia lag behind in the average intensity of account use. In these regions only about 50 percent of account holders

[20] Demirguc-Kunt, A., L. Klapper, and D. Singer. 2013. "Financial Inclusion and Legal Discrimination against Women: Evidence from Developing Countries." Policy Research Working Paper 6616, World Bank, Washington, DC

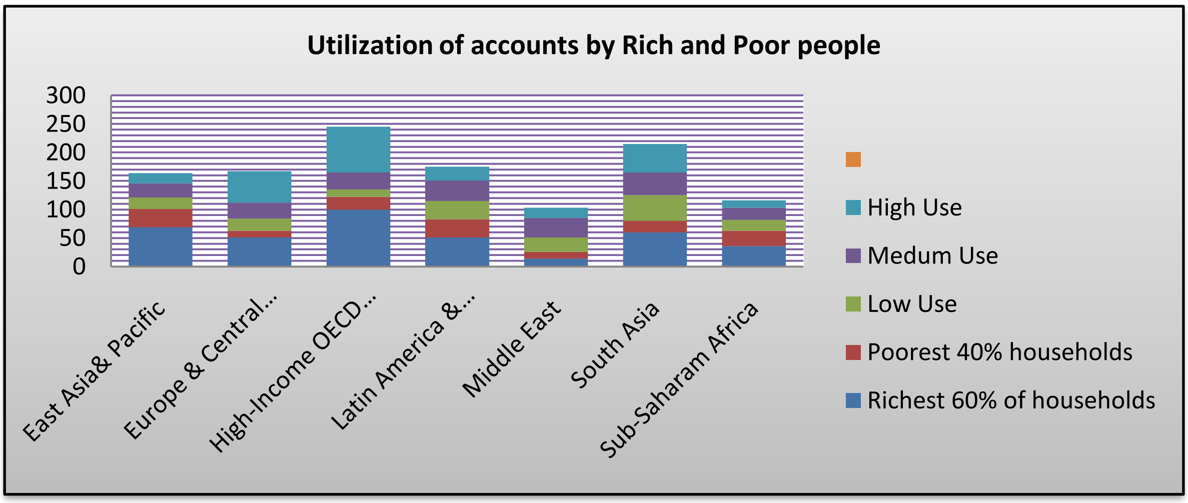
have a high- or medium use account, compared with 70 percent or more in all other regions? In the Middle East a third of account holders reported having neither received nor made payments in the past 12 months. And in South Asia about 40 percent have an account classified as dormant. One possible reason for this is the large number of accounts opened within the past year in India, many of which were set up without an explicit purpose in mind. Another is the low rate of ATM or debit card ownership in South Asia, which suggests that many account transactions need to be carried out through a bank teller, adding to the costs in time and convenience **(Demirguc-Kunt, A., L. Klapper, P. Van Oudheusden, and L. Zingales, 2014**)[21].

Individual Characteristics of Account Holders Utilization

In most regions there is little difference between men and women in the intensity of account use. As noted elsewhere, women typically are less likely than men to own an account but among those who do have an account, women and men show similar patterns of use. The only regional exceptions to this general trend are South Asia and the Middle East. Among those who have an account in South Asia, women are half as likely as men to have a high-use account and a third more likely to have a dormant account. And in the Middle East, while the share of account holders with a high-use account is similar for men and women, women are less likely than men to have a medium-use account and more likely to have a dormant account. Outside high-income OECD economies, not surprisingly, those with a high-use account are generally more likely to belong to the richer parts of the population. Overall in developing economies, adults in the poorest 20 percent of households typically hold 10 percent or fewer of the high-use accounts. And in the Middle East and South Asia adults in the richest 20 percent of households hold more than 40 percent of high-use accounts on average. This finding holds both for adults in the poorest 40 percent of households within economies and for those in the richest 60 percent though the share receiving wage payments into an account is lower among adults in the poorer group of households (figure 1.14).

[21]Demirguc-Kunt, A., L. Klapper, P. Van Oudheusden, and L. Zingales. 2014. “Trust in Banks.” Development Research Group, World Bank, Washington, DC

Figure:9 Utilization of accounts by Rich and Poor people



Source: Author Design based on World Bank Report, 2014

Europe and Central Asia is an exception to this general trend, however. There, regardless of household income, about 30 percent of adults who reported receiving wages into an account do not have a high-use account.

The technical team incorporated their constructive comments :

- Digital gap between the rich and the vulnerable groups,
- Anti-money laundering and countering the financing of terrorism(AML/CFT),
- Financial exclusion caused by de-risking or de-banking etc

However, unbanked individuals are increasingly gaining access to financial services through digital channels. Banks, microfinance institutions, mobile operators, and third party providers are leveraging mobile phones, point-of-sale devices, along with networks of small-scale agents, to offer basic financial services at greater convenience, scale and lower cost than traditional banking allows. There are emerging new sets of institutions such as agent network managers, payment aggregators and others who are helping build out a more far reaching and efficient digital finance ecosystem.

Digital Financial inclusion and why it Matters

Digital Financial inclusion has been broadly recognized as critical in reducing poverty and achieving inclusive economic growth. Digital Financial inclusion is not an end in itself, but a means to an end there is growing evidence that it has substantial benefits for individuals. Studies show that when people participate in the financial system, they are better able to start and expand businesses, invest in education, manage risk, and absorb financial shocks. Access to accounts and to savings and payment mechanisms increases savings, empowers women, and boosts productive investment and consumption. Access to credit also has positive effects on consumption as well as on employment status and income and on some aspects of mental health and outlook.

Globally, financial sector policymakers recognize the "game-changing" potential of digital financial inclusion. The Bank for International Settlements emphasized this point by noting that institutions including the G20 and global financial regulators '"have the opportunity and indeed the responsibility to prepare the standard-setting world for both the risks and the rewards of the digitization of financial services **(Asli Demirguc-Kunt, Leora Klapper,Dorothe Singer,Peter Van Oudheusden, 2014)**[22].

In general Digital finance refers to financial services carried out through various digital means such as mobile and the internet. Using this particular mode of transaction entails less use of cash and utility of traditional bank branches. Computers, mobile phones, or cards used over point-of-sale (POS) devices that connect individuals and businesses to a digitised national payments substructure, enabling seamless transactions across all parties.

However, there are more promising signs beginning to emerge in some markets. India provides an interesting glimpse of what might happen if we get the DFS revolution right. A combination of digital identity (*Aadhaar*), a mass campaign to open bank accounts to give the poor access to a range of financial services (PMJDY), and an ambitious program to directly transfer not just salaries and pensions, but also social security payments, has resulted in the average balance in PMJDY accounts of over $25. Shortcomings persist – the cash in/out agent network is fragile, few overdrafts have been sanctioned to date and most poor people are entirely dependent on agents for information and assistance on using the system – but the signs of real financial inclusion are emerging.

Findings ofDigital Financial Services to Unbanked Masses

Being financially included in a formal banking system helps to:

Make daily transactions are more easy and quickly with access and available of finance. Safeguard savings of people, which eventually helps households and small businesses in efficiently managing cash flow, smoothening consumption and formation of working capital; and Finance the business needs of small businesses and support owners in investing in assets and increasing the scale of operation of business. It also helps people to plan and pay for recurring expenses, mitigate financial shocks and manage expenses related

[22] AsliDemirguc-Kunt, LeoraKlapper,DorotheSinger,Peter Van Oudheusden. (2014). *The Global Findex Database 2014.* Washington, DC 20433, USA: Published by World Bank

to unexpected events such as medical emergencies. Even though DFI offers significant benefits to households, small business units and disadvantaged segments of the economy, several barriers to financial inclusion exist which have limited the reach of users to formalfinancial channels? Digital finance brings a host of benefits to the government and economy as a whole by reducing leakage in public expenditure **(PWC Report, 2017)**[23].

Economic development is usually a long journey, but digital finance solutions can radically speed the progress, and at a relatively affordable cost. Imagine the person in a rural area winning back the time spent traveling many miles on foot or by bus to a cash agent, and being able to work instead. Think of how many more small businesses might expand if they had access to credit. Picture the smallholder farmers who can finally get loans to buy the seeds, fertilizer, and farming tools needed to improve crop yields and boost incomes. And imagine, too, the enormous new business opportunities for banks, telecoms companies, fintech players, retailers, or any company that harnesses the low costs of transacting digitally to serve a much broader customer base of individuals and businesses profitably. Digitizing finance will be a multiyear effort for many countries but the sooner they start, the faster the rewards will come, in the form of higher growth, greater innovation, and more inclusion.

While digital innovation can provide a significant boost to financial inclusion, digital finance also presents regulators with new challenges. They are charged with protecting consumers in a rapidly changing and increasingly complex supply-side ecosystem, as well as dealing with the growing risks related to data governance. The data generated by individuals' digital footprints is increasing exponentially and includes, for example, whom they call, what they write in texts, whom they engage with on social media, what they buy, and which websites they visit.

These findings will provide to fordigital financial solutions could play a significant part in closing gaps in financial inclusion. There are several digital services have been launched over the last few quarters that have seen significant adoption Public policy will play a vital role in consumer education and protection, by articulating the responsibilities of supply-side participants through suitable policies and regulations, as well as ensuring compliance. While this would be a blow to traditional remittance channels, underserved consumers would stand to benefit from much more affordable, convenient, and secure money transfer services. We hope that it proves useful to a wide range of stakeholders including governments,

[23]PWC Report. (2017). *Public Finance News Letter.* Gurgaon, Haryana: Published by PricewaterhouseCoopers Private Limited.

international financial institutions, nongovernmental organizations, think tanks, academics, private sector participants, donors, and the wider development community.

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