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Financial Inclusion and Fintech in CAREC: Constraints and Prospects

By Khalid Umar

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This paper is written by Khalid Umar, Chief of Strategic Planning Division of the CAREC Institute.

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Executive Summary

This report focuses on financial inclusion in the countries (excluding the People's Republic of China (PRC)) that make up the Central Asia Regional Economic Cooperation (CAREC) Program. The central aim of this report is to paint a picture of the current situation concerning financial inclusion, examine the potential of financial technology (Fintech) for accelerating financial inclusion level, evaluate constraints to increasing financial inclusivity, and discuss prospects to widen the net of financial services in the CAREC region.

Financial inclusion is imperative to achieving economic growth for states that are a part of a globalized market, and it is also essential to achieve several common domestic objectives like poverty alleviation, anti-corruption measures, employment, social equity, and wealth redistribution. In our world today, financial inclusion goes hand-in-hand with the existence of robust, economic, and widely accessible information and communications technology (ICT). As a matter of course, ICT infrastructure varies widely across the world, and this can also be seen in the CAREC region. As a result, there is also a varying range of financial inclusion in CAREC member states.

Globally, 1.7 billion adults are without access to banking services, but recent trends point towards a rising number of adults that are opening bank accounts. It must be noted that due to the advent of ICT and the rapid rise of global smartphone ownership, individuals increasingly have access to several non-traditional financial services, for example, mobile money providers. Keeping this in mind, in developing countries, 79% of adults own a smartphone. Data for this report has been collected from international sources that include but are not limited to international financial institutions, CAREC member state governments, and the private sector.

Despite these encouraging indicators and trends, huge disparities exist in the financial inclusion level. These disparities exist across the globe but are often more pronounced in developing countries and become apparent when one looks at the disparity in levels of financial inclusion based on income levels, age groups, and gender. There are also huge financial inclusion disparities between countries, regions, and economic blocs. This poses a challenge to increasing financial inclusivity across the world and also in the CAREC region. However, this also indicates that there is a fantastic opportunity to bring hundreds of millions of individuals in CAREC member states into the fold of financial inclusion. Simultaneously, financial inclusion achieves development/economic objectives along the way.

The CAREC region consists of several economies, which are at varying stages of development, ranging from low income to upper-middle-income with an average per capita income of $3,178. The CAREC region also varies greatly in terms of socio-economic indicators but taken as a whole, in most respects, it is lagging far behind developed nations. This also means that many CAREC member states are lagging when it comes to the provision of services and infrastructure that are critical to increasing financial inclusion, for example, access to the Internet, transport linkages, and government facilitation. It is not surprising then that CAREC countries' digital adoption is among the lowest in the world. Part of digital adoption is also the proliferation of financial technology (Fintech), which is instrumental when it comes to the expansion of financial services in the modern-day. In CAREC member states, the average subscriptions to cellular networks are high, but the problem of low Internet penetration persists, often lagging behind global averages. Without adequate cellular internet penetration of high bandwidth (3G, 4G, 5G), harnessing Fintech to achieve financial inclusion will continue to be difficult even with high mobile subscription level. The slow adoption of Fintech in the CAREC region is primarily due slower adoption and diffusion of advanced cellular technologies.

Governments in CAREC member states are encouraged to take a leading role in promoting as well as developing the quality infrastructure that will lead to an increase in financial inclusion. Government is

the primary actor for increasing financial inclusion as there has to be some basic infrastructure for this to happen. Furthermore, there is also a need for incentives for the private sector to partake in the process. It has also been observed that several countries have achieved this with governments providing the initial push. Also, by increasing the net of financial services, governments have been able to address several key development challenges and make progress towards achieving many economic goals. How governments can lead the charge is multi-faceted but is broadly concerned with the digitization of certain government services like national identification, national databases, tax collection, and the like. CAREC member state governments also have to lead through policy responses that invest in quality digital infrastructure, enable regulatory environments, build trust in financial services providers by protecting consumers and optimizing their experience, and incentivize the private sector. While ensuring conducive environment for deepening financial inclusion levels, the governments need to remain vigilant and act appropriately to lean against debt and financial stability risks (at individual, enterprise and country level) that may arise as a result of unchecked, higher financial inclusion.

Introduction and Background

Financial inclusion is broadly recognized as the ability of the adult population, as well as micro, small and medium-size enterprises (MSME) to easily own a bank account and access affordable, reliable, and sustainable financial services offered by the formal financial sector such as banks, development finance institutions, and insurance companies. According to the World Bank's definition, "[*F]inancial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit, and insurance – delivered responsibly and sustainably*"[1] Sahay *et al.* (2015) define financial inclusion as the ability of individuals and businesses to use financial services offered by the formal sector. Fintech is usually referred to as technologies with the potential to transform prevalent business processes, products, and financial services. On a more practical level, the term Fintech implies the use of digital financial services, which among others, includes Internet, mobile phone, cloud services, digital ID, machine learning, and application programming interfaces.[2]

Globally, 1.7 billion individuals remain unbanked, and those with access to finance end up paying a hefty cost for benefiting from the available financial services. The Global Findex database indicates that the worldwide trend for opening a bank account among adults is ascending. During 2014 and 2017, some 515 million adults worldwide managed to open a basic account at a bank, informal institution, or mobile money provider. Likewise, in recent years there has been a global surge in mobile/smartphone ownership and the use of the Internet. In developing economies, 79% of adults own a mobile phone, while out of 1.7 billion unbanked adults, 1.1 billion own a mobile phone.

Around the world, the proportion of the adult population making a digital payment using mobile phones or the Internet has increased by 11% during 2014 and 2017, from 41% to 52%, while in developing economies, during the same period, the share has risen by 12 percentage points, reaching 44% of the adult population.[3] Despite the upward trend in bank account ownership, huge disparities persist between different income groups, young and old segments of the population, men and women, regions, countries, and sub-regions. The wide gap between the banked and the unbanked poses a formidable challenge but also offers an enormous opportunity to policymakers to create ideal policy conditions and regulatory environments to harness digital technologies for deepening financial inclusion across all segments of society.

Policymakers view financial inclusion as central to the economic development, poverty alleviation, and supporting social inclusivity by efficiently allocating the capital and promoting financial responsibility and sustainability under strong regulation and supervision. However, the evidence is lacking on the effect of financial inclusion on inclusive economic growth and its impact on overall economic development. Demirguc *et al*. (2017) identify two essential reasons for the lack of evidence on the implications for inclusiveness and economic development. First, financial inclusion is a relatively recent phenomenon in economic discourse, and it caught the limelight in the aftermath of the 2007-9 financial crisis. Therefore, the data for a comprehensive economic analysis of financial inclusiveness is limited. Second, financial inclusion as a policy instrument is recently embedded in larger economic policy design; hence the correlation between financial inclusion and the economic development remains unclear.

[1] https://www.worldbank.org/en/topic/financialinclusion/overview. Accessed on 2 August 2020

[2] Pazarbasioglu, Ceyla, Alfonso Garcia Mora, Mahesh Uttamchandani, Harish Natarajan, Erik Feyen, and Mathew Saal, April 2020 'Digital Financial Services', The World Bank, Washington, D.C.

[3] Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, 2017, 'Measuring Financial Inclusion and the Fintech Revolution', The Global Findex Database, The World Bank, Washington, D.C.

Sahay *et a*l. (2015) find that financial inclusion promotes economic growth to a certain level by broadening access to finance for households and businesses across different regions within the country and also to different age groups and genders, but the marginal benefits diminish after its coverage and depth increases. Regardless of the anecdotal evidence on the inclusivity and long-term macroeconomic impact, access to finance helps the poorest households languishing in extreme poverty to find a sustainable avenue for upward mobility by enabling access to formal borrowing and saving. Yet, the financial systems lack the required level of inclusiveness, leaving hundreds of millions of poor people excluded from availing of financial services. Their reliance on cash renders their financial transactions unsafe and challenging to manage. In the absence of affordable financial services, those that are locked out and often the most vulnerable find it exceedingly challenging to arrange funds to meet emergency expenditures.

Realizing Fintech Potential for Accelerating Financial Inclusion Levels

Financial technologies present a tremendous opportunity for reaching out to the financially excluded and underserved segments of the population, particularly in remote regions and communities. Fintech has the potential to transform the financial inclusion landscape by offering cost-effective and easily accessible financial services. Developing economies, with only about 20 percent of the population using formal saving channels, are fast exploring options to leverage available technologies to access affordable and reliable financial services. Mobile phone penetration and high-speed Internet availability in many developing economies are igniting a financial inclusion revolution.

The outbreak of the COVID-19 pandemic, with restricted physical contact, has further magnified the importance of technological innovation, particularly in social safety payments from governments to person (G2P) and internal and cross-border remittances. Leveraging financial technology for G2P payment reduces the administrative costs and the risk of leakages and fraud. Likewise, domestic and cross-border remittance also benefits from technology by a reduction in transaction costs. It is estimated that by 2021 the global remittance flow will reach USD 600 billion. Internalizing technology can reduce the average cost from 6.6% to 3.3%.[4]

According to the McKinsey Global Institute (MGI) calculations, Fintech (digital finance) can potentially bring 1.6 billion people into the financial mainstream in emerging economies, with more than half of them being women. MGI estimates that new loans extended to households and businesses could reach a staggering figure of USD 2.1 trillion, which could lift hundreds of millions of people out of poverty, and boost government savings by up to USD 110 billion by reducing leakages and increasing tax collection. The increased access to finance via Fintech is expected to increase savings for the service providers to the tune of USD 400 billion and prop up their balance sheets by USD 4.2 trillion in new deposits. Figure 1 below reveals the benefits of digital finance to the global economy. Nonetheless, in the absence of strong regulatory framework, the increased access to finance poses serious risks to financial stability and increasing the debt levels for individuals and enterprises. Further, the excessive reliance on third party technology platform signals a significance risk to financial and data privacy.

[4] Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, 2017, 'Measuring Financial Inclusion and the Fintech Revolution', The Global Findex Database, The World Bank, Washington, D.C.

Figure 1: Potential Benefits of Digital Finance

Source: Digital Finance for All: Powering Inclusive Growth in Emerging Economies by McKinsey Global Institute September 2016

As regards the overall impact on the economy and employment, the calculations indicate that by 2025, the widespread adoption of Fintech could add USD 3.7 trillion to the GDP of emerging economies, representing a six percent increase over the baseline fintech scenario. Such enormous growth in the GDP will translate into the creation of 95 million new jobs – contradicting the widely held belief that technology dampens prospects of job creation. However, the estimated impact of Fintech could vary among countries depending on their baseline fintech conditions.

In order to reap the benefits, as calculated by MGI, it is imperative that the governments in emerging economies make concerted efforts to rapidly establish an enabling ecosystem that could promote the adoption of digital financial technologies to boost financial inclusion. Governments need to design and promote digital infrastructure that should, at the minimum, include i) necessary regulatory policy environment; ii) mandatory government payment transfers through Fintech; iii) simplifying the process to obtain digital IDs, biometrics; iv) facilitate account opening and digitalization of payments; and v) coordinate with telecom/bank service providers to ensure interoperability of payment systems, product diversification and affordability of financial services.

The Central Asia Regional Economic Cooperation (CAREC) Region and Financial Inclusion

The Central Asia Regional Economic Cooperation (CAREC) program is an intergovernmental initiative of the Asian Development Bank (ADB) consisting of a committed partnership of 11 countries, namely, Afghanistan, Azerbaijan, the PRC, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. The CAREC program combines efforts to promote regional economic cooperation.

However, CAREC countries are at different stages of development. They widely vary in population, from Pakistan with over 200 million people to Mongolia with just over three 3 million people. Based on per capita income, the CAREC region[5] comprises low-income countries (Afghanistan, Tajikistan), lower-middle-income countries (Kyrgyzstan, Pakistan, Uzbekistan), and upper-middle-income countries (Azerbaijan, Georgia, Kazakhstan, Mongolia, and Turkmenistan). The regional per capita income averages USD 3,178.[6]

Similarly, considerable disparities persist among countries of the CAREC region in their level of financial inclusion. Among the CAREC countries, Mongolia takes the lead as its share of the population with a bank account, which stands at 93%, is almost double of what the rest of the countries have displayed, followed by Georgia and Kazakhstan, with 61% and 59% share of population with a bank account, respectively. However, in some countries, the growth in account ownership remains low. Afghanistan (15%), followed by Pakistan (21%) and Azerbaijan (29%), represent the lowest share of bank account holders in the region. CAREC countries' digital adoption is also among the lowest in the world. For deepening financial inclusion, countries need to harness financial technologies for quicker outcomes.

Rapidly evolving technologies are transforming economies, businesses, and consumers in numerous ways – from production to distribution to consumption. Integration of technology and finance holds immense potential to offer affordable, comprehensive, and sustainable financial services to unbanked households and firms. Across the globe, many countries have harnessed technology to reach out to the unbanked population and lift hundreds of millions out of absolute poverty. The PRC in the region and Kenya in Africa are instructive examples of success stories for CAREC countries to emulate to deepen financial inclusion. To reap the benefits of technological innovation for achieving the objective of financial inclusiveness, governments, and multilateral development, institutions need to work in tandem to develop an enabling ecosystem.

Scope and Objectives of the Study

In the context of the above, the objective of this study is to:

i. Analyze global trends in financial inclusion and the adoption of Fintech.
ii. Examine the state of financial inclusion and Fintech in the CAREC region.
iii. Evaluate the potential of Fintech to elevate financial inclusion levels.
iv. Present case studies to learn lessons from regional and global success stories; and
v. Offer policy recommendations for governments and development partners.

The study excludes the PRC from the analysis due to the asymmetric size of the country, its advanced status in financial inclusion, and the leadership role it has played in adopting digital technologies. However, the PRC, along with Kenya, is presented as a success story for CAREC countries to emulate.

[5] This analysis excludes the PRC.
[6] https://data.worldbank.org/indicator/NY.GNP.PCAP.CD

Further, businesses are also excluded from the study; instead, the focus has been placed on individuals and households in the analysis of financial inclusion and their adoption of Fintech.

Organization of the Paper

This paper is organized into five sections. Section 1 of the paper highlights global trends that include bank account ownership by gender, income group, age groups, and regions, and the use of mobile phones and the Internet. Section 2 describes the state of financial inclusion and adoption of Fintech in the CAREC region by examining several economic/macroeconomic indicators. Section 3 examines key factors behind low levels of financial inclusion and fintech adoption in the CAREC region. Section 4 presents case studies of the People's Republic of China (PRC) and Kenya. Finally, Section 5 concludes with a summary of findings and policy implications for the CAREC governments and multilateral development partners.

Section 1: Global Growth in Financial Inclusion and Fintech

Since 2011, global account ownership at a regulated financial institution has recorded steady growth, rising from 51% to 69% in 2017.[7] Some countries such as the PRC, India, and Malaysia have displayed impressive growth in account ownership, whereas other countries such as Pakistan, Nigeria, and Mexico have stagnated. According to the Global Findex database 2017[8], almost 515 million new adults worldwide have managed to open an account with a formal financial institution or mobile money provider within three years (2014-17). However, despite tremendous growth, still 1.7 billion adults remain unbanked worldwide. Nearly all these unbanked adults live in developing economies, and almost half of them are concentrated in seven countries – Bangladesh, the PRC, India, Indonesia, Mexico, Nigeria, and Pakistan.[9]

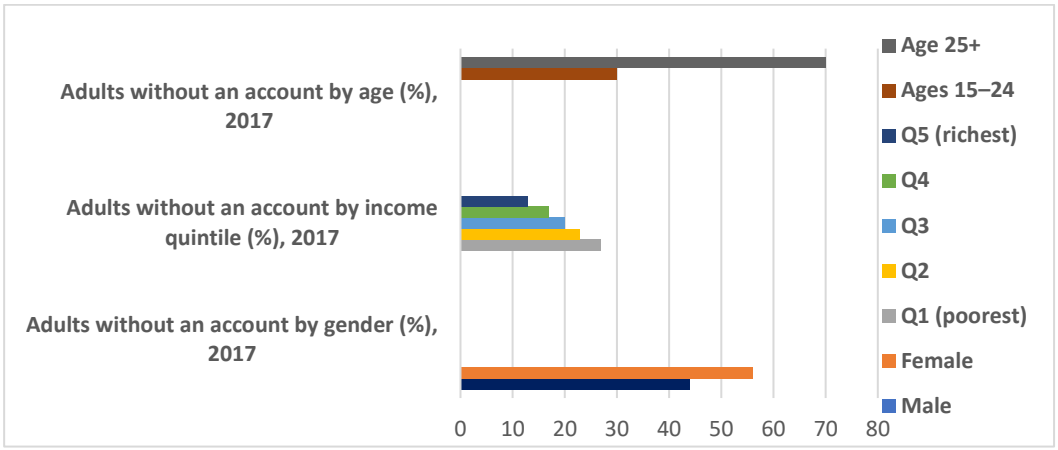
Although account ownership is steadily growing in most of the regions, disparities persist between male and female, rich and poor, and young and old adults. Of the 1.7 billion unbanked adults, 56% are women, and 44% are men. Account ownership is also skewed in favor of men. Globally, 72% of men own a bank account as opposed to 65% of women own a bank account. The gender disparity in account ownership has largely remained unchanged between 2011 and 2017.

Similarly, the gap between rich and poor remains wide. Half of the unbanked adults worldwide belong to the poorest 40% of the population, whereas the remaining half belongs to the richest 60% of the population. Likewise, a higher percentage of old adults (age>25) tend to be unbanked as compared to their younger counterparts (age between 15-24). Figure 2 below demonstrates disparities among gender, social status, and age.

The adoption of financial technology, proxied by mobile phone and internet users, has recorded uneven growth between 2015 and 2019. The number of mobile phone users stagnated between 2015 and 2016 but recorded significant growth in the following year, jumping from 51% to 66% of the population having a mobile phone. The downturn returned in 2019, with growth recording a negative trend. Noticeably in many countries, ownership among individuals tends to be seasonal and also obtain several simultaneous mobile phone subscriptions from different service providers. An increasing trend is shown in mobile subscriptions during the period 2015 – 2019 (See Figure 3a in Annexure 1).

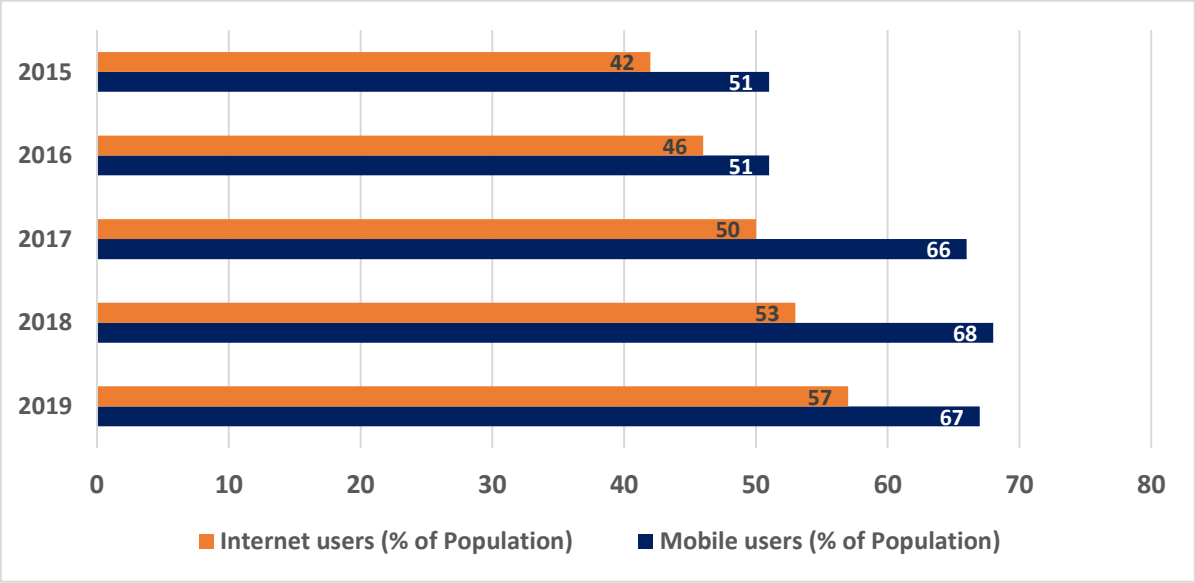
[7] Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, 2017, 'Measuring Financial Inclusion and the Fintech Revolution', The Global Findex Database, The World Bank, Washington, D.C.
[8] The 2017 Global Findex database captures number and percentage of the population availing formal and informal financial services.
[9] Ibid.

Figure 2: Adults without an account by Age, Income, and Gender



Source: Author's calculations based on World Bank, Global Findex Database (2017)

Figure 3: Global Trends in Mobile Phones and Internet Users



Source: Author's calculation using data of Global Digital Report (2019)

Unlike mobile phone subscriptions, the penetration of affordable, reliable, and easily accessible mobile Internet and broadband internet services is a relatively difficult undertaking. The growth in internet use has remained slow but steady during this period. In 2015, 42% of the world population had access to the Internet, which increased to 57% in 2019. Figure 3 above shows global trends in the usage of mobile phones.

On the other hand, mobile subscriptions do not represent unique individuals. Mobile phone subscriptions include all the mobile handsets in use. It is telling to note that people can own multiple subscriptions with multiple devices and a fraction of them have dual SIMs.

Section 2: Financial Inclusion and Fintech in the CAREC Region

The CAREC region represents a diverse economic group with sharp contrasts in terms of size of the economy, growth trends, population size, political and economic history, culture and languages, and resource endowment. This diversity poses tremendous challenges and offers opportunities at the same time. The CAREC region (excluding the PRC) is home to approximately 330 million people producing nearly USD 650 billion of annual value added (GDP). Most of the countries of the region recorded considerable growth in 2019. Tajikistan and Turkmenistan posted decent economic growth rates, while growth in countries like Afghanistan, Pakistan, and Azerbaijan remained subdued.

The total population of the CAREC countries is represented in Table 1. Pakistan has the largest population, 217 million, in the region, followed by Afghanistan and Uzbekistan, with a total population of 38 and 34 million, respectively. More than 50% of the population of each country falls between the age group of 15 to 64 years old. Among all the countries, Azerbaijan has the highest share of the population in the age group 15-64, whereas the highest share of the 0 to 14 years old age group can be found in Afghanistan. The large proportion of young adults in the population suggests that their financial needs – borrowing, saving, investment, insurance – are manifold and require urgent policy interventions to allow them to catch up with their global and regional peers.

Table 1: Country Profile of CAREC member countries 2019

INDICATORS	AFG	PAK	AZE	GEO	KAZ	KRZ	MON	TAJ	TKM	UZK
GDP growth rate (annual %)	2.901	0.989	2.219	5.137	4.5	4.507	5.099	7.011	6.2	5.6
GDP, total (current US$) (in millions)	19,101	278,222	48,048	17,743	180,162	8,455	13,853	8,117	40,761	57,921
Population, total (in millions)	38	217	10	4	19	6	3	9	6	34
Population ages 0-14 (% of total population)	42	35	23	20	29	33	31	37	31	29
Population ages 15-64 (% of total population)	55	61	70	65	63	63	65	60	65	67

Source: Author's calculations using data of WDI (2019)

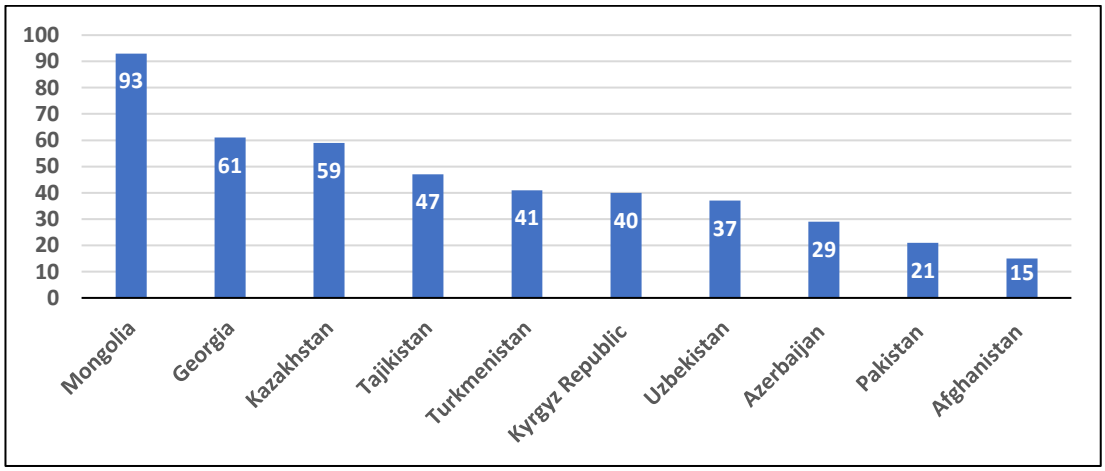
Financial Inclusion

Account Ownership

The CAREC region, with its considerable economic and population size, trails the world and other regions on financial inclusion and adoption of financial technologies, as well as on other economic indicators. A relatively young, underserved, and marginalized population, the region carries immense potential for financial inclusion by harnessing financial technologies. However, the potential remains to be realized. Ownership of a money account in a formal bank, financial institutions, and mobile money service provider is generally proxied for measuring financial inclusion.

Among CAREC countries, Mongolia (93%) is the leader in terms of the population with a bank account, as this figure is almost double of what the rest of the countries display, followed by Georgia (61%) and Kazakhstan (59%). However, in some countries, the growth in account ownership remains low. Afghanistan (15%), followed by Pakistan (21%) and Azerbaijan (29%), represent the lowest share of bank account holders in the region. Three of the most populous countries in the CAREC region – Pakistan, Afghanistan, Uzbekistan – are also among the lowest four in terms of bank account ownership, which is indicative of a vast number of people that are excluded from the financial system. The levels of inclusion in Azerbaijan and Tajikistan are surprising. Azerbaijan is an upper-middle-income country, but with respect to account ownership, it is one of the lowest performers, whereas Tajikistan, a low-income country, is among the top performers. See Figure 4 below.

Figure 4: Percentage of the population having a Bank Account 2017 (%)



Source: Author's calculations using data of World Bank, Global Findex Database (2017)

Mobile money accounts are gaining traction in many countries of the world, mainly due to technological innovation, relative ease of services, cost-effectiveness, and cumbersome and inaccessible account opening procedures at formal financial institutions. Mongolia and Pakistan fare above the global average, whereas Afghanistan, Georgia, Kyrgyzstan, and Tajikistan are below the average. Azerbaijan, Uzbekistan, Kazakhstan, and Turkmenistan could not be analyzed due to the non-availability of data. Refer to Figure 4a presented in Annexure 1.

Bank Account by Gender, Income, and Age Group

To get a clearer picture of the gains in account ownership, the share of account ownership by income is presented in Figure 5 below. The share of account ownership by gender and by age is shown in Figure 5a and 5b presented in Annexure 1. For all the countries, except Mongolia, individuals aged 25 years or above have the highest share of account ownership compared to those who fall between in the 15-24 years old age group[10].

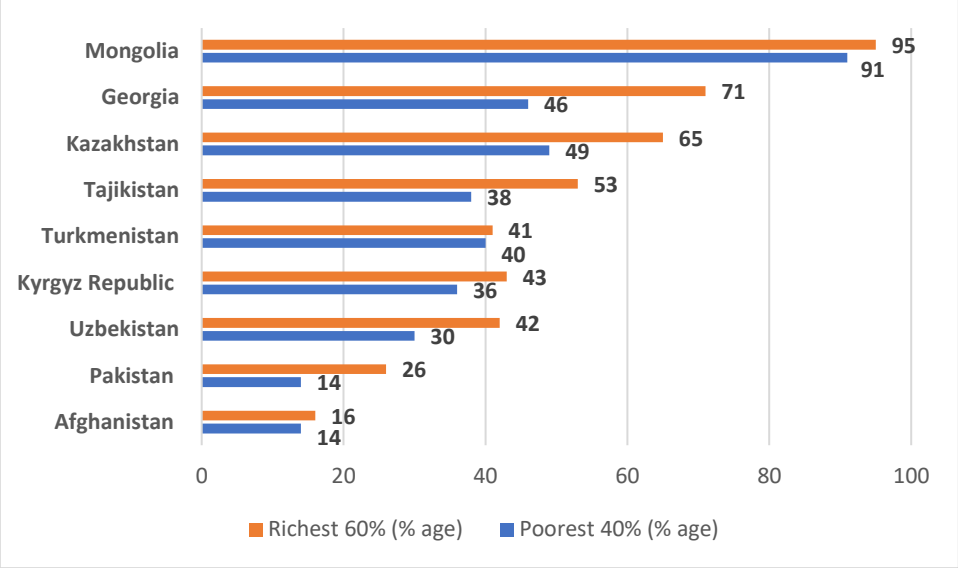
The gender gap in account ownership varies substantially among CAREC countries. According to the data presented in Figure 5a in Annexure 1, females have insufficient representation in Pakistan (with the highest gender gap), closely followed by Afghanistan. Although account ownership has doubled since 2011 in Pakistan, only males have benefitted from the gains, while the growth remained stagnant among the females. Kazakhstan, Kyrgyzstan, Mongolia, Uzbekistan, and Azerbaijan demonstrate the smallest gender-gap, as the percentage of female and male account holders in these countries is almost equal. Mongolia shows nearly universal bank account ownership for both males and females, where females are edging out the males by a small margin. Overall, the CAREC region presents a gloomy picture with more than half of the population is unserved by any financial service that could have potentially transformed their economic and social wellbeing. The vast gender gap in Pakistan and Afghanistan – two of the most populous countries – remains a matter of grave concern that significantly impacts the overall regional average of account ownership.

Similarly, rich and poor adults do not have equal access to bank accounts. Pakistan, Azerbaijan, Georgia, Kazakhstan, and Tajikistan witness a huge disparity in account ownership between rich and poor adults, which means that the wealthier segment of the population is more likely to have an account as compared with less fortunate adults. In comparison, Mongolia and Turkmenistan offer equitable access to bank accounts for adults from both income groups. The highest gap between gender and income groups prevails in Pakistan, indicating that females and poor adults are far less likely to have an account than males and wealthier adults. In this circumstance, however, poor females are most unlikely to have a bank account, which means that gains in account ownership have been missed out on by females as they are skewed towards the wealthier adults and men. The large gap in account ownership further reinforces the existing divide between rich and poor, men and women, and dampens prospects of achieving inclusiveness.

Likewise, huge disparities prevail between younger and older adults in all countries, except for Mongolia and Tajikistan. On all metrics, Mongolia stands out from its peers. Figure 5b presented in Annexure 1 indicates that in almost all countries, except for Mongolia and Tajikistan, adults above 25 years of age are nearly twice as likely to own a bank account than younger adults (15-24 years of age). The causes for low account ownership among young adults could be traced to family traditions, cultural context, and market structures. Unlike in the USA, most of the young adults depend on their parents for financing their education, health, and meeting other financial needs, which is consistent with family and cultural traditions. Moreover, the financial sector in the region is underdeveloped, conservative, and assigns huge premiums to credit history and collateral requirements.

[10] Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, 2017, 'Measuring Financial Inclusion and the Fintech Revolution', The Global Findex Database, The World Bank, Washington, D.C.

Figure 5: Bank Account Ownership by Income Group 2017, %



Source: Author's calculations using data of World Bank, Global Findex Database (2017)

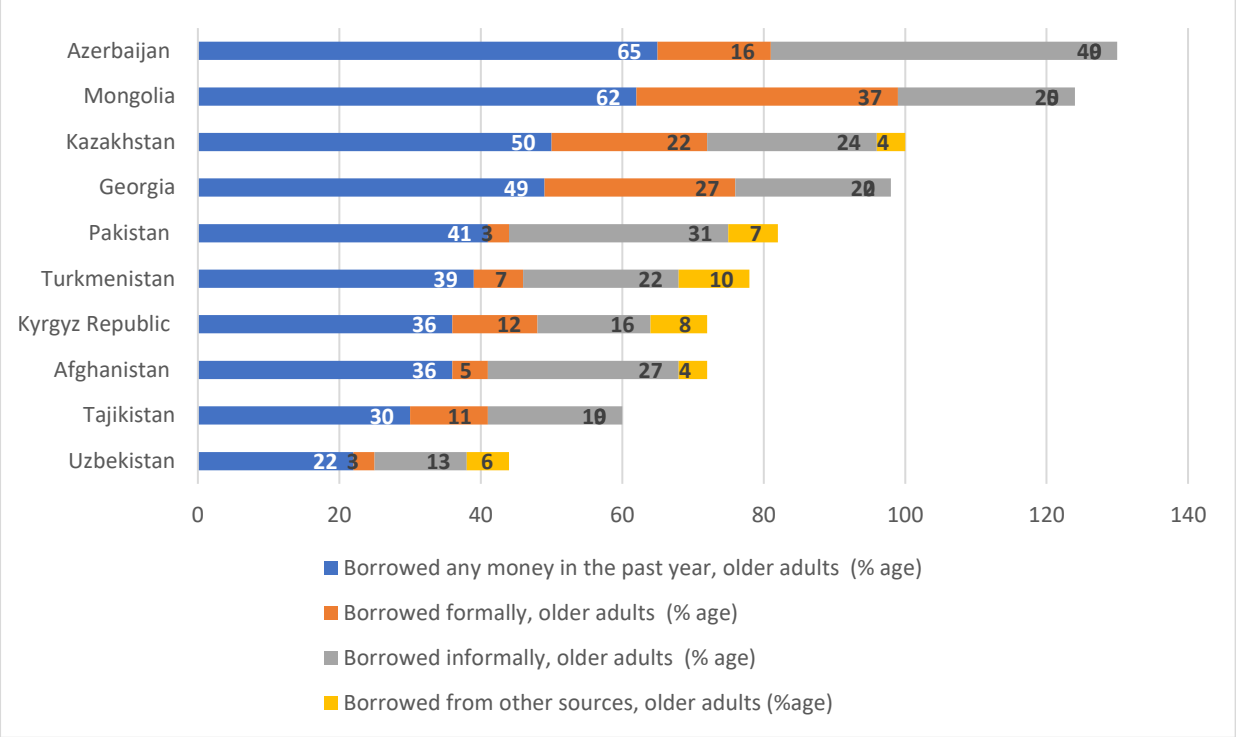
Borrowing and Saving Pattern among Older Adults

Opening an account at a formal financial institution or mobile money provider alone are not enough to deepen financial inclusion and create financially resilient households and communities. Instead, a great deal depends on how individuals use these accounts, such as making or receiving payments, borrowing, saving, and making investment decisions. These factors collectively determine and support individuals to strengthen their creditworthiness, which in turn helps them raise funds in times of financial stress and makes them more resilient to financial shocks.

Figure 6 below describes borrowing patterns among older adults in 2017. Some 50% or more of older adults in Azerbaijan (65 %), Kazakhstan (50%), Georgia (49 %), and Mongolia (62%) borrowed money through multiple sources. In comparison, nearly one-third of older adults in Pakistan, Afghanistan, Kyrgyzstan, Tajikistan, and Turkmenistan borrowed money from various sources. However, borrowing does not appear to be a common source of fundraising in Uzbekistan. Borrowing from formal financial institutions reduces borrowing costs, ensures predictability of services, and improves creditworthiness for borrowers in the future. Yet, in the CAREC region, except for Mongolia and Georgia, most of the funds borrowed in 2017 by older adults are sourced in the informal sector that could include family, friends, or informal money lenders. Informal borrowing is deeply entrenched in Pakistan, Uzbekistan, Turkmenistan, and Afghanistan.

The percentage of older adults setting aside some money for saving purposes is considerably higher in Turkmenistan, Uzbekistan, Kazakhstan, and Pakistan as compared with other CAREC countries. Like borrowing, the bulk of the savings are parked in the informal saving clubs. Except in Mongolia, in all CAREC countries saving in a formal financial institution is at the minimum level; most elder adults opt for semi-formal or other methods for saving money (Refer to Figure 6a presented in Annexure 1). Both borrowing and saving patterns in the region seem consistent and reinforce each other. Relying on semi-formal sources of saving deprives individuals of building their creditworthiness hence diminishing opportunities for borrowing from the formal sector.

Figure 6: Borrowing Behavior among Older Adults 2017, %



Source: Author's calculations using data of World Bank, Global Findex Database (2017)

Fintech Adoption

Fintech typically implies, among other things, the use of the Internet and mobile phones for accessing financial services that include making payments, storing money, borrowing, and purchasing insurance. Mobile phone usage and access to the Internet for financial services are two commonly used indicators to measure fintech adoption.

On mobile phone subscription metrics, CAREC countries, except Kazakhstan, are far ahead of global average (67%). Mobile phone subscriptions in countries like Azerbaijan, Georgia, Mongolia, Kyrgyzstan, and Tajikistan outnumber their populations. More than a hundred percent subscription indicates that many people subscribe to more than one network service provider. Kazakhstan, an upper-middle-income country – reports the lowest mobile phone subscription among CAREC countries. The total internet users and mobile phone subscriptions as a percentage of the total population globally and in the CAREC region is shown in Figure 6b presented in Annexure 1.

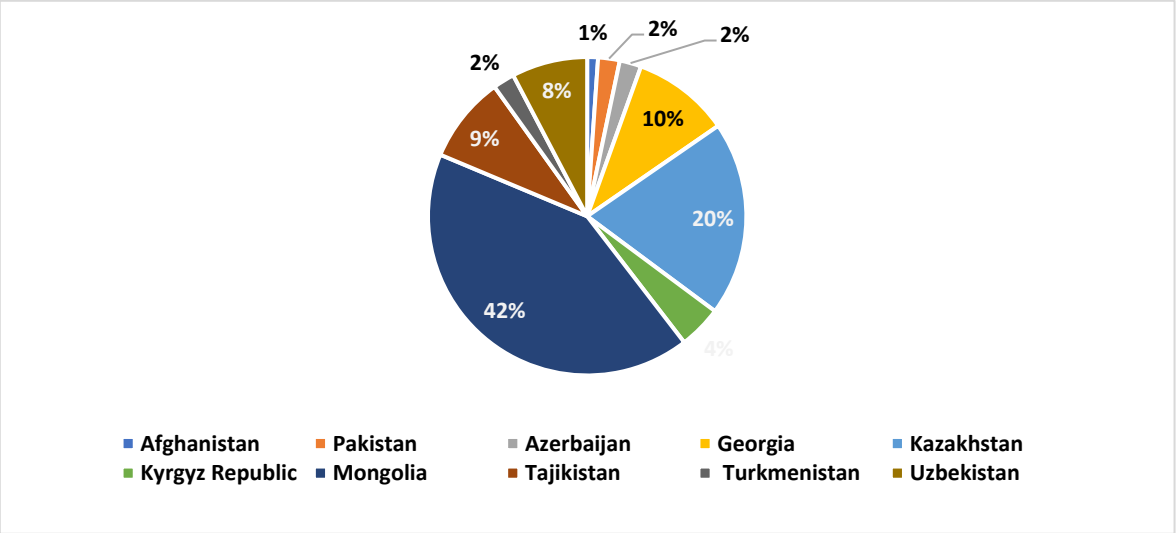
On internet usage, six CAREC countries – Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Pakistan, and Afghanistan – are below the global average (57%). The highest internet usage prevails in Azerbaijan, Georgia, and Mongolia. The low penetration of the Internet, especially in the most populous countries in the region (Pakistan, Afghanistan), reflects the untapped potential of leveraging financial technologies for reaching out to underserved segments of the population in these countries. Kazakhstan, Kyrgyzstan, and Tajikistan, with a relatively smaller population, too, perform poorly on this metric. Overall, internet usage in the CAREC region is low as compared with the international average and other regions. Such a situation hinders progress in harnessing technology, which offers the fastest and most cost-effective route to expanding financial inclusion, particularly in remote localities where traditional brick-and-mortar bank branches are few and far between. However, on the bright side, a high subscription of mobile phones in nearly all CAREC countries could potentially

pave the way for promoting money accounts with mobile money service providers – an alternate route to democratizing financial inclusion. To achieve this objective, governments need to pursue integrated, liberal, and, at times, risky policies in tandem with the private sector and development partners, in addition to benefiting from regional and global success stories.

Using and Accessing Account

Two methods are typically used to access a financial account, using a mobile phone or the Internet to make or receive payments digitally. In Mongolia, the highest percentage (42%) of adults reported using either a mobile phone or the Internet to access their financial accounts in the past year. Mongolia's high rate of using mobile phones or the Internet to access a financial institution account is explained by its nearly universal mobile phone subscription and high level of internet penetration. See Figure 7 below.

Figure 7: Accessing a Financial Institution Account through a Mobile Phone or the Internet 2017, (% of Population)



Source: Author's calculations using data of World Bank, Global Findex Database (2017)
Note: Date represents individuals availing mobile phone or internet services to make or receive a payment or make a purchase in the preceding 12 months.

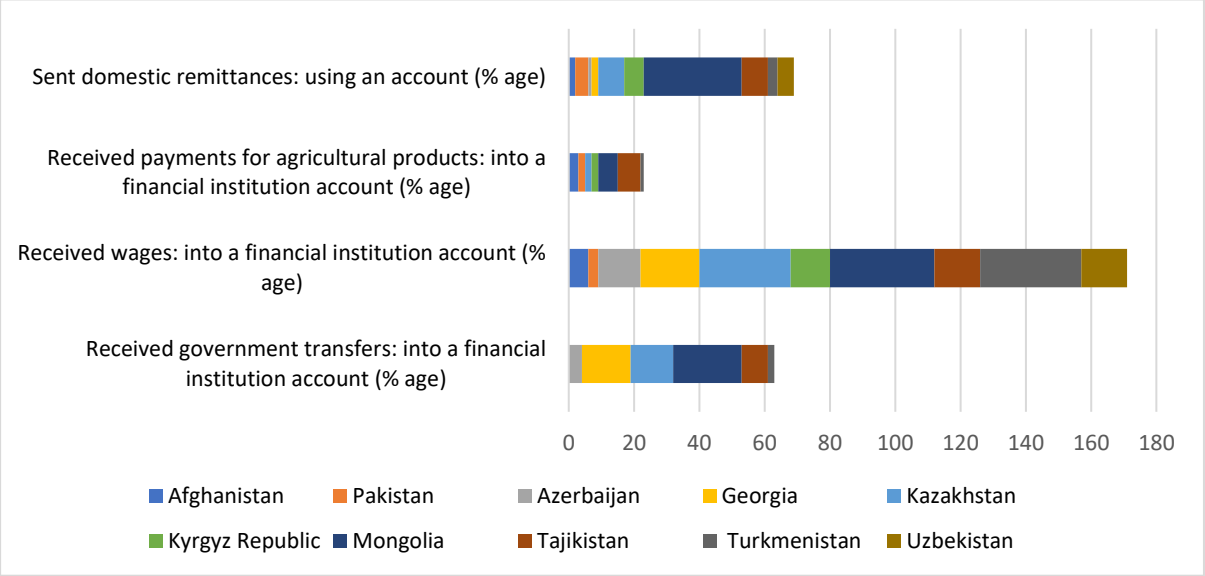
Conversely, using a mobile phone or the Internet to access a financial account is least common in countries like Azerbaijan, Afghanistan, Pakistan, and Turkmenistan, with a share of 2%, 1%, 2%, and 2%, respectively. However, it is important to note that only the individuals with both a bank account and a mobile phone/internet have been considered, whereas such payments can also be made through payment cards, i.e., debit or credit cards. Furthermore, digital payments can also be made through mobile money accounts without any linkage to the account at a financial institution. Overall, the CAREC region lags the world and other regions in terms of using mobile phones and the Internet for accessing a financial institution account.

Purpose of Using the Account

People regularly make payments for daily purchases, utility payments, long-term investments, and loan payments, among others. Similarly, most people also receive payments such as wages, social safety benefits, unemployment payments daily. In both cases, people either use cash or bank accounts to make or receive such payments.

Receiving wages in a bank account is the most common purpose for which individuals use their bank accounts. The least common specified purpose of a bank account remained payments received for agricultural products, which possibly demonstrates the level of underdevelopment and informality in the agricultural sector in the CAREC region. Government transfers are the second least used purpose for bank account usage, which exhibits weak social safety nets in CAREC countries, among others. Domestic remittances represent the money sent to family and friends, which is an essential source of income for millions of families in the region. Yet, it continues to shy away from technology and relies on cash-intensive transactions. Mongolia is the only country in the region where a sizeable number of bank account holders use the bank account to send remittances. Figure 8 below reveals the kind of payments individuals received or made using a bank account in the past year.

Figure 8: Individuals using the Bank Account for the specified purpose in the past year.



Source: Author's calculation using data of World Bank, Global Findex Database (2017)
Note: Data for domestic remittances for all the CAREC countries is for the year 2017 except that the data for Azerbaijan, Afghanistan, and Georgia is for the year 2014 due to the non-availability of data from recent years. The data for agriculture-related payments for all countries is for the year 2017, except for the year 2014 for Georgia. Lastly, the data for government transfers are for the year 2017 for all CAREC countries, except Azerbaijan, for which the data displayed is for the year 2014.

Online Purchasing

Online purchasing or e-commerce is fast becoming the most popular method of shopping in many countries. Over the years, the PRC has emerged as a world leader in e-commerce. However, countries in the CAREC region continue to remain oblivious to this inevitable transformation. See Figure 8a in Annexure 1.

Section 3: Factors of low Financial Inclusion and Fintech in the CAREC Region

Financial inclusion outcomes and the adoption of Fintech present a puzzling scenario for countries such as Azerbaijan and Kazakhstan. Both countries are upper-middle-income countries, but Azerbaijan has one of the lowest bank account ownership in the region, whereas Kazakhstan has one of the lowest mobile phone subscriptions and internet usage. The varied outcomes imply that the factors holding back progress in their financial inclusion pursuits are numerous, and it is challenging to shortlist the most common factors applicable to all CAREC countries. Nevertheless, the following four elements could be attributed to low outcomes in the CAREC region.

Absence of an Integrated National Strategy

Focus on enhancing levels of financial inclusion is increasing, with a significant number of countries adopting national financial inclusion strategies to reduce the percentage of the unbanked population. National Financial Inclusion Strategies (NFIS), as defined by the Alliance for Financial Inclusion (AFI), are developed through a national consultative process involving broader stakeholders and set out objectively measurable targets, both in the short and long-term. The NFISs examine the current state of financial inclusion, identify constraints, and propose policy actions.

An integrated and coherent national strategy harnesses financial, technical, and human resources towards achieving a defined set of objectives and targets. Evidence from countries such as South Africa, the U.K., Brazil, Namibia, Malaysia, and Tanzania, seems to suggest that countries that adopted NFISs have recorded steady growth in financial inclusion levels.[11] However, such policy realization at the government level is absent in most of the CAREC countries. Only Pakistan (2015) and Tajikistan (2012) adopted standalone national financial inclusion strategies as part of their commitments to the Maya Declaration – a global commitment led by Alliance for Financial Inclusion (AFI).

On the other hand, Azerbaijan and Kyrgyzstan have incorporated financial inclusion as an integral policy in their long-term development strategies. Yet it must be noted that the adoption of national strategies does not suffice as a standalone measure to accelerate financial inclusion levels; it requires an integrated approach and concerted efforts from the governments, the private sector, and development partners. Pakistan presents a puzzling case study on this account. Pakistan adopted the strategy in 2015 intending to stimulate financial inclusion outcomes. However, the percentage of account ownership among adults rose just eight percentage points from 2014 to 2017. The period has further widened the already huge gender gap in account ownership – male adult account ownership increased by 13 percentage points, whereas, for female adults, it only increased by two percentage points.[12]

Physical Access and Income Constraints

To benefit from financial digital services for expanding financial inclusion level, a well-developed physical infrastructure is essential for easy access to financial institutions and other financial services. There are several facets of access to financial services: availability, cost, and quality of services. Access to finance can open avenues for all with higher levels of access and use of banking services, only if

[11] Alliance for Financial Inclusion (AFI), 2015, 'National Financial Inclusion Strategy: Current State of Practice', accessed on 07 August 2020 https://www.afi-global.org/sites/default/files/publications/fisplg-state_of_practice.pdf.

[12] Rasmussen, Stephen. Pakistan Enigma, October 2018, 'Why Is Financial Inclusion Happening So Slowly?', Accessed on 01 September 2020, https://www.cgap.org/blog/pakistan-enigma-why-financial-inclusion-happening-so-slowly.

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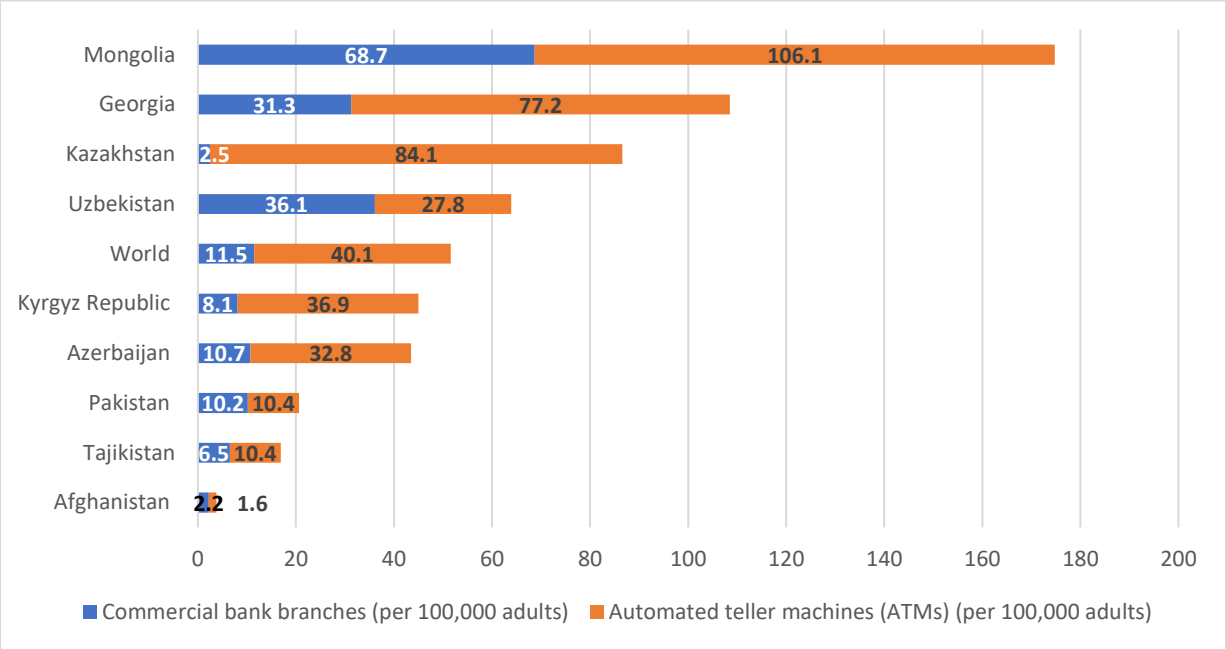
there are low financing constraints to people. In terms of the presence of commercial banks and ATMs per 100,000 adults, five CAREC countries fare below the global average. The highest number of commercial bank branches per 100,000 adults is in Mongolia (68.7), followed by Uzbekistan (36.1) and Georgia (31.3). The lowest number is in Afghanistan (2.2) and Kazakhstan (2.5). Similarly, Mongolia reported the highest number of ATMs per 100,000 adults 106.1, followed by Kazakhstan (84.1) and Georgia (77.2). Afghanistan again has the lowest number of ATMs at 1.6. See Figure 9 below.

Figure 9: Commercial Bank Branches and ATMs in the CAREC Region



Source: Author's calculations using the data of WDI (2018)

Note: The data for Turkmenistan is not available. Data for Commercial bank branches (per 100,000 adults) in Azerbaijan is for the year 2015, while for the rest of all the above-displayed countries, data for 2018 is presented. Also, data for ATMs (per 100,000 adults) in Tajikistan is for 2013, whereas 2018's data is presented for the rest of the countries. The commercial bank branches refer to those retail locations of resident commercial banks which are physically detached from the main office but not legally organized as separated subsidiaries.

In terms of gender, the trend shows the highest number of unbanked adults is women in all CAREC countries. Mongolia is the exception, which has the lowest number of unbanked adults, and where the distribution is equal for both genders. One must note that countries with a higher number of bank branches and ATMs have a lower share of unbanked adults. For example, Mongolia has the highest number of commercial bank branches and ATMs. It has the lowest share of unbanked adults (both males and females). See Figure 9a in Annexure 1.

Cultural and Trust Barriers

Deeply entrenched cultural and trust barriers continue to hamper financial inclusion outcomes in the CAREC region. Traditionally, the institution of family, duly supported by kinship affiliations, has been the primary source of fulfilling the financial needs of young and old adults, both for anticipated and emergency expenditures. In most families, young adults depend entirely on their family for financing their education, health, and initial business equity. Similarly, older adults resort to family and relatives for borrowing money instead of approaching any formal financial institutions. Gender is also an obvious fault line in the CAREC region. Women's participation in economic activity is low in the region,

particularly in Afghanistan and Pakistan – both countries with only 7% account ownership among women.

Multiple factors have contributed to people's lack of trust in governments and financial institutions. The collapse of the former Soviet Union, which resulted in the loss of bank-held savings for many consumers, shattered their trust in the formal banking sector. The lack of trust in the formal banking sector, combined with low financial literacy, are partly responsible for low levels of financial inclusion in the former soviet states.[13] In other countries such as Pakistan and Afghanistan, with negligible government-to-citizen transfers and high levels of corruption, people's trust in state intuitions and the banking and financial sector is low.

Institutional Impediments

According to the IMF, the shadow economy's share ranges from 20% to 40% of the total economy in the CAREC countries.[14] The unregulated business activity renders businesses and individuals vulnerable to financial shocks. In a shadow economy, business-to-business transactions and payment of wages are consummated through cash, which in turn hinders the development of creditworthiness and qualifying for financial services from the formal sector for business investment and emergency financing.

The underdeveloped and weak financial institutions and financial markets further complicate the landscape for financial inclusion. The IMF measures the relative depth, access, and efficiency of financial institutions and financial markets. Using a scale of 0 to 1, where one denotes strong, and 0 denotes weak financial development, the CAREC countries display low financial development - Afghanistan (no data), Azerbaijan (0.20), Georgia (0.30), Kazakhstan (0.34), Kyrgyzstan (0.12), Mongolia (0.40), Pakistan (0.24), Tajikistan (0.09), Turkmenistan (0.11) and Uzbekistan (0.22).[15] See Table 2 below for the scores of CAREC countries in terms of the development of financial institutions and financial markets.

[13] Morgan, Peter J.; Zhang, Yan; Kydyrbayev, Dossym, October 2018, 'Overview of financial inclusion, regulation, financial literacy, and education in Central Asia and South Caucasus' ADBI Working Paper, No. 878, Tokyo, Asian Development Bank Institute (ADBI).

[14] Medina, Leandro, and Schneider, Friedrich G., January 2018 'Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?', IMF Working Paper No. 18/17. SSRN: Accessed on 2 September 2020.

[15] https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B&sId=1485894037365, accessed on 2 September 2020

Table 2: Strength of Financial Institutions and Financial Markets

Country	Score
Afghanistan	Not available
Tajikistan	0.09
Turkmenistan	0.11
Kyrgyzstan	0.12
Azerbaijan	0.20
Uzbekistan	0.22
Pakistan	0.24
Georgia	0.30
Kazakhstan	0.34
Mongolia	0.40

Source: Author's compilation using the IMF's Financial Development Index Database
Note: The index is a relative assessment of countries in terms of the strength of their financial markets and institutions. A score of 1 denotes strong, whereas 0 denotes weak financial markets and institutions.

The considerably underdeveloped financial sector in the region impedes efforts to improve financial inclusivity. The traditional banking system heavily relies on conservative and risk-averse approaches for serving existing and new clients. The low level of physical access to the traditional banking system and underdeveloped financial sector can be fortified with technological innovation and adoption, which offers a rapid and efficient path toward expanding financial inclusion. Cisco Global Digital Readiness Index determines the readiness of countries using seven components: i) Basic needs; ii) Human capital; iii) Ease of doing business; iv) Startup environment; v) Technology infrastructure; vi) Technology adoption; and vii) Government and business investment.

On this comprehensive metric, too, CAREC countries manifest low progress. Afghanistan is ranked in the 'activate' category, which indicates that the country has just started a digital journey. All other countries (except for Turkmenistan, which is not ranked due to unavailability of data) are ranked in the 'accelerate' category, which indicates that countries have taken some steps, but still significant measures remain to be undertaken. None of the CAREC countries is categorized as 'amplify,' which means countries have made significant progress in achieving digital maturity.[16] The myriad of indicators covered under Cisco's index adequately explains the reasons for the low financial inclusion levels in the CAREC countries.

[16]Cisco Global Digital Readiness Index, 2019, White paper Cisco, Accessed on 7 September 2020, https://www.cisco.com/c/dam/en_us/about/csr/reports/global-digital-readiness-index.pdf

Section 4: Peer Learning - Following Footsteps

In a globalized world, successful models and best practices are plentiful and readily available. In most cases, the wheel does not need to be reinvented. The CAREC countries can learn from these best practices, fine tune, and tailor their policies according to the country context. Both the PRC and Kenya present distinctive success models to emulate. The PRC, with its peculiar economic and political system, thrived on the back of a formal banking sector account ownership, primarily supported by the state-owned banking sector and creatively led by the tech giants. On the other hand, Kenya, a relatively small economy, relied on its private sector to take and absorb risks and lead the drive to financial inclusion, while the government provided ideal conditions for innovation to thrive. For the policy maker convenience, here are several case studies:

CASE STUDY
People's Republic of China (PRC)

A holistic and integrated policy approach to deepen financial inclusion by leveraging technology

OVERVIEW

China, with the world's highest number (225 million) of unbanked adults, is clubbed with India (190m), Pakistan (100m), and Indonesia (95m) - the countries with the highest concentration of an unbanked population. Rationalized for population size, China, with 79 percent of the adult population owning a store of a value transaction account, is far ahead of the other three members of this club - India (53 percent), Pakistan (13 percent), and Indonesia (36 percent). Account ownership in China has jumped from 64 percent in 2011 to 79 percent in 2014. The percentage increase is much higher than the percentage increase in G-20 High-Income Countries (G-20 HIC), G-20 Middle-Income Countries (G-20 MIC), East Asia, and Pacific Large Middle-Income Countries (EAP L-MIC), and other Large Middle-Income Countries (L-MIC). China's per capita GNI is lower than the average per capita GNI of G-20 countries. On another critical metric - firm-level account ownership - China has reached nearly universal account ownership for small, medium, and large firms, surpassing all middle-income countries within and outside of the G-20.

By individual characteristics, the disparities between men and women, rich and poor, rural and urban, and education levels tend not to drift away from the country average dramatically. The percentage point difference between men and women is the lowest among all groups, implying the high participation of women in economic activity. Educational achievement tends to play a crucial role in widening the gap between the banked and the unbanked adults, with a difference of 17 points between adults with primary and secondary level education. In terms of household mobile phone ownership, China has emerged as a global leader with nearly universal ownership. Out of 225 million unbanked adults, 82 percent own a mobile phone, which presents a massive opportunity for intensifying efforts to bring them into the financial mainstream by harnessing financial technologies.

Over the past decade, China has emerged as a global leader in developing a fintech ecosystem, spearheaded by giants like Alibaba (Alipay) and Tencent (WeChat). Since 2011, the PRC has outpaced global competitors - the US, Japan, and South Korea - in filing fintech patents. China stands ahead of the world in fintech adoption with a 69 percent digitally active population. China's ascendancy to the top of the fintech ladder has been made possible by the giants like Alibaba and Tencent, who jointly accounted for 90 percent of the digital merchant payments market in 2017. Alipay and WeChat dominate the global mobile payment market with monthly active users of over 500 million and 900 million, respectively.

Although China commenced efforts to popularize the use of technology for financial payments in the early 2000s, it made giant leaps during the previous five years after 2015. From a low total value of mobile payments in 2013, China has surpassed the $40 trillion mark for a very high value of the mobile payments in 2018. This epic accomplishment has come on the back of a whole set of integrated and coordinated policy measures by the various tiers of the governments and initiatives by large companies.

Source

The Global Findex Database 2017 Measuring Financial Inclusion and the Fintech Revolution by Asli Demirgüç-Kunt Leora Klapper Dorothe Singer Saniya Ansar Jake Hess, the World Bank.
Harnessing technology for more inclusive and sustainable finance in Asia and the Pacific October 2018, ADB
China's digital payments revolution, Aaron Klein, Brookings Institution, April 2020

Key Success Factors

- Traditionally, the saving rate in China remained relatively higher than most OECD countries - averaging 36.5 percent between 1952 and 2019, reaching as high as 44.6 percent in 2019. Besides, over the past three decades, China recorded unprecedented economic growth lifting hundreds of millions out of abject poverty and raising disposable incomes of its vast population manifold. The high saving rates and an increase in disposable income created demand for financial services and products. The four-times increase in account ownership and five times increase in debit card ownership within a decade (2006-2016) explains the shift in spending patterns and modalities.

- During the current decade, the number of access points (ATMs) and usage (bank account/mobile ownership) both for individuals and households in China targeted hundreds of millions of individuals, particularly those segments of the population that were excluded from the financial system.

- Since the early 2000s, the People's Bank of China (PBOC) and various tiers of government collaborated to pilot initiatives to facilitate financial inclusion in targeted communities. This incremental approach provided ample room to test, fine-tune, and replicate success models at a larger scale.

- Financial technology introduced by tech juggernauts - Alibaba and Tencent - have dramatically brought down the cost of making person to person and business to business transactions attractive and affordable. The motive behind low transaction costs is that the companies do not view such transactions as revenue generation opportunities; instead, they tend to encourage consumers to fund their digital wallets for future spending.

- The adoption of quick response codes (QR) in the early 2010s by WeChat and Alipay has been a critical enabler for the fintech revolution in China. Unlike traditional debit/credit card transactions, QR allows merchants to receive payments without being online. The customer is required to be online using a smartphone, and the merchant just needs a QR code to accept payment without requiring a smartphone.

- China has harnessed existing infrastructure to reach out to underserved and excluded communities. Postal Savings Bank of China (PSBC) adopted financial inclusion as an essential element of its strategy and emerged as one of the most critical players of financial inclusion in the rural communities. By 2016, PSBC had set up 152,000 agent-based access points throughout China.

RESULTS

79%

Adult account ownership in 2017 increased nearly four times within a decade.

69%

Digitally active population, leading the high-income economies in fintech adoption

90%

of the $17 trillion digital merchant payments market in 2017, were jointly accounted by Alipay and Tencent, dominating the global mobile payment market

CONCLUSION

Alongside the efforts to popularize the use of technology for financial payments, it is crucial to have a whole set of integrated and coordinated policy measures by the various tiers of the governments and initiatives by large companies.

The high saving rates and an increase in disposable income creates demand for financial services and products. The four-times increase in account ownership and five times increase in debit card ownership within a decade (2006-2016) in china, justifies this.

Technological innovation has been a critical enabler for the fintech revolution in China. Much of its growth in deepening financial inclusion can be attributed to the adoption of quick response codes (QR) in the early 2010s by WeChat and Alipay, which become an accessible mode of transaction, even for small pushcart vendors as well as for the street beggars.

Source

Toward Universal Financial Inclusion in China: Models, Challenges, and Global Lessons," (Washington, DC: The World Bank / PBC, February 2018)
Measuring Financial Inclusion Core Set of Financial Inclusion Indicators, Guideline Note No.4 March 2013, Alliance for Financial Inclusion (AFI)

CASE STUDY KENYA

A distinctive success model in popularizing and democratizing finance among the population

OVERVIEW

Kenya has emerged as a success story in the African continent for broadening financial inclusion by using basic mobile phones with a SIM toolkit. Kenya's financial inclusion journey began in 2007 when a subsidiary of Vodafone partnered with Safari Telecom - the most popular mobile network operator - to launch M-PESA. Since then, Kenya has not only brought millions of unbanked adults into the financial mainstream but has also inspired and motivated peers in the neighborhood and elsewhere in the world. The early years since the launch of M-PESA are marked with caution, small steps crossing the social, psychological, and administrative frontiers. However, since 2011, within six years, the adult account ownership in a bank or mobile money service provider has nearly doubled - jumping from 42.34 percent of the population in 2011 to 81.56 percent in 2017.

By the end of 2019, the number of mobile wallets reached 58.3 million, with every adult on average owning 1.7 mobile wallets. Some people own mobile money accounts with different service providers that make account ownership larger than the population size. In the beginning, mobile phone money accounts offered basic services such as payments from one account to another but then gradually expanded services by facilitating savings and loans.

Over time, the services have steadily grown to include retail merchant payments, small farmers, and access to healthcare. Nearly a million customers benefit from over 70,000 merchants' access points. An agriculture data analytics company - FarmDrive - provides small loans in the agriculture sector, aiming to reach USD 3 million by the end of 2020. Likewise, Safaricom's M-Tiba offers services to nearly 800,000 people to access healthcare via more than 400 facilities across the country.

Although mobile money accounts revolutionized the financial inclusion landscape in Kenya, to ensure sustainability and deep penetration, it needed an integrated approach embraced by multiple stakeholders. The close cooperation between banks and telecommunication companies paved the way for expanding the financial inclusion ecosystem - mobile networks, bank branches, automated teller machines (ATMs), and access points - both in urban and rural communities.

Source

Digital Financial Services by Ceyla Pazarbasioglu, Alfonso Garcia Mora, Mahesh Uttamchandani, Harish Natarajan, Erik Feyen, and Mathew Saal, April 2020, World Bank.

Mobile Money is Driving Financial Development in Africa By Katharina Lehmann-Uschner and Lukas Menkhoff, DIW Berlin Weekly Report 2020

Key Success Factors

- Kenya has achieved staggering growth in expanding and deepening financial inclusion on the back of investment and innovation led by the private sector. Kenya's mobile network operators reflect a private sector-led innovation. Safaricom - Kenya's largest mobile network operator - massively invested in building the necessary infrastructure across the country to facilitate financial transactions. Private companies in Kenya developed their own ecosystem to facilitate alternative account ownership with a mobile money service provider and promoting the concept of mobile wallets for daily transactions.

- In 2007 when M-Pesa was launched, no regulatory guidelines were in place to regulate out of bank transactions. But instead of hampering innovation, the Central Bank of Kenya (CBK) closely engaged with Safaricom to develop guidelines for the incremental adoption of mobile money transactions. This non-conservative and supportive approach by the CBK, which was duly supported by regulatory bodies of the government, paved the way for countrywide replication and expansion of services to savings, loans, merchant payments and health insurance.

- Demand and supply forces have also contributed to the growth and expansion of financial services in Kenya. On the demand side, an extensive network of mobile phone operators and agents existed throughout the country. On the supply side, accessible, convenient, and cost-effective financial services were non-existent. The gap between supply and demand presented ripe conditions for the telecom companies to take risks and make investments.

- Simplified systems and procedures were instrumental in popularizing financial services among the population. The savings and loan products provided by M-Pesa and remote opening of bank accounts did not require cumbersome procedures and extensive documentation. The banks access customers' information from the Safaricom database and verify with the central government database, as long as the deposits are below a certain threshold.

RESULTS

81.6%

Adult account ownership in 2017 nearly doubled compared to 2011.

58.3 million

Number of mobile wallets by the end of 2019

80%

of the population is served by a financial center to make transactions located within 5km of their homes.

CONCLUSION

Although mobile money accounts revolutionized the financial inclusion landscape in Kenya, to ensure sustainability and deep penetration, it involved multiple stakeholders. The close cooperation between banks and telecommunication companies paved the way for expanding the financial inclusion ecosystem, both in urban and rural communities.

Non-availability of financial access points within a reasonable distance runs the risk of discouraging people to avail opportunities for a range of reasons. Therefore, it is necessary that financial services are available at a convenient distance without running the risk of robbery and high direct or indirect cost to make a transaction.

It is important to targeted the low hanging fruit when launching any financial service. For example the domestic remittance sector was targeted in case of M-pesa launch - in a bid to win the trust of the population who were heavily dependent on internal remittance transfers. And gradually expand the scope to other financial services.

Source
Cashing In on the DIGITAL REVOLUTION, Finance & Development June 2016 the World Bank, Njuguna Ndung' u, Armando Morales, and Lydia Ndirangu.

Section 5: Conclusion and Policy Implications

Affordable and easily accessible financial services are crucial for aiding the poor to find a pathway out of abject poverty. Access to affordable finance can significantly reduce their vulnerabilities and improve spending on health, education, and unforeseen emergencies.

Worldwide, nearly 1.7 billion adults do not have access to financial services. Although account ownership is steadily growing in most of the regions, disparities persist between male and female, rich and poor, and young and old adults. The bulk of unbanked adults are women, poor, young adults and concentrated in a few developing countries. The use of mobile phone and internet has recorded uneven growth between 2015 and 2019. The number of mobile phone users stagnated between 2015 and 2016 but recorded significant growth in the following year. The downturn returned in 2019, with growth recording a negative trend. The growth in internet use has remained slow but steady during this period.

Like other developing economies, the CAREC region, with its diverse economic landscape, requires a lot of catching up to do with its peers. In terms of bank account ownership, Mongolia is the only country in the CAREC region which performs better than the global average. Most of the CAREC countries fall far below the global average. On all other metrics such as gender, income group and age groups, the CAREC region, except for Mongolia, which has emerged as an outlier, fares poorly in comparison with global average. On mobile phone subscription and internet usage CAREC countries exhibit encouraging outcomes. Except for Kazakhstan, nearly all countries have more than global average mobile phone subscription as a percentage of the population, whereas six countries are below global average in terms of internet usage. Using internet and mobile phone for accessing bank account and making online purchases have yet to gain traction in CAREC countries. Similarly, receiving wages in a bank is the most common purpose for which individuals use their bank accounts.

The factors holding back progress in democratizing finance and leveraging financial technologies are numerous, at time puzzling, making it a big challenge for researchers to narrow down most relevant responsible factors. Nonetheless, four factors are identified as key elements for low financial inclusion in the CAREC countries: i) Absence of an Integrated National Strategy; ii) Physical Access and Income Constraints; iii) Cultural and Trust Barriers; and iv) Institutional Impediments.

CAREC countries can learn from regional and global success stories, fine-tune, and tailor their policies according to the country context. Both the PRC and Kenya present distinctive success models to emulate. The PRC, with its peculiar economic and political system, thrived on the back of a formal banking sector account ownership, primarily supported by the state-owned banking sector and creatively led by the tech giants. On the other hand, Kenya, a relatively smaller economy, relies on its private sector to take and absorb risks and lead the drive to financial inclusion, while the government provided ideal conditions for innovation to thrive.

To deepen financial inclusion levels by harnessing the potential of Fintech, the governments and the multilateral development partners need to collaborate to develop synergies and find affordable and sustainable solutions to low financial inclusion levels. Governments need to take the lead towards financial inclusion by providing an enabling policy environment that should be embedded in an integrated national financial inclusion strategy with defined and measurable targets supplemented with a robust implementation mechanism.

Governments must design and adopt a digitization policy to shape the direction of digital adoption in the country. Governments must make concerted efforts to develop and promote an enabling ICT

ecosystem to support innovation. The outbreak of the COVID-19 pandemic has further amplified the need for a digital revolution.

Developing and enacting a supportive legal and regulatory system is one of the essentials of propelling financial inclusion. The regulatory environment needs to accommodate disruptive innovation led by startups as well as incumbent big players in finance and technology. Consistent with national financial inclusion strategies and digital adoption policies, the countries need to upgrade their legal frameworks, which are skewed in favor of "business-as-usual" financial services. However, caution needs to be exercised as there is no one-size-fits-all solutions available; governments need to carefully formulate legal and regulatory policies conducive to country's economic context.

Elevating levels of trust in the banking and financial sector and bridging the access gap necessitates multi-faceted policy measures by the governments. The governments should not entirely entrust the private sector to design financial inclusion products and deliver to underserved adults. The leadership role of the government as a sovereign of last resort should be conspicuously seen to reinforce people's trust in the financial products offered by the private sector. Targeted efforts on the part of the governments would help ensure equitable provision of financial services across gender, income groups and age groups. Post-offices in most of the countries are generally perceived as the most trusted and accessible governmental institutions. Like the PRC's case, CAREC countries can leverage this existing infrastructure and network and creatively transform it into financial inclusion hubs down to the community level.

The critical role the private sector plays in innovation and service delivery cannot be overemphasized. In both the case studies, albeit with different manifestations, presented in the paper, the private sector has led the growth of account ownership and adoption of financial technologies. The CAREC countries need to engage the private sector right from the beginning – from the conceptualizing of financial inclusion strategy to digital adoption policies to developing a legal and regulatory framework. Finally, in addition to technical support, development partners' financial assistance is critical in developing vital financial and technological infrastructure for enhancing the financial inclusion level. They need to extend generous finances in the shape of loans, technical assistance, equity investment, and grants to governments as well as the private sector.

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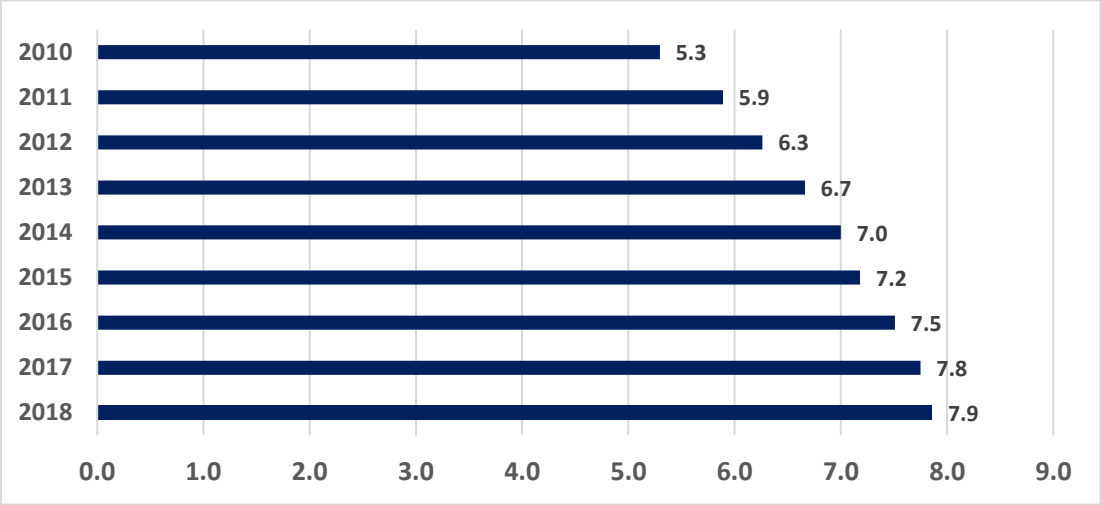
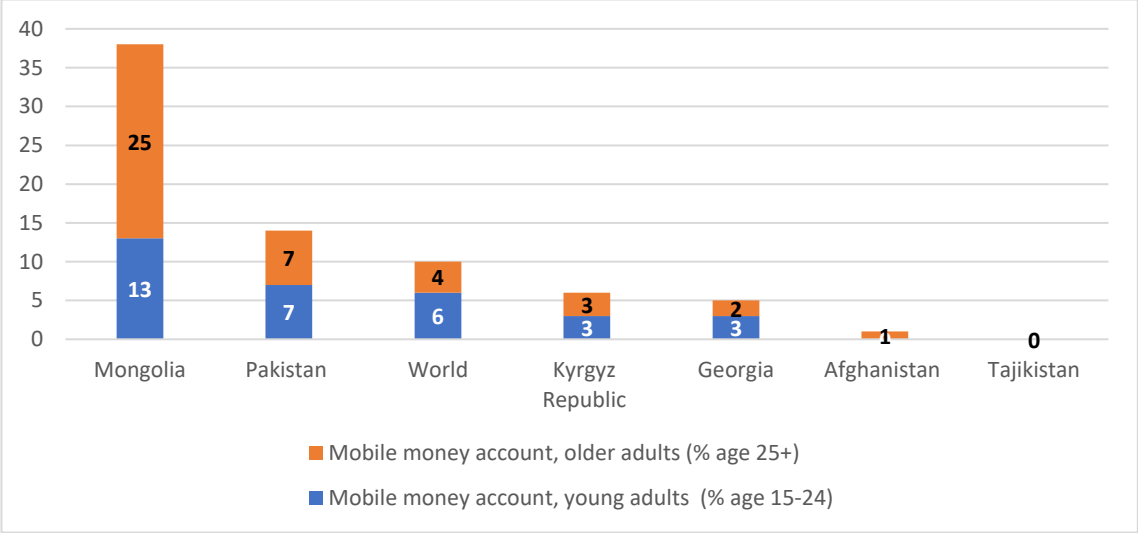
Annexure 1

Figure 3a: Global Trends in Mobile Phones Subscriptions 2010-2018 (%)



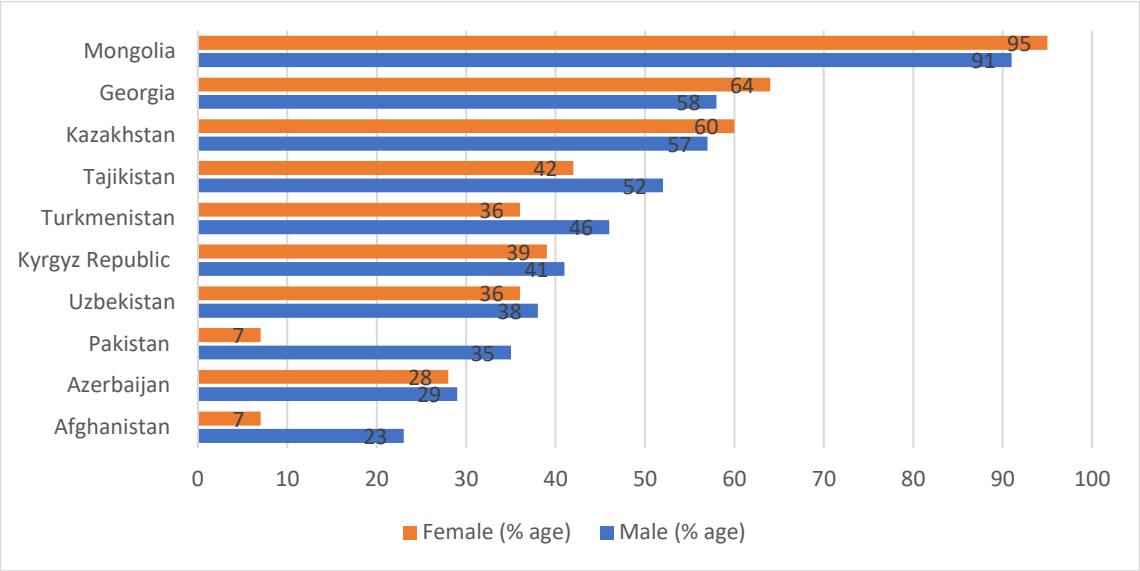
Sources: Author's calculation using data of WDI (2018)

Figure 4a: Adults with a Mobile Money Account 2017, %



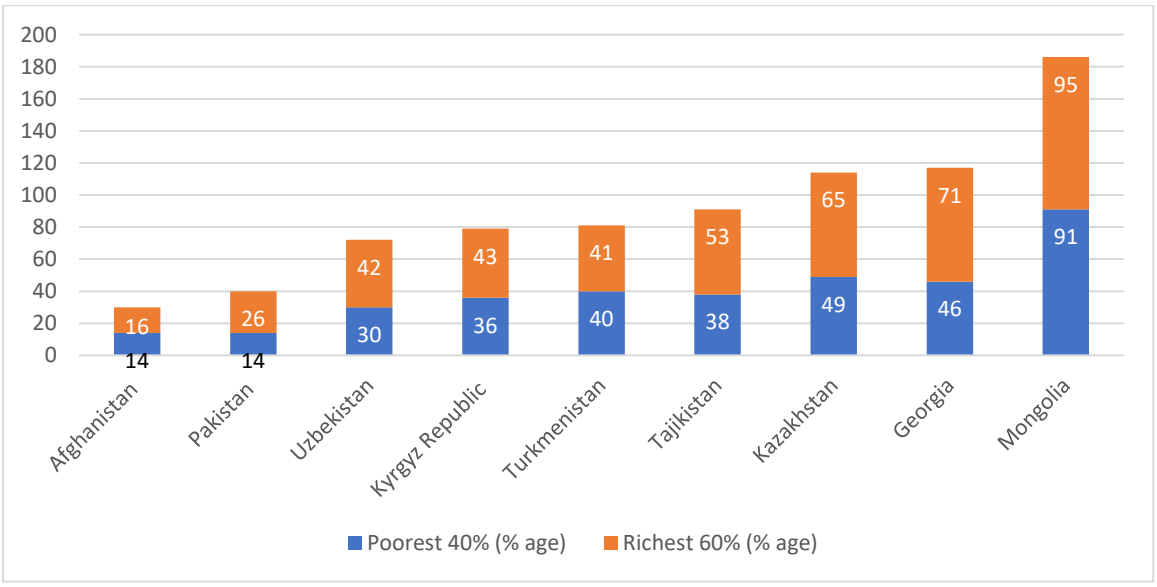
Source: *Author's calculations using data of World Bank, Global Findex Database (2017)*

Figure 5a: Bank Account Ownership by Gender 2017, %



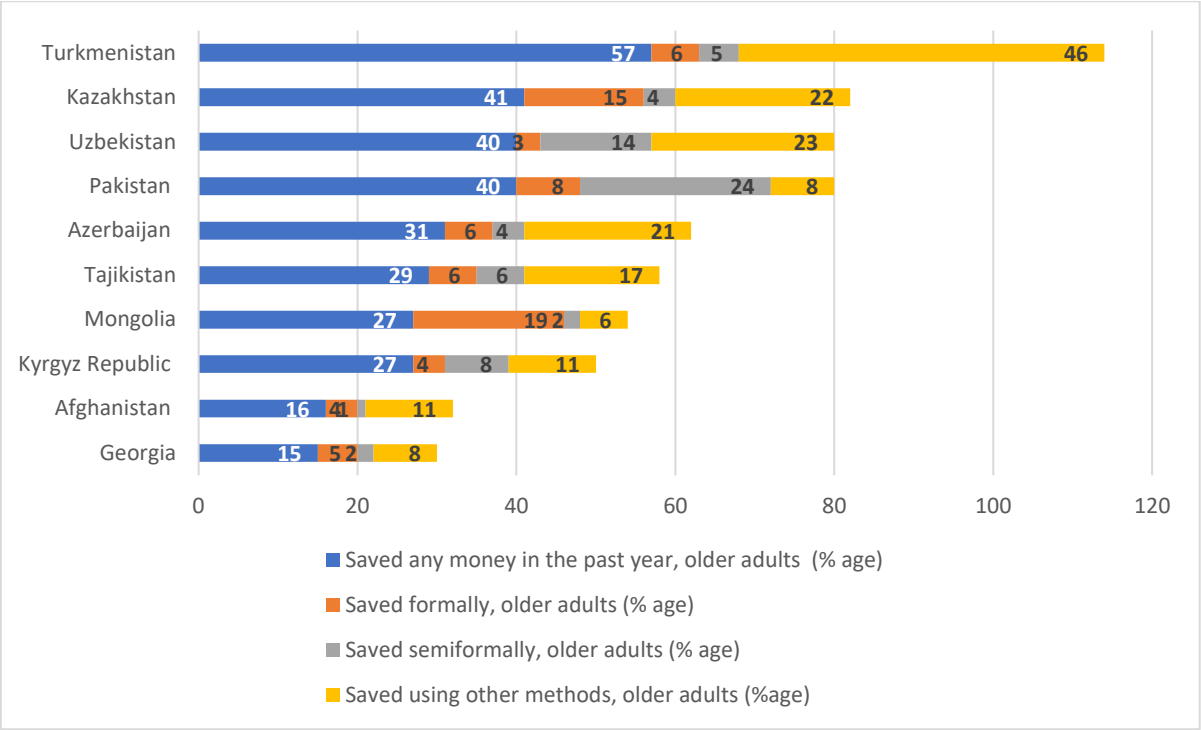
Source: Author's calculations using data of World Bank, Global Findex Database (2017)

Figure 5b: Bank Account Ownership by Age Group 2017, %



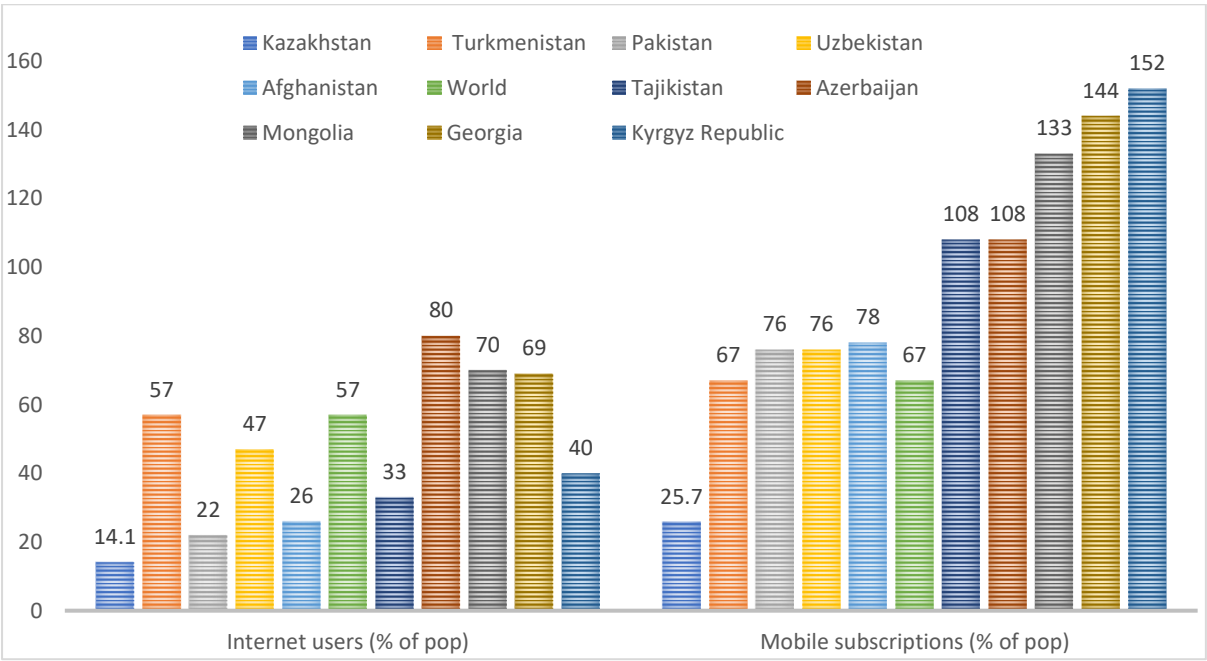
Source: Author's calculations using data of World Bank, Global Findex Database (2017)

Figure 6a: Saving Behavior among the Older Adults in the past year 2017, %



Source: Author's calculations using data of World Bank, Global Findex Database (2017)

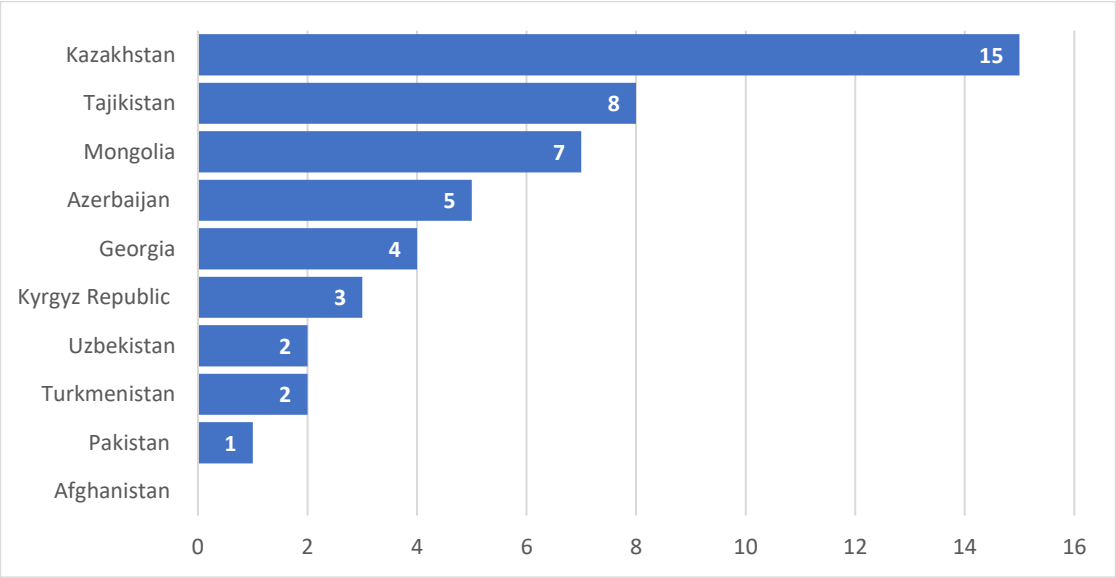
Figure 6b: Internet and Mobile Phone users in the CAREC Region 2019, %



Source: Author's calculations using data of Global Digital Report (2019)

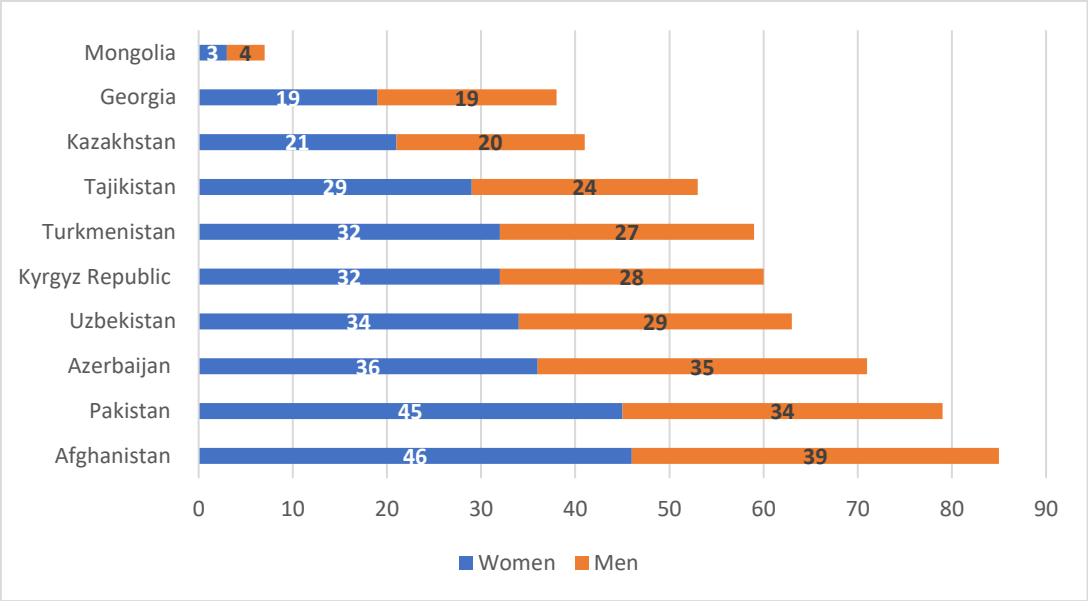
Note: Mobile phone subscriptions include all the mobile handsets in use. Mobile subscriptions do not represent unique individuals, so figures over 100% indicate multiple mobile subscriptions per person.

Figure 8a: Individuals leveraging the Internet for Online Purchases in the last year 2017, %

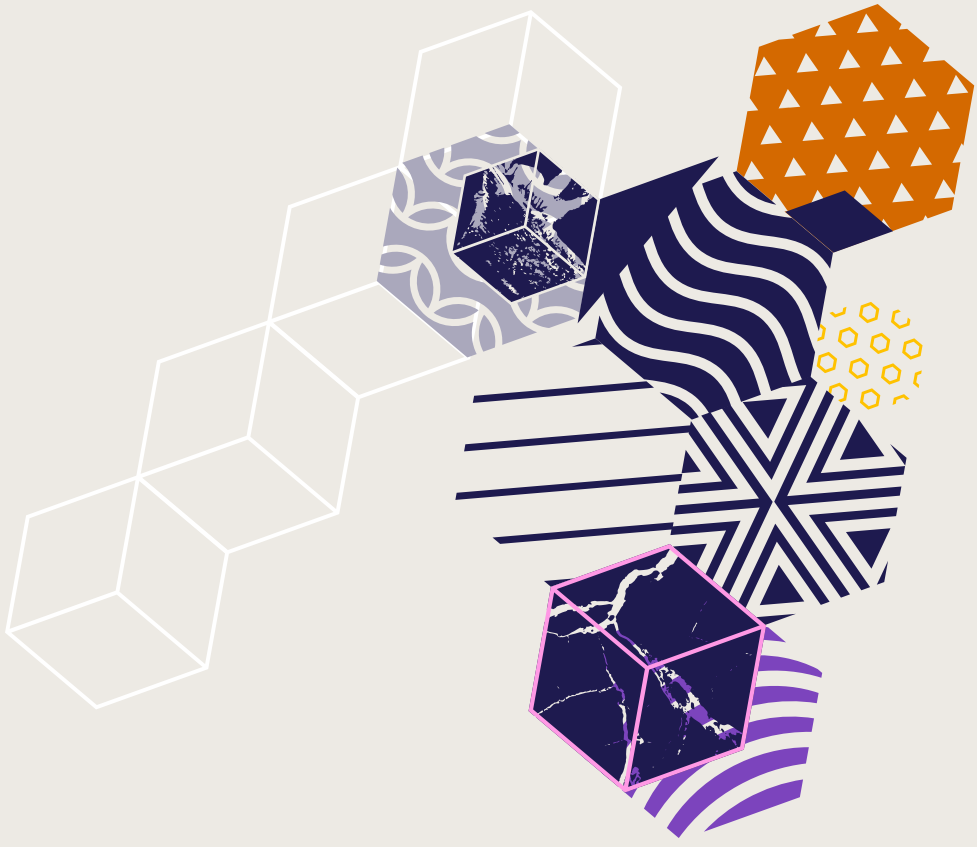


Source: Author's own calculation using data of World Bank, Global Findex Database (2017)

Figure 9a: Adults without an Account by Gender 2017 (% of population)



Source: Author's own calculation using data of World Bank, Global Findex Database (2017)



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