





## About Karandaaz Pakistan

Karandaaz Pakistan, established in August 2014, promotes access to finance for small businesses through a commercially directed investment platform, and financial inclusion for individuals by employing technology enabled digital solutions. The company has financial and institutional support from leading international development finance institutions; principally the Foreign, Commonwealth and Development Office (FCDO) of the United Kingdom (UK) and the Bill & Melinda Gates Foundation (BMGF).



## About Oxford Policy Management

Oxford Policy Management (OPM) is committed to helping low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reform. OPM seeks to bring about lasting positive change using analytical and practical policy expertise. Through our global network of offices, we work in partnership with national decision makers to research, design, implement, and evaluate impactful public policy.



## Acknowledgements

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## Note to Readers

Karandaaz Pakistan has created this body of research with the ultimate objective of improving understanding of the Fintech ecosystem and supporting timely policy decisions for the growth of this sector. We have undertaken this research with utmost objectivity and endeavored to cover all aspects of the Fintech ecosystem of the country. The information collected as part of this research primarily reflects the position of the ecosystem as of December 2020. We understand that the ecosystem is rapidly changing and there may remain, therefore, some gaps in the information presented in this report. Nevertheless, Karandaaz is actively generating insights for the larger digital financial services (DFS) industry, and subsequent reports will be published to share information on impact and emerging opportunities.

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*The views expressed in this document are those of the authors and do not necessarily reflect the views and policies of Karandaaz Pakistan or the donors who have funded the study.*

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## EXECUTIVE SUMMARY

Financial Technology (Fintechs) companies are revolutionizing the financial services industry throughout the world. By unlocking innovation, Fintechs are allowing the financial industry to serve customers in novel ways, enabling them to provide higher quality services at lower prices. In recognition of these innovative transformations, global Fintech Investments in 2020 were over \$100 billion with almost 3,000 deals<sup>1</sup>. Research also suggests that lockdowns, resulting from measures to curb the spread of COVID 19, have led to an increase in transaction volumes of Fintechs<sup>2</sup>. Some important trends have emerged during the year of the pandemic, both on the supply and demand sides. These include accelerated digital adoption, shifting consumer behaviours towards digital platforms, and increased regulatory focus on the Fintech sector, amongst others. These trends are most likely to stay, and will define how Fintechs will continuously disrupt the financial services ecosystem<sup>3</sup>.

Karandaaz Pakistan, in partnership with Oxford Policy Management (Pvt.) Ltd (Pakistan office) has undertaken a landscape analysis of the Fintech Ecosystem of Pakistan. Through this analysis, we endeavor to bridge knowledge gaps that prevail in the Fintech ecosystem of the country and enable regulators, investors and private sector players (both local and international) to build on this information for evidence-based decision making. The research is based on a robust methodology, where consultations have been undertaken with various stakeholders in the financial services ecosystem of Pakistan, representing regulators, investors, Fintechs, financial institutions, amongst others. A total of 41

interviews were completed to constitute a sufficient amount of information that enabled comprehensive analysis. Data has been collected through open-ended, qualitative instruments. While we do not claim for this study to be nationally representative, we hope that through capturing and analyzing perspectives of relevant stakeholders, a directionally correct and objective context is delivered.

For purposes of this report, we use the definition of Fintechs as identified in the *Global Covid-19 FinTech Market Rapid Assessment Study* by the Cambridge Centre for Alternative Finance. The study defines Fintechs as 'a set of activities (which may be either regulated or unregulated, according to each jurisdiction) contributing to the provision of financial services facilitated predominately by entities emerging from outside of the traditional finance system (such as the banking industry or capital markets)'. We also conform to the suggestion in the report that Fintech is narrower in scope than the wider digital financial services (DFS) domain<sup>4</sup>.

Pakistan's Fintech Ecosystem, despite global heightened attention, remains nascent and faces a variety of challenges. These challenges, both external and internal, hamper the growth of the Fintech ecosystem of the country. However, with the recent initiatives such as the establishment of Fintech Associations, and with the flexibility provided by the regulator, there seems to be a strong push towards jump-starting the Fintech Ecosystem of the country and contributing to a conducive environment for Fintechs in Pakistan to thrive.

<sup>1</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

<sup>2</sup> <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/03/2020-ccaf-global-covid-fintech-market-rapid-assessment-study-v2.pdf>

<sup>3</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

<sup>4</sup> <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/03/2020-ccaf-global-covid-fintech-market-rapid-assessment-study-v2.pdf>

Fintechs are combining financial services and digital technology to provide innovative solutions to consumers and businesses alike. There is no doubt that Fintechs have a significant impact on serving the unserved and underserved populations, through enhancing customer journeys and developing innovative products for easier access to financial services. As a result, individuals and small and medium enterprises (SMEs) alike are the most important beneficiaries of technology driven financial services.

Our findings suggest that there exist several white spaces for Fintechs to capture. Amongst these, Payments are the most prominent, in addition to opportunities in infrastructure, investments and insurance. There are, by rough estimates, more than 40 notable Fintechs operating in the country, of which, most are operating in the Payments space. This trend also mirrors global priorities of Fintechs, which, especially after the pandemic, have seen a surge in the payments space. We also found that the regulatory support for Fintechs has considerably improved in recent years, with increased interest from the State Bank of Pakistan (SBP) and the Securities and Exchange Commission of Pakistan (SECP).

This shows that increasing understanding of the potential that Fintechs possess in disrupting financial services and advancing the objective of financial inclusion. However, with only 21 percent of Pakistan's adult population included in the formal financial

sector<sup>5</sup>, Fintech's face numerous challenges to realize this potential. With a limited talent supply and the populations trust in cash, Fintechs are struggling to offer innovative solutions to capture the unserved market and have limited sources for investments.

The future, however, holds promise. The launch of the RAAST programme by the SBP will most likely create a considerable market opportunity for Fintechs to capitalize on. Similarly, as consumer preferences shift towards using digital technologies and with rising smartphone adoption, the target population for Fintechs will consistently rise. Realizing this shift and opportunity in the market, with the large, and yet untapped female population of the country, Fintechs can play a significant role in the disruption of the financial services ecosystem. Fintechs will be encouraged by the recent initiatives of the SBP and the SECP, which will enable increased investment by international Venture Capitalists (VCs) and emergence of global Fintechs in Pakistan. Institutional donors will also continue to play an integral role in supporting the Fintech ecosystem, especially focusing on women economic empowerment through financial inclusion and financial deepening. However, obstacles still prevail related to financial literacy of Pakistan's adult population and over regulation of the market, but coordinated efforts between all stakeholders are likely to create a conducive environment for Fintechs to thrive in Pakistan.

<sup>5</sup> <https://globalfindex.worldbank.org/>





## INTRODUCTION

Financial Inclusion is considered a key enabler of economic development and is featured as a target in 8 of the 17 sustainable development goals (SDGs) of the United Nations (UN). Increasing evidence suggests that inclusion of small and medium enterprises (SMEs) and individuals can help increase economic growth, support job creation, aid the effectiveness of fiscal and monetary policy and contribute to financial stability<sup>6</sup>. Research also suggests that the impact of digital financial inclusion of individuals alone can increase Pakistan's GDP by \$36 billion by 2025<sup>7</sup>.

To accelerate financial inclusion, Fintechs (or Financial Technology firms) are playing a key role. Through utilizing the power of digital innovation, Fintechs have been at the forefront of serving customers in disruptive methods, leading to increasing ease and convenience in accessing financial services for individuals and businesses alike.

For the Fintech ecosystem to thrive in Pakistan, aspects related to regulations, infrastructure, investments, amongst others, are required to come together to develop a conducive environment. In the recent past, we have seen some growth in the Fintech ecosystem, as more start-ups and investors enter into this space, and supportive regulations are promulgated by the regulators. However, given the prevailing gap and the resultant potential in the financial ecosystem of Pakistan (with only 21 percent of the population financially included as per the World Bank<sup>8</sup>), Fintechs are at the forefront of enabling adoption and usage of digital financial services.

This report provides a descriptive assessment of the Fintech ecosystem through studying opportunities and challenges, investment landscape and regulations. The concentration on these focus areas is a result of our analysis of key factors that are collectively binding for the ecosystem to flourish.

## METHODOLOGY

The methodology for this study primarily comprises of qualitative data collection from key stakeholders of the financial services ecosystem of Pakistan. While we do not claim for this study to be nationally representative, we have ensured that the data collection instruments and stakeholders interviewed together construct complete and detailed perspectives of key elements of the ecosystem, its opportunities and challenges. While the report utilises primary data for analysis, secondary literature is also incorporated at various parts of the report<sup>9</sup>.

### Data collection

Interviews were held with relevant stakeholders' part of the Fintech ecosystem in Pakistan. These included regulators [State Bank of Pakistan (SBP), the Securities and Exchange Commission of Pakistan (SECP) and others], sampled financial institutions, Fintechs (SBP licensees and non-licensees) and Fintech sector experts. Almost all interviews were conducted remotely. The data collection took 5 weeks during which 41 interviews were completed. (Please see Annex 1 for details).

<sup>6</sup> <https://www.imf.org/~media/Files/Publications/DP/2019/English/FISFMECAEA.ashx>

<sup>7</sup> <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/How%20digital%20finance%20could%20boost%20growth%20in%20emerging%20economies/MG-Digital-Finance-For-All-Full-report-September-2016.pdf>

<sup>8</sup> <https://globalfindex.worldbank.org/>

<sup>9</sup> The larger financial services landscape including insurance, wealth management, leasing, low-income housing, mortgage refinancing, commodity and capital markets and other domains that are not under the regulatory regime of SBP were not covered.



## KEY FINTECH SEGMENTS – GLOBAL

Globally, Fintechs are earning increasing prominence in financial sectors. The ability of Fintechs to provide innovative solutions and to disrupt the financial services ecosystem has culminated in significant interest from investors, regulators and individuals. Since the launch and the subsequent success of M-PESA in Kenya, developing countries have followed suit to utilize technology for accelerating financial inclusion. Although infrastructural and other challenges prevail that impede exponential growth, countries seek the right formula' that can result in widespread adoption and usage of DFS.

The role of Fintechs has become more important during the pandemic that resulted in lockdowns and social distancing. Fintechs

have supported governments in delivering relief measures, specifically tax relief schemes, delivering government-based stimulus funding to Micro, Small and Medium Enterprises (MSMEs) and households amongst other aspects. While this importance has been exacerbated after the emergence of COVID 19, initiatives for the promotion and support for Fintechs are not recent. The Bali Fintech Agenda Paper<sup>10</sup>, released in 2018 by the World Bank and the International Monetary Fund (IMF) discusses 12 key points to support Fintech ecosystems. In addition to suggesting that countries should Embrace the Promise of Fintech's, the paper identified the key role countries have to play in accelerating financial inclusion. The 12 elements are below:



<sup>10</sup> <https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/10/11/pp101118-bali-fintech-agenda>

Common features of a thriving Fintech ecosystem include;

Figure 1: Common Features of a Fintech Market System<sup>11</sup>



A well-developed Fintech ecosystem consists of:

- A rich supply of stage funding (Seed stage, Series A-E, and exit);
- Incubators and accelerators to provide resources to support Fintech start-ups;
- A rich supply of well-educated individuals with the aspiration to join a start-up;
- Willing partners (DFS providers) that have enabled access to their Application Programming Interface (API) to start-ups to develop new product offerings;
- Traditional banks and MFIs that have embraced the digital opportunity and moved substantially onto digital platforms; and
- A regulator that has generally adopted a proportionate approach to risk management, and has developed new Fintech regulations as the need arises.

<sup>11</sup> [https://www.ey.com/en\\_nl/financial-services-emeia/how-fintechs-are-moving-mountains-and-moving-mainstream](https://www.ey.com/en_nl/financial-services-emeia/how-fintechs-are-moving-mountains-and-moving-mainstream)



There are 13 distinct verticals that Fintechs traditionally focus on. These include the following<sup>12</sup>:



<sup>12</sup> <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/03/2020-ccaf-global-covid-fintech-market-rapid-assessment-study-v2.pdf>

A stylized map of Pakistan is the central focus, rendered in various shades of blue and purple. The map is overlaid with several geometric patterns: a network of light blue lines and dots in the top-left corner, and a network of pink lines and dots in the bottom-right corner. Scattered across the map are several small, light blue triangles and a few larger, solid purple triangles. The overall aesthetic is modern and technological.

## 4 - THE FINTECH ECOSYSTEM OF PAKISTAN<sup>13</sup>

Despite Pakistan's growing population, with a significant youth bulge, and the commercial opportunity to deliver mass-market financial products and services, the country has been a comparatively slow-mover within the DFS domain. Pakistan has a financial inclusion ratio of 21%, compared to an average of 33% for lower middle-income countries<sup>14</sup>. There are more than 160 million biometrically-verified mobile connections in Pakistan (approximately 68% of the population owns mobile phones)<sup>15</sup> and there are 58 million mobile wallet accounts in the country, but 53 percent of these are inactive<sup>16</sup>.

Pakistan published its first National Financial Inclusion Strategy (NFIS) in 2015 which had a target of including 50 percent of the adult population by 2020. This target was then revised to '65 million digital accounts by 2023' in the updated NFIS in 2018<sup>17</sup>. Alongside this revised target, there has been an increased concentration towards utilizing DFS, recognizing its importance of reaching underserved areas and unserved populations and its accompanying convenience for users.

Similarly, a rapid assessment study undertaken by Karandaaz in April 2020 found that 94 percent of Fintechs in Pakistan believed that measures to curb the spread of COVID 19 will lead to increased adoption and usage of DFS. Around 31 percent of the respondents suggested that of the various use cases, bill payments were the most likely to increase, followed by mobile top Ups (23%) and e-commerce (15%). COVID 19 was therefore viewed as, albeit, a temporary catalyst for adoption and usage of DFS. It created an opportunity for the larger digital finance ecosystem to build on the shift in practices and behaviours towards DFS. This is evidenced by the increase in both mobile banking transactions (by 50%) and mobile money transactions (by 34.3%) from 2019 to 2020<sup>18</sup>.

## TRADITIONAL FINANCE TO DIGITAL FINANCE: AN EVOLUTION

Scalability and ubiquity of financial technology solutions is critical if the financial system is to serve large numbers of underserved customers. The following discussion focuses on the key limitations in the traditional system that created space for Fintechs, these gaps were addressed through digital financial solutions to achieve economies of scale and efficiency in payment systems.

### Accounts

Traditionally, account opening processes have been considered cumbersome, with stringent know your customer (KYC) requirements. This, with the addition of limited utility offered by traditional accounts, are more suitable for affluent individuals and have not been designed to cater to lower income populations. DFS accounts, on the other hand, are small-value transactional accounts and cater to mass populations. They involve tiered KYC, are issued over a digital channel and are able to conduct instant transactions.

As an alternative to traditional accounts, branchless banking accounts have played a major role in providing convenient, affordable and useful account ownership to a larger population of adults. In Pakistan, the introduction of branchless banking licensing in 2008 by the SBP served as impetus for Digital Financial Service Providers (DFSPs) to construct agent networks throughout the country and aggressively move towards branchless banking. As a result, formal financial services, for the first time, spread to tier 3 cities and proliferated into rural networks of Pakistan.

<sup>13</sup> We have intentionally not inserted a map of Fintechs in Pakistan as this research was not intended to be nationally representative. We have however, provided some estimates around the number of Fintechs currently operating in the country

<sup>14</sup> World Bank, Findex Data Set

<sup>15</sup> www.PTA.gov.pk As on end-June, 2020

<sup>16</sup> Branchless Banking Statistics (Jul-Sept 2020), AC&MFD, SBP

<sup>17</sup> Enhanced National Financial Inclusion Strategy, 2018 | Ministry of Finance

<sup>18</sup> <https://portal.karandaaz.com.pk/dataset/branchless-banking-transactions-volume/1082>

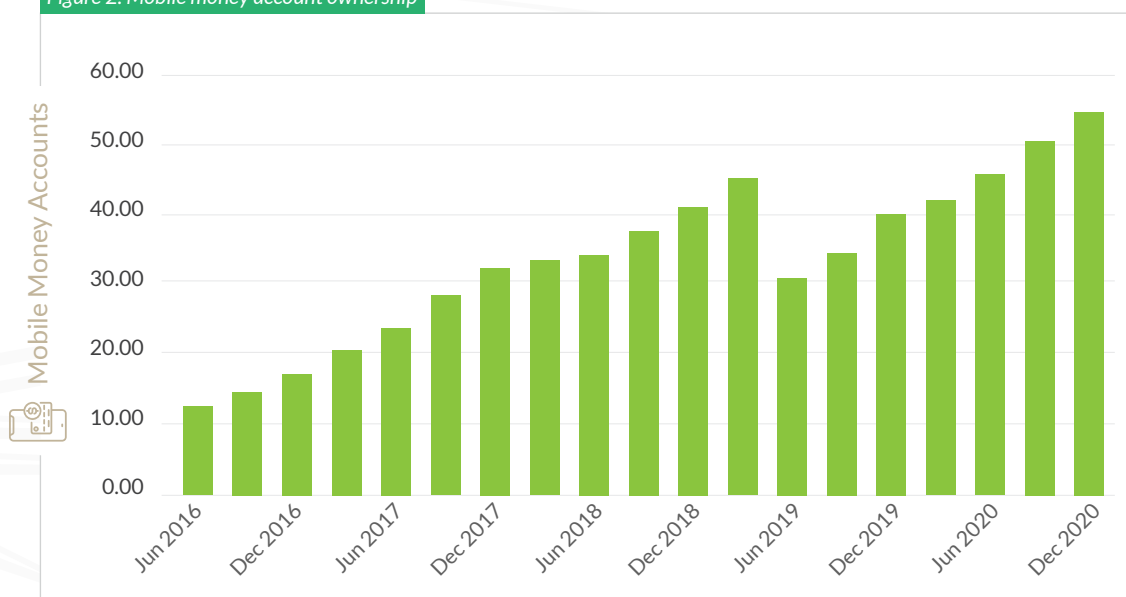
This was because the cost of offering digital accounts was considerably lower (by ~90 percent<sup>19</sup>) than traditional accounts, which required a brick-and-mortar structure. The role of Fintechs in this expansion was obvious.

EasyPaisha was the first mover in the branchless banking space and swiftly captured a significant market share, given the ease of access and convenience that the platform provided. More than 10 market players eventually entered the digital finance

space, out of which two players (EasyPaisha and JazzCash) currently serve almost 70 percent of the branchless banking users<sup>20</sup>.

In 2016, resulting from increased scrutiny on Anti Money Laundering (AML)/ Combatting the Financing of Terrorism (CFT) laws, SBP enacted mandatory biometric verification for agent assisted transactions [Over the Counter transactions (OTC)]. In the same year, a consistent increase in mobile money account ownership was seen. See Figure 2<sup>21</sup>.

Figure 2: Mobile money account ownership



While this progress has been commendable and as DFSPs continue to tap geographically dislocated populations, traditional commercial banks have been lagging in innovation to capture the unserved market. Despite the introduction of regulations around basic banking accounts in 2005<sup>22</sup> and subsequently Asaan Accounts<sup>23</sup> in 2015<sup>24</sup>, commercial banks have not been able to exponentially capitalize on this.

## Access Channels

The presence of bank branches has been concentrated in urban centres, where business activity is conducive and population

density is high. This severely limits the reach of the banking system to more geographically spread customers, whilst incurring higher costs of maintaining a brick-and-mortar structure. This is also challenging for the government, as it has to disburse social protection payments, salaries and pensions to a scattered populations. Using a widely spread and easily accessible infrastructure for branchless banking is therefore essential for creating value for larger populations.

Pakistan's DFS ecosystem is considered a bank-led model, which takes advantage of the distribution channel spread by telecommunication providers.

<sup>19</sup> Digital Finance for all: Powering inclusive growth in emerging economies, McKinsey Global Institute, 2016

<sup>20</sup> [https://finclusion.org/uploads/file/fii-pakistan-wave-6-2020\(1\).pdf](https://finclusion.org/uploads/file/fii-pakistan-wave-6-2020(1).pdf)

<sup>21</sup> <https://portal.karandaaz.com.pk/dataset/branchless-banking-accounts/1079>

<sup>22</sup> BPD Circular No. 30 of 2005.

<sup>23</sup> BPRD Circular No. 11: Guidelines on Low Risk Bank Accounts with Simplified Due Diligence – Asaan Account.

<sup>24</sup> which allowed accounts to be opened with a minimum deposit of PKR 1000



This distribution channel (or agent network), is primarily based in local *kiryana* stores (or easily load shops), which historically have developed trust of local populations. The agent network has utilised the Unstructured Supplementary Service Data (USSD) for airtime reload for post-paid customers and for OTC money transfers.

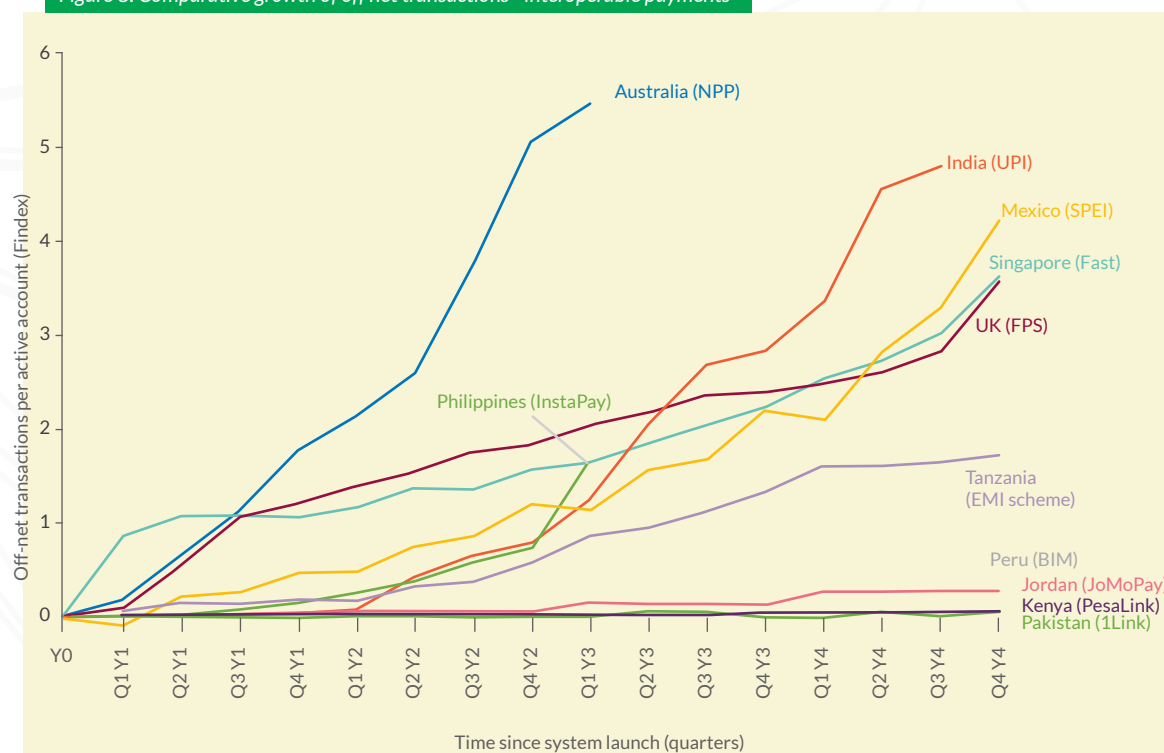
The convenience of using mobile technology and the USSD service offered by mobile operators served as grounds for uptake in mobile wallets. However, the absence of this service provision to all financial institutions (e.g., for account opening and account transactions) limits potential opportunities to offer products and services to customers without smartphone ownership. Given that 50 percent of 167 million cellular subscribers do not possess a smartphone, enabling USSD

technology can be a potential stimulant for spread and uptake DFS.

### Interoperability:

Interoperability, the ability of different systems to connect with one another<sup>25</sup> is a key ingredient of the DFS ecosystem. It allows accounts to exchange value, regardless of their host financial institution, through an underlying connected infrastructure of participating entities. Without complete interoperability, the growth of Pakistan's DFS ecosystem will remain sluggish. The figure below provides a comparison in off-net transaction growth since the launch of interoperable solutions (1Link in the case of Pakistan).

Figure 3: Comparative growth of off net transactions - interoperable payments<sup>26</sup>



Pakistan's DFS ecosystem has a prominence of Payments (which we will talk about in section 2.2 below), which also has become a key focus of Fintechs. From local remittances to utility bills, instant payments impact the daily lives of individuals and businesses. However, to derive real benefit from instant payments, an interoperable infrastructure is required. Only

through such an infrastructure can customers transact within different networks (for example, sending money from an EasyPaisa account to a UBL omni account). Interoperability, therefore, serves as a definite impetus to driving behavioural change in adoption of DFS.

<sup>25</sup> <https://www.cgap.org/sites/default/files/researches/documents/interoperability.pdf>

<sup>26</sup> [https://www.cgap.org/sites/default/files/publications/2021\\_01\\_Technical\\_Note\\_Interoperability\\_Digital\\_Financial\\_Services.pdf](https://www.cgap.org/sites/default/files/publications/2021_01_Technical_Note_Interoperability_Digital_Financial_Services.pdf)

Interoperability is typically enforced by a regulator based on market readiness, which has also been the case in Pakistan.

Pakistan is another example that usefully illustrates some of the challenges to interoperability. Some providers chose to integrate DFS accounts into the conventional banking switch 1Link, thus achieving technical connections very quickly. However, it has not produced high use because the pricing rules were not written for these kinds of transaction sizes or use cases. In terms of arrangement governance, 1Link is still governed by 11 larger banks that do not provide DFS accounts. Pakistan has more work to do on governance and business incentives for interoperability to work better – Except taken from CGAP's report titled 'Digital Finance Interoperability & Financial Inclusion A 20-Country Scan'

Before 2008, 1Link served as the ATM switch for 28 banks whereas MNET was connected to 10 banks. Working towards an improved infrastructure, the SBP brought together both 1Link and MNET's services in 2008. This resulted in ATM interoperability, allowing all ATM card holders to utilise services of any bank's ATM. Similarly, when SBP issued the licensing regime of PSPs, it mandated that the existing licenses and new licensees should allow interoperability. NIFT and 1- Link, the earliest PSPs, were mandated to be interoperable by the regulator.

Currently the conventional bank accounts and wallet platforms are partly interoperable where the funds can be pushed between bank

accounts and wallets through Inter-Bank Funds Transfer (IBFT). However, funds cannot be pulled from the accounts, which although remains a risk from a security perspective, is a key functionality in developed markets (*Direct Debits are considered Pull Payments*). Cheques and bearer prize bonds on the other hand are fully interoperable in Pakistan. There is also a key factor of cost in interoperability. Currently, IBFT is routed through 1Link, which being a private entity, charges a fee. This fee, while considered minimum for high value payments, usually proves to be a significant percentage of low value payments. The introduction of RAAST by the SBP is likely to provide full-interoperability in the market, with little or no cost. This can serve as a game changing solution for Fintechs.

Regulations for Mobile Banking Interoperability were first released by the SBP in 2016<sup>27</sup>, jointly with the Pakistan Telecommunication Authority (PTA) - regulations for technical implementation of mobile banking<sup>28</sup>. These regulations allowed third-party service provider (TPSP) licenses to be issued by the PTA and authorized by SBP for USSD interoperability purposes within the branchless banking network. Within this licensing regime, Fintechs were promoted to apply for the licence and provide USSD platform interoperability.

## CATEGORIZATION OF FITNECHS OPERATING IN PAKISTAN

Our estimates suggest that there are more than 40 prominent Fintechs in the country, that can be categorized into the following seven categories based on their products and services portfolio. Please see Figure 4.

Figure 4: Fintech Categories in Pakistan



<sup>27</sup> [www.sbp.org.pk/bprd/2016/C3-Annx-A.pdf](http://www.sbp.org.pk/bprd/2016/C3-Annx-A.pdf)

<sup>28</sup> [www.pta.gov.pk/media/MBanking1652016.pdf](http://www.pta.gov.pk/media/MBanking1652016.pdf)

## INNOVATION OPPORTUNITIES AND CHALLENGES

The innovation heatmap shows the maturity of segments directly serviced by Fintechs. While payments is the most mature segment, the next wave of innovation is expected in alternate credit. Opportunities to innovate still exist in the investments and insurance segments, but this needs regulatory coverage to support new business models. See Figure 5<sup>29</sup>.

### Opportunities

The financial services opportunity grid below utilises the tree-map structure to draw out opportunities to achieve the targets set out in the NFIS, by 2023. The five key areas of payments, infrastructure, investments, insurance and lending are the most prominent. The respective size of each box reflects the estimated market activity. Please see Figure 6<sup>30</sup>.

Figure 5: Innovation Heat-Map of Fintechs in Pakistan

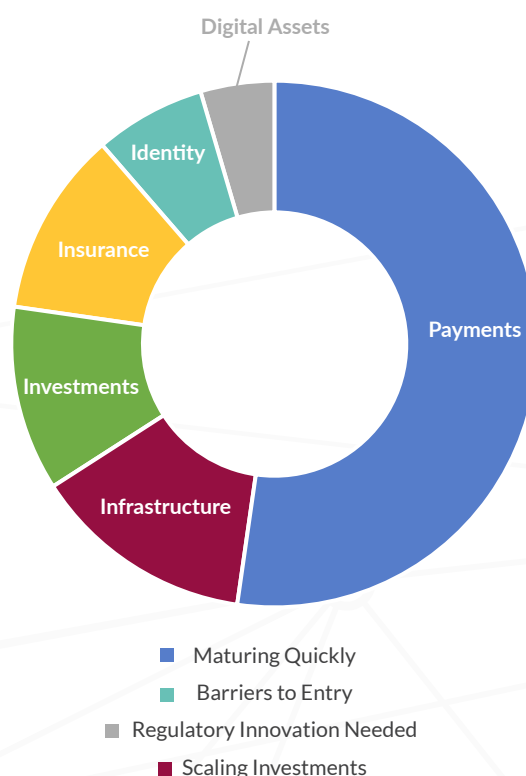
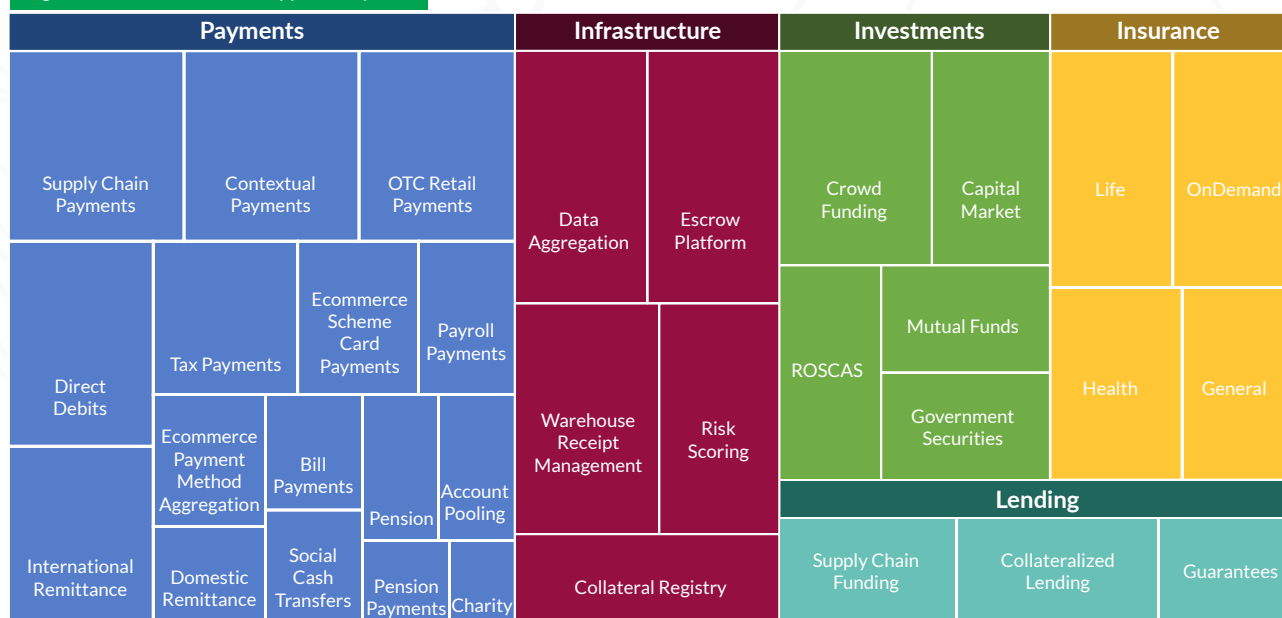


Figure 6: Financial Services Opportunity Grid



<sup>29</sup> The diagram is based on our findings from interviews with Fintechs as part of this study. Each portion of the pie represents the percentage of Fintechs within, and their corresponding status as represented by the legend provided

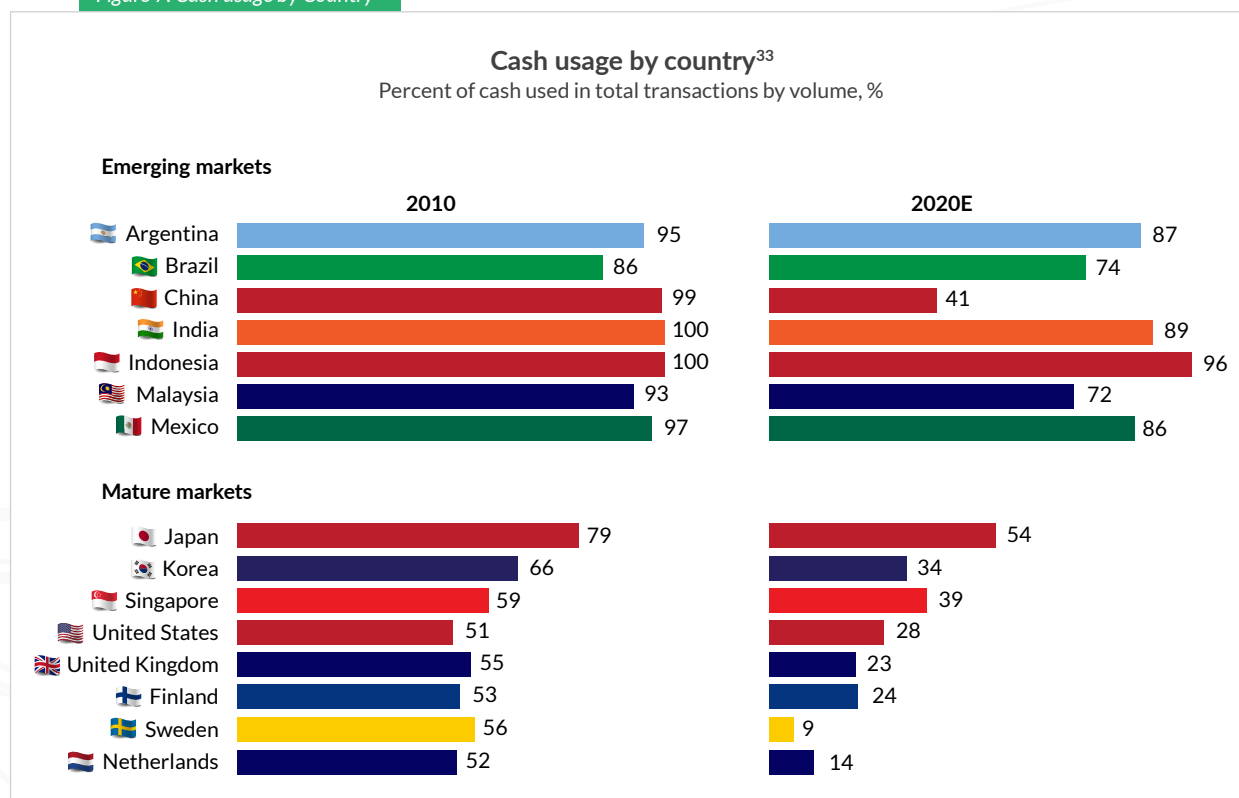
<sup>30</sup> The opportunity grid is based on the percentage of Fintechs operating in the identified areas, out of the sampled Fintechs interviewed as part of this study

## Payments

Payments has seen a global surge in interest during the pandemic. This has been due to widespread lockdowns and the resultant reliance on e-commerce, practices of social distancing, usage of contactless payment

mechanisms, and the aversion to using cash. McKinsey & Company, in its Global Payments Report 2020, estimated that usage of cash is likely to significantly decline throughout the world. (Figure 7). As a result, alternate payment mechanisms are being increasingly adopted.

Figure 7: Cash usage by Country<sup>31</sup>



The payments segment in Pakistan consists of established players including JazzCash and EasyPaisa. These providers are the leading enablers of digital transaction accounts (DTA) by individuals and businesses. Some Fintechs are looking at improving the utilisation of DTAs with new use cases while others are enabling new accounts targeting specific opportunities. Below, we provide examples of specific opportunity areas within the payments space.

- **Supply chain payments:** These Business to Business (B2B) payments, between different value chains participants, are of high-value that power domestic and

international trade. These payments allow the businesses to manage liquidity and utilise the digital rails for scheduled and time sensitive payments. Currently a local Fintech (Haball Private Limited) is targeting this opportunity. Haball has developed a platform for the B2B payments automation and is receiving market interest for its solutions.

- **Contextual payments:** Contextual payments focus on the rich data that can travel with the payments, describing the contracting terms and payment milestones.

<sup>31</sup> <https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/accelerating%20winds%20of%20change%20in%20global%20payments/2020-mckinsey-global-payments-report-vf.pdf>



This facility allows transaction participants to store and utilise data to develop patterns and build cash flow predictability. The data can prove to be vital for new product innovation and service design. RAAST will enable contextual payments.

- **Request to Pay (Direct debits):** Direct debits are considered enablers for merchant collections. Utilising the direct debit rails, Fintech solutions enable merchants to set up recurring authorisation to debit customer accounts. Similarly, the service enables the collecting banks to pull funds from the buyer's account based on these agreed terms. The underlying solution of enabling the banks to offer such a service to its merchants is enabled by Fintechs.
- **Over the counter (OTC) retail payments:** Enabling merchants to collect payments in cash at partner locations (non-bank) is an accelerator for e-commerce adoption. Facilitating walk-in locations would allow merchants to build a collection network for payment processing and limited warehousing (offering customer lock boxes). Currently, merchant aggregators including KuicPay, PayPro are enabling non-bank locations such as the TCS (Courier Company) walk-in centres for cash payments. Physical locations of Pakistan Post are also being integrated into the DFS eco-system through a partnership with a leading commercial bank. This would enable Pakistan Posts physical offices to act as physical cash collection centres for e-commerce transactions.
- **International remittances:** International Remittances (IR) has seen considerable interest from Fintechs globally. In Pakistan, there has been recent surge in enabling incoming IR onto digital platforms, specifically mobile wallets. However, given that IR equates to 7-8 percent of Pakistan's GDP (approximately USD 22 billion in 2019)<sup>32</sup>, there is considerable opportunity for Fintechs to capitalize on this market segment. There are more than 20 financial institutions involved in the IR business in Pakistan that are associated with the Pakistan Remittance Initiative (PRI) - an effort to facilitate safe, accessible, inexpensive and efficient flow of remittances through formal channels, launched by the SBP in 2009. However, only 50-60 percent of the total IR is received through these formal sources the remaining come through informal means such as family, friends and illegal means such as Hawala or Hundi<sup>33</sup>.
- **Tax payments:** Provincial governments are creating an enabling infrastructure for digital collection of taxes<sup>34</sup>. Not only would this improve visibility in the collection process, it will also provide a new use case to increase the activity of DTAs. The Punjab government has also initiated a subsidy on submitting tax payments digitally<sup>35</sup>.
- **Account pooling:** Liquidity management solutions used by businesses to effectively manage working capital between transaction and investment accounts. Account pooling across multiple financial institutions can be within the country or cross-border based on regulatory approval.
- **Merchant payments (e-commerce payment method aggregation):** Merchant payments aggregation enables merchants to offer a ubiquitous payment experience to customers irrespective of the bank holding the funds. Such services are offered by NIFT and apps currently enabling merchants to receive e-commerce payments directly.

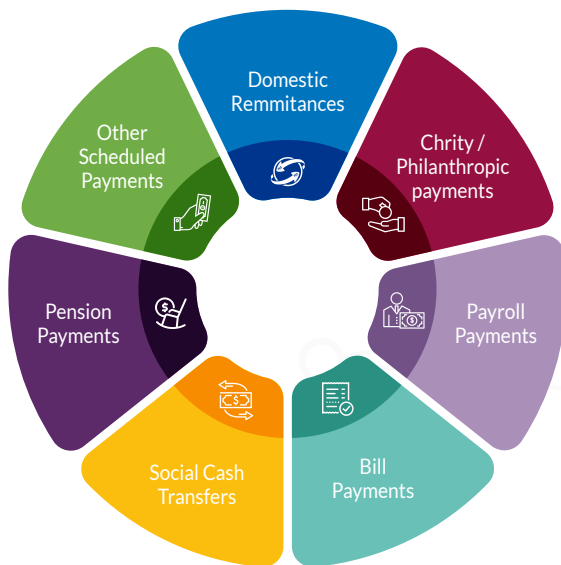
<sup>32</sup> <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT?locations=PK>

<sup>33</sup> <https://www.sbp.org.pk/PS/PDF/NPSS.pdf>

<sup>34</sup> e-Payment Gateway | PITB

<sup>35</sup> <https://pkrevenue.com/highlights-of-punjab-tax-relief-package-sales-tax-exempted-on-insurance-medical-treatment/>

Figure 8: Additional Opportunities in the Fintech space



## Infrastructure

There is considerable opportunity to impact the financial services infrastructure through Fintech innovation and ideas. Some of these are listed below:

- **Data aggregation:** Pakistan is one of the few developing countries that holds a comprehensive database of all its citizens through the National Database and Registration Authority (NADRA). The availability of this data presents a significant opportunity for Fintechs to build on and develop products/services that serve the best interest of customers.
- **Escrow platform:** Trust gaps between individuals and businesses prove to be one of the major impediments to adoption and usage of pre-payments in DFS. The development of third-party trusted platforms routing payments through an escrow platform can serve to overcome this trust barrier. This will require regulatory/legislative enforcement and an arbitration platform for dispute resolution.
- **Credit Scoring:** Data-driven credit profiling for the underserved is an

opportunity area for consumers and enterprises alike. Through using alternative data sources (such as tax payments, mobile phone payments, subscriptions etc), Fintechs can develop credit scoring models for previously unbanked individuals and MSMEs. This enhances access to easy and affordable credit. Credit scoring models have definitive impact on economic growth and are considered one of the key elements in accelerating inclusion of MSMEs globally<sup>36</sup>.

- **Collateral registry:** A digital movable collateral registry has recently been institutionalised by SECP<sup>37</sup>. It has the opportunity to impact the MSME finance challenge. In the first phase of this process, a digital Secured Transactions Registry (STR), governed by The Financial Institutions (Secured Transactions) Act, 2016 has been launched. The STR is an electronic database in which financial institutions can record charges or security interests created by unincorporated entities or individuals on their movable assets, such as receivables, intellectual property, inventory, agricultural produce, petroleum or minerals, motor vehicles, etc. Fintechs, through the STR, can act as middlemen/aggregators that can record security interests of unincorporated entities on their movable assets and lend required amounts to the respective entities accordingly.
- **Warehouse receipt financing:** Access to credit for farmers remains a key challenge in scaling agricultural outputs and businesses. To combat this challenge, the SBP introduced a framework for warehouse receipt (WHR) financing in 2019<sup>38</sup>. The importance and the resultant implementation of WHR financing has also been recognized in the NFIS. Fintechs can play a key role in developing technologies around WHR mechanisms as this remains a complex problem given conventional practices in Pakistan's agricultural sector.

<sup>36</sup> <https://www.centerforfinancialinclusion.org/how-alternative-credit-scoring-can-work-for-the-unbanked-and-the-bottom-line>

<sup>37</sup> <https://str.secp.gov.pk>

<sup>38</sup> <https://dnb.sbp.org.pk/press/2019/Pr-31-Oct-19.pdf>

## Savings and investments

This is an area that has remained underdeveloped, with less than 8.4%<sup>39</sup> of Pakistani citizens saving through formal means. While Fintechs are actively entering this space, there are key opportunities for Fintechs to capitalize in the following areas:

- **Crowdfunding:** Crowdfunding has evolved as an alternative regime for accessing finance from the informal sector. Supporting the development of a crowdfunding platform would enable new investors to reach the market and encourage new opportunities for wealth creation. Crowdcube is a (UK) based Fintech that specialises in crowdfunding<sup>40</sup>.
- **Access to Mutual Funds/Stock Exchange for Individuals:** The digital infrastructure needed to target smaller investments in mutual funds and/or the stock exchange will provide the much required impetus for small-value investors to participate in the capital markets. The CDC recently enabled digital account opening for individuals, which may create a significant space for Fintechs to intervene<sup>41</sup>.
- **ROSCAs:** ROSCAs/savings committees are a common savings scheme, utilised by a large percentage of adult population in the informal economy (there are no accurate estimates for the number of individuals involved in savings through ROSCAs). Digitising the ROSCA mechanism, and enabling graduation towards formal investment platforms is a key area for Fintechs to capture. Oraan PTE LTD, a Fintech based in Karachi, is offering innovative solutions around ROSCA's, and supporting financial literacy initiatives too.

## Insurance

Aligned with global interest in the insurance sector by Fintechs, Pakistan has also recently

seen Fintech involvement in this space. Comparisons amongst emerging markets show that the insurance sector penetration in Pakistan is much below average (around 1 percent, just above Bangladesh and Nigeria)<sup>42</sup>. The nascency of the insurance sector may be due to numerous impediments in processes and the general lack of innovation. While some interesting work is being done within the insurance sector by the likes of Tez financial services, there remains considerable opportunity for other Fintechs to intervene.

Globally, Fintechs are disrupting the long-standing pain points of the insurance industry and providing customers with an intelligent user experience. They are increasingly providing innovative products that serve customers better (such as microinsurance, usage-based insurance etc), are changing experiences around on-boarding and claim processing, and are using data and artificial intelligence (AI) to compete better<sup>43</sup>.

## Lending

**SME finance:** SME lending is currently based on a limited range of products. There are around 178,000 formal SME borrowers from a total, albeit conservative, estimate of 3.2 million SMEs. Similarly, SME financing as a percentage of private sector credit remains at 7.2 percent in Pakistan.<sup>44</sup> This represents a significant market gap which conventional financial institutions have not been able to capture. India has seen a significant influx of Fintechs focusing on narrowing the credit gap for SMEs<sup>45</sup>.

**Micro Loans:** The availability of information and the ability to utilise the information in novel ways, has allowed the development of models which are increasingly enabling Fintechs to cater to new market segments. While some Fintechs in Pakistan are working on Micro Loans, psychometrics, 'big data', and digital footprints are already being used in innovative financial services in a number of countries, and can potentially be used in Pakistan as well.

<sup>39</sup> <https://dnb.sbp.org.pk/press/2019/Pr-31-Oct-19.pdf>

<sup>40</sup> <https://www.ceicdata.com/en/indicator/pakistan/gross-savings-rate>

<sup>41</sup> <https://www.crowdcube.com/>

<sup>42</sup> <https://cdcpakistan.com/wp-content/uploads/2019/03/Digital-Account-Opening-Solution-%E2%80%933-Guidelines.pdf>

<sup>43</sup> [https://www.swissre.com/dam/jcr:4a1688f7-13e9-4b79-b5ba-917a00d2ea30/sigma4\\_2020\\_extra\\_Complete.pdf](https://www.swissre.com/dam/jcr:4a1688f7-13e9-4b79-b5ba-917a00d2ea30/sigma4_2020_extra_Complete.pdf)

<sup>44</sup> <https://www2.deloitte.com/global/en/pages/financial-services/articles/fintech-revolution-in-insurance.html>

<sup>45</sup> <https://www.sbp.org.pk/sme/PDF/DFG/2020/Dec.pdf>

## Prevailing Challenges in Fintech Innovation:

### Non-Targeting of unserved market:

Currently, even with regulatory support, innovation capital available, relatively good infrastructure and a youthful population, start-ups are not geared towards solving the financial inclusion challenge. Out of hundreds of start-ups founded over the past five years, only a handful are targeting innovation in financial services i.e. are Fintechs. Of these limited Fintechs, a minimum is targeting the underserved population.

This may be due to the reason that innovation efforts till date have been directed towards improving the 'delivery' of existing financial products, instead of new product development that caters to the underserved segments of the population. However, despite the focus on delivery of existing financial products, user experience is not usually at the heart of product development. As a result, many low-tech savvy individuals are not able to fully benefit from the services provided.

**Financial inclusion dynamics:** Only 21 percent of Pakistan's adult population is included in the formal financial sector<sup>46</sup>. While this serves as an opportunity for Fintechs to capture a large un-banked population, it also serves as a limitation of catering to less than a quarter of the adult population of the country. The financially included population is also assumed to be concentrated in urban centres of the country, where mobile phone ownership and prevalence of telecommunication densities is high. Geographically dislocated areas have limited digital access and low mobile phone ownership as well, which serves as impediments for financial inclusion.

**Over-regulation of market:** Trust in the financial system and customer protection has proven to be more important than innovation for the underserved market. Regulators have thus been taking a cautious approach to financial services innovation. They are prioritising regulations and directives targeting innovation in service delivery, so

that customers build trust in moving money out from under the mattress and into the productive economy.

**Limited supply of talent:** To innovate in such an environment it is very important that an understanding of the existing environment and its functioning is well established before proposing a disruptive change. Unfortunately, the available talent with such capability is limited leading to a sizeable demand/supply gap. The absence of training and lack of an experimentation environment further limits the supply of talent. Professionals who have been trained in the conventional financial ecosystem have limited opportunities to upskill themselves and be introduced to the disruptive concepts in financial services innovation.

**Barrier to partnerships with Financial Institutions:** Adequately capitalised Fintechs with regulatory approval and licenses are considered favourable for bank partnerships. This reduces the risks that banks may face in potentially partnering with Fintechs, which are non-licensed and therefore do not have a regulatory cover by the SBP. At the same time, given that most Fintechs do not have a tested business model, banks are usually reluctant to allocate resources, especially as banks in Pakistan are considered risk averse.

**Financial Literacy:** A considerable trust deficit exists in the adoption and usage of digital technologies. This trust deficit inhibits individuals and businesses from formally adopting digital financial services. As of 2017, 14.3 percent of Pakistan's adult population is considered financially literate<sup>47</sup>. Recognising this as an impediment for financial inclusion, the SBP has also launched several initiatives to enhance financial literacy of local populations, which have impacted over 100,000 individuals<sup>48</sup>. The trust in cash may be a result of inadequate infrastructure of financial services, adverse experiences, or just personal preferences, but it has a considerable impact on the market that Fintechs are able to serve.

<sup>46</sup> <https://www.theindianwire.com/startups/top-10-fintech-startups-sme-lending-72282/>

<sup>47</sup> <https://globalfindex.worldbank.org/>

<sup>48</sup> [http://finclusion.org/data\\_finder/](http://finclusion.org/data_finder/)



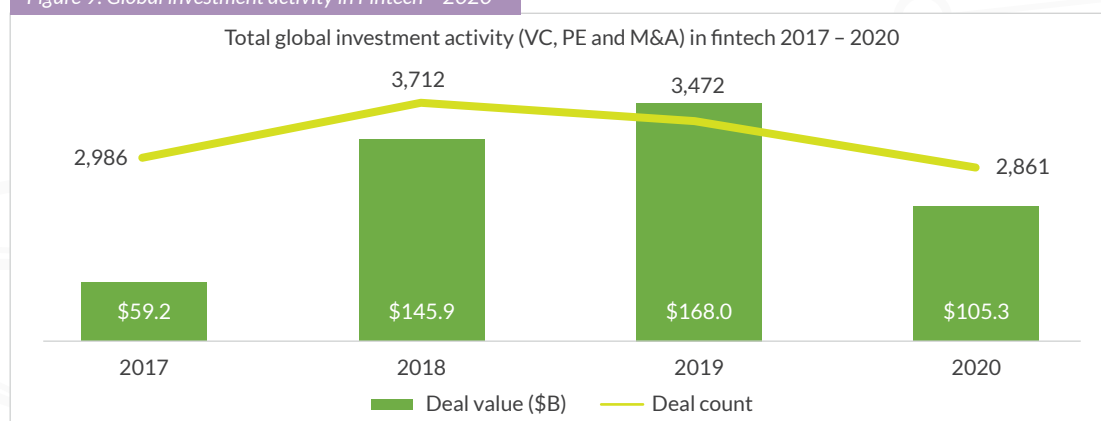


## INVESTMENT LANDSCAPE

Global investments in Fintechs in 2020 were recorded at USD 105.3 billion, with 2861 deals. While this shows a decline in investment from 2019, despite the surge in recognition and importance of Fintechs during the pandemic, it was nonetheless

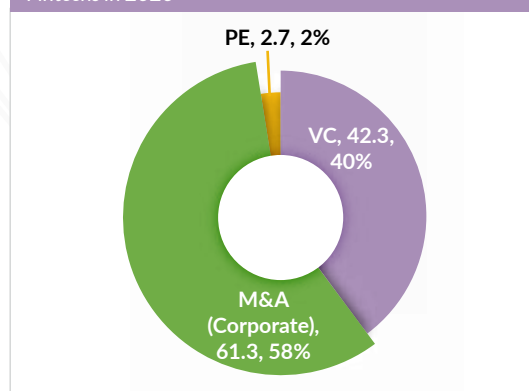
higher than the first half of 2020. The decrease is primarily attributed to a drop in merger and acquisition - corporate (M&A) deals in 2020 compared to 2019, which is likely to rise again in 2021<sup>49</sup>. See figure 9.

Figure 9: Global investment activity in Fintech – 2020<sup>50</sup>



Of the total investment in Fintechs in 2020, corporate investments accounted for 61.3 percent whereas investments by VCs made up 40 percent of the total share. See Figure 10<sup>51</sup>.

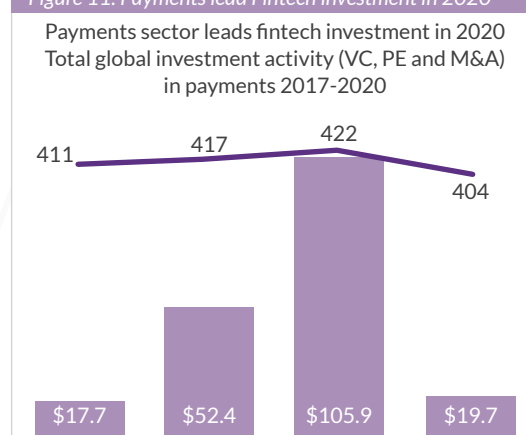
Figure 10: Comparison of VC, M&A and PE investments in Fintechs in 2020<sup>52</sup>



Payments has been at the forefront of Fintech innovation exacerbated by the effects of the

pandemic. Rapid digital adoption and focus on alternative payment methods (to avoid cash primarily and a heavy reliance on e-commerce), the payments sector saw more than 400 deals worth USD 19.7 billion. (Figure 11).

Figure 11: Payments lead Fintech investment in 2020<sup>53</sup>



<sup>49</sup> <https://nflpy.pk/>

<sup>50</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

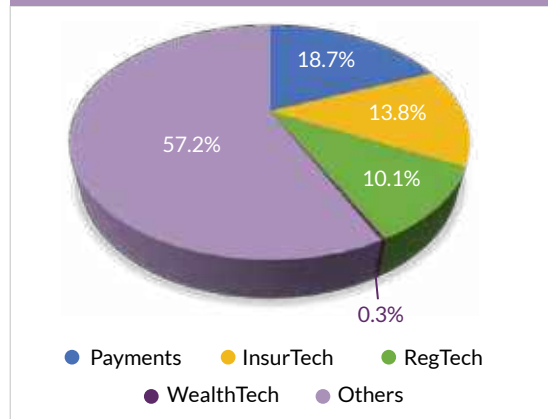
<sup>51</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

<sup>52</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

<sup>53</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

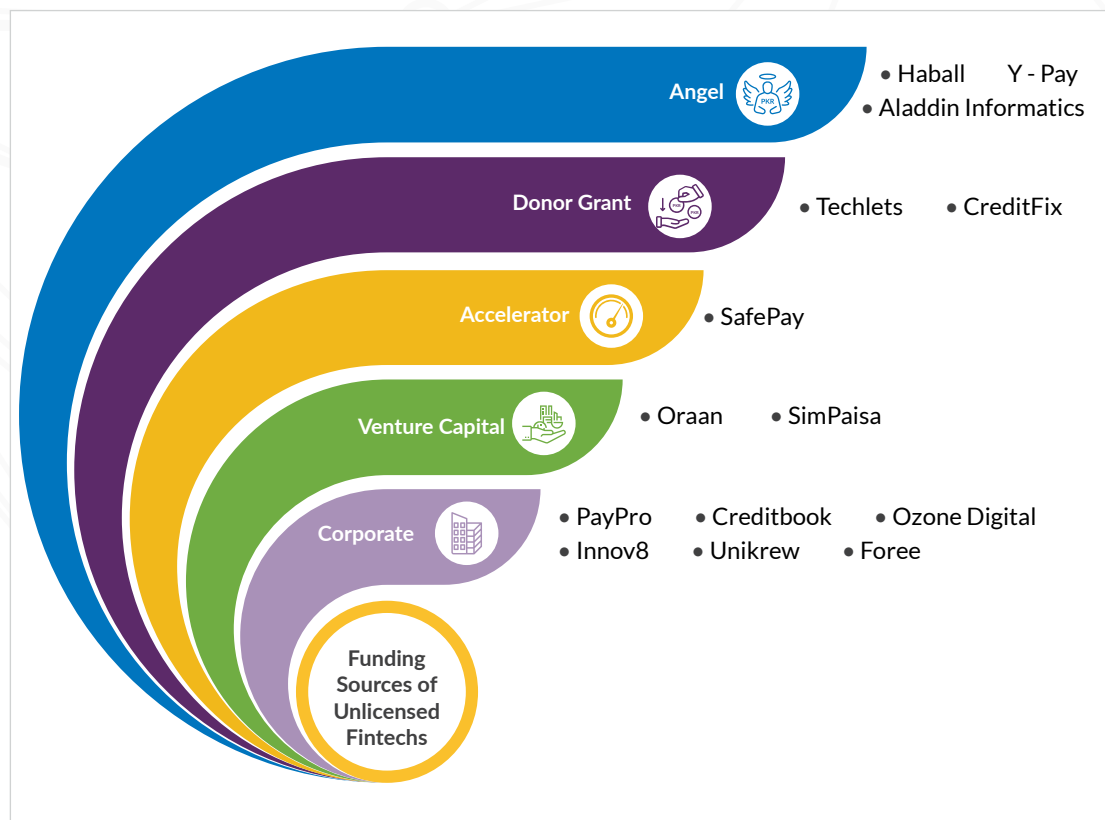
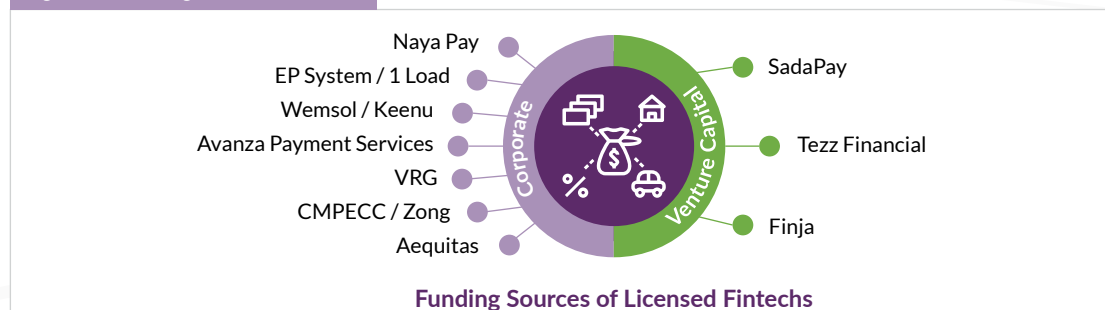
InsurTech, RegTech and WealthTech followed with deals valuing \$14.5 billion, \$10.6 billion, \$0.3 billion respectively. Figure 12.

Figure 12: Percentage of Investments in different segments - 2020<sup>54</sup>



While there is little data available for Fintech investments in Pakistan, we found that typical angel and venture capital investors have been cautious with Fintech investments. Resultantly, in line with global trends, corporate houses are increasingly realizing this opportunity<sup>57</sup>. Large corporate houses are making direct investments in Fintech start-ups or using their venture capital arms to fund the same. An analysis of Fintech investment over the past 5 years is provided in Figure 13.

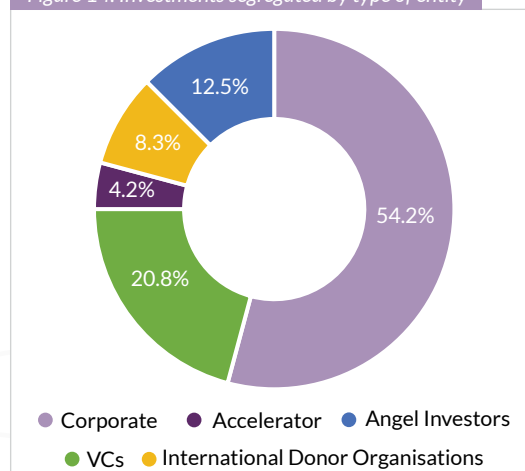
Figure 13: Funding Sources of Fintechs



<sup>54</sup> <https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/02/pulse-of-fintech-h2-2020.pdf>

Figure 14 segregates the above funding sources into different entities. We find that of the total investments in 24 Fintechs, 54.2 percent were undertaken by corporate entities. This was followed by VCs at 21 percent and by Angel investors at 12.5 percent. While this diagram may not be a representation of the complete industry, the share of the different types of investors in Fintech investments may more or less be the same.

Figure 14: Investments segregated by type of entity





## REGULATORY ENVIRONMENT

Conducive regulation is key in enhancing financial inclusion in any country. While Pakistan's regulators are considered to be progressive, especially in light of recent positive developments, there remain gaps in the regulatory environment which hinder Fintech innovation and scale. The Global Microscope<sup>55</sup> is an indicator that assesses the enabling environment for financial inclusion across five categories and 55 countries. Between 2016 and 2020, Pakistan slid from rank 5 to rank 21. While Pakistan's score on financial inclusion has increased by 7 points since 2018, its scores on products and outlets, and infrastructure remain comparatively lower than peer countries such as India and the Philippines.

In 2016, Pakistan's branchless banking network was at its optimum, where number of accounts increased by 16% in one quarter, primarily due to widespread adoption of m-wallets. The key to success is a coordinated effort on the part of the institutions involved and the development of regulations that support market development holistically. This indicates that, even with swift regulatory interventions, Pakistan is falling behind the speed at which comparative changes are brought about in other countries.

The SBP, the SECP, PTA and NADRA are the key regulators involved in establishing the rules of business for the national financial inclusion strategy set up by the government<sup>56</sup>.

### SBP

Given that Pakistan's DFS ecosystem is a bank-led mode, the SBP is the primary regulator of the ecosystem. Through the

years, SBP has led various initiatives, in the form of regulations and licencing to support the DFS ecosystem of the country. More recently, the SBP has been increasingly active in enabling DFS, such as through waiving charges on IBFT and more importantly through the launch of the RAAST programme.

### Branchless Banking Regulations

**Customers:** The branchless banking regulations were first issued by the SBP in March 2008. The regulations were based on a bank-led model that introduced the new branchless banking players and the development of an agent network for the delivery of financial services to the underserved. Following rapid uptake, the regulations were revised in 2011 and again in 2016<sup>57</sup>. Through its policy interventions, SBP has been attempting to ensure a shift from agent assisted transactions to self-service branchless banking transactions conducted by customers themselves. A customer transition to using digital accounts to pay retail merchants for everyday services would bring a paradigm shift in digitising the eco-system. It also requires the merchant to be equipped with channels and devices to accept payments. An open loop system where many-to-many relationships exist between customer and merchants is the desired end state which would create an enabler for financial inclusion.

Branchless banking accounts are the building blocks of the acceptance infrastructure of digital transactions in the country. SBP has categorised branchless banking accounts into three levels under a risk-based customer due diligence approach<sup>58</sup>.

<sup>55</sup> The Economist Intelligence Unit

<sup>56</sup> [www.finance.gov.pk/NFIS.pdf](http://www.finance.gov.pk/NFIS.pdf)

<sup>57</sup> Updated Branchless Banking Regulations 2016: [www.sbp.org.pk/bprd/2016/C9-Annx-A.pdf](http://www.sbp.org.pk/bprd/2016/C9-Annx-A.pdf)

<sup>58</sup> Section 4, Branchless Banking Regulations 2016: [www.sbp.org.pk/bprd/2016/C9-Annx-A.pdf](http://www.sbp.org.pk/bprd/2016/C9-Annx-A.pdf)



To facilitate convenient account opening for individual customers, 'Level 0' and 'Level 1' branchless banking accounts have relaxed KYC requirements and can be opened using a BVS, linked to the NADRA database. While the SBP allowed remote account opening for Level 0 accounts recently, BVS is mandatory requirement.

**Agents:** Pakistani businesses have historically been under documented for taxation and other privacy considerations. DFS providers consider the paper-based documentation required by SBP a key bottleneck to agent network expansion. There are hurdles in making the documentation available to merchants to open a Level 2 account. This is a minimum requirement to participate in branchless banking transactions as an agent. Constrained by the overall FATF challenge faced by Pakistan, SBP issued a 'framework for branchless banking agent acquisition and management',<sup>59</sup> outlining minimum requirements for branchless banking agent due diligence and risk management.

SBP further issued a revision to reduce the paperwork required, with regulations on Digital On-boarding of Merchants revised in 2020<sup>60</sup>.

### PSP and EMI Licencing<sup>61</sup>

The Payment Service Provider (PSP) licensing regime has provided the regulatory cover for Fintech platforms enabling payment settlement systems between participating financial service providers. Licensees are given commercial launch approval after a limited pilot, and post SBP compliance review. After establishing the PSP licensing regime, SBP announced the licensing regime for Electronic Money Institutions (EMI)<sup>62</sup>, enabling Fintechs to provide payment services to individuals. However, for Fintechs to initiate lending services, a Non-Bank Financial Company (NBFC) licence is also required from the SECP.

**PSO/PSPs:** The purpose of PSOs/ PSPs is to provide an electronic platform for clearing, processing, routing and switching of electronic transactions. It can make agreements with Banks, MFBs, other PSOs and PSPs, Merchants, e-commerce service providers and any other company for the provision of services mandated to the PSO and PSP under the rules.

*Excerpt taken from SBP website*

**EMIs:** The EMIs are entities that offer innovative, user-friendly and cost effective low value digital payment instruments like wallets, prepaid cards, and contactless payment instruments. e-money has played a crucial role in digitizing different types of payments in various countries. The EMIs in Pakistan are expected to offer interoperable and secure digital payment products and services to end users.

*Excerpt taken from SBP website*

### SECP

While SBP is the regulator of the scheduled banks, SECP is the regulator for the other institutions providing credit: NBFCs and microfinance institutions (MFIs). Recently, SECP instituted an innovation office that has been successful in making some key interventions to which Fintechs have responded favourably. Alongside institutionalising the STR, SECP has launched a regulatory sandbox to provide regulatory cover for business models that lie outside an explicit regulatory framework.

<sup>59</sup> Section 9.1 "Framework for Branchless Banking Agent Acquisition and Management"

<sup>60</sup> Regulations for Digital On-Boarding of Merchants

<sup>61</sup> Rules for Payment System Operators and Payment Service Providers

<sup>62</sup> Regulations for Electronic Money Institutions

The selected companies are inducted as a cohort in a 6-month cycle to test their innovation and provide evidence for the proposed impact.

As a result, SECP assesses success of the Fintech idea and provides approvals accordingly. This initiative has drawn interest from Fintechs in the area of micro-savings, digital insurance, crowdfunding, robo-advisory, and P2P lending platforms.

## PTA

A key opportunity exists for PTA to influence mobile operators to collaborate with the banking sector for supporting financial inclusion initiatives

Two main initiatives expected to be supported by the operators are:

1. The availability of telecoms channels (USSD, SIM Toolkit) for ubiquitous access and interoperability to financial service providers: Of 167 million cellular subscribers in Pakistan, 86 million do not have a 3G/4G connections. For this segment of the population, USSD channels provide a cheap and convenient access channel to financial services.
2. The provision of telecom data to financial service providers (through a credit bureau service) for evaluating the credit performance of customers: historically, mobile operators extend airtime credit to users with a sound history of usage and repayment. Replicating this for financial services holds a significant opportunity. Globally, this data is used in models for alternative credit assessments and have shown success. Provision of this data to Fintechs can enable innovative product development and allow reaching unbanked customers, with no previous records to assess credit behaviour.

## NADRA

NADRA is the national identity registrar in Pakistan and has been registering citizens' biometric identities since the year 2000. Citizen demographic and identity data is captured on a plastic chip card with high-grade security features. To provide a customer with financial or telecoms services, the verification with NADRA's identity verification service (Verisys)<sup>63</sup> is mandatory.

Digital identity is the underlying denominator for access to financial services. The availability of a robust digital identity infrastructure enables providers to identify and on-board customers that comply with AML/CFT laws and KYC standards as per local laws and regulatory requirements. The customer data is provided to the financial service provider or telecom operator in offline, online and batch modes which are priced separately through utilising APIs.

DFS providers argue that such citizen data should be available at near free or at low cost to enable increased adoption and usage. Market players also reported that additional data fields of customer data may be provided by NADRA, as opposed to limited data fields currently being provided. Moreover, NADRA provides data in Urdu, with its English translation, arranged for separately by each provider, which is prone to errors.

Our findings also showed that data, provided in English, can be stored accurately and in real time and can help to increase the confidentiality of data by avoiding use of third parties for translation. While NADRA has reduced the price for m-wallet opening, it may have to be further reduced for Fintechs, enabling them to on board new customer for early product trials without incurring sizeable cost.

<sup>63</sup> [www.nadra.gov.pk/services/financial-service-solutions/](http://www.nadra.gov.pk/services/financial-service-solutions/)



## DIVERSITY AND INCLUSION

Digital Financial Services offer a diverse range of digital channels and models, as well as personalized services and offerings to the market, which can potentially reduce or removing barriers associated with the access, usage and quality of financial service that exist with formal traditional financial systems. DFS, when provided in a responsible way within a robust infrastructure, may contribute to increased economic participation of segments that face financial exclusion such as women, youth, senior citizens, and individuals with disabilities.

### GENDER

Currently, only 7 percent of Pakistan's female population is financially included, with only a 2.2 percent increase from 2014<sup>64</sup>. With an almost 50 percent female population in the country, this both represents a significant gap and an opportunity for market players to capitalize on. The revised NFIS strategy set a target of 20 million transaction accounts for women by 2023. Fintechs, as opposed to conventional financial institutions, are increasingly realizing this opportunity and creating products and services that tap this market gap.

The SBP is cognizant of this gap. This is evidenced by the recent development of a Gender Mainstreaming Policy titled "Banking on Equality: Reducing the Gender Gap in Financial Inclusion" by the regulator. The policy, currently in a draft phase and open for consultation with stakeholders, envisages improved gender diversity, women centric products and services, and a policy forum on gender, in addition to other aspects. The policy proposes some potentially impactful steps to bridge the gender gap in financial inclusion such as designing a Gender

Mainstreaming in Agents Policy –(GMAP) by branchless banking players and specialised departments for women financial services at banking institutions. However, the current numbers reflect a bleak situation. Since 2017, there has been no increase in the financial inclusion of women, retaining the percentage of financially included females at 7 percent. At the same time, the share of mobile money account ownership between men and women is 76 percent to 24 percent<sup>65</sup>.

The financial services ecosystem is yet to realize the market potential for women, despite the encouragement by the regulator. Fintechs, therefore, have a large segment of the population available for disruption.

### SENIOR CITIZENS AND PEOPLE WITH DISABILITIES

The first initiative to target this segment was launched in 2008, digitising pension passbooks through digital wallets. Pension payments were transferred to a bank account or wallet, with proof of life validation required every six months to enable the pension to continue. The inclusion of people with disabilities has primarily been limited to the visually impaired, whereby in 2014 banks were directed to include at least one talking ATM and use braille on ATMs.

There have been one-off or standalone initiatives targeting the underserved segments but no coherent strategy has been put in place targeting financial inclusion. The NFIS also does not mention specific targets or initiatives to cater to this segment of the population.

<sup>64</sup> <https://globalfindex.worldbank.org/>

<sup>65</sup> <https://karandaaz.com.pk/blog/financial-inclusion-increasing-gender-disparity/>





## THE FUTURE

The DFS ecosystem of Pakistan is evolving at a very rapid pace. The recent initiatives by the SBP and the SECP are paving the way for more Fintechs to disrupt the ecosystem and provide innovative solutions. The promise of Fintechs is also being increasingly recognized by financial institutions and the need for providing user centric and inventive products and services to a large unbanked population of the country is being progressively acknowledged. The revised targets of the NFIS can become a major force for change and result in additional support by the regulators.

The future for the Fintech ecosystem in Pakistan holds abundant potential. The launch of the RAAST programme, specifically, will most likely create a considerable market opportunity for Fintechs to capitalize on. A significant shift in adoption of digital financial technologies has also been observed on the demand side as a result of COVID 19. The volume of both mobile banking transactions and internet banking transactions has exponentially risen, by 102 percent and 42 percent respectively.<sup>66</sup> Similarly, smartphone adoption doubled over the last two years, reaching 81 million by the end of 2019<sup>67</sup> (49% of mobile connections).

It is anticipated to reach 70% by 2025<sup>68</sup>. This shows a dramatic shift in consumer preference and a ripe market opportunity for Fintechs to capture. The payments segment is most likely to see enhanced activity in the near future, followed by the infrastructure segment. The lending segment may also witness a rise in interest by Fintechs.

While several challenges prevail, there is likely to be a surge in supply of Fintech experts in Pakistan. This primarily emanates from the rising interest in entrepreneurship, more successful start-ups, and wider investment activity. It is difficult to predict if financial literacy and inclusion levels will rise in the near future, but the trend in adoption of smartphones certainly paints an encouraging picture.

Investments by corporate entities will continue to rise, followed by a surge in investments by VC's and angel investors. Investments by the latter will most likely see an increase due to favourable adjustments established by the SBP (such as modernizing foreign exchange regulations)<sup>69</sup>. Aligned with global trends in investments, the payments segment will absorb a majority of these investments in the near future.

Given the recent focus of the regulator on gender mainstreaming in financial inclusion, financial institutions are likely to respond with adequate rigor. However, the considerable gap that currently prevails in the financial inclusion of women remains an opportunity for Fintechs to capitalize on. Institutional donors and other government agencies are likely to continue supporting economic empowerment of women through financial inclusion and independence and this will result in more grants and technical support in bridging this gap.

<sup>66</sup> <https://portal.karandaaz.com.pk/dataset/internet-banking-transactions-volume/1134>

<sup>67</sup> <https://www.gsma.com/asia-pacific/wp-content/uploads/2020/06/24253-Pakistan-report-updates-LR.pdf>

<sup>68</sup> [https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/06/GSMA\\_MobileEconomy\\_2020\\_AsiaPacific.pdf](https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/06/GSMA_MobileEconomy_2020_AsiaPacific.pdf)

<sup>69</sup> <https://www.sbp.org.pk/press/2021/Pr-10-Feb-21.pdf>

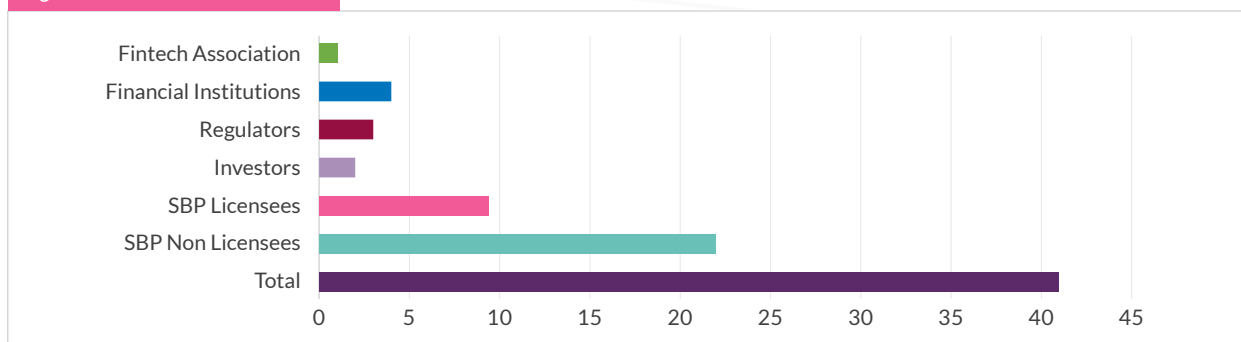




## ANNEXURES

### 9.1 ANNEX 1: STAKEHOLDER CONSULTATIONS

Figure 15: Stakeholder Interviews



The details of these stakeholders are in Figure 16:

Figure 16: Stakeholders Consulted



## About Karandaaz

KARANDAAZ PAKISTAN is a Section 42 company established in August 2014 and focuses on fostering economic growth and creating jobs through financial inclusion of unbanked individuals and unserved enterprises, with a special focus on women and youth. The company has four verticals:

### Karandaaz Capital

Provides wholesale structured credit and equity-linked direct capital investments to micro, small and mid-size enterprises (MSMEs) that demonstrate compelling prospects for sustainable business growth and employment generation in Pakistan.



### Knowledge Management and Communications

Supports the company's core financial inclusion goal by developing and disseminating evidence based insights and solutions.



### Karandaaz Digital

Focuses on expanding the poor's access to digital financial services in Pakistan by working across the ecosystem with all stakeholders.



### Karandaaz Innovation

Manages the Innovation Challenge Fund and Women Entrepreneurship Challenge, providing risk capital and grants to partners with the aim to generate innovative solutions in areas of financial inclusion and entrepreneurship.

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