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# Redefining the FinTech experience: Impact of COVID-19





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## Message from PwC

The FinTech sector finds itself at an inflection point as the world continues to tackle the socioeconomic fallout of the COVID-19 crisis. Despite sincere and strong efforts announced by Governments and international bodies to stem the spread of the disease, there has been a considerable impact on global health and safety, and India is no exception. The contagious nature of the virus has fundamentally altered human interaction and collaboration, leading to a swift and significant reduction in consumer demand, and affecting economies worldwide. At this crucial juncture, FinTech models have an opportunity to create a significant socioeconomic impact and redefine the mechanics of doing business once again.

The FinTech model was developed to bridge the gap in traditional methods of doing business in the financial services (FS) space. FinTechs have used technology and innovation to deliver FS to the underserved and unserved markets, leading to disruptions across the FS industry. There has been significant growth in the FinTech sector in India, driven by substantial unmet consumer demand and rapid digital technology adoption. Strategic moves by the Government and regulators to create technology rails that facilitate such innovation (including targeted initiatives such as the Unified Payments Interface [UPI], GST, TReDS, Account Aggregator framework to name a few) have further facilitated this growth.

The consistent growth of the FinTech sector is reflected in investor sentiments. Prior to the COVID-19 outbreak, the Indian FinTech ecosystem witnessed a positive trend in FinTech funding activity, with USD 2.6 billion invested in FinTechs in 180 rounds of capital raising in 2019.<sup>1</sup> The FinTech sector in India was following a trajectory similar to that of its global counterparts, with a maturing payments subsector, significant disruptions in lending (particularly to new-to-credit segments) and innovations in related sectors of InsurTech, WealthTech and EnablingTech.

However, the global economic downturn due to the COVID-19 crisis has had an adverse impact across sectors in India, and FinTechs have not been immune to this impact. Liquidity crunches have been observed and smaller, early-stage players have found it difficult to continue operations. Social distancing norms, while immensely important to stop the spread of the disease, have reduced consumption, thereby affecting smaller businesses. Once social distancing norms are relaxed and economies are gradually reopened, countries would focus on rebooting economic health, with implications on modes of interaction.

FinTech models hold an advantage over traditional FS models in the new normal. In the short term, there has been an immediate need for digital-led modes of working, as well as contactless sales and service delivery, both of which are key tenets of FinTechs. A number of EnablingTech players have seen a rise in the demand for their offerings that use technology to assist with front, mid and back office work. FinTechs that have followed predominantly digital customer acquisition and service delivery models are at a relatively advantageous position than their traditional counterparts. With a sudden need for last-mile delivery of benefits and relief, FinTechs that are already catering to such underserved segments could be potential distribution channels. While there will be a need for interventions by the Government and regulators to provide relief and support for the FinTech ecosystem, the current challenges could truly lead to an inflection point for the FinTech sector.

This report takes a look at the opportunities for the FinTech sector in the wake of the COVID-19 crisis. We have analysed the sector's position prior to the pandemic, reflected upon the impact of the crisis on the sector and recommended a framework for the way forward, with suggestions for both the industry and the supporting ecosystem of the Government and regulators.

<sup>1</sup> <https://tech.economictimes.indiatimes.com/news/internet/at-2-6-billion-investments-in-fintech-doubled-in-2019/73147816>



**Sudhakar Ramasubramanian**

Chair, FICCI Fintech Committee and Chief Digital Officer, IndusInd Bank

## Message from FICCI

The COVID-19 pandemic has had a significant impact across sectors in India and disrupted business operations. The FinTech sector is no exception and various segments within this sector have been impacted, although the extent of the impact differs. While companies are working round the clock to adjust to the new normal and meet the challenges, there are many opportunities for FinTechs in the current scenario, given the strong need for digital and contactless delivery of financial services.

Many FinTechs are currently working on innovative, interactive and user-friendly technology solutions to help their customers tide over the current crisis. In the payments space, some start-ups are going beyond their core payment gateway business by offering a full suite of cash management services and other banking services to help their small and medium enterprise (SME) customers. Likewise, other FinTechs are leveraging new innovative payment technologies, such as sound waves, to provide contactless payments targeted at customers with feature phones or those in areas with slow/no internet coverage. In the digital lending space, many FinTechs are acquiring customers digitally and using sophisticated underwriting models to disburse loans with significantly low costs of acquisition. Some FinTechs are setting up payments infrastructure to facilitate easy payments and sales for SMEs and micro merchants, as well as provide them with loans based on payments data.

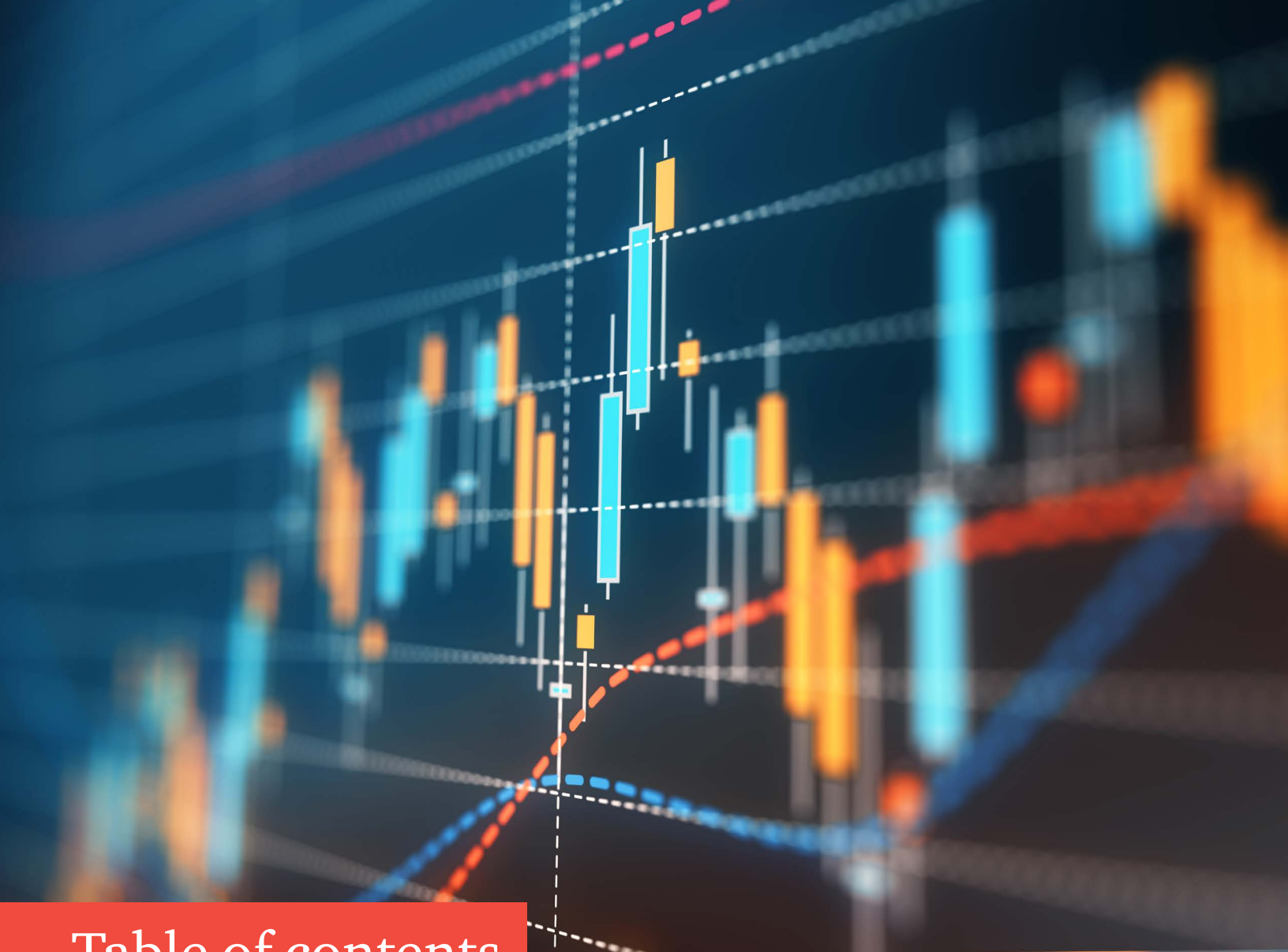
Even as FinTechs try to capitalise on these new opportunities and create some of their own, they require regulatory support. Strategic moves by the Government and the Reserve Bank of India (RBI) to create technology rails that facilitate such innovation (including targeted initiatives such as UPI, GST, TReDS, Account Aggregator framework) have proved to be beneficial for FinTechs. The recent regulatory initiatives taken up by the Government have made paperless and presence-less finance a reality in India. Introduction of the video-based customer identification process (V-CIP) and allowing digitally signed

valid documents sourced through the DigiLocker or an issuing authority for KYC-related purposes are some of the key reforms that have helped in accelerating the next phase of digital financial inclusion. We fully support and appreciate these moves and look forward to some of the simplification that is needed, as highlighted by the FICCI Fintech Committee. In the post-COVID world, there is an immediate need to move towards completely digital, paperless and presence-less end-to-end processes. The need to conduct in-person customer due diligence for all regulated entities should be progressively done away with while ensuring the authenticity of the process. As soon as this process is implemented, we will move towards better customer experience and a greater degree of financial inclusion in the country.

This comprehensive report jointly prepared by FICCI and PwC India encapsulates key areas related to the functioning of the FinTech industry in India. It also sheds light on various aspects of the pre-COVID scenario and the post-COVID forecast for the industry – the changing landscape, workforce and organisational structures, the shift in focus from the global to the domestic market, the role of capital providers and most importantly, supportive and user-friendly policy measures by the Government and regulators that can aid the growth of this sector.

FICCI's Fintech Committee has been working closely with the Government and the regulators by advising them on policy and regulatory changes to support the industry. This detailed report can help us expand our discussions on the subject, and I wish the FICCI team success in this endeavour.

I would like to thank my colleagues from the FICCI Fintech Committee for contributing their valuable insights to this report. I would also like to express my gratitude to the PwC team for putting together this report and being the knowledge partner for this initiative.



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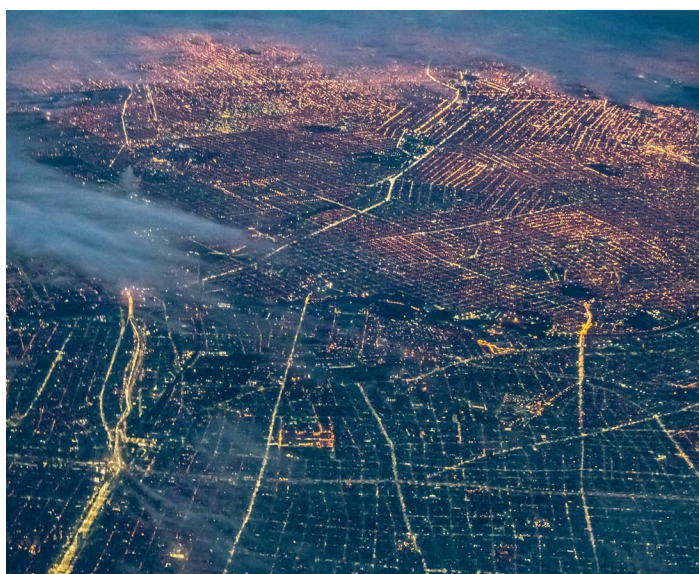


# 1. The FinTech sector prior to the COVID-19 crisis

Financial technology or FinTech has varying definitions based on financial literacy and its adoption in different countries. In India, where multiple issues in accessing financial services are prevalent, FinTech can be defined as follows: Businesses that use advanced technology and innovative business models to conceptualise, create and deliver financial services to underserved and unserved customer segments. Driven by this core objective, FinTechs may disrupt, enable or collaborate with traditional financial institutions (FIs).

Over the years, India has become one of the world's leading countries in FinTech adoption. The FinTech sector has benefited from a plethora of digital touchpoints that individuals use daily, resulting in an increased adoption of FinTech services. A few indicators related to FinTech activity in India are highlighted below.

- a) Despite a slowdown in consumption and decline in FinTech investment trends globally, the Indian FinTech ecosystem has seen an upward trend in funding. In 2019, Indian FinTech start-ups raised USD 2.6 billion in 180 rounds of capital raising.<sup>2</sup> The indicators still show a bullish perception of investors towards the Indian FinTech market.
- b) Digital payments transactions in India are expected to grow at a compound annual growth rate (CAGR) of 20.2% until 2023, reaching a value of USD 135.2 billion from USD 64.8 billion in 2019.<sup>3</sup> India has seen momentous growth of 383% in digital payments from FY18 to FY19 and the volume of digital payments has increased by 58.8% during the same period.<sup>4</sup>
- c) The growing number of mobile subscribers (1.18 billion), internet users (540 million) and mobile internet users (520 million) in India is enabling FinTechs to tap into unserved customers over digital channels.<sup>5</sup>
- d) Credit availed by micro, small and medium enterprises (MSMEs) has increased at a CAGR of 19.3% in recent years.<sup>6</sup>
- e) Currently, assets under management (AUMs) within the robo-advisors segment in India amount to USD 42 million and are expected to increase to USD 145 million at a CAGR of 36.2%.<sup>7</sup>



The increase of FinTech penetration and adoption across multiple sectors has had a positive impact on the Indian economy. The growth in digital transactions has enabled transparent, secure, swift and cost-effective mechanisms, benefiting businesses, consumers and Governments alike. Given the increased traction of FinTech activities in the Indian ecosystem, it is interesting to look at the drivers that have led to the sector's sustained growth this in the Indian context.

<sup>2</sup> <https://tech.economictimes.indiatimes.com/news/internet/at-2-6-billion-investments-in-fintech-doubled-in-2019/73147816>

<sup>3</sup> <https://www.livemint.com/politics/policy/digital-payments-to-more-than-double-to-135-2-bn-by-2023-1560711978627.html>

<sup>4</sup> <https://razorpay.com/blog/the-era-of-rising-fintech-digital-payments-growth/>

<sup>5</sup> [www.cisco.com/c/dam/m/en\\_us/solutions/service-provider/vni-forecast-highlights/pdf/India\\_Device\\_Growth\\_Traffic\\_Profiles.pdf](http://www.cisco.com/c/dam/m/en_us/solutions/service-provider/vni-forecast-highlights/pdf/India_Device_Growth_Traffic_Profiles.pdf)

<sup>6</sup> [www.transunioncibil.com/resources/tucibil/doc/insights/reports/report-msme-pulse-april-2019.pdf](http://www.transunioncibil.com/resources/tucibil/doc/insights/reports/report-msme-pulse-april-2019.pdf)

<sup>7</sup> <https://www.statista.com/outlook/337/119/robo-advisors/india>

## 1.1. Drivers, challenges, potential and growth in the FinTech sector

The key drivers of the Indian FinTech ecosystem can be divided into two primary categories – supply-side and demand-side. Supply-side drivers include Government and regulatory support, capital access, talent availability and technological advancement, while demand-side drivers include unmet needs and rising customer demand on the digital front.

### I. Supply-side drivers

A few key supply-side drivers are discussed below.

- i. **Government and regulatory support:** The Government of India (GoI) and the regulators have played a major role in accelerating the growth of FinTechs in the country. Some of the key initiatives include the Goods and Services Tax (GST) regime, the Jan Dhan Yojana, FinTech-focused initiatives and guidelines issued by the Reserve Bank of India (RBI), the Insurance Regulatory Development Authority of India (IRDAI) and other regulators. The recent video know your customer (KYC) guidelines issued by the RBI is one such favourable step for the growth of FinTechs. The GoI has also taken multiple initiatives which include:
  - a. Creating rails for the sector to grow in the following areas:
    - Digital payments: Unified Payments Interface (UPI), a real-time, instant payment system facilitating inter-bank transactions has been developed by the National Payments Corporation of India (NPCI) and allowed by the RBI to provide services.
    - Digital lending: Initiatives including the formation of peer-to-peer (P2P) lending guidelines and account aggregators have been taken.
  - b. Formalising the FinTech sector by setting up standard operating procedures (SOPs), regulations, compliances and guidelines for monitoring the operation of various industry products and services provided to consumers.
  - c. Promoting innovation, transparency, inclusion and access by initiatives such as the Personal Data Protection Bill, account aggregation, sandbox, skill

development, guidelines on angel tax for start-up investors and other mission mode programmes such as Digital India and Startup India.

- ii. **Technological advancement:** Technological advancement includes different initiatives such as the development of IndiaStack, the world's largest proposed collection of open application programming interfaces (APIs), and availability of low-cost internet. Emerging technologies are the backbone of the entire FinTech ecosystem and are playing a vital role in revolutionising the sector. Advanced analytics and artificial intelligence (AI) are leveraged by cutting-edge FinTechs for process automation, customer engagement, fraud analytics and compliance.

### II. Demand-side drivers

- i. **Rising customer needs on the digital front:** As customers are getting tech-savvy, expectations from FS providers are growing at a much higher rate. FinTechs are coming up with innovative models to cater to growing customer expectations. Increased internet and smartphone penetration has also helped FinTechs serve previously unserved segments. The number of cashless transactions per person has drastically increased to 18 transactions per person in 2018 from 2.2 transactions per person in 2014.<sup>8</sup>
- ii. **Unmet customer needs and market potential:** Access to FS in India, despite the remarkable growth of FinTechs, remains largely limited. Insurance, lending (especially to small businesses and gig economy

8 <https://qz.com/india/1746910/cashless-payments-growing-faster-in-india-than-almost-anywhere-else/>





consumers), personal financial management and capital markets are particularly underpenetrated sectors with significant opportunities for expansion and penetration. Advancement in technologies aids in fulfilling the gap through cost-effective channels of user engagement, risk profiling and client servicing. For instance, the MSME sector has an unfulfilled credit gap of INR 16 lakh crore, which presents a great opportunity to alternative lenders.<sup>9</sup> Similarly, there are significant opportunities for the insurance sector as

non-life insurance penetration in India was at 0.97% in 2019, while life insurance penetration was at 3.69% in 2017.<sup>10</sup> The severely low percentages of penetration indicate the presence of a potential large market.

- iii. **Rising collaboration between incumbents and FinTechs:** A number of FS incumbents and FinTechs are entering into collaborative partnerships rather than being competitive with each other. Innovations led by FinTechs are assisting incumbents to launch products that can digitally reach the last mile.

<sup>9</sup> <https://economictimes.indiatimes.com/small-biz/sme-sector/msmes-indias-growth-engine-face-a-rs-16-lakh-crore-credit-gap-msmeday/articleshow/69968156.cms?from=mdr>

<sup>10</sup> <https://www.statista.com/statistics/655395/life-and-non-life-insurance-penetration-india>

## 1.2. Our point of view on FinTech sub-sectors

FinTechs have been rapidly transforming the financial sector, including digital payments, lending, insurance, wealth management, capital markets, supervision, regulation and underlying EnablingTechs. A few key FinTech sub-sectors are discussed below.

### Payments

Digital payments is the most highly-funded sector in the Indian FinTech ecosystem. In 2019, the digital payments sector alone received a funding of USD 1.9 billion out of a total funding of USD 3.7 billion.<sup>11</sup> The sector has further grown with the development of different Government initiatives.

#### Market opportunity

Digital payments transactions in India are expected to grow at a CAGR of 20.2% to reach USD 135.2 billion in 2023 from USD 64.8 billion in 2019.<sup>12</sup> India has seen a momentous growth of 383% in digital payments from FY18 to FY19 and the volume of digital payments has increased by 58.8% during the same period.<sup>13</sup> The introduction of UPI has been a key factor for the exponential increase in digital payments in India. The monthly transaction value of UPI had touched USD 29 billion in February 2020.<sup>14</sup>

#### Differentiator strategy

Multiple payments start-ups have started to dominate the sector, with each trying to differentiate itself by forming innovative strategies to increase adoption and digital payments usage. Some of the differentiator strategies/ personas adopted by FinTech players are:

a) Infrastructure provider: Start-ups are providing payment technologies such as mobile point of sale (mPoS) or quick response (QR) code to enable offline merchants to accept digital payments. These services are used as a business stream and customer acquisition strategy for other financial services such as lending and personal financial management.

- b) Payment gateway + value add: Some start-ups are going beyond their core payment gateway business by offering a full suite of cash management services and other banking services to help their small and medium enterprise (SME) customers.
- c) FS wrapped around non-FS business offering: Start-ups are creating value for their end customers by offering non-FS services and bundling financing offerings at the point of consumption (such as e-commerce and bank balance check).
- d) Innovative payment devices: Start-ups are leveraging new innovative payment technologies such as sound waves to provide contactless payments services for customers with legacy phones or in areas with slow/no internet coverage.



<sup>11</sup> <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/payments-business-leads-fintech-deals-in-india/articleshow/74467955.cms?from=mdr>

<sup>12</sup> <https://www.livemint.com/politics/policy/digital-payments-to-more-than-double-to-135-2-bn-by-2023-1560711978627.html>

<sup>13</sup> <https://razorpay.com/blog/the-era-of-rising-fintech-digital-payments-growth/>

<sup>14</sup> Conversion rate of 1 USD = Rs. 76.62 on 21st April 2020 - <https://www.npci.org.in/product-statistics/upi-product-statistics>



## Alternative lending

Lending can be divided into two key subsegments – consumer lending and merchant lending for small and micro businesses. Alternative lenders aim to fulfil the credit needs of the underserved and untapped segment by leveraging data sources and technologies such as AI and machine learning (ML) for profiling and underwriting. Both the consumer and the MSME sectors have significant unfulfilled potential for alternative lenders to tap into. There are approximately 63.4 million MSMEs contributing more than 30% of India's gross domestic product (GDP).<sup>15</sup> Despite the enormous contribution by MSMEs, a large portion of credit demand is not met, resulting in the emergence of shadow bankers. A growing segment of aspirational millennials who work as freelancers and gig economy workers, and are looking to access credit easily for multiple needs, presents lucrative opportunities for alternative lenders.

### I. Retail lending

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The sector has attracted multiple start-ups to engage, profile and underwrite new-to-credit and not-so-creditworthy or sub-prime customers. Investors have also focused on emerging business models such as PoS financing, peer-to-peer (P2P) lending and alternate data assessment, tailored to the needs and characteristics of different customer classes.

#### Market opportunity

According to a joint report by a leading Indian private bank and an Indian analytics company, the retail loan book size of financiers in India is expected to double to USD 1.24 trillion by March 2024. Digital loans are expected to grow to USD 197.3 billion by 2024.<sup>16</sup>

#### Differentiator strategy

With a plethora of digital lenders in the Indian market, some of the differentiating strategy adopted by lending start-ups include:

- a) **Acquiring customers through PoS:** Start-ups are acquiring customers (for loans) by creating PoS-/checkout-based partnerships with many online/offline merchants.
- b) **Acquiring customers through an organisation:** Start-ups are lending to traditionally underserved gig economy/daily wage workers by tying up with organisations that digitise these segments.

- c) **Digital lending marketplace:** Start-ups are deploying technology to offer convenience to customers on personal financial management (PFM), easy-to-compare marketplaces, gold loans from home, etc.
- d) **Direct customer acquisition:** Start-ups are helping consumers to build credit profiles with small-ticket loans through unique mobile-based applications and underwriting.

## II. MSME lending

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In 2019, the Indian MSME segment accounted for 31% of India's GDP and 45% of its exports. 65 million MSMEs employ close to 124 million people across the country.<sup>17</sup>

### Market opportunity

Even though India's MSME sector is the biggest contributor to its GDP, it has a credit gap of USD 380 billion.<sup>18</sup> Roughly 40% of India's MSMEs borrow credit from the informal sector. This presents a large opportunity for FinTech start-ups to formalise lending for MSMEs.<sup>19</sup>

#### Differentiator strategy

Some of the differentiating strategy opted for by emerging lending start-ups to explore MSME financing are highlighted below:

- a) **Tech-driven acquisition and underwriting:** Start-ups are acquiring customers digitally and using data effectively using sophisticated, underwriting models to disburse loans while incurring significantly low costs of acquisition.
- b) **FS wrapped around non-FS business offering:** Start-ups are creating value for their customers by offering non-FS services and bundling financing offerings at the point of consumption (such as a marketplace for raw material procurement, along with financing it).
- c) **Invoice financing:** Start-ups are benefiting from the linking of the Trade Electronic Receivables Discounting System (TReDS) to the GST Network (GSTN) to understand cash flows of MSMEs and offer them invoice financing options.
- d) **PoS-based lending:** Start-ups are setting up payments infrastructure to facilitate easy payments and sales for SMEs and micro merchants, and using such channels to provide them with loans based on payments data.

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15 <https://msme.gov.in/sites/default/files/MSME-AR-2017-18-Eng.pdf>

16 <https://www.theweek.in/news/biz-tech/2019/12/17/retail-lending-in-india-to-double-to-rs-96-lakh-crore-by-fy2024.html>

17 <https://www.financialexpress.com/industry/msme-fin-indias-answer-to-its-problem-of-380-billion-msme-credit-gap-lies-in-these-type-of-lenders-to-step-up/1887426/>

18 <https://www.financialexpress.com/industry/msme-fin-indias-answer-to-its-problem-of-380-billion-msme-credit-gap-lies-in-these-type-of-lenders-to-step-up/1887426/>

19 [https://www.omidyar.com/sites/default/files/file\\_archive/18-11-16\\_Report\\_Credit\\_Disrupted\\_Digital\\_FINAL.pdf](https://www.omidyar.com/sites/default/files/file_archive/18-11-16_Report_Credit_Disrupted_Digital_FINAL.pdf)

## InsurTech

Insurance penetration in India in 2017 was at 3.69%, one of the lowest penetration percentages across the world.<sup>20</sup> With multiple FinTech start-ups coming up with different business models to serve the uninsured segment of the population, the sector has seen good traction over the last few years.

### Market opportunity

The Indian insurance industry is expected to be worth USD 280 billion in 2020 and increase by 12–15% over the next 3–5 years.<sup>21</sup> The industry is witnessing further growth with the increasing participation of private players, product innovation, innovative distribution channels coupled with targeted publicity and promotional campaigns by insurers.

### Differentiator strategy

With considerable space to capture, the following differentiating strategy has been opted by InsurTech start-ups:

- a) **Digital convenience:** New-age insurance companies are leveraging technology to support not only digital purchase of insurance policies but also claims initiation and settlements, offering superior customer experience.
- b) **Niche products:** Start-ups are targeting new customer segments by offering niche insurance products such as insurance for non-critical health conditions, protection for devices and cyber insurance.
- c) **Web aggregators:** Start-ups are employing technology to provide customers with a wide range of best-suited options through marketplaces and simplifying digital purchase.

## WealthTech

WealthTech is categorised as products and services offerings ranging from financial services software, investment platforms, online investing tools and robo-advisors to digital brokerages. WealthTech players leverage advanced technologies such as AI and analytics to transform traditional investment and wealth management services. Account aggregation is expected to play a pivotal, enabling role in personal financial management by aiding data extraction and aggregation (post obtaining consent from a user) for a comprehensive analysis on transactions from multiple sources. Conventionally, the methodical expertise of financial advisors has been a key distinguishing factor for wealth advisors/managers. Accessibility and adoption of technology, identification of investment value chain from sourcing of investments, evaluation of risks, recommendations on automated execution and settlement are being transformed in an efficient and cost-prudent method. The increasing traction of WealthTech in India is visible from FinTechs offering micro investments, personal financial management and access to alternative investments, which were earlier available to a few high-net-worth investors. In 2018, WealthTechs raised USD 122 million.<sup>22</sup> Though the amount raised by WealthTechs was lesser than other FinTech sub-sectors such as payments, lending and insurance, the sub-sector is expected to grow further in coming years.



<sup>20</sup> <https://www.livemint.com/money/personal-finance/insurance-penetration-in-india-at-3-69-one-of-the-lowest-across-the-world-1550491451271.html>

<sup>21</sup> <https://www.ibef.org/industry/insurance-presentation>

<sup>22</sup> <https://thefinancialtechnology.com/wealthtech/wealthtech-in-india/>

## Market opportunity

The Indian wealth management space is highly underpenetrated, paving the way for multiple FinTech start-ups to explore opportunities and carve out a niche by either disrupting a segment of value chain such as advisory or brokerage, or becoming a full-stack digital player. The total market size for robo-advisory in India is predicted to be worth USD 145 million by 2023,<sup>23</sup> thus providing a perspective on the opportunity for FinTech disruption.

## Differentiator strategy

Some of the differentiating strategies used by WealthTech start-ups are highlighted below.

- a) **Digital discount brokers:** Start-ups have created tech-first, low-cost brokerage offerings to empower retail investors and traders with the right tools for investing.
- b) **Digital wealth management platforms:** Start-ups are providing clients with a 360-degree view of their investment portfolios and assisting them with tools and personalised inputs to optimise and invest towards their goals.
- c) **Robo advisory:** Start-ups are offering financial advice for achieving goals with moderate to minimal human interaction.
- d) **Thematic investing:** Start-ups are enabling retail investors with sophisticated tools that allow them to create tailored baskets of stocks reflecting their strategy and views on the market.
- e) **FS wrapped around non-FS business offering:** Start-ups are creating value for their end customers by offering non-FS services and bundling WealthTech offerings such as intuitive tax filing services, along with inputs on optimising investments for tax saving.

## EnablingTech

EnablingTech firms are businesses that provide technology-based solutions to both FinTechs and traditional FIs to aid the creation, enablement and delivery of innovative financial products and services.

Enabling technologies such as AI, ML, big data and cloud computing are some of the underpinning technologies transforming operations, products and services of banks, FIs and FinTechs. Some of the EnablingTech use cases for FinTech start-ups are discussed below.

- a) **Agent productivity:** EnablingTechs work towards seamless distribution of financial products and services to targeted prospects, supporting agents and banking correspondents by engaging and servicing customers based on parameters such as unique preferences, risks and prospect conversion probability.
- b) **E-KYC, fraud and compliance:** Technologies such as biometrics, AI and video analytics are helping banks and FinTechs to create advanced solutions for digital onboarding, securing transactions and mitigating fraud and anti-money laundering (AML)/combating the financing of terrorism (CFT) risks.
- c) **Account aggregation:** This technique involves extraction, aggregation and analysis of information from multiple accounts, such as loan/credit accounts, savings and current accounts, credit cards and investment accounts, Government repositories such as public provident fund (PPF) and income tax return data; and supplementary business or consumer accounts such as those of e-commerce, food or mobility aggregators, in a single platform. Data collection, collation and sharing are enabled through open API connections. Data from various financial information providers can be pivotal for financial inclusion and to build better products and services for users, such as credit scoring, underwriting and personal financial management. Moving beyond the traditional, assets-based approach of credit rating agencies, account aggregation incorporates cash flow based inputs such as income from various sources, expenses, invoices, receipts and tax returns.
- d) **Customer acquisition and service:** Chatbots and robo-advisory services are also a part of EnablingTech solutions. They can be partially or fully automated and used for attracting new customers and retaining existing ones. They provide low-cost, efficient and time-bound services in domains such as digital wealth management and financial marketplaces.

23 <https://www.pwc.in/assets/pdfs/consulting/financial-services/>



## 2. The impact of COVID-19 on the Indian FinTech sector

### 2.1. Socioeconomic impact on the global economy

The World Health Organization (WHO) declared the COVID-19 outbreak a pandemic on 11 March 2020. The declaration resulted in Governments worldwide restricting the movement of people. These measures brought mobility, trade, manufacturing, supply chain and distribution channels to a halt, impacting financial markets, businesses and consumer demand. While countries are primarily concerned about the health and safety of their citizens, the restrictions/lockdowns have had an adverse effect on the global economy.

Governments and central banks worldwide are rolling out large stimulus packages and considering taking further measures related to monetary, fiscal and regulatory relaxations to avert a sharp economic downturn

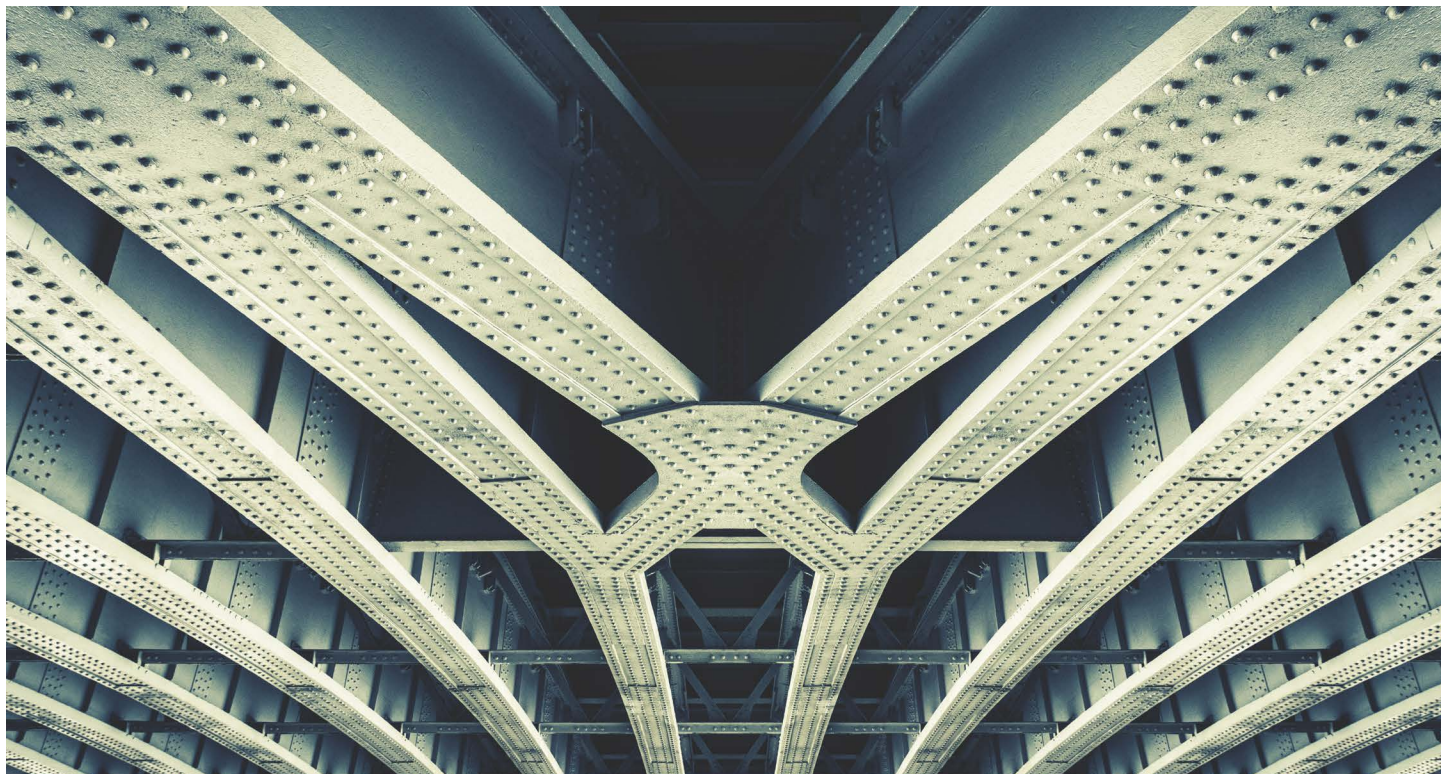
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**The IMF sees GDP per capita shrinking across 170 nations due to the coronavirus pandemic. The IMF noted that even a short-lived outbreak would drag the world into a 3% GDP contraction. A resurgence of COVID-19 in 2021 could leave economies struggling for years to come.**

– The International Monetary Fund

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The extent of global economic contraction due to the COVID-19 crisis could be critical and depends on three aspects – duration and extent of restrictions on mobility, disruption in economic activities, and the actual extent and efficacy of monetary and fiscal responses to the crisis.





## 2.2. Impact on the Indian economy

The impact of contractions in developed economies is expected to have ramifications in developing economies like India as well via channels such as investment furlough, and reduced commodity and services imports. Developing economies dependent on sectors such as agriculture, manufacturing, trade and tourism, and with a workforce that is largely semi-skilled or unskilled and hired on a contractual basis face heightened economic risks. India has a total workforce of approximately 500 million and a staggering 90% of them are employed in the informal sector.<sup>24</sup> A large number of contractual workers and daily wage earners across industries either face employment uncertainties or have been out of work since the countrywide lockdown was imposed in March 2020.<sup>25</sup>

The economic impact of the prevailing restrictions on movement could be greater than expected. Sectors such as agriculture, manufacturing, utility and mining, even though they have been categorised as essential sectors and are functioning to some extent even during the lockdown, may be significantly impacted by business

interruptions such as shortage of workforce, supply chain disruptions and higher working capital needs.

The International Monetary Fund (IMF) has projected India's GDP growth in the current fiscal year (FY20-21) at 1.9%,<sup>26</sup> but several other agencies have predicted even lower GDP growth rates.

Post the lockdown, the pace of economic recovery will depend on participation of and support from both the Government and the private sector. Economic intervention from the Government is expected to focus on providing fiscal support, such as making more cash available in the hands of the consumer to boost consumer spending and aggregate demand. But such measures are expected to have a significant impact on the economy as the Government had projected a budget deficit of 3.5%<sup>27</sup> of the GDP for FY20-21, which is now estimated to reach as high as 6.2%, with a possible long-term impact on factors such as crowding out of private investments, controlled interest rates and currency rates, thereby impacting net exports and effects on inflation.

## 2.3. Impact on consumer behaviour – demand and supply trends

Loss or reduction of income could affect consumption and expenditure patterns worldwide.<sup>28</sup> Businesses could be affected by absence or reduction of customers and lack of fresh capital, propelling them to dip into their cash reserves for sustenance. Small- and medium-sized businesses, especially in the high-volumes and low-margins sectors such as food and travel could be the ones to be impacted more than others.

As businesses incur losses, unemployment could upsurge considerably, resulting in an initial supply-side shock at the

beginning of the lockdown that transitions into a broader demand-side shock for the economy. Low-income workers are more likely to be affected due to underpaid and sporadic wages. Consumers are also expected to lower consumption and spending due to apprehensions about reduced incomes.<sup>29</sup>

Governments should focus on nurturing the demand side of the economy and consumer confidence in markets to prevent an economic downturn.

24 <https://economictimes.indiatimes.com/news/economy/indicators/national-database-of-workers-in-informal-sector-in-the-works/articleshow/73394732.cms?from=mdr>

25 <https://www.livemint.com/news/india/136-million-jobs-at-risk-in-post-corona-india-11585584169192.html>

26 <https://www.thehindubusinessline.com/economy/imf-cuts-india-gdp-growth-to-19-projects-sharp-contraction-in-global-economy/article31340272.ece#>

27 <https://economictimes.indiatimes.com/news/economy/policy/virus-crisis-is-a-chance-for-india-to-finally-reform-its-economy/articleshow/75059953.cms?from=mdr>



28 <https://www.nielsen.com/wp-content/uploads/sites/3/2020/03/Impact-of-COVID-19-on-Consumer-Behavior-Global.pdf>





29 <https://www.nielsen.com/wp-content/uploads/sites/3/2020/03/Impact-of-COVID-19-on-Consumer-Behavior-Global.pdf>

## 2.4. Impact of COVID-19 on FinTech sectors

FinTechs have become essential in the banking and financial services ecosystem and have made considerable progress in the last decade in terms of product and service offerings, business traction and attracting capital. But with the unfolding of the COVID-19 crisis and the subsequent economic impact, the foreseeable damage to the FinTech ecosystem is expected to be conspicuous and significant.

FinTechs that are securely capitalised and have recently raised capital will have an edge over their competitors, and early-stage FinTechs might endure more hardships as funding becomes sparse and the struggle for cash amplifies. The possible impact of COVID-19 on various FinTech sectors is analysed below.

FinTech segment	Headwinds	Tailwinds	Short-to-medium-term impact
Payments	<ul style="list-style-type: none"> <li>PoS transactions down manifold.</li> <li>International and domestic remittance are at lowest levels.</li> <li>EMI collections for non-banking financial companies (NBFCs) come down.</li> <li>Physical delivery of PoS machines are affected.</li> <li>Payments affected for e-commerce, travel and hospitality sectors.</li> </ul>	<ul style="list-style-type: none"> <li>Rise in digital payments for grocery shopping, recharges, bill payments, utility payments, etc.</li> <li>Rise in digital payments in Tier 3 and 4 cities.</li> <li>Rise in digital transfers for P2P payments.</li> </ul>	
Alternative lending	<ul style="list-style-type: none"> <li>Putting discretionary expenses on hold and negative employment sentiment result in demand shock.</li> <li>There could be a big dip in new disbursements.</li> <li>Physical collections may decrease significantly during the crisis.</li> <li>Unsecured retail lending and SME lending default become causes of concern for FIs.</li> <li>Banks and NBFCs tighten their purses for co-lending.</li> </ul>	<ul style="list-style-type: none"> <li>Bailout packages and EMI moratorium to help organisations.</li> <li>Lending demand increases from sunrise sectors like EdTech, digital productivity and pharmaceuticals.</li> <li>Well-capitalised FinTechs look to expand to lending with new product launches and M&amp;As.</li> </ul>	

FinTech segment	Headwinds	Tailwinds	Short-to-medium-term impact
WealthTech	<ul style="list-style-type: none"> <li>• All asset classes see sell-offs and high volatility.</li> <li>• Pre-mature redemption/halt of mutual funds, exchange-traded funds and systematic investment plans.</li> <li>• Market contraction for IPO, M&amp;A and foreign investment.</li> <li>• Negative sentiment in commodity and currency markets.</li> <li>• Forecasts and models of robo-advisors put to test.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant rise in new account opening by investors.</li> <li>• Return of dormant customers for long-term wealth creation.</li> <li>• Digital KYC regulations adopted to onboard customers.</li> <li>• Improved acceptance and adoption of digital channels by advisors and customers.</li> </ul>	
InsurTech	<ul style="list-style-type: none"> <li>• Increase in claim costs by individuals and enterprises.</li> <li>• Government advisories expedite hospital claims.</li> <li>• Travel and vehicle insurance demand reduces significantly.</li> <li>• Industry exposed to mis-selling and cybersecurity threats.</li> <li>• Physical visits for claim processing negatively impacted.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a rise in health insurance awareness and purchase.</li> <li>• A favourable change in customer behaviour towards health and life insurance is noticed.</li> <li>• Well-capitalised FinTechs look to expand to insurance.</li> </ul>	
Neobanks	<ul style="list-style-type: none"> <li>• Onboarding of new clients is paused or reduced heavily.</li> <li>• Merchants and SMEs are busy with their own issues, resulting in demand shock.</li> <li>• In uncertain times, deposits are routed to traditional banks.</li> </ul>	<ul style="list-style-type: none"> <li>• Value-added services for digital bookkeeping, accounting, etc., to go up among SME customers and individuals.</li> <li>• Digital customer engagement modes to get acceptance and adoption among consumers and SMEs.</li> </ul>	
EnablingTech	<ul style="list-style-type: none"> <li>• Decrease in overall IT budgets of FIs.</li> <li>• Focus on cost-optimisation initiatives may result in innovation projects being put on hold.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital tech (e-KYC, chatbots, voicebots, etc.) adoption for customer engagement on the rise.</li> <li>• Digital tech (productivity tools, CRM, cloud, compliance, etc.) adoption for internal employees on the rise.</li> <li>• New demand for ecosystem enablers (APIs, sandbox, etc.) on the rise.</li> </ul>	

Source: PwC analysis of media articles by The Economic Times BFSI and The Ken

## Payments

### Key subsegments

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The payments segment in FinTech comprises various subsegments such as PoS companies, digital wallets, bill payments, remittance firms and payment gateways.

### Impact of COVID-19

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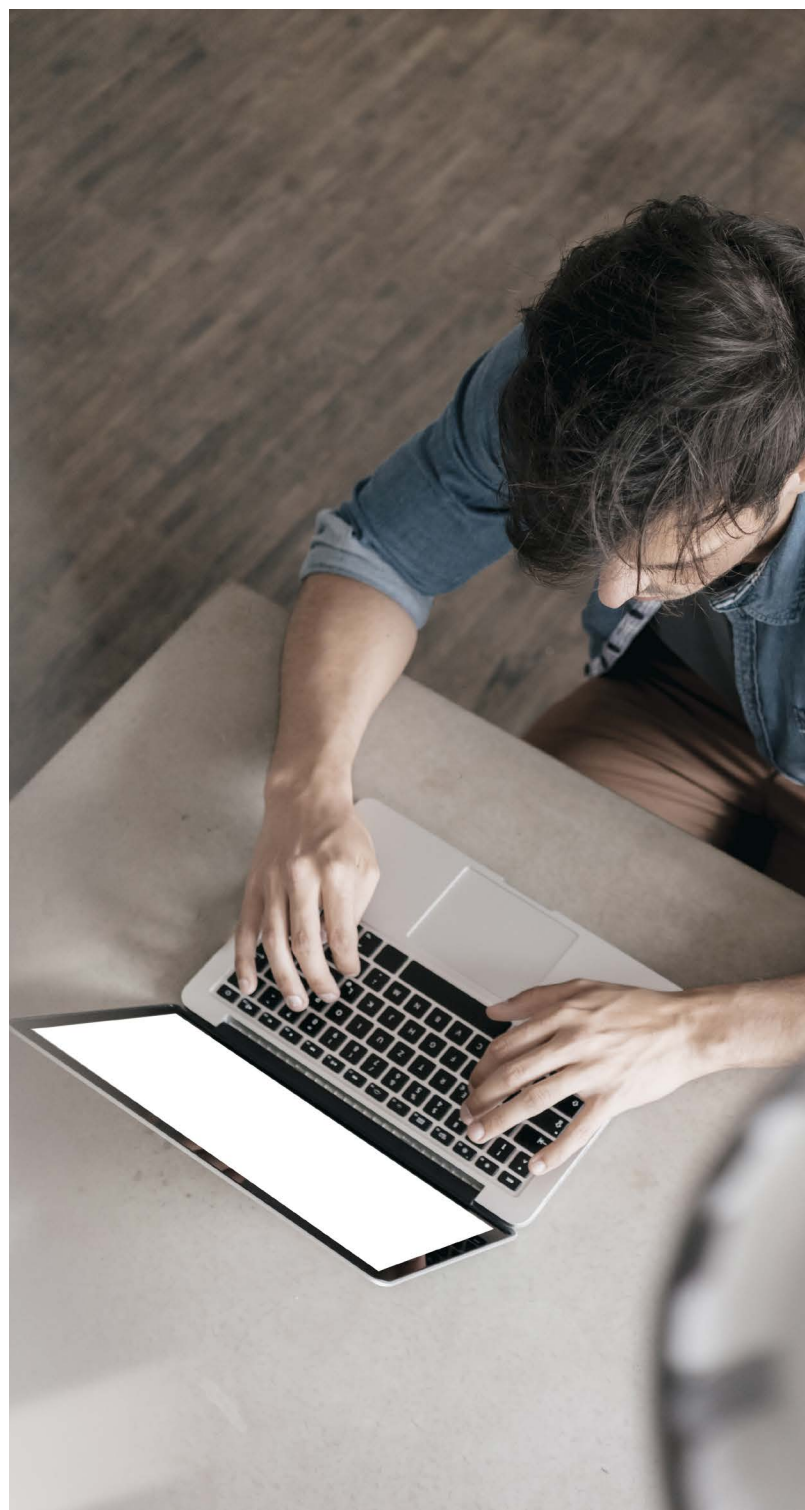
Cash-based transactions are expected to reduce during the COVID-19 crisis as cash is one of the potential carriers of the disease. In such a situation, digital payments may witness an accelerated rate of adoption. Education, online gaming and entertainment, grocery and utility payments are some of the categories in which digital payment volumes have increased.<sup>30</sup> Some start-ups have reported an increase of up to 70% from 3–5% in utility payments via digital modes.<sup>31</sup> The RBI Governor also advocated the use of digital payments.<sup>32</sup> The number of transactions for services such as utility payments and purchase of essential goods is likely to increase multifold. FinTechs are also trying to upsell certain products, such as gold, that had muted traction earlier.<sup>33</sup>

Some FinTech firms are also redesigning their user interfaces (UIs) to be relevant and pushing services such as mobile recharges, essential bills payment, credit card payment and insurance premiums to the foreground.<sup>34</sup>

On the other hand, demand contraction in e-commerce, travel, hospitality, retail, airlines, restaurants, entertainment parks, etc., has been detrimental to the digital payments

sector in India. An online payments solution provider reported that the transactions processed in the travel segment, which account for over 25% of all online spends, have reduced by nearly 35–40%.<sup>35</sup>

Physical PoS transactions on merchant outlets have also been affected. Remittances, both domestic and international, have seen reduction as both migrant and domestic workers are impacted due to lockdowns. A few payment FinTechs have also been affected due to the reduction in equated monthly instalment (EMI) collections for their NBFC partners.



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30 <https://www.financialexpress.com/money/6-digital-payment-modes-to-look-at-during-and-post-covid-19-outbreak/1946141/>

31 <https://prime.economictimes.indiatimes.com/news/75168852/fintech-and-bfsi/clicks-are-down-a-big-shift-in-digital-payments-is-being-written-in-the-confines-of-four-walls>

32 <https://twitter.com/RBI/status/1243522318397132800>

33 <https://www.livemint.com/news/india/digital-payment-firms-tap-the-gold-rush-to-boost-transactions-11588079361125.html>

34 <https://www.livemint.com/news/india/lockdown-online-payment-firms-adopt-strategies-to-assist-payments-11587117888436.html>

35 <https://economictimes.indiatimes.com/tech/internet/digital-payments-slip-30-on-covid-19-curbs/articleshow/74665259.cms>





As per data released by the NPCI on 4 May 2020,<sup>36</sup> there has been a decline in the usage of its platforms UPI, Immediate Payment Service (IMPS), National Electronic Toll Collection (NETC) and Bharat BillPay<sup>37</sup> amidst the ongoing countrywide lockdown. Some of the key trends related to the aforementioned decline are highlighted below.

1. NETC: Usage of NETC saw a significant decline in April 2020, with the transaction count dropping by 87.86%. Toll collections resumed on 20 April 2020 as the Government announced certain relaxations in the second phase of the lockdown. Transactions worth INR 247.58 crore were recorded in ten days after collections resumed, though the amount collected was 40.01% less compared to the previous month.
2. IMPS: April 2020 accounted for 122.47 million IMPS transactions, a 43.51% reduction from March 2020 which accounted for 216.82 million transactions. The value of transactions also declined by 40.01% from INR 2.01 lakh crore in March 2020 to INR 1.21 lakh crore in April 2020.
3. UPI: UPI transactions recorded a fall of 20.2% in April 2020, from 1.25 billion in March 2020 to 0.99 billion in April 2020. The value of transactions fell by 26.79% to INR 1.51 lakh crore in April 2020.
4. Bharat BillPay: Bharat BillPay transactions also declined in April 2020 and witnessed a reduction of 19.38% in transaction counts and a reduction of 29.81% in transaction value. The transaction count fell from 15.84 million to 12.77 million between March and April 2020 and the value of transactions fell to INR 1,371.17 crore in April 2020 from INR 1,953.88 in March 2020.
5. AePS: The Aadhar Enabled Payment System (AePS) showed positive gains in April 2020 with a 126% increase in transaction count and a 44.62% increase in transaction value. In March 2020, the AePS processed 181.81 million transactions worth INR 10,171 crore, which jumped to 411.51 million transactions worth INR 14,708 crore in April 2020. The jump in transactions can be attributed to cash disbursements worth INR 31,325 crore (till April 22) by the Department of Financial Services (DFS) to approximately 33 crore people as a part of the Pradhan Mantri Garib Kalyan Package.<sup>38</sup>

36 <https://bfsi.economictimes.indiatimes.com/news/financial-services/imps-transactions-fall-by-43-51-in-april-as-npci-reports-dismal-counts-for-all-platforms-barring-aeps/75525577>

37 <https://bfsi.economictimes.indiatimes.com/news/financial-services/imps-transactions-fall-by-43-51-in-april-as-npci-reports-dismal-counts-for-all-platforms-barring-aeps/75525577>

38 <https://economictimes.indiatimes.com/news/politics-and-nation/over-33-crore-people-get-rs-31235-crore-assistance-under-pm-garib-kalyan-package/article-show/75321574.cms?from=mdr>

## Alternative lending

### Key subsegments

The alternative lending segment in FinTech comprises various subsegments such as the FinTechs with NBFC licence, distribution platforms, supply chain finance, P2P lending, PoS lending, payday lending and SME lending.

### Impact of COVID-19

FinTech lenders have been building their business around the assumption of expanding income levels of consumers and their growing aspirational needs. These lenders have been targeting the traditionally underserved segments such as blue-collar workers, self-employed workers and students. Sectors such as airlines, food and beverage (F&B) and ride-hailing services employ a bulk of gig economy workers who are facing the risk of reduced incomes and inability to repay loans.<sup>39</sup> For FinTech lenders, the likelihood of latent stress on loan books and the potential difficulty they could face in raising further

debt for future disbursements as banks and NBFCs may get selective in extending credit are causes for concern. Even though most FinTech lenders operate digitally, the lockdown has hindered their client support initiatives and collection efforts.

COVID-19 has caused a potentially long-lasting impact on India's MSME sector. Sudden interruption in supply chains and subdued demand have left MSMEs in an urgent need to manage their cash flows. As global trade declines, MSME exporters could be amongst the worst affected due to the pandemic.

India's economic slowdown had already affected the MSME sector. The COVID-19 crisis is further expected to have an adverse effect on the sector, making lenders cautious of lending to MSMEs. Lending FinTechs have been targeting the traditionally unbanked segment, with last-mile financing as their core strength. Most of these players have focused on creating larger loan books and have lend to MSMEs based on cash flows rather than assets. With the COVID-19 crisis affecting the cash flows of MSMEs, these lenders could see delinquencies across the board.

**As per a leading credit information company, MSME loans worth approximately INR 2.32 lakh crore are at the risk of turning into non-performing assets (NPAs).<sup>40</sup>**

Cash flow is the most critical issue for MSMEs and most of them would require a fresh infusion of working capital to restart operations. Relaxations in accounting of NPAs or Government guarantees for loans could help the sector beat short-term liquidity crisis. Fintech NBFCs facing issues in raising funds got some relief as the RBI announced targeted long-term repo operations (TLTRO), mandating it to be deployed within 30 working days.<sup>41</sup>

FinTech lenders with diversified books and exposure to pharmaceuticals, food/grocery stores, logistics and e-commerce in their portfolio would be in a more stable condition. Distribution platforms could see lower revenue, even though they don't take on as much risk since their margin income depends on their ability to fill the loan request. P2P platforms would become attractive for smaller SMEs though the cost of capital would remain high.

"Lenders are in collection mode for now; moratorium doesn't help in the long term as customers are just pushing back payments, affecting risk signals to the business. It's not clear if customers are pushing back payments due to job losses or health concerns, which affects the real reading of the situation for most lenders. Additionally, most prudent lenders on the unsecured side will take a couple of quarters to achieve historical disbursal levels given the unclarity on which segments to focus on."

– Sanjay Aggarwal, Co-founder, Moneyview

39 <https://economictimes.indiatimes.com/jobs/covid-19-effect-organised-private-sector-planning-layoffs-salary-cut/articleshow>

40 <https://economictimes.indiatimes.com/https://economictimes.indiatimes.com/small-biz/sme-sector/cibil-sees-rs-2-32-lakh-crore-worth-loans-turning-bad-over-next12%20months/articleshow/75301990.cms>

41 <https://www.livemint.com/industry/banking/rbi-provides-liquidity-support-to-nbfc-and-mfi-11587130027236.html>

## WealthTech

### Key subsegments

The WealthTech segment in FinTech comprises various subsegments such as digital discount brokers, robo-advisors, mutual fund distributors, personal finance management apps, micro-investing platforms, foreign investing apps and thematic investment platforms.

### Impact of COVID-19

Digital wealth management platforms have reported an uptick in the number of new accounts opened and volume of transactions.<sup>42</sup> This upsurge could be a result of new investors entering the capital markets to take advantage of significant corrections from the fall of markets; from the previous high and exploring better yields on their capital compared to vanilla banking and savings products.

“The revenue pool has reduced, as overall AUM has reduced and is likely to remain depressed for a few quarters, which would have an impact on market participants in the form of consolidation of smaller players and increased significance of robo advisory. The consumers psychology would also pivot to safer assets and distrust in riskier asset classes with reduced expectations in long-term gains.”

– Atul Singhal, Founder of Scripbox

On the other hand, the crude oil crash of 20 April resulted in the meltdown of the Multi Commodity Exchange (MCX) of India. As per one of the discount broker FinTechs in India, this resulted in an estimated loss of over INR 330 crore USD 43.5 million for Indian brokers.

## InsurTech

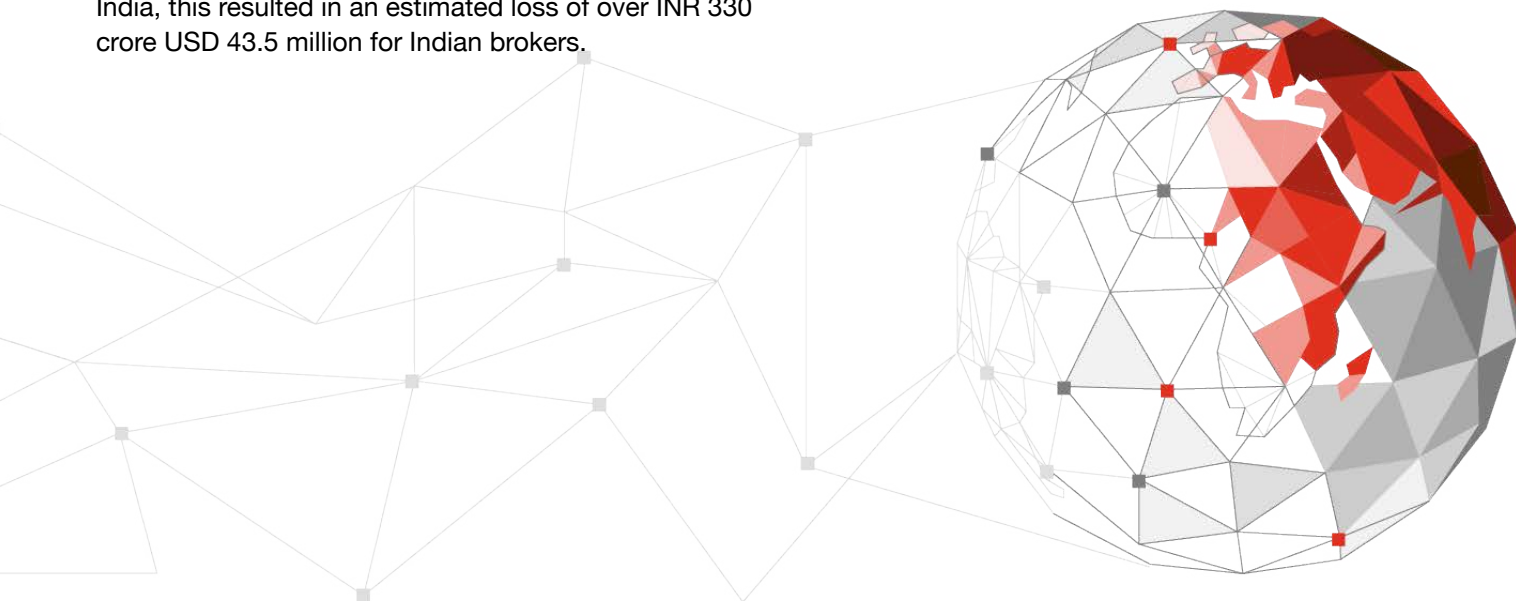
### Key subsegments

The InsurTech segment in FinTech comprises various subsegments such as digital insurance manufacturers, distribution platforms and web aggregators.

### Impact of COVID-19

The insurance sector is in a distinct position as far as the COVID-19 crisis is concerned. The sector, which witnessed a growth of 14% in insurance premiums of non-life insurance segment in FY20 (till February 2020), is facing uncertainties as the demand for insurance products is becoming volatile.<sup>43</sup> While the demand for products such as travel and vehicle insurance is declining, the sector is witnessing an increased demand for health and life insurance policies. Digital insurance players and enablers stand to gain as they offer seamless purchase, disbursement and claim services with minimal interaction and at competitive prices.

As the demand for health insurance is increasing amidst uncertainties, digital insurance providers are witnessing a significant surge in the demand for their products. In another significant development in the insurance segment, an InsurTech platform partnered with the NPCI in May 2020 to offer COVID-19 coverage to over 700 million RuPay card users.<sup>44</sup>



42 <https://www.livemint.com/market/stock-market-news/new-demat-accounts-climb-to-10-year-high-as-retail-investors-pile-into-equities-11579716451485.html>

43 [https://www.business-standard.com/article/economy-policy/non-life-insurers-register-14-premium-collection-growth-in-apr-feb-fy20-120032501761\\_1.html](https://www.business-standard.com/article/economy-policy/non-life-insurers-register-14-premium-collection-growth-in-apr-feb-fy20-120032501761_1.html)

44 <https://bfsi.economictimes.indiatimes.com/news/insurance/covid-19-insurtech-riskcovry-ties-up-with-npci/75667709>

## Neobanks

### Key subsegments

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The neobank segment in FinTech comprises neobanks that serve retail customers and the ones that serve business customers, primarily SMEs.

### Impact of COVID-19

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The short-term impact ranging from 1–3 months can be a temporary fall in order books as discretionary expenses are reduced and ongoing projects are put on hold. Neobanks may face problems in gaining deposits and staying afloat, although offering a wrapper of value-added services such as accounting and expense management on current and savings account (CASA) may be helpful. Large banks showed a monthly gain of 5.6% in deposit increases compared to 1.7% for small banks between 26 February to 18 March 2020.<sup>45</sup>

In the medium term, especially once the lockdown is lifted and video KYC processes are rolled out, digital banks are expected to attract more customers. SMEs, who are seeking a better banking experience from exclusive digital channels and looking to avail a wrapper of services such as accounting, reconciliation and tax compliances in a simple, secure and cost-prudent manner will benefit in the medium term.

Neobanks have been widely adopted by a large section of the global market due to their innovative business models and digital payment channels. As social distancing and work from home/remote working become a way of life, businesses are more prone to get digitised and lead to the growth of digital financial services.

## Emerging tech

### Key subsegments

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The emerging tech segment in FinTech comprises software as a service (SaaS) based technology providers to traditional financial service providers and business-to-consumer (B2C) FinTechs. Some of these technology offerings include digital onboarding, chatbots, customer relationship management (CRM), credit-scoring platforms, loan-origination platforms, API platforms and productivity tools.

## Impact of COVID-19

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FS companies have changed the way they operate in the wake of the COVID-19 crisis. Sectors such as insurance and payments have seen a spike in digital transactions. Enabling technologies are the backbone of these companies and have enabled them to continue operations during the crisis. As per the lockdown rules in India, though financial services have been categorised as essential services and are physically operational, a majority of the operations are continuing digitally and supported by chatbots, digital KYC, etc. FinTech enablers offering cloud-based solutions could experience higher demand from service providers. FinTech enablers augmenting productivity and optimising costs are also expected to be in high demand. AI is expected to be a sought-after technology for products and services such as conversation solutions for call centre chatbots, fraud detection and workflow automation. Digital identity as a service (IDaaS) providers are also expected to be in demand as KYC processes are expected to be digitised further.

### Impact post COVID-19

The post COVID-19 situation may drive more digital initiatives among FS incumbents and they are expected to have requirements on many EnablingTech fronts. FinTech enablers are expected to avail more solutions based on AI, Internet of things (IoT) and software. AI bots that are used for call centres, account opening procedures and loan automation may be in greater demand.

As the demand for online modes of operations are expected to increase, organisations will look to invest in cyber security and regulatory technology. The post COVID-19 market is expected to be lucrative for FinTech enablers as incumbents may invest more in digital initiatives.

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<sup>45</sup> Data from Bloomberg and the Federal Reserve



## 2.5. The impact of COVID-19 on FinTech funding

The COVID-19 pandemic has affected global mobility, trade, tourism and consumer sentiment. Several start-ups are treading cautiously during the slowdown and are planning how to sustain themselves in the wake of potential losses in the next few quarters.

The lack of clarity around the wider macroeconomic environment, sustainability of current business models and uncertainty about future growth has cautioned investors. There has been a visible shift towards fewer and higher-quality investments by asset managers, emanating from their investment mandates and fiduciary obligations to limited partners. In Q1 2020, disclosed venture capital (VC) investments in India plummeted to USD 1.74 billion in value as compared to USD 2.22 billion in Q1 2019, indicating a drop of 22% over a year. The volume of investments also reduced by approximately 35.7% to 126 from 196 in the same period in 2019.<sup>46</sup>

Many venture capitalists are reinforcing the principle of cash is king by conserving cash and planning to raise capital to deploy gradually and strategically in

such an uncertain economic climate. FIs and lending institutions are tackling their own increasing asset risk and deteriorating operating environment.

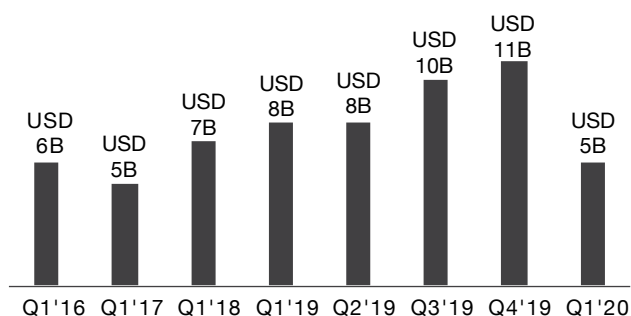
FinTechs have not been immune to the current economic situation either. In the present scenario, equity infusion might become a challenge as private equities (PEs) and venture funds observe further investment prudence and debt funding from banks/FIs might be difficult to come by and expensive. In such a situation, it might become increasingly challenging for early-stage FinTechs to compete with mature and better-capitalised FinTechs.

Globally, FinTech funding and deals have already witnessed a sharp decline in Q1 2020 and the contraction is expected to broaden in Q3 2020 as many investors may put deals on hold to re-evaluate the impact of COVID-19 on the global economy and specific business sectors.<sup>47</sup>

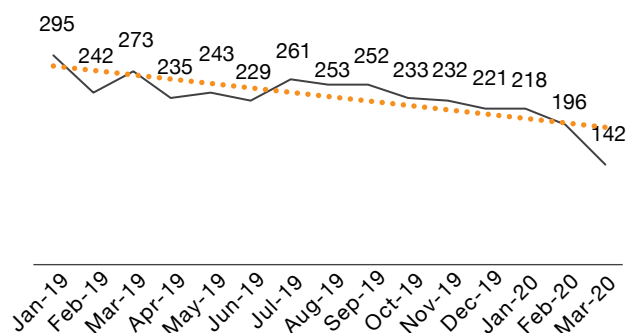
There could be an impact on a number of deals in the coming quarters due to logistical issues such as travelling for due diligence and delay in compliances like getting clearances and tax certificates.

**In Q1 2020, FinTech funding has fallen back to 2017 levels**

Globally disclosed FinTech funding details<sup>48</sup>



**Global FinTech deals between January 2019–March 2020<sup>49</sup>**



Source: CB Insights

<sup>46</sup> Data from Venture Intelligence

<sup>47</sup> <https://www.cbinsights.com/research/coronavirus-fintech-financing-impact/>

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.



Furthermore, India has joined the likes of the US, several European countries and Australia, in reviewing its foreign direct investment (FDI) policy, with a focus on China. This could limit investments for Indian start-ups coming through PEs and VCs. In 2019, Indian start-ups received USD 3.9 billion from Chinese investments, up from about USD 2 billion in 2018. Chinese capital has predominantly been active in sectors such as e-commerce, EdTech and FinTech, investing in 18 of India's 23 unicorns.<sup>50</sup> India-based alternative investment funds attracting capital in the form of co-investment and limited partnerships from Chinese investors may witness regulatory hurdles such as increased timelines for approval of transactions, potentially affecting the raising of capital and its deployment in Indian start-ups.

A few FinTechs engaged in lending to small businesses and consumers might incur losses due to potentially reduced demand over the next few months, stress on their balance sheets and delayed payments of instalments. The economic slowdown and cashflow disruptions of certain FinTechs may also affect the valuations of some FinTechs' potential deal negotiations. During a crisis, investors might look to support portfolio companies by deploying dry powder to navigate the tumultuous time and adapting

to the new normal of consumption. A churn in portfolio rebalancing is also expected by several non-traditional start-up investors such as sovereign wealth funds, equity hedge funds, endowments, pension funds and corporate venture capitalists. Such investors may face considerable stress in their core portfolios and may be compelled to revisit their asset allocation strategy towards alternative investments, of which PE/VC investments are a significant subset.

Despite the economic downturn and its effect on FinTechs, it is also an opportune hour for investors to back them as their offerings can facilitate the growth and well-being of the financial and wider ecosystem. The crisis has highlighted the ubiquity of digital FS. Investments by a leading venture capitalist and angels in series A of a payments infrastructure platform, a Swedish FinTech investor leading a series B round of investment in a payments technology firm, and a stealth mode neobanking player raising a top-up funding round from a host of global and Indian venture capitalists are a few examples that reaffirm the market's potential and interest of investors.<sup>51</sup>

<sup>50</sup> <https://timesofindia.indiatimes.com/business/india-business/with-4-billion-chinese-investment-desi-start-ups-wary-of-fdi-policy-tweak/>

<sup>51</sup> Data from VCCircle





## 3. Response by the Fintech ecosystem

### 3.1. How FinTechs have reacted so far

The COVID-19 crisis has had a cascading effect on the global economy and previous successes, funding and team strength may not be the only factors that determine how FinTechs bounce back. The ability of FinTech start-ups to respond to the crisis with innovative product launches and value-added services for customers will be the key indicators of how the industry emerges from the crisis. Some of the key innovation initiatives by FinTech start-ups in India are highlighted below.

#### Innovation initiatives by FinTech start-ups in India

FinTech segment	Innovation	Innovation description	Innovation category
Payments	Virtual cards	<ul style="list-style-type: none"><li>A prepaid card services FinTech firm has launched a contactless virtual card to help customers eliminate physical touch during transactions.</li></ul>	Product expansion
InsurTech	COVID insurance	<ul style="list-style-type: none"><li>Multiple FinTech firms across payments, WealthTech and EnablingTech segments have either launched or enabled the swift launch of COVID-19 insurance for customers.</li></ul>	Product expansion
Payments	Priority KYC	<ul style="list-style-type: none"><li>Through this initiative, the on-demand payments platforms for SMEs are offering priority KYC services to essential services firms like pharmacies to help them go online in less than five minutes.</li></ul>	Value-added services
Payments	Furniture rental platform	<ul style="list-style-type: none"><li>A payment gateway firm from Bengaluru partnered with a furniture rental platform to enable people to rent office furniture for WFH. It has also launched same-day settlements for all customers to help them improve their cash flows and manage operational expenses better.</li></ul>	Value-added services
Lending	Credit products	<ul style="list-style-type: none"><li>A credit card bill payments app firm from Bengaluru launched unique lending products to allow members to pay their monthly house rent with credit cards and also offered an instant credit line to consumers.</li></ul>	Product expansion
Payments	Electronic PoS	<ul style="list-style-type: none"><li>E-PoS allows merchants to download the app and convert their Android phone into payment acceptance devices for cards, UPI and wallets.</li></ul>	Product expansion

FinTech segment	Innovation	Innovation description	Innovation category
Payments	Free website with a built-in payment gateway	<ul style="list-style-type: none"> <li>A payments gateway FinTech has launched several innovative initiatives to help SMEs during the lockdown. This includes an offer to build a free website for any merchant's business, with a built-in payment gateway.</li> </ul>	Value-added services
Lending	Anti-lockdown loans	<ul style="list-style-type: none"> <li>A P2P lending FinTech launched anti-lockdown loans to offer customers benefits such as a three-month EMI-free period, followed by easy repayment options at affordable rates. Another SME lending platform provided COVID-19 protection insurance with its lockdown loans and enabled bullet repayment after six months.</li> </ul>	Product expansion
Neobank	Financial literacy	<ul style="list-style-type: none"> <li>A neobank which offers digital banking solutions to India's blue-collar workers is helping workers understand the benefits and features of branchless banking.</li> </ul>	Value-added services
Payments	Home delivery	<ul style="list-style-type: none"> <li>A Bengaluru-based Fintech firm has introduced a feature that allows users to get groceries and other essentials delivered to their homes.</li> </ul>	Value-added services
EnablingTech	Video conferencing	<ul style="list-style-type: none"> <li>A digital KYC provider has launched a secure video conferencing (VC) tool for private one-to-one communication between banks and their customers.</li> </ul>	Product expansion

Source: PwC analysis of media articles from The Economic Times BFSI, The Ken and The Financial Express

**We have broadly classified innovation initiatives taken during the current crisis into two categories:**

**1. Product expansion:** These initiatives include FinTech and EnablingTech start-ups launching new products and innovations that are contextual to the current situation. Some examples of such newly launched products and innovations are given below.

- A Bengaluru-based FinTech has developed a solution that helps essential businesses by providing them with same-day settlement. This will allow businesses to receive funds from vendors within a few hours instead of the usual 3–5 working days.<sup>52</sup>

- A couple of highly funded FinTech start-ups are now tying up with major corporate healthcare insurance giants to provide COVID-19 insurance coverage. Such insurances can be bought at a reasonably inexpensive rate and the process of buying such policies is entirely digital.
- An EnablingTech start-up has developed a secure video conferencing tool for private communication between a bank/FS provider and its client. The tool uses AI to improve security, helping businesses continue their operations smoothly.<sup>53</sup>

52 [https://www.business-standard.com/article/companies/covid-19-impact-fintech-startups-smell-opportunity-revisit-business-ideas-120041200382\\_1.html](https://www.business-standard.com/article/companies/covid-19-impact-fintech-startups-smell-opportunity-revisit-business-ideas-120041200382_1.html)

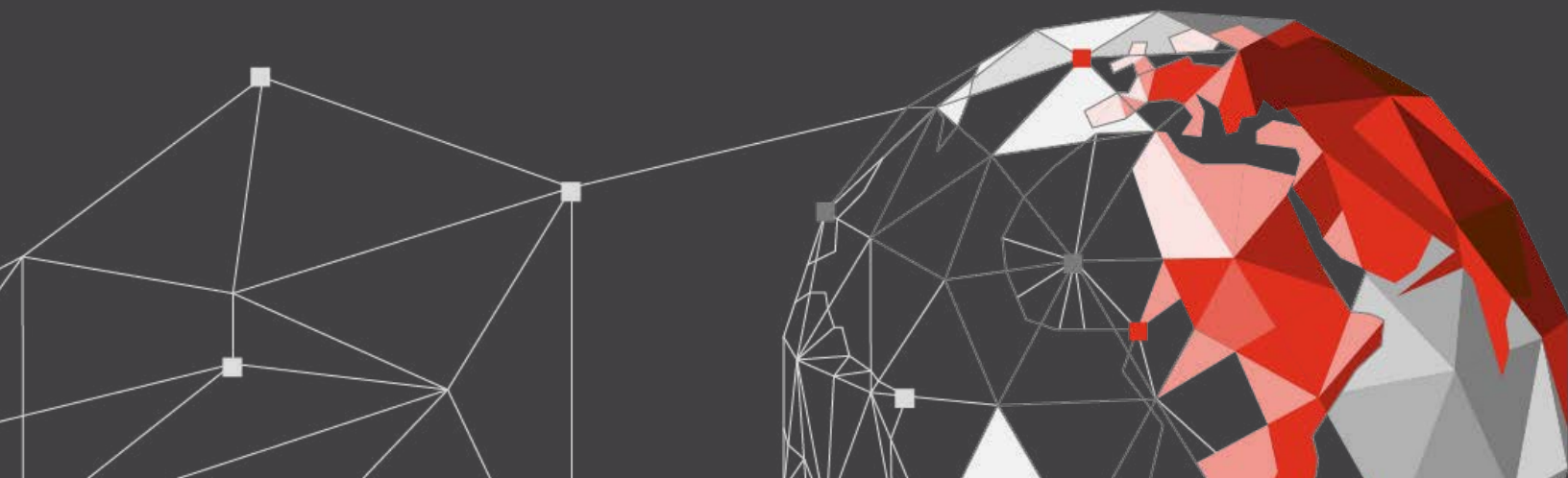
53 <https://bfsi.economictimes.indiatimes.com/news/fintech/signzy-launches-vc-tool-for-secure-communication-for-fis/75157892>



2. **Value-added services:** These initiatives include the launch of value-added services by FinTech start-ups to help customers navigate the COVID-19 crisis. The nature of these innovations includes the launch of non-financial products such as digital KYC, furniture delivery, website creation and financial literacy. Some examples of such value-added services are given below.
- A Bengaluru-based FinTech has started supporting the delivery of grocery and other essential items through its app. It has tied up with local stores and will facilitate the delivery of items to the user's home. The user can pay digitally, thereby reducing the risk of the virus spreading via cash transactions.<sup>54</sup>

- Another FinTech has come up with a proposition for essential businesses, which includes partnering with pharmacies to help them go online with their products in five minutes.<sup>55</sup>
- At a time when demand for liquidity is high, a FinTech will soon start a lending feature that will also enable customers to pay their monthly house rent using their credit cards. The interest accrued for using the platform will be almost one-third of current credit card interest rates in the market and consumers using this platform are expected to have enough cash in hand.<sup>56</sup>

The FinTech boom began after the 2008 financial crisis. The COVID-19 crisis of 2020 could lead to FinTechs innovating, rationalising and optimising their products and services for a post COVID-19 world.



54 <https://www.crowdfundinsider.com/2020/04/160161-indian-fintech-phonepe-to-support-home-delivery-options-via-its-digital-payments-app-during-covid-19-crisis/>

55 [https://www.business-standard.com/article/companies/covid-19-impact-fintech-startups-smell-opportunity-revisit-business-ideas-120041200382\\_1.html](https://www.business-standard.com/article/companies/covid-19-impact-fintech-startups-smell-opportunity-revisit-business-ideas-120041200382_1.html)

56 <https://inc42.com/buzz/cred-forays-into-digital-lending-with-rent-payments-via-credit-card/>

## 3.2. Government and regulatory response

The Government of India (GoI) and the state governments have proactively introduced an array of social measures and policies to contain and manage the spread of COVID-19. The GoI, the state governments and FS regulators have also introduced a number of fiscal and monetary policy interventions to provide necessary impetus to the economy.

Some of the measures that are expected to have a positive impact on the FinTech sector by assisting businesses with liquidity benefits are highlighted below.

The RBI has announced a TLTRO of INR 500 billion, targeting mid-sized NBFCs and microfinance institutions (MFIs).

The RBI has also reduced the reverse repo rate by 25 basis points (bps), lowering the rate to 3.75%. It has also reduced the liquidity coverage requirement (LCR) of banks to 80% from 100%.

The RBI has decided to revise the NPA classification rule and asked lenders to exclude the moratorium in calculating the 90-day NPA norm.

The RBI has provided capital support of INR 500 billion to the National Bank for Agriculture and Rural Development (NABARD), the Small Industries Development Bank of India (SIDBI) and the National Housing Bank (NHB) to provide them with a cushion for further on-lending.

NABARD, SIDBI and NHB have respectively announced refinance schemes aimed to assist regional rural banks (RRBs), MFIs, MSMEs and housing finance companies (HFCs) with access to funding.

The GoI has announced a relief package worth INR 1.7 lakh crore for helping frontline workers, construction workers, transfer of cash to low-paid workers, self-help groups, farmers, pensioners, etc., under various schemes, and ensure food security by providing beneficiaries with additional foodgrains.

Source: The RBI and media reports from The Economic Times BFSI, Business Today, Inc42 and Hindustan Times

### 3.2.1. Assessing the impact

Although several policies have been introduced by the GoI and the regulators, the impact of these efforts has been varied so far. The liquidity improvement measures for NBFCs has had a limited impact until now.

- While increased liquidity has been provided to banks, extension of credit to NBFCs, MFIs and HFCs by banks has not picked up due to the risk-averse stance of banking institutions. This is apparent from the fact that despite reverse repo rate being reduced to 3.75%, banks have deposited a total of INR 7.2 trillion with the RBI (till 23 April 2020), up from INR 4.4 trillion (till 27 March 2020 when the reverse repo rate was at 4%).<sup>57</sup> (It is to be noted that the RBI has focused on other

channels to address liquidity needs of smaller players, as mentioned in the previous section).

- TLTRO 2.0, specifically aimed at increasing liquidity for small- and mid-sized corporates via NBFCs and MFIs, has received a tepid response, with bidding received for only 50% of the offered amount (till 23 April 2020).<sup>58</sup>

Given the mixed response to liquidity measures, it is important for the Government and the regulators to consider other steps to boost the economy. A look at strategies that have been successful in tackling past economic crises, as well as learnings from other countries, could be helpful in coming up with other suitable measures.

<sup>57</sup> <https://www.livemint.com/industry/banking/nbfc-grapple-with-liquidity-challenges-as-banks-park-more-funds-with-rbi-11587727377667.html>

<sup>58</sup> <https://www.moneycontrol.com/news/business/economy/rbis-tltro-2-0-fails-to-get-good-response-what-does-it-mean-for-fund-starved-nbfc-5182231.html>



## 4. Way forward

### 4.1. Frameworks and strategies for FinTechs

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#### 4.1.1. Introduction

The COVID-19 crisis has changed not only the way FIs conduct their business, but also how employees do their work and consumers manage their finances. The value of digital channels, products, infrastructure and operations is increasing in the financial industry.

FIs are increasingly moving towards working remotely to safeguard the well-being of their employees. However, not all financial firms have the infrastructure, tools or processes in place to enable a seamless transition to remote working. While FinTech start-ups and digital-native

firms are handling the swift transition to remote working relatively well, traditional FIs are finding the transition challenging.

A digital-native enterprise is an organisation that scales its operations and innovates at a pace that is significantly greater than traditional businesses. The common denominator of most FinTech disruptors is that they harness modern technology and its applications along with optimised processes to create scalable and sustainable business models.





#### 4.1.2. The post COVID-19 era digital framework for the financial industry

As remote working becomes the norm, digital-native firms are leveraging their inherent operational advantage to ensure a smooth transition for employees and continuity of operations.

To enable seamless transition to remote operations, firms need a combination of an on-demand scalable infrastructure, remotely accessible tools, digital methodologies for collaboration and a flexible culture to ensure a quick and decisive response to a crisis. Along with a digital framework, access to secure data methodology and balancing privacy and cyber threat norms will play pivotal roles to ensure seamless operations and decision making. A digital framework that identifies the key business components for FIs in a post COVID-19 era to keep them operational is presented below.

##### Digital infrastructure

On-demand scalable infrastructure, along with secure access to support digital interactions and secure data transmissions while remote working.

##### Digital tools

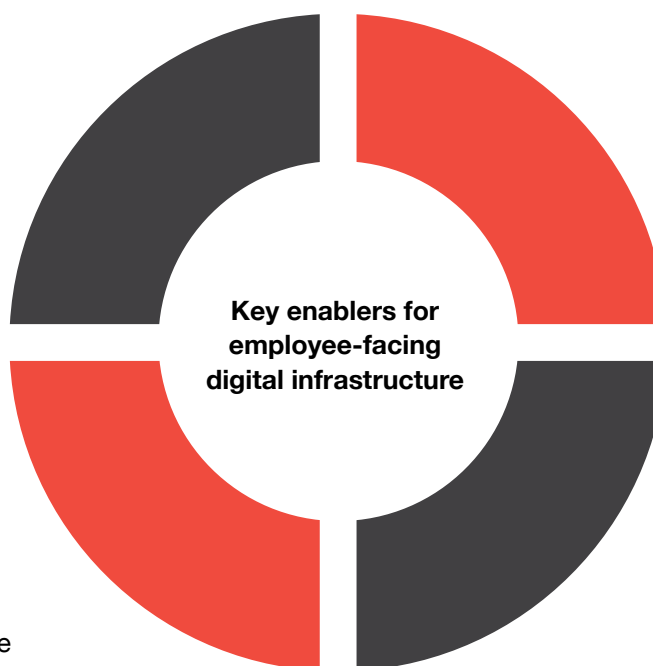
Customer-, partner- and employee-facing business apps and engagement tools that enable remote communication and collaboration.

##### Digital culture

Policies in the workplace to facilitate remote working, bring your own device (BYOD), flexible work hours and work-as-you-go initiatives.

##### Digital methodologies

Agile methodology, DevOps, innovation centres and omnichannel engagements to aid in anticipating and responding rapidly to new needs.



Source: PwC analysis

A modern, successful business model of an FI would be one that helps the company to enable employee collaboration and manage customer relationships.

“

**India has been an underserved market and this pandemic has pushed digital technology adoption, accelerating the use of digital financial products.**

– Sanjay Aggarwal, Founder, Moneyview

”

#### 4.1.2.1. Digital framework for remote working: Employee centric

A leading media outlet is of the view that the COVID-19 crisis has resulted in the “world’s largest work from home experiment”.<sup>59</sup> Several companies are prioritising remote working as a part of their operational strategy. Digital-native firms that are already working on the concept of a digitised work-as-you-go culture are in a better position to continue with their operations. Usage of technology across multiple employee touchpoints is advocated to ensure seamless operations and employee satisfaction. Some of the measures taken by organisations to continue operations during the current crisis are presented below.<sup>60</sup>

Recruitment	Employee onboarding	Communication and data sharing	Employee learning and training sessions	Health and well-being
A Bengaluru-based payments company initiated virtual onboarding for outstation candidates by digitising some of its processes such as signing of employment contract.	Companies have initiated virtual interviewing and hiring backed by digitisation of processes such as signing of employment contract.	<p>A US-based company witnessed significant traction on its communications platform in India since the onset of the COVID-19 outbreak.</p> <p>A US-based online communication platform, focused on providing instant messaging service for bankers, has witnessed an increase in messaging activity, ranging from 80% to 500%. Further, the volume of attachments sent via instant messages has gone up by 500% at some bank clients.</p>	There has been a rise in the number of employees looking to utilise the additional time they have at home. Companies are partnering with digital learning platforms to offer multitudes of courses across sectors, including technology, data analytics and finance.	Companies are launching a host of services for employees, including on-call doctors, psychological counselling, online meditation, fitness sessions and flexible working hours to help them manage household work.

Source: PwC analysis of media articles from Livemint

Some FinTechs in India are considering continuation of WFH even after the lockdown has been lifted. As per a global FinTech research firm, nearly 80% of FinTechs are willing to continue working remotely post the lockdown.<sup>61</sup>

59 <https://www.bloomberg.com/news/articles/2020-02-02/coronavirus-forces-world-s-largest-work-from-home-experiment>

60 <https://www.livemint.com/news/india/coronavirus-is-your-organisation-ready-for-work-from-home-in-india-11584073716110.html>

61 <https://ibsintelligence.com/ibs-journal/ibs-news/fintech-work-from-home-post-covid-lockdown/>

#### 4.1.2.2. Digital framework for remote operations: Customer centric

Digital-native firms are looking to identify and increase digital touchpoints to engage with their customers. FinTechs have witnessed a significant growth in transaction volumes on their platforms during the lockdown and significant reliance of customers on digitally-enabled services. Some of the steps taken by FinTechs to address customer-centric issues in remote operations are presented below.

Online customer targeting	Customer onboarding	Digital service proposition
A Bengaluru-based FinTech SaaS company has announced the extension of its GST platform's free trial period for customers. Further, it has launched a webinar series to educate users on the intricacies of GST and direct taxes.	A Bengaluru-based digital onboarding service provider for banks is witnessing significant increase in demand as companies are looking at video-KYC services to onboard customers.	A Noida-based payments unicorn in India has witnessed transaction growth by over 50% for purchase of daily essentials such as grocery items and mobile phone recharges during the lockdown.
A Bengaluru-based payments gateway company is offering free services for SME merchants to create their websites with an integrated payment gateway service.		A Gurugram-based online insurance platform has witnessed growth in demand for health insurance policies by approximately 30% over May 2020.
Multiple FinTechs are offering free or discounted initial services to attract customers to their platforms.		

Source: PwC analysis of media articles from IBS Intelligence

It is anticipated that work- and interaction-related measures undertaken as a part of the new normal would continue even after the COVID-19 crisis subsides. But the crisis may have irrevocably changed the behaviours and expectations of customers, partners and employees.

FinTechs should use this period of disruption to re-evaluate how infrastructure, technology and culture can accelerate future growth and competitiveness in a post COVID-19 world. This strategic pivot will enable organisations to go beyond looking for efficiencies to create a completely new digital enterprise that will impact all components of business models.



### 4.1.3. Strategies for FinTechs to navigate the lockdown challenges

As the Gol and state governments continue to take steps to control the COVID-19 crisis, concerns on the immediate and long-term effects on India's economy continue to grow. The expected contraction, along with an overall reduction in consumption of non-essential services, is expected to have a multiplier effect on the incomes, consumption patterns and repayment capabilities of employees in these sectors. Further, consumers would prefer utilising channels and services that provide greater importance to their health and safety, and this is a key factor that brands would need to consider to stimulate consumption. With restrictions on physical movement expected to remain in place once lockdown measures are relaxed, remote working, digital collaboration and cyber security will become even more important.

#### Short-term strategy

In the wake of the COVID-19 crisis and subsequent economic trends, FinTechs will need to relook at their go-to-market strategy and internal methods of doing business.

- Digital service delivery: In a situation where consumers are impelled to adopt online channels to reduce exposure to health hazards, digital FS have the potential to flourish. FinTech solutions would be at an advantage to provide such services directly to customers (B2C) or look at partnership opportunities with larger incumbents (B2B2C). Thus, a shift towards non-physical channels such as contactless payments, digital onboarding, credit appraisal and collection of payments could be a major advantage for FinTech business models.
- Become the bridge for last-mile benefits delivery: FinTechs have specialised in catering to traditionally underserved markets. This is particularly relevant at present as governments look to distribute benefits and basic services to those who are most vulnerable. FinTechs could look to diversify their services into such spaces.
- Branding around health: Even though the demand from the market for discretionary spend is expected to reduce, there could be a major advantage for businesses that can create a sense of safety and health in their offerings. FinTechs can take a cue from leading food delivery apps that are paying particular attention to highlighting the steps taken to ensure that health and safety concerns are adequately addressed in order to sustain customer activation.
- Disruption of internal processes: FinTechs, while adept at simplifying and digitising customer experience, will need to look inwards at their ways of working. Remote working will require investments in collaboration, data and security infrastructure to facilitate business continuity while safeguarding employees from the associated risks of digital systems. A number of EnablingTech players would find prospective buyers for their solutions that assist in internal productivity boosts.
- Innovative product development: It should not come as a surprise to see FinTechs rapidly adapt to the economic difficulties and develop innovative products and services for consumers. The FinTech revolution was born in the wake of the previous global financial crisis of 2008 and the sweeping recession that followed. FinTechs could look to provide financial services linked to essential services consumption. A leading payments player and a restaurant aggregator have partnered to develop a 'contactless dining' solution that restaurants can utilise to completely disrupt their traditional processes of ordering, billing and transactions by allowing negligible physical contact with menus, billing and cash transactions.<sup>62</sup>
- Diversify exposure: FinTechs could also look to increase portfolio exposure to essential services, be it lending portfolios, wealth management AUM portfolios or B2B/B2B2C partnerships.

“ The recovery cycle could be long and it is a good time to redirect efforts to important initiatives that will make a long-term impact on the business and not necessarily in the next month or two.

– Subramanya SV, Co-Founder, Fisdom

62 <https://www.indiatoday.in/technology/news/story/zomato-paytm-prepare-plans-for-contactless-dining-in-post-lockdown-world>

Other strategic recommendations that FinTechs can consider are presented below.

Sustain current business model			Reimagine the future
Reduce costs and sustain cash flows	Arrest downfall in revenue/asset quality	Manage people assets	Re-evaluate business models in the new normal
<ul style="list-style-type: none"> <li>• Conduct zero-based assessment for budgeting and expenses.</li> <li>• Renegotiate long-term contracts with vendors, landlords, etc.</li> <li>• Set aggressive targets for receivables.</li> <li>• Incentivise customers to pay in advance.</li> <li>• Touch base with lenders to assess appetite for rollover/fresh disbursements.</li> </ul>	<ul style="list-style-type: none"> <li>• Incentivise to buy now-than-later (promote savings from buying now).</li> <li>• Create and sustain channels to sell to remote customers.</li> <li>• Streamline product portfolios.</li> <li>• Engage with borrowers/customers with a comprehensive reach-out programme to gain insights on their response to the crisis.</li> </ul>	<ul style="list-style-type: none"> <li>• Engage in 'muscle building' by training the workforce and enhance process improvement to increase productivity.</li> <li>• Promote staggered WFH policies, social distancing, infrastructure, etc.</li> <li>• Take sound employment decisions (hiring/rightsizing/furlough).</li> <li>• Engage in salary decisions (deferrals/cuts/negotiations).</li> </ul>	<ul style="list-style-type: none"> <li>• Gain research-based consumer insights on how the new normal would look like.</li> <li>• Strategise on new product iterations, use cases and delivery channels.</li> <li>• Re-evaluate go-to-market (GTM) plans and conduct research, but wait for final launch.</li> </ul>
Stakeholder communication			
<ul style="list-style-type: none"> <li>• Communicate frequently with employees, investors, vendors, etc.</li> <li>• Investor communication to be focused on the steps to conserve cash, manage employment and strategy for the near term.</li> </ul>			

Source: PwC analysis

## What's next?

The COVID-19 crisis could pave the way for FinTechs to play a critical role in the next one year, as consumers and businesses would be receptive to agile, accessible and cost-prudent digital banking and financial offerings. We have analysed the different FinTech segments, and a potential roadmap of how the sector may perform in the next one year is presented below.

	Immediate (<1 month)	Short term (1–3 months)	Mid term (3–6 months)	6–12 months
Digital payments	<ul style="list-style-type: none"> <li>There is a decline in monthly transactions across payments methods – credit cards, RTGS, NEFT, UPI, etc.</li> <li>Travel and hospitality sectors are impacted the most.</li> </ul>	<ul style="list-style-type: none"> <li>UPI and card payments are further expected to reduce in the short term.</li> <li>There could be a broad-based impact across sectors.</li> </ul>	<ul style="list-style-type: none"> <li>Recovery ensues as economic activity recommences.</li> <li>Push from the RBI and the NPCI likely to boost digital payments.</li> </ul>	<ul style="list-style-type: none"> <li>Expected fillip to digital payments in sectors such as utility payments, essential goods and groceries, but consumer consumption and spending expected to be impacted.</li> </ul>
Digital lending	<ul style="list-style-type: none"> <li>Both retail and business customers are expected to opt for the RBI's moratorium.</li> <li>There are early signs of stress in repayment from MSMEs.</li> </ul>	<ul style="list-style-type: none"> <li>More borrowers across industries expected to opt for the moratorium.</li> <li>Higher-risk premiums and ergo credit costs may impact net interest margins.</li> </ul>	<ul style="list-style-type: none"> <li>There could be loan defaults in the MSME segment, as borrowers exhaust savings/retained earnings.</li> <li>FIs generate leads and acquire customers, but face difficulties to borrow from banks and NBFCs.</li> </ul>	<ul style="list-style-type: none"> <li>Risk appetite gradually returns to the sector.</li> <li>FinTechs are able to access funds.</li> </ul>
InsurTech	<ul style="list-style-type: none"> <li>There is an increased trend in purchase of health/life insurance, tax-saving related insurance.</li> </ul>	<ul style="list-style-type: none"> <li>There could be a sharp fall in new sales as the new FY begins with weak macroeconomic environment; will lower demand and premium on products like auto insurance.</li> </ul>	<ul style="list-style-type: none"> <li>InsurTech companies can regain volumes by building awareness around health and life insurance products.</li> </ul>	<ul style="list-style-type: none"> <li>Tax-saving related purchases increase amidst the base effect.</li> </ul>





	Immediate (<1 month)	Short term (1–3 months)	Mid term (3–6 months)	6–12 months
Wealth management/ personal finance	<ul style="list-style-type: none"> <li>• There is a steep decline in most indices/benchmarks.</li> <li>• Organisations/individuals look to conserve cash in times of distress.</li> </ul>	<ul style="list-style-type: none"> <li>• Investors could face possible losses, though with some line of sight of revival.</li> </ul>	<ul style="list-style-type: none"> <li>• There is increased traction as normalcy returns once the market discounts COVID impact more accurately.</li> </ul>	<ul style="list-style-type: none"> <li>• Indian equity markets have rebounded quickly in previous crises.</li> <li>• Recovery from the current crisis likely as investors start seeing value creation.</li> </ul>
Neobanks and other FinTech enablers	<ul style="list-style-type: none"> <li>• The immediate impact of the crisis may be cushioned due to ongoing projects.</li> </ul>	<ul style="list-style-type: none"> <li>• A temporary fall in order books as 'discretionary' expenses are cut down and ongoing projects put on hold.</li> <li>• Banks and NBFCs will focus on recoveries/asset quality.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a revival of interest as signs of normalcy are visible.</li> <li>• Neobanking offers low-cost, value-added offerings such as accounting, invoicing and reconciliation to appeal to MSMEs.</li> </ul>	<ul style="list-style-type: none"> <li>• Demand for FS/products increases due to implementation of cost-reduction initiatives.</li> </ul>

Source: PwC analysis

## 4.2. Policy and regulatory strategies to consider

### 4.2.1. Learnings from other financial crises

#### A) Economic strategy during the Great Depression

The Indian economy currently finds itself in a situation similar to the US economy during the Great Depression of 1929–1933. The depression, which began in the US, engulfed countries worldwide. Unemployment in the US went up to 24.9% in 1933. Similarly, as of 7 April 2020, the unemployment rate in India was 23% due to the COVID-19 crisis and an already unstable economy.<sup>63</sup>

During the Great Depression, a series of policies called the New Deal was introduced.

- The policy framework was divided into relief, recovery and reform, known as the 3 R's, to address the problems of mass unemployment and economic crisis.
- The New Deal focused on launching emergency relief

programmes, regulating banks and stock markets, providing debt relief, managing farms, initiating industrial recovery and introducing public works construction projects.

The economic and monetary policy response to the Great Depression led to the establishment of a number of laws, structures, regulations, rails and processes that have been adopted globally and reflect in India's core regulatory machinery in terms of regulations and protection of banking, the stock market and the larger FS industry. However, the strategic focus on relief for the unemployed and poor, recovery of the economy and reform of the financial system to withstand shocks is worth considering. Some of measures taken to tackle the Great Depression in the US are highlighted below.

	Relief	Recovery	Reform
1933	<div>The Emergency Banking Act</div> <div>The Federal Emergency Relief Act</div> <div>The Public Works Administration</div> <div>The Civilian Conservation Corps</div> <div>The Tennessee Valley Authority</div>	<div>The National Recovery Act</div> <div>The Agricultural Adjustment Act</div> <div>The Home Owners' Loan Corporation</div>	<div>The Glass-Steagall Banking Act</div>
1934		<div>The Federal Housing Administration</div>	<div>The Securities Exchange Act</div>
1935	<div>The Works Progress Administration</div>		<div>The Social Security Act</div> <div>The National Labor Relations Act</div>
1937		<div>The Agricultural Adjustment Act</div>	
1938			<div>The Fair Labor Standards Act</div>

Source: PwC analysis of media articles from The LA Times and Livemint

<sup>63</sup> <https://www.latimes.com/business/story/2020-04-03/unemployment-rate-great-depression> and <https://www.livemint.com/news/india/covid-19-lockdown-impact-unemployment-rate-rises-to-23-4-11586202041180.html>



## B) Learning from the response to the financial crisis of 2008

The causes of the 2008 subprime lending crisis are very different from those of the current COVID-19 crisis. The 2008 crisis was caused by misalignment of risk assessment and opaque financial instrument creation, which in turn led to significant financial bailouts by Governments across the globe. The economic impact of both the crises is similar and thus warrants a look at the response by Governments and central banks worldwide.

### Liquidity measures by the RBI<sup>64</sup>

- A number of monetary policy measures were implemented by the RBI between October 2008 and April 2009 to increase liquidity.
  - The repo rate was reduced by 425 bps to 4.75%.
  - The reverse repo rate was reduced by 275 bps to 3.25%.

“

All eligible accounts which were standard accounts on September 1, 2008 were allowed to be treated as standard accounts on restructuring provided the restructuring was taken up on or before January 31, 2009 (extended up to March 31, 2009 in February 2009) and the restructuring package was put in place within a period of 120 days from the date of taking up the restructuring package. The period for implementing the restructuring package was extended from 90 days to 120 days.

– RBI guidelines on asset reclassification<sup>65</sup>

”

- The cash reserve ratio (CRR) was reduced by a cumulative 400 basis points to 5.0%.
- Actual/potential provisions of primary liquidity amounted to nearly INR 5.6 trillion (10.5% of the GDP).

### Asset reclassification and restructuring measures by the RBI

- In response to banks showing extreme risk aversion towards SME lending, in October 2008, the RBI instructed them to restructure accounts of SMEs on a case-to-case basis. The restructuring guidelines were further relaxed as a one-time measure in December 2008.
- As some banks were facing operational difficulties in implementing these relaxations, the RBI took further one-time asset reclassification measures in January 2009.



64 [https://www.rbi.org.in/scripts/BS\\_SpeechesView.aspx?Id=446](https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=446)

65 <https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?ID=676>



## 4.2.2. Learnings from other countries

Apart from looking at past strategies implemented to deal with financial crises, it is also prudent to consider the measures adopted by other countries to tackle the COVID-19 crisis. We have summarised these measures, focusing on interventions that benefit the FinTech sector (larger monetary and fiscal policy decisions have not been included). The measures have been classified under the following categories:

- **Relief policy:** Targeted interventions and stimulus packages by governments and regulators that directly benefit the FinTech ecosystem.
- **Forbearance policy:** Directives issued by governments and regulators to FIs for the end customer to benefit indirectly.

### The United States

Relief policy	Forbearance policy
<ul style="list-style-type: none"><li>• Under the federal Paycheck Protection Program (PPP), small businesses can avail forgivable loans to pay their employees during the COVID-19 crisis. The programme has set aside a corpus of USD 349 billion.<sup>66</sup></li></ul>	<ul style="list-style-type: none"><li>• The Small Business Administration plans to onboard non-banks as lenders under the federal PPP.<sup>67</sup></li></ul>

### Singapore

Relief policy	Forbearance policy
<ul style="list-style-type: none"><li>• The Singapore FinTech Association (SFA) and Razer FinTech will reportedly be offering FinTech firms in Singapore, with bridge financing and equity or equity-linked instruments that will range from anywhere between USD 100,000 to USD 1.5 million.<sup>68</sup></li><li>• The Monetary Authority of Singapore (MAS) has launched a USD 125 million package to help FIs and FinTechs drive growth once economic activity in the country resumes. The focus would be on supporting workforce training and manpower costs, strengthening digitalisation and operational resilience, and enhancing the access of FinTech firms to digital platforms and tools.<sup>69</sup></li><li>• The MAS and Institute of Banking and Finance (IBF) plan to increase course fee subsidies to 90% for those who are attending relevant IBF courses, including employees of FinTech firms.<sup>70</sup></li></ul>	<ul style="list-style-type: none"><li>• MAS is working closely with the Association of Banks in Singapore (ABS) to promote <b>greater adoption of e-payments</b> by individuals and businesses.<sup>71</sup></li></ul>

66 <https://home.treasury.gov/system/files/136/PPP--Fact-Sheet.pdf>

67 <https://www.forbes.com/sites/advisor/2020/04/27/need-a-loan-now-that-the-paycheck-protection-program-is-running-again-try-these-nonbank-lenders/#1d-c12ac838eb>

68 <https://www.businesstimes.com.sg/banking-finance/singapore-fintech-association-razer-offer-fintech-firms-up-to-us15m-financing-amid>

69 <https://www.mas.gov.sg/news/media-releases/2020/mas-launches-package-for-fis-and-fintech-firms-to-strengthen-long-term-capabilities>

70 Ibid.

71 <https://www.mas.gov.sg/news/media-releases/2020/mas-urges-use-of-digital-finance-and-e-payments-to-support-covid-19-safe-distancing-measures>

## China

Relief policy	Forbearance policy
<ul style="list-style-type: none"> <li>According to the China Banking Association, Chinese banks have provided over 2 trillion yuan (approximately USD 282.97 billion) through lending to tackle the COVID-19 crisis (as of 26 March 2020).<sup>72</sup></li> </ul>	<ul style="list-style-type: none"> <li>In order to boost liquidity, the People's Bank of China (PBC) has slashed the reserve requirement ratio and interest rate on excess reserves of FIs with the PBC to increase lending to small- and mid-sized banks.<sup>73</sup></li> <li>The Government of China plans to provide relief to SMEs by:<sup>74</sup> <ul style="list-style-type: none"> <li>delaying loan repayment for eligible small and medium industries</li> <li>increasing tolerance with respect to NPAs for loans to epidemic-hit sectors and SMEs</li> <li>boosting SME lending through supporting bond issuance by FIs.</li> </ul> </li> <li>The Government of China further announced a package worth USD 39 billion which includes loan guarantees to SMEs with an annual revenue of less than USD 78,000.<sup>75</sup></li> </ul>

## South Korea

Relief policy	Forbearance policy
<ul style="list-style-type: none"> <li>The Ministry of SMEs and Start-ups announced support worth USD 1.3 billion towards various initiatives, including an emergency fund to provide direct financial support to SMEs and self-employed individuals.<sup>76</sup></li> </ul>	<ul style="list-style-type: none"> <li>The Government of South Korea announced a financial stabilisation plan of KRW 100 trillion (5.3% of the GDP), which includes a focus on increased lending to SMEs by both state-owned and commercial banks, partial and full guarantees and collateralisation of loan obligations.<sup>77</sup></li> </ul>

<sup>72</sup> <http://www.chinabankingnews.com/2020/03/27/chinas-banking-sector-provides-over-2-trillion-yuan-in-lending-support-to-fight-against-covid>

<sup>73</sup> <https://economictimes.indiatimes.com/news/international/business/china-frees-up-56-bln-for-virus-hit-economy-by-slashing-small-banks-reserve-requirements/article-show/74966543.cms?from=mdr>

<sup>74</sup> <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#C>

<sup>75</sup> <https://aecm.eu/wp-content/uploads/2020/03/Update-SME-policy-response.pdf>

<sup>76</sup> <https://aecm.eu/wp-content/uploads/2020/03/Update-SME-policy-response.pdf>

<sup>77</sup> <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#K>

### 4.2.3. Learnings for India to consider

It is encouraging to see that the GoI, the state governments and the regulators have already adopted strategies that have proved useful in the past and have been adopted by other countries, including liquidity relief measures through monetary policy tools, promoting lending to SMEs and employee retention incentive programmes.

Some additional areas that India could consider focusing on are listed below:

- An assisted approach by the Government, providing credit guarantee up to a certain extent for lending to NBFCs, could help in mitigating the risk averseness of banks and provide the funds to smaller companies.
- Utilising FinTechs for distribution of financial benefits and relief is a strategy already being adopted in other countries and could be beneficial in India.
- Targeted funding specific to FinTech start-ups (given the contribution of the sector) could be warranted.

A detailed set of recommendations on interventions to consider are discussed in this section.

## 4.3. Recommendations for policies and regulations

The need for digital awareness and presence is prominently recognised by individuals, businesses and governments alike. FinTechs can act as enablers for the banking and financial sector, playing a crucial role in ubiquity and adoption of digital financial services. A few measures related to policy and regulation that can support the FinTech sector during the ongoing crisis are proposed below.

- **Promote digital banking:** Since usage of cash can spread COVID-19, there is a need to further **promote digital payments and digital banking**. The GoI is advised to reinstate subsidies for digital payments for transactions below INR 2,000 immediately. Additionally, it is suggested that it should announce status quo ante on merchant discount rate (MDR).
- **Minimal physical intervention:** For FinTechs, NBFCs, asset management companies (AMCs), Securities and Exchange Board of India registered investment advisors (SEBI RIA), reporting entities, etc., the Aadhar-based

e-KYC authentication should be implemented as this would enable business continuity of the mentioned entities to digitally onboard customers without physical intervention. The Ministry of Finance (MoF) has already issued a notification to this effect,<sup>78</sup> but the same is yet to be implemented.

- **The need for a central KYC registry:** The importance of using a central KYC (CKYC) registry should be highlighted by the RBI in its Master Circular. It is recommended that an explicit mandate from the RBI regarding CKYC be issued and lenders be instructed to launch CKYC at the earliest for paperless onboarding of customers. Banks, NBFCs (after securing an RBI mandate) and KYC registration agencies (KRAs) – after securing a SEBI mandate – should be able to upload data to the Central Registry of Securitization Asset Reconstruction and Security Interest (Cersai) CKYC database to enable its growth.

78 <https://dor.gov.in/sites/default/files/circular%20dated%2009.05.2019%20of%20PMLA.pdf>

- **Leveraging the CKYC Infrastructure for paperless financial onboarding:** The Central KYC Registry Operating Guidelines, 2016, mandates that every reporting entity (RE) capture an individual's data as per the common KYC template and upload it on the CKYC registry, along with the scanned copy of the supporting documents (proof of identity and proof of address).<sup>79</sup> The recent amendments to the Prevention of Money-Laundering (Maintenance of Records) Rules, 2005, is a positive step by the Government to provide different alternatives to REs to digitally onboard an individual in a paperless and presence-less manner. The CKYC Registry is one such existing infrastructure that can support the objective of paperless and presence-less digital financial onboarding drive in an optimum manner. Its effective use by FIs can be pivotal to financial inclusion and efficient delivery of financial services. The SEBI KRA central database of individuals and efficient online checks allow onboarding of new mutual fund customers. There is a need for similar utilisation of common repository infrastructure for banking products as well, and the CKYC Registry could fulfil this need. The benefits of the CKYC Registry across FIs range from de-duplication of KYC processes through its inter-usability and cost optimisation for FIs. It also paves the way for unification of KYC data across all financial sector regulators. Moreover, full optimisation of the CKYC Registry will enable FIs to focus on their core businesses and reduce compliance costs and additional due diligence processes towards customer onboarding.
- **Video KYC by all lenders:** The RBI should mandate launching of video KYC processes by all lenders at the earliest and simplify prescriptive requirements such as the presence of a bank officer on the other side during an interaction. The RBI should also encourage the development of collaborative solutions for video KYC between banks and FinTechs.
- **Moratorium for lenders:** As the RBI has already announced a moratorium on term loan repayments for six months and a similar moratorium for interest payments on working capital loans for three months,<sup>80</sup> lenders will benefit if this is recognised as a **reciprocal moratorium**, i.e. they are provided similar relief.

Most FinTech lenders (NBFCs or platforms) borrow capital from larger banks and FIs, and on-lend to SMEs and consumers. If lenders are obligated to restructure their assets, they should be provided with corresponding relief on their liabilities. The moratorium announced would place some stress on the asset liability management (ALM) and cash flows of lenders and worsen the liquidity in the market. Hence, it is imperative that FinTech lenders are offered the same relief in terms of their borrowings from banks and other FIs.

- **Continued support for households and MSMEs:** In the current environment, it is assumed that both households and MSMEs will continue to be under stress with respect to their cash flows: MSMEs for working capital and households for routine expenses. It is essential that both are provided continued support in the current environment of restricted physical movements and potential liquidity crunch. We recommend a few propositions such as pool purchase, suspension of ratings and co-origination of loans. FinTech-inspired initiatives set up in the past, such as the SIDBI Udyami Mitra, could be looked at as reference models.
- **Fast-track loan service provider's (LSP) framework:** MSMEs are envisioned by the Government to contribute as much as 50% to India's GDP.<sup>81</sup> Increasing the credit flow to MSMEs is pivotal to realising the objective of India becoming a USD 5 trillion economy. While the GoI has taken several steps to reduce the sector's over-reliance on informal credit channels, it will see further light of the day if the LSP licences and thereby licensed access to Account Aggregators and GSTN (Goods and Service Tax Network) are made available to qualifying FinTech entities for efficient and seamless loan disbursement to MSMEs and retail borrowers. This LSP licence framework, requirements and application process is recommended to be communicated by the Ministry of Finance and the RBI so that interested LSP platform providers can apply and start building platforms for MSME credit delivery.

79 Section 4B(a), Central KYC Registry Operating Guidelines, 2016 (version 1.1)

80 <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11835&Mode=0>

81 <https://economictimes.indiatimes.com/small-biz/sme-sector/vision-is-to-increase-msmes-contribution-to-gdp-to-50-nitin-gadkari/articleshow>



- **OTP-based e-KYC:** There should be an increase in the limits for loan accounts permitted under one-time password (OTP) based e-KYC onboarding. The limits for credit cards issued under the same process should also be increased. Lending through OTP-based e-KYC authentication under the RBI's KYC Master Direction is currently capped at INR 60,000.<sup>82</sup> It is an ideal time to revise the limit upwards for loans/credit cards sanctioned through OTP-based e-KYC. This will allow consumers and SMEs to borrow small-ticket loans in a hassle-free manner.
- **FinTechs as essential service providers:** Banks have been classified as essential services that can continue to operate during the lockdown. Similar consideration should be accorded to FinTechs and other allied banking service providers that work with banking partners.

A situation like the COVID-19 crisis has its share of adverse effects. At the same time, it provides us with an opportunity to engage in reforms and implement comprehensive, large-scale measures not only to prioritise expenditure on health and the economy, but also prepare for future setbacks. Now is the time to take quick and impactful steps to prevent further adverse effects on the economy and make efforts to strengthen financial innovation and digital adoption. While FinTech models work on the underlying premise of promoting financial access to the underserved, fast-tracking the accomplishment of this objective will require the collaboration of Governments, regulators, citizens, banks, FIs, FinTechs, BigTechs, investors and other stakeholders – the very philosophy of a collaborative ecosystem that is at the heart of the FinTech paradigm.



<sup>82</sup> <https://economictimes.indiatimes.com/news/economy/policy/rbi-allows-ekyc-to-use-otp-for-account-opening/articleshow>

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