

FinTechs in India – Key trends

December 2019

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Foreword from Deloitte

The banking sector is undergoing a transformation where technological innovation and capital preservation have become fundamental for the survival of every organisation. On one hand, various macro-prudential regulatory efforts and restructuring initiatives have led to resurrection and revival of the sector. On the other hand, the sector is continuously facing challenges due to the launch of digital innovation, and disruptions from within and outside the sector. Spurred by increased awareness among customers and a shift in their expectations, emerging competition from start-ups, and limitations in traditional business models, the banking sector appears to have reached a tipping point. To stay relevant in the business, banks are being forced to redefine their purpose, disrupt their own business models, and show a great deal of resilience in absorbing and propagating exponential change.

The Indian banking sector is witnessing conflicting scenarios. While it is gaining strength as one of the fastest-growing large economies of the world, at the same time, it is struggling with multiple challenges related to strength and resilience. These include complex and diverging regulations, legacy systems, disruptive models and technologies, new competitors, and an often-restive customer base with ever-increasing expectations. This appears to be restricting investment and growth in the industry. One of the major challenges the banking industry faces is distressed loans/stressed assets. High non-performing assets and a slow deleveraging and repairing of corporate balance sheets are seen testing the banking system's resilience. In an effort to harmonise Indian regulatory standards with globally accepted norms, the RBI recently launched a revised framework. The move puts the Indian regulatory framework for stressed assets on par with the international norms.

At present, the rate of technological changes in the banking sector is exponential. Dramatical disruption is expected in all sectors, including financial services, over the next few years. The disruption will primarily be led by greater customer empowerment and technology-driven innovation. Banking is becoming increasingly convenient because of internet, and the future of the banking sector seems to be going increasingly digital. Today's digital age and hyper-connected environment require banks to continuously reimagine their business. Indian banks appear to be making great strides in the arena of digital transformation. In the technology arena, the promise of exponential technologies seems more real than ever. Although enthusiasm for blockchain is tapering off globally, the industry still continues to move towards a blockchain-enabled future. However, the energy might now lie with artificial intelligence (AI) and cloud as they are already transforming many aspects of banking in significant ways.

Although the banking technology landscape is vast in India, this pack covers our views on AI and FinTech in both the global and Indian contexts. While traditional banks are still trying to 'look digital', the new-generation digital banks and FinTech are turning the table by disrupting the entire landscape. New digital forces, such as machine learning and AI, big data analytics, robotic process automation, open banking, blockchain, chatbots, and internet of things, have repositioned technology from being a business enabler to a business driver.

Foreword from CII

Dear Reader,

Greetings!

I am happy to present the 6th edition of CII's Banking and Finance Summit 2019. Each time, we have tried to approach the theme from a new angle and get an expert institution to deep dive into that new dimension and bring forward a paper which can give the reader a new perspective into this huge subject area. This time we are attempting to explore FINTECH and are very pleased that Deloitte has agreed to be the knowledge partner. The area is exciting and like technological interventions in other areas, financing also requires technology. I am encouraged to find a large number of eager, young interventionists in Fintech, who require an enabling environment to flourish. I have no doubt that Fintech will take roots on a fast track like digitalization of banking is doing.

I am very pleased to present to you the report from Deloitte and wish you an insightful reading.

The discussion in the Conference will also focus on Fintech and we have been fortunate to attract domain experts in every Panel. I hope you will also enjoy the deliberations.

Thanks and regards



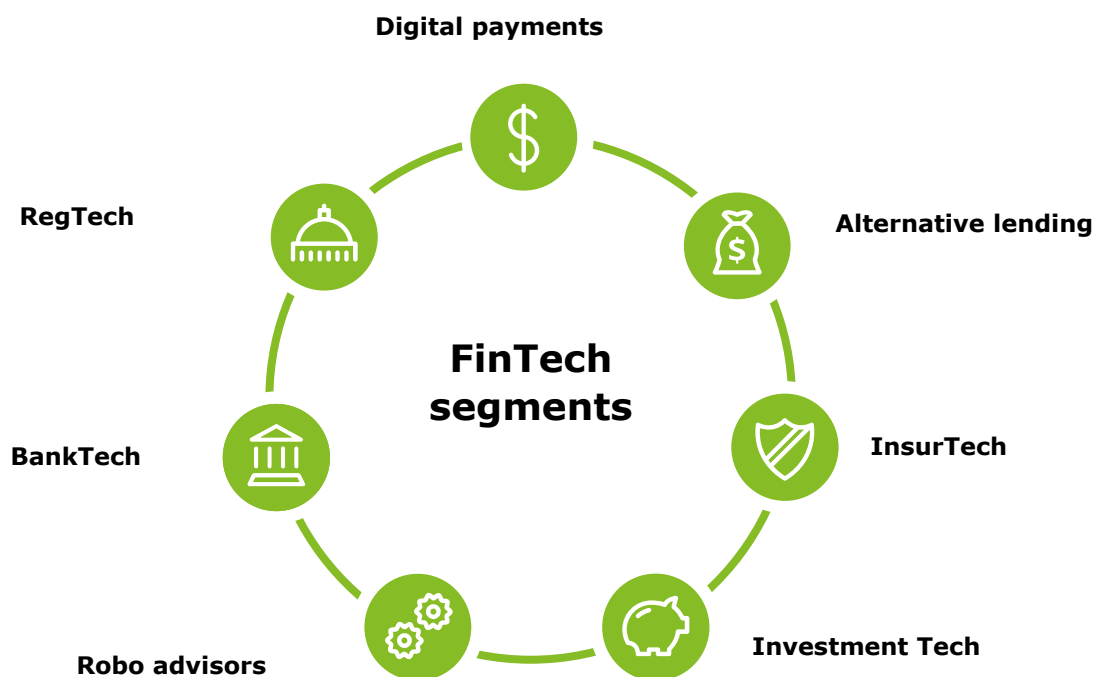
Rajesh Srivastava
Chairman, CII Banking & Finance Summit &
Executive Chairman
Rabo Equity Advisors Pvt Ltd

1. Introduction

1.1 The large FinTech industry in India is evolving

The financial services industry in India is moving towards digitisation, driven by a shift in expectations of consumers who prefer more personalised services. Consumer expectations are changing primarily because of the increasing penetration of smartphones and internet. This has led to a rapid rise in the financial technology (FinTech) industry in India. Financial services in India are moving from the traditional 'one size fits all' approach to a more personalised service approach. Further, the Government of India and regulators led various initiatives for technology-enabled inclusion. FinTechs play an important role in this movement. The adoption of FinTechs' products among customers has increased significantly as they provide personalised services and superior customer experience via digital channels.







Figure 1: Fintech segments



Source: Deloitte Analysis

In our view, FinTechs in India can be broadly categorised into seven types on the basis of solutions they offer:

Figure 2: Categories of FinTechs

	Digital payments	Electronic payment solutions covering both remittances and merchant payments; these also include enterprise payments
	Alternative lending	Technology-enabled solutions for alternative credit scoring (for credit workflows) to provide loans to underserved MSME* and retail consumers
	InsurTech	Solutions using a new technology to expand the distribution of insurance products and re-imagine them according to the unique requirements of different types of customers
	InvestmentTech	Technology solutions for significantly greater ease of investing and personal wealth management; these include robo-advisory solutions that use artificial intelligence technologies for the automation of investment advice
	RegTech	Technology solutions for the improved automation of regulatory compliance
	BankTech	Any other technology solutions not covered above but help banks and financial institutions meet the ever-increasing and changing requirements of customers

* Micro, Small and Medium Enterprises

Source: Deloitte Analysis

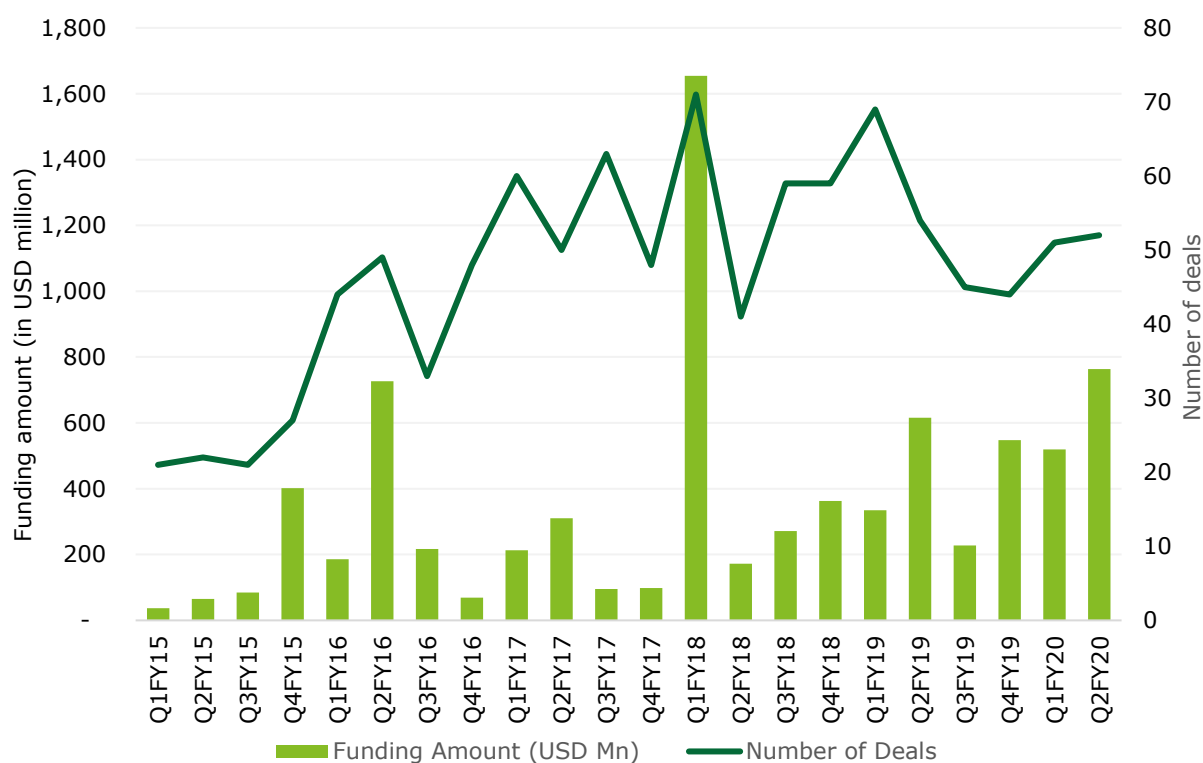
2. Funding across FinTechs

2.1 Key trends in FinTech investment

FinTechs have seen significant funding from venture capital and private equity firms. Over the past 22 quarters, FinTechs have received a total investment of US\$ 8 billion¹ across 1,031 deals (Figure 3). A bulk of these investments were in FinTechs operating in the digital payment domain. The past 2-3 years have also seen significant investments in alternative lending and InsurTech.

A summary of these investment trends is given below.

Figure 3: Funding activity across FinTechs in India²

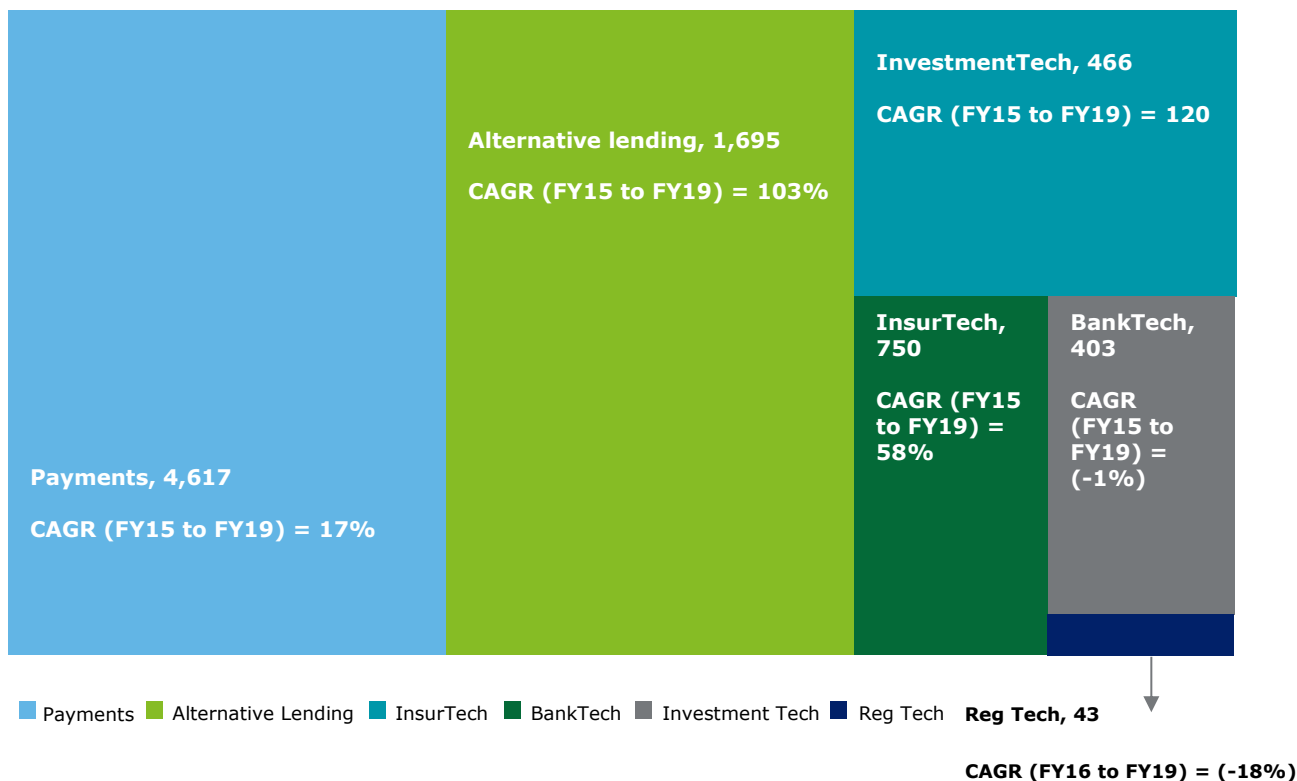


Source: Tracxn

¹ Source: Tracxn

² The large amount of funding in Q1FY18 is due to the \$1.4 billion funding received by Paytm from SoftBank in May 2017.

Figure 4: Share of investments in FinTechs across segments (Q1FY15–Q2FY19, in US\$ million)



Source: Tracxn

In the following paragraphs, we examine investment trends in each of these areas in detail.

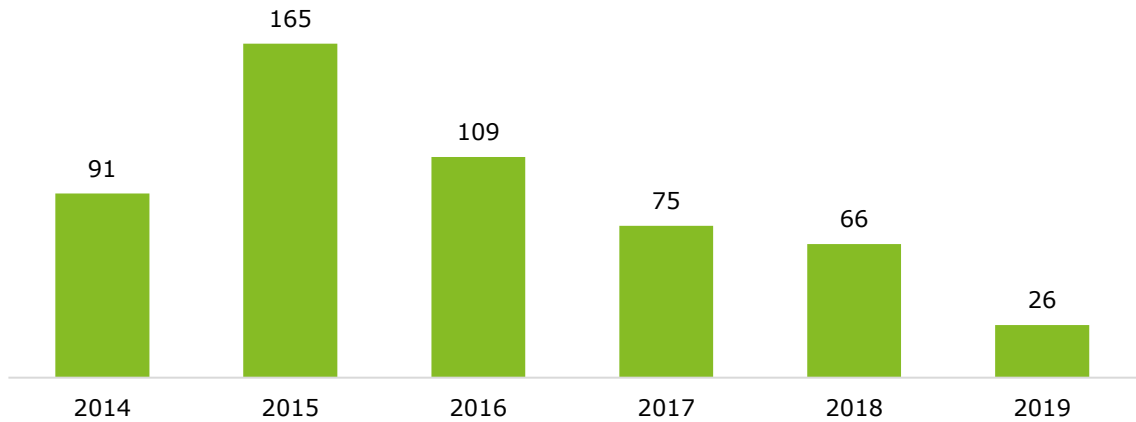
2.2 Digital payments

Over the past five years, digital payment FinTechs received investments of US\$ 4.6 billion across 219 deals³. About 532 such FinTechs were founded during the same period.

However, this period also saw increased competition, low customer loyalty, rising cost of customer incentives, and some regulatory restrictions (such as increased KYC norms for digital wallets and data localisation). This has led to a slowdown in both the number of entrants and funding in the past few years, as shown below.

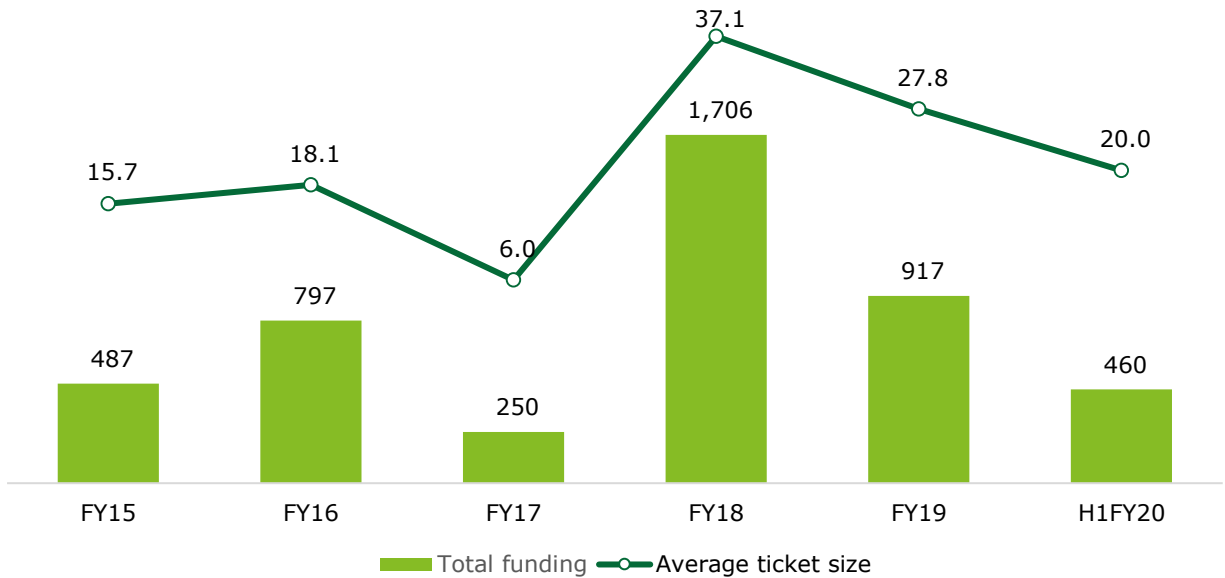
³ Source: Tracxn

Figure 5: Number of digital payment FinTechs founded in recent years



Source: Tracxn

Figure 1: Funding received by digital payment FinTechs across years (in US\$ million)



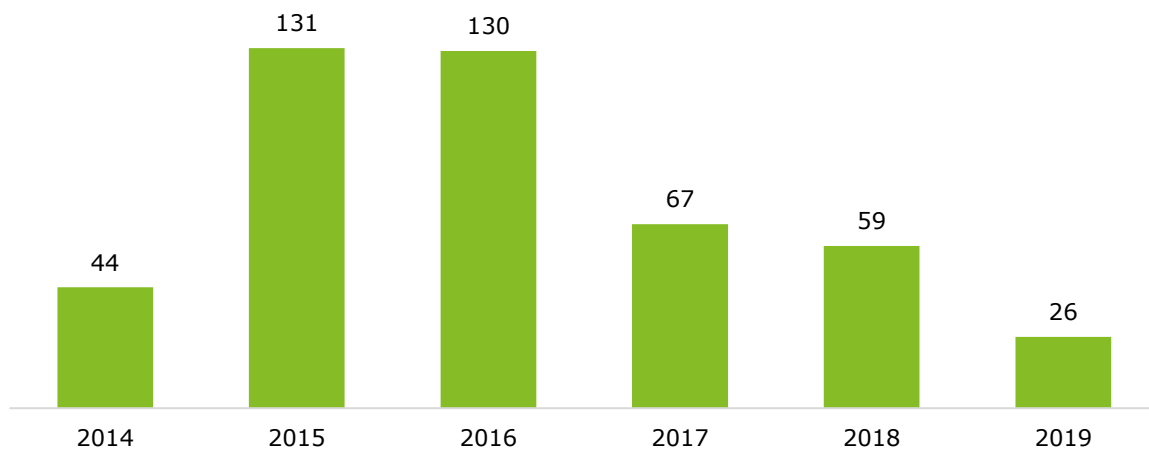
Source: Tracxn

Nonetheless, large players continue to receive funding as customer adoption remains the key objective, with a longer-term goal of pivoting to remunerative products, which can ride on the back of payments.

2.3 Alternative lending

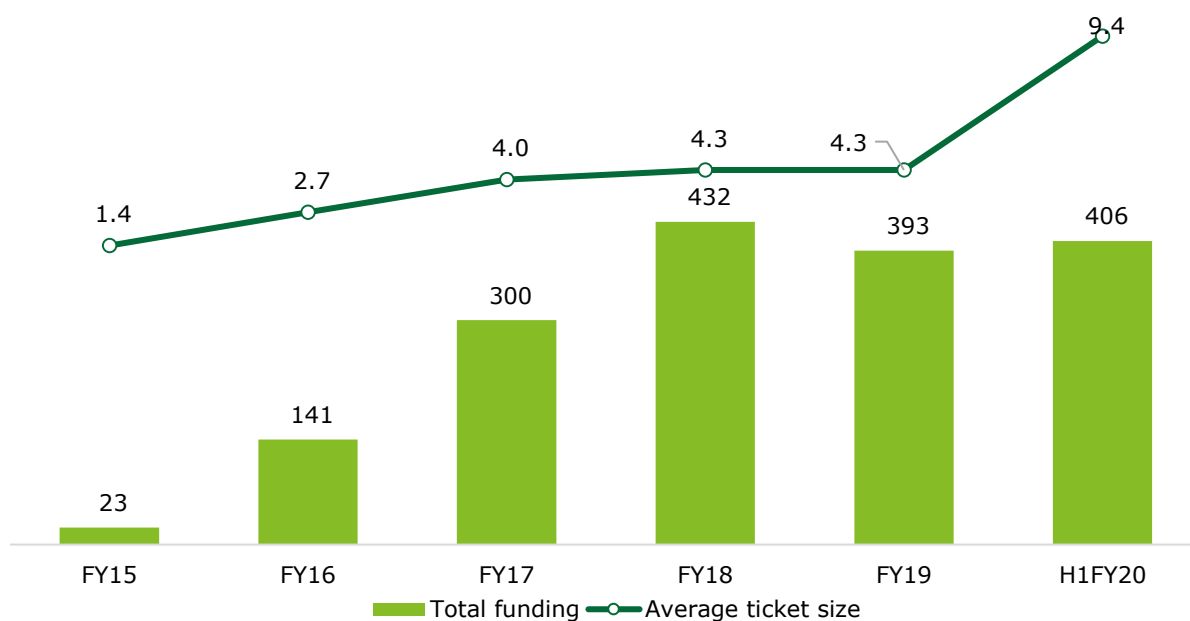
Alternative lending FinTechs aim to address the large demand-supply gap of credit in the country. They address the gap by using both conventional and alternative credit scoring models, and digital workflows, to improve customer experience and gain operating efficiencies. In the past few years, while the number of new alternative lending FinTechs has been decreasing, the amount of investments has been rising.

Figure 2: Number of alternative lending FinTechs founded in recent years



Source: Tracxn

Figure 3: Funding received by alternative lending FinTechs across years (in US\$ million)

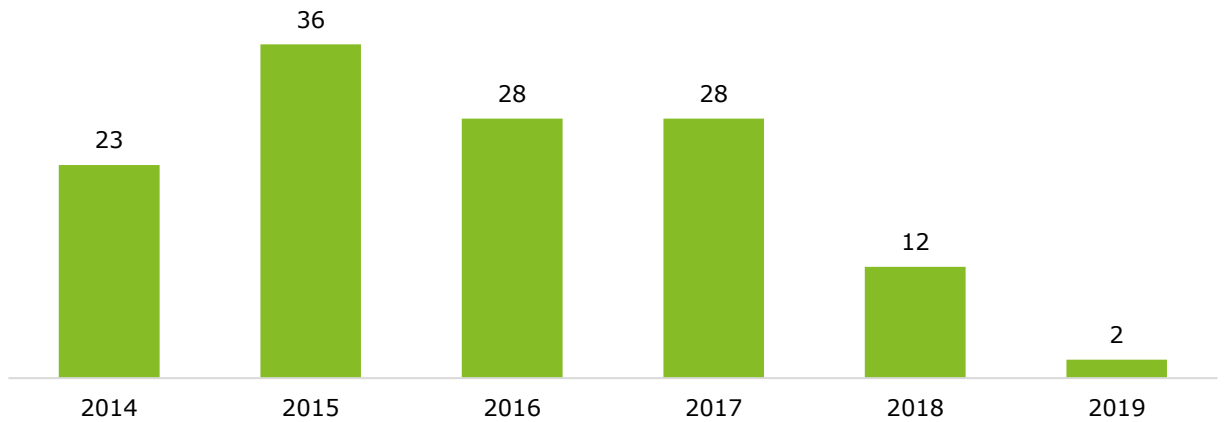


Source: Tracxn

2.4 InsurTech

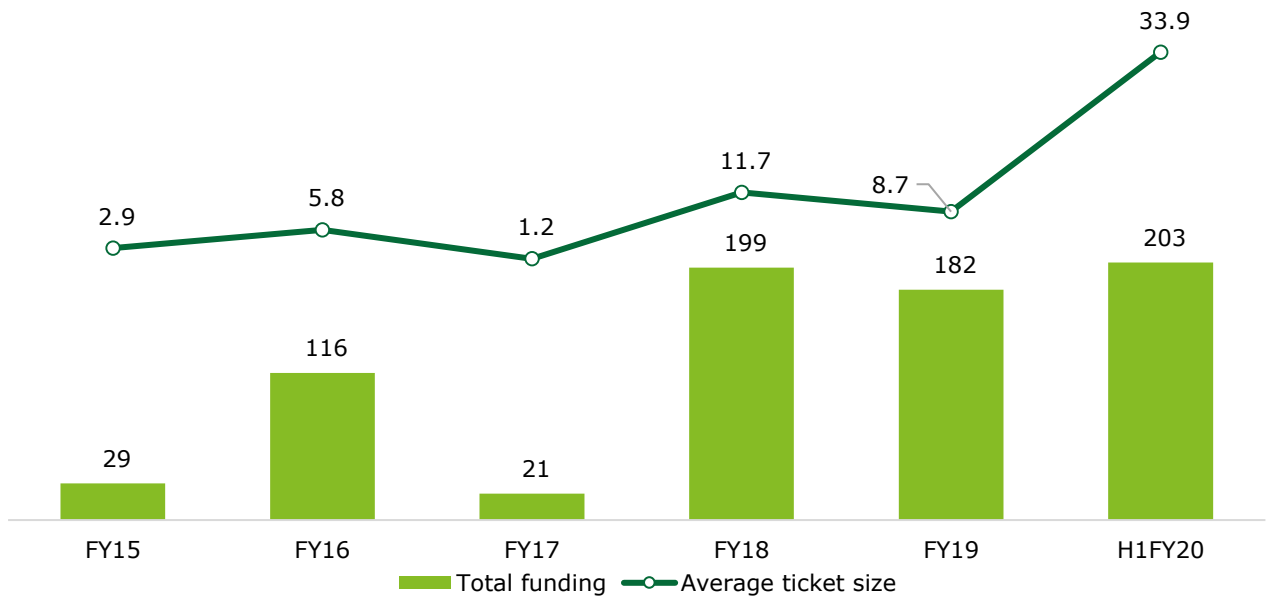
With the rise of InsurTech, a change in the dynamics of the Indian insurance industry has been witnessed. The funding received by InsurTech start-ups in India increased significantly after FY17. This is because these FinTechs have disrupted the conventional insurance value chain in two ways – by offering on-demand bite-sized insurance, mobile-powered micro insurance platforms, remote claims management capabilities, and chat bots (for enhanced customer service); and by experimenting (such as using drones for assessing claims in agriculture insurance).

Figure 4: Number of InsurTech FinTechs founded in recent years



Source: Tracxn

Figure 5: Funding received by InsurTech FinTechs across years (in US\$ million)



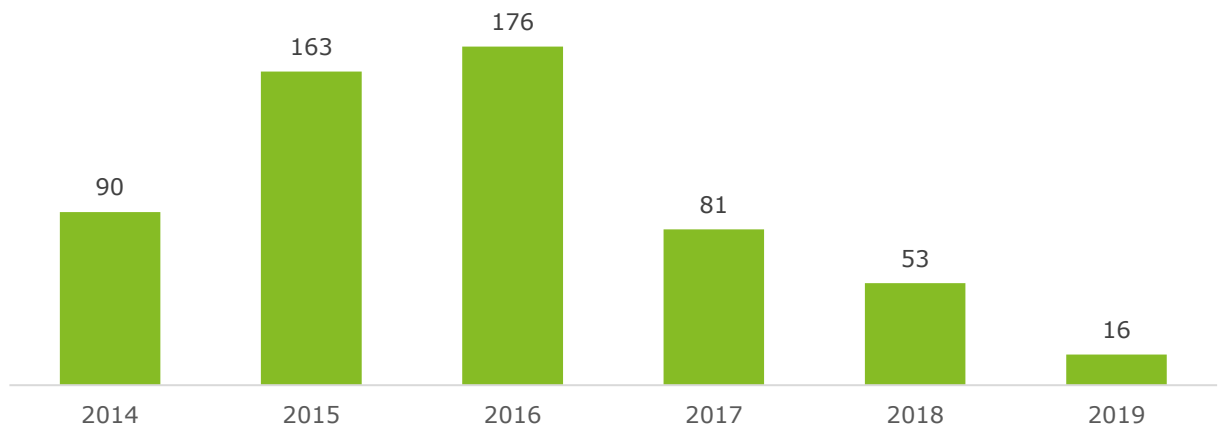
Source: Tracxn

2.5 InvestmentTech

As consumers are shifting from fixed deposits towards mutual funds and (to a lesser extent) direct equities, InvestmentTech FinTechs are expected to grow at a rapid pace in the future. A number of factors are enabling the growth of this industry – an increase in personal wealth (in select customer segments), adoption of digital channels, and easy availability of information to retail investors.

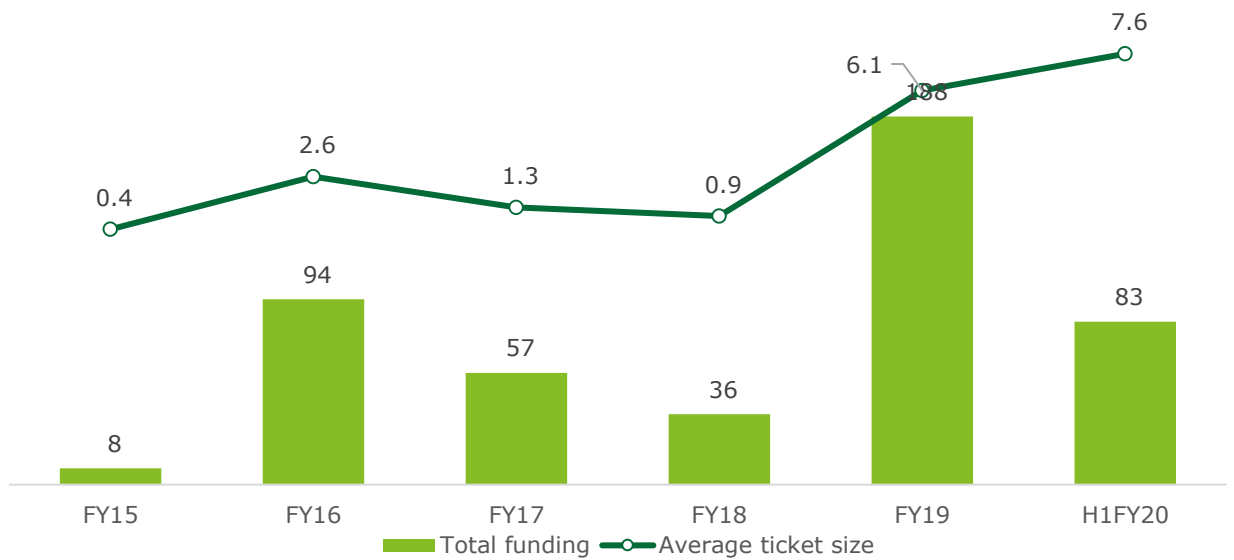
Fund flow towards robo advisors have remained muted, as these platforms have not been able to monetise their product offerings. These offerings are still in the nascent stages. However, robo advisors are expected to evolve over the years due to increasing product offerings and complexities, and a higher degree of standardisation and transparency (which should also help put in place stronger regulations).

Figure 6: Number of investment FinTechs founded in recent years



Source: Tracxn

Figure 7: Funding received by InvestmentTech FinTechs across years (in US\$ million)

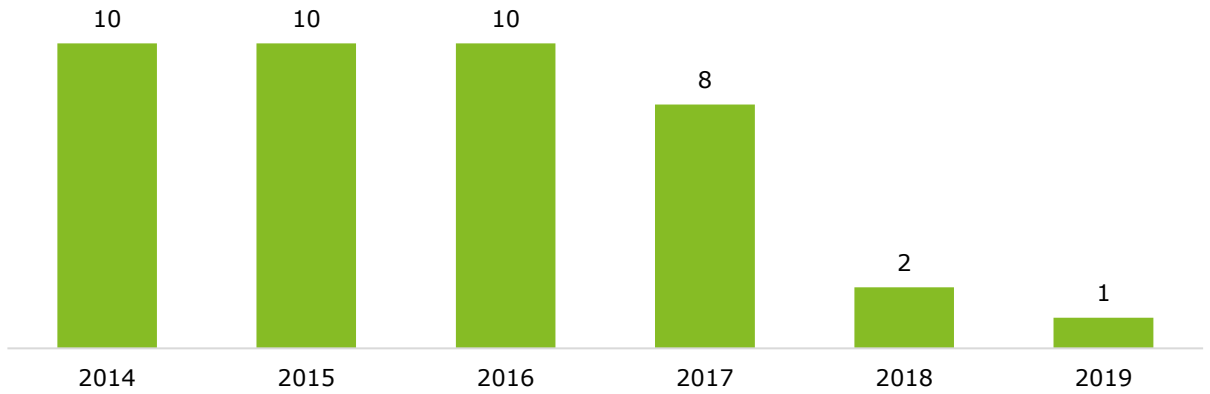


Source: Tracxn

2.6 RegTech

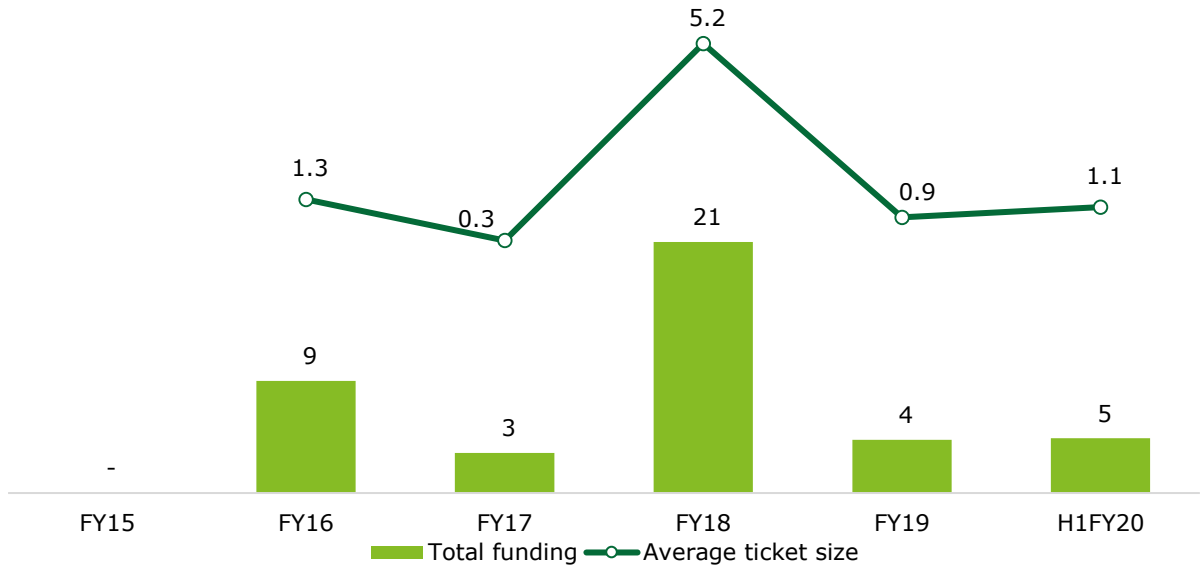
Funding for these has remained low in the past few years as solutions are relatively niche. However, with increasing emphasis on compliance and governance, the demand for such solutions is expected to rise in the future.

Figure 8: Number of RegTech FinTechs founded in recent years



Source: Tracxn

Figure 9: Funding received by RegTech FinTechs across years (in US\$ million)

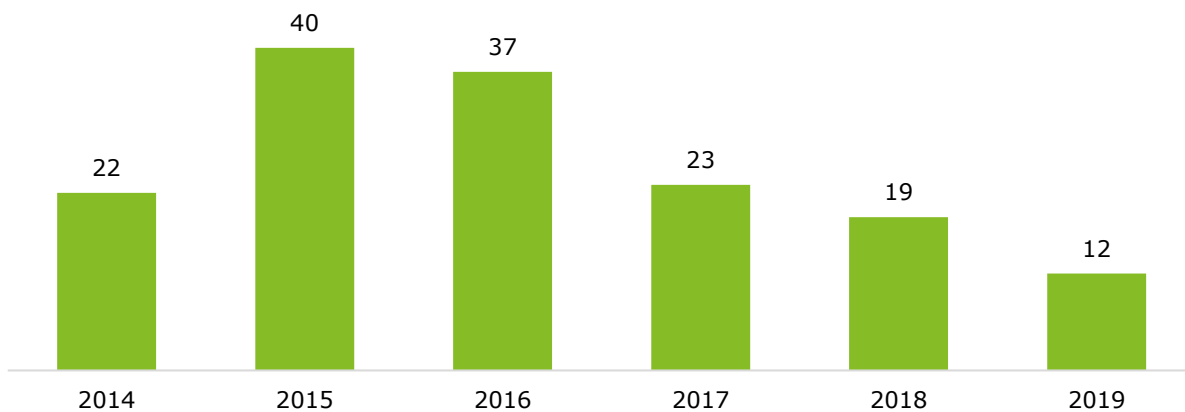


Source: Tracxn

2.7 BankTech

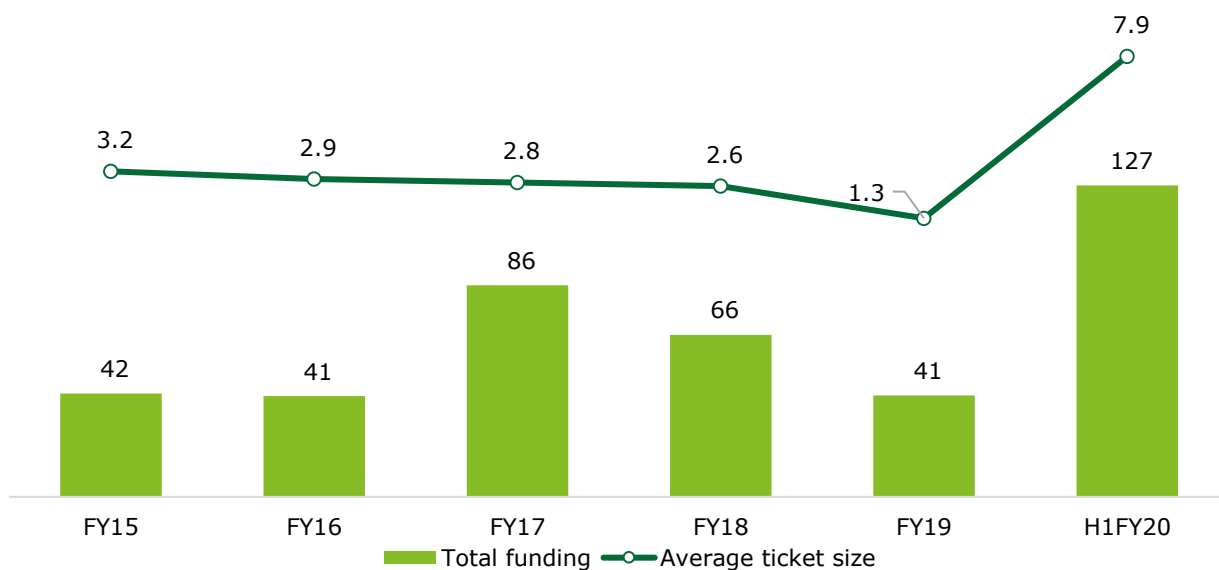
These FinTechs have seen an upward trend in funding as banks are more willing to collaborate with FinTechs to improve their operational efficiency.

Figure 10: Number of BankTech FinTechs founded in recent years



Source: Tracxn

Figure 11: Funding received by BankTech FinTechs across years (in US\$ million)



Source: Tracxn

3. A closer look

In the next paragraphs, we take a closer look at the following three key areas that are currently large and expected to grow significantly:

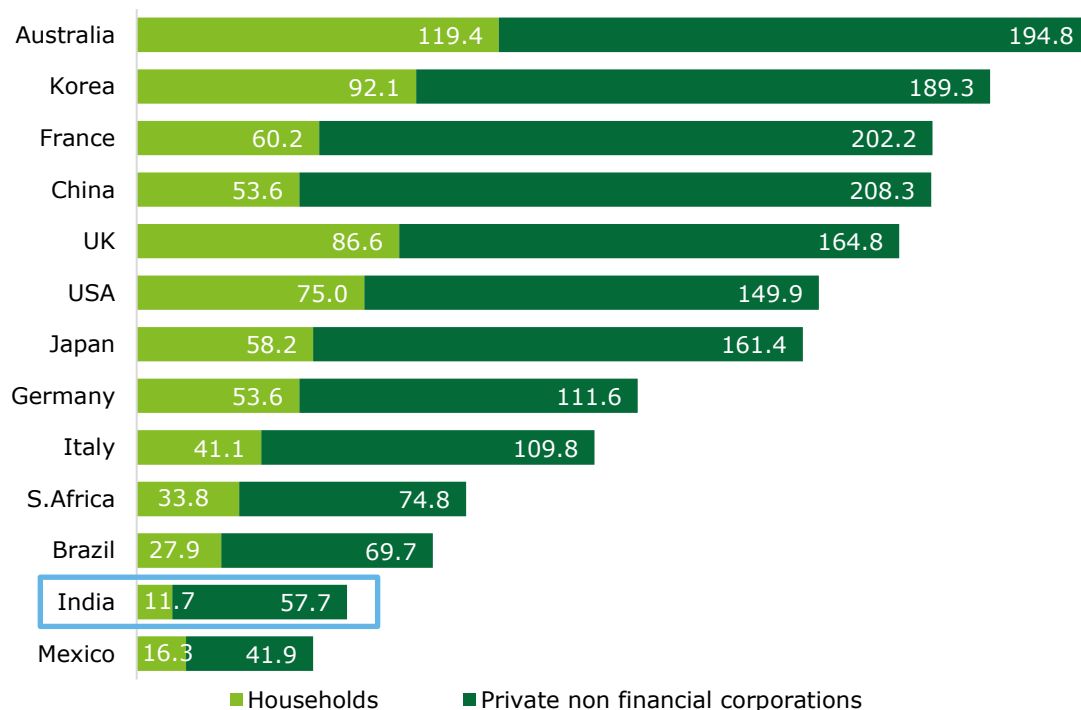
1. Alternative lending
2. InvestmentTech
3. InsurTech

3.1 Alternative lending

3.1.1 Credit penetration

India ranks significantly lower than other economies in terms of credit penetration. This is because traditionally Indian banks’ underwriting processes required rigorous documentation, such as income proof and credit bureau records, from potential borrowers. This meant that non-salaried individuals, such as small business owners and self-employed persons often found it difficult to get access to formal credit. However, with increasing internet penetration and credit bureau coverage, financial institutions (FIs) and FinTechs find it easier to appraise customers digitally before giving credit.

Figure 12: Credit-to-GDP ratio

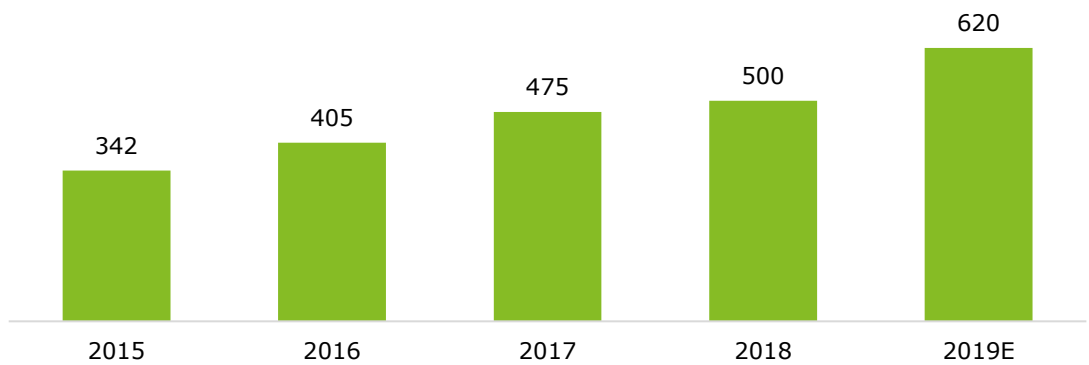


Source: Bank for International Settlements

3.1.2 Key business models in alternative lending

Alternative lending platforms are filling this demand supply gap in credit by targeting new customers and digitising the credit appraisal and disbursal processes. Supporting infrastructure, spurred by rising internet penetration and customer awareness, has resulted in the launch of a number of innovative lending business models. Such models are designed to appeal to retail customers and business owners who have so far been unable to access traditional bank credit. Some common features that distinguish these platforms from traditional banking approach are the following: quick and digitally driven, unique credit appraisal approaches, and flexible product structure to suit the income earning and repayment capacity of borrowers.

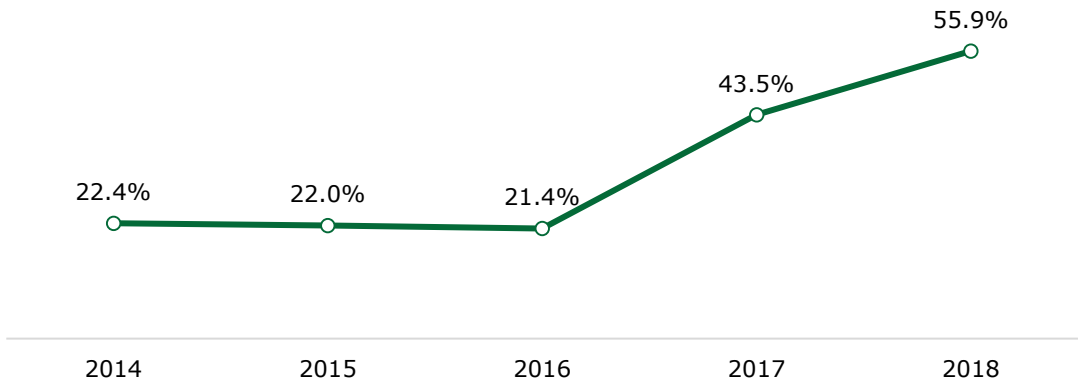
Figure 13: Internet penetration (in million)



Source: IMAI

As a result, our credit bureau coverage has been rising.

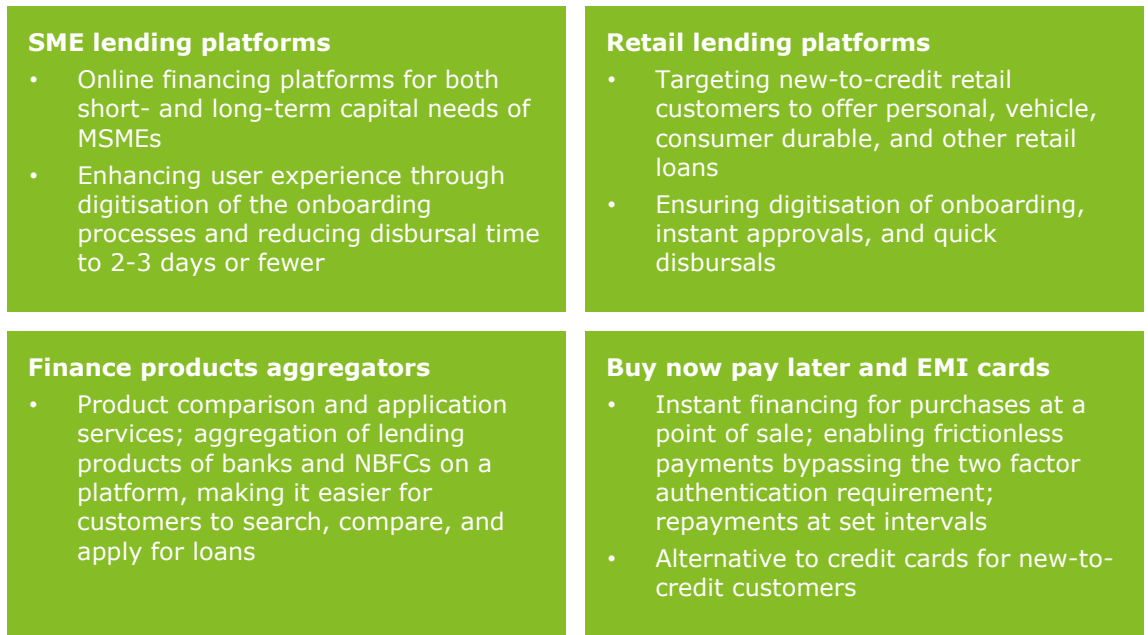
Figure 14: Credit bureau coverage



Source: World Bank

The following is an overview of key business models/solution types in alternative lending in India.

Figure 15: Key business models/solution types in alternative lending in India

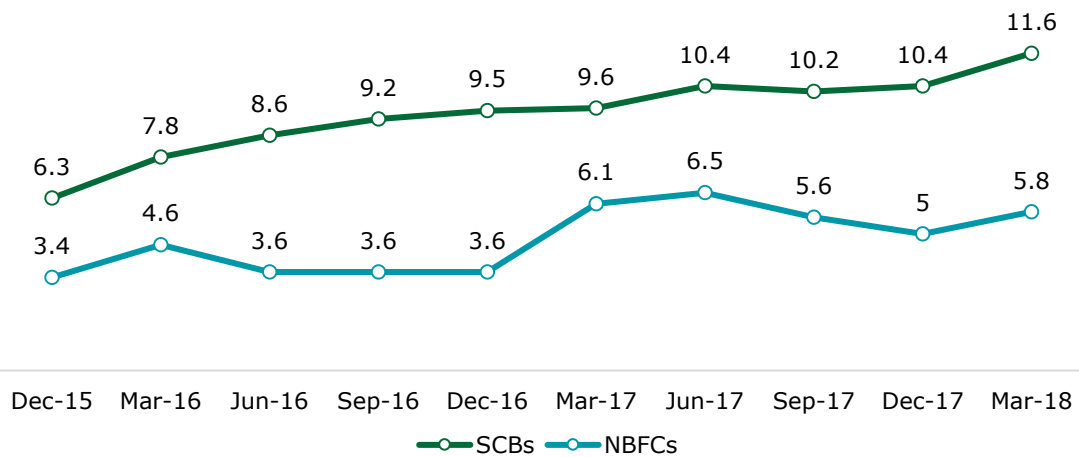


Source: Deloitte Analysis

3.1.3 Increasing NPAs – A concern for the sector

Growth in credit supply has coincided with growth in NPAs, making it necessary for banks/NBFCs and FinTechs to work closely to manage the performance of their credit portfolios. To effectively manage NPAs on books, there has been a lot of emphasis on robust collection management.

Figure 16: NPA ratio of banks and NBFCs (in %)



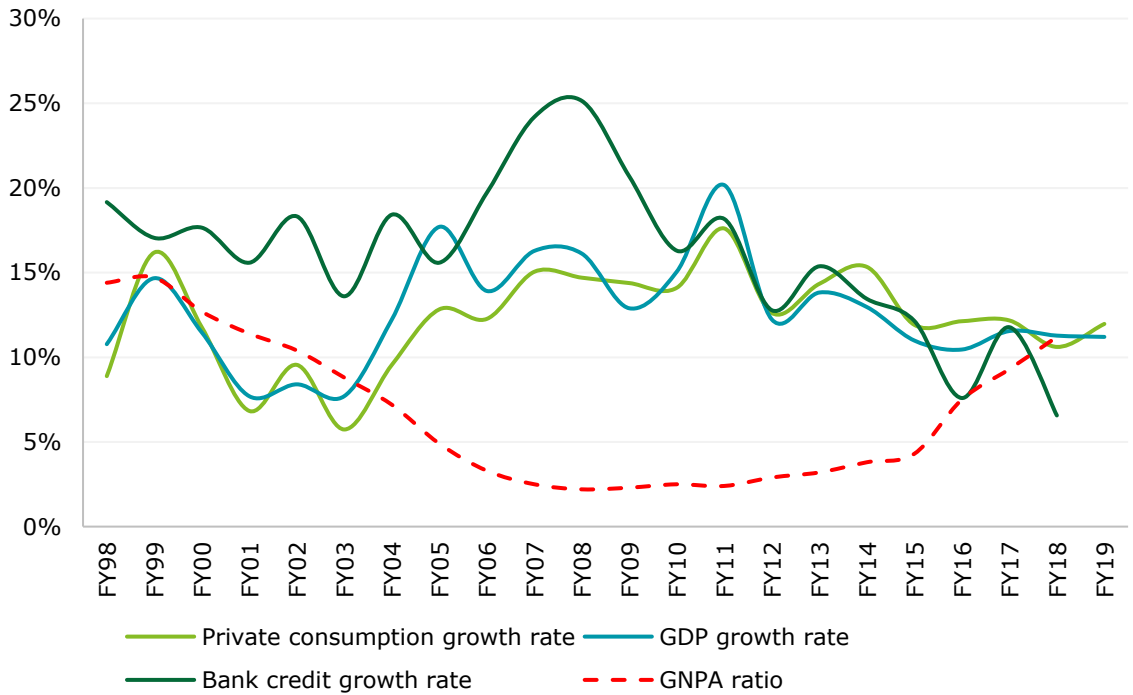
Source: RBI

FIs and FinTechs will need to define due diligence processes and proactively monitor financial, behavioural, and environmental indicators to keep a close eye on

asset quality. Some FIs and FinTechs have begun using artificial intelligence and machine learning tools to get early warnings on asset performance.

The recent slowdown in consumption and broader economic growth may put further stress on asset quality.

Figure 17: Economic and credit growth rates vs. GNPA ratio



Note: Private consumption and GDP growth rates are based on nominal values
 Source: RBI, MOSPI, and Deloitte Analysis

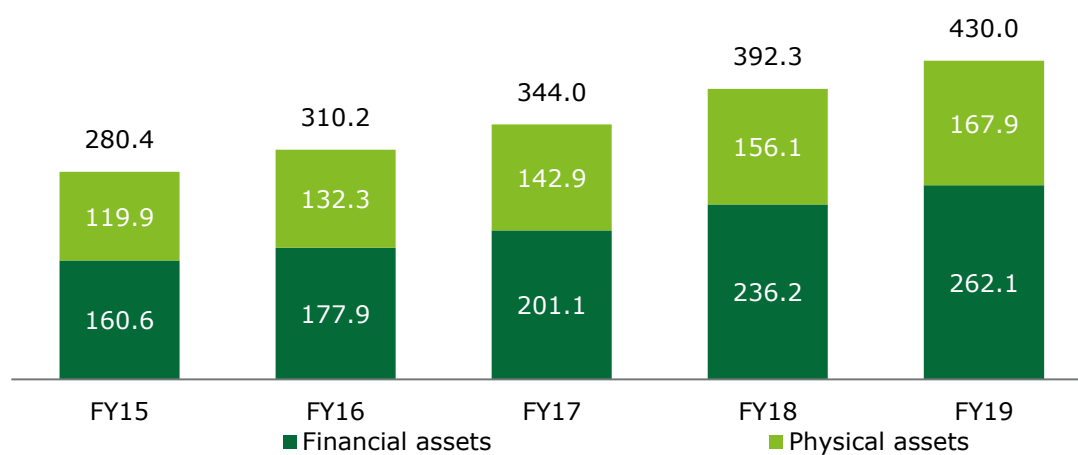
3.1.4 Our point of view

- 1 Low credit penetration among both households and MSMEs indicates high
- 2 Easy availability of alternate data for credit assessment, and significant
- 3 However, the risk of rising NPAs requires a continued focus on robust credit risk
- 4 Also, FinTechs will have to take note of data privacy laws and related customer

3.2 InvestmentTech

Indian household savings are seeing a shift from physical assets to financial assets. They are also witnessing a move from fixed deposits to mutual funds and (to a lesser extent) direct equities. As these shifts happen, more consumers are expected to adopt investment management platforms to execute/manage their investments across instruments and FIs. This space has witnessed the emergence of several platforms, which offer free investment execution tools to customers, attracting sizeable customer bases. There is a significant headroom for growth of customer adoption as overall penetration of mutual funds and direct equities continues will be low. There are fewer than 50 million equity demat accounts and 100 million mutual fund folios at present, compared with an adult population of ~1 billion⁴.

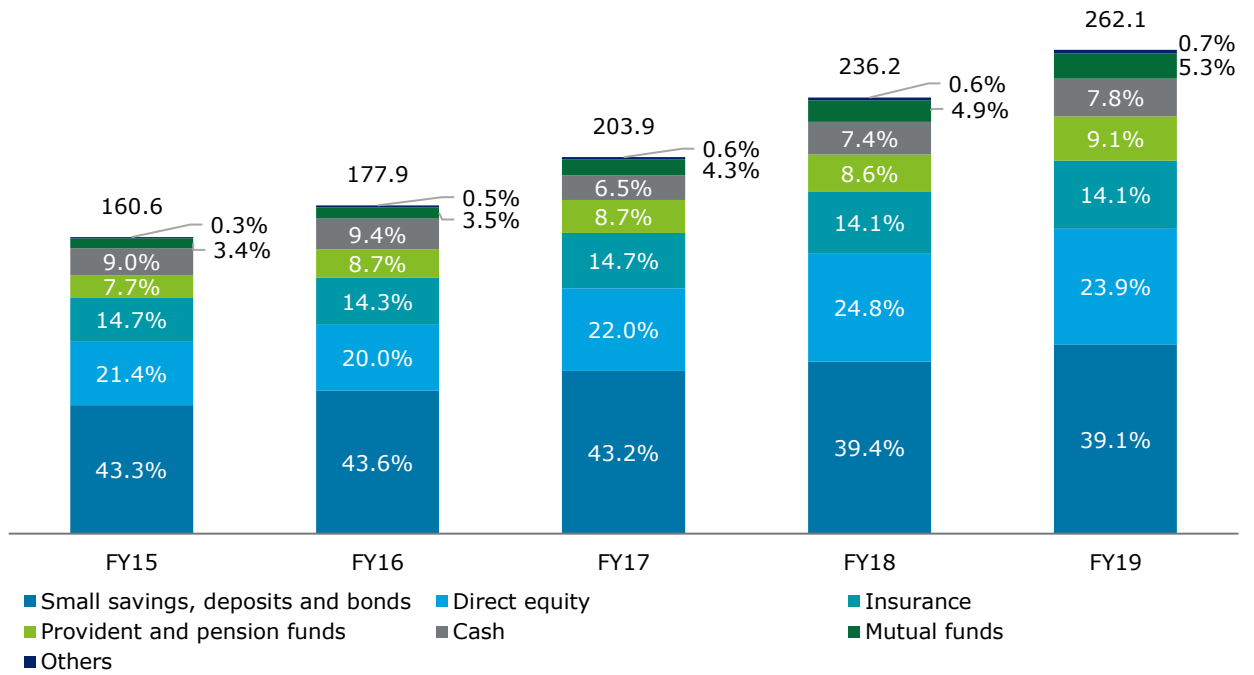
Figure 18: Household savings (INR lakh crore)



Source: MOSPI, RBI

⁴ Source: Securities and Exchange Board of India (SEBI), Association of Mutual Funds in India (AMFI)

Figure 19: Allocation of savings towards financial assets (INR lakh crore)

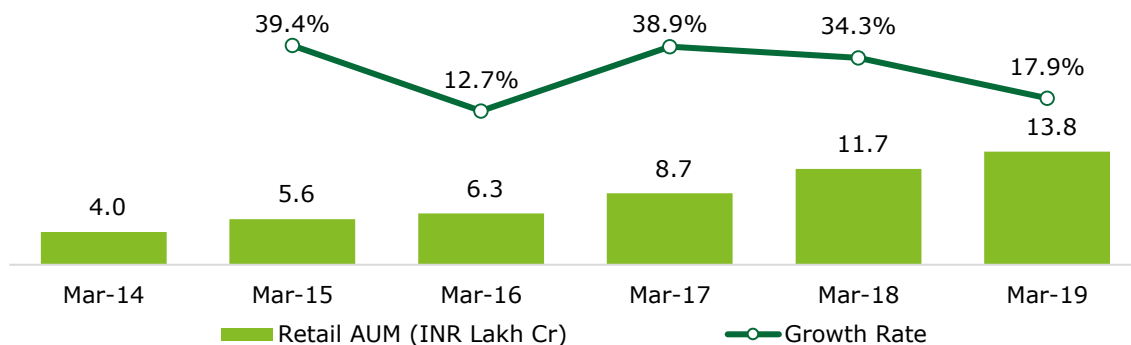


Source: MOSPI, RBI

3.2.1 Growth in mutual funds (retail)

Mutual fund investments have increased at a significant rate of about 26% over the past five years. In this regard, India has clocked more than double growth, outperforming the world and developed regions. There has been a significant increase in mutual fund SIPs (the number of SIP accounts more than doubled from 2017 to 2018).⁵

Figure 20: Retail investments in mutual funds (INR lakh crore)



Source: AMFI

The increase in mutual funds has been driven by multiple factors, such as an increase in personal wealth, need for diversification of portfolio, distribution expansion/geographic penetration to provide last mile connectivity, and strengthening of digital channels. However, the Indian mutual fund industry has a long way to go as it still lags behind other developed economies in terms of assets under management as a percentage of GDP.

⁵ Source: AMFI and Deloitte Analysis

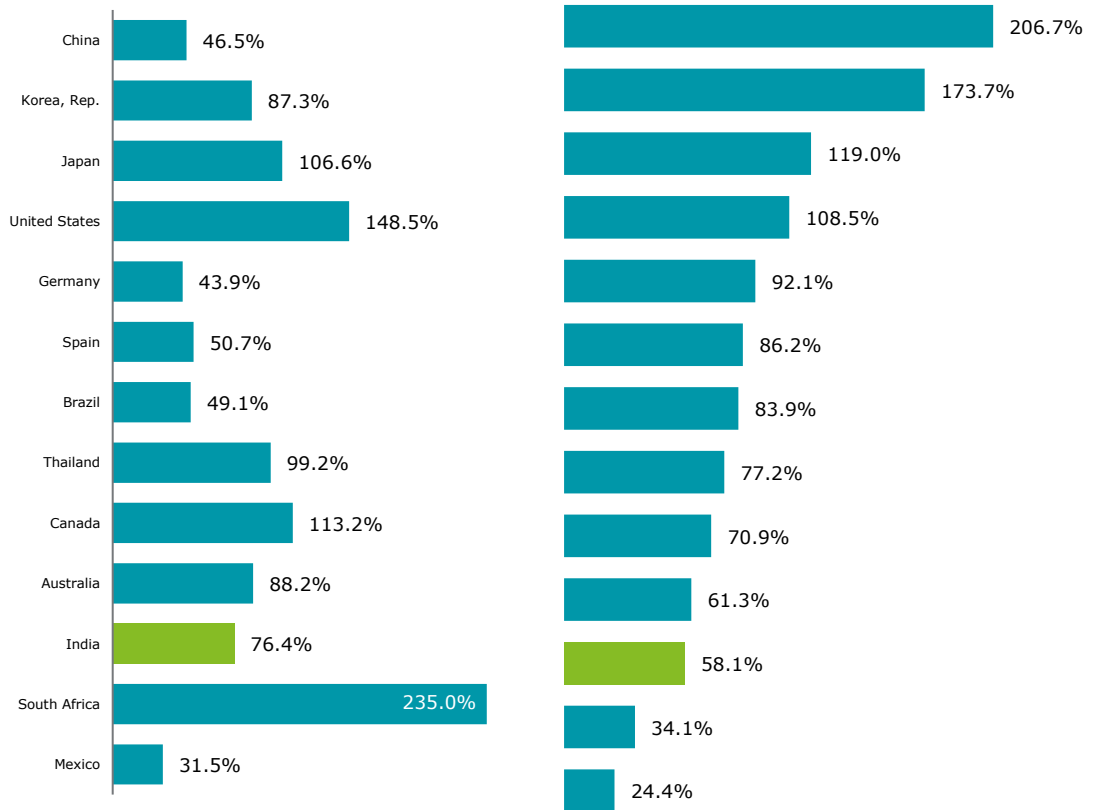
3.2.2 Growth in direct equity investments (retail)

India has witnessed a significant growth in the number of retail participants in the equity market. This growth has been led by increasing customer awareness and rise of technology, which has significantly eased investment execution and improved transparency. Retail participants have increased particularly in tier 2 and tier 3 cities, providing a reflection of prospering interest in the equities market among socioeconomic strata.

Figure 21: Equity retail participation and equity cash market

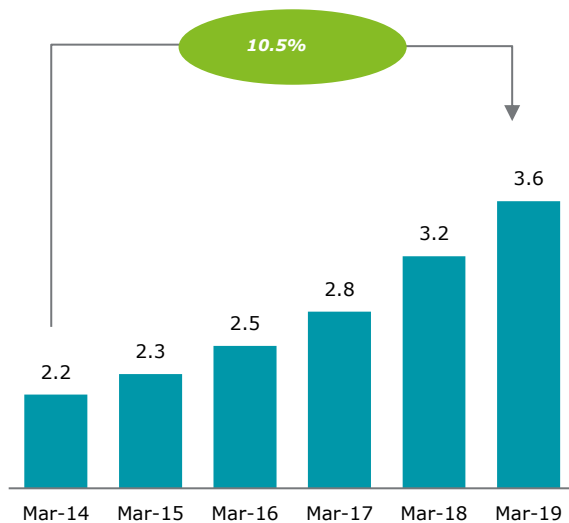
Market capitalisation of listed domestic companies (% of GDP)

Turnover ratio of domestic shares* (%)



Source: World Bank, World Federation of Exchanges

Number of demat accounts in India (in crore)



Source: SEBI

However, the Indian equity market continues to suffer from low stock turnover compared with other developing/developed countries.

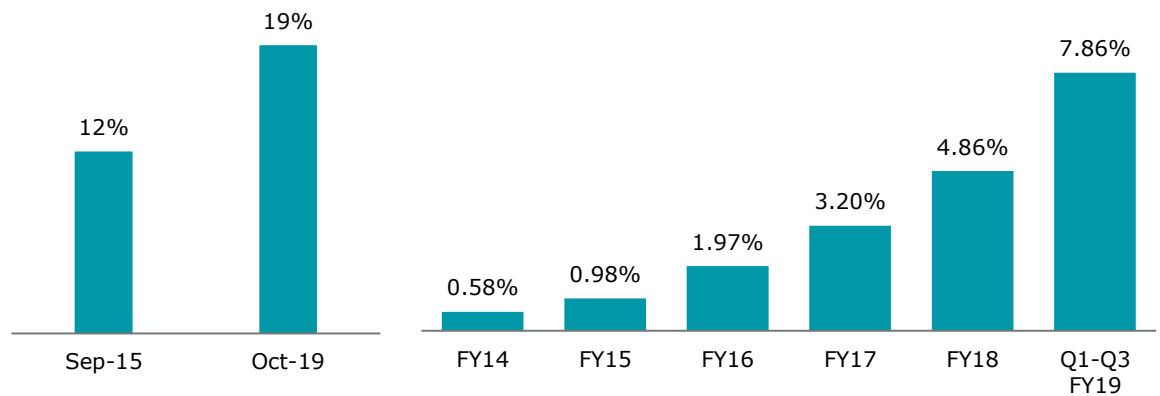
3.2.3 Digitisation across investments

Direct investment channels (i.e., online/mobile platforms) are gaining traction among consumers, making it easier and more affordable for individuals to invest. Customers also benefit from educational programmes available on these platforms.

Figure 22: Adoption of digital channels

Share of mutual fund investments in direct plans by individual investors

Share of equity trades through mobile (% of total turnover)*

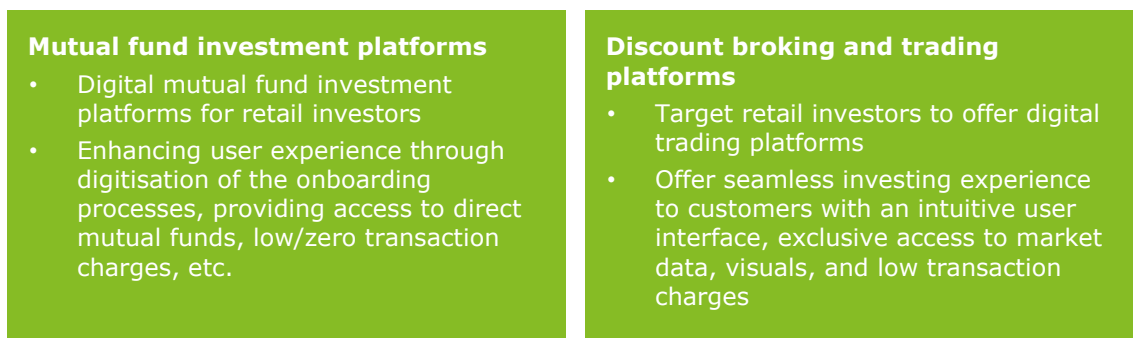


Source: SEBI, AMFI

3.2.4 Key business models in InvestmentTech

InvestmentTech platforms are simple and easy to use, and charge significantly low fees. These platforms have been instrumental in raising customer awareness and changing customer attitudes/behaviour in relation to mutual fund and equity investors. The launch of discount broking and trading platforms have disrupted the market, capturing a large market share. Moreover, mutual fund investment platforms have rapidly grown, driven by AMFI's 'mutual fund sahi hai' campaigns.

Figure 23: Key business models/solution types in InvestmentTech in India

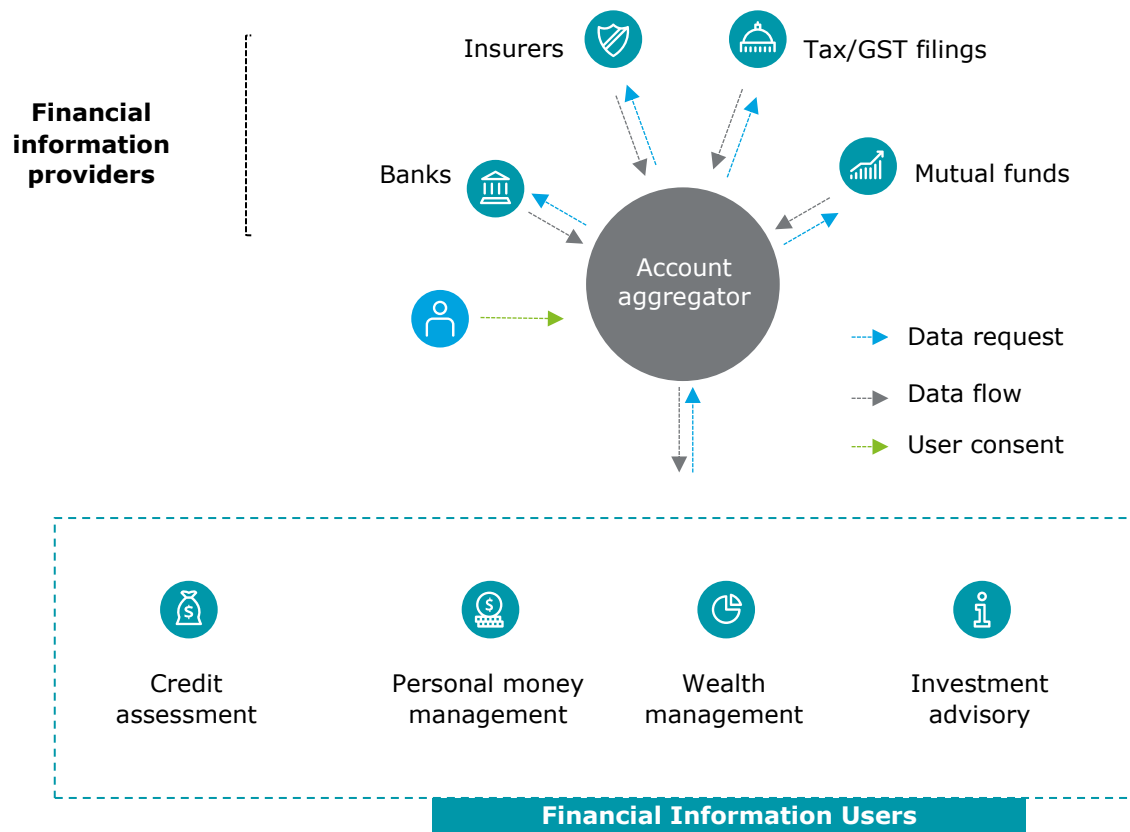


Source: Deloitte Analysis

3.2.5 Account aggregators

A key development in relation to data access is the “Account aggregator” concept introduced by the RBI. Account aggregator can enable access to 360 degree customer data with rigorous customer consent mechanisms.

Figure 24: Account aggregator framework



Source: Deloitte Analysis

The following are the key features of this framework:

- Account aggregators cannot sell and even read customer data.
- Customers can selectively share data and revoke consent.
- Standard APIs have been defined for interoperability and ease of integration.
- Eight account aggregator licences have been given in-principle approval by RBI.
- Customer consent will be based on the electronic data consent framework developed by the Ministry of Electronics and Information Technology.
- The service is expected to be launched for public use in March 2020.

The following are the key benefits of account aggregators:

1. Credit appraisal models to better manage credit risk
2. Enable customer to make better financial decisions and provide better related advisory services

3.2.6 Our point of view

1 As consumers start allocating more savings towards mutual funds and direct equities, growth in the adoption of investment platforms can be expected.

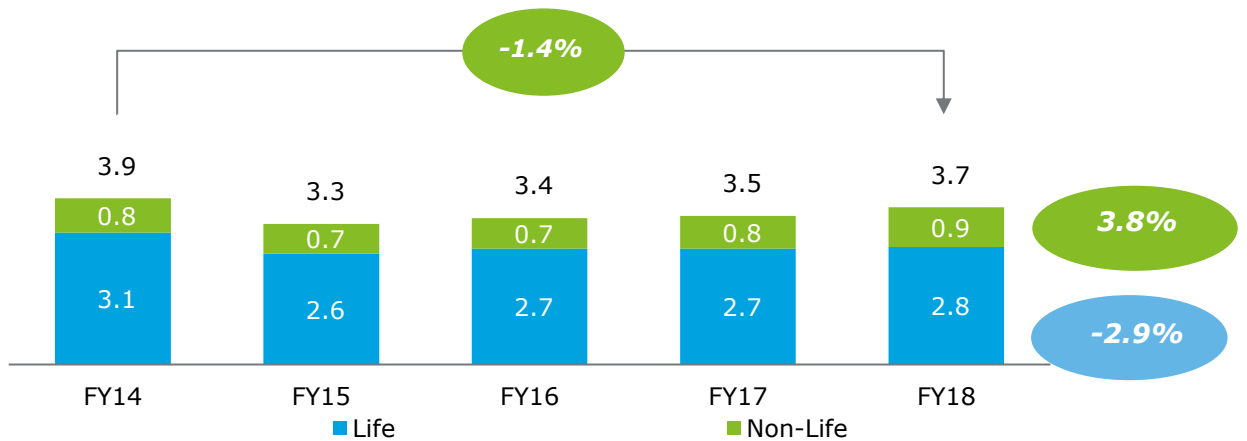
2 At present, the focus is more on ease of investment transaction execution; launch of the account aggregator framework will be an enabler for advisory services.

3 Advisory solutions are evolving and their adoption will depend on the pace at which these solutions grow in maturity and the corresponding pace of customers becoming aware and accepting them.

3.3 InsurTech

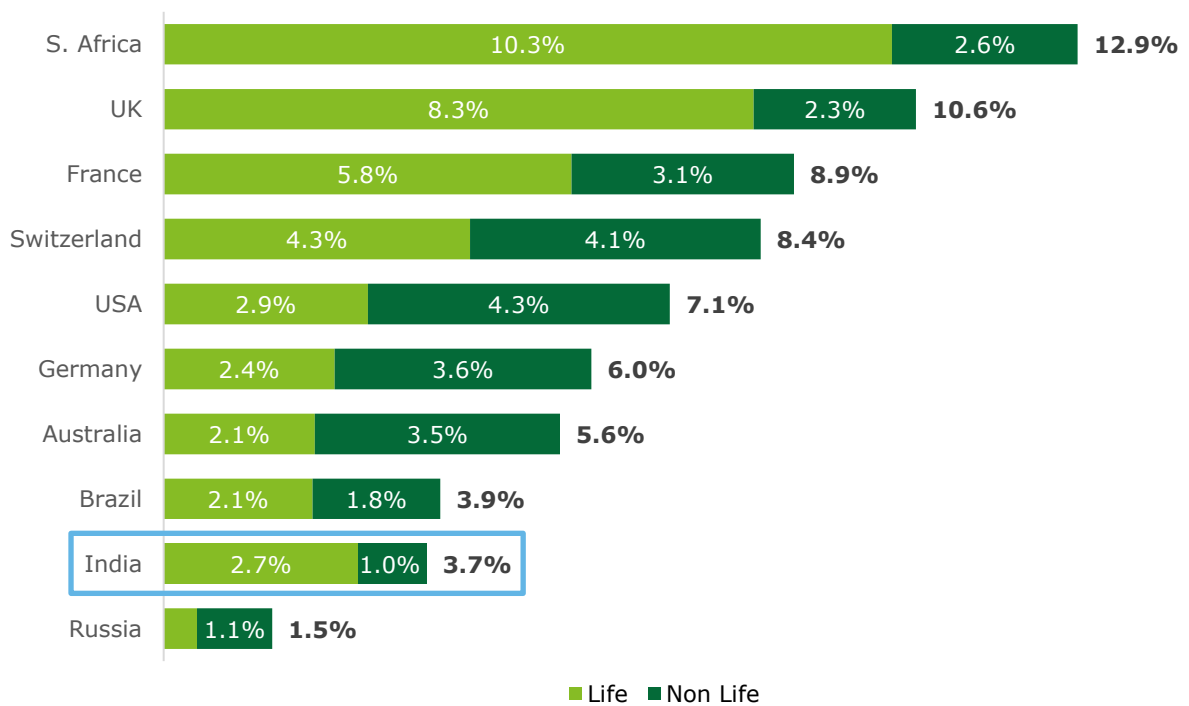
Despite recent growth, overall insurance penetration remains low in India compared with other economies. Current insurance penetration is 3.7% compared with the global average of 6.5%, owing mainly to customer mistrust.

Figure 25: Insurance Penetration (Premium as % of GDP) – India



Source: Insurance Regulatory and Development Authority of India (IRDAI)

Figure 26: Insurance penetration (premiums as % of GDP, Dec'18) - Comparison with other economies



Source: Swiss Re Sigma

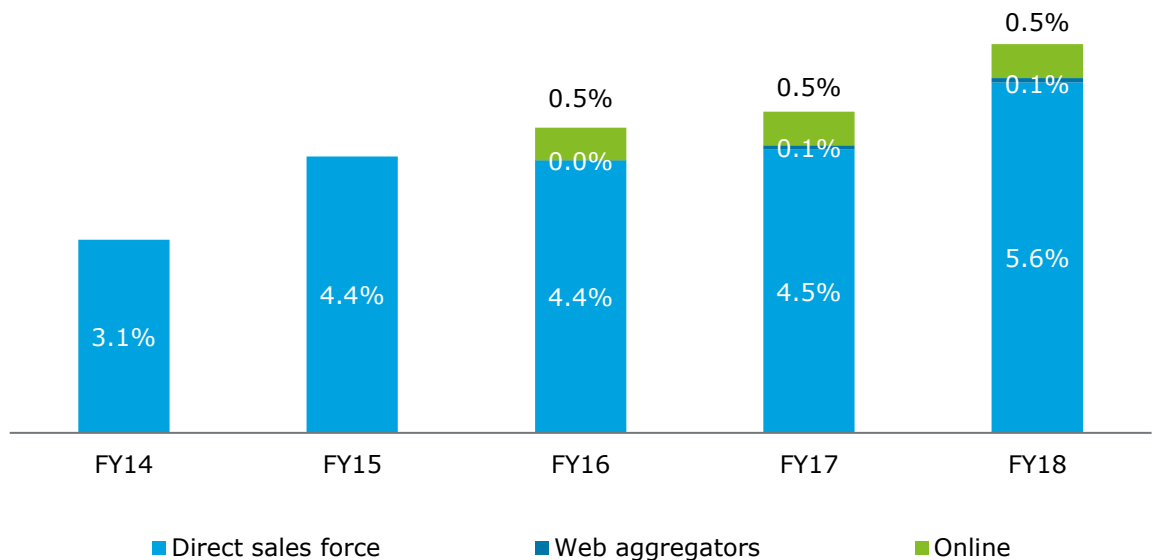
3.3.1 Digital distribution

Insurance distribution through online channels (direct and indirect) has seen a rise in the past few years, indicating a shift in consumers’ purchase behaviour. The shift is driven by high smartphone penetration and enhanced customer experience provided via digital channels. Online is also a cost-effective channel for at scale penetration of the insurance market.

In alignment with these changes, InsurTech companies have been focusing on the following:

1. Personalised products according to changing customer needs – On-demand insurance
2. Improving customer experience and engagement – product aggregation and comparison

Figure 27: Digital distribution of insurance



Note: Other insurance distribution channels primarily include physical channels (such as individual agents, corporate agents, brokers, and common service centres).

Source: IRDAI

Similar to the above trend of increase in the share of direct and digital channels in first year premiums for individual life insurance business, the share of direct sales force channel for general insurance increased from 26.8% in FY14 to 28.5% in FY18⁶.

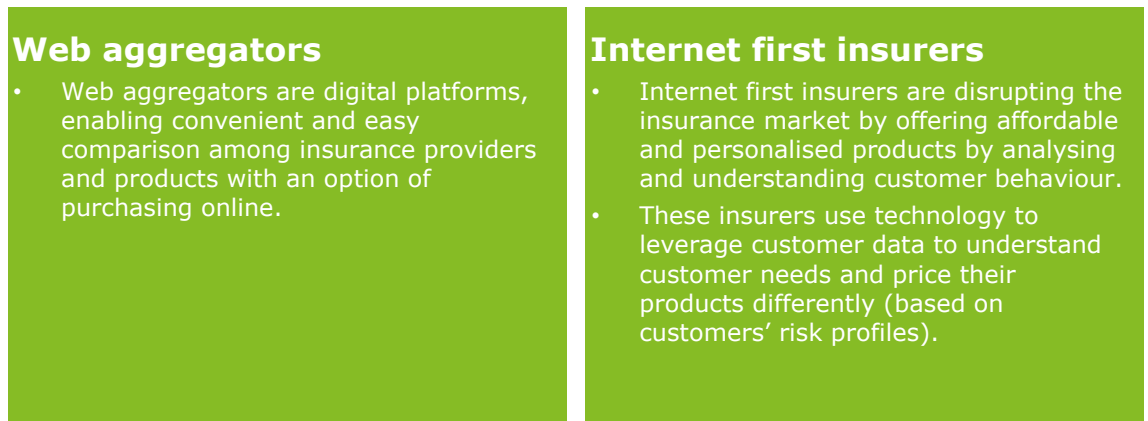
3.3.2 Key business models in InsurTech

Two key business models are prevalent in the India InsurTech market—web aggregators and internet first insurers. Aggregators are gaining market shares in insurance distribution by proving a single easy-to-use platform for comparing different offerings and solution providers. Internet first insurers have been instrumental in disrupting the market by offering low-cost general insurance,

⁶ Source: IRDAI

innovating products according to customer requirements, and using data to define their pricing strategies.

Figure 28: Key business models/solution types in InsurTech in India



Source: Deloitte Analysis

3.3.3 Our point of view

- 1** More customers will move online to buy insurance products. As a result, InsurTech companies are expected to grow further.
- 2** Web aggregators are expected to attract a larger customer base as customer awareness increases and customer experience improves.
- 3** Internet first insurers are expected to disrupt the industry by focusing on improving customer experience and lowering premiums/operating costs using digital technology.



Confederation of Indian Industry

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