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WM Chief Investment Office

Financial technology: Broadening horizons

May 2021

Financial technology accelerating in a post-Covid world

Why this theme?
Financial technology (Fintech) impacts a broad spectrum of commercial and financial activities. The Covid-19 pandemic has accelerated certain key existing trends that will shape the future of financial services, in our view.

Why does it matter?
Global investments flowing to Fintech-related firms are expected to grow to above USD 300bn, with annual investment spend growth rates exceeding 20%, by 2022. Fintech's growth is also set to benefit within Emerging Markets, thanks to favourable demographics, increasing connectivity and a smaller presence of legacy systems.

What does this mean for investors?
Fintech is expected to see significant growth, driving digitalisation and innovation in the financial services industry over the coming years.

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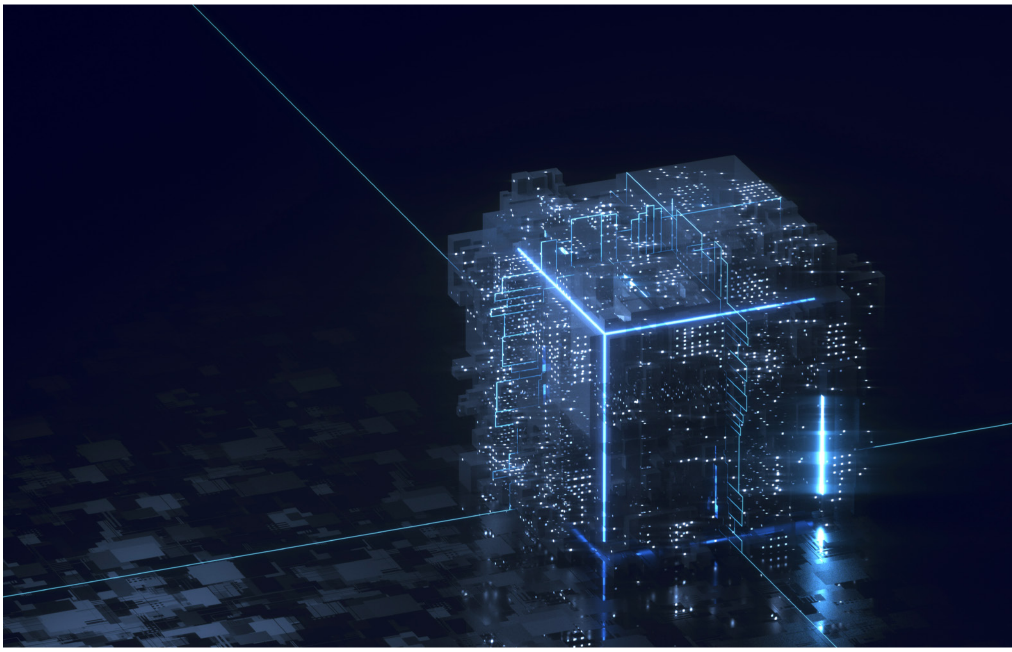


Financial technology (Fintech) impacts a broad spectrum of commercial and financial activities. It is a term used to describe firms leveraging technology to deliver financial services to businesses and consumers, aiming to compete with traditional financial methods and applications.

Social distancing accelerated the shift toward digitalisation, a trend that was already underway even before the pandemic. Digitalisation catering to newly developed habits due to Work-From-Home (WFH) policies and reduced physical interactions are expected to shape the future of financial services and commerce. In our view, these forces will impact both consumers and businesses.

2020 was a pivotal year for Fintech

Fintech is not a new concept. In fact, we can trace its roots as far back as the early 1900s. In recent years, however, global investments in Fintech have accelerated, with some reports estimating investment spend of around USD 300bn or more with an annualised growth rate of above 20% for the period between 2018 and 2022.

2020 was a particularly pivotal year for the Fintech sector as financial services firms as well as large and small tech companies seized on the disruption caused by the Covid-19 pandemic to accelerate the shift to digitalisation.

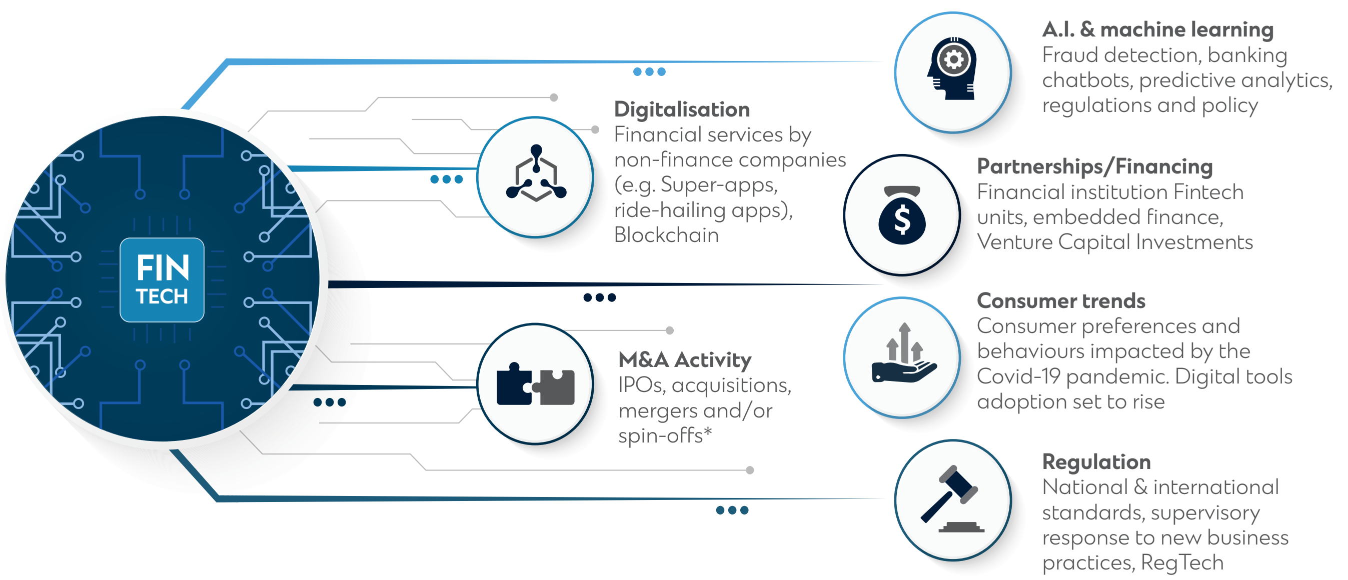
According to a recent KPMG study, digital tools' adoption accelerated in 2020, including the demand for e-payments solutions and contactless banking services. Consumers radically shifted their spending behaviours as they became more accustomed to e-commerce platforms, digital customer service channels and e-wallets.

Among businesses, Fintech investments and partnerships with large corporates accelerated as well. Mature fintechs and large technology firms embraced Mergers & Acquisitions (M&A) activities to grow geographically or add new services for their consumers.

This wave of activity, however, drew attention from governments and regulators globally as they sought to understand the evolution of Fintech and develop appropriate frameworks around these changes.

The changes witnessed in 2020 will form the foundations for further developments in the Fintech ecosystem, in our view. We subdivide this ecosystem into six broad pillars, inside of which we believe several forces will drive growth and progress in the consumer and business side globally.

Key Fintech pillars of growth in the coming years



Source: News sources, Standard Chartered
*A 'spin-off' is a situation in which a firm divests one or more business segments, creating separate smaller entities.

Deconstructing the drivers of future Fintech growth

Financial services, as an industry, has traditionally had high barriers to entry. This is because of a combination of factors, such as a significant regulatory burden, high capital requirements and risk management and compliance needs. This likely explains why incumbents in the financial services industry have been able to retain a significant market share for several decades.

The Fintech ecosystem, however, has matured significantly since the financial crisis of 2008-09. The nature of the crisis and advances in technology paved the way for smaller firms to selectively tackle parts of the financial services value chain and offer (in most cases) improved solutions to consumers and businesses alike.

The Fintech ecosystem is broad

Fintech ecosystem by customer type (non-exhaustive)

Consumer

- Lending
- Personal finance
- Money transfer/ Remittances
- Payments and billing
- Crypto
- Insurance

High Net Worth Consumers

- Wealth management
- Crowdfunding and investment platforms
- Real estate

B2B - Small to medium enterprises (SMEs)

- Infrastructure providers
- Lending
- Insurance
- Payroll and accounting

B2B - Enterprises

- Capital markets
- Regtech
- Infrastructure providers
- Blockchain
- Insurance

Source: Business Research Company, KPMG, Standard Chartered

As dynamics in Fintech evolve, we identify and examine a few fundamental drivers supporting our bullish view:

- Consumer behaviour and preferences;
- Artificial Intelligence and Decentralised Finance;
- Growth in advanced financing stages for fintechs;
- Accelerating M&A activity and partnerships;
- Rapid growth of digitalisation in Emerging Markets;
- Advancements in the regulatory framework

Consumer behaviours and preferences
A recent survey by Harris Poll, on behalf of Plaid in the US, highlights that Fintech adoption has accelerated amid the Covid pandemic. About 60% of those surveyed have used more digital tools to manage money than before the pandemic. Moreover, two-thirds expect to use financial apps more frequently going forward and expand their usage beyond simple banking tasks.

Further mobile penetration and broadband connectivity are key enablers behind these consumer behaviour changes. In Emerging Markets (EM), in particular, mobile connectivity has supported the

Mobile penetration rates in EM on the rise

Country	Smartphone users	Population	Penetration
China	851.2M	1,420.1M	59.9%
India	502.2M	1,368.7M	36.7%
United states	**276.0M**	**329.1M**	**79.1%**
Brazil	96.9M	212.4M	45.6%
Russia	95.4M	143.9M	66.3%
Indonesia	83.9M	269.5M	31.1%
Japan	**72.6M**	**126.9M**	**57.2%**
Germany	**65.9M**	**82.4M**	**79.9%**
Mexico	65.6M	132.3M	49.5%
Iran	45.4M	82.8M	54.8%
Turkey	44.8M	83.0M	54.0%
Vietnam	43.7M	97.4M	44.9%
Philippines	36.3M	108.1M	33.6%

Source: World Bank, Standard Chartered. Data as of 30 Sep 2020; Developed Markets economies in **Bold**.

financial services' expansion among consumers, as better connectivity has allowed Fintech to tackle niches underserved by traditional banks.

Consumers' new favourable inclination toward digital tools in Developed Markets (DM) and growing connectivity in EM will likely provide a large addressable market for Fintechs to potentially seize.

Artificial Intelligence (AI) and Decentralised Finance
AI and Machine Learning (ML)-driven systems are enabling companies to put the vast amount of data they collect to effective use. Firms are increasingly able to monitor customer behaviour, detecting anomalies and opportunities they can factor into their services and product offerings.

Moreover, these technologies are helping banks in their anti-money laundering and terrorism financing efforts. Another added benefit of AI is that it helps financial services and Fintech firms meet increasingly demanding regulatory requirements.

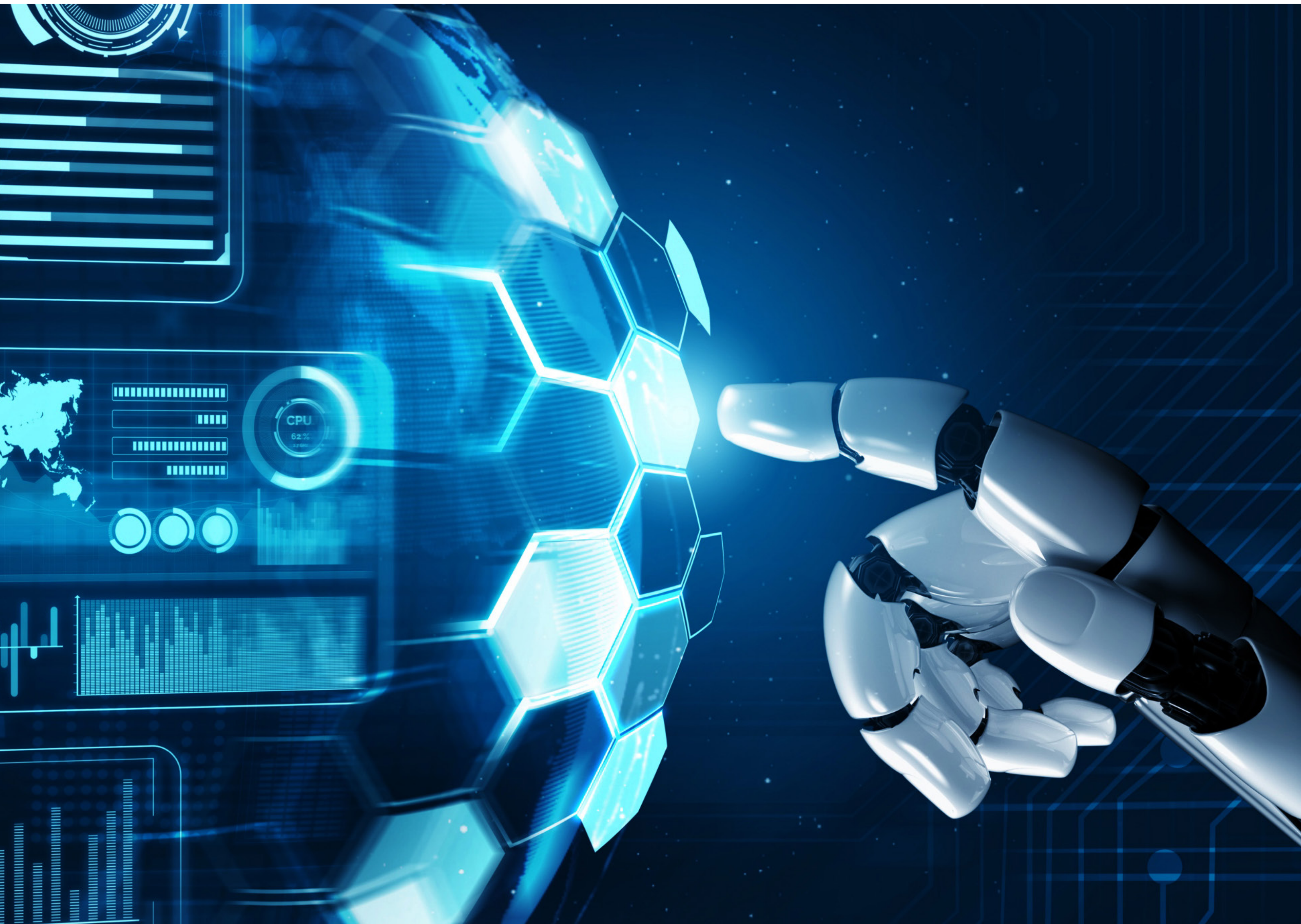
The incorporation of AI and ML is expected to improve the return on investment in compliance departments and slow the annual growth in compliance expenses.

Another important field borne out of technological advances is that of Decentralised Finance (DeFi). A known objective of DeFi is to decentralize financial services processes and offerings. It does so by removing bank, payment and investment intermediaries and replacing these with services that operate within a blockchain network.

Blockchain is proving to be a robust alternative base for this disruptive emerging financial ecosystem because it offers transparency and (potentially) increased security.

In 2020, the growth of DeFi has accelerated significantly, albeit off a low base, rising to about USD 13bn in market size by December 2020.

The sectors most likely to be affected by the DeFi evolution are lending, decentralized exchanges, asset management, financial data, and insurance.



Growth in more advanced financing stages for Fintech start-ups

Global investments in Fintech-related firms in 2020 recorded a value of USD 105.3bn with 2,861 deals, according to data from KPMG (which includes Venture Capital, Private Equity and Merger & Acquisitions). After the global pandemic brought many deals to a halt in the first half of 2020, the trend reversed in H2 as investors and fintechs learned to adapt to the new ways of doing business.

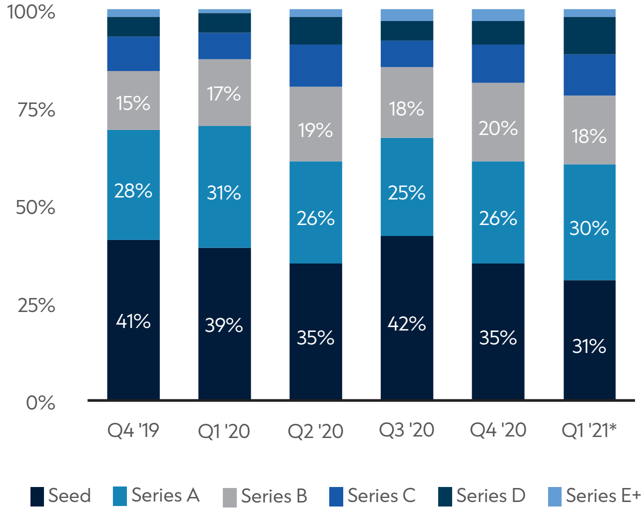
The key takeaway, in our view, is that Fintech start-up funding deals are focusing on the more advanced stages of early financing. Growing late-rounds financing for these Fintech start-ups means the ecosystem is maturing as some of these firms advance in their corporate life cycle. This, in turn, supports the stabilisation of the sector as it becomes more ingrained in regular commercial and financial activities.

At the global level, Asia has become an increasingly important hub for Fintech investments. In this region, typical Venture Capital and Private Equity firms are often sided by specialised family offices and sovereign wealth funds during funding rounds. North America, however, remains the largest region. For comparison, the continent is home to twice as many Fintech companies as the APAC region according to CB Insights.

We believe these trends will continue as demographics (particularly in Emerging Markets) as well as technological advancements will continue to fuel investment opportunities in Fintech.

Increasing share of funding rounds past the Seed stage likely means start-ups continue to mature and grow

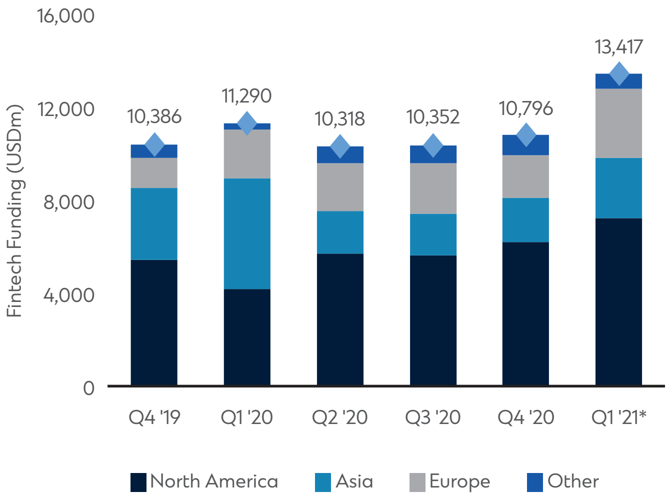
Percent share of global Fintech deals by funding stage



Source: CB Insights, Standard Chartered
*As of 28 Feb 2021. The higher the letter the closer a firm is to a potential listing on a public market.

Fintech funding is surging across major regions in 2021 YTD

Global Fintech start-up funding by region



Source: CB Insights, Standard Chartered
*As of 28 Feb 2021.

Accelerating M&A activity and partnerships
Financial services incumbents, as well as large technology firms, will likely continue to embrace M&A activities with smaller Fintechs in order to continue their push toward greater digitalisation, add new services for their consumers, and grow market share domestically or abroad.

The focus on M&A – as well as partnerships between non-financial and financial services firms – supports the rise of 'Embedded Finance'. Some estimates put the combined market cap size of firms involved in providing some form of Fintech services (and firms pivoting toward this trend) at around USD 7 trillion by 2030.

More specifically, Embedded Finance consists of the co-mingling of financial services into non-financial websites, mobile applications, and business processes.

Embedded Finance enables third parties to create new revenue and profit streams, as well as significantly improve user experience and loyalty, by streamlining digital access to complementary financial services.

Sample offerings in this space can include payments and money accounts, lending or "buy now and pay later" programs, investments and insurance. For example, well-known ride-hailing apps have become leaders in this arena as they offer a variety of the above services to users, commercial partners and employees.

Additionally, embedding Fintech services onto these platforms not only offers diversification of revenue streams, but it also adds flexibility with regards to income generating business models. Firms can charge for their services either via fees and commissions, or per transaction, or by assets under management or lastly, by subscription premiums. This is flexibility adds to the reasons why incumbents seek to grow via M&A.

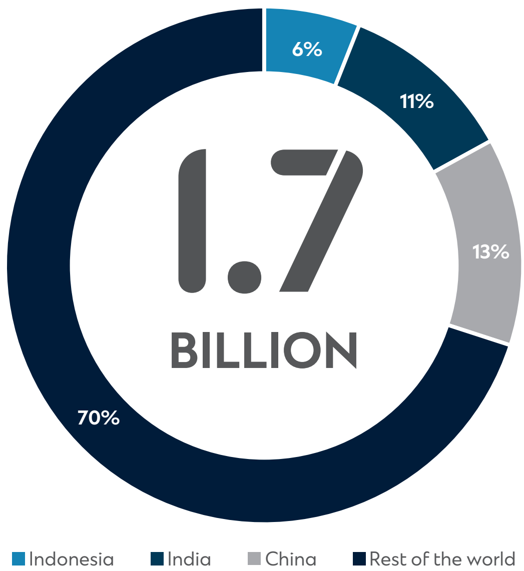
In the coming years, we expect embedded finance to permeate more industries and sectors. Consumers and businesses will likely carry out their day-to-day financial tasks within their preferred ecosystems, while getting more accustomed to and demanding of the convenience that comes from it.

Growth in the digitalisation of Emerging Markets
Until relatively recently, cash transactions have been ubiquitous in developing countries. That is because many households and small businesses tend to not have a bank account and unfortunately present little economic value to some financial institutions.

However, Fintechs have established the first stepping stone in EMs within payments. These services have empowered business owners with digital tools to procure and pay for products irrespective of the supplier's location. They have also facilitated the need for increasingly complex logistics. Networks, efficiency and scale economies have then quickly emerged, delivering lower prices to customers and better margins to innovative business owners.

Large unbanked population

1.7 billion adults lack a bank account, predominantly in Emerging Markets



Source: Global Findex Database, Standard Chartered

As demographics and a growing middle class emerge as a key engine of growth, the Fintech ecosystem will likely continue to find fertile grounds to expand. Firms will likely grow across various financial services segments (remittances, digital banking, wealth products and insurance) to target both consumers and businesses alike. The speed and adoption of technology in these regions will make it easier for new players to leapfrog traditional financial services through digitalisation.

Regulations: a balancing act
Regulation is a key swing factor in how Fintech disruption could play out. Although it is unlikely to change the general advancement of this trend, regulation could affect the speed and extent of disruption.

Traditional financial services firms' interplay with regulators can offer some historical perspective, as they have, at different times, thrived and suffered from the burden of regulations.

At first, regulation shielded them from competition by creating high barriers to entry for the industry, providing them with the ability to cross-sell and retain clients more easily. After the 2008-09 financial crisis, however, regulations imposed a heavy cost burden to incumbents, and investment in digitalisation and consumer satisfaction suffered as a consequence.

In the post-crisis period, Fintechs have been thriving off the slow pace of innovation from incumbents while maximizing their reach from operating at the fringes of the regulatory purview.

This has led, in some cases, to large market share and quasi-monopolistic power by some mature Fintech firms which forced regulators to intervene either through fines, by halting M&A activities or demanding changes to certain business practices.

Moreover, material shocks that may warrant stronger regulatory involvement, such as cybersecurity issues, could lead to slower development of this sector as well. The impact could also vary significantly by country, or region, given different regulatory stances.

Going forward, we view this dynamic more as a balancing act, as Fintechs will continue to mature and inevitably have to abide by a similar set of rules as licensed banks, for example. On the other hand, however, regulators are working to adapt and evolve the current rulebook to match the standards consumers and business now expect thanks to their experience with e-Commerce or tech apps.

High-growth backdrop makes Fintech attractive
Fintech is expected to see significant growth as digitalisation in the industry accelerates. From the replacement of legacy infrastructure to embedded finance, and a more effective use of data and advanced analytics, Fintech will continue to play an important role to drive the development and innovation of financial services in the coming years ahead.

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