

FINTECH: DISRUPTING & AUGMENTING THE FINANCIAL LANDSCAPE

DIGITALLY SAVVY CUSTOMERS AND
DIVERSE PLAYERS DRIVING INNOVATION

DECISIONPOINT™
— by **WNS**



Overview

FinTech has today established itself as an industry in its own right, with diverse players ranging from start-ups and technology majors, to traditional players who are adopting emerging technologies to enhance their services. Growing attention from regulators and shifts in policies to make way for financial innovation further validate FinTech's role in shaping the financial services space.

With global market volumes approaching -USD 300 Billion, it is interesting to study the regional strengths and opportunities within the FinTech market. China, at 99 percent volumes of APAC, may be a dominant market, but high local focus and geographic isolation make it an uncertain one too.

As individual FinTech segments grow, player consolidation is an expected outcome. However, as capabilities deepen and use cases evolve, are we likely to see convergence as well? Challenger banks, for example, are fast emerging as a super FinTech segment with the potential to address the service and scale limitations faced by e-wallets and Peer-to-Peer (P2P) lending platforms. The report traces key players and the latest use cases to track future trends across FinTech segments.

FINTECH: CONFLUENCE OF FINANCE AND TECHNOLOGY

FinTech is a term coined for companies that combine financial services with inventive technologies. However, there is no industry-wide consensus on an exact definition of FinTech. Even global regulatory bodies and leading think tank organizations provide variations of the definition, ranging from the World Economic Forum (WEF), which describes it as 'the use of technology and innovative business models in financial services', to the Financial Stability Board (FSB), which is more precise by describing it as 'technologically-enabled financial innovation that could result in new business models, application, processes or products with an associated material effect on financial markets and institutions and the provision of financial services'.¹

While there are many ways of defining FinTech, two key characteristics that stand out in all definitions are:

1. Use of neoteric technologies:

Disruptive technologies include the use and deployment of cloud computing, robotics, artificial intelligence (AI) and machine learning, mobile applications, big data analytics, blockchain or distributed ledger technology, cryptography and quantum computing.² While many of these technologies have been in existence for decades, the extent of their application as path-breaking technologies in financial services is a key determinant of them being categorized as FinTech disruptions.

2. FinTech has the potential to augment, disrupt and revolutionize the financial services landscape,

which is also its most prominent characteristic, both from a risk perspective and functional point of view. This ability to metamorphose the financial

services industry is what differentiates FinTech innovations from the previous wave of technological inventions.³

FinTech holds the promise of reducing the cost of financial intermediation by screening clients and assessing credit worthiness,⁴ thereby improving access to finance and productivity. FinTech also has the potential to transform 'user experience'. The enablement of FinTech is dependent on the availability of computing power, intelligent algorithms, huge amounts of data and mobile hardware that provides constant accessibility. A mix of factors such as consumer preferences and adaptability, the regulatory framework, the reactions and attitudes of incumbents, and political choices will determine the extent to which the FinTech ecosystem influences the broader financial structure.⁵

1. DTCC, FinTech and Financial Stability: Exploring how technological innovations could impact the safety and security of global markets, Oct 2017. Accessed on Feb 28, 2018, <http://perspectives.dtcc.com/>

2. Ibid

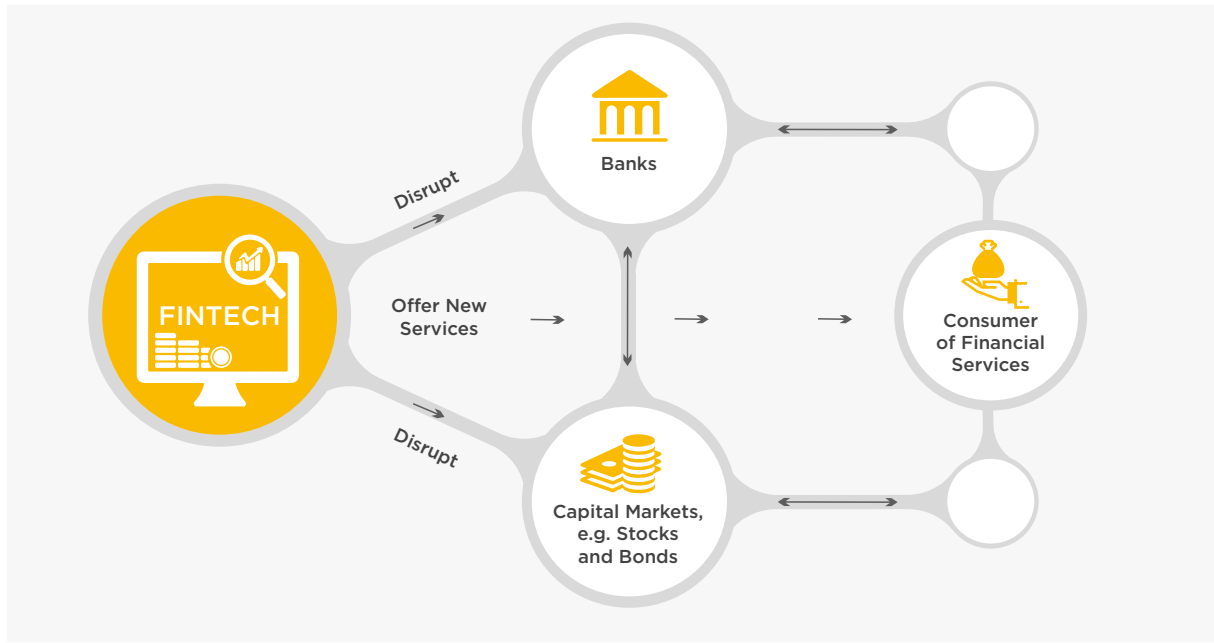
3. Ibid

4. Bruegel, Capital Markets Union and the FinTech opportunity, Sept 2017. Accessed on Feb 27, 2018, <http://bruegel.org/tag/fintech/>

5. Ibid

Exhibit 1

FinTech Disrupts Intermediaries in the Financial System, thereby Leading to Changes in the Financial Ecosystem



Source: Bruegel

STRUCTURE AND SCOPE

The FinTech industry is composed of a diverse range of players, with majority of them being startups which are narrowly focused on applying technology to boost or amplify a specific process or financial service. Well-known players in this segment include robo-advisors such as Wealthfront and Betterment, peer-to-peer (P2P) lending companies such as Lending Club, and providers of digital wallets and online payment services like Venmo.⁶ However, another segment of the FinTech industry consists of established

technology players such as Amazon, Google, Facebook, Apple and Microsoft, which are using their deep market knowledge and decades of experience to expand their presence in the financial services industry and leverage their market position. At the same time, existing providers of payment services and transaction technology are increasingly making use of new and emerging technologies while traditional banks and financial institutions are adopting FinTech applications to improve their business

processes and strengthen their market position.⁷

The FSB has proposed a broad classification of FinTech into the proposed areas:⁸

- i. Payments, Clearing and Settlement
- ii. Deposits, Lending and Capital Raising
- iii. Insurance
- iv. Investment Management
- v. Market Support

6. DTCC, FinTech and Financial Stability: Exploring how technological innovations could impact the safety and security of global markets, Oct 2017. Accessed on Feb 28, 2018, <http://perspectives.dtcc.com/>

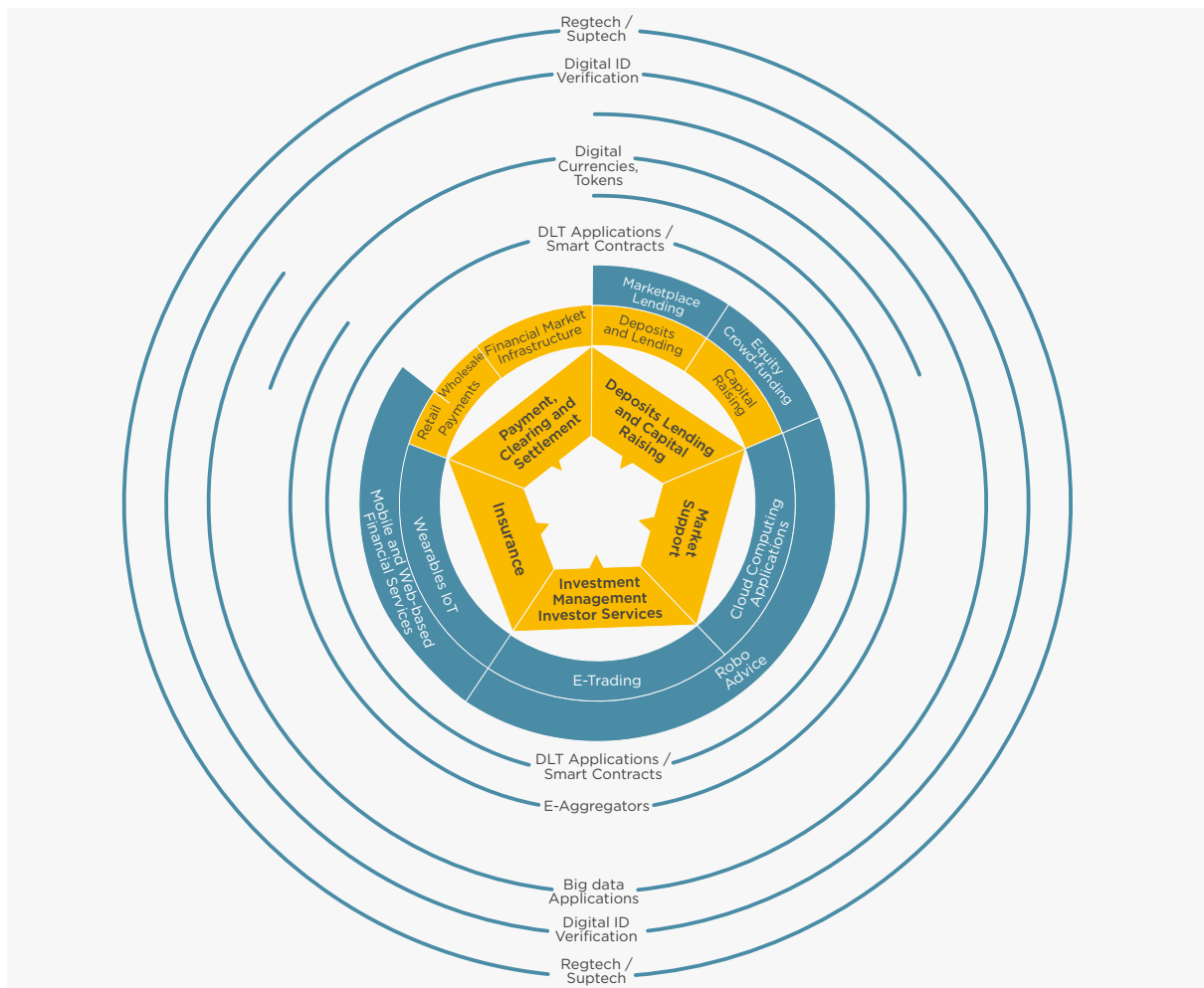
7. Ibid

8 Financial Stability Board, Financial Stability Implications from FinTech, June 2017. Accessed on Feb 28, 2018, www.fsb.org

Exhibit 2

FinTech Innovations by Economic Function

■ Economic functions ■ Innovations



Source: Financial Stability Board, Financial Stability Implications from FinTech, 2017; WNS DecisionPoint™ Analysis

There has been a rapid growth of innovations across all these categories of financial services, both at the retail level (households and small and medium enterprises) and wholesale level (non-financial corporations and banks).⁹

In the payments space, for example, the emergence of mobile and web-based platforms such as Alipay, Android Pay, Apple Pay, M-Pesa, PayPal and Samsung Pay offer end-users the ability to transact through online devices and reduce transaction costs involved in more traditional

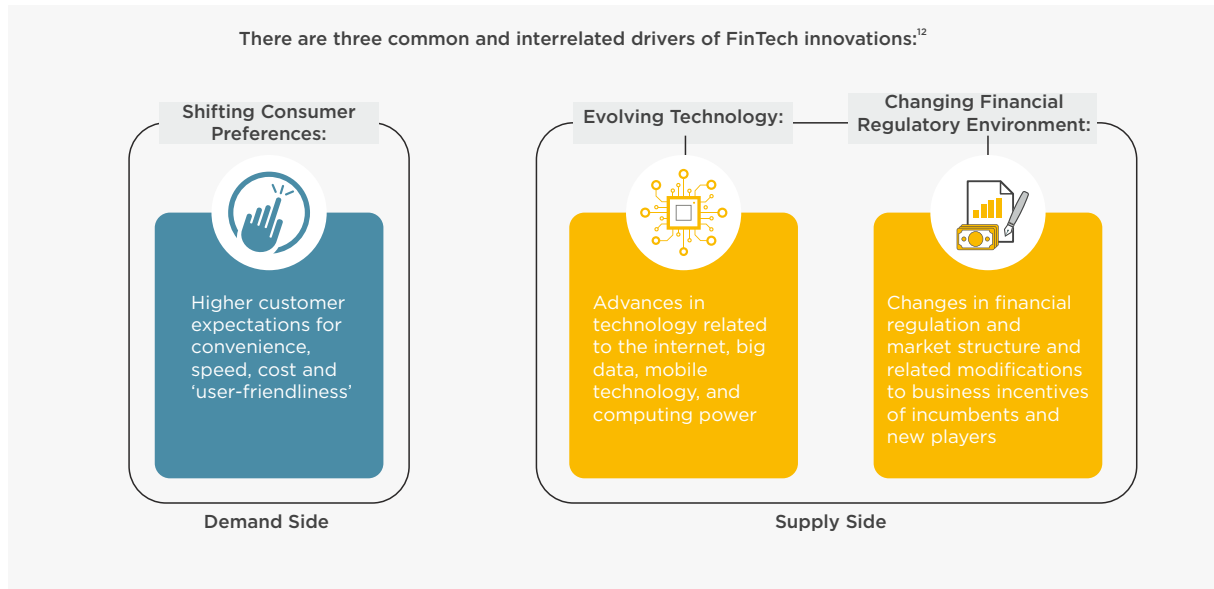
methods of payment.¹⁰ Crowdfunding connects investors with borrowers and for equity with issuers, through an internet-based platform; this is seen as a way of pooling funds and streamlining information-sharing beyond traditional financial intermediaries.¹¹

9. Ibid
 10. Ibid
 11. Ibid

Exhibit 3

Drivers of FinTech Innovation

■ Economic functions ■ Innovations



Source: Financial Stability Board, Financial Stability Implications from FinTech, 2017; WNS DecisionPoint™ Analysis

Shifting Consumer Expectations

Existence of market demand for innovation is essential to its success. A number of factors are driving the demand for FinTech innovations. Foremost among these is the omnipresence of internet access and real-time transacting capability of users of internet-connected devices, giving rise to

higher customer expectations with regard to convenience, cost, speed and user-friendly features of financial services. This has, in turn, become one of the most important factors in consumer purchasing decisions. Financial inclusion is also an important factor across the globe. With an estimated two

billion of the global population¹³ without basic banking and accounting services, FinTech is seen as an impetus to the provision of easy-to-understand and convenient services, lowering costs of adoption and enabling a wider customer base for financial services.

Demographic Factors Driving Demand

These include the rapidly expanding mobile- and internet-savvy population and its growing financial and economic influence across the financial ecosystem. Economic development in

emerging and frontier economies has the potential to significantly increase the user base of FinTech. Also, many FinTech innovations may display positive network capabilities that influence demand.

For example, the larger the number of users of a digital currency or crowdfunding platform, the more easily they can be used for transactions and hence greater the benefit to every user.¹⁴

12. De Haan, et al (2015). Accessed on Feb 28, 2018, www.fsb.org

13. Global Partnership for Financial Inclusion, German 2017 Priorities Paper, 2017. Accessed on March 5, 2018, www.gpfi.org

14. Financial Stability Board, Financial Stability Implications from FinTech, June 2017. Accessed on Feb 28, 2018, www.fsb.org

Swiftly Advancing Technologies

Rapidly growing emerging technologies and unique business models are the key characteristics of the supply-side forces

revolutionizing financial services. New technologies, such as big data, artificial intelligence, machine learning, cloud computing and

biometrics,¹⁵ combined with mobile devices connected to the internet has added a new dimension to the digital world.

New Forms of Service Provision

Breakthroughs in financial services include new mobile payment services (e.g., PayPal [U.S., Europe] and Alipay [China]), new FinTech

lending platforms (e.g., Lending Club [U.S.], Zopa [U.K.], Lufax [China]) and even low-cost investment products. The availability

of such services at one's fingertips bodes well for increased choices and access to financial services, particularly in emerging markets.¹⁶

GLOBAL MARKET TRENDS IN THE FINTECH INDUSTRY

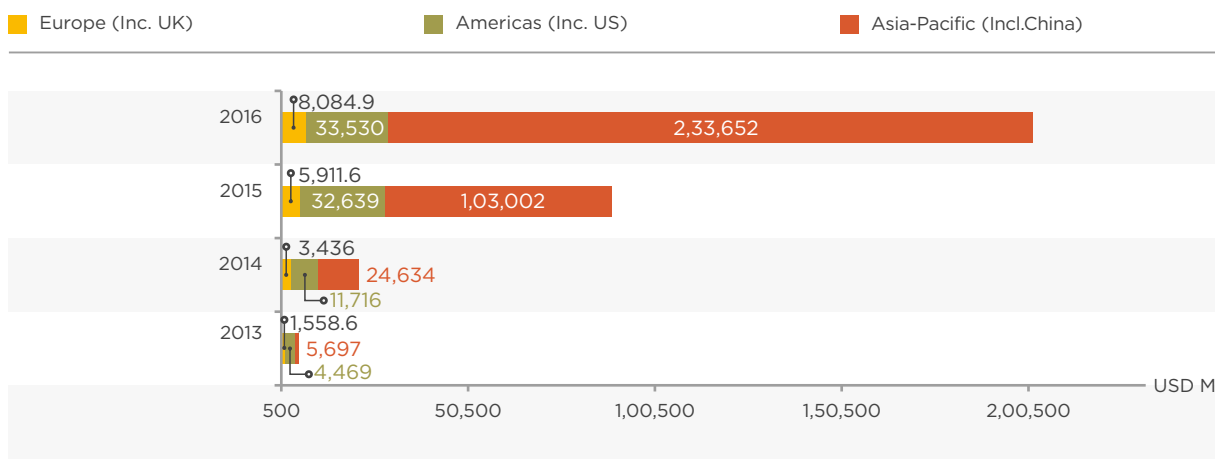
According to figures published by the Cambridge Centre for Alternative Finance, the Asia-Pacific market (incl. China) is the

largest market for FinTech by volume, with the total market volume in 2016 at USD 233 Billion, surpassing the market volumes

of USD 33.5 Billion of the Americas (incl. U.S.) and USD 8 Billion of Europe (incl. U.K.) by a wide margin.¹⁷

Exhibit 4

Regional Distribution of FinTech Market Volume (2013-2016)



Source: Cambridge Centre for Alternative Finance

15. Ibid

16. Ibid

17. Cambridge Centre for Alternative Finance, The 3rd European Alternative Finance Industry Report, 2017. Accessed on March 1 2018, <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/>

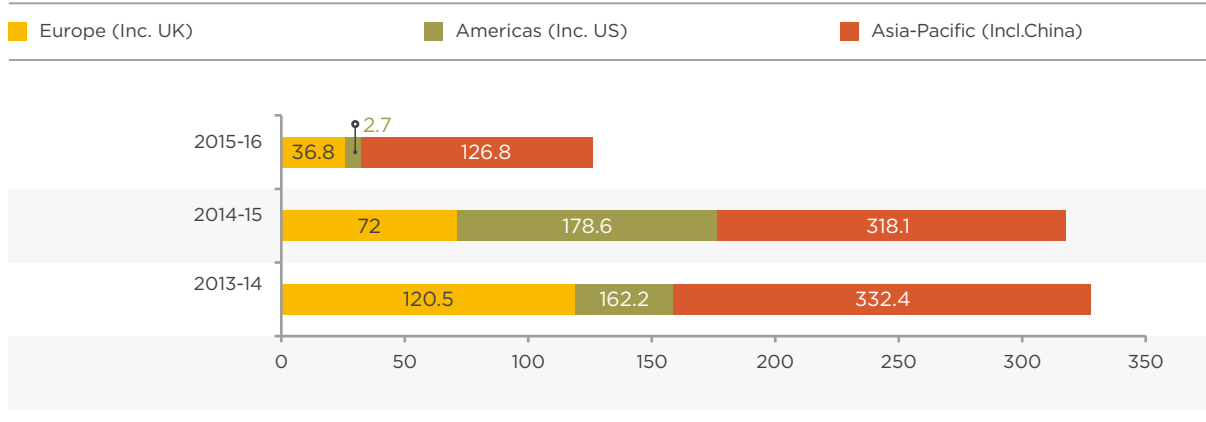
The Asia-Pacific market also registered the highest growth rate in terms of market volume, growing

exponentially at the rate of 126.8 percent over 2015-16, in comparison with the smaller

growth rates of 36.8 percent and 2.7 percent for the Europe and Americas markets, respectively.¹⁸

Exhibit 5

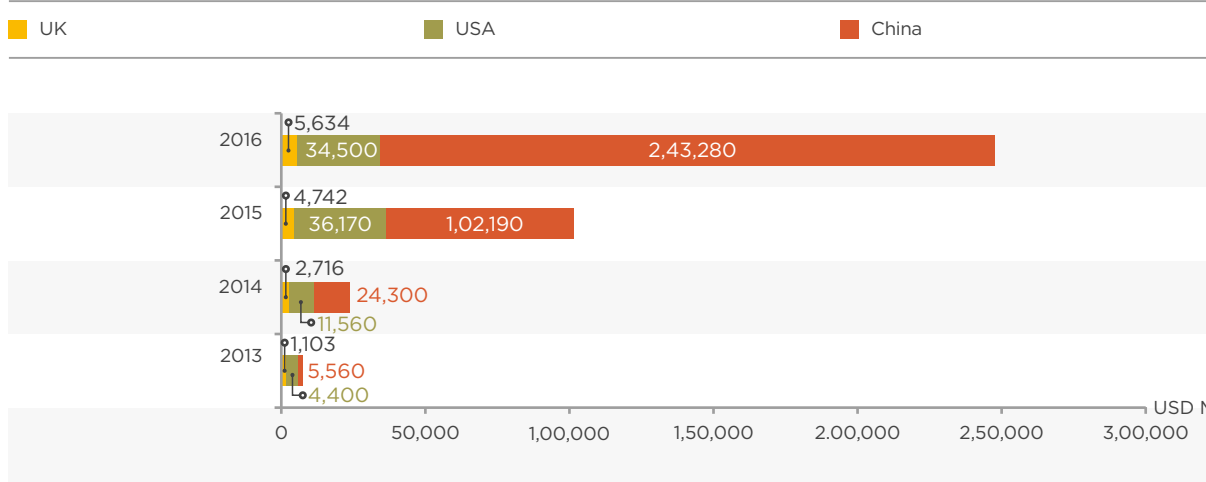
Percentage Change in Regional FinTech Market Volume (2013-16)



Source: WNS DecisionPoint™ Analysis based on data from Cambridge Centre for Alternative Finance

Exhibit 6

FinTech Market Volume in 3 Major Regions (2013-16)



Source: WNS DecisionPoint™ Analysis based on data from Cambridge Centre for Alternative Finance

The growth in the Asia-Pacific FinTech market has been spearheaded by China, with 99 percent of the market composed of Chinese FinTech firms.

The Asia Pacific market grew by 79 percent,¹⁹ excluding China. The Americas Fintech market grew by 22 percent in the year 2015-16, and is dominated by the U.S.,

with U.S.-based FinTech firms owning 22 percent of the market.²⁰ While Europe is the smallest market for FinTech by volume, its per-annum growth has been

18. Ibid
 19. Ibid
 20. Ibid

steadier in comparison to the Americas and Asia-Pacific market, growing at 85 percent annually on average between 2013-16.²¹

While FinTech, as an industry, is experiencing rapid growth spurt across continents, it is also worth assessing as to which models of FinTech dominate the broader

industry in these regions. The table below lists the business models classified in the FinTech industry, along with their market volume in major continents across the globe.

Exhibit 7

Regional Market Volumes for Different FinTech Models

FinTech Model	Definition	Europe (incl. U.K.) 2016 Market Volume (USD M)	Americas (incl. U.S.) 2016 Market Volume (USD M)	Asia-Pacific (incl. China) 2016 Market Volume (USD M)
P2P Consumer Lending	Individuals or institutional investors provide loans to a consumer borrower	2,172.6	21,143	1,37,024.9
P2P Business Lending	Individuals or institutional investors provide loans to a business or corporate borrower	1,884.3	1,511	58,513.6
Invoice Trading	Individuals or institutional investors purchase invoices or receivable notes from a business at a discount	823.5	Data not available	2,437.4
Equity-based Crowdfunding	Individuals or institutional investors purchase equity issued by a company	565.08	569.3	558.6
Reward-based Crowdfunding	Backers provide finance to individuals, projects and corporates in exchange for non-monetary rewards and benefits	260.2	596	2,080.8
Real Estate Crowdfunding	Individuals or institutional investors provide equity or subordinated-debt financing for real estate	202.7	821	112.2
P2P Property Lending	Individuals or institutional investors provide loan secured against property to consumer or business and corporate borrowers	1,511.3	1,002.7	7,351.7
Balance Sheet Business Lending	The platform entity provides a loan directly to a business borrower	62.3	6,125.9	27,946
Donation-based Crowdfunding	Donors provide funding to individuals, projects and companies based on philanthropic and civic motivations with no expectation of a monetary or financial gain	83.3	339.2	661.1
Debt-based Securities	Individuals or institutional investors purchase debt-based securities, typically a bond or debenture at a fixed interest rate	121.27	Data not available	263
Balance Sheet Consumer Lending	The platform entity provides a loan directly to a consumer borrower	17.6	2,979.4	9,450.3
Mini-Bonds	Individuals or institutions purchase securities from companies in the form of unsecured retail bonds	10.7	Data not available	1.4
Balance Sheet Property Lending	The platform entity provides a loan secured against a property directly to a consumer or business borrower	1.1	Data not available	2.0

Source: Cambridge Centre for Alternative Finance; WNS DecisionPoint™ calculations. The classifications described are as listed by the Cambridge Centre for Alternative Finance.

21. Ibid

GLOBAL FINTECH FINANCING TRENDS

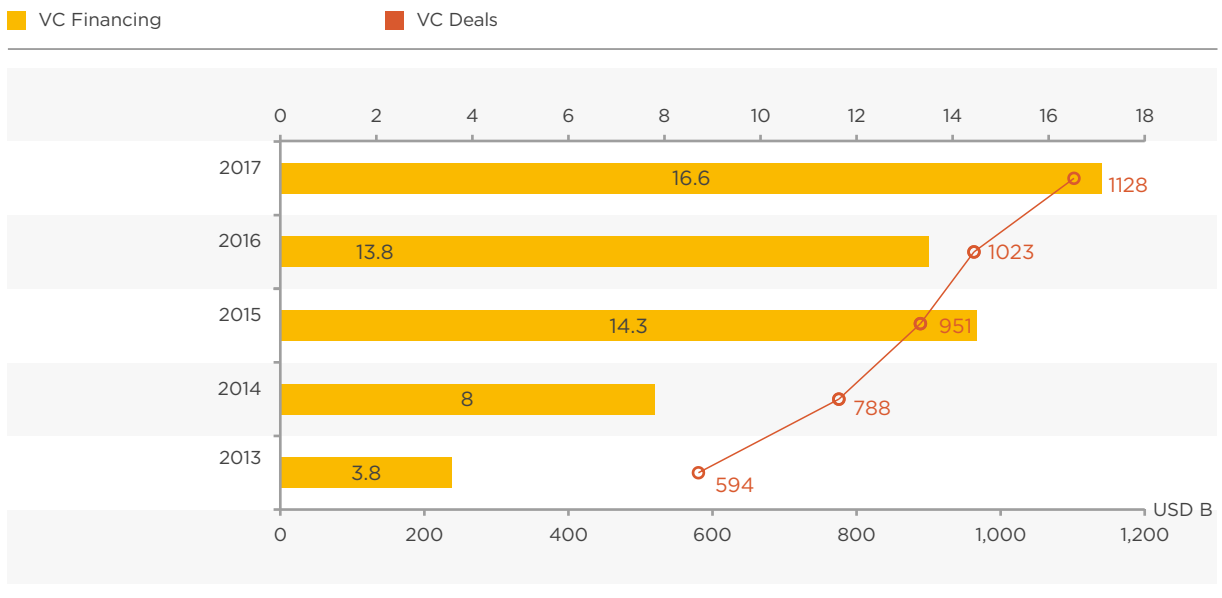
Financing deals in the FinTech industry have grown by leaps and

bounds in the last five years, with 2017 registering record growth in

Venture Capital (VC)-backed financing deals.

Exhibit 8

Annual Global FinTech Deals and Financing (2013-17)



Source: CB Insights

The year 2016 was the only year when VC-backed FinTech didn't witness growth. Primary reason for this was the lack of any notable mergers and acquisitions (M&A) and initial public offering (IPO)

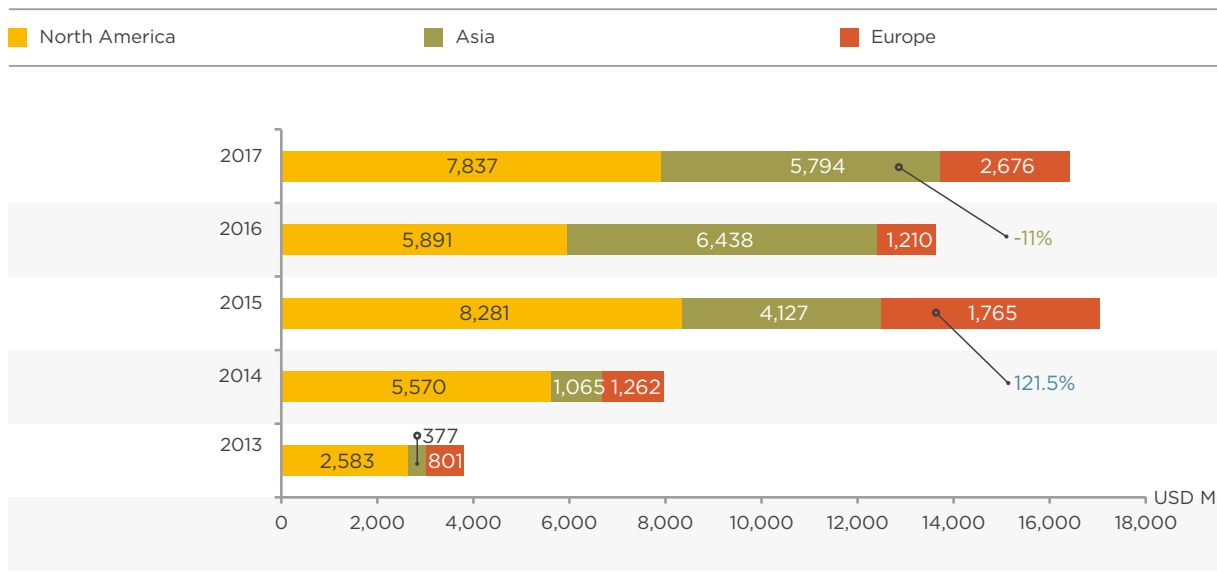
exits in the FinTech industry. Most FinTech startups were acquired to get an access to their advanced technology, and not because of their business success, implying that multiples were quite

low. IPO exits were even worse – only a few traditional payment and financial services companies went public, with no major startup in the list.



Exhibit 9

Annual Funding to VC-backed FinTech Companies (2013-17)



Europe witnessed an exponential growth in VC-backed FinTech funding between 2016 and 2017,

with funding growing by over 120 percent. On the other hand, Asia witnessed an 11 percent fall in

VC-backed FinTech funding from 2016 to 2017, falling for the first time in four years.

DEEP DIVE INTO FINTECH SECTORS: THE KEY GAME CHANGERS

While FinTech, as an industry, has grown exponentially, there are certain segments and sectors within the FinTech space that have

dominated the expansion of the industry over the years and will continue to play an imperative role in the future proliferation of the

industry. In the following pages, we assess the key FinTech verticals that are pre-eminent to the success of the industry.



E-Wallets

Ever since their inception, mobile wallets have garnered much attention, with questions around the value they deliver to their

end-clients and their business results, in addition to their ability to compete with banks and payment systems. It is worth assessing the

future direction e-wallets will take, as well as the key players that are shaping the segment.

Exhibit 10

Overview of Key Players in the E-wallets Segment

E-Wallet Company	Geographical Coverage	Key Highlights
PayPal	Global	<ul style="list-style-type: none"> After divestiture from eBay, the company has grown significantly in both functionality and the frequency and quality of new product introduction
AliPay and WeChatPay	Global, predominantly in China, U.S., Russia and Taiwan	<ul style="list-style-type: none"> Foreign expansion remains a key challenge Have primarily expanded through Chinese tourists, making local merchants and banks add Chinese wallets to payment options
ApplePay, Google Wallet, Android Pay, Samsung Pay	U.S., U.K., Poland, Ireland, Singapore, Australia, Hong Kong, Japan, New Zealand,	<ul style="list-style-type: none"> Offers links to bank debit/credit cards and enables payment by phone Largely used by technology geeks who are looking to use new forms of technology Overall, haven't brought about any far-reaching changes in the spending habits of the population Will need to focus on expanding functionality in the future
Xiaomi, Huawei, Oppo	East Asia, U.S., U.K.	<ul style="list-style-type: none"> As more smartphone producers enter the payments market, the client base share of each player will decline Product differentiation and quality will be the main factors defining the growth of the segment M&A and consolidation likely to grow in the segment
Paytm	India	<ul style="list-style-type: none"> Largest ecommerce base and payment system launched in India The company registered 1.5 Billion transactions in 2017, with a 45 percent growth in total number of users The company has over 2 Million registered merchants on its platform and has 147 Million active transacting users Has partnered with: Delhi Metro to offer its payments processing; pawnshop chains and shops to allow its transactions to go through its platform; tens of service providers and internet services, who started offering Paytm payment methods New funding of USD 60 Million from Mountain Capital, the investment arm of Taiwan's semiconductor company Mediatek, to expand its existing lines of business in payments and commerce
Momo	Vietnam	<ul style="list-style-type: none"> Mobile wallet and payment app, launched in tandem with Standard Chartered Bank in 2016 Aims to use mobile technology as the vehicle for payments and banking in the country Has landed a USD 28 Million investment round from banking giants Standard Chartered and Goldman Sachs

Source: Life.SREDA, Money of the Future, 2017

P2P Lending

Investors on alternate lending platforms are increasingly gaining prominence as large institutional investors and banks dominate this arena. Such platforms require a different level of reporting, transparency and business processes from the startups (higher expertise in securitization, rather than in financial innovation).²² P2P business models are required to be either very well targeted and differentiated, or be the best in risk management (via big data analytics), or have a

unique selling proposition (specific conditions, e.g. regarding collateral, payouts, particular clients) or have the largest funds for loan origination.

P2P lending has firmly established itself in 3 countries – U.S., Great Britain and China.²³ The Chinese market is the biggest because of the large population and lower availability of traditional sources of credit, but is highly uncertain because of a number of issues. Firstly, there are approximately

2,000 P2P lending platforms in China, majority of which are poorly diversified in terms of products and invest too little in risk management, resulting in soaring bad loans. Secondly, the geographic isolation of these models makes them susceptible to overvaluation and corruption. All these projects are Chinese, work exclusively in China and have only Chinese investors. Opening these models to foreign investors will improve transparency and increase reliability.²⁴

Exhibit 11

Overview of Key Players in The P2P Lending Segment

P2P Lending Company	Country	Key Highlights
Lending Club Corp.	U.S.	<ul style="list-style-type: none"> Most popular U.S. P2P lending site Nation's largest platform for personal loans, primarily by helping consumers gain access to lower interest rates as compared to traditional options such as credit cards Total borrower base of beyond 1.7 Million in 2016 Has facilitated nearly USD 23 Billion in loans since its inception, and by September 2016, managed a servicing portfolio of nearly USD 10.9 Billion Has launched an auto refinance product giving car owners a solution to save money on their auto loans
Prosper	U.S.	<ul style="list-style-type: none"> Has originated nearly USD 8 Billion in loans since inception in 2006 Launched its 'Prosper Daily' app, offering budgeting and spending tracking services, alerts for potential fraudulent charges and credit monitoring Launched a new credit card service called 'Credit Card Optimizer', designed to aid consumers in effectively managing their credit card via their smartphones Entered into a partnership with HomeAdvisor, a leading U.S. home services digital marketplace, to help increase awareness of Prosper's fixed-term, fixed-rate loan product to the millions of people who use the HomeAdvisor website, enabling project cost research and calculation of estimated monthly loan payments
Zopa	U.K.	<ul style="list-style-type: none"> Launched a new range of lending products in 2016: Zopa Access, Zopa Classic and Zopa Plus, to offer more choice and flexibility to both existing and new Zopa customers Launched a service called Zopa Car ReFi, to enable customers to pay off more expensive car finance deals with a better value, more flexible agreement Has applied for a banking license in 2016 to boost competitiveness and to extend the company's suite of investor and borrower products by offering Financial Services Compensation Scheme (FSCS) protected deposit accounts to savers and overdraft alternatives to borrowers

22. Life.SREDA, Money of the Future, 2017. Accessed on March 6, 2018, <http://sreda.vc/fintechresearch/>

23. Ibid

24. Ibid

P2P Lending Company	Country	Key Highlights
Lufax	China	<ul style="list-style-type: none"> World's second most valuable financial technology startup by virtue of fundraising that increased the valuation of the company at USD 18.5 Billion Aims to diversify into wealth management and increase its ability to package loans

Source: Life.SREDA, Money of the Future 2016

Crowdfunding

Crowdfunding has emerged as one of the most talked about and popular FinTech models in recent years. The collaboration between crowdfunding platforms and big corporates is gaining momentum. Technology giants can now try new services and technologies in a more interactive manner, thereby expanding their base of innovation-friendly customers.

The crowdfunding market has witnessed increasing consolidation over the years due to the abundance of players in the market. Also, many companies are using their own platforms to raise capital.

Many countries also support the growth and acceleration of crowdfunding companies.

For example, Singapore, Malaysia, Hong Kong, Korea and Japan offer grants and co-investment programs for their startups. Banco Santander has partnered with Crowdfunder platform in providing startups with 50 percent financing along with 50 percent from the crowd.²⁵

Exhibit 12

Overview of Key Players in The Crowdfunding Segment

Crowdfunding Company	Country	Key Highlights
Indiegogo	U.S.	<ul style="list-style-type: none"> Launched its Enterprise Crowdfunding platform in 2016, a help program that will provide assistance to companies interested in crowdfunding their next project Collaborated with General Electric, Harman International Industries, Hasbro and Shock Top in 2016 to expand customer base with new products Entered Equity Crowdfunding platform with the aim to give small-scale investors a stake in companies they back
Show4me	U.K.	<ul style="list-style-type: none"> Startup that has brought crowdfunding principles to concert promotion Works on the principle of fans pledging ticket money via the platform and allowing the concert promoter to break even costs till the venue and dates are confirmed
CoAssets	Singapore	<ul style="list-style-type: none"> Has acquired more than USD 7.4 Million from both private placements and the public listing in 2016 Acts primarily as a lead generation site Plans to establish a wholesale global debt opportunities fund to invest in fixed income assets that fall outside the Asia-Pacific region

Source: Life.SREDA, Money of the Future 2016

25. Ibid

Crowdfunding

Real Estate crowdfunding and increasing partnerships with stock exchanges are the key trends

gaining prominence in this segment. Stock exchanges offer crowdfunding some pre-IPO

settlement and trading in technology stocks, which are very small-cap relative to the main board stocks.²⁶

Exhibit 13

Overview of Key Players in Crowdfunding

Crowdfunding Company	Country	Key Highlights
AngelList	U.S.	<ul style="list-style-type: none"> Has witnessed over USD 425 Million invested via its platform in more than 1000 companies Serves as a directory for startups and investors Expanded into Canada, through partnership with the Ontario Securities Commission, and in India, providing recruiting services The company's offshoot, Republic, lets anybody invest as little as one wants to invest directly
Crowdo	Southeast Asia	<ul style="list-style-type: none"> Largest crowdfunding platform in Southeast Asia with Israeli origins Launched its platform in Malaysia in 2016, and became one of the first crowdfunding platforms in the region to receive a Capital Market Services (CMS) license to deliver P2P lending and Equity Crowdfunding
SyndicateRoom Ltd.	U.K.	<ul style="list-style-type: none"> In March 2016, SyndicateRoom, a crowdfunding platform, was made a member of the London Stock Exchange to provide small-time investors in the U.K. access to initial public offerings Launched a new product, 'Watchlist', to enable online investment platform users the opportunity to invest funds in a curated list of AIM-listed companies at a discount to share their price

Source: Life.SREDA, Money of the Future 2016

Challenger Banks

Challenger banks are often seen as rivals to the traditional brick-and-mortar banks. However, this perception is gradually changing. Innovative solutions are built in the mobile-first model, in contrast to a branch-first model.²⁷ These banks also serve the new generation of technology- and mobile-savvy population, and not the existing clients of traditional banks, which fundamentally changes their brand positioning, language and perception. Also, the level of service

is entirely different in terms of quality and channels of delivery. With challenger banks, one can ask a question via a messenger or web chat service and get an answer immediately.

Challenger banks are also complementary to various other FinTech verticals. E-wallets suffer from poor functionality (ApplePay, SamsungPay, AndroidPay) and difficulties with customer retention and scalability (Alipay, Paytm).

Traditional banks (CapitalOne, MetroBank, SBI) use outdated technology and hence need a boost, in addition to being geographically limited. P2P lending platforms experience burgeoning customer-acquisition costs, and need continuously updated and advanced information with regard to a client's credit-worthiness to avoid credit risks. These areas offer potential opportunities for challenger banks to help other FinTech verticals.²⁸

26. Ibid
 27. Ibid
 28. Ibid

Most of the mobile-banking activity is concentrated in two segments – the young, working class population (age group 18-19) and emerging markets.²⁹ Geographically, challenger

banks enjoy the largest demand in the U.K., U.S., Canada and Brazil. There is very little volume of challenger bank activity in Asia, which acts as an incentive for

investors and banks in the region to look for solutions in Europe and the U.S. and implement them in Asia.

Exhibit 14

Overview of Key Players in The Challenger Bank Segment

Challenger Bank	Country	Key Highlights
Nubank	Brazil	<ul style="list-style-type: none"> FinTech startup based in Sao Paulo Provides a digital credit card for smartphones, thereby luring customers away from large, traditional banks Has enjoyed soaring popularity due to the increasing recession and unusually high interest rates in Brazil
Monese	U.K.	<ul style="list-style-type: none"> U.K. banking app for immigrants and expats Provides customers with 'current account' interface, low-cost international money transfers and a Visa debit card Enables cash deposits and withdrawals and storage in multiple currencies
Starling	U.K.	<ul style="list-style-type: none"> Mobile-only bank Aims to streamline the way consumers manage money Recently unveiled a new identity and new website Granted a banking license by the Prudential Regulatory Authority (PRA)
Atom	U.K.	<ul style="list-style-type: none"> Made its iOS app available to users of fixed-term savings account Aims to create mobile apps by incorporating gamification, 3-D visualizations and other customer features to expand its user base
Koho	Canada	<ul style="list-style-type: none"> Vancouver-based fintech startup Developing a banking service aimed at provision of low-cost services as modern alternatives to traditional banks Offers customer a banking card, visa prepaid card, web app and mobile app

Source: Life.SREDA, Money of the Future 2016

Blockchain

The Blockchain segment is highly fragmented and the wide array of implementation possibilities and technical complexity involved make it a challenging segment to dissect.

The most popular area, cryptocurrencies, is the most complex subject within Blockchain. There are over 150 cryptocurrencies,

including 30 major ones, and 10 currencies with the largest number of transaction volumes.³⁰ They are mainly traded in China – the four Chinese pools control 60 percent of the market. Cryptocurrencies are headlined by continuous emergence of tools such as high frequency trading and margin trading and index investment funds.³¹

The other key areas of interest in Blockchain are healthcare, logistics, land registry, public and corporate document management.³² Estonia, a global leader with regard to implementation of e-government services, is collaborating with Guardtime blockchain startup to create a unified base of medical records for people, which will be

29. Ibid
 30. Ibid
 31. Ibid
 32. Ibid

accessible to hospitals and insurance companies.³³ Swedish authorities are collaborating with ChromaWay blockchain company to create a single registry of land plots on blockchain to make life easier for land sellers and buyers as well as banks that use land plots as collateral for loans.³⁴

While all areas in the financial sector, from payments to transfers, trade finance, stocks, collateral records, have registered significant activity in the Blockchain realm, the largest number of activities take place either in money transfers or establishment of new standards for the banking sector by regulators and associations.³⁵ A Singaporean

startup, DaoPass, offers complete identification of customers through partner banks for Fintech startups, telcos, messengers and e-commerce players. Two American companies – R3 consortium and Digital Asset Holdings – are competing for the right to become the largest ‘SWIFT’ banks for the world.³⁶

Exhibit 15

Overview of Blockchain Firms in Finance

Blockchain Company	Country	Key Highlights
Circle	U.S.	<ul style="list-style-type: none"> Provides a suite of online products enabling global digital currency Products designed for end-users, businesses and charities, and in-person payment transactions, with a focus on privacy for consumers The platform's protocols are modelled after Bitcoin
Ripple	U.S.	<ul style="list-style-type: none"> Provider of a blockchain-based virtual payment and currency exchange platform Built upon a distributed open source Internet protocol, consensus ledger and native currency called XRP (ripples) Santander Bank used Ripple's technology to facilitate international payments through a new app SBI Ripple Asia recently announced the creation of a Japanese consortium of 15 banks in a new network to use Ripple's technology for payments and settlement
Blockstream	Canada	<ul style="list-style-type: none"> Provider of blockchain technologies and architectures of trust that use blockchain principles, founded in Quebec, Canada Provides companies access to the mature, tested, and secure blockchain technology in production

Source: Life.SREDA, Money of the Future 2016



33. Ibid
 34. Ibid
 35. Ibid
 36. Ibid

SUMMARY

While FinTech as a financial sector phenomenon is gathering pace worldwide, Latin America and Southeast Asia will see the strongest FinTech growth in terms of market volume in coming years, thanks to a relatively young population and increasing demand for robust mobile products. The year 2017 witnessed VC-backed FinTech deals in Latin America focused on the unbanked and underbanked demographics. As more venture-backed Latin American FinTech startups crop

up, the focus will continue to expand from lending and payments to wealth management and enterprise finance.³⁷ Blurring lines between FinTech and commerce will enable innovation in the Southeast Asian and Latin American financial sectors.

Blockchain and cryptocurrencies will strengthen their position as the most popular segments within FinTech. As crypto speculation continues, more companies will look beyond their initial use cases

to enable and expand investment and trading across platforms.³⁸ The coming years will also witness growth and collaboration between Challenger banks and traditional banks, e-wallets and P2P lending platforms, as these FinTech segments look to consolidate their market position across the globe. In this increased pace of FinTech market activities, it is the end-consumer who is set to benefit from the assortment of user-friendly features available at his disposal.



37. CB Insights, 2018. Accessed on March 7, 2018, <https://www.cbinsights.com/research/report/fintech-trends-2018/>
38. Ibid

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Making key decisions that improve business performance requires more than simple insights. It takes deep data discovery and a keen problem solving approach to think beyond the obvious. As a business leader, you ought to have access to information most relevant to you that helps you anticipate potential business headwinds and craft strategies which can turn challenges into opportunities finally leading to favorable business outcomes.

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