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FinTech: Reshaping Finance in Asia

Fintech in Asia

Technology has become central to our lives, improving productivity and disrupting various sectors. Finance is no exception. Over the years, the way in which banking transactions are conducted has changed, from branch visits for every transaction to ATM's through to internet banking and ultimately mobile banking.

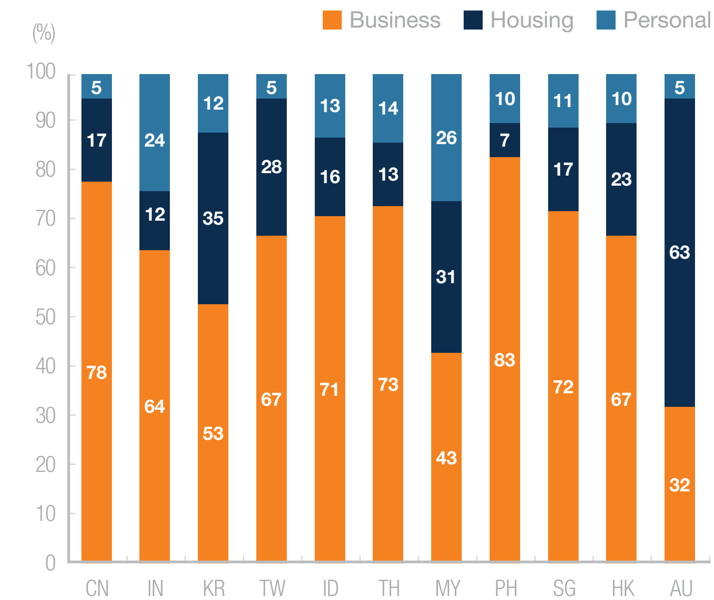
Investment in financial technology (fintech) has grown from US$1.8 billion in 2010 to US$19 billion in 2015, with more than 70% of this investment focusing on the last mile of user experience.[1]

Banks in Asia have been more focused on corporate banking, as evidenced by the loan mix and retail loan penetration across countries. Few banks have emphasized the consumer segment, despite consumer banking being one of the most profitable businesses and this opportunity is being exploited by the new fintech players in Asia. The new entrants (particularly in China) have been faster than banks to offer convenient, reliable, fast and cost-efficient alternatives to traditional bank payments.

[1] Citi Research (2016)

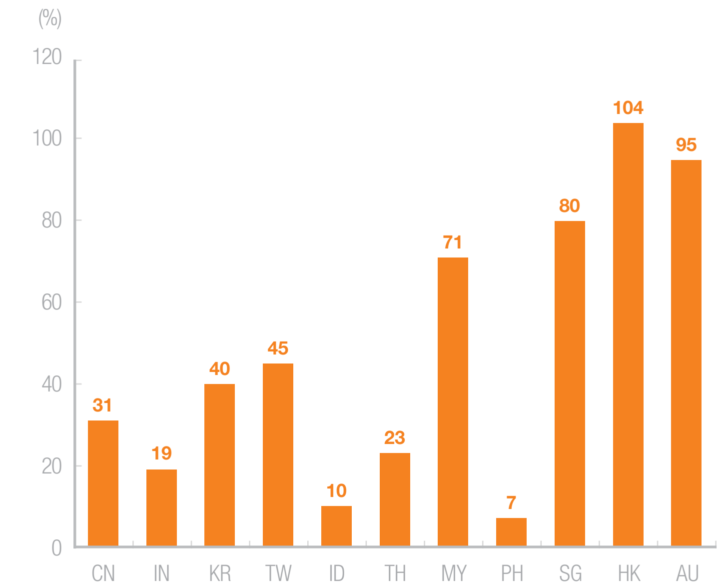
Corporate loans = 2/3rd of Overall Loans in Most of Asia
Banking System Loan Mix across Asia (%)

Source: CEIC, Credit Suisse (2016)



Retail Credit Penetration Quite Low in Most of Asia
Retail Credit as % of GDP

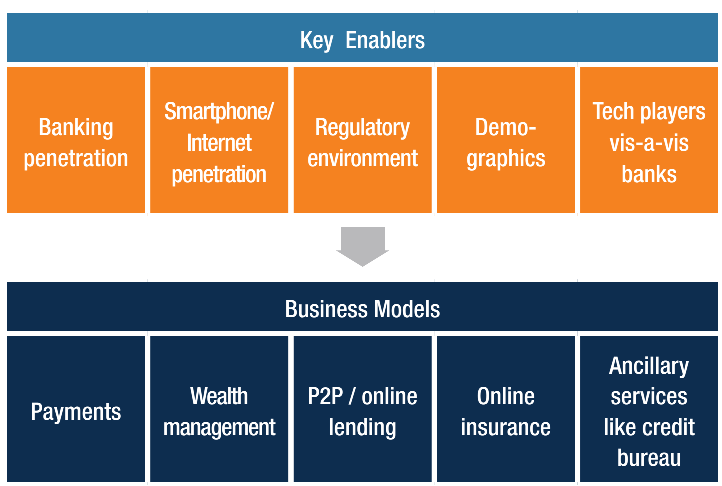
Source: CEIC, Credit Suisse (2016)



Disruption will play out unevenly in Asia, contingent on banking penetration, smart phone penetration, technology positioning, and telecommunication giants vis-à-vis banks and the regulatory environment. India and China not only account for the lion's share of the region's economic and population weight, but also symbolize the divergent paths of fintech in Asia.

Key Enablers and Business Models for Fintech Companies

Source: Citi, Goldman Sachs, Mirae Asset Global Investments (2016)



Fragmentation

China is unique in Asia and the world. It is the most advanced on the digital disruption front, given that mainstream banks do not focus on consumer lending in conjunction with strong and well-resourced technology players and supportive regulations. In the card-intensive country of Korea, major internet players are offering wallet services through messenger platforms with several bank tie-ups that are sure to redraw the consumer journey. Similarly, Taiwan is marked by an advanced technology culture where third-party payment processes have been allowed since last year.[2]

India, Indonesia and the Philippines represent the new frontier where fintech could have a significant impact. These three countries have several common characteristics – huge technology-adept but unbanked populations with low consumer credit penetration. In certain countries the government is giving a push for financial inclusion, such as in India with Aadhar national cards and the Jan Dhan program.

> *India, Indonesia and the Philippines have several common characteristics – huge technology-adept but unbanked populations with low consumer credit penetration.*

Asia is home to ~800 million Millennials and an Unbanked Population of ~850 million

Source: CEIC, Central Banks, Euromonitor, IMF, ITU, World Bank, Citi Research (2015)

		China	India	Indonesia	Philippines	Rest of Asia
Population	mn	1,368	1,251	253	99.9	184
Millennial population	mn	328	340	63	28	39.9
% share	%	24%	27%	25%	28%	22%
Smart phones	mn	670	163	68	30	110.5
% penetration	%	49%	13%	27%	30%	60%
Internet users	mn	668	220	43	38.5	113.7
% penetration	%	49%	18%	17%	39%	62%
Unbanked	mn	236	422	116	48.7	20.9
% of adult population	%	17%	34%	46%	49%	11%
Saved at a Financial Institution	mn	462	128	48	10	65.7
% of adult population	%	34%	10%	19%	10%	36%
Borrowed from a financial institution	mn	107	57	24	8	24.7
% of adult population	%	8%	5%	9%	8%	13%
No of branches per 100k adults		18	13	14	14	15
Credit card penetration		13.0%	3.0%	1.1%	2.2%	26.3%
Debit card penetration		39.8%	15.8%	18.6%	13.9%	49.3%
Online shopping penetration		37.0%	14.0%	16.0%	21.0%	37.6%
Mobile shopping penetration		27.0%	9.0%	9.0%	11.0%	18.9%

[2] Citi Research, "Digital Finance in Asia" (June 2015)

In the Pursuit of Banks

Fintech companies, notably in China, are targeting the personal and small and medium enterprise (SME) customer segments. The big success stories have been in payments (Alipay, Tenpay, Paytm) and wealth management (Yu'e-Bao). Online insurance is still in its nascent stages and incumbent players are already using those means as a channel while peer-to-peer (P2P) lending has picked up in China (Lufax).

It is unlikely that technology players can displace the banks in the medium-term due to their funding, capital and risk management constraints. However, new entrants might eat into future revenue streams of banks, causing lost incremental revenue opportunities. In our view, fintech companies have a greater propensity to make an impact in capital light areas, as anything that is capital intensive is the forte of commercial banks.

The businesses most at risk for banks will be consumer credit, SME lending (e-commerce companies build strong customer databases, e.g. Alibaba lending to its sellers) and wealth management products. Payments account for 7% of banking revenue, of which slightly more than half is non-corporate and open to disruption. On the savings and investment side, some of the revenues could be carved out on wealth management platforms, which offer low cost alternatives and better consumer experiences.

Banks' liability franchises are unlikely to be materially affected given the trust factor associated with banks. New players may very well run into regulatory hurdles given the social and political risk associated with safeguarding deposits. P2P lending has grown rapidly in China and now exceeds US$ 100 billion, yet that is still below 1% of the overall lending market. P2P lending can disintermediate a portion of unsecured consumer credit though it is unlikely to have an effect on mortgage lending, which is the mainstay of the retail banking business.

All is not lost for banks. Technology has helped banks significantly reduce costs as cost income ratios have come down across the region. Further, some of the banks have been using technology effectively for client acquisition, reducing turnaround time, and increasing cross-selling.

Global Bank Revenue Split by Segments / Products

Source: Citi Research, Mirea Asset Global Investments(2015,Accessed 2016)

	Payments	Savings / Investments	Lending	Capital markets	Overall
Personal/SME	4%	12%	29%	1%	46%
Corporate	3%	6%	21%	5%	35%
IB/Markets	0%	3%	6%	10%	19%
Overall	7%	21%	56%	16%	100%

"In our view, fintech companies have a greater propensity to make an impact in capital light areas, as anything that is capital intensive is the forte of commercial banks."

China's Unique Ecosystem

China has embraced internet technology disruption. This is expected to open up new markets much like smartphones have helped connect more new users to the internet network in China. Chinese internet giants have gained considerable market share in e-commerce and third-party payments. Almost all the banks in China are state-owned, with a large share of their loan book focused on the corporate sector while consumers and SME customers were left behind. The internet players took this opportunity to offer convenient, reliable, fast and cost efficient alternatives to traditional bank payments.

Chinese technology companies consistently benchmark themselves against their US counterparts. This concept is less relevant now as China is well on its way in developing a unique ecosystem, especially in the internet finance industry. Change does not happen overnight, yet in China the progress of financial technology is taking place quickly as many forces – both internal and external – are encouraging and inducing the industry to take new form.

Mobile is the New Normal

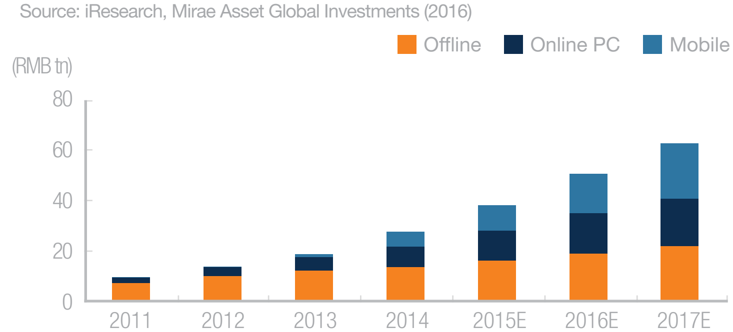
The advent of Alibaba and Tencent, commencing in the desktop sphere coupled to smartphone proliferation, has set the stage for competition in payment transactions for non-banking payments by third party providers. The payment service, which is the most basic service of internet finance in China, grew by 57.4% year-over-year to reach RMB 26 trillion (~ US$ 3.9 trillion) at the end of 2015.[3] Third party research expects the market to nearly double and exceed RMB 50 trillion (~ US$ 7.4 trillion) by 2017.

Mobile usage has been the key driver behind the industry growth as mobile devices (mobile applications) have progressively replaced the utility offered by cash and credit cards. The year 2015 marked an inflection point wherein mobile third party payment contributions overtook online PC third party payments. The online-to-offline ("O2O") surge has catalyzed mobile payments as merchants adopt payment solutions to satisfy newfound customer needs. Offline transactions have been on the losing side of the equation. The physical transaction space dominated by China UnionPay (owned by the People's Bank of China) has seen its market share decline amid more mobile acceptance.

In terms of payment usage breakdown, third party data suggests that contribution from wealth management continues to rise steadily. Payment for e-commerce, online games and utilities are experiencing normalization of growth, hence their portion of the total has been reduced.

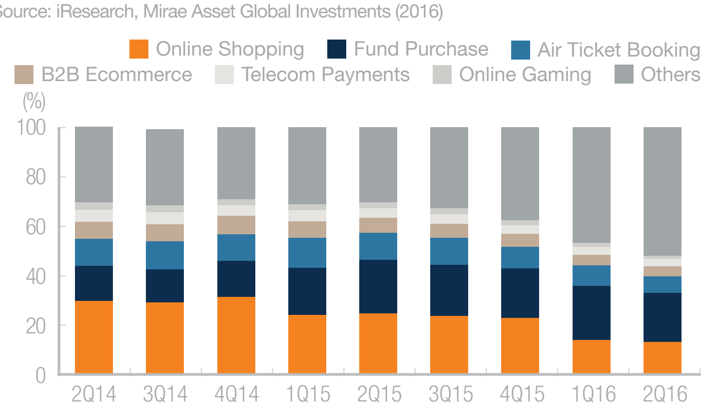
Non-Financial Institution Payments

Source: iResearch, Mirae Asset Global Investments (2016)



Gross Merchandise Volume of Third Party Online Payments 2014-2016

Source: iResearch, Mirae Asset Global Investments (2016)



[3] iResearch, Mirae Asset Global Investments (2016)

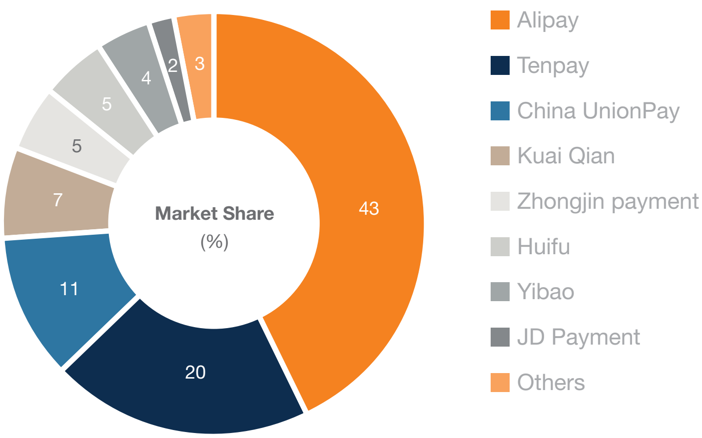
Virtual & Physical Footprints

Alibaba and Tencent are challenging the traditional bank-card payment players with Alipay and Tenpay, which boast 450 million and 300 million users, respectively.[4] Together they rule the market with approximately 63% share of the total third party payment market (42.8% and 20%, respectively, in 2Q16).[5] These two payment options are not only available on online retailer websites, but also in many traditional offline retailers throughout China. Offline coverage has broadened, making the usage of services much more convenient. Alipay and Tenpay are extending their coverage outside of China to more closely align with Chinese outbound tourist trends. Alipay is accepted at 80,000 merchants in 70 countries and the company has set a target of securing one million merchants within three years.[6] There are other smaller players such as JD Finance and Baidu launching their own payment products, but they have more limited application.

In our view, China's payment evolution has accelerated past the US, spurred on by vigorous investments made by the internet behemoths Alibaba and Tencent. This is in contrast to Paypal in the US, which, after years of internet development, has a small portion of the market relative to the established payment networks of Visa, MasterCard, and American Express.

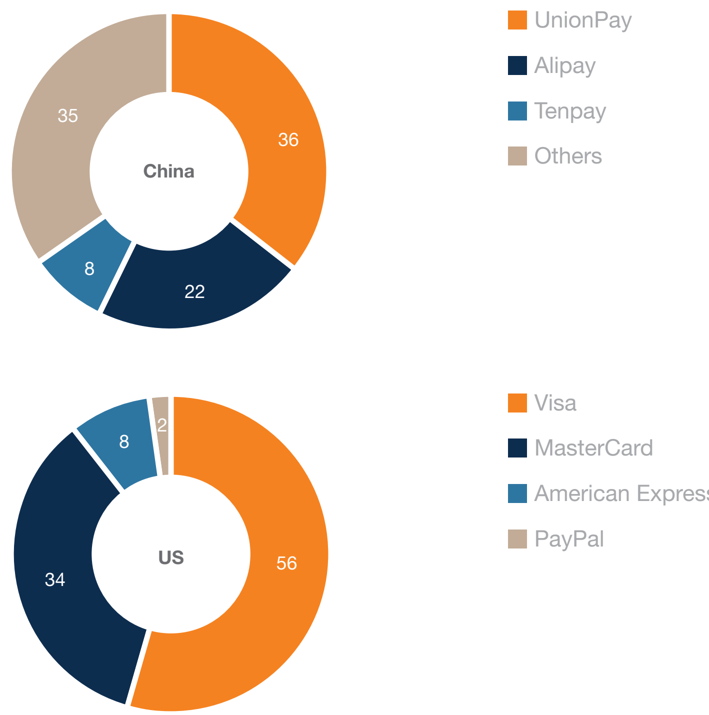
Online Third Party Payment Market Share (as of 2Q 2016)

Source: iResearch, Mirae Asset Global Investments (Accessed October 2016)



Total Payment Market Share Breakdown Comparison: China vs. US

Source: Nomura, Mirae Asset Global Investments (July 2016)



[4] http://news.163.com/16/0427/01/BLKDGIQD00014Q4P.html

[5] iResearch (2016)

[6] Alipay Mobilizes for World-Wide Expansion, WSJ (October 31, 2016) (http://www.wsj.com/articles/alipay-mobilizes-for-world-wide-expansion-1477930366)

China's Market Leaders

Alipay, launched in 2004, is the independent third party payment service adopted by Alibaba's Taobao/Tmall e-commerce platform. Alipay has built a solid user base riding on Alibaba's e-commerce boom, sourced from both the merchant and user front thanks to its convenient, safe and secure transactions.

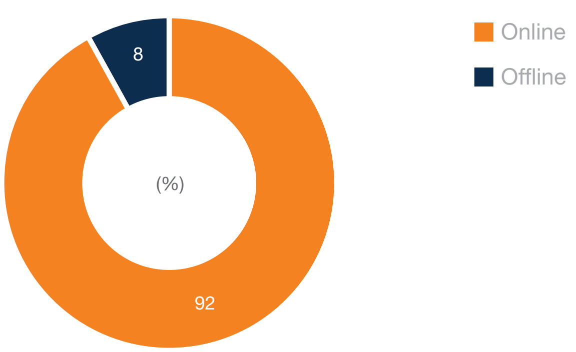
Tencent's WeChat capitalized on the mushrooming user base of social networking mobile applications to become the prevailing technology player in China. Tenpay's payment function is embedded within the WeChat messenger application, enabling a symbiotic rise with WeChat, which topped 800 million monthly active users as of June 2016.[7] The social aspect of WeChat has been the key reason for Tenpay's success as users are able to transfer money as well as offer red envelopes to friends and family. During the Chinese New Year Eve in 2016 8.08 billion red envelopes were distributed via the Tenpay payment transfer function, up from one billion the year earlier.[8] Moreover, Tencent has strategically invested in many industry verticals with targeted company allocations, such as JD.com (online retailer), Wuba (classified advertisements), and Didi (car-hailing company) in order to amplify exposure and further entrench themselves within both the online and offline payment worlds. Tenpay has achieved 20% market share as of June 2016.[9]

What is Next for Chinese FinTech?

We see banking and wealth management (peer-to-peer, money market funds) as the next businesses to be impacted by Chinese finance technology. Given that this lucrative banking and wealth management industry is relatively inefficient and under-penetrated, Chinese internet leaders have the potential to reshape and redefine the market by leveraging their technology coupled to big data capabilities. Indeed, brokerage account openings overwhelmingly drew from online registrations in 2015 and the wealth management market is forecasted to quintuple by 2020.[10] Regulation is the biggest bottleneck, yet fortuitously the Chinese government possesses a constructive attitude towards new technology. The two parties have been working closely to bring more innovation to the country while ensuring a healthy development for the economy.

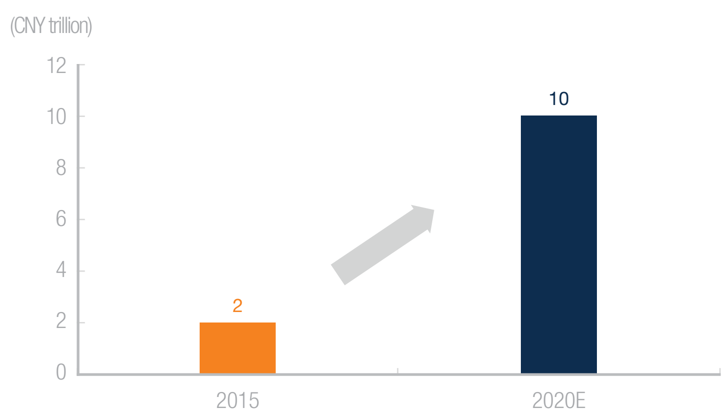
Chinese New Broker Account Openings in 2015

Source: Nomura, Mirae Asset Global Investments (June 2016)



Online Wealth Management Market in China

Source: Nomura, Mirae Asset Global Investments (June 2016)



[7] "Tencent Tries Out a Stickier WeChat" (September 2016)

[8] http://news.163.com/16/0130/07/BEIH4NB900014Q4P.html

[9] iResearch, Mirae Asset Global Investments (2016)

[10] Nomura, Mirae Asset Global Investments (2016)

Internet giants have outstanding competitive advantages over traditional players as they are equipped not only with stronger technology but also accrued user data in addition to a cheaper user traffic cost structure. The supremacy of large-scale technological expertise and flush resources together deliver durable sustainable advantages.

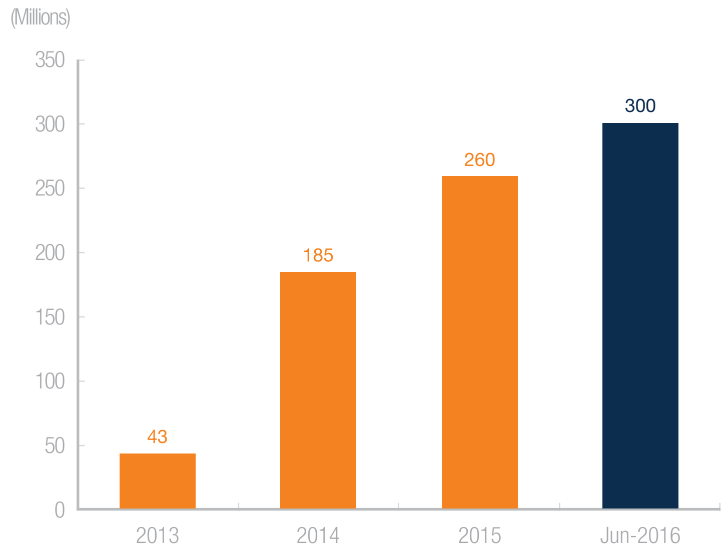
Ant Financial is a fitting example of these phenomena. It leveraged its existing traffic of Alipay users to pair it with cross-selling wealth management services in 2013 as an internet finance firm. Ant Financial promoted Yuebao, a money market fund managed by its fund management arm TianHong Asset Management. Yuebao saw its assets under management surge to RMB 541 billion (US$ 78.73 billion) in 2014 from RMB 185.3 billion (US$ 26.92 billion) in 2013. Yuebao's total user base reached 300 million as of June 2016[11], up from 43 million 2013.

Tenpay, with approximately 300 million[12] users, is adopting a similar strategy by offering payment services as a baseline that together with captured user data and sticky organic traffic may provide a vector of products by converting adoption of higher-value banking and wealth management services on their Licaitong platform.

Internet giants hold a promising position in the Chinese fintech industry supported by a large payment user base, low distribution costs, and technology that have cumulatively helped evolve the fintech industry pronouncedly in light of mobile/internet penetration and the unmet demands of consumers. Meanwhile in India, financial inclusion has proved to be the thrust behind bringing millions of unbanked online with technology and many banks are playing their part.

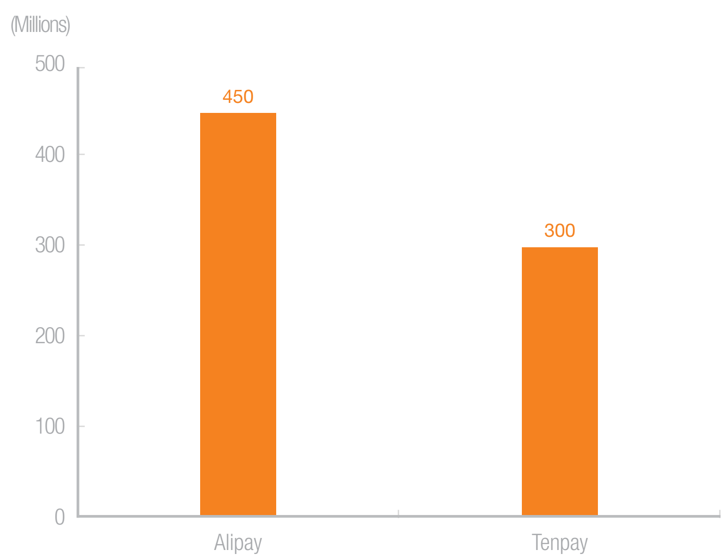
Tianhong Asset Management's Yuebao Users

Source: Southmoney.com, Mirae Asset Global Investments (September 2016)



Alipay vs. Tenpay Users

Source: 163.com, Mirae Asset Global Investments (April 2016, Accessed October 2016)



[11] http://www.southmoney.com/yinhang/zhifubao/201609/760918.html

[12] http://business.sohu.com/20160422/n445489529.shtml 300 million users are users that have connected their bank card information, otherwise active users is estimated at 420million.

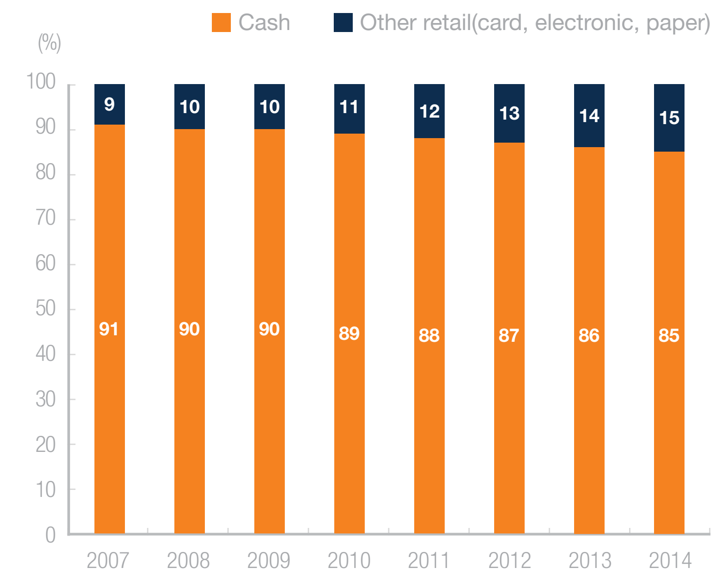
The Indian Model

Private sector banks in India have been leaders in adopting technology. HDFC Bank was one of the earliest adopters in digital banking, with more than 85% of banking transactions occurring through non-branch channels. ICICI Bank was the first bank to launch a payments wallet ("Pockets") and the KYC process has been streamlined to allow for account opening within the same day[13]

Cash is still king in India, with more than 80% of transactions taking place in cash, three to four times higher than in developed countries.[14] But cash is slowly being substituted by other retail channels, and the Indian government's move to scrap high-denomination notes will provide added impetus toward currency formalization and sets a conducive environment for start-ups to compete.

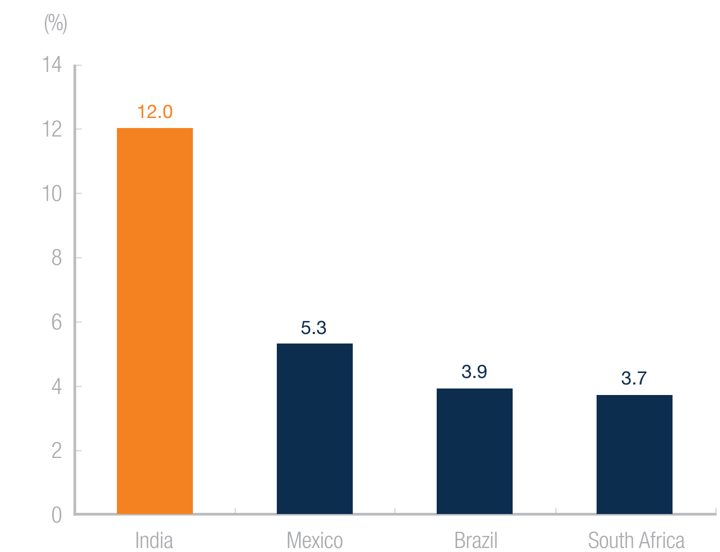
Cash vs. Other Retail Channels

Source: HSBC, Mirae Asset Global Investments (2016)



Notes and Coins in Circulation (% of GDP)

Source: IMF, Mirae Asset Global Investments (2013; Accessed in 2016)



Fintech in India has been predominantly payments-driven within a strict regulatory environment requiring licenses for most of the business as sanctioned by the Reserve Bank of India. A government push has encouraged the use of technology for financial inclusion. This has commenced with the Aadhar Card with unique identification numbers (UID) for 994 million individuals, which constitutes most of the adult population.[15] Within a few months, several hundred million accounts were opened, which will be used for various purposes like direct benefit transfer.

Indian non-cash retail transactions were worth USD 2.7 trillion in 2015, with paper-based exchanges accounting for nearly half of the total.[16] However, electronic payments are quickly catching up, with a compound annual growth rate (CAGR) of 61% between 2006 and 2014.[17] Remittances exceeding USD 70 billion and favorable regulations vis-à-vis bottom-of-the-pyramid financial inclusion will carry the payments trend in India for years to come.[18]

[13] Company Disclosures, Mirae Asset Global Investments (2016)

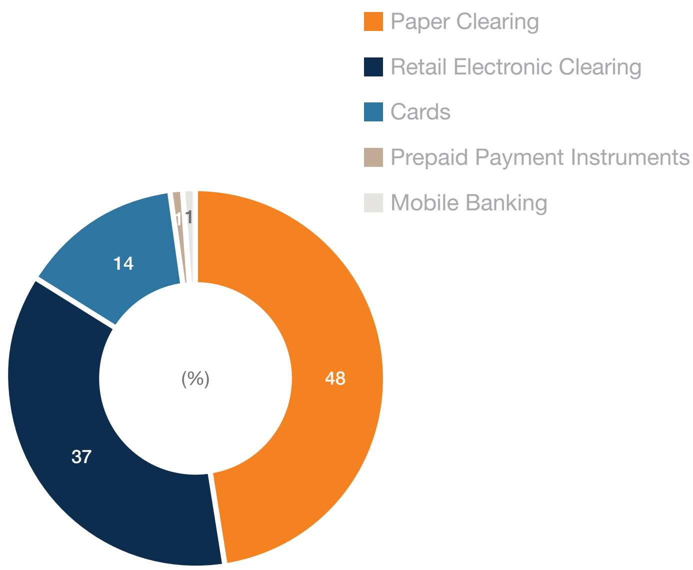
[14] Financial Times, "India's Cash Woes Push Start-Ups to Front of Line" (November 2016)

[15] Unique Identification Authority of India, Government of India (November 2016)

[16] HSBC, India e-finance primer (November 2015) [17] Goldman Sachs, Asia Digital Banking (May 2015) [18] Credit Suisse, Digital Finance in Asia (June 2015)

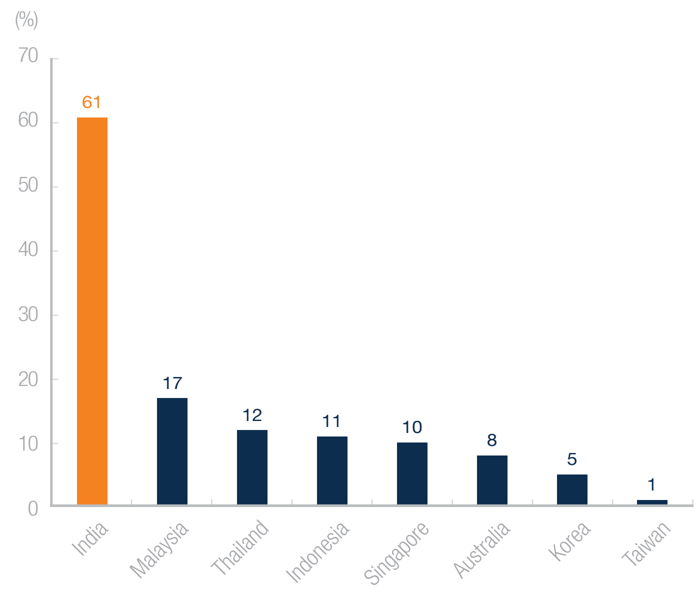
India Share of Retail Transactions Settled

Source: HSBC, India e-finance primer (November 2015)



Electronic Payment Liftoff (Growth 2006-2014)

Source: Goldman Sachs, Asia Digital Banking (May 2015)



Sea Change From the Ground Up

Asia is a contrasted region and each country's fintech ecosystem will evolve along a distinctive tangent. As we have explored, China is oriented towards optimizing the customer digital experience while India is marching to technology-enabled financial inclusion that originates from a cash-based society. As a whole, Asia's consumers are more receptive to new technologies in terms of using a host of non-bank financial services compared to developed market counterparts. This sea change of digitalization is only beginning to reshape finance in Asia.

Gaining exposure to Asian fintech requires a differentiated, nuanced understanding of trends early on within a regional investment portfolio. Indeed, this is an intense and exciting segment that we will observe with interest, deriving insights from our on-the-ground research and bottom-up investment approach.

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