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FinTech: Value Amongst the Noise?

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"Silicon Valley is coming", said Jamie Dimon, Chairman and CEO of banking giant JP Morgan. This is a sentiment that you will have heard echoed by many other senior figures in the financial services sector. Accenture reports that investment in financial technology, "FinTech", companies has grown by over 200% between 2014 and 2015 alone. In 2015, investment grew by a further 75%[1]. We are inundated by headlines about how these disruptive, data-driven FinTech companies are about to put the global banking sector out of business. According to IBM, 90% of the world's data has been created in the last two years[2], and these companies plan to use that data to put pressure on the traditional financial model. At Pantheon we have noted that such a vibrant and high growth sector offers potential opportunities for private capital providers. We aim to cut through the noise and explain some of the key drivers of this exciting sector. In doing this, we also seek to answer the question of how big the investment opportunity really is, and how private equity might best become involved.

What is FinTech?

The traditional definition of financial technology referred to the 'back-office' of the large financial institutions. Today, the definition has expanded to encompass an industry of innovative new firms that aim to use new technologies to compete or collaborate with the universe of traditional finance providers and intermediaries. Importantly, these companies could be either start-ups or more established companies. This makes them relevant for a broad spectrum of private capital providers, from the early-stage venture capital funds to the biggest brand name funds in the world.

The market can be broadly separated into three constituent sectors:

> **Payment Processing/Money Transfers** – these are third parties that are used by a consumer or merchant to handle either purchases or money transfers. The classic example of a payment processor is PayPal. Newer examples include iZettle, which allows merchants to take mobile card payments; and Vantiv, which is a large payment and technology provider to the corporate sector. A well-known example on the currency side of the business is Transferwise, a provider of mobile consumer

[1] Accenture, March 2016
[2] IBM, "Bringing Big Data to the Enterprise"

foreign exchange services. Crucially, these companies are able to undercut the transaction fees charged for similar services by the large financial institutions. Given that this area is one of the highest margin parts of the banking business, this is a major threat to such organizations[3].

- **Consumer and Smaller Business Finance** – this includes lending companies such as Lending Club and Funding Circle, both of which offer peer-to-peer lending services as an alternative to traditional bank lending for consumers and small and medium sized businesses. It also includes new investment managers such as Nutmeg, which seeks to make wealth management available to the masses. Also included are services for personal financial insight such as Credit Karma, which is a free credit score and financial management platform for consumers. These are areas in which banks have failed to be user-friendly, leaving gaps in financial education that companies such as Credit Karma are addressing with success.

- **Software and Back Office** – companies that provide software and analysis tools for the back offices of financial services companies, and the finance function of companies in other sectors. This could include accountancy and risk management tools. Generally, such companies aim to provide cost savings, improve efficiency, enhance analytical capability, boost compliance and reduce risk. In this sense they are collaborators rather than competitors.

Intelliflo is a good example of a company that seeks to collaborate with a traditional financial service to enhance efficiency[4].

Intelliflo

Case Study 1: Intelliflo

Intelliflo provides “software as a service” (SaaS) for the Independent Financial Adviser (IFA) market in the UK. The marquee product is “Intelligent Office” which enhances the pre-sales advice process; aggregates and presents the data needed for the customer advisory process; and provides the customer relationship management package including fee streams and portfolio performance. The software enables wealth managers to run their business more efficiently, and serve their customer base better as a result.

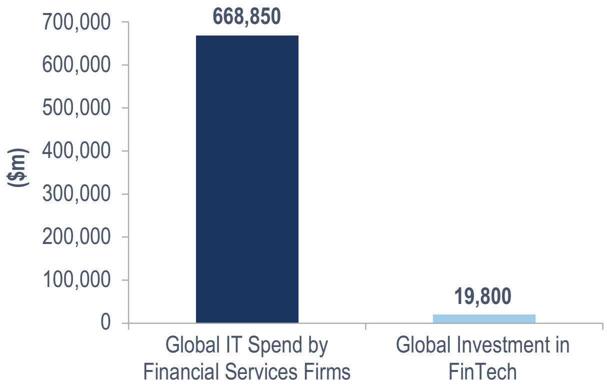
[3] McKinsey & Company, “The digital battle that banks must win”, August 2014

[4] Please note all case studies used in this publication are provided for general information and illustration only.

How Important is this "New" Market?

Total global spend of financial services companies on IT was $669 billion, as at the end of 2015 (see Figure 1). FinTech investment by venture capital ("VCs") is currently a relatively low $20 billion[5] out of that possible $669 billion, or around 3%. However, the overall level of global investment in FinTech is increasing rapidly, as shown by Figure 2.

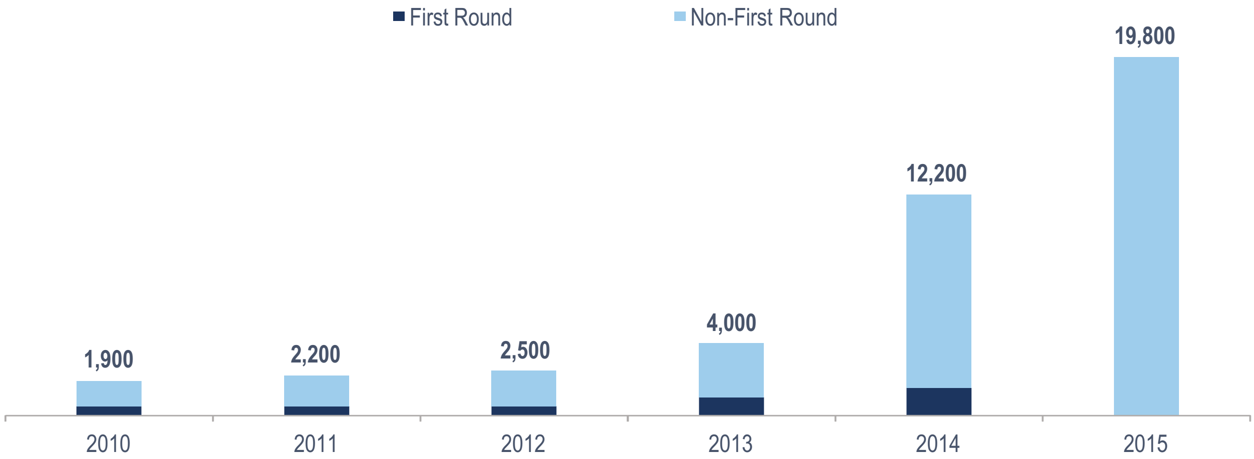
Figure 1: Global Investment in FinTech as a proportion of IT Services Spend



Source: KPMG

Futhermore, the proportion of investment that is made via a subsequent funding round is also growing, indicating that the sector is gaining traction. It suggests that companies are increasingly getting to the size where it makes sense to seek additional growth financing. As we have explored in our definition of FinTech, the actual universe of investable financial technology is much greater than the 3% figure we are first presented with. Pantheon expects that these dynamics will open up the financial technology space as an increasingly investable proposition, driven by a number of global structural mega trends.

Figure 2: Venture Capital Investment in Financial Technology



Source: Accenture, April 2016

[5] Accenture, "The Future of FinTech and Banking", April 2016

Drivers of the FinTech Opportunity

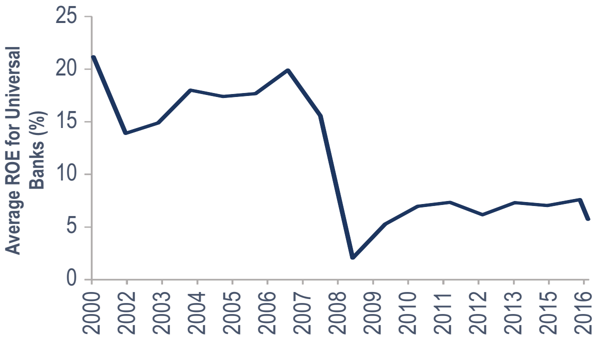
There are a number of ways in which structural changes in the financial ecosystem are driving the growth of the FinTech opportunity. Banks are facing multiple challenges against the backdrop of the financial crisis. The pace of technological change, and specifically mobile penetration rates, has enabled significant growth in FinTech. Consumers are becoming more impatient for results as the result of this technological transformation. Additionally, the emerging markets present billions of new customers, without the incumbency issues of developed markets.

The Struggles of the Traditional Banking Model

Since the Global Financial Crisis ("GFC"), the financial services sector has found itself increasingly burdened whilst PwC reports that 20% of traditional financial services business is at risk from FinTech by 2020[6]. Another uncomfortable statistic is that since 2011, an equivalent of 60% of the profits of Britain's largest banks has been spent on fines and customer compensation[7]. What are the structural themes behind this struggle?

Firstly, are the some 250 new regulations that banks have to adhere to, with the intention of controlling the risk-taking behavior that drove the Global Financial Crisis (GFC)[8]. The most onerous of these regulations demanded an increased on-balance sheet capital requirement[9], and the total of all regulations has increased general spend on compliance matters. The average annual compliance spend is up to $4 billion for some large banks[10]. As a result, they have less capital to commit to risk-taking activity such as investment banking and trading, and less capital to invest in developing more innovative products. The best demonstration of this struggle is the Return on Equity ("ROE") drag of such institutions. As an example, Goldman Sachs reported ROEs of up to 40% prior to the GFC, and now reports ROEs closer to 7%.

Figure 3: Average ROE for Universal Banks



Source: Capital IQ, YTD ROE as of Q3 2016

Secondly, the major financial institutions have grown to almost unmanageable sizes. In the two decades prior to the GFC, the banking sector underwent a progressive wave of mergers and acquisitions activity. This was driven partially by debt-fuelled topline-focused acquisition programs, and partially due to takeovers being the only remaining means of saving some of the banks hit hardest by the early days of the GFC. If we take the United States banking sector as an example, the 37 'big' banks of the 1990s became only four by 2009. Historically, such banks have tended to build their own proprietary IT platforms, which have been inward-looking and inflexible. The job of integrating the platforms of these merged entities is still ongoing.

[6] PwC, "Blurred Lines: How FinTech is shaping financial services", March 2016

[7] BBC, "Banks 'pay 60%' of profits in fines and customer payments", 7 April 2015

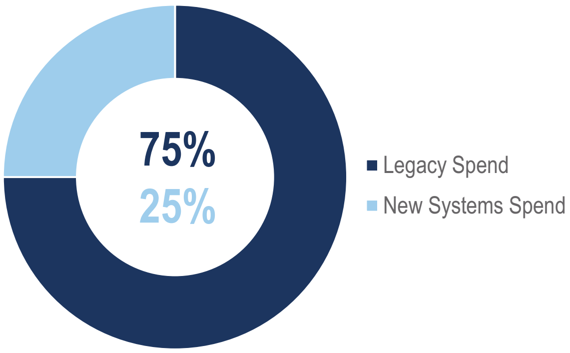
[8] Thomson Reuters, 2016

[9] From 2015, the Basel III capital Accord mandated that the minimum Tier 1 capital ratio of a bank should be 6%. The Tier 1 capital ratio measures a bank's solvency levels by measuring the core capital that it holds on its balance sheet against its total risk weighted assets. Tier 1 capital is composed mainly of common stock or other very liquid instruments. Risk weighted assets are a risk adjusted amounts of a bank's assets, i.e. the loans and other products that it has extended to customers

[10] Financial Times, 28 May 2015

As such, the proportion of total bank IT spend on managing legacy systems is three-quarters of total IT spend (Figure 4). These fragmented technologies not only consume resources but fail to communicate well with each other or with customer interfaces. This has fundamentally undermined banks' ability to respond to threats to their business from newer, more nimble players. As a guide, it can take up to two years for a large bank to deploy a basic upgrade.

Figure 4: Split of IT Spending for Financial Institutions



Source: Financial Times / Celent, June 2015

Technology has never been more ubiquitous or cost effective

The cost of Internet data has decreased from around $12 per mbps in 2008 to less than $1 today. Over the same time period, the number of hours the average American spends using the Internet has increased from 2.7 hours to 5.6 hours[11]. These trends have been driven largely by the increase in smartphone penetration, allowing immediate and completely mobile access to personal affairs. The number of global smartphone contracts in 2000 was less than one billion, by 2014 there were over seven billion such contracts[12]. Over three-quarters of people in the U.S. and UK now own a smartphone. These facts give an indication of the sheer demand for and access of technology by the general population.

In general, the traditional financial sector has been behind the curve in terms of utilizing and monetizing on this technological boom. New companies that are able to invent themselves from scratch to fit into the technological landscape and to be nimble enough to respond to changes have found themselves with a competitive advantage in product development and customer service. In some of the less capital-intensive business lines, such as payments, there have been minimal barriers to entry. There have also been relatively low switching costs for consumers, who have been able to shop around online for the best service. Companies able to use 'Big Data', advanced analytics and machine learning have been able understand customers in a way that the big banks have not. Understanding customers allows a firm to serve them better, as well as enabling more effective risk management for the house.

Nutmeg is a good example of a company that has presented itself as a data intensive and technologically-driven solution to the traditional wealth management business.

[11] Pew Research Centre, 2016
[12] World Bank Data, 2016

Case Study 2: Nutmeg

Nutmeg is an online wealth manager for UK consumers. It provides portfolio management for customers with as little as £500 to invest. Customers can choose their risk tolerance level and are built a portfolio of exchange-traded funds based on this selection. The core business model is to provide the service of an Independent Financial Advisor (IFA) for a fraction of the cost.

This is a pure disruption play, with three of the drivers we have discussed being key. Consumers are not keen to spend a large amount of time dealing with an IFA, and a nutmeg account can be set up in ten minutes. There is also real time access to one's portfolio with current pricing data. The ubiquity of technology makes this an attractive proposition for today's consumers, being primarily focused on immediacy and online access, something that a traditional IFA cannot offer. The net effect of this is contributing to and taking advantage of the struggle of the traditional financial model.

The value add of a VC firm here is around getting the right people on board to drive customer acquisition and internationalization, as well as making introductions to new potential clients. There is also the opportunity for a VC to invest in the marketing strategy and use its experience to lower the acquisition cost of new customers.

Consumer standards and urgency are high

Generational shift has been a key driver for many global markets. Financial services is no different. The 'Millenial' generation has grown up with rapid technological advances and are highly technologically aware[13]. This generation typically exhibits greater transience in desires and less brand loyalty. This builds expectation in terms of level of service, customization and speed. When shopping for a product, over 80% of Millenials expect real time product and pricing information, and a third believes that they will not need traditional financial institutions in five years from now[14].

The Millenial Disruption Index (MDI) highlighted that banking is the sector at the highest risk of disruption, with the majority of innovation expected to come from outside of the traditional sector[15]. Having grown up with technology, Millenials are more trusting of it and are thus prepared to undertake 'high risk' transactions on a mobile device in a way that previous generations would be cautious of. This offers the opportunity for innovative companies to roll out disruptive services.

The latest McKinsey survey of banking customers showed that 79% of customers saw their bank as a transaction centre, with only 21% seeing it as an advisor to their financial wellbeing[16]. Banks are aware of the threat and recognize the need to shake themselves out of institutional complacency. Thus, when looking at the opportunity produced from the struggles of the traditional financial sector, it is worth considering the advantage that the banks have in terms of the volume of consumer data, as well as their sizeable existing customer bases.

[13] A Millenial is defined as someone born between 1982 and 2004

[14] Omnibus Research, Bloomberg, 2016

[15] The Millenial Disruption Index is a three year study into the behaviour of the Millenial demographic

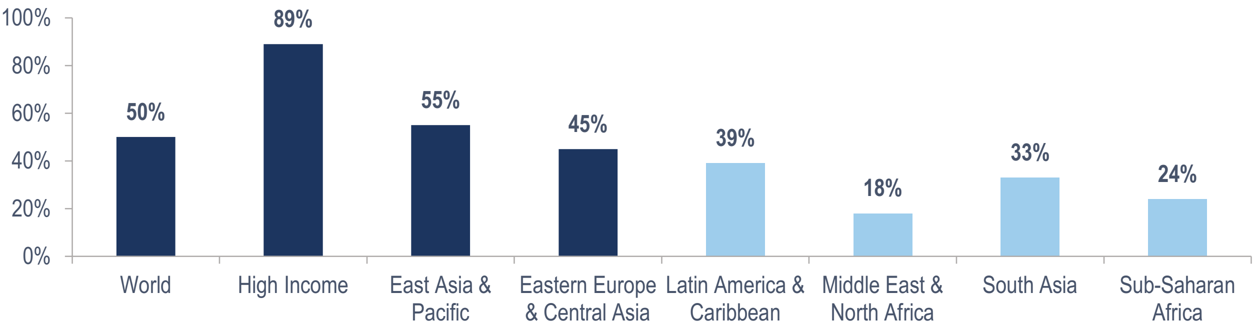
[16] McKinsey, "Cutting through the noise around financial technology", February 2016

As an example, some of the best-placed companies in the FinTech sector are those that offer new means for the banks to address the demands of consumers ("enablers"); not just those looking to innovative new product to poach customers ("disruptors").

The Emerging Markets present billions of new customers with no incumbency issues

Outside of the structural shifts of the developed world is a raft of brand new customers coming online in the developing markets. The magic of this demographic is that they have fewer incumbent providers and already have high levels of mobile phone penetration. The Internet knows no borders and so new web-based financial providers have been able to rapidly infiltrate the market. In fact, some large banks have attempted to enter the market but have subsequently withdrawn, finding that the Western banking model does not translate well there for exactly this reason. Money transfer companies such as Interswitch (see case study 3 below) and Paga in Africa have grown exponentially, monetizing this trend.

Figure 5: Low Levels of Traditional Banking in Emerging Markets (World Bank Data 2016)



Interswitch

Case Study 3: Interswitch

Interswitch is the largest payments processing company in Nigeria, catering to individuals and corporates. Its core business is to facilitate interbank money transfers. It also provides debit card processing, part of which is its ownership of the largest debit card scheme in Nigeria. It was the first mover in electronic transactions and continues to dominate the market. Aside from its own payment infrastructure, Interswitch's shared infrastructure has been adopted by many banks, governments and corporates. As a business, it has both disruptive and enabling elements.

Of the drivers we have analyzed in our study, two are of particular relevance to this company. First is the rapidly increasing penetration of banking in the emerging markets, driving the volume growth of financial transactions. The other is the ubiquity of technology (the mobile phone), facilitating the company's rapid entry and growth in the market.

The opportunity for private equity

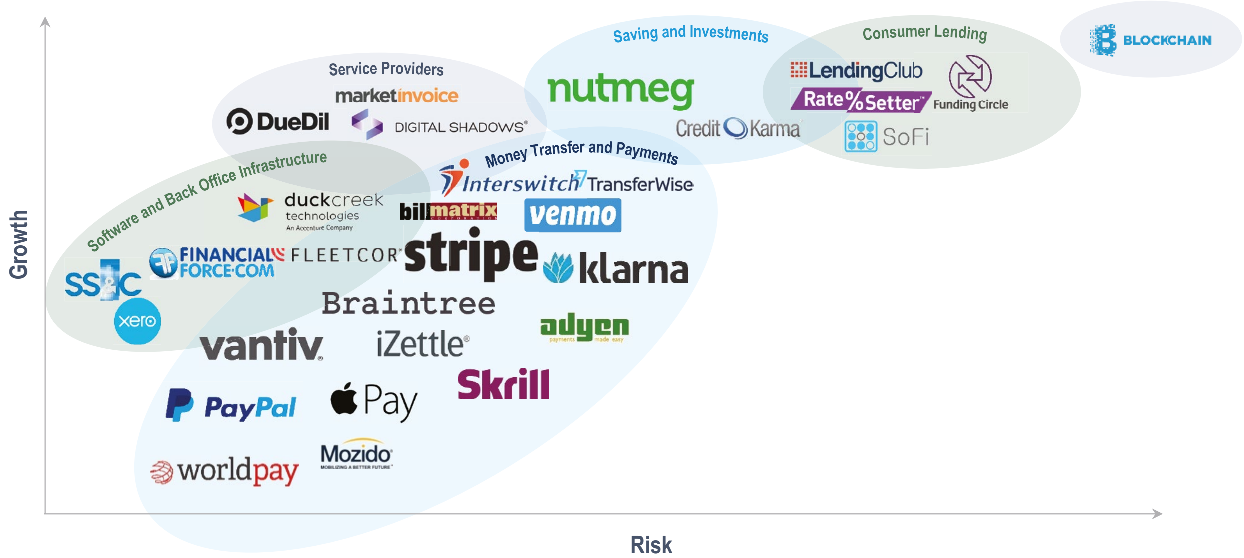
With such exciting trends and continual birth of new companies, the FinTech opportunity for venture capital is obvious. There is a large spectrum of various risk-return profiles available for all types of private capital provider, from the high risk consumer lenders backed by the big venture names, to the much more stable, cash generative payment processors that have been backed by some of the biggest private equity groups.

Largely, the spectrum appeals to the different fund groups as follows:

Venture Capital – The venture capitalist (VC) is in the game of backing the 'next wave' idea. They tend to build large portfolios of assets, and are looking for those select few outsized returns which can return multiples of their fund size. As a result, they have a high risk appetite and are focused on rapid top-line growth with a path to, rather than already proven, profitability. They are also focused on organic growth and do not use leverage. Every part of the FinTech opportunity will be of interest to them if there is a company offering which can quickly take market share. Going back to the case study, Nutmeg is a good example of the type of company that might appeal to a VC player.

Mid-Market / Growth – The mid-market buyout or growth player is, conversely, looking for a proven concept. Such a fund will be interested in verifying a solid EBITDA track record and potential for profitability growth. Cash conversion will also be important as modest leverage will be part of the investment thesis in most transactions. Aside from growth, they will be interested in opportunities to add operational value to the business. These players also take interest in inorganic sources of growth in the M&A markets. A mid-market buyout fund has a lower inherent tolerance for capital losses in comparison to the VC and comes with a more conservative risk profile. These groups will be on the lookout for more established disruptors, and also the enablers we have discovered earlier in this study. Ullink is an example of the type of company that might appeal to a mid-market player.

Figure 6: The Universe of FinTech Opportunities



Case Study 4: Ullink

Ullink provides trading and connectivity software to firms involved in the securities markets. Its customers include banks, brokers, trading venues and investment firms. There are two core parts of the business. The first provides information exchange between market participants; the second provides order management systems.

The business case is in three parts. First, that it allows market participants to use the vast quantity of data that exists in the financial markets. Second, it provides a better system for firms to manage their order books than the incumbent proprietary software they may have used in the past. Finally, it supports the underlying industry trend towards automation.

Large Buyout – Large buyout managers are, by definition, looking for sizeable opportunities. They will be less concerned with outsized growth rates and more concerned by the scope for operational value add, a strong history of profitability and downside protection. The latter is particularly important given the greater use of leverage in transactions versus the other fund types. M&A programs are a key strategy for a large buyout fund. Such a model lends itself well to established companies: often non-core spin outs of large financial services companies, big software providers and process outsourcers, as well as other services for banks, insurance companies, asset managers or the finance functions of other corporates (see final case study on Worldpay).

Case Study 5: Worldpay

Worldpay is a world-leading provider of payment processing services and a pioneer in introducing technology into the payments sector. Through its direct membership of MasterCard and Visa it allows merchants to take payments via card machines, online, by telephone or by email. It was a carve-out from the Royal Bank of Scotland.

RBS became majority-owned by the UK government as a result of the pressures of the GFC. Part of the ownership of the government required RBS to re-capitalize via the sell-off of non-core business divisions, one of which was the payment processing business that would become Worldpay. The business case for Worldpay has been largely driven by the struggle of traditional financial services providers theme.

As we reflect, it is clear that the financial technology opportunity is much larger than it first appears. It encompasses many sub-sectors of firms that can work with or compete with the traditional financial services companies. We have also discovered that there are many different profiles of firm, from the established and cash generative to the hopeful "Unicorn". We have seen how these profiles could potentially slot into the spectrum of private equity from the mega-buyout manager to the early-stage VC.

At Pantheon, we have seen an increasing number of FinTech companies in our portfolio and are excited to track the development of this sector. We believe this is a sector that is just getting going.

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