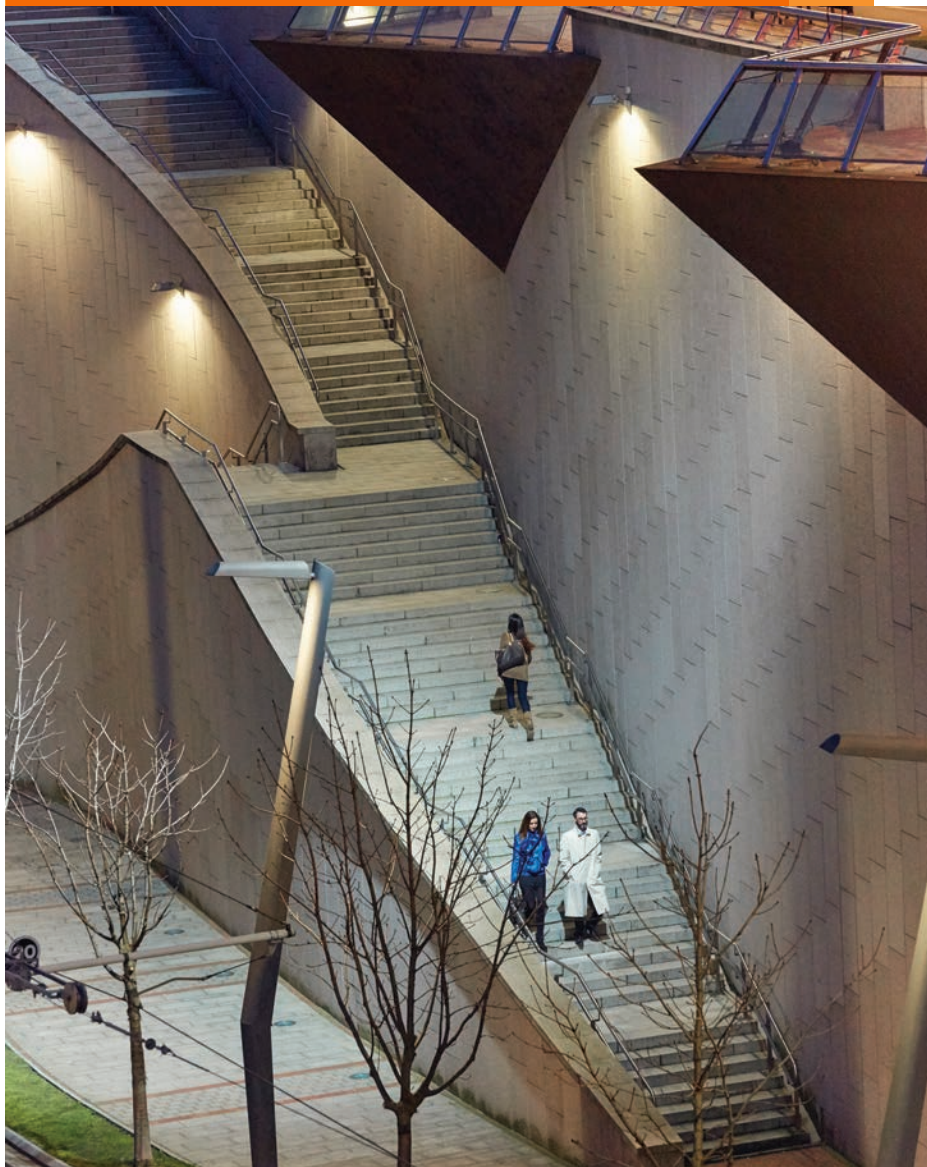


The future shape of banking in Europe

How disruptive forces will
drive the evolution of a
new banking ecosystem

July 2016





An aerial photograph of a paved plaza with a herringbone pattern. A person in a white tank top and shorts is walking in the upper left. A person in a blue shirt and white pants is walking in the center, surrounded by many pigeons. Two people are standing in the lower left. The scene is lit by bright sunlight, creating long shadows.

Contents

<i>Foreword</i>	<i>4</i>
<i>Multi-paced transformation</i>	<i>6</i>
<i>Future scenarios</i>	<i>10</i>
<i>Outlook</i>	<i>19</i>
<i>Contacts</i>	<i>22</i>

Foreword



In the foreword to our 2012 report ‘Banking industry reform – A new equilibrium’¹, we made a prediction about the global financial crisis. We said that the financial sector would emerge from the crisis to a world very different from the one we remember going in, partly as a result of the crisis itself, and partly due to other global trends and developments that have been gathering pace alongside it. These included changes in global economic growth patterns, advances in technology, a new competitive landscape, and changes in stakeholder attitudes and expectations. We added that banks’ responses to the crisis – and the related reform agenda – should take full account of these trends and developments, or they would risk emerging from the crisis ‘recapitalised, restructured, reformed ... but irrelevant’.

In a follow-up report ‘The future shape of banking: Time for reformation of banking and banks?’², published two years later in July 2014, we hypothesised that the banking industry would be transformed quite radically by these forces – particularly technology. Indeed, we asserted that, unless banks took up this transformation challenge, they would be rendered progressively irrelevant, or even non-existent. We painted a picture of a banking industry no longer made up of a defined set of banking institutions, but consisting of a much more diffuse and interconnected set of entities and activities, many of them bridging into other industries entirely such as technology and retail.

Part of this transformation – we supposed – would come about through ‘voluntary’ actions taken by banks as they adapted to the world around them. But a big part of it would be the result of disruption and displacement from innovative new challengers. Finally, we observed that, in response to this industry transformation, banking regulation would itself need a radical reorientation – from a position of regulating a defined set of institutions (and everything within) to one of regulating the markets that they serve through an increasingly complex system. In other words, they would need to switch from regulating banks to regulating banking.

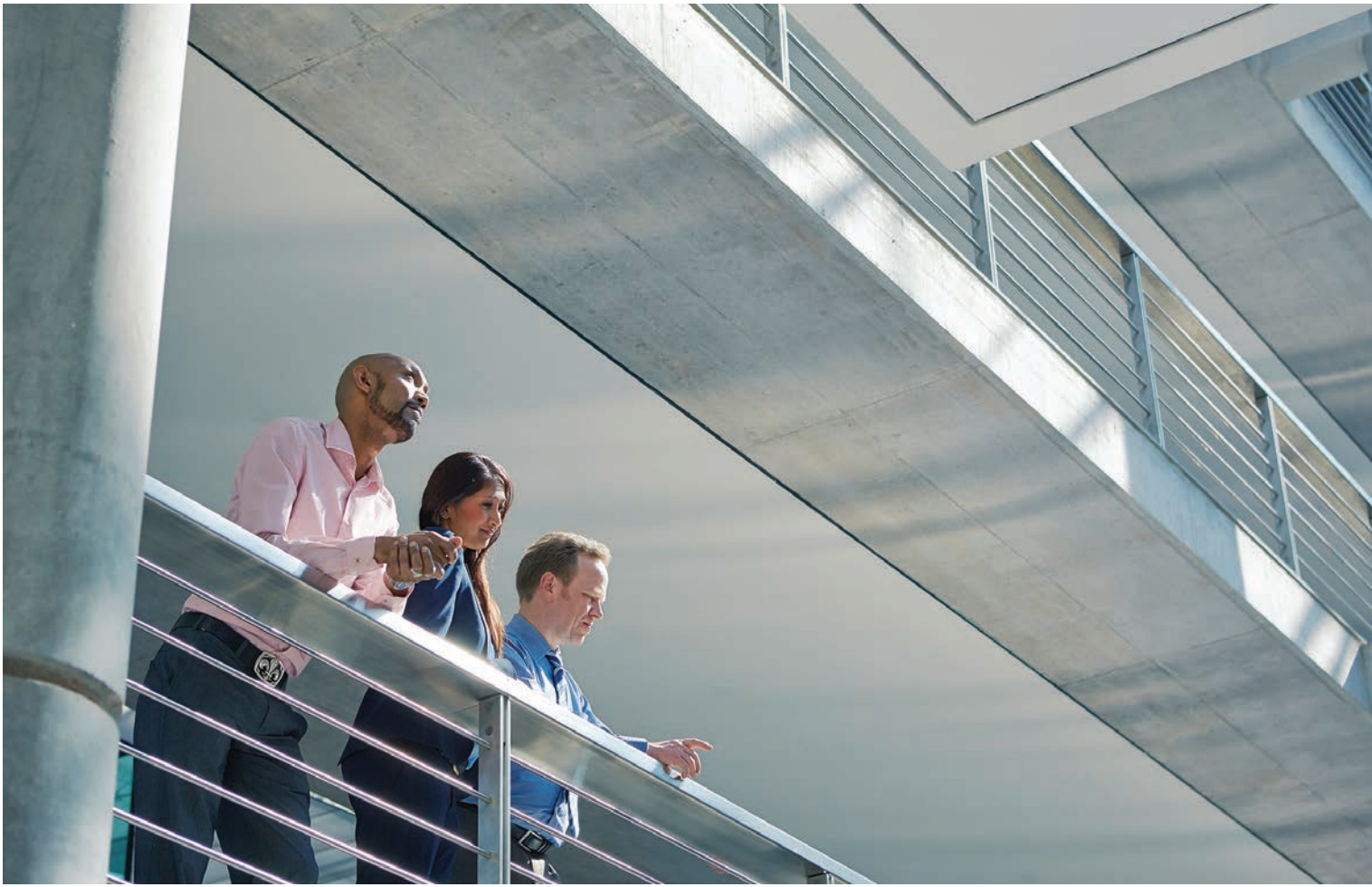
We gave a rough timescale of 2025 to 2030 for all of this to play out.

Two years down the track, in 2016, how do we feel now about these assertions? Firstly, the overall timeframe feels much too long. In a mere couple of years, the words ‘FinTech’ and ‘Blockchain’ have burst into the banking lexicon with such speed and impact that, if a word-cloud was created from all that is said and written in the industry today, they would surely compete with ‘Regulation’ in terms of font size.

And now of course, with the UK’s decision to leave the EU, the word ‘Brexit’ has been added to the list of likely change accelerants.

1 Banking industry reform – A new equilibrium
<http://www.pwc.com/gx/en/industries/financial-services/banking-capital-markets/publications/banking-industry-reform.html>

2 The future shape of banking: Time for reformation of banking and banks
<http://www.pwc.com/gx/en/industries/financial-services/publications/future-shape-banking.html>



Within this shifting landscape, however, the pace of change feels mixed. If anything, established banks have moved more slowly than we expected; challengers have moved more quickly; and regulators – though prolific – have barely deviated from the agenda they have been on since the crisis: ending ‘too-big-to-fail’.

This throws up a new set of scenarios for us to consider within our originally stated timeframe, or possibly sooner:

1. This trend of multi-paced transformation continues: banks gradually adapt and consolidate, but not fast enough to prevent challengers of various forms from taking a sizeable (say, 20%) and permanent share of the market.
2. The trend quickens, and a tipping point is reached beyond which the challengers become the new incumbents and the present incumbents either fade away or are reduced to playing a utility role. In this scenario, it is possible that a new banking crisis, and a new round of public intervention, will precipitate the transition.
3. A third scenario – one that challenges the notion that incumbents and challengers are locked in permanent combat – is that they form a more accommodating and symbiotic relationship within a new banking ecosystem in which the terms ‘incumbent’ and ‘challenger’ cease to have meaning. Under this more optimistic scenario, the banking industry – together with other Financial Services and Technology sectors – moves on from scrapping over who gets what share of the payments/deposits/loans/securities market. Instead, it addresses itself collectively to customer service innovation and solving contemporary challenges such as financial exclusion, under-funding of lifetime financial security, and under-investment in new infrastructure and productive capacity.

In this report, we expand on the phenomenon of multi-paced transformation, as a prelude to examining these scenarios in some more detail. We do so with a particular focus on Europe³.

Why Europe? For two main reasons. First, because the industry in Europe is in need of a major shake-up and is being driven rapidly towards this by a ‘perfect storm’ of a still toxic legacy; intense policy and regulatory reform; weak underlying economic conditions; and now a new risk in the form of Brexit – driven instability and uncertainty.

Second, because these and other disruptive forces are arguably stronger in Europe – the status quo is less stable – so, out of the European crucible could emerge a model for the global banking industry that will prevail for decades. For example, some banks are already responding to the Brexit jolt in a positive proactive way by looking at options to bring forward transformations in their strategies and operating models to improve performance, while also covering their regulatory bases. As we put it in our previous report, what doesn’t kill you makes you stronger!

For this, though, a lot of things will need to go right, starting with avoiding a destructive spiral set off by the market and economic turmoil that the UK’s EU exit has just unleashed. It will also take courage and vision on the part of incumbents and challengers, as well as regulators, to take the industry down the path of our third scenario.

³ By Europe, incidentally, we mean the broad region of Europe, not just the EU or Eurozone.

Multi-paced transformation



Bank inertia

In our 2014 report, ‘The future shape of banking: Time for reformation of banking and banks?’, building on Bill Gates’ implied warning to the banking industry⁴, we concluded that a market economy could indeed exist without banks in their current form; that they would likely come under intensifying disruptive competition; but that they still had the opportunity and means to mount a powerful defence. We argued that to do so – to remain relevant – they would need to sharpen their strategic focus and move rapidly to adopt new business models and technologies.

Have they done this? So far, not really.

There has been some progress on a number of fronts, including those we flagged in a suggested 5-point transformation agenda: regulation; legacy remediation; trust; customer service; and operational innovation. There has also been some progress – though much more is needed – on reducing the complexity of banking products and services while at the same time promoting financial inclusion and financial literacy amongst its users.

There have been setbacks as well, however, with ultra-low or negative official interest rates presenting a particular challenge to banks’ ability to restore profitability and fund the capital growth and investment capacity needed for meaningful transformation.

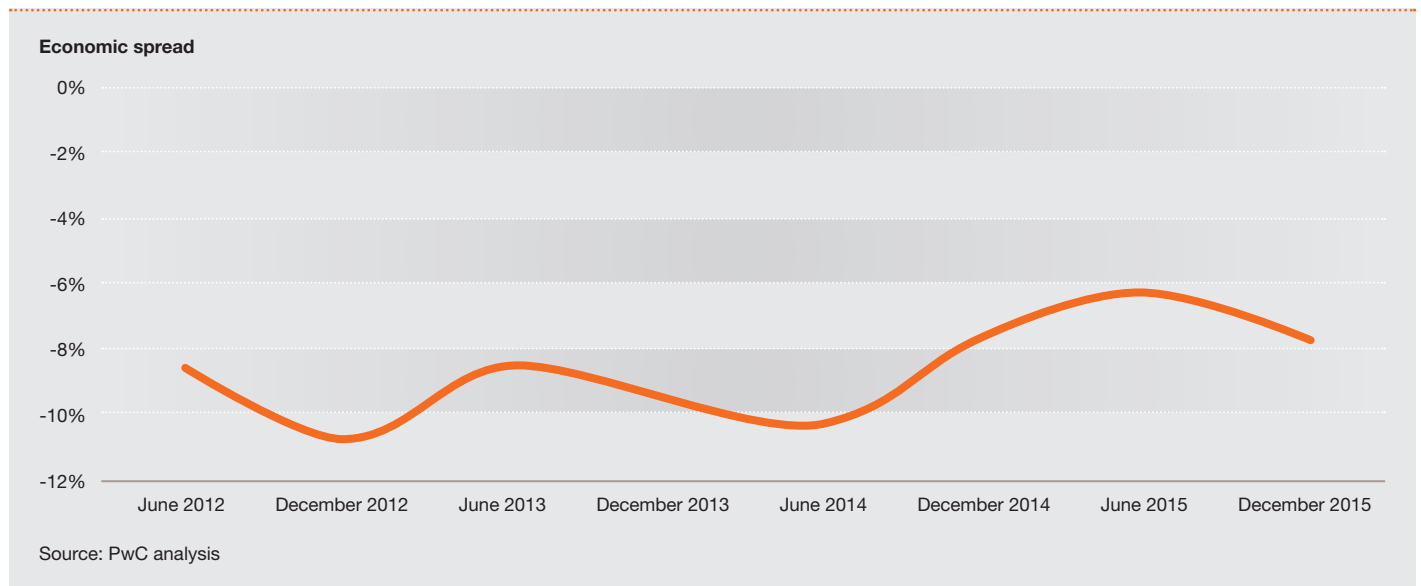
Meanwhile, banks in Europe have had to contend with a punishing programme of regulatory reform, with the adoption of the Basel III reforms and (in the Eurozone) the transition to the Single Supervisory Mechanism (SSM) making it hard for many banks to find the time, resources or clarity of direction to reposition themselves for the future. Looking ahead, the need to adapt to a post Brexit landscape will add cost and distraction, and could add considerable friction, depending on what arrangements come out of the negotiations.

As important as these reforms have been – particularly the ‘Comprehensive Assessment’ of asset quality reviews and stress tests, which addressed lingering market concerns about the strength of European bank balance sheets – they have not lived up to their billing of drawing a line under the crisis in European banking. In contrast to the modest capital shortfall revealed by the Comprehensive Assessment in 2014, PwC research on the underlying economic performance of European banks shows that they have consistently missed their performance hurdle rates⁵ by a considerable margin. See Figure 1 overleaf.

4 “Banking is necessary; banks are not”: Bill Gates, 2014

5 Meaning that their average return on equity (RoE) was less than their average cost of equity (CoE)

Figure 1: European G-SIB economic spread (RoE-CoE) performance 2012-2015



Although some of this underperformance reflects the effects of one-off asset write-downs, fines and restructuring charges, with these effects removed the underlying ‘structural’ performance picture is still consistently poor, with net economic spreads stuck at around -6% for the past two years. Over the same period, their weighted market price-to-book value ratios fell from 0.74 to 0.70.

The transformations that have occurred on our ‘5-point agenda’ have clearly yet to pay dividends.

What’s driving this? While banks may have strengthened their balance sheets, they have done less to address their core business fundamentals, and the industry has many underlying structural challenges to contend with.

For one thing, it seems that the European market is operationally ‘over-banked’ (see text box ‘Is Europe overbanked?’) making it less cost efficient than in other regions. The cost-to-income ratios of European banks average around 80%, compared to a global average of around 65%. Another factor is that, compared to the US, Europe has a chronically undersized corporate bond market, with the result that the income from supplying corporates with debt funding is disproportionately skewed towards interest income (as opposed to fee and trading income) and is therefore disproportionately exposed to extended periods of low interest rates.

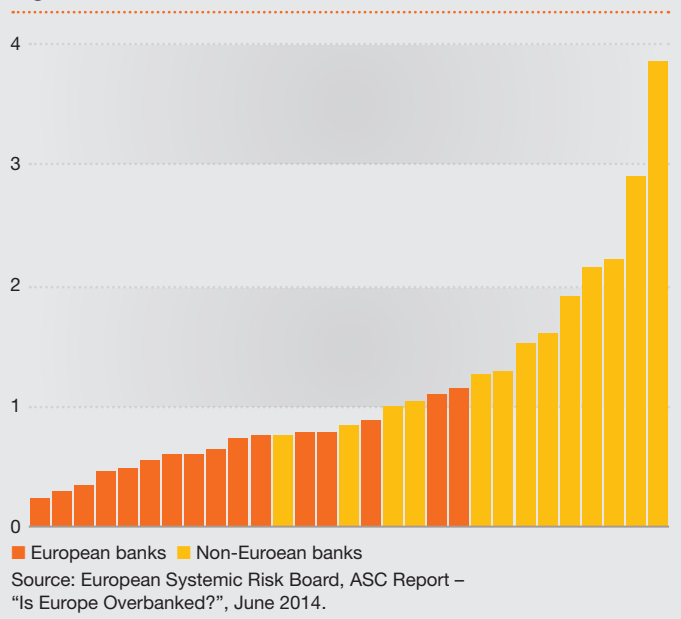
The bottom line is that there are too many banks in Europe, doing too much, in a structurally unfavourable market environment.

Is Europe overbanked?

Europe has 130 large banks⁶, servicing a €15.3tn economy – that’s one bank per €118 bn of GDP – compared to one bank per €302bn in the US, one per €214bn in Canada and one per €144bn in Australia⁷.

The European Systemic Risk Board, in its 2014 paper “Is Europe Overbanked?”, compares European markets against a number of others in terms of the ratio of stock and bond market capitalisation versus aggregate bank credit lines – the dark bars in Figure 2 below are European markets.

Figure 2: Financial structure in 2011



⁶ Banks with over €30bn in assets, that being one of the threshold criteria according to which banks come under the direct supervision of the ECB

⁷ For comparison, we apply the same threshold to screen out smaller banks in these other territories



These challenges are well understood and a policy and industry consensus seems to be forming on what needs to change. For example, there is talk about a new wave of consolidation now that the supervisory authority has been taken out of national hands where previously there may have been an inclination to defend national industries and institutions. There are also plans for the development of the corporate bond market (under the guise of Capital Markets Union) to reduce the current over-reliance on bank lending and the market friction that that gives rise to.

At the bank level, there is also a lot of work under way to rationalise products and services to the 'core', and to renew operating platforms and streamline processes in an effort to reconnect with customers and improve efficiency and control. To help reduce costs, European banks have been amongst the first seriously to challenge the traditional vertically integrated business model by entering into platform sharing deals and outsourcing processes to third party utility and ancillary service providers. Finally, banks are all looking for ways to restore their incomes, through asset re-pricing and bringing new products and services on stream, in order to compensate for the cost of regulatory reforms.

But, for various reasons, the lead time on all of these fronts is long.

Challenger vigour

In contrast, there is a surge of innovation and investment interest in the challenger sector.

By challenger sector, we don't just mean the new banking names - more-or-less modelled on the traditional standalone bank – that have come to the market with a new brand and ostensibly differentiated customer offering.

We also mean the growing body of business-to-business service providers that grew up initially to offer banks a way to streamline their operations and/or to service the requirements of the new regulatory landscape. These providers now stand as forceful competitors for relevant part of the banking value chain and are thus disruptors in their own right.

We also mean the technology driven start-ups targeting customers directly with either new (cheaper, faster, easier) ways of doing existing things like payments; new ways (ditto) of choosing between and interacting with existing providers; new ways of disintermediating the banking system; and whole new product and service categories such as secure data storage covering everything from digital identity to medical records.



And we mean large existing firms in other sectors – such as retail, technology and rival financial sectors – encroaching on the banking market place, sometimes but not always packaged with their own core products and services, often on a white-label basis in a way that separates the customer from the source provider, and often embodying elements of the above disruptive innovations as well.

Connecting all of these, to varying degrees and in varying ways, is the 'FinTech' phenomenon, which is growing at an explosive rate from the intersection of finance and technology. As an indication of this, funding of FinTech start-ups more than doubled in 2015 reaching \$12.2bn, up from \$5.6bn in 2014, based on the companies included in PwC's DeNovo platform⁸. In the context of the European banking market, FinTech has now spread out of the 'laboratories' of Silicon Valley and London's Canary Wharf and is taking hold wherever the opportunities exist, including right across Europe. (As a matter of fact, Asia-Pacific is now one of the fastest growing global regions for FinTech investment, quadrupling in the last year)⁹.

8 Blurred lines: How Fintech is shaping Financial Services
<http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html>

9 Financial Services Technology 2020 and beyond: Embracing disruption
<http://www.pwc.com/gx/en/industries/financial-services/publications/financial-services-technology-2020-and-beyond-embracing-disruption.html>

Future scenarios



An industry ripe for change

This combination of incumbent inertia and challenger vigour is intrinsically unstable.

In particular, while banks continue to strive to improve their bottom lines:

- **Challengers** are becoming increasingly active, targeting attractive parts of the banking value chain to exploit with new technologies and lean, agile, business models and/or – in the case of challengers from other industries – from their existing product and service platforms
- **Customers** are increasingly bemused by the offerings and service standards of the big banks and are increasingly apathetic with regard to banks' efforts to improve¹⁰, making them ripe targets for new, particularly digital, offerings to match those that they are experiencing in other aspects of their lives and businesses
- **Policy makers and regulators**, even while they still have full agendas on the prudential front, are increasingly turning their attention to the structural performance issues that are plaguing the industry
- On the evidence of where bank stocks have been trading, **investors** are growing increasingly impatient to see a turnaround in performance ... if this is not responded to, it could precipitate a wave of restructuring activity that is both more rapid and more radical than what bank management teams or their supervisors might otherwise deliver or indeed wish for.

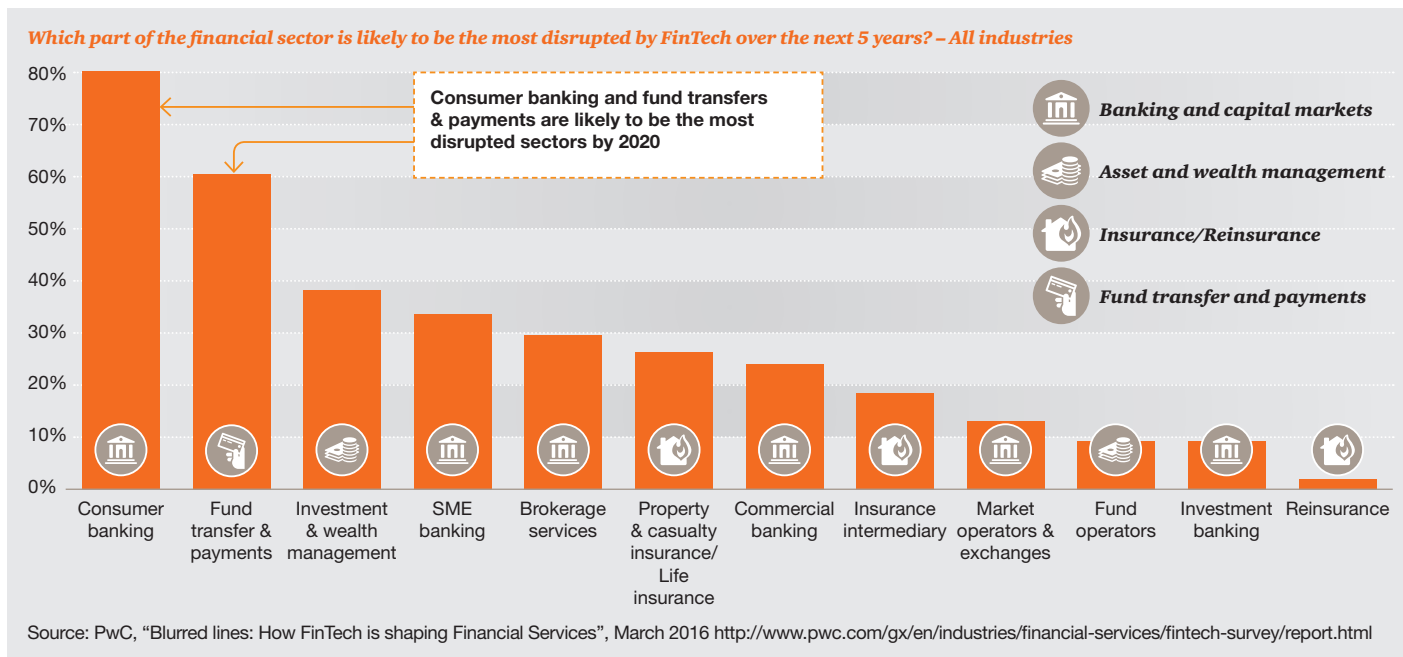
As providers reshape their offerings to keep pace with these changes, two aspects come to the fore. The first is the underlying customer **utility** that the activity or offering delivers. This could range from the facility to make adequate provision for lifetime financial security to arranging credit and completing on a transaction.

The second component is the **delivery** of the utility. What's new or distinctive in the way the customer gains access to the desired outcome? Is it on-demand, on the move, at low cost, or integrated with another related financial or non-financial service? And how relevant is the context within which it's delivered, for example the time of day, or coinciding with some complementary activity or inactivity on the part of the customer?

Today's customers are seeking the optimal combination of utility and delivery in their financial services and they do not much care whether the entity providing them is formally categorised as a bank or something else.

¹⁰ See our report: How Financial Services lost its mojo – and how it can get it back
<http://www.pwc.co.uk/industries/financial-services/regulation/how-financial-services-lost-its-mojo.html>

Figure 3: Areas of financial services most likely to face disruption



It is also clear that customers increasingly see banking not as a discrete area of their lives that can only be served by banks, but as an array of lifestyle services that anyone can provide. So they will look across the wider “banking” ecosystem for the best providers – be they banks or non-banks – and virtually all traditional banking activities aside from licenced deposit-taking – namely transactions, custody, brokerage, wealth management, lending, and investment/proprietary trading – are therefore in play.

Meanwhile in Europe, the long extended period of low interest rates mentioned above is also likely to force more radical and rapid change than would otherwise occur. If rates were perceived to have just blipped downwards, then banks and the wider market might be inclined to wait it out. However, with rates expected to remain very low for another decade or more, challengers have every opportunity to exploit their structural cost advantages – and banks have no real option but to restructure themselves in response.

Scenario 1: Market share adjustment

“This trend of multi-paced transformation continues: banks gradually adapt and consolidate, but not fast enough to prevent challengers of various forms from taking a sizeable (say, 20%) and permanent share of the market”

In our recent global survey of 544 respondents from all financial services industry segments, as well as from FinTech companies¹¹, we asked what proportion of their respective markets was ‘at-risk’ to a FinTech challenge by 2020. The incumbents’ answer, averaged across all segments, was 23% while FinTech respondents were more bullish at 33%. That’s a striking ‘bid-offer’ price on where the market share

could settle out, and a strong indication that even in this relatively mild scenario the industry landscape is about to change quite dramatically.

Narrowed to the core banking and, separately, funds transfer and payments markets, the incumbents’ views were even more pessimistic at 24% and 28% respectively.

Indeed, it appears that no part of the banking landscape is considered safe, with consumer banking, funds transfer and payments, wealth management, SME banking, brokerage, commercial banking and investment banking – amongst others – all identified in our survey as facing potential disruption. See Figure 3 above.

This finding is reinforced by our 19th Annual Global CEO Survey¹², in which 81% of banking CEOs told us that they are concerned about the speed of technological change, a higher proportion than any other industry sector.

The question this poses is, if technology is such a potent weapon, and if FinTech challengers are so clearly in the ascendency in that domain as to take up to a quarter of the whole market, why would it stop there?

We come to this in scenario 2, but first it is worth reprising what incumbent banks have in their favour that can prevent them from being overwhelmed. The **first**, admittedly trite, answer is ... incumbency, and a much-overlooked by-product of incumbency: brand.

¹¹ Blurred lines: How Fintech is shaping Financial Services <http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html>

¹² 19th Annual Global CEO Survey report <http://www.pwc.co.uk/ceo-survey/html>

This is how we put it in our 2014 report:

“What is clear is that banking services will migrate increasingly away from physical, tangible distribution into technology-enabled channels. The friction and inertia for customers in moving between banks and other service providers will decline under the impacts of both technology and competition regulation. And as banking service models become more digitally enabled, and financially more about an agency relationship, the value of brands will tend to rise.

This would play to the banks’ strengths. By representing trust, integrity, security and quality of service to the customer, brands could increasingly help to solve the transaction cost problem of choosing how and with whom to bank. So, while their brands have traditionally been seen as a relatively limited part of banks’ value, in the future they may become central to it.¹³”

Source: The future shape of banking: Time for reformation of banking and banks

That is, tarnished as they may have been by the crisis, incumbent banks are still widely recognised as representing security and dependability, both of which are crucial attributes when it comes to looking after people’s money.

A **second** by-product of incumbency is access to customer data. This provides a window onto the transactional and other lifestyle data on those customers, enabling banks to tailor their offerings accordingly (subject of course to privacy considerations). To date, incumbents have tended to shy away from capitalising fully on their customer data, because of fears over customers’ sensitivity around privacy and confidentiality. But in an environment where customers are increasingly savvy about exchanging their personal data for other forms of value – and are increasingly willing to make this kind of trade – banks’ data on its customers is potentially a huge source of value.

In addition, it suggests that banks could turn customer data management – particularly the security aspects of it – into a new commercial venture, one that is highly compatible with their existing brands and capabilities.

A **third** factor that helps incumbents is customer inertia. We know, for example, that despite strong regulation in the United Kingdom to make account switching cheap and easy, disappointingly few retail customers have so far bothered to do it.

A **fourth** factor is the virtual lock that incumbent banks have on the licenced deposit market and the funding cost advantages that come with it (packaged, as it is, with a ‘free’ government guarantee and access to Central Bank liquidity). Although that licence comes at a price in the form of subscription and compliance costs, for incumbent banks that cost is partly a sunk cost (they have already set up their compliance functions) and they are likely to be able ‘deliver’ compliance, as it were, as efficiently or more so than any new entrant.

A **fifth** factor is the control that incumbents have over critical banking infrastructure, particularly payments infrastructure, and the scale economics which enable them to absorb the cost of membership of relevant clearing, exchange and settlement facilities. That is, to whatever extent challengers need access to that infrastructure to fulfil their offerings, they must either bid directly for that access on competing terms, or else they must negotiate for access via incumbents’ membership on terms that the latter can more-or-less dictate.

A **sixth** factor is core banking know-how, particularly in respect of credit evaluation and pricing, coupled with the financial muscle to bear losses, notwithstanding that know-how, when markets turn sour. Put another way, we can see how challengers might build up market share in stable (albeit weak) economic conditions, attracting customers with clever mobile functionality and a sharper commercial offering. But then we can speculate how robust that market share will be when, inevitably at some stage, interest rates rise, borrowers start to default, savers’ money is lost, other commitments are unfulfilled, and so on.

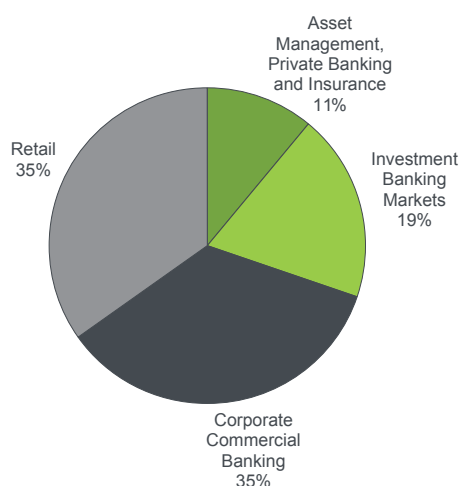
A **final** consideration in this context – not an incumbent strength, rather the opposite in fact, but a salutary consideration nonetheless – is the economic *unattractiveness* at the present time of the market being contested.

It is often supposed that there are deep profit pools waiting to be exploited, particularly in the retail segment that is apparently being targeted. For example, in their comprehensive report on the FinTech phenomenon¹⁴, Citibank provide a breakdown of global banks’ profitability by segment (see Figure 4 overleaf), to demonstrate the threat to incumbents’ overall profitability from the FinTech challenge which, so far, has been targeted mostly at the retail segment.

13 The future shape of banking: Time for reformation of banking and banks
<http://www.pwc.com/gx/en/industries/financial-services/publications/future-shape-banking.html>

14 Digital Disruption – How FinTech is forcing banking to a tipping point, Citibank,
<https://www.citivelocity.com/citigps/ReportSeries.action?recordId=51&src=Home>

Figure 4 . Global Banks – Profit Split by Business Segments



Source: Citibank

However, it is also important to consider the economic cost of generating these profits, in the form of the returns required by shareholders to bear the risks involved. Adjusting for this economic cost, we find that the retail segments of the world's largest banks missed shareholders' required returns by almost three percentage points in 2015¹⁵.

It is also often supposed that the economic cost borne by incumbents is partly driven by the amount of equity capital and reserve liquidity that regulators require them to hold. The inference here is that challengers have a potential advantage in being able to escape those requirements. The reality, however, is that banking – and retail banking in particular – is still a highly levered business, partly as a result of its favourable access to debt funding which, in turn, is partly attributable to the explicit (in the case of deposits) and implicit government guarantee and liquidity backing that incumbent banks enjoy. The regulatory capital and liquidity requirements that existed pre-crisis, and have been tightened since, are thus only a check on the leverage and liquidity risk that can otherwise (and prior to the crisis, did) get driven to unsustainable levels.

The regulatory capital/liquidity requirement, and the funding advantage, essentially go hand in hand and what we have seen since the crisis is a rebalancing of these factors. In essence, therefore, the increased regulatory capital and liquidity imposition on incumbents constitutes the partial removal of a subsidy which, given current economic, commercial and operating conditions, has made banking a lot less economically profitable than it used to be. Challengers face these conditions too.

The point is not that challengers cannot derive value by disrupting the market with novel low cost offerings – they can, and they are – it is just that the market segment they are targeting is currently operating in the red in economic terms – particularly in Europe – so the economic hurdle rate for deriving value is that much higher. For this reason, we may find that the disruption will restrict itself to a few choice areas where technology offers most scope for transformational change and, consequently, it will not get past the c. 20% market share threshold.

In support of this case, Citibank estimate in their report that by 2015, despite years of investment in FinTech, only about 1% of North American consumer banking revenue had migrated to new digital models, either with new entrants or incumbents. They expect this proportion to rise to about 10% by 2020 and 17% by 2023.

So it is easy to envisage how, through a combination of deploying its defensive assets (brand recognition and access to customer data; hold on deposits and infrastructure; credit know-how; financial muscle), and doing just enough to meet customer expectations on service functionality and price, incumbent banks can hold on to 80% or more of their market.

¹⁵ In a PwC study of the Global Systemically Important Banks (G-SIBs), their retail segments delivered an average return on equity of c. 9.5% against an average risk-adjusted cost of equity of c. 12.5%

Scenario 2: New order

“The trend quickens, and a tipping point is reached beyond which the challengers become the new incumbents and the present incumbents either fade away or are reduced to playing a utility role. In this scenario, it is possible that a new banking crisis, and a new round of public intervention, will precipitate the transition.”

What if the incumbency advantages enjoyed by today’s banks prove less solid than envisaged in scenario 1, or what if the challengers are able to take some of them for their own?

Starting with brand, as challengers become more recognised they could reach a tipping point where their brands can compete on equal if not more favourable terms. To see how rapidly the brand landscape can shift, the below (Figures 5 & 6) picture of how financial services brands have slipped against technology brands over the past ten years or so tells a sobering story.

Figure 5: Global ranking of financial services brands, 2004-2015

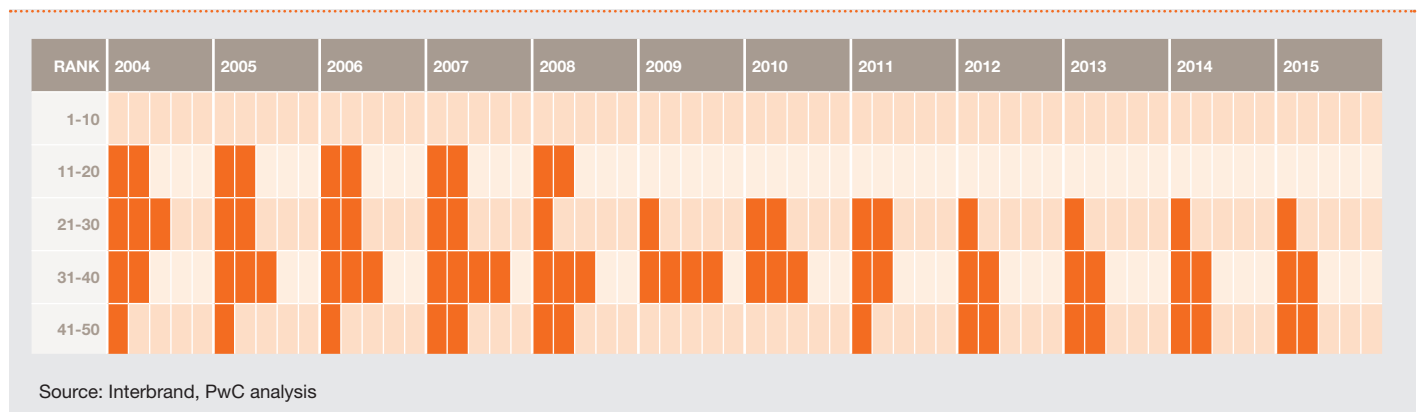
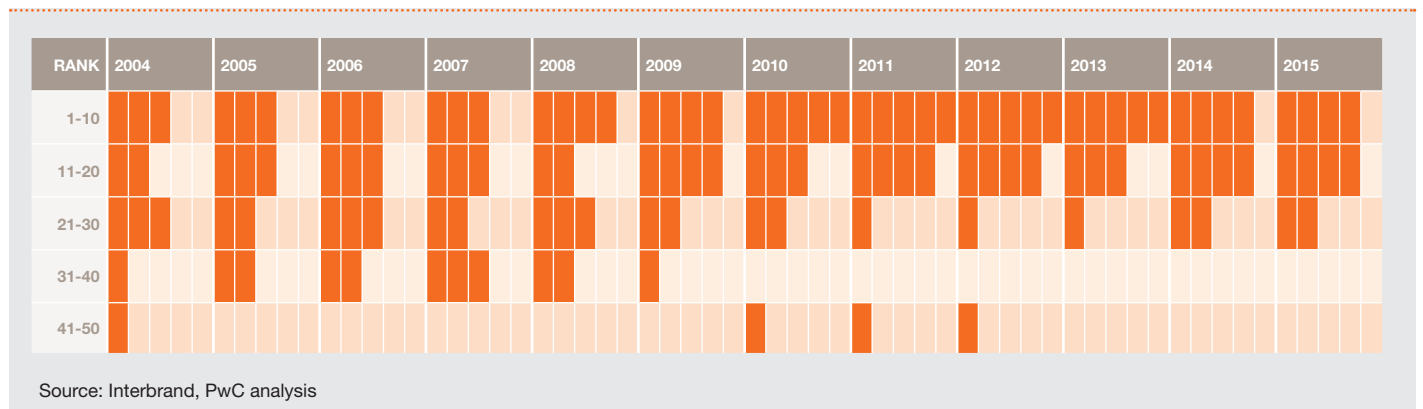


Figure 6: Global ranking of technology brands, 2004-2015



It is even more sobering to reflect that some of the technology brands that have climbed up the rankings – including Apple, Google and Microsoft, which ranked 1,2 4 respectively in Interbrand's 2015 best brands league table – are leading the push into aspects of the banking market¹⁶.

As regards smaller firms - startups, FinTech firms etc. – whose brands clearly don't yet register on global rankings, the experience of another sector that has gone through a major shake-up in recent decades – telecommunications – demonstrates how quickly new brands such as Vodafone, O2 and others can establish themselves on the back of a shift in technology.

In projecting where things might settle, it is necessary to go a bit below the overall strength of brands into what they stand for. We made the point in scenario 1 that financial services brands still stand strongly – more strongly perhaps than technology – for security and dependability, and that this may well put them ahead in offering services where security is a primary concern – secure storage of customers' most sensitive data, for example. But when it comes to the other aspect of customer data that we suggested earlier was a boon to incumbents – what customers' transactional data reveals about their lifestyles, habits and preferences – by getting in at the front end of this with payment products such as Apple Pay, technology firms arguably have as good a picture of this as banks do. Not only that, but through their provision of online search functionality and wearable technology they also have access to data on customers' behaviour patterns leading up to transactions, making the total package of data all the more powerful. So far, it seems that customers are less concerned about the security of their 'pre-transactional' data and are more likely to grant access to it, consciously or otherwise, to a brand that stands for lifestyle convenience than to one that stands for security.

We suggested earlier that the other bedrock asset for incumbents is their hold on deposits, giving them a powerful funding cost advantage. But even deposits are being disrupted away through the emergence and growth of peer-to-peer lending and crowd funding platforms, as well as the more widespread distribution and take-up of savings and money management products previously targeted at more affluent customers by the asset and wealth management sectors. Although bank deposits will continue to benefit from implicit or explicit government guarantees and liquidity support¹⁷, with interest rates looking like remaining close to zero for an extended period, putting continued pressure on savers' incomes, more and more people may be tempted to take at least some of their savings out of the licensed banking system in search of better yields.

When it comes to infrastructure, there is a mixed picture here as well. Many see the traditional bricks and mortar variety – branch networks – as more a liability (in the sense of being a drag on costs) than an asset, although views are mixed on this. Other aspects of banks' hold on infrastructure – the payments; clearing; settlements; exchanges and custodial systems and networks – may be harder for challengers to unpick. However, even here, it is not hard to imagine a future in which, for example, blockchain technology has rendered much of the existing banking infrastructure redundant anyway.

With know-how, again, the idea that banks have a monopoly on this is open to challenge. For one thing banks are finding it harder to attract and retain talent, partly due to various aspects of bank regulation that bear directly on bank staff (bonus caps and the senior manager regime, to name two), and partly because those with a penchant for creative innovation might be thinking that conditions are more conducive for them outside the regulated sector. In any case, this is also an area where technology, through artificial intelligence (AI) applications, could make serious inroads.

Finally, as regards financial muscle, while it is true that banks have built up huge reserves of capital and liquidity, and they are far better placed now than they were before to invest in future growth and to ride out market shocks and downturns, the challenger sector – most obviously represented in this case by the big technology firms – is also well resourced.

There are two further caveats to the bank story in this regard. First, the build-up of capital and liquidity has happened largely under duress, ratcheted up by regulation, and it is there strictly to maintain stability. As such, any investment in restructuring, innovation or growth will need to be financed separately, and any losses sustained through credit downturns etc. will need straightaway to be recapitalised. In other words, bank capital and liquidity is there as a buffer, not a war chest.

Second, the substantial and (for many) still deteriorating discount of banks' market-to-book values is testament to two things: the current lack of investor confidence in the industry as it stands; and, on the flip side, the latent potential for investors' money to come flooding back as and when they see an investable proposition. If incumbents continue to struggle to cover their capital costs, and if the challenger sector continues to show promise, we may find that investor money floods back through the challenger channel, not back into big bank stocks.

¹⁶ Interbrand's 2015 best brands league table
<http://interbrand.com/best-brands/best-global-brands/2015/>

¹⁷ Although as Martin Wolf in the Financial Times points out, in an article on former Bank of England Governor Lord Mervyn King's book, *The End of Alchemy* (Financial Times 31.5.2016 Central banks as pawnbrokers of last resort), even the free provision of central bank liquidity support could be taken away.

Completing this scenario, the incumbent banks could feasibly be pushed back to providing not much more than a basic utility, still the default choice for millions of customers (not unlike the big utilities in telecoms, energy and other household services) but unable to compete effectively for value-adding services to millions more. In this scenario, they would continue to attract a core of deposits that savers deem necessary to be guaranteed by government, and they would continue to lend money out to individuals and business borrowers on the other side, as they do today. But on both fronts, they would be much diminished, with a substantial proportion of saving and investment flows, and a host of ancillary products and services, by-passing the regulated sector to be handled instead by a new breed of ‘incumbents’ who have seized their opportunities. As regards infrastructure – like utilities in other industries – to the extent that this would still be held and controlled by the present day incumbents, they would be compelled by regulation, in the name of fair competition, to grant access to other firms on non-punitive terms.

Two sets of circumstances could bring this scenario about – one clean and the other messy.

In the clean version, the ongoing performance challenges faced by incumbents prompt them to cut further and further into their costs, and retract further and further to their ‘core’ franchise offerings where they can deliver value. These core franchise offerings increasingly come to resemble the utility offerings outlined above; regulators recognise the inevitability of this and move to shepherd the industry in the direction of this ‘least worst’ outcome in a way that maintains the stability and security of the core utility. Meanwhile, they turn their attention to how best to regulate the rest of the banking industry, which, in this scenario, sits outside that core utility. For their part, investors adjust their expectations of returns from core banking to reflect the lower risk utility model, and performance levels gradually migrate towards that level¹⁸. They also actively invest in new ventures with new business models that can better deliver growth by offering more innovative ‘value-adding’ products and services to customers.

18 Following the example of other industries such as telecoms, water, power, transport etc., many of whose utility providers deliver very satisfactory economic results.

19 It is significant that the fall in bank stocks following the UK’s EU referendum result was not restricted to UK banks, banks with large UK operations, or with a heavy reliance on EU passporting ex the UK. See *Bank shares plunge after Britons vote to leave the EU*, Financial Times, 24th June 2016.

20 Blurred lines: How Fintech is shaping Financial Services <http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html>

21 An example of this is Raisin.com which launched across Europe in April 2016, linking up with J&T Banka of the Czech Republic and Poland’s Alior Bank to offer savers a return of up to 2.2%. Raisin.com now aims to build up its platform and expand the number of participating banks, and other similar platforms are emerging as well.

In the messier version, continued economic weakness, further market volatility triggered by Brexit and potentially other knock-on political events in Europe and beyond, and possible further weakening of emerging market growth, exacerbates the underperformance of Europe’s banks and undermines investor confidence to the point where a fresh crisis occurs¹⁹. In such a crisis, governments may again be compelled to intervene – most likely through a recovery & resolution process whereby the ‘recovered’ part of the industry, this time around, is re-modelled on a utility basis and the ‘resolved’ part – by definition – ceases to exist.

Scenario 3: Evolved ecosystem

“A new banking ecosystem develops in which incumbents and challengers recognise the value that each brings and the merits of combining that value through amalgamations, alliances and other business-to-business relationships. In this scenario, the terms ‘incumbent’ and ‘challenger’ cease to have meaning and industry moves on to address itself collectively to customer service innovation and solving contemporary challenges such as financial exclusion, under-funding of lifetime financial security, and under-investment in new infrastructure and productive capacity”

To develop this scenario, we turn again to our recent FinTech survey report²⁰ which begins by painting a high level picture of such an ecosystem (see Figure 7 overleaf) before going on to examine the views, expectations and motivations that could shape it.

The first point to note is that, when it comes to the interplay between incumbents and challengers, it isn’t just the front end that is being contested ... the imperative for banks to cut costs, coupled with the emergence of new technologies and new market structures, is driving disruption right along the value chain. As much as that constitutes a threat (in ways that we have already explored), in different circumstances it could also count as an opportunity. When asked in our survey what opportunities could come from FinTech, incumbent industry respondents did not restrict themselves to building FinTech into their own front end solutions (although this featured strongly as well²¹). Indeed the biggest opportunity, cited by 73% of respondents, was to embrace FinTech as a means to reduce costs.

Of course, for FinTech to manifest as an opportunity for incumbents it requires some sort of collaboration ... and it turns out that there is a lot of this going on – see Figure 8 overleaf.

Figure 7: New banking ecosystem

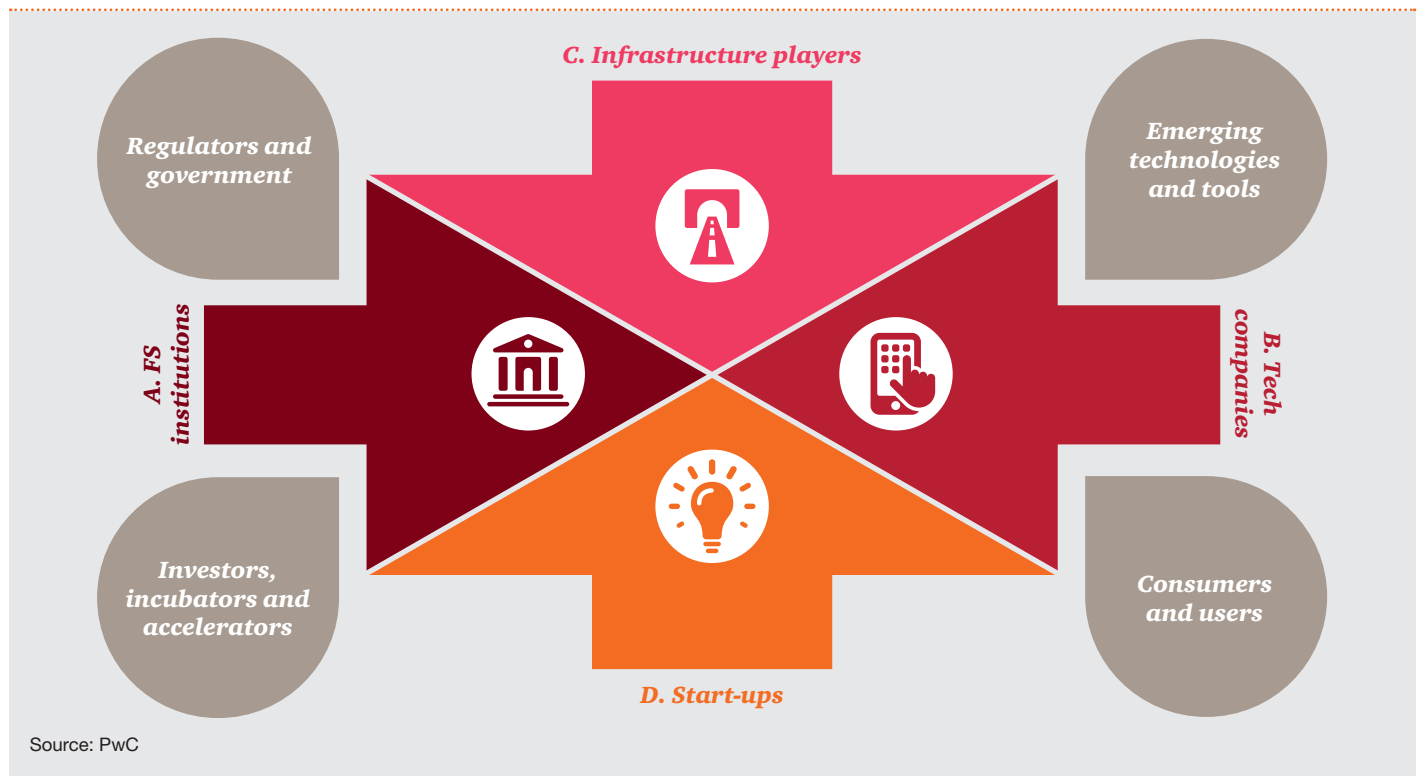
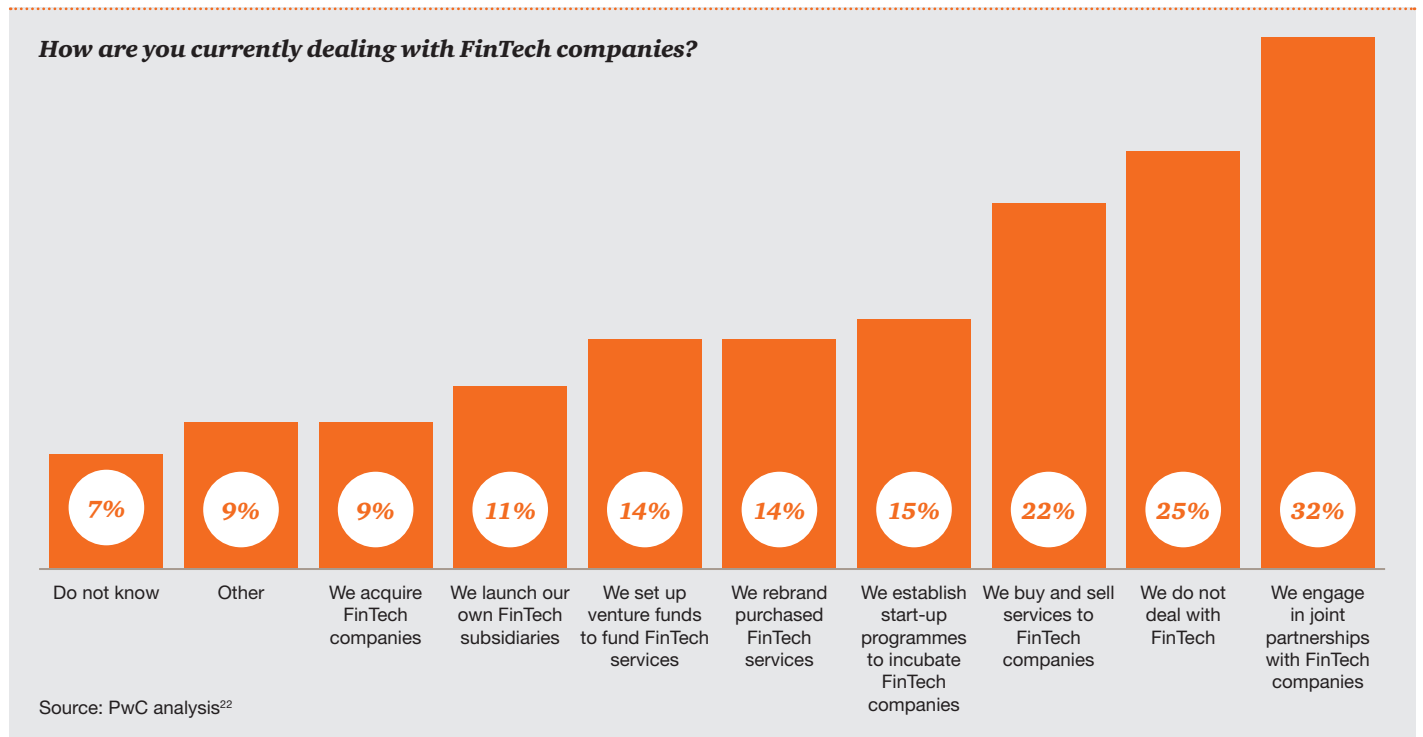


Figure 8: How financial firms are engaging with FinTech



²² Blurred lines: How Fintech is shaping Financial Services
<http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html>

Although a substantial minority (25%) do not deal with FinTech, the remaining majority (at least 68%) do, in lots of different ways. Of that 68%, only 11% report some form of in-house development ('D.I.Y. FinTech') or straight acquisition of FinTech companies (9%); the rest involves some sort of collaboration with 3rd parties. This suggests that there is clear momentum amongst banks towards a more collaborative approach – not surprising perhaps considering the alternatives already explored through the other scenarios.

An obvious question, though, is why would challengers themselves see this as an attractive path to go down when, on the face of it, they have so much to gain from banks' relative demise? Leaving aside the fact that the above statistics relate specifically to FinTech, not the entire challenger group as we defined it earlier, there are plenty of reasons why it might make sense for challenger firms (FinTech oriented or otherwise) to work collaboratively with banks. They include:

- **Cashflow** – some start-up firms may see themselves as having an abundance of talent in technical innovation, but less commercial acumen or operational experience. They can also burn through cash in the short term, requiring their sponsors to divert a lot of attention to fundraising. For them, the appetite amongst banks to invest in the sector is an opportunity to monetize their intellectual property early on and retain a stake in its ongoing commercialisation by partners who are better at that sort of thing.
- **Commercial logic** – in many cases, the commercial logic for the challenger firm is all about providing an innovative service to the sector on a B2B basis, at least to begin with, prior to broadening out potentially as the industry evolves
- **Strategic logic** – challengers may view rival challengers within their respective niche domains, rather than industry incumbents, as their true competitors in the long run. By working with banks, they can get ahead of their true competitors by developing and testing their offerings in a 'live' environment and then launching and scaling them rapidly in the market via banks' customer bases and distribution networks
- **Regulation** – the uncertainty and cost of regulation is a major risk and barrier to entry for challengers. By working with banks within the regulated sector, on a collaborative basis, they can participate in the value chain without stepping over the line themselves, or else, if the regulatory net widens in future, they can avail of incumbent banks' expertise in managing the regulatory process

Efficiency, Competition and Too Big To Fail – A collaborative solution

We observed earlier that Europe is operationally over-banked and that this has been a drag on performance. We also noted that the establishment of a single supervisory mechanism (SSM) could help by paving the way for a wave of consolidations. The problem is that this could fail two crucial public policy tests: competition (TSB and Williams & Glynn are examples of forced *divestments*, ostensibly to restore competition following the post crisis restructuring of the UK banking sector); and Too Big To Fail (TBTF) (authorities are looking to make banks smaller, not bigger).

Collaboration between incumbents and challengers offers a possible way through this in two ways. First, by deploying technology within banks to streamline operations and reduce costs at source. Second, by providing banks with access to efficient, technology enabled operations – with scale – on a B2B basis, via commercial industry utilities. In both cases, the need to seek scale efficiencies through industry-wide consolidation is diminished.

Today, banking remains as one of the most vertically integrated industries there is, partly due (up until recently) to the relative absence of the competitive cost pressures that have driven transformations in other industries such as Telecoms, Airlines and Autos. As in these industries, alliances, platform sharing and rapid adoption of technology could be a better and more acceptable way forward for banking than just creating scale.

A final observation on this is that failing to collaborate, and instead pursuing a strategy of – as we put it before – scrapping over who gets what share of the existing market, could be short-sighted in two ways. First, as regards challenger tactics, the adage of being 'careful what you wish for' might easily apply, particularly in the messier version of scenario 2 which would likely be unpleasant for everybody. Second, on a more positive note, there are potential benefits for all concerned from contributing to the development of a newly evolved ecosystem in which the banking industry – broadly defined – can better satisfy more fundamental economic and societal needs, reassert itself as a force for good, rediscover the art of innovation and get back on a growth trajectory.

Outlook

Beyond the scenarios considered in this report, what is the longer term outlook for banking? Extrapolating from scenario 3, one way to envision this is through what we term “STEEP” drivers, standing for the social, technological, economic, environmental and political/regulatory forces that will shape the industry ecosystem going forward (see Figure 9 below). The future impacts of technology and regulation – and how regulation will itself need to change – have already been well documented, here and elsewhere.

From our perspective, though, there has been less public debate about how social, environmental and economic factors will interact in shaping the industry.

Banking is ultimately about people, so its future will ultimately be dictated by what people want from it - as individuals and societies – shaped by the environment in which they live and expressed through the economic activities in which they engage.



Figure 9: STEEP drivers



Source: PwC analysis

We know that societies are changing profoundly as populations grow and age; as information flows more freely; and as people become less accepting of the status quo. We know that environmental pressures are building as human activity grows increasingly out of kilter with the wealth and distribution of environmental resources to sustain it. We know that global economic conditions are becoming more challenging, with economic growth becoming more subdued and more volatile. And we know that these things are all connected.

What does any of this have to do with the future of banking?

One clue to this lies in the *history* of banking, and specifically the role that banking has played in the history of economic development down the ages. From financing surges in global investment and trade, to mobilising and distributing investment and risk-bearing capacity through the capital markets, to revolutionising the life chances available to private citizens through housing and education, to supporting major public infrastructure projects through innovative project financing structures, and all the way to everyday innovations such as the ATM and credit card, banking has helped to transform people's lives through innovation.

As Andrew Palmer put it in his book *Smart Money*²³,

“A ... consensus has emerged ... in which bankers are generally bad, in which there is a socially useful bit of the industry that doles out loans to individuals and businesses, and the rest of it is dangerous and unnecessary gambling.

“Finance should have been scrutinized more intensively before the crisis. By the same token, it should be looked at with a clear eye now ... For all of its flaws, there is no more powerful problem-solving machine.

“This is an industry that is home to creative minds grappling with gigantic problems ... Financial innovation has made enormous contributions to society in the past, and it is primed to do so again.”

Our build on this is to suggest that creative collaboration amongst all the disparate parts of the banking industry – as opposed to narrow competition between them (although that will play a part too of course) – represents the best and quickest way to realise this opportunity. Why? Because, looking ahead, it does not feel like the innovations that Andrew Palmer alludes to are likely to be pre-planned or institutionally

driven. Things are moving too fast for that. Take, for example, the sudden emergence of what's called the sharing economy – a perfect case of social, environmental and economic forces colliding and driving out a major socio-environmental-economic development that just makes sense. This wasn't planned, it happened organically through ingenuity and collaboration.

Following this example, an evolved banking ecosystem – an extrapolation of our scenario 3 – is not only the most desirable but is also, dare we say, the most likely way forward for banking ... in Europe and beyond. While Brexit and its aftershocks pose a potent threat to this scenario, they also represent an opportunity if firms can harness the disruptive energy in a positive way.

For incumbent banks and challengers, the path to scenario 3 and beyond means:

- **Having a customer and societal needs-driven vision for what the evolved banking ecosystem looks like.** Since the crisis and before, firms have been eager to reassert their purpose to customers and society and to drill that into their internal cultures. We think our scenario 3 could give some further shape and clarity to this.
- **Being clear about the role that they can best play within that ecosystem.** In our recent book *Strategy That Works*, we lay out a framework for committing to a core identity – within a wider market context – and following through with a coherent strategy and business model to fulfill that identity²⁴.
- **Embracing and even driving 'inevitable' disruptive forces even if, on the face of it, these could erode profit margins.** Given the choice, it is better to disrupt your own business model, in a way that is compatible with your core identity and strategy, than to have someone else do it for you in a way that isn't.
- **Being open, creative and proactive in collaborating with other parts of the ecosystem to drive the best outcomes for customers, society and shareholders.** In an evolved ecosystem, vertically integrated firms that presume to do everything in-house, to try to capture the full value chain, will be out-competed and survived by firms that combine with others to deliver superior overall value to customers.

23 *Smart Money: How high-stakes financial innovation is re-shaping our world – for the better.* Andrew Palmer, Basic Books, New York, 2015

24 Paul Leinwand and Cesare Mainardi with Art Kleiner, *Strategy That Works* (Boston: Harvard Business Review Press, 2016).
<http://www.strategyand.pwc.com/strategythatworks>

For this reason, we expect that the traditional vertically integrated business model in banking will give way to more diversity and fluidity, driven by the changing dynamics of the “STEEP” forces we referred to earlier. To illustrate this, in a report published in March 2016 – *European banking outlook 2016*²⁵ – we set out three future archetypal business models for banking in Europe: platform banks; digital banks; and ‘OEM’ banks, the latter inspired by business models that have emerged in the auto industry.

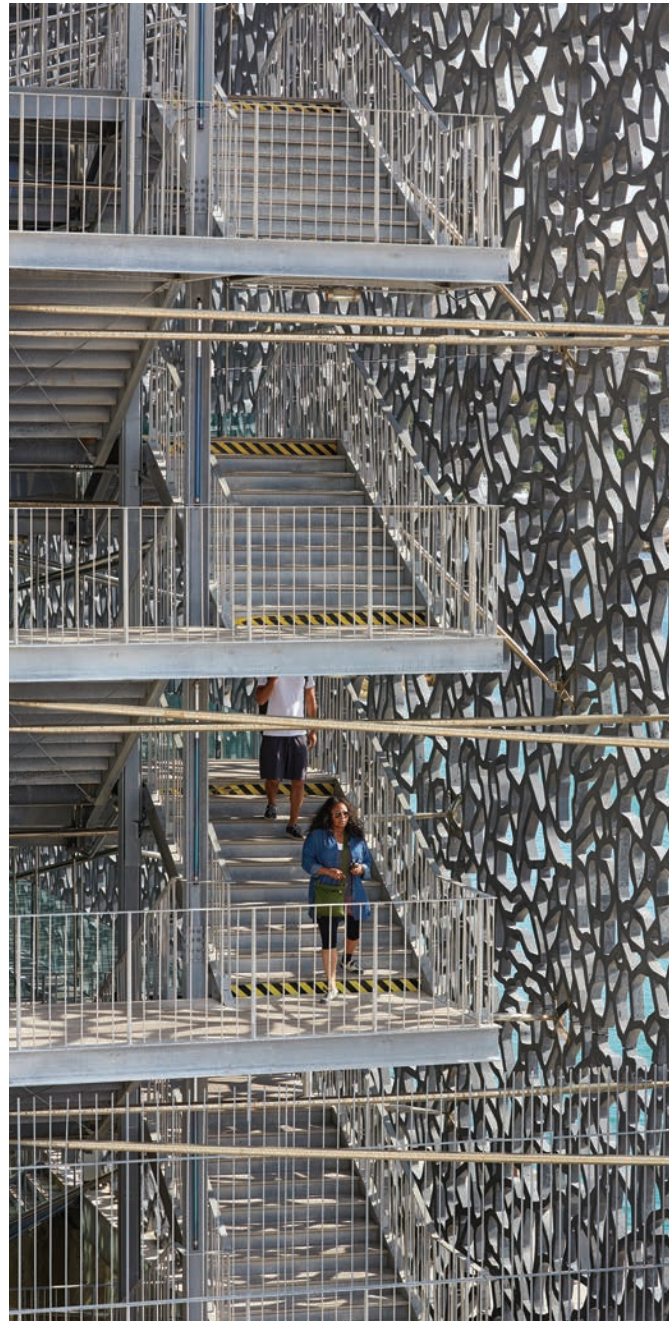
For policy-makers and regulators, to quote Andrew Palmer again, it requires “... watchfulness for the risks that can cause real economic damage and tolerance for the ideas that can produce real benefits.”

Completing the reorientation from regulating banks to regulating banking would greatly facilitate this, we believe.

Along the lines of Lord Mervyn King’s *The End of Alchemy*, it also requires further thought, coordination and transparency amongst policy makers, regulators and central bankers – taking contributions from industry and elsewhere – on the completion of the reform agenda. For example, for Europe in particular, we see scope for integrated reforms to enable the ECB’s quantitative easing (QE) programme, together with measures to stimulate the securitisation and other capital markets, to finance banks’ legacy (non-performing) asset portfolios on the one hand, and free up the supply of capital and credit to finance new investment on the other.

Finally, it requires policy makers to guard against the fragmentation of the industry. We have seen early signs of fragmentation through the so-called ‘balkanisation’ of regulatory regimes following the crisis. The danger now is that protectionist tendencies, which appear to be emerging on the global political landscape, could further fragment the banking industry and thereby inhibit the creative innovation and collaboration that are so sorely needed.

Banking is a dispersed industry, and financial innovation is an even more dispersed activity. The last thing that is needed, in Europe or anywhere else, is for innovation hubs from Silicon Valley to New York, London, across Europe, the Middle East, Africa and Asia to become disconnected from each other, from the sources of finance that feed them, and from the markets and people they serve.



25 Strategy& European Banking Outlook 2016: It’s time to radically rethink business models
<http://www.strategyand.pwc.com/reports/european-banking-outlook-2016>

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