

**Deloitte.**

Payments disrupted  
The emerging challenge  
for European retail banks



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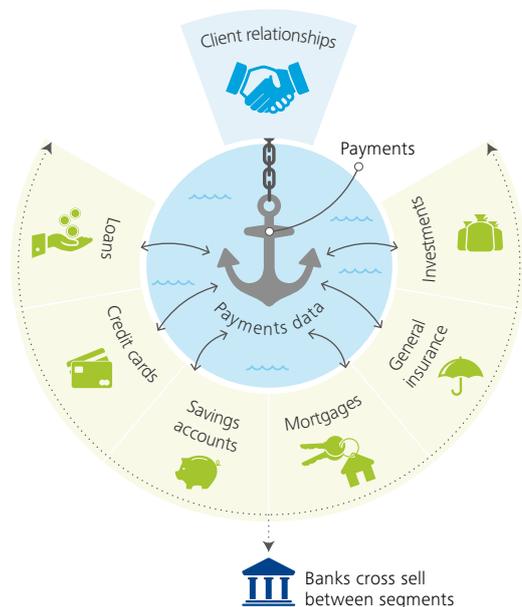
# Executive summary

Since the financial crisis, European banks have not made returns in excess of their cost of equity, and they are not expected to do so for several years to come. The forces assailing bank profitability are arguably playing out with the greatest intensity in the area of payments.

Payments are a key revenue stream for European banks. Deloitte estimates that retail payments will account for €128 billion in revenues in 2015, or around a quarter of total European retail banking revenues.

Moreover, payments are of strategic importance both as the anchor for client relationships and as a platform for selling a range of other products, such as loans, credit cards, savings accounts and mortgages.

Illustration 1.



Source: Deloitte analysis

Payments are now the subject of intense regulatory scrutiny, both at EU level and in individual countries, with price caps and structural measures being introduced to promote competition and innovation.

Banks are subject to higher regulatory requirements than non-banks, for example in treating customers fairly, not discriminating in service offerings, and ensuring universal availability. Non-banks, by contrast, are not subject to the onerous requirements on credit institutions, and can cherry-pick the most attractive services.

Deloitte analysis shows that the impact of capping debit and credit card fees in the EU, which comes into effect in December 2015, will be relatively modest. Once volume increases are taken into account, the loss will amount to just three per cent of payments revenues.

However the impact of opening up the payments market, coupled with the effects of technological change, could be substantial. Regulatory changes are enabling agile and innovative non-bank players to offer new payment initiation services, without having to own an infrastructure of bank branches, accept deposits or provide processing capacity.

Non-bank payment initiation services can offer a simpler, swifter user experience, for example using mobile apps. By contrast banks, with their heavier compliance obligations, have traditionally invested more in security and resilience.

New payments services are accelerating the shift from cash to non-cash payments. Consumer preferences are changing, thanks to the convenience offered by contactless cards and online and mobile payments.

Digital payments are enabling much more data to be captured with each payment, such as where the individual was while making the payment.

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Deloitte estimates that retail payments will account for €128 billion in revenues for banks in 2015.

The value as well as the amount of collected data is increasing, thanks to greater processing power, analytics to discern payment patterns, and in-memory databases that enable data to be analysed more quickly and effectively.

Such payments data is also of value to consumers, for personal budgeting, as well as to non-banks well beyond their traditional use of banks as a revenue stream, for cross-selling and credit scoring.

The value of data is one of the key reasons why payments are the biggest area of investment for fintech. (A further attraction of payments to non-banks is that convenient payments services create 'user lock-in' for providers such as Apple.)

Banks are lagging behind in fintech investment, accounting for just 19 per cent of the \$10 billion total in 2014. Non-banks accounted for 62 per cent, and collaboration between banks and non-banks for the other 19 per cent.

At the same time, with the rapidity and convenience of digitised living, consumers expect greater speed in their payments experience, including shopping both online and off-line.

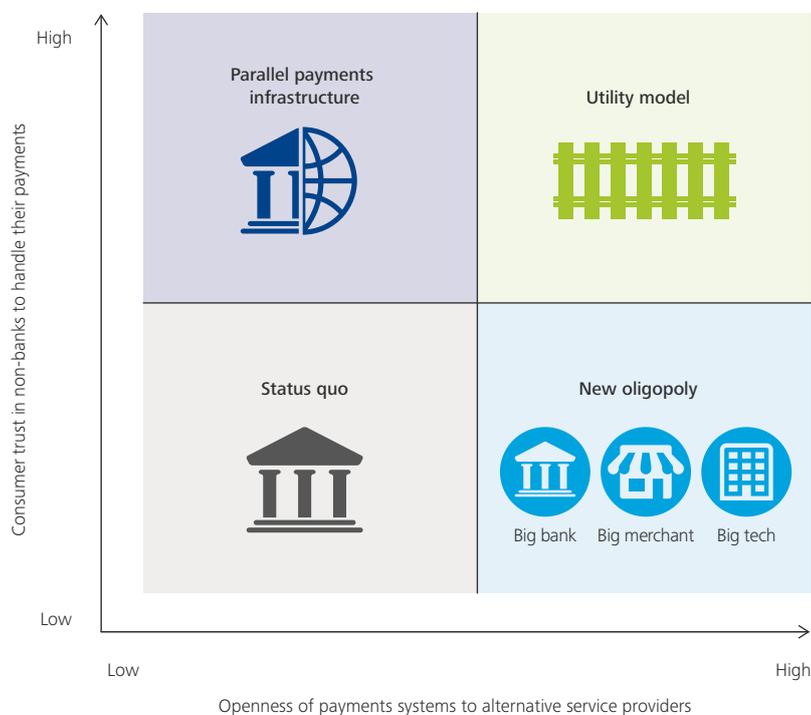
Consumer expectations place demands on banks in terms of investment in both front-end applications, and back-end processing infrastructure. They will also increase liquidity requirements, as payments are made increasingly throughout the day rather than in overnight batches that enable more efficient netting. If banks do not invest in settlement to the extent that it is as speedy as clearing, this may increase settlement risk.

Industry experts interviewed believe that new retail payment initiation services will not affect banks' profits much, mainly because the initial effect will be to displace cash payments.

However, Deloitte foresees that the eventual impact could be much greater. First, while cash payments may not be very profitable for retail banks, cash handling brings value to the banking eco-system, for example by attracting small and medium-sized enterprises (SMEs).

Second, if non-bank players gain a foothold in payments, they are likely to increase their involvement over time, and to gather more of the existing data that banks have traditionally used for credit scoring and other purposes. They may also gain access to new data, such as where customers are when they make mobile purchases. Moreover, they may move into other banking services. PayPal, for example, already offers finance through PayPal Credit. In Europe, ipagoo plans to offer payments services that would, if successful, displace traditional banking transactional revenue and data.

Figure 1. Emerging payments landscape



Source: Deloitte analysis

Banks, therefore, have strategic choices to make:

- *How much should they invest to defend their position in payments, and how should they invest?*
- *Should they go it alone, or should they collaborate with other banks or non-banks?*
- *Where should banks be active in the payments value chain?*
- *Should they focus on providing the 'rails' for payments, leaving the front-end initiation via new payments applications ('apps') to fintech?*
- *Should they take different approaches for card and non-card payments?*

Deloitte believes that the strategic responses by banks will be determined by four factors. Are the payments card or non-card? How big is the bank? How open is the payments system to new players? And how much do customers trust in non-banks (compared with banks) as providers of payment services?

Deloitte expects that the status quo, in which payment systems continue to be run by and for the major banks, will not survive as EU regulations will not permit it. More likely are three new scenarios as outlined in Figure 1.

- **New oligopoly:** Payment systems are opened, but customer trust in non-banks is limited. As a result, the non-bank newcomers will be restricted to a handful of big players with brand and scale.
- **Utility model:** If customers are more willing to experiment, both banks and non-banks will offer payments applications that run on banking payment 'rails' which are low-margin, high volume utilities.
- **Parallel payments infrastructure:** Should customer desire for change outpace regulatory pressure to open up payments systems, completely new methods of payment could take hold. For now, the likeliest candidates are crypto-currencies that use block-chain technology to bypass central banks, traditional currencies and centralised clearing and settlement systems.

The strategic option for card payments is clear.

Card payment networks are already large and global: even the biggest banks are small by comparison.

Thanks to network effects, banks' dominant strategy is to collaborate with the big networks.

The dominant strategy for smaller banks is always to collaborate, with other banks and non-banks.

Both big and small banks should increasingly team up with non-bank players, including payment providers, acting as product manufacturers to the non-banks' retail front-end.

Larger banks will have more strategic choice, particularly if they can manage to build customer trust, and a new payments oligopoly could evolve where payments revenue is shared with a handful of non-bank giants. There is scope for in-house innovation; however, larger banks should be careful not to over-invest.

Where payment systems are opened up and customers trust non-banks, it makes less sense for larger banks to 'go it alone' in an innovation race that they are unlikely to win, given their culture, regulation and regulatory systems, and the skills and firepower of the non-banks ranged against them. Rather, it makes sense for some larger banks to build scale as utilities, exploiting their competitive advantages in compliance and resilience, providing the essential 'rails' in what continues to be a fast-growing area of activity.

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# 1. Introduction: The status quo under threat

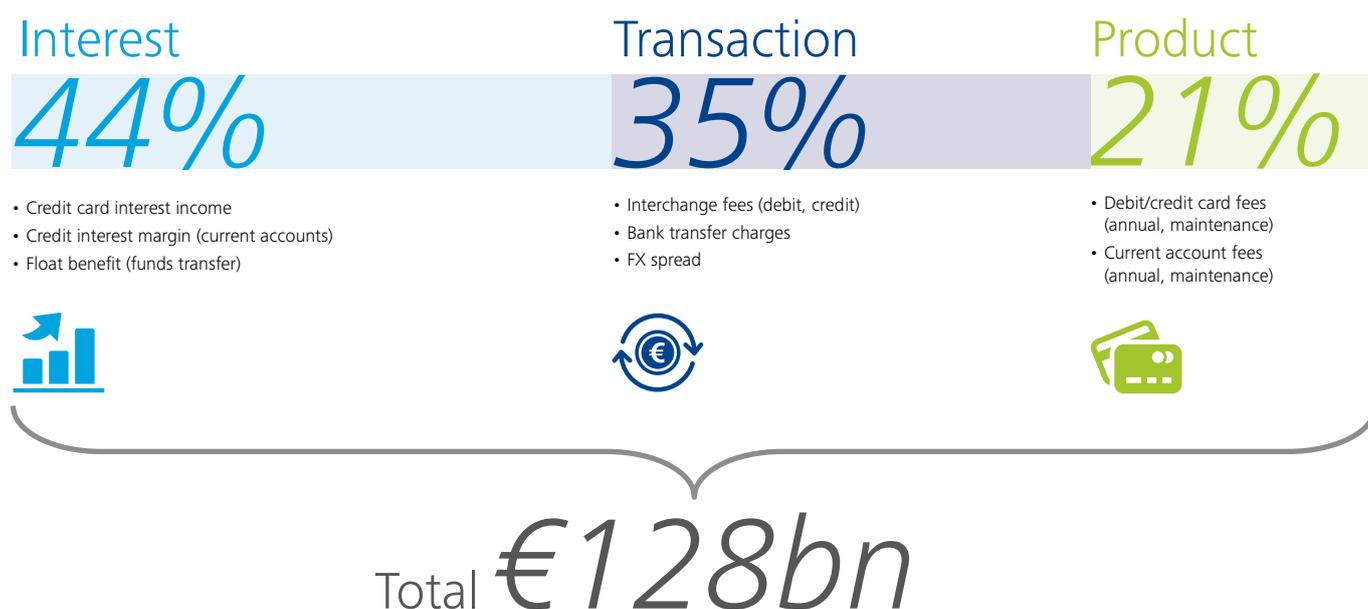
Banks have historically been the dominant players in payments systems in Europe and around the world. This is true both in the so-called 'front-end' where customer payments are initiated, (for example by writing a cheque, initiating a credit transfer, or paying by card) and the 'back-end' where payments are processed.

In most European countries, banks either own or control the non-card payments schemes, such as Bacs<sup>1</sup> and CHAPS<sup>2</sup> in the UK, and payments processors, such as the UK's VocaLink. Moreover, European banks have a higher degree of control over card payments systems than banks elsewhere. While all three major international card networks (Visa, MasterCard and American Express (Amex)), are listed companies with shares traded on stock exchanges, Visa Europe remains owned by its member banks and payment service providers.

As a result of this large degree of control, payments have traditionally been both a key revenue stream and a strategic source of competitive advantage for banks. As a day-to-day relationship product, a bank's payments capability enables it to sell a range of other services, such as current (checking) accounts, deposit accounts, loans and credit cards to customers.

Deloitte estimates that retail payments will generate around €128 billion in revenues for banks in 2015, or around a quarter of total European retail banking revenues<sup>3</sup>. These revenues derive from three different sources: product fees, transaction fees, and interest (see Figure 2).

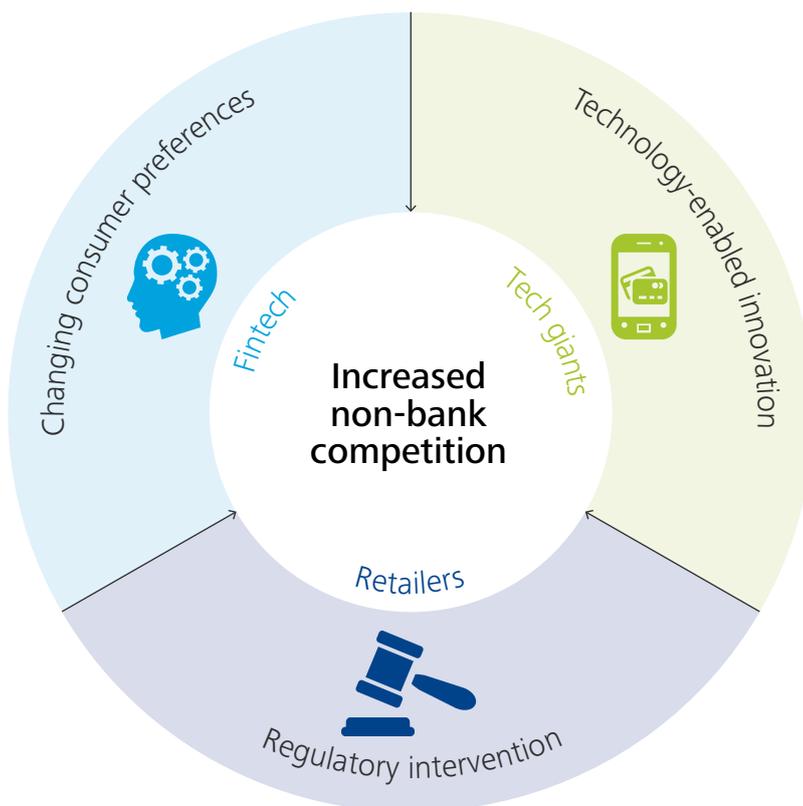
Figure 2. EU bank revenues from payments, 2015



Source: European Central Bank, national central banks, Deloitte analysis<sup>4</sup>

## 2. Challenges to banks' position in payments

Illustration 2. Challenges to banks' position to payments



Source: Deloitte analysis

However, the forces that are currently disrupting European retail banks are arguably at their most intense in payments (See Illustration 2). These forces are:

- Regulatory intervention
- Technology-enabled innovation
- Changing consumer preferences.

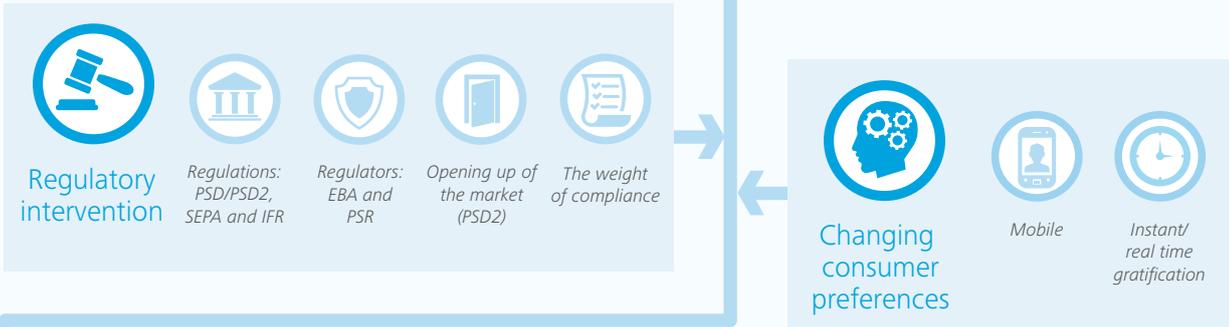
This report looks at each in turn.

### About the report

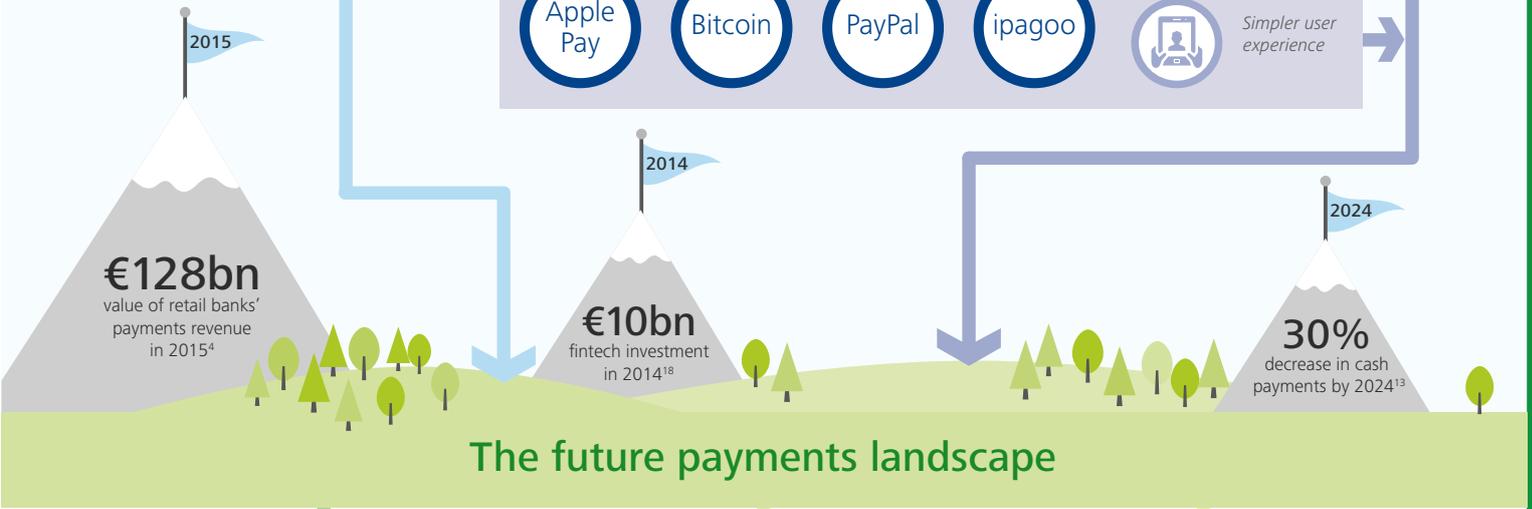
Deloitte spoke to 24 payments experts from retail banks, card and non-card payment schemes, payments processors and non-bank payment service providers. The objective was to understand their perspective on developments in payments, and how they felt the industry should respond to them. These experts were asked questions about the impact of regulation and technological change. Specifically, respondents were asked to evaluate the effect of new, non-bank payment service providers on their payments revenues, the future ownership and governance of non-card payment schemes, and possible consolidation among payments processors.

# Payments disrupted – an emerging landscape

## 1. The status quo under threat



## 2. Increasing non-bank competition



## 3. Three new scenarios are likely to prevail:



Source: Deloitte analysis



# Regulatory intervention

Regulators have identified the dominance of banks in payments as a problem. The European Commission, for example, sees high costs of payments as a tax on trade. It estimated that payments in 2005, including cash, cost two to three per cent of EU gross domestic product.<sup>5</sup> EU payments regulation aims to reduce this by half.<sup>6</sup>

New EU regulation is having, and will continue to have, an impact on both the front and back-ends of the payments system, with a number of landmark payments regulations.<sup>7</sup>

## Regulation and payment initiation

The EU's first Payment Services Directive (PSD), which came into force in 2007, provided the framework for a single European market for payments. It established the legal platform for the Single Euro Payments Area (SEPA). Under SEPA, almost all cross-border euro payments in the European Free Trade Area (EFTA) are charged at the same rate as domestic payments. After many delays, it finally came into effect in the eurozone in August 2014. (The deadline for non-eurozone countries is October 2016.)

The ultimate objective of SEPA is to ensure that any entity can send or receive cross-border electronic retail payments in euros across the EFTA under the same terms and conditions as domestic payments. SEPA affects bank revenues in two ways:

- it reduces fees from cross-border transactions to domestic levels
- by reducing settlement times from three days to one, it reduces the interest that banks can earn on their 'float' by about two-thirds.

The Interchange Fee Regulation (IFR) caps bank-to-bank fees for debit and credit card payments in the EU, and comes into effect in December 2015. Interchange fees are charged by banks to each other when consumers make purchases using debit or credit cards. The new limits will be 0.3 per cent of the transaction value for credit cards, and 0.2 per cent for debit cards. This contrasts with EU averages in 2013 of 0.92 per cent for credit cards and 0.31 per cent for debit cards, according to Euromoney.<sup>8</sup>

The fee cap hits the issuing bank (the one that issues the card used by the consumer) rather than the so-called 'acquiring' bank, which acts on behalf of the merchant. So-called 'merchant acquirers' make their money from a Merchant Service Charge.

The IFR also forces card schemes to be separated from the associated processing, in order to open up the processing market to more competition.

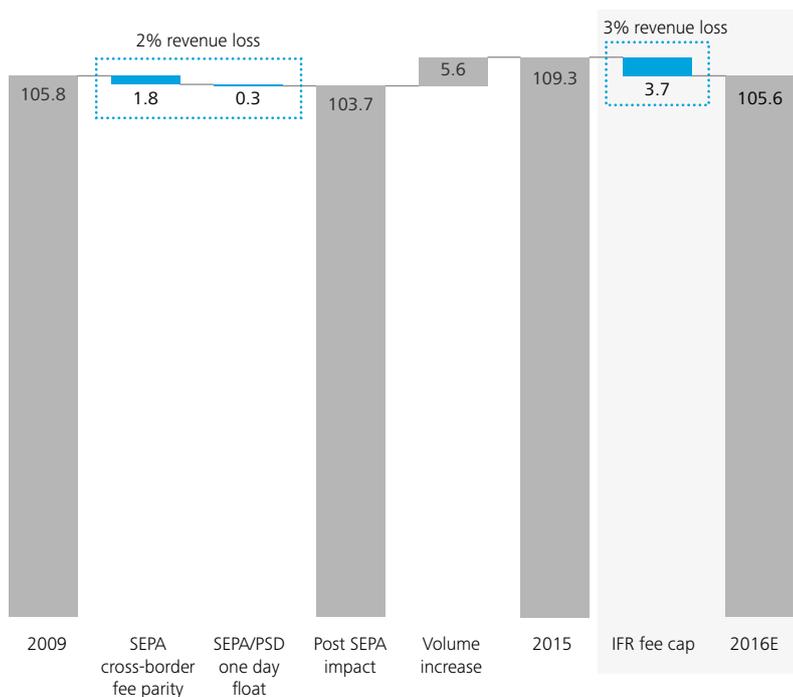
The Payments Services Directive 2 (PSD2) is still in draft stage and is expected to come into force in 2017. It aims to open the payments market to competition from non-bank players in response to innovation and changing customer behaviour, especially with regard to the use of smartphones.<sup>9</sup>

Key proposals in PSD2 are that banks should:

- allow access to customer account information for third parties that are appropriately licensed, and that have received explicit customer consent
- be prohibited from treating payments through third parties differently, for example by charging higher fees or taking longer.

Access for third parties to customer account information may be via open Application Programming Interfaces (API). These are used to offer value-added payment services through mobile phones. The common technical standards are to be defined by the European Banking Authority (EBA).<sup>10</sup>

Figure 3. Impact of SEPA, PSD and the interchange fee cap on bank payments revenues in seven major EU markets, 2009-2016 (€bn)



Source: European Central Bank, national central banks, Deloitte analysis<sup>11</sup>

“Front-end propositions, whether it’s Apple Pay or anything else...the opportunity for that type of payment solution to be disruptive is huge.”

Senior executive of a payments scheme

The UK also has a new Payments Services Regulator (PSR), which became operational in April 2015, to generate more innovation and competition in payments. The PSR has a wide range of regulatory and competition powers. These include powers to:

- amend agreements relating to payment systems, including fees and charges
- require schemes to allow direct access to payment systems for payments services providers (PSPs)
- require PSPs that enjoy direct access to payment systems to allow indirect access to smaller PSPs.

#### Impact of SEPA, PSD and the interchange fee cap on European payments revenues

Deloitte estimated the impact of SEPA and PSD to date, and what the impact of the interchange fee cap will be. We looked at payment revenues in the seven largest European Union economies: Germany, France, the UK, Italy, Spain, the Netherlands and Poland. Deloitte estimates that the revenue loss due to SEPA regulations and PSD was modest, with a loss of €1.8 billion from the reduction in the cross-border euro payment fees to domestic levels and a further €300 million from the reduction in settlement terms from three days to one. However, this two per cent revenue loss is more than offset by a volume increase of more than five per cent, or €5.6 billion.

This analysis also leads us to believe that the revenue loss from the cap on interchange fees will likewise be modest, at around three per cent (see Figure 3).

More significantly, these regulatory changes and PSD2 will create favourable conditions for innovation in payments through the involvement of a wider range of participants, such as fintechs, technology companies and retailers.

For banks, regulation is therefore creating new risks of greater competition from non-bank challengers; and like all significant risks, these will need to be appropriately managed. A senior executive of a payments scheme acknowledged that: “Front-end propositions, whether it’s Apple Pay or anything else...the opportunity for that type of payment solution to be disruptive is huge.”

### Regulation: ownership and access

While the main impact of regulatory intervention is in the front-end provision of payment services, the 'back-end' of the system is also affected, with consequences for banks.

Payments processors undertake the clearing and settlement of transactions that are managed by payments schemes. Currently payments schemes can have a preferred processor, and scheme customers have no choice over who processes their payments; for example, in the UK, Bacs's direct debits are processed exclusively by VocaLink.

Both the EU (through the IFR) and the UK (through the new PSR) have stated their aim of opening up payments processing as a means of stimulating competition. Under the IFR, the EU is forcing the separation of card schemes from processing. In the UK, processing is already separated from payments schemes; for example VocaLink processes payments initiated through Bacs and Faster Payments Scheme (FPS).

Non-card payment schemes, such as Bacs and CHAPS in the UK, and national card payment schemes, such as STET of France and SIBS of Portugal (which also covers non-card payments), have traditionally been not-for-profit entities, owned and controlled by banks. These banks are scheme members; non-members can only access schemes indirectly, through a member bank acting as their agent.

In many countries, banks own the payments processors as well as the payments schemes, though the exact membership and ownership of each varies. For example, UK banks own VocaLink as well as Bacs and FPS, although the PSR is reviewing VocaLink's ownership and governance.

Over the past decade there has been a shift to a more 'mixed economy'. Most international card schemes, such as Visa (with the exception of Visa Europe), MasterCard and Amex, are for-profit, publicly-traded companies. However non-card payments schemes have remained not-for-profit.

Regulators want to open up schemes and processing because they feel that these not-for-profit models entrench the position of those members with privileged access (i.e. banks), and enable them to profit from their dominance of payments systems.<sup>12</sup>

There are four broad ways in which payment schemes may be reformed:



Scheme ownership could change, to include more users



Schemes may become for-profit



Schemes may open up and provide direct access to non-members



Schemes may change their governance to include a broader user base

Deloitte believes that the main impacts of regulatory intervention will be direct participation by non-members, and also governance reform of payments systems, which will reduce the degree of control that banks have over payments schemes. Control will be spread among a wider group of users of payments services, such as tech companies, retailers and fintechs.

Two factors affect our view about the extent or speed of change. First, the regulators' aim of increasing competition and access to payments schemes is subservient to financial stability, which could be put at risk by a change in scheme ownership or a switch to a for-profit motive. Second, our interviews with industry experts indicate a general preference for evolution rather than revolution.

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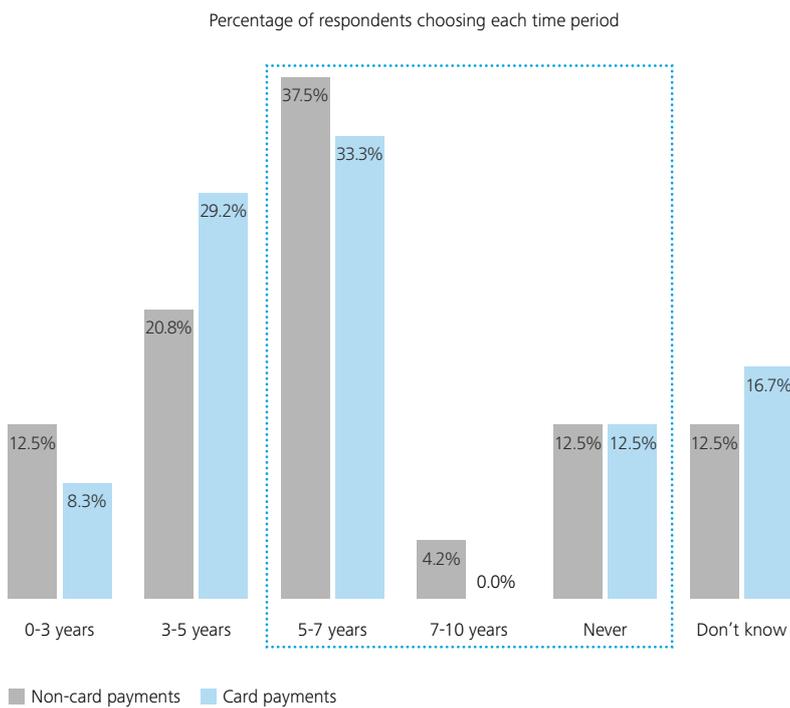
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### Regulation and payment processors

Many industry observers expected SEPA to trigger an immediate consolidation of payment processing across Europe, due to standardisation of the rules. However Deloitte's interviews with industry experts suggest there is no economic imperative in the short-run for any such consolidation. Respondents did not see big potential cost savings (see Figure 4).

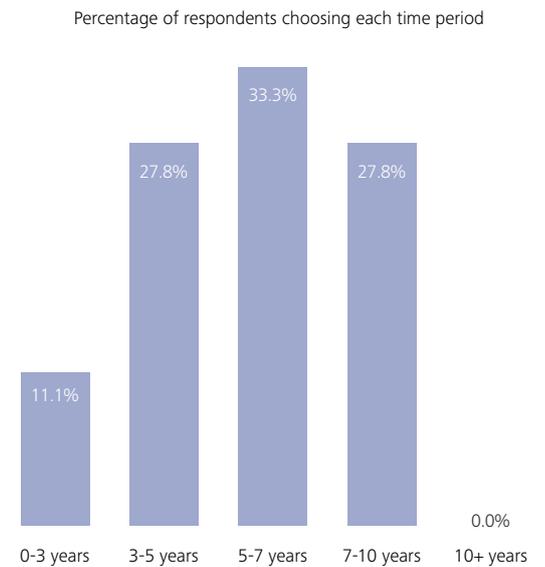
Similarly payments experts do not expect one or more pan-European clearing house to dominate the cross-border payments processing market in the next five years: the necessary inter-operability is still not fully in place (see Figure 5).

Figure 4. Expectations of the timing of payments processing consolidation in Europe



Source: Interviews with 24 European payments experts, March to May 2015, Deloitte analysis

Figure 5. Expectations of the timing of a pan-European clearing house dominating card and non-card cross-border payment processing



Source: Interviews with 24 European payments experts, March to May 2015, Deloitte analysis

What might lead to consolidation in cross-border payments processing? Deloitte expects that processing consolidation will be the result of some or all of three factors: further regulatory intervention; increasing non-bank competition; and the investment required to respond to the demand for near real-time payments such as the UK's FPS.

The demand for near real-time payments poses a number of challenges and may require processors to upgrade their infrastructure, prompting them to consolidate.

In the first instance, banks may respond to the demand for near real-time payments by investing in faster clearing, which is when the messages about payments are exchanged for the end-users. However, unless systems for settlement (when the money actually changes hands between the banks) are upgraded at the same time, this may increase the settlement risk that the counterparty does not deliver the cash for a payment obligation it has entered into, and that has already been cleared. This risk is heightened outside business hours, when TARGET2, the new real-time gross settlement system for euro denominated payments, is closed. Payment schemes have responded to this challenge through a variety of mechanisms to reduce or eliminate the counterparty credit risk including setting caps, requiring increased collateral or prefunding. These measures increase the cost of scheme membership for banks.

If banks want to solve this problem of a mismatch between clearing and settlement, they will need to invest in near real-time settlement. However this will introduce another problem: it will challenge their liquidity management, because banks will have to fund multiple settlement cycles per day, rather than a single overnight batch. As a consequence, they will need to manage their intra-day liquidity more carefully. The more settlement cycles there are, the less netting there can be; so the total sums settled by banks may be larger, which could also increase banks' need for liquidity.

Even if processing consolidation does occur, the impact on banks will vary. Banks are likely to keep critical financial fraud functions, such as Know Your Customer (KYC) and Anti-Money Laundering (AML) procedures, in-house. However, payments processing could be outsourced to third parties, especially by smaller banks.

In a highly standardised payments processing market, processors may attempt to differentiate themselves in terms of speed of processing and cross-border service coverage, as well as cost savings.

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# Technology-enabled innovation

While Deloitte estimates that the IFR will have only a modest effect on banks, Deloitte believes that the impact of opening up the payments market under PSD2 (and by the PSR in the UK), coupled with technological change, could be large.

Regulatory forces are enabling agile and innovative non-bank players to offer payment initiation services, without having to own the traditional infrastructure of bank branches, take deposits or provide processing capacity.

Such non-bank payment initiation services offer a simpler and swifter user experience, for example using mobile apps.

In contrast banks, with their much broader compliance responsibilities, have traditionally invested more in security and resilience than in convenience. These two imperatives – security and convenience – appear to conflict with each other. Convenience, in the form of fast and easy payment methods, seemed inconsistent with banks’ duty to guard customer data and to identify and authenticate customers correctly, in order to prevent financial crime.

However new technologies such as biometrics (e.g. fingerprint or iris recognition) offer the tantalising prospect of marrying convenience with security. See box-out on Apple Pay on page 16.

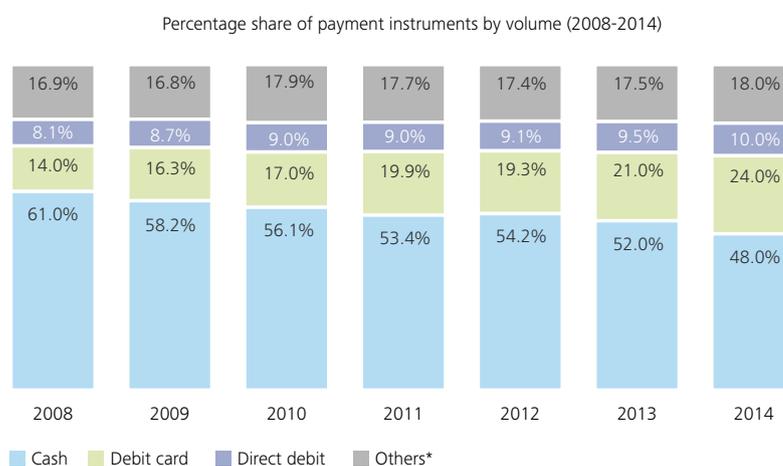
## The dash from cash

New payments services are accelerating a pre-existing shift from cash to non-cash payments. Across the UK the use of cash is decreasing, while other forms of payment are gaining popularity.

In 2014, non-cash payments in the UK overtook cash payments for the first time, with the use of cash falling to 48 per cent of transactions (see Figure 6).

According to the Payments Council, a body that represents the UK payments industry, cash transaction volumes are expected to fall by a further 30 per cent over the decade to 2024.<sup>13</sup>

Figure 6. Use of cash and other payment methods in the UK



\* Others include cheque, credit card and automated credit transactions

Source: Innovation in UK consumer electronic payments, Ofcom and Payment Systems Regulator, 13 November 2014, p. 14. See: <http://stakeholders.ofcom.org.uk/market-data-research/other/technology-research/2014/e-payments>, 'Cash overtaken by 'non-cash' payments in 2014', Payments Council, 21 May 2015. See: [http://www.paymentscouncil.org.uk/media\\_centre/press\\_releases/-/page/3237/](http://www.paymentscouncil.org.uk/media_centre/press_releases/-/page/3237/)

# Apple Pay

Apple Pay is a mobile payment method and digital wallet that offers convenience to the customer, and the prospect of better security to the merchant. It is available only to owners of newer models of its iPhone (iPhone 6 and above) and allows customers to authenticate payments by touching the phone's Touch ID fingerprint sensor.

For the consumer, Apple Pay offers the speed of contactless payment cards, but with higher spending limits (at least in the US). For banks and merchants, in principle Apple Pay should reduce fraud, because debit and credit card details are not shared with the merchant during the transaction.

In the US, Apple has secured the acceptance of major retailers, while its bank partners have reportedly agreed to give the tech giant 15 to 25 basis points (hundredths of one percentage point) of the issuing bank's fee on each transaction.<sup>14</sup> For merchants, a key attraction was that Apple persuaded the card schemes to treat in-store Apple Pay payments as 'Card Present' transactions, thereby avoiding the surcharge that merchants pay in so-called 'Card Not Present' (CNP) transactions, in recognition of increased fraud risk.

The relative convenience of Apple Pay is much greater in the US than elsewhere, because the most prevalent card payment authentication method is 'swipe and sign' (swiping a magnetic strip and signing a slip of paper). US banks are only just beginning to introduce the faster and safer Chip and PIN<sup>15</sup> authentication, and contactless payments are uncommon.

How is Apple Pay different from contactless? Contactless payments are subject to a value limit to protect banks from fraud, because there is no authentication of the card user, as no PIN is entered. Apple has a deal with US banks and payments schemes that payments authorised using its Touch ID finger scan should be treated as 'fully authenticated'. As a result, payments can be made up to the credit or transaction limit for the card.

Part of the reason why Apple could negotiate this arrangement in the US is that 'swipe and sign' is not particularly secure, so US banks incur significant fraud costs. For this reason, paying away 15 basis points or so to Apple to deliver a more secure transaction can be seen as a rational decision, although one that may not give full consideration to the strategic risks.

Apple reached a deal to launch Apple Pay in the UK in July 2015 partnering with HSBC, Nationwide, RBS, Lloyds Bank and Santander, among others, although the commercial details have not been disclosed. However, given lower levels of fraud in Europe because of Chip and PIN, and the new interchange fee caps European banks have both less incentive and less ability than US banks to share fees with Apple. Moreover unlike in the US, Apple Pay transactions in the UK may be subject to the same limit as contactless cards (which has risen to £30 as of September 2015).

Apple Pay is expected to create more interest in the digital wallet proposition as a whole, particularly in the US.

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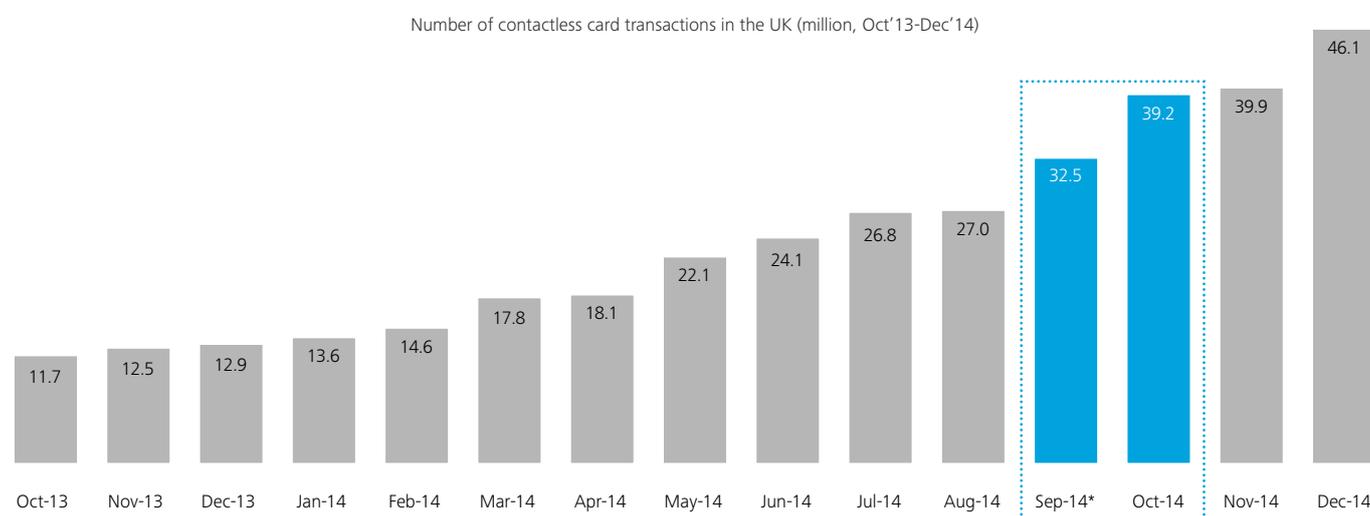
A driver of the shift from cash to non-cash is the convenience of new payments methods. Consumers accustomed to the immediacy of the internet are demanding faster or even 'invisible' payments that are subsumed into transactions. Within non-cash payments, customers are increasingly experimenting with new payments methods, such as paying with contactless cards and mobile phones.

Contactless cards were first issued in the UK by Barclaycard in 2007.<sup>16</sup> Adoption has accelerated, with increasing numbers of merchants accepting them. They received a significant boost in September 2014 when Transport for London (TfL) started to accept them. Figure 7 shows a surge in contactless payments in September and October 2014.

New payments services are accelerating a pre-existing shift from cash to non-cash payments. Across the UK the use of cash is decreasing, while other forms of payment are gaining popularity.

According to the Payments Council, a body that represents the UK payments industry, cash transaction volumes are expected to fall by a further 30 per cent over the decade to 2024.

Figure 7. London transport boosts contactless card adoption in the UK\*



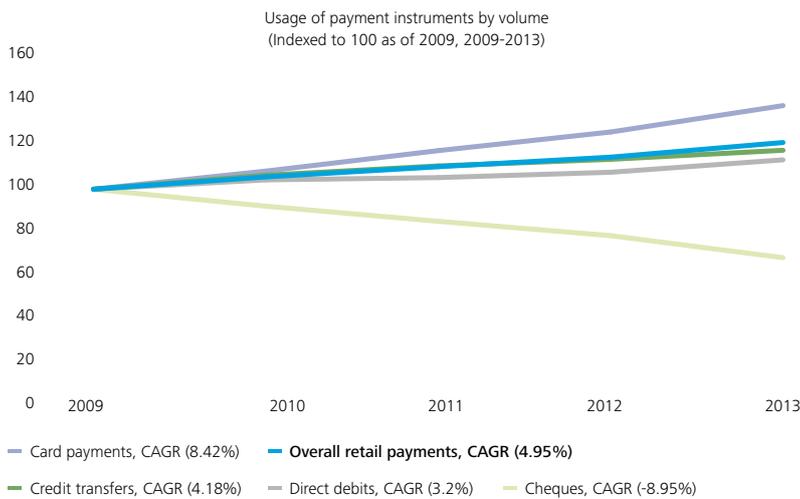
\*Sept 14: Contactless payments accepted by London's TfL

Source: Annual Report 2015, The UK Cards Association, 2015, p. 13.

See: [http://www.theukcardsassociation.org.uk/wm\\_documents/UK%20Cards%20Annual%20Report%202015%20FINAL.pdf](http://www.theukcardsassociation.org.uk/wm_documents/UK%20Cards%20Annual%20Report%202015%20FINAL.pdf); Contactless Statistics, The UK Cards Association.

See: [http://www.theukcardsassociation.org.uk/contactless\\_contactless\\_statistics/index.asp](http://www.theukcardsassociation.org.uk/contactless_contactless_statistics/index.asp)

Figure 1. Payment instruments by volume, Europe



Source: Payment Statistics for 2013, ECB, 9 September 2014, p. 2.  
See: <https://www.ecb.europa.eu/press/pdf/pis/pis2013.pdf?06ec75f7173136eb1186fc5c1e3b2d89>

“It is clear many people who want to get into the payments industry don’t want to get into the payments industry. What they want to get into is the industry of gathering the data of which payments are made by individual customers, and the network value of that, and how many people they can share that with.”<sup>17</sup>

Douglas Flint, Chairman, HSBC

A similar trend is under way in the rest of Europe. While Europe-wide figures for cash trends are difficult to obtain, traditional non-cash payment methods such as cheques are also losing popularity, as cards and electronic payment methods gain traction (see Figure 8).

### The increasing value of data and the rise of fintech

In the past, banks have not fully recognised the value of insights that can be obtained from payments transactions. Banks have long used it for credit scoring and to cross-sell other products. However, the sophisticated use of data by Google and others such as Groupon has alerted banks to the potential value of their payments data.

HSBC’s chairman Douglas Flint has said: “It is clear many people who want to get into the payments industry don’t want to get into the payments industry. What they want to get into is the industry of gathering the data of which payments are made by individual customers, and the network value of that, and how many people they can share that with.”<sup>17</sup>

A consequence of the shift to digital payments is that much more data is being captured. Every non-cash payment, even cheques, generates more data than a cash transaction, for example by recording the amount, date and recipient of the payment. With the shift from cash to non-cash payments, especially using digital methods, more data is being generated.

# How can banks derive value from payments data?

**1. Pricing.** Banks can apply big data analytics to open data, such as competitors' prices and customer demographics, and together with their own payments data, use this to price optimally.

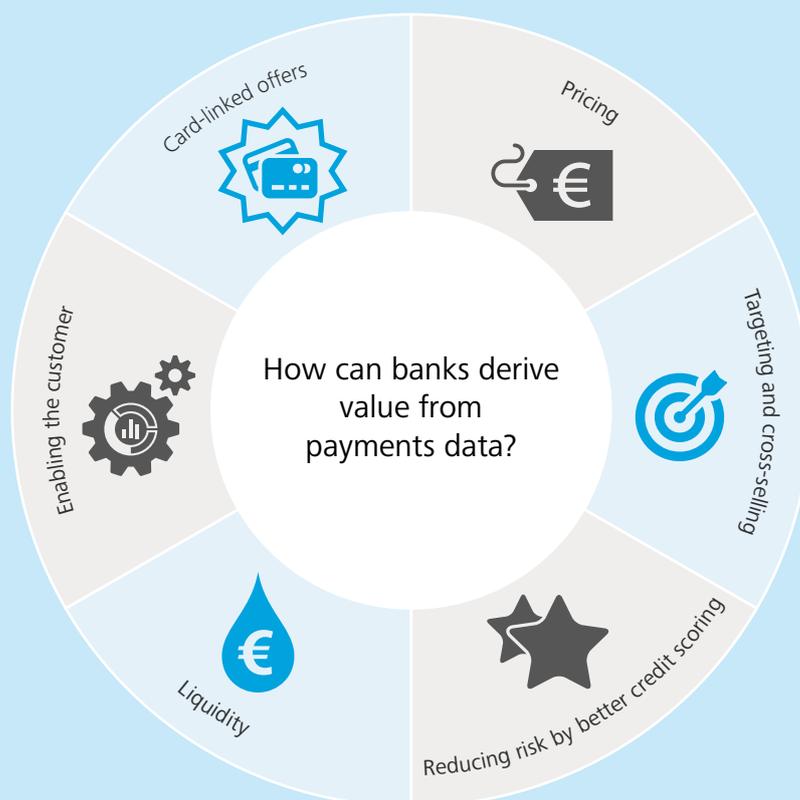
**2. Targeting and cross-selling.** By understanding customer behaviour, banks can target new customers and cross-sell to existing customers, provided they observe regulatory requirements to treat their customers fairly. (And data privacy regulations must be adhered to when looking at permissions over how data can be used and shared.) For example, if a bank is alerted to a large purchase by one of its customers, it can offer an instalment option. A good example of a non-bank challenger doing this is PayPal Credit (formerly 'Bill me later').

**3. Reducing risk by better credit scoring.** Banks can incorporate transactional-level data analysis within credit risk model development. Traditional credit scoring relies heavily on external credit bureau data, which often lags behind the underlying events; whereas a bank's own up-to-date transactional data can provide more real-time insight into customer behaviour. For example, transactional data could pick up a customer's loss of job, from spending patterns or benefit payments, ahead of changes to an external credit score.

**4. Liquidity.** Banks can manage their intraday liquidity better by building up a clear picture of the timing of peaks and troughs in customer transactions.

**5. Enabling the customer.** A bank can give customers access to their own data, and help them manage their finances via apps that make use of the data. Lloyds Bank's Money Manager is a 'budgeting tool' enabling customers to understand their spending patterns and make more informed spending decisions.

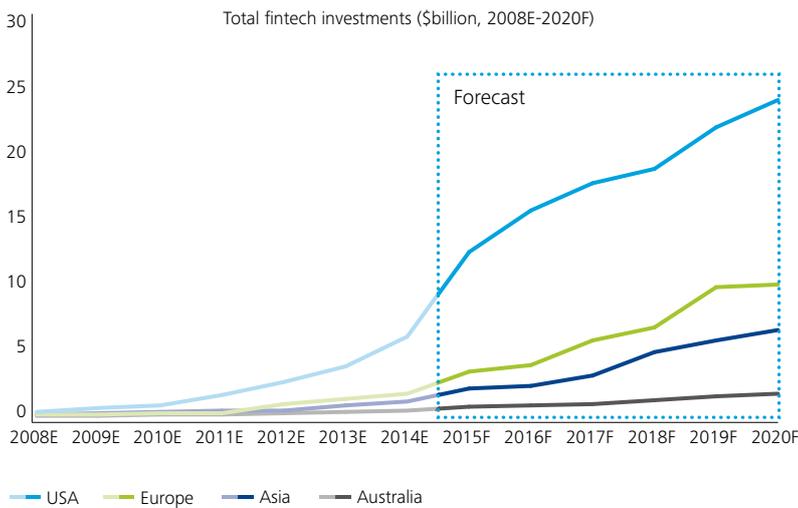
**6. Card-linked offers.** Banks can make use of their transactional data to offer discounts to customers, in practice operating as an aggregator for several loyalty programmes linked to the customer's bank account.



All these developments can create a lot of value for customers, making bank-customer relationships 'stickier', although banks will have to be careful not to exploit customer inertia. It is also important for banks not to go outside of the data privacy regulations, particularly with the more stringent requirements for consent and usage in the proposed new EU Data Protection Regulation.

The flip side is that if a third party intermediates in payments transactions, it could exploit many of these same value levers itself, and also deprive banks of the data.

Figure 9. Global fintech investments



Source: Five Banking Innovations from Five Continents: USA, Europe, Asia, Africa, Australia, Market Research, February 2015, p. 31.  
 See: <http://content.marketresearch.com/five-banking-innovations-white-paper>

Growing fintech investment is fuelling unprecedented non-bank competition.

Moreover, as payments go digital and the associated messaging standards become more sophisticated, much more data can be captured with each payment, such as the location of the payment transaction and other metadata (data about data).

Payment messaging standards are evolving, enabling the capture of more payments data. Continental Europe is probably the furthest advanced in adopting ISO 20022, the new international financial industry messaging standard. For example, the Danish faster payments system using ISO 20022 went live in 2014. The UK has also started to embrace ISO 20022, using it for new structures such as current account switching.

Payments data is more valuable than ever, thanks to improvements in the ability to handle, consolidate and interpret it. This is the result of technological advances: greater processing power, analytics to discern payment patterns, and in-memory databases that can be used to analyse data more quickly and extensively.

This data is of obvious interest to banks, for better credit scoring and cross-selling. However, it is also of interest to many other parties, both commercial and government, whether for service provision (for example on Transport for London), taxation, fraud detection or sanctions management.

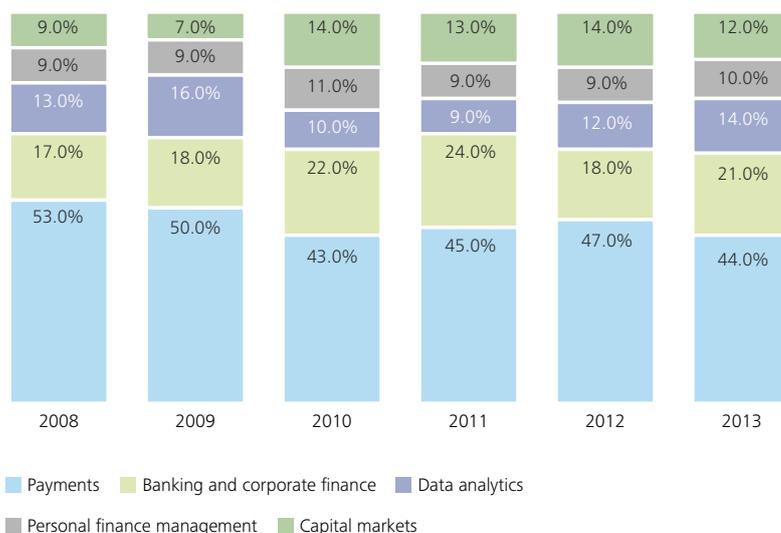
So while the volume and value of payments data is growing, banks' historical dominance of its ownership is in decline. As others recognise the value of data, growing fintech investment is fuelling unprecedented non-bank competition.

Fintech investment has risen strongly over the past few years, and is forecast to continue to grow strongly (see Figure 9). And the biggest single area for fintech deals is payments (see Figure 10).

Banks are lagging behind in fintech investment, accounting for just 19 per cent of the \$10 billion total investment in 2014. Non-banks accounted for 62 per cent, and collaboration between the banks and non-banks for the final 19 per cent (see Figure 11).<sup>18</sup>

Fintech investment has risen strongly over the past few years, and is forecast to continue to grow strongly. The biggest single area for fintech deals is payments.

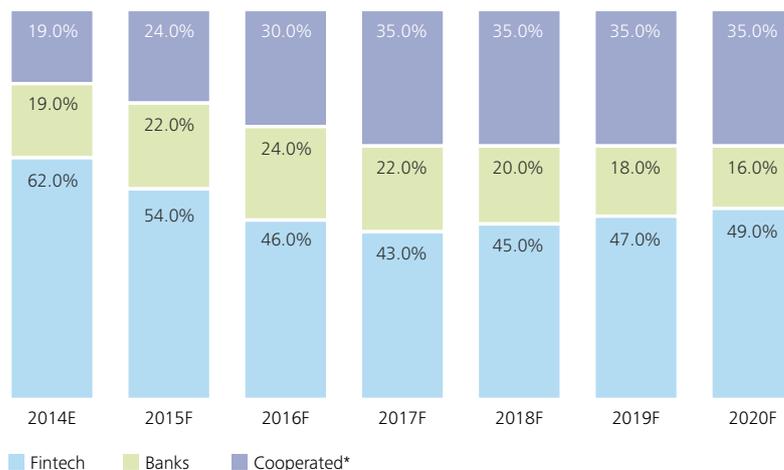
Figure 10. Global fintech deals by category, 2008 – 2013\*



Source: Disruptions Driving FinTech Investing, Information Venture Partners, p. 5.  
 See: <http://www.informationvp.com/fintech-white-paper.html>  
 \* Totals for 2008 and 2013 add up to 101% due to rounding

Figure 11. Global fintech investments broken down by origin

Distribution of fintech investments by origin (2014E-2020F)



Source: Five Banking Innovations from Five Continents: USA, Europe, Asia, Africa, Australia, Market Research, February 2015, p. 32. See: <http://content.marketresearch.com/five-banking-innovations-white-paper>  
 \*Banks cooperating with fintech companies by the means of external funding



# Changing consumer preferences

In the past, underlying service levels for payments were broadly similar. The emergence of new services, such as the UK's Faster Payments, and new methods of payments, such as contactless cards and mobile payments, has enabled consumers to experiment.

One senior British banker told Deloitte: "The payments world has not changed so much – all these things have been happening for some time. Now what we see is that people are more open to experimenting."

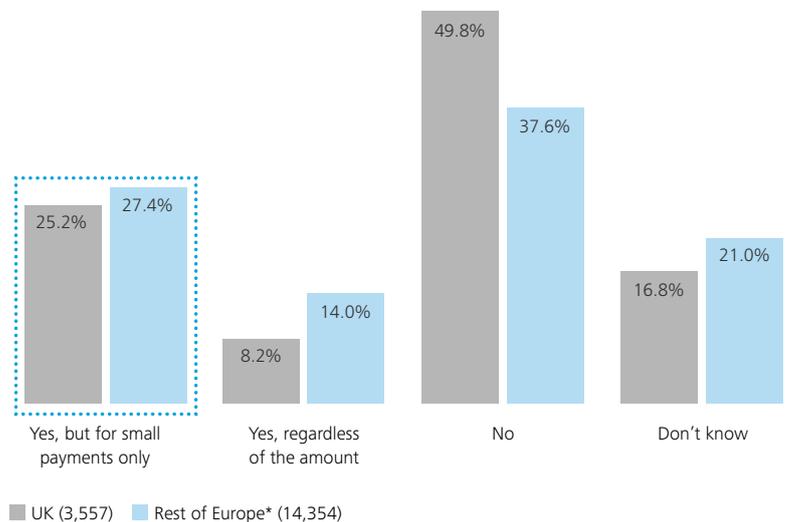
Consumers are willing to use new payments methods, such as mobile apps. According to the Deloitte Global Mobile Consumer Survey 2014, this trend is most evident in low-value transactions (see Figure 12).

"The payments world has not changed so much – all these things have been happening for some time. Now what we see is that people are more open to experimenting."

Senior British banker

Figure 12. Mobile payments preferred for low-value transactions

Percentage of respondents willing to use their phone to make in store payments, weighted base\*\*



\*Rest of Europe consists of France, Germany, Spain, Norway, Finland, Netherlands, Russia, Italy, and Sweden  
 \*\* In Russia, the online research approach used leads to a high concentration of urban professionals. These respondents are likely to be relatively high earners within their country. For other countries, the sample is noticeably representative.

Source: Global mobile consumer survey 2014, Deloitte analysis  
 Base: All adults 18-75 who have not used their phone to make a payment in store  
 Survey question: If a solution whereby you would be able to pay in shops by using your mobile phone, similar to how you use a debit or credit card, would become available, would you use it?

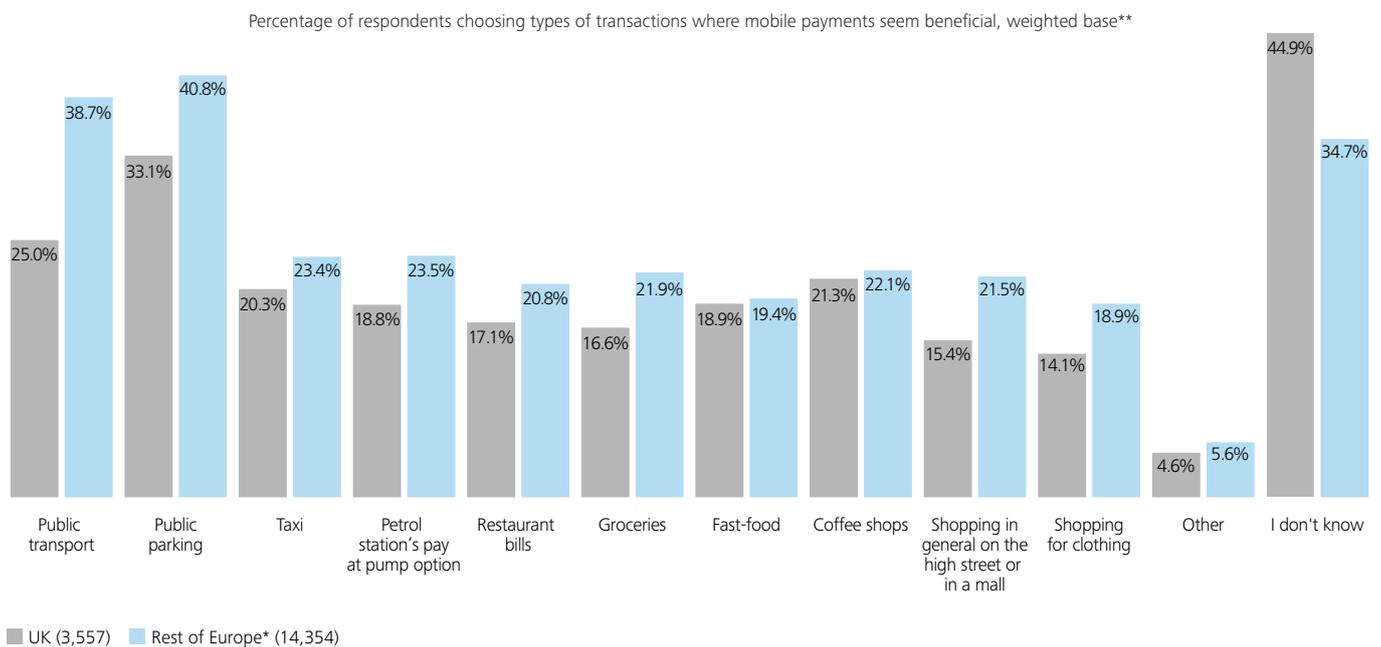
Consumers are attracted to mobile payment methods on public transport and for parking, which are arguably where they offer the greatest additional convenience at the transaction point (see Figure 13).

Payments experts interviewed by Deloitte commented that if a more convenient payment mechanism were available, small businesses and individuals will migrate towards it.

There is a risk that the payment itself will 'disappear'. The digital interface is increasingly relegating the bank into a utility. This highlights the risk that, as people get used to non-banks (and assuming there are no problems), the advantage that banks enjoy in terms of customer trust will erode. This is a risk that we explore later, as we examine likely scenarios for the European payments industry.

Consumers are willing to use new payments methods, such as mobile apps. According to the Deloitte Global Mobile Consumer Survey 2014, this trend is most evident in low-value transactions

Figure 13. Types of transactions where mobile payments are preferred



\*Rest of Europe consists of France, Germany, Spain, Norway, Finland, Netherlands, Russia, Italy, and Sweden

\*\* In Russia, the online research approach used leads to a high concentration of urban professionals. These respondents are likely to be relatively high earners within their country. For other countries, the sample is noticeably representative.

Source: Global mobile consumer survey 2014, Deloitte analysis.

Base: All adults 18-75 who have not used their phone to make a payment in store

Survey question: In which of the following scenarios would you find it beneficial to pay by using your mobile?

Payments experts interviewed by Deloitte commented that if a more convenient payment mechanism were available, small businesses and individuals will migrate towards it.



# 3. Increasing non-bank competition

Many of the experts Deloitte interviewed were not particularly worried about increasing non-bank involvement in payments. Their view was that the revenues, profits and overall liquidity for banks are not significantly threatened by the competition.

About half of respondents expect that the impact on retail bank payments profits of opening up payments initiation will be 'low' or 'very low' for both card and non-card payments (see Figure 14). They took this view, mainly because the initial effect of the new payments services will be to displace cash payments.

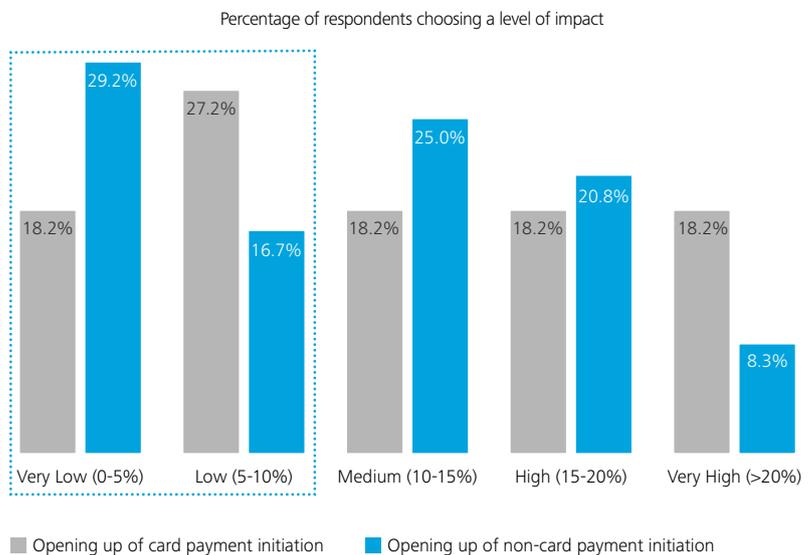
Deloitte considers, however, that the impact could be substantial. First, while cash may not be very profitable for the payments function in retail banks, cash handling brings value to the banking eco-system, for example by attracting small and medium-sized enterprises (SMEs).

Second, if non-bank players gain a foothold in payments, they are likely to leverage their favourable position and their proximity to the customer, and gradually expand their product offerings into areas such as money market funds, FX and lending.

At the moment, some fintech developments may seem interesting but far from 'life-threatening' to banks, but this can change. PayPal is a non-bank payment service provider that over the years has built up a significant customer base and transaction volumes. It has gained a strong foothold in the online transaction space, with mobile payment capabilities through its wallet app, as well as allowing users to store money in PayPal accounts. PayPal is an example of how a third party payment company can treat the banks as a utility by taking over front-end payment initiation and processing. A striking example of PayPal encroaching into banking territory is its instalment credit lending facility, PayPal Credit.

In summary, we believe that there is a lot of value at stake. At a minimum, it requires a defensive response from the banking sector.

Figure 14. Payment experts' views on the impact of payment initiation competition on payments profits



Source: Interviews with 24 European payments experts, March to May 2015, Deloitte analysis

There is a lot of value at stake. At a minimum, increasing competition requires a defensive response from the banking sector.

# ipagoo

ipagoo is a new non-bank that plans to offer a pan-European digital cash management account. It will not lend money, and so is free of much of the regulation associated with deposit-taking and credit provision. Rather, it is simply a custodian of funds.

ipagoo offers novel services. It allows users to have current accounts in many currencies and countries. ipagoo's sales pitch is that those customers who want to transact across more than one EU jurisdiction only have to complete one online on-boarding process for the entire EU.

It provides for conditional payments, such as 'pay my rent once I've received my salary'. Another innovative offering is real-time cash pooling, which enables individuals and businesses to see a summary of their accounts and financial products and to make transfers between them in real-time.

ipagoo estimates that 25 million people in the EU are living in a different country from the one in which they were born, while 2.4 million businesses have operations in more than one EU country. These constitute its initial target market.

ipagoo also sees itself as an aggregator for a host of other non-banks seeking to 'unbundle' the many services offered by the traditional integrated European bank.

It aspires to act as a partner to banks, in two ways. First, it could be the distributor for bank products, for example allowing a German bank to sell savings accounts to Italian clients.

Founder and chief executive Carlos Sanchez would also like to offer ipagoo's services as a 'white label' to be re-branded by small and medium size banks, allowing them to become pan-European and reach potential customers without the need to open new branches or establish subsidiaries in other countries.

"Our view is to specialise in one aspect of the banking value chain, cash management. If you do that, you cut the current banking set-up in two, [with] the credit/lending function and the cash management/depository function in two different legal entities. The restrictions applied on the credit function do not apply to cash management functions. This will allow smaller banks to become digital, and have a customer reach and efficiency not paralleled, even by the largest European banks."

Carlos Sanchez, Founder and Chief Executive, ipagoo

Deloitte expect that the status quo, in which payment systems continue to be run by and for the major banks, will not last, as EU regulations will not permit it.



# 4. The emerging payments landscape and future scenarios

Banks have strategic choices to make. How much should they invest to defend their position in payments, and how should they invest? Should they 'go it alone' or should they collaborate? Should they focus on providing the 'rails' for payments, and leave the innovation to fintech? Should they take a different approach for card and non-card payments?

These choices will to some extent depend on how the payment landscape evolves. In turn, this will depend on the success of regulators in opening up payments systems to alternative payments services providers, and on consumers' appetite for adopting alternative models.

Deloitte believes that there are four broad scenarios for the European payments market (see Figure 15).

The first scenario is the continuation of the status quo, where payments systems are not yet open, and consumers do not yet fully trust non-banks for making payments.

However Deloitte believes that the status quo, in which payments systems continue to be run by and for the major banks, will not last, as EU regulations and regulators will not permit it.

There are three future scenarios we might expect to see in payments.

- New oligopoly
- Utility model
- Parallel payments infrastructure.

See page 32 for more detail on these future scenarios.

A new company that straddles the utility model and the parallel infrastructure is ipagoo. Its separation of cash management from banks' traditional credit function is revolutionary, though it will plug in to the existing non-card payments schemes. See box-out on ipagoo on page 28.

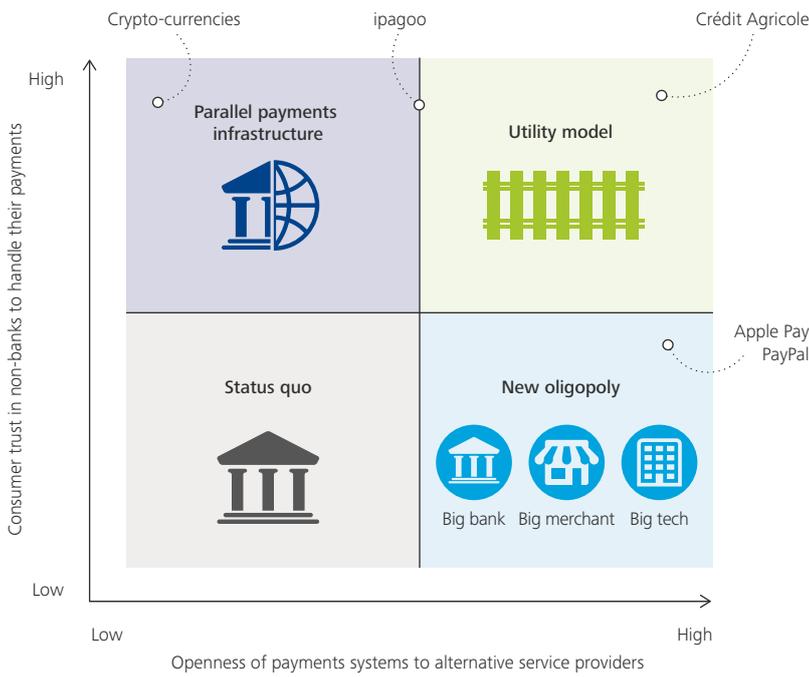
Banks could be relegated to the role of payments utility, used by non-bank initiators simply to settle payments. This could be a viable model, one that is not capital-intensive but which requires up-front investment in the underlying platform and scale to drive down marginal costs.

This outcome is more likely to materialise as a result of greater merchant acceptance of non-bank payment methods, and higher consumer adoption.

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Deloitte believes that there are four broad scenarios for the European payments market; the status quo, new oligopoly, utility model and parallel payments infrastructure.

Figure 15. Emerging payments landscape



Source: Deloitte analysis



**New oligopoly.** Payments systems are opened, but customer trust in non-banks is limited, so the non-bank newcomers will be restricted to a handful of big players with brand and scale. Tech giants may crowd out smaller fintech aspirants.



**Utility model.** If customers are more willing to experiment, banks and non-banks will offer payments applications ('apps'). These would run on banking payment 'rails' which operate as low-margin, high volume utilities. A high-profile example of a fintech using banking 'rails' is the UK's TransferWise. It allows customers to send and receive foreign currency-denominated transfers internationally, at keener rates than banks. Similarly, Venmo and Square Cash allow individuals to exchange money by mobile phone, using existing card and interbank systems.



**Parallel payments infrastructure.** Should customers' desire for change outpace regulatory pressure to open up payments systems, completely new methods of payment could take hold. The likeliest candidates at the moment are crypto-currencies, such as Bitcoin and Ripple. Bitcoin uses block-chain technology to bypass central banks, traditional currencies and the centralised clearing and settlement systems. See box-out Crypto-currencies on page 33.

# Crypto-currencies

Crypto-currencies, Bitcoin being the most well-known, are a new way to transfer value. They use cryptography, mathematical techniques for encrypting and decrypting data, to guarantee the authenticity of the transaction, and to allow a real-time transfer of value at very low cost.

Retailers, financial institutions and regulators have expressed interest in crypto-currencies for various reasons: ability to attract new clients, delivery of new financial capabilities, and control of payments.

Both the US Federal Reserve and the Bank of England have published research about applications of crypto-currencies in the financial system, and about how they can be brought into mainstream payments systems.

Bitcoin has been criticised because participants can hide their identity. Sceptics also point to the volatility of its US dollar value, which limits its use as a unit of account or as a store of value, two of the traditional functions of money (the third being as a medium of exchange).

However the technology behind Bitcoin, called block-chain, presents a significant opportunity to improve all sorts of transactions processes.

Block-chain is a public, decentralised and immutable ledger that records all transactions indefinitely. In principle, this could eliminate the need for a central settlement utility for payments, such as central banks or payment schemes. Block-chain could also do away with the need for third party validation of transactions. Ironically, given that participants can hide their identity, block-chain offers a unique audit trail that can't be falsified.

Another player in this field is San Francisco-based RippleLabs. It is using a decentralised ledger technology to provide real-time settlement to financial institutions. It differs from Bitcoin as it offers its settlement service for both crypto-currencies and traditional fiat currencies, such as the US dollar.

In principle, this could eliminate the need for a central settlement utility for payments, such as central banks or payment schemes.



# 5. Banks' response to the challenges

The purely financial case for responding to non-bank payment services providers may be difficult to prove at this stage of market development. However, the downside risk from allowing non-bank competitors to establish an unimpeded strong foothold is too great to do nothing in response, even if the probability of significant disruption may seem small at the moment.

By not responding to innovations in payments, or by relying on fintech, banks risk becoming utilities earning low margins. In such a scenario, they will need to build scale to make sufficient returns on investment. Becoming a utility can be a viable strategic option for banks that are able to operate efficiently and at scale. But it must be a conscious choice. There is a defensive imperative to act.

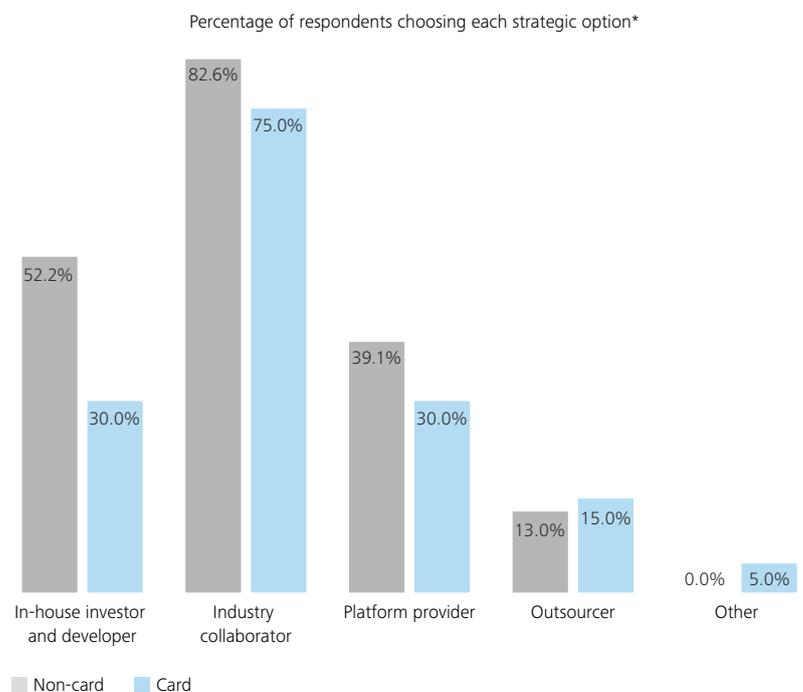
In addition, participation by banks in payments innovation will be important for maintaining their reputation with the public and government.

### But what is the right response?

How much should banks invest in payments innovation? After all, there are substantial and continuing calls on banks to strengthen capital ratios and remedy past shortcomings in conduct, and generating profits remains a big challenge.

The experts interviewed as part of Deloitte's research had mixed opinions when asked about the strategic options they preferred. We asked them to comment on four possible options: in-house innovation; industry collaboration; being a platform provider for API; and outsourcing payment services (see Figure 16).

Figure 16. Preferred strategic responses for banks in the face of increased non-bank competition



Source: Interviews with 24 European payments experts, March to May 2015, Deloitte analysis  
\* Respondents could choose more than one option

In general, industry collaboration was the preferred strategy across the board in response to increasing non-bank competition, albeit somewhat more so for card payments than for non-card payments.

However, the respondents thought that there is still room for in-house innovation as a strategic option for competing in non-card payments.

In contrast, the strategic option for card payments is clear. Card payments networks are already large and global: even the biggest banks are small by comparison. The dominant strategy of banks is therefore to collaborate with each other and with the well-established international players such as MasterCard and Visa.

Deloitte believes that banks' strategic responses should be determined by four factors. How big is the bank?<sup>19</sup> Are the payments card or non-card? How open is the payments system to new players? And how much do customers trust in non-banks as providers of payment services, compared with banks?

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In general, industry collaboration was the preferred strategy across the board in response to increasing non-bank competition, albeit somewhat more so for card payments than for non-card payments.

### **Benefits of collaboration**

Industry collaboration is a cost-efficient way of developing new infrastructure, taking it to market and making it available to customers.

The UK's Zapp is a good example. Developed by the bank-owned payments processor VocaLink, Zapp is due to be launched in autumn 2015. It is a mobile payment method, linked to consumers' existing banking applications and bank accounts, which allows online and Near Field Communication (NFC) enabled in-store payments.

Several UK banks have signed up for Zapp, allowing integration between it and their own mobile banking apps. Several UK retailers have also signed up for Zapp, allowing it to be accepted in their stores.

Collaboration is also important for achieving industry-wide inter-operability and greater user acceptance. A number of interviewees in the research mentioned the UK's Paym to elaborate on the importance of inter-operability that can be achieved through industry collaboration.

Paym, introduced in 2014, is a mobile banking solution that was also developed by VocaLink with participation from several UK banks. By linking to a user's mobile telephone number, it allows payments to be sent and received between bank accounts using mobile phones, without the need to provide additional banking identification information such as an International Bank Account Number (IBAN) or sort codes.

**If you can't beat them...**

Both big and small banks should increasingly team up with non-bank players, including payment providers, acting as product manufacturers to the non-banks' retail front-end.

A representative of a global bank told Deloitte: "Banks fear being disintermediated through the introduction of new types of payment service providers, but long-term, strategy-wise, partnering with them will be essential for us in maintaining a decent profit."

**Small bank options**

The dominant strategy of smaller banks will always be to collaborate, both with other banks and non-banks. They should:

- pursue selective industry collaboration (in the infrastructure and network areas)
- focus on their core risk management competencies
- open their platforms to innovations by other payment service providers as part of an open API approach.

**Big bank options**

Deloitte believes that for large banks, the overall prescription is relatively clear. In addition to selective in-house investment, partnering with, or acquiring, fintech companies should be a key part of the banks' strategy.

There is some scope for in-house innovation, which gives large banks with resources the opportunity to gain competitive advantage as first movers, by changing consumer preferences, or by being viewed as market-leading digital innovators in banking. However, banks should be careful not to over-invest.

Where payment systems are opened up, and customers trust non-banks, it makes less sense even for larger banks to 'go it alone' in an innovation race that they are unlikely to win, given their culture, their regulation and regulatory systems, and the skills and firepower of the non-banks ranged against them. Rather, it will make sense for some larger banks to build scale as payments utilities, exploiting their advantages in compliance and resilience, and providing the essential 'rails' in what continues to be a fast-growing area of business.

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"Banks fear being disintermediated through the introduction of new types of payment service providers, but long-term, strategy-wise, partnering with them will be essential for us in maintaining a decent profit."

**Global bank representative**



# Endnotes

- 1 Bacs, formerly the Bankers' Automated Clearing Services, is the UK scheme for processing direct debits and direct deposits.
- 2 CHAPS, the Clearing House Automated Payment System, offers same-day sterling fund transfers. It is typically used for high-value fund transfers, e.g. by solicitors in house purchases.
- 3 The Future of Retail Payments: Opportunities and Challenges, European Central Bank, 2011, p. 12. See also: <https://www.ecb.europa.eu/pub/pdf/other/retailpayments2011en.pdf>
- 4 Deloitte UK Banking Insight Team developed a European payments revenue pool model. Our purpose was two-fold: to estimate the total revenues generated by payments for European banks, and to assess the impact of EU regulations, e.g. SEPA cross-border regulations and the interchange fee cap on those revenues. The model captures direct revenues (e.g. fees, commissions) and indirect revenue streams (e.g. float benefit, interest revenues) enabled by payments. The products/payment methods considered for the analysis included were: debit cards, credit cards, ATM transactions, cheques, electronic funds transfer and current accounts. For the purposes of the study, seven major European markets were considered: the UK, Germany, Italy, Spain, France, the Netherlands and Poland and the results were extrapolated to estimate EU-wide figures. The underlying data was obtained from publicly-available sources: the European Central Bank, national central banks and retail banks.
- 5 Press release, European Commission, 20 September 2005. See also: [http://europa.eu/rapid/press-release\\_SPEECH-05-528\\_en.htm?locale=en](http://europa.eu/rapid/press-release_SPEECH-05-528_en.htm?locale=en)
- 6 Press release, European Commission, 11 May 2007. See also: [http://europa.eu/rapid/press-release\\_SPEECH-07-319\\_en.htm?locale=en](http://europa.eu/rapid/press-release_SPEECH-07-319_en.htm?locale=en)
- 7 'The European regulatory agenda on payments is driving major industry change', Deloitte. See also: <http://www2.deloitte.com/lu/en/pages/risk/articles/european-regulatory-agenda-payments-industry-change.html>
- 8 Euromoney Sibos 2013 edition, August 2013, p. 5. See also: [http://www.euromoney.com/downloads/guides/Sibos\\_guide\\_2013.pdf](http://www.euromoney.com/downloads/guides/Sibos_guide_2013.pdf)
- 9 In its proposals for PSD2 to the European Parliament, the European Commission explained the background to this new directive as follows: "The electronic payments market in Europe offers great opportunities for innovation. Consumers have already significantly changed their payment habits in recent years. In addition to the ever growing number of credit and debit card payments, the rise of e-commerce and the increasing popularity of smart phones have paved the way for the emergence of new means of payments. The benefits of better market integration and reduced fragmentation in this field at European level are substantial." See also: [http://ec.europa.eu/finance/payments/cim/index\\_en.htm](http://ec.europa.eu/finance/payments/cim/index_en.htm)
- 10 Revised EBA Work Programme, Article 87a, 27 March 2015, p. 40, Reference Number 346. See also: [https://www.eba.europa.eu/documents/10180/842038/30+09+2014+\(EBA+2015+Work+Programme+Annex\).pdf/de36f4b0-80ee-4e26-af0c-86b99965b510](https://www.eba.europa.eu/documents/10180/842038/30+09+2014+(EBA+2015+Work+Programme+Annex).pdf/de36f4b0-80ee-4e26-af0c-86b99965b510)
- 11 See endnote 4.
- 12 Interchange fees for card-based payment transactions, Official Journal of the European Union, 29 April 2015. See also: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL\\_2015\\_123\\_R\\_0001&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL_2015_123_R_0001&from=EN)
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- 15 A PIN is a Personal Identification Number.
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- 17 'HSBC chairman: Tech firms only want your data', City A.M., 25 March 2015. See also: <http://www.cityam.com/212399/hsbc-chairman-tech-firms-only-want-your-data>
- 18 Five Banking Innovations from Five Continents: USA, Europe, Asia, Africa, Australia, Market Research, February 2015, p. 32. See also: <http://content.marketresearch.com/five-banking-innovations-white-paper>
- 19 What constitutes a 'big' bank depends on the nature of the innovation being pursued, but it needs to take into account both market power and profitability (i.e. the ability to fund the development and marketing of the new service). It will also vary from market to market. For a large, relatively concentrated market, such as the UK, Deloitte considers that a 15+ per cent Personal Current Account market share is probably required to provide enough market power and income to be 'big' enough to afford to invest in proprietary payments innovation. Given current retail banking business models, a 15 per cent market share in the UK translates to a pre-tax profit of £1 billion, and total assets of £150 billion.

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