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The Future of Payments

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Introduction

As the decline of cash continues, alternatives are rising to take its place. And it is not just cash they are leaving in their wake. Last year cash accounted for less than half of all payments made by consumers, businesses and financial institutions in the UK for the first time.[1] In the first three months of 2016, meanwhile, use of both contactless credit and debit cards overtook cheques.[2]

These are just a few milestones as we witness “the slow death of cash”,[3] and are reflected in trends in the U.S., where non-cash payments continue to grow relentlessly.[4] But while it’s long been clear that consumers and businesses are walking away from cash, it’s less clear where they’re going.

In addition to traditional cards, electronic payments and transfers, a whole range of alternative payments now proliferate: contactless cards, pre-paid cards, payments apps and other mobile payments, mobile banking, e-money accounts and virtual currencies. Yet none is ubiquitous.

This paper, based on new analysis by the Centre for Economics & Business Research (Cebr) for Paul Hastings as well as a YouGov survey of consumers and businesses, examines where we are now and attempts to look ahead. Based on surveys of both the public and businesses, it explores their priorities, acceptance, and use when it comes to payments innovation. We also look at some of the barriers these technologies face as they battle to become mainstream, and what this means for the banks and fintech challengers involved.

Ultimately, if we cannot yet answer what will take the place of cash when it is no longer king, we can at least begin to discern the factors that will determine the battle for the throne.

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Executive Summary

The shift from physical to electronic payments is seeing an ever-expanding range of payment methods replacing cash. From mobile banking and contactless cards, to phone payments and bespoke apps, the payment landscape is undergoing a quiet revolution.

Analysis for Paul Hastings by the Centre for Economics & Business Research (Cebr) shows cash payments declining to less than a third of all transactions in the UK and under a quarter in the U.S. in 10 years' time. Three quarters (74%) of UK and 82% of U.S. businesses will by then accept alternative payments (against 41% and 48%, respectively, today).

Those alternatives include a wide range of technologies: pre-paid cards; app-based payments such as mobile banking apps, Android, Samsung or Apple Pay; and other mobile or app-based payments not linked to a bank; contactless cards; and e-money accounts, such as Neteller or PayPal, and payment initiation services such as Zapp. Some, such as contactless cards in the UK, are mainstream enough that they are hardly considered alternatives at all.

Despite this, the shift has been slower than some expect. No technology is yet ubiquitous and the market remains fragmented. Payments are seeing rapid change, yet transformational change – where mainstream consumers can no longer imagine life without the technology – is another matter.

Indeed, uptake of alternatives such as digital wallets by consumers is still low (6-7%). Moreover, our survey finds apps and access to alternative payments are largely irrelevant when it comes to switching accounts. In fact, over a quarter (27%) in the UK and almost four in 10 (37%) in the U.S. do not use any alternative payment method at all.

The "mobile payments revolution" is underway among the banks and fintech companies, and the innovations required for alternative payments to work seamlessly are substantial. Nevertheless, they have yet to make a dramatic impression on consumers. A separate survey of businesses, meanwhile, shows that the uptake of alternative payments has been even slower to develop.

This white paper argues there are a number of key reasons why the payments industry has yet to see transformational change from technology.

First, it hasn't fully allayed consumers' security fears. Despite significant efforts by technology developers to ensure consumers are protected, such concerns still represent a considerable barrier to new technologies. Common reasons for consumers to be unwilling to use alternative payment methods, for example, are concerns over data security (49% in the UK and 46% in the U.S.), theft (45% and 41%) and fraud (59% and 46%).

Second, the regulatory landscape remains inconsistent – at times fostering, but still often discouraging, innovation. This is evidenced, perhaps, in significant differences the survey finds between the U.S. and UK in terms of the uptake of new technologies. While the UK's financial sector regulators, the FCA and the Payment Systems Regulator, are positively encouraging innovation from within and outside the banking sector, the situation is less encouraging in the U.S.. Efforts are underway to change this, though.

Finally, there are significant barriers – both regulatory and structural – that make the financial services environment more challenging than many other industries for those wishing to innovate. The rise of Uber and Airbnb in their respective industries is impressive, yet an equivalent provider is perhaps less likely to have such an impact on the finance industry due to its sheer size and complexity.

Yet, significant transformational change is coming to the industry. Some technologies, such as contactless cards (used by 36% of UK consumers) and PayPal (used by 32% of U.S. consumers and 46% in the UK) are already mainstream. The experience in other sectors shows us that others will follow; the only thing that's unclear is which ones.

The barbarians are already at the gates; new challengers and regulatory moves present a significant challenge to the supremacy that banks enjoy in servicing consumers' and businesses' everyday financial needs and transactions. Equally, though, there are significant signs of banks fighting back. Cash is no longer king; but it's still all to play for when it comes to who will reign in future.

Paper Trails

The slow death of cash is not really that slow at all, and in some cases it is facilitating the rapid growth of alternatives.

Comfort with these alternatives is seeing them increasingly used in more and smaller transactions, where cash has in the past proved more difficult to displace. (In value rather than volume terms, cash already accounts for only a third of consumer purchases in the UK).[5] The average value for a purchase by a contactless card in the UK, meanwhile, is just £8.28.[6]

Over the next decade, Cebr's analysis suggests that, as cash continues to decline, alternative payments will become more firmly established, with three quarters of businesses in the UK and more than eight out of 10 in the U.S. accepting them.

Already, strong contenders for the dominant payment methods of the future are emerging. Contactless card payments are growing rapidly – with UK consumers spending £1.1 billion with them in January 2016 alone – an increase of 285.6% on the same month last year. This will continue to surge, with contactless transactions expected to increase almost six-fold in the coming decade in the UK. PayPal, meanwhile, is already used for more than one in five online purchases in the UK.

In the U.S., meanwhile, the number of contactless mobile payment users looks set to increase from 38 million today to 221 million in 10 years – about six people in 10 based on population projections.

UK	2016	2026
Number of contactless transactions	3,264 million	19,067 million
Share of business that accept alternative payment methods	41%	74%
Noncash transactions as a share of total transactions	55%	68%
Noncash transaction value*	£1.14 trillion	£1.44 trillion

U.S.	2016	2026
Number of contactless mobile payment users	38 million	221 million
Share of business that accept alternative payment methods	48%	82%
Noncash transactions as a share of total transactions	63%	76%
Noncash transaction value	$33 trillion	$46 trillion

* In both tables the noncash transaction values refer to the use of debit and credit cards as well as cheques. Use of other noncash payment systems which are primarily reserved for high value financial transactions e.g. automated clearing house are excluded.

Tables 1 and 2. 10 year forecast for the payments landscape. Source: Cebr

A creeping revolution

So far, however, the move to alternative payments has not coalesced on any one payment system or even small group of technologies. Instead, the market is fragmented with a wide range of competing offerings. A YouGov survey for this report shows that use remains quite limited in almost all cases.

Just 6% in the U.S. and 7% in the UK so far use app-based payments linked to their banks such as 1-Click Buy or Android or Apple Pay; 10% in the U.S. and 7% in the UK use mobile or app-based payments not linked to their bank account; 18% in the U.S., but only 5% in the UK, use pre-paid cards (Figure 2).

A few have achieved greater uptake, close to the level of cheques: contactless cards (or fobs) in the UK at least, where 36% say they are users, although only 4% in the U.S. are; mobile banking apps, again more so in the UK, with 31% users, against 23% in the U.S.; and PayPal which leads the way in both countries, with 32% of consumers as users in the U.S., and 46% in the UK.

Over a quarter (27%) in the UK and more than a third (37%) in the U.S. use no alternative payment mechanisms at all.

Alternative payments are also not a priority for consumers when it comes to switching accounts. Only 7% in the U.S. and just 1% in the UK say access to alternative payment methods would be a key incentive enticing them to switch banks (Figure 3).

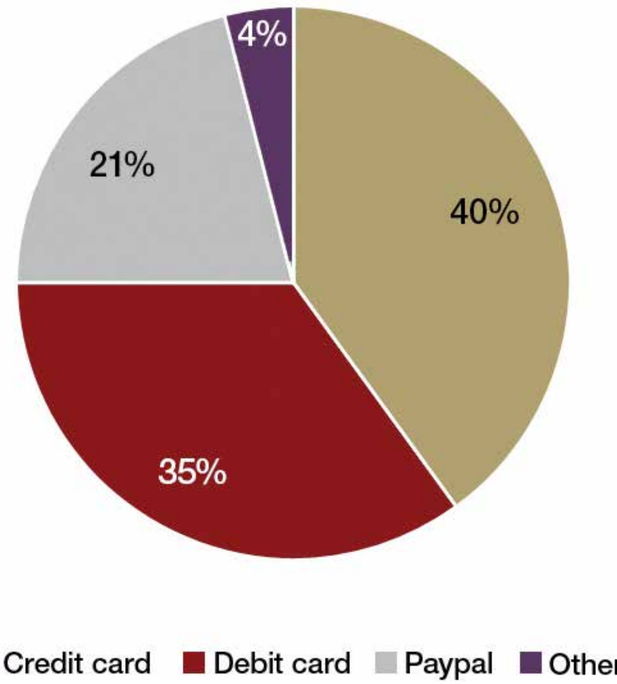

Figure 1. Payments for online purchases in the UK (2014). Source: Eccommerce News and Pavvision

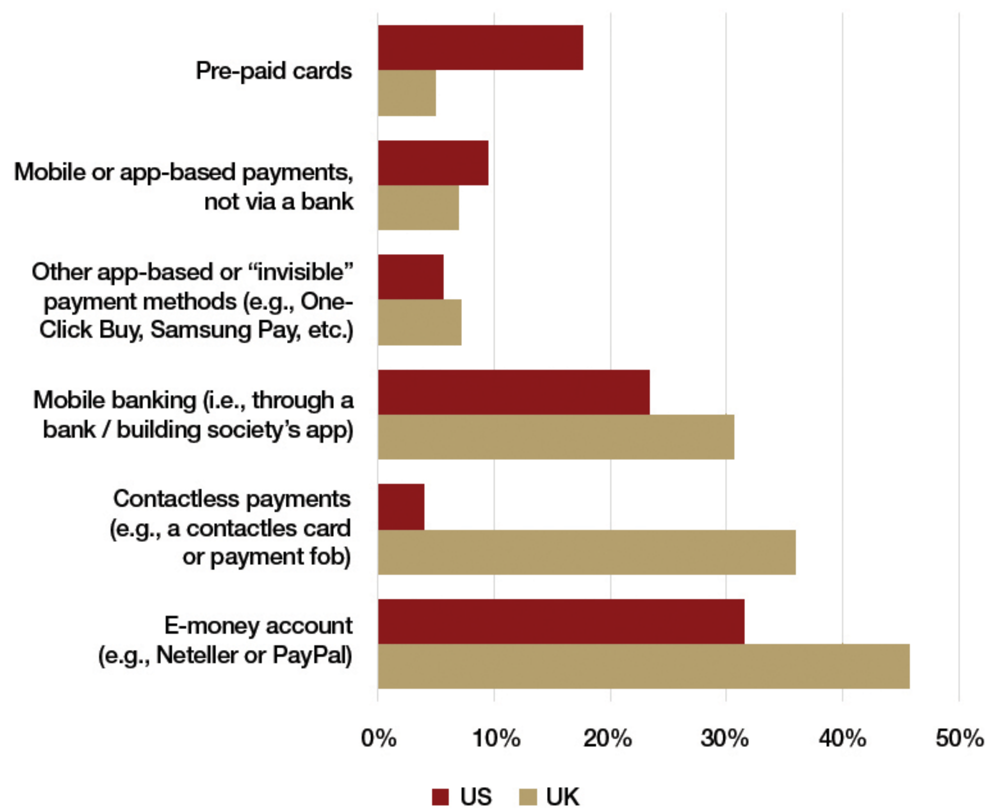

Figure 2. Share of consumers using alternative payment mechanisms.

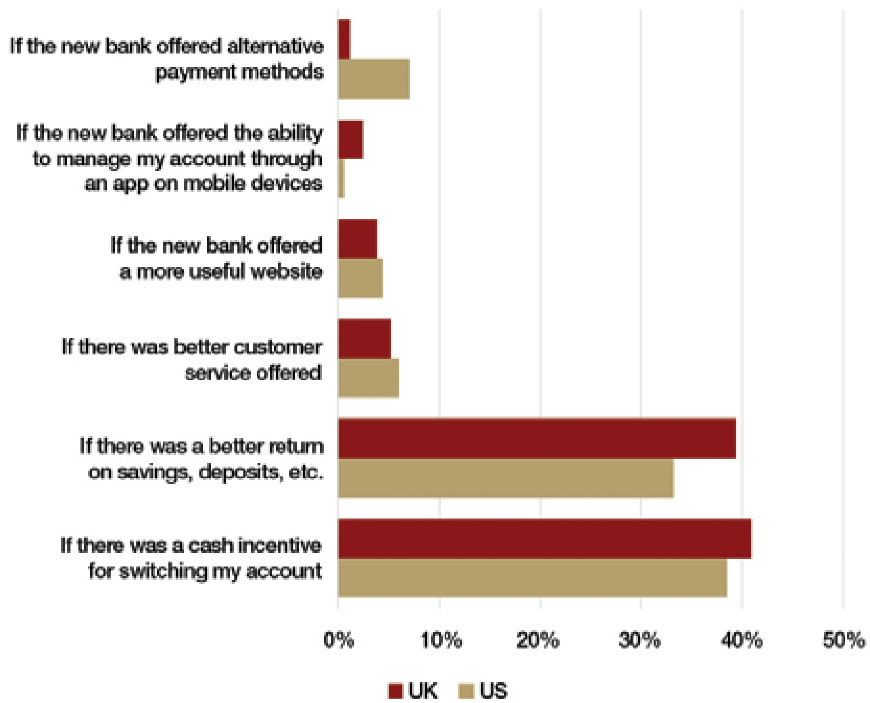

Figure 3. Main incentive likely to encourage account holders to switch their main account to a new or online only bank.

Finally, payment innovations have yet to make significant inroads in business-to-business transactions. Mobile banking apps, used by 11% in both the U.S. and UK, are the most popular alternative, with business users still heavily reliant on bank transfers, cheques, cards and cash (Figure 4).

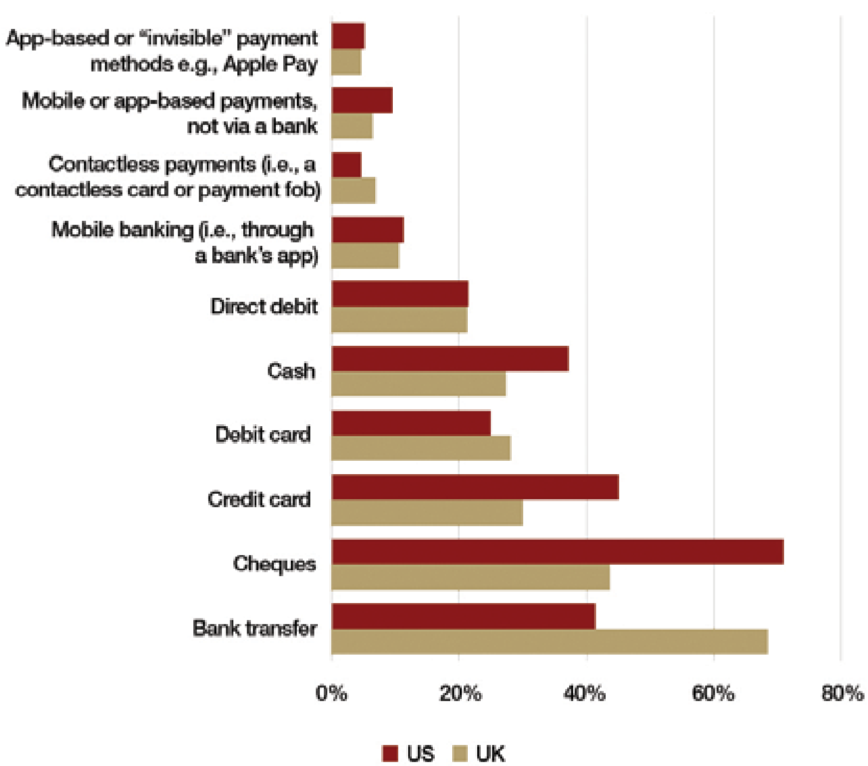

Figure 4. Payment methods used for B2B purchases.

The range of payment solutions now available – supported by substantial innovation on the part of both fintech businesses and established banking players – shows that an alternative payments revolution is underway. So far, however, no technology has achieved transformational change in the way we pay for our goods and services.

There are a number of reasons for this.

Fear and Fraud

The first is consumers' security fears.

Not surprisingly, security is a top priority for consumers choosing banking services. It is the most important characteristic in the UK and, in the U.S., second only to easy access to high street branches (as U.S. banks charge for withdrawals from competitor banks). It is also a key reason why consumers who don't use alternative payments refuse to do so.

The risk of theft (mentioned by 45% in the UK and 41% in the U.S.), fraud (59% and 46%) and data security incidents (49% and 46%) are consumers' most common concerns (Figure 5). Asked what features they'd like to see incorporated in alternative payment methods in the future, a reduced risk of fraud was the leading answer by a significant margin (Figure 6).

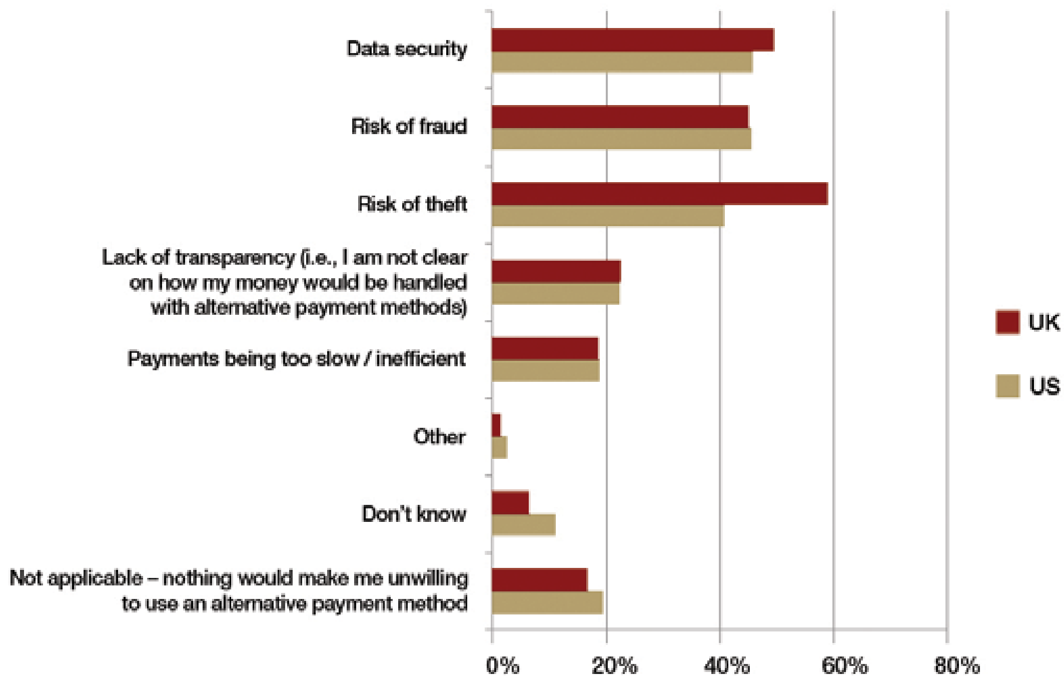

Figure 5. Reasons for consumers being unwilling to use alternative payment methods.

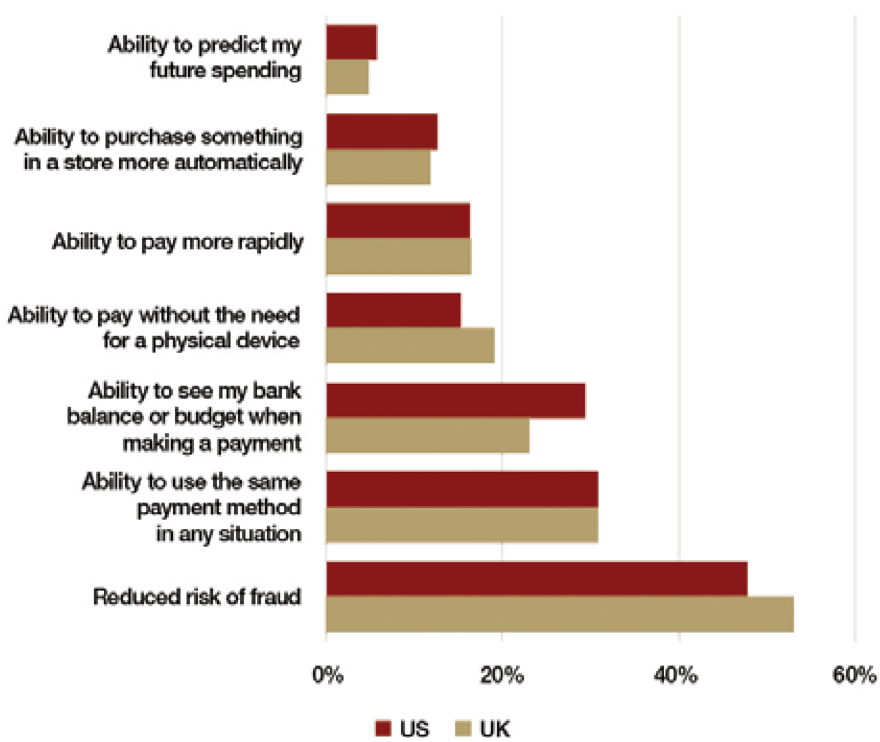

Figure 6. Most desired features for alternative payments.

Fears of fraud are not illogical. In the U.S., although merchants report that credit cards accounted for 58% of fraudulent transactions, 16% of fraud was through alternative payment methods.[7] Fraud losses on UK-issued credit cards totalled £479 million in 2014.[8]

The challenge for alternative payments around security is therefore twofold: to tackle the genuine risks, which will continue to evolve as technologies develop; but also to ensure perceptions of the risk are realistic. There is little to suggest alternative payment systems are more vulnerable to financial crime than traditional methods, and in fact there is some evidence to the contrary. The survey results show the industry has some work to do in getting this message across.

Regulatory burdens

The financial services industry is heavily regulated on both sides of the Atlantic. There is potential for this to act as a barrier to entry to new competition, and also potentially hamper the successful introduction of new technologies. On the other hand, regulators and policy makers also have it in their power to encourage innovation and open markets by dismantling monopolies and removing barriers to competition.

To date, the approach of regulators has not been wholly consistent. The regulatory environment has at times helped, but at times hindered, innovation in payments. The precise balance struck by the regulators may in part explain some of the differences we see in the uptake of new technologies between the U.S. and the UK.

According to our survey, the U.S. largely trails the UK in consumer uptake of alternative payments. Not only is the proportion of U.S. consumers using no alternatives significantly higher (37% compared to 27% in the UK), but the U.S. also leads in terms of uptake in only two out of the five technologies: prepaid cards and non-bank based mobile or app payments.

It is possible to argue this at least partly reflects two advantages UK payment innovators enjoy over their U.S. counterparts when it comes to the regulatory environment.

The first is the approach of the UK regulators. The FCA, for example, has been in the vanguard of supporting the fintech industry, with the launch of its "innovation hub" and "regulatory sandbox", being a "safe space" in which businesses can test innovative products without immediately needing to comply with the usual regulatory requirements.[9] The Payment Systems Regulator has also promoted a number of initiatives, in many cases intended to help alternative payments providers access payment systems directly or indirectly or otherwise develop new products, in pursuit of its statutory objectives of innovation, competition and improvement of the service user experience. Also noteworthy are similar initiatives at an EU level, under the second Payment Services Directive (**PSD2**) which will come into effect in January 2018, and will have a focus on significantly facilitating entry of new, third-party payment providers including through sharing of account data (which is echoed in a UK Open Banking initiative) as well as raising the regulatory bar on cybersecurity.

The second is EU-wide passporting that enables payments firms authorised in the UK to sell their products and services across the 31 countries of the EU without the need for further licences and largely on the basis of UK law. The outcome of the Brexit negotiations for the UK's withdrawal from the EU may change this, but for the time being it is a clear benefit for UK firms. While federal banks in the U.S. have a similar ability to operate nation-wide on a single set of permissions, no equivalent for non-banks in the U.S. yet exists and they accordingly typically either need to rely on a third party's licence(s) or seek their licences in each U.S. State.

Even in the UK, of course, regulation is still sometimes a potential barrier to innovation, which may explain why even there payments innovation has not made greater inroads. The impact of the EU interchange fee regulation on the UK,[10] for example, has given rise to debate. In limiting the fees charged by issuers of various payment systems, regulators may ultimately benefit consumers through lower prices (assuming merchants pass on the savings or that they get passed on to merchants). However, they may also indirectly reduce incentives for payment service providers to innovate by potentially limiting scheme incentives for development and launch of new products.

Time for Realism

Perhaps the most significant factor is the sheer size and complexity of the finance sector, which marks it out from others. There continue to be some who anticipate an "Uber moment" in financial services, with disruption similar to that overtaking taxi drivers.[11] However, growth of alternative payments such as smart phone spending has been slow in comparison (Figure 7).

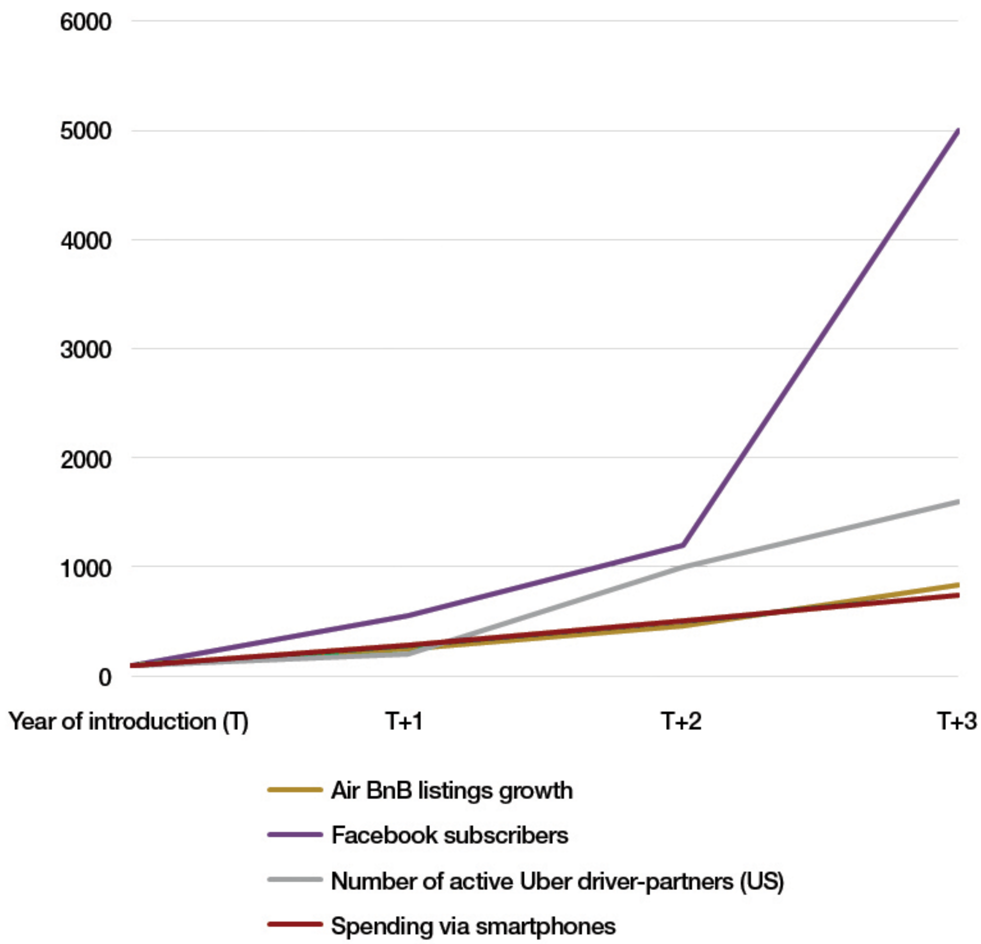

Figure 7. Growth of innovative businesses.

As others have pointed out, however, the comparison is simplistic.[12] No single market disruptor has achieved such rapid growth for any number of reasons, including the following.

First, financial services is, rightly, among the most heavily regulated industries, creating a challenge for new players. Second, the established players – the banks – have not been caught unaware by innovative start-ups, as other industries perhaps have; they have been preparing and rolling out their digital services for years – albeit they may often face regulatory or other obstacles to progress.

Secondly, the market structure and incentives in financial services are different, with banks, start-ups and telecom companies all having a strong interest in retaining their users rather than simply viewing them as recipients of one-off commoditised services as in some other industries. There is no incentive for them to coalesce around a single payment technology, with each pushing their own.

This has inevitably created a fragmented market, and this itself works against the uptake of alternative payments: after a reduced risk of fraud, the most important feature consumers look for in an alternative payments solution is the ability to use the same method in any situation (Figure 6).

Perspectives from the UK and U.S.

We have a fantastic array of new payment methods at our fingertips, whereas once the options were limited to cash, cheques, card, and bank transfer. You can leave your payment card at home, and pay contactless through Andoid, Samsung, or Apple Pay; if you shop online, you may use PayPal, paysafecard, or Zapp instead of Mastercard or Visa; if you want an alternative to your mobile banking app, perhaps you'll use Money Dashboard or Mint; and for electronic payments that are just like paying by cash – instant and anonymous – bitcoin and other emerging digital currencies are an option.

Nonetheless, as this paper shows, there are still challenges to the success and adoption of emerging payment methods. They include a need to continue building customer trust in new technologies, and a regulatory framework that is having to respond fast to the changing dynamics of the market and emerging cybersecurity threats in a way that, hopefully, will not have a detrimental effect on the user experience or impose unnecessary barriers to new entrants.

The UK and other EU bodies have been proactive in reshaping regulation (for example, through a second EU Payment Services Directive due to come into effect in 2018) in a way that is intended to foster innovation and facilitate the entrance of new players, while guaranteeing a high level of payments security.

It remains, though, to be seen whether regulators are able to implement the new regime in a way that can satisfactorily accommodate the technical challenges facing many providers.

Ben Regnard-Weinrabe
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The challenge for payment service providers is to create reasons for consumers to use new methods and technologies to make payments. As things stand, consumers see little value in changing how they make payments in most environments apart from novelty value and the gratification of being an early adopter.

Obviously contactless cards can save time compared to chip and pin credit cards, and the benefits of all methods over cash and cheques are clear, but consumers do not yet see the benefits of more advanced forms of payment. Other rapidly adopted new technologies – Airbnb, Uber, and Spotify for example – have obvious advantages in cost, convenience, or human engagement. Payment methods don't appear to have enough of the same advantages.

The current U.S. regulatory framework is more oppressive for non-bank entrants into financial services, and there is still some old-fashioned thinking. Currently banks and credit card companies still use direct mail as the main method of contact.

Entrepreneurs here need to line up business relationships with banks and technology innovators, and banks need to be more aware of the coming challenges if they choose to remain isolated.

The election of Donald Trump to the White House will create near term uncertainty about the direction of regulatory policy. Candidate Trump provided few specifics about his regulatory priorities for financial services, but the working hypothesis is that a Trump Administration will be inclined to reduce rather than increase the regulatory load. How that will impact different types of businesses – particularly banks v. non-banks – will remain to be seen.

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Change in Time

Transformational change will come to the industry. Contactless cards in the UK and, perhaps even more so, PayPal in both the UK and U.S. have already seen a breakthrough to become mainstream if not yet dominant in their respective settings. And even these are unlikely to be the final word, with scope for peer-to-peer or shared ledger, rather than bank-to-bank models, to cut transaction costs and gain market share.

Continued growth in the use of existing or new payment models can also be expected, since adoption of alternative payments is generally higher among the young (Figure 8). As growth continues, the possibility of reaching a tipping point increases, with a dominant player or players emerging. This may leave businesses with little choice but to accept the favoured technologies.

As it is, the Cebr forecasts the share of businesses accepting alternative payments to rise steadily over the next six to eight years, ultimately reaching 82% in the U.S. and 74% in the UK (Figure 9).

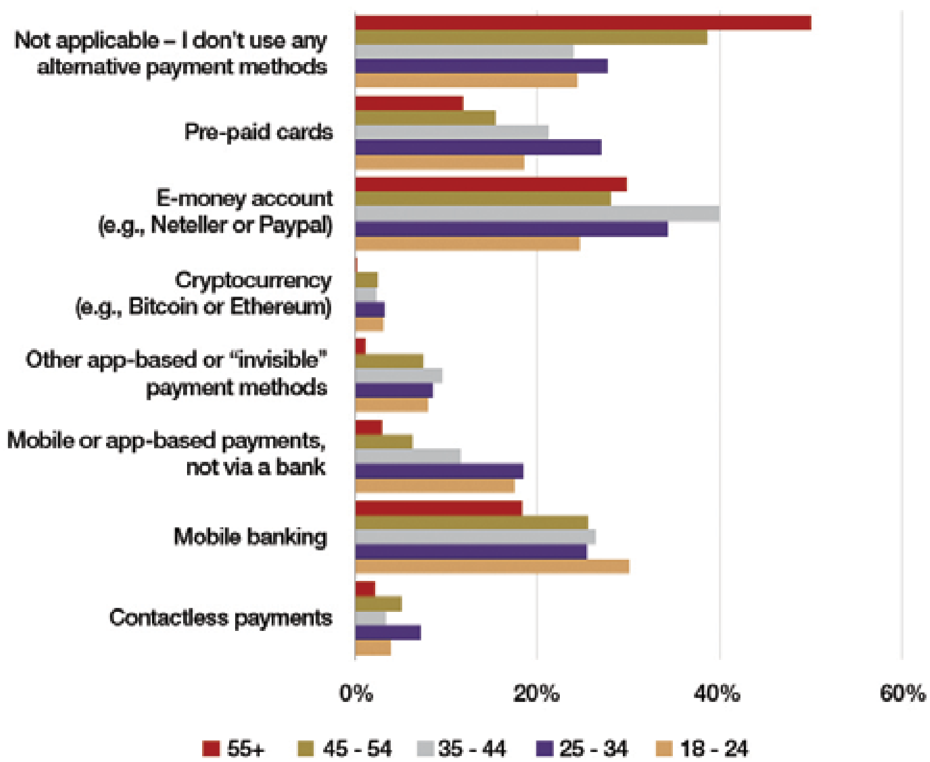

Figure 8. Share of consumers using an alternative payment method, by age, U.S.

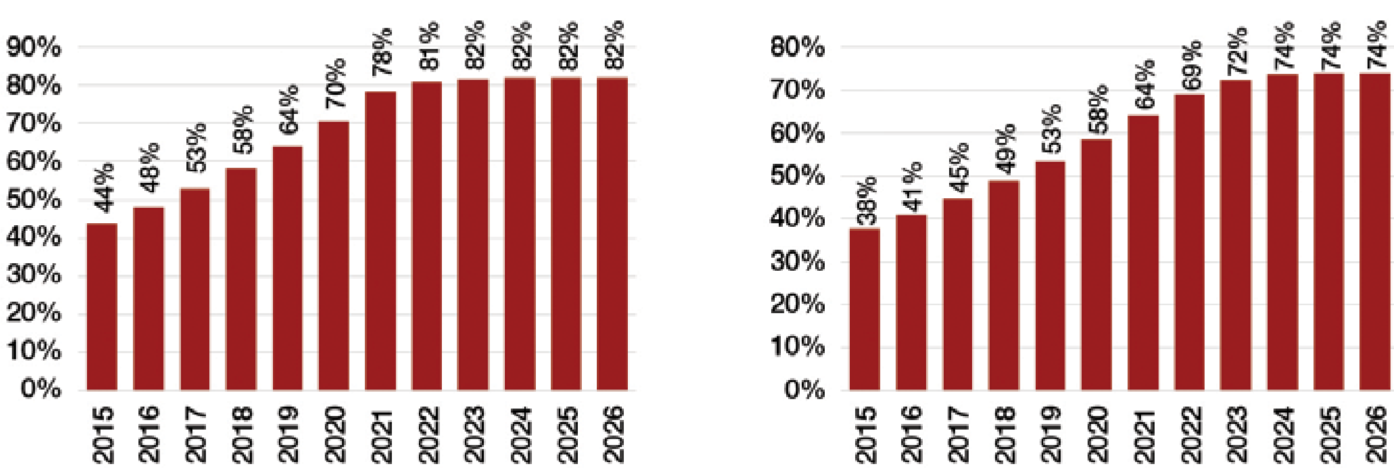

Figure 9. Share of businesses accepting alternative payments, U.S. (left) and UK. (right)

These trends are, of course, mutually reinforcing: as more businesses accept alternative payments, individuals are more likely to be able to use the same payment method in any situation, making them more enthusiastic about the technology; and, as more consumers use a payment method, more businesses will be inclined to accept it.

Regulation can help as well as hinder progress.

First, building on European Banking Authority internet security guidelines already applicable across much of the EU, requirements under PSD2 for two-factor authentication (e.g., a PIN number plus a one time password sent by text, rather than the single factor of a PIN, for example) should help allay users' security fears.

More importantly, encouraging innovation and new players into the payments market is a central aim of PSD2. It will compel banks (on account holders' request) to grant direct access to their accounts for third-party providers of payment initiation services as an alternative to use of a debit or credit card for online purchases. With an individual customer's permission, third-party providers will also be able to consolidate a single view and allow the customer to manage all their accounts across different institutions in one place.

Since national legislatures have to implement PSD2 in 2018 – i.e., before the likely completion of Brexit negotiations – we would expect it to come into force in the UK, and a similar "Open Banking" initiative has already been launched in the UK.

In the U.S., meanwhile, challengers continue to lobby the government to reduce barriers to competition. The recent fintech summit at the White House, as well as various other initiatives, suggest there is at least a desire to do so.[13] Even as it is, it is hard to argue payment product launches have been deterred: the U.S. has traditionally easily outstripped others in the number of launches it sees (Figure 10).

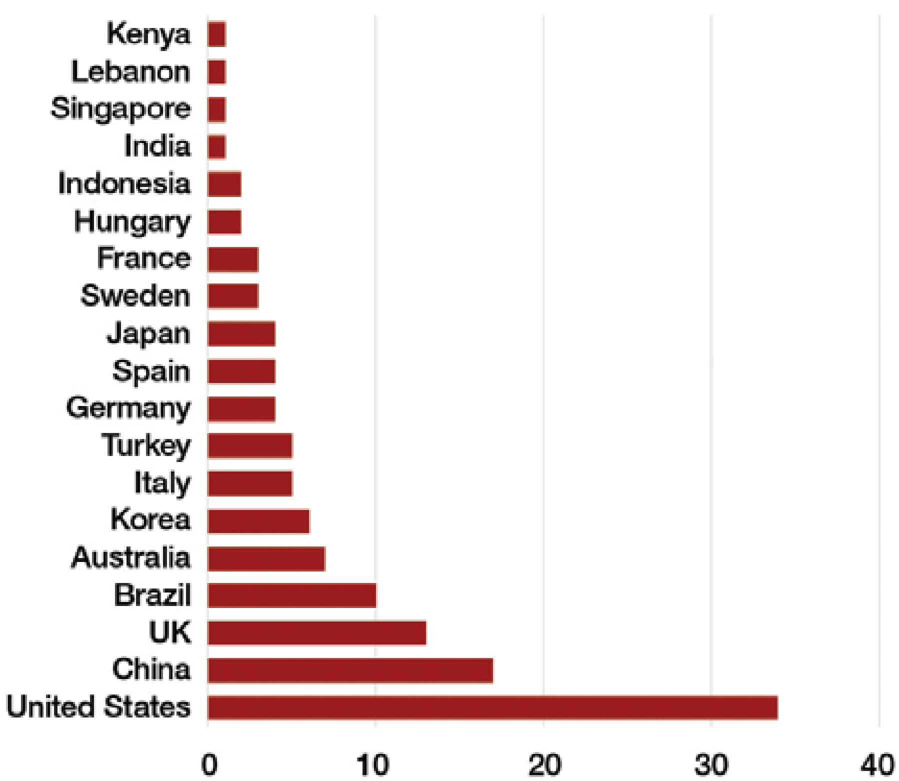

Figure 10. Payment product launches, 2010. Source: McKinsey on Payments, report number 16

Indeed, the range of payment solutions currently available shows that it is not innovation that is lacking, but consumer acceptance. That will come sooner or later, either for some existing solution or something that has not yet been launched. The only thing that remains to be seen, therefore, is which technologies come to dominate and who benefits – the established banks and other providers or fintech start-ups.

To Learn More

To discuss any of these findings and how they may impact your business in more detail, please contact one of our Payment Systems partners:

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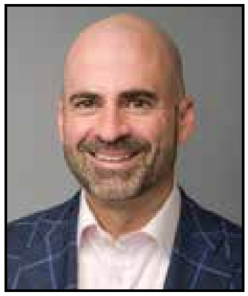

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1 http://www.bbc.co.uk/news/business-32778196
2 http://news.sky.com/story/contactless-card-use-overtakes-cheque-books-10561047
3 http://news.sky.com/story/1487879/payment-trends-mark-slow-death-of-cash
4 https://www.frbservices.org/files/communications/pdf/general/2013_fed_res_paymt_study_summary_rpt.pdf
5 http://www.paymentsuk.org.uk/sites/default/files/The%20Future%20of%20Payments%20Aug%2015_0.pdf
6 As of February 2016: http://www.theukcardsassociation.org.uk/contactless_contactless_statistics/index.asp
7 Javelin Strategy & Research Merchant Survey
8 The UK Cards Association
9 https://www.the-fca.org.uk/firms/project-innovate-innovation-hub/regulatory-sandbox
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