



A special thank you to:







And to the more than 100 organisations who contributed to this report, including:























































































































































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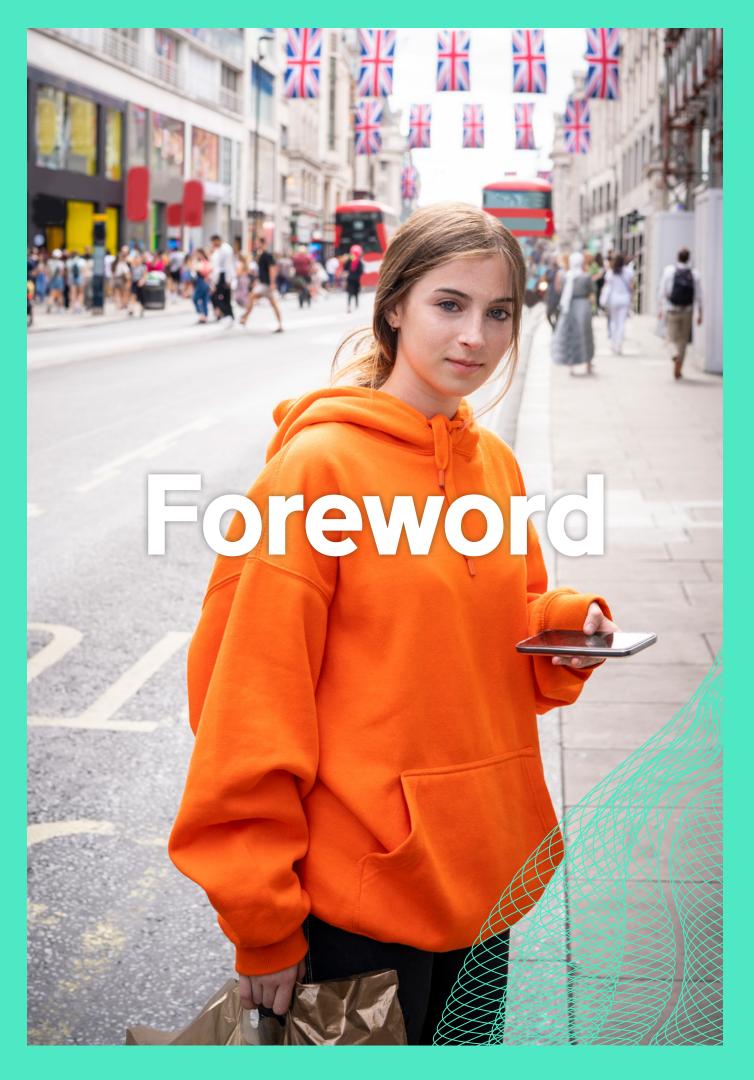




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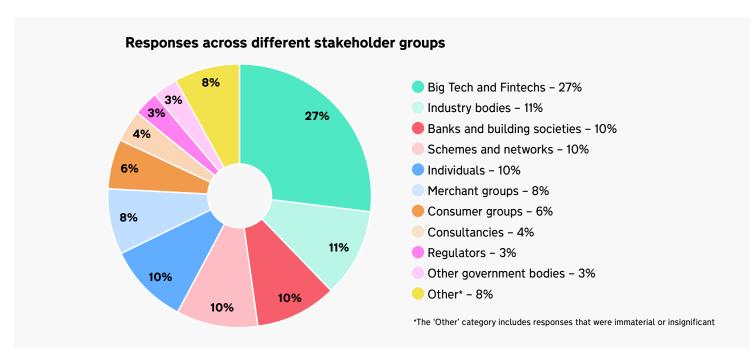
Key international insights that emerged though this work



Foreword

This review was initiated on July 10th of this year and over the last three months, I and a small team have consulted with c. 150 people. We have conducted roundtables and listened to views from large and small financial institutions, Fintechs, Big Tech, Telcos, Consumer Groups, Regulators, Retailers, Merchants and Trade Associations. Additionally, we received over 60 submissions to our Call for Input.³

I am extremely grateful for the open and enthusiastic way that firms and individuals have engaged with this process, and I would like to thank all those listed on the preceding page for their contribution. We have also run some limited primary research and conducted focus groups to ensure that we have rigorously considered the consumer view throughout. I would like to pay personal thanks to key contributors, namely Accenture, Baringa and to EY in particular for their insightful support throughout this review.



¹ Financial Technology firms

² Telecommunication firms

³ Future of Payments Review - Call for Input

Our terms of reference⁴ ask three questions;

- What are the most important consumer retail payment journeys both today and in the next 5 years?
- For these journeys today, how does the UK consumer experience for individuals and businesses compare vs other leading countries?
- Looking at the in-flight plans and initiatives across the payments landscape, how likely are they to deliver world leading payment journeys for UK consumers?

In the time available, we have sought to provide a high-level, strategic view of the digital payments landscape. We firmly believe that cash can coexist with digital payments and over a third of submissions to our Call for Input highlighted cash as a relevant issue. However, we did not want to duplicate the work already underway on access to cash. Likewise, we have chosen not to focus on other topical issues which are extensively covered elsewhere, including cryptoassets, large corporate payments, Buy Now Pay Later (BNPL) and international payments. In terms of in-flight initiatives, we have not attempted to analyse each one, but rather look at the big picture of what they add up to. Throughout I have attempted to listen to all the views – even when contradictory to each other, be led by the data, avoid payments gobbledegook and be clear where I am expressing my own judgement.

Through my executive career I have experienced the importance of payments from various perspectives including; as founder of a start-up in the dot.com boom, a director at the retailer Currys, CEO of BT's Openreach, and finally at both HSBC UK and Nationwide Building Society as CEO. If capital and liquidity are the heart and lungs of the financial ecosystem, payments are the central nervous system. A world class payments ecosystem is essential – not just to the economy – but to the lives of every member of our society. It has been a great privilege to lead this work, and I very much hope that it will make a meaningful contribution to the further enhancement of our current strong position today in the UK.

Joe Garner – www.joegarner.co.uk

 $^{{\}color{red} 4 \quad \quad } \underline{\text{https://www.gov.uk/government/publications/future-of-payments-review-2023/terms-of-reference-future-of-payments-review}$



Executive summary

A world leading payments environment is vital for a world leading economy and a healthy society. The economy cannot grow without the payments infrastructure to support it. The ability to send and receive money must be resilient, reliable, scalable, adaptable, secure, trusted, fast and convenient for trade to thrive at every level of the economy. And as consumers, each of us relies on the above every day to shop, travel and work in the way that we do today.

"The UK is in a good place today, but without a National Payments Vision and Strategy, we cannot be confident in the future."

Overall, we conclude that the UK payments landscape is in a good position today with many positives. First and foremost, the payments environment has a long track record of security, reliability, and resilience. The UK has historically been a leader on innovation in areas such as real time payments and Open Banking. Our terms of reference ask the question "Looking at the in-flight plans and initiatives across the payments landscape, how likely are they to deliver world leading payment journeys for UK consumers?"

We found many well intended in-flight initiatives which all make sense in isolation, but in the course of our work, we could not find a clear agreed vision of what they are aiming to achieve in aggregate. Without question the strongest piece of feedback we received through this review is that the UK's payments landscape lacks vision and clarity of priorities. This lack of vision and strategy means that it is hard to have high confidence in achieving a coherent outcome in 5-10 years' time.

Our strongest recommendation is therefore that the Government develops a national payments vision and strategy – particularly considering; i) the criticality of payments to consumers and the economy, ii) the many billions of pounds being invested and iii) the highly interdependent nature of the payments arena.

⁵ https://www.openbanking.org.uk/what-is-open-banking/

To note, Open Banking is one option for enabling real-time account-to-account transfers in the UK. This review has considered in detail opportunities for exploiting Open Banking, given the strength of feedback received through our stakeholder engagement. However we acknowledge that there are multiple account-to-account solutions in existence, and support continued innovation across all payment mechanisms to help ensure the UK's position as a world leader in this space.



This work should have a primary aim of simplifying the landscape over time. A healthy payments ecosystem is essential to a healthy competitive economy. With a clear vision for the future, payments can help unlock GDP growth through fostering small business growth, frictionless trade, and Fintech innovation.

"The UK consumer benefits from a world-leading payments experience today – but it could be even better."

Turning to the specific payments journeys we were asked to consider; the picture is mixed. On the positive, the UK has a relatively mature banking, cards and digital wallets environment, and a well-developed regulatory environment. Taken together this means that from a consumer point of view, the UK holds a leading position for the purchase experience of goods and services – both in-person and online. We make some recommendations regarding Strong Customer Authentication (SCA) requirements that we believe can make things even smoother for consumers at the point of purchase.

We are supportive of the work to preserve access to cash, and are concerned that digital exclusion could be adding to the financial exclusion problem. We are asking that these issues are closely monitored.

On the negative, there are two significant issues in the retail space that need to be addressed. First, the consumer-to-consumer bank transfer process is clunky (relative to international comparators) with the need to enter account numbers and sort codes. This needs to be improved in the coming years. Second, many merchants and retailers are frustrated by the costs of taking card payments, and the lack of viable alternatives.

"Open Banking can help improve both person-to-person bank transfers and provide an alternative to the card schemes, but only if the lack of consumer protection and commercial arrangements are addressed."

Firms and Fintechs are starting to innovate and use Open Banking capabilities to improve the bank transfer experience for consumers. Our work leads us to believe that – with some adjustments – Open Banking could help improve the consumer-to-consumer process and (in time) provide an alternative to the card schemes for retailers. However, there is currently no consumer dispute resolution process for Open Banking transactions, and we believe this will be a barrier to adoption if not addressed. Likewise, the current commercial arrangements do not create the conditions for Open Banking to thrive in a healthy way, with costs and benefits misaligned. If these issues can be addressed, we are optimistic about the scope for innovation and believe that the UK can use Open Banking to capture a world leading position once again in these areas.

"Even ahead of a National Payments Vision and Strategy, there are some actions that can be taken to declutter the environment and accelerate progress."

The UK has a well-developed payments environment, but it is also very complex with multiple industry and regulatory bodies. We make some suggestions on how to improve alignment and prioritisation with the intention of freeing up more space for innovation. We are advocating that on the high-profile issue of frauds and scams, we increase the focus on preventing the crime in the first instance, and closely assess the impact of the new Authorised Push Payment (APP) fraud reimbursement rules.⁶

"A technology inflection point?"

Finally, throughout this work we have observed how technology in general, and Big Tech in particular, are redefining not just payments but financial services in the process. In 1994 Bill Gates predicted that technology firms will 'bypass' banks. The extremely rapid adoption of digital wallets (e.g. Apple and Google Pay) may indicate that we are at an inflection point. We concluded that this presents as much opportunity as threat and encourage an open and collaborative dialogue in the best interests of consumers, businesses, and the wider economy.

In summary, the UK has the opportunity to create a world leading payments environment long into the future. But to do this we need to cut through the complexity and work towards a new shared vision consistently over the long term.

 $[\]frac{\text{https://www.psr.org.uk/news-and-updates/latest-news/news/psr-confirms-new-requirements-for-app-fraud-reimbursement/}$

Summary of recommendations



The primary recommendation is that the Government develops a National Payments Vision and Strategy to bring clarity to its future desired outcomes for UK payments.

A key aim of this strategy is to simplify the landscape. Although total payments have grown slowly over time to £47.5bn last year, there have been rapid shifts – most notably from cash to debit cards. Additionally, payments through the Faster Payments System have also grown as they have progressively also replaced cheques. These trends are forecast to continue – albeit at a more moderate rate – over the coming years.



Consumer Experience and opportunities to improve

Recommendations 1 & 2 are concerned with improving the consumer shopping experience by moving SCA requirements away from detailed technical standards for the Financial Conduct Authority (FCA) to supervise via an outcomes-based approach. This can improve the shopping experience and further reduce fraud.

Recommendation 3 asks that HM Treasury and the FCA regularly assess whether digital exclusion is leading to financial exclusion. The position is evolving rapidly and needs to be closely monitored.



Open Banking and opportunities to exploit more fully

Recommendation 4 is that consumer protection on payments made via Open Banking is enhanced with a minimum form of dispute resolution. This will create the trust and security that consumers need to adopt Open Banking solutions.

Recommendation 5 is that Open Banking is leveraged to improve the person-to-person bank transfer payments journey. We believe that Open Banking journeys can rival the best in the world – if we focus on them.

Recommendation 6 is that an Open Banking alternative payment journey is developed to give retailers choice beyond card schemes. In addition, that the Payment Systems Regulator (PSR) complete their work investigating card scheme fees. If choice can be created, we believe that merchant dissatisfaction will decrease.

Recommendation 7 is that the Government and Joint Regulatory Oversight Committee (JROC) prioritise agreement of a commercial model for Open Banking so that there is scope to invest in both infrastructure and consumer protection. Without sustainable financials, it is hard to see that Open Banking can thrive over the long term.



Improving regulatory oversight and alignment would allow for more efficiency and innovation

Recommendation 8 is that the PSR conducts a review of the new APP fraud rules after 12 months of implementation and we are suggesting that the Government set a more ambitious fraud crime reduction target beyond 2024. The emphasis should be to prevent the crime in the first place.

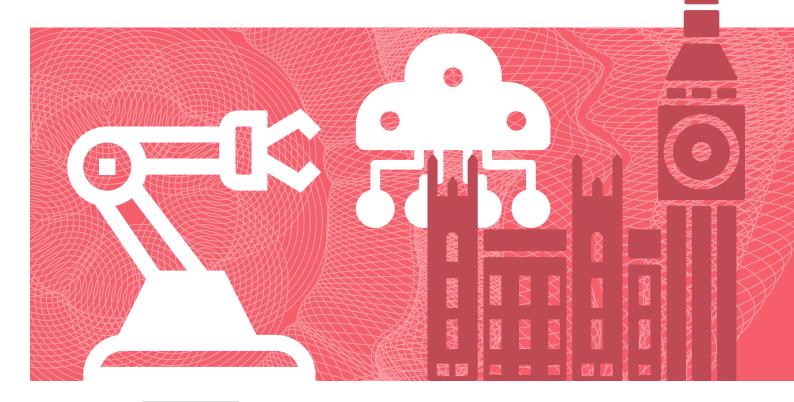
Recommendation 9 is that HM Treasury and the regulators review whether the way some current regulatory requirements are applied to Fintechs is clear and appropriate. If we can reduce the complexity for smaller firms, they will grow more rapidly.

Recommendation 10 is that HM Treasury and the regulators take a variety of actions to drive closer alignment of regulatory activity, including through updated remit letters, enhancing the regulators' existing Memorandum of Understanding, ensuring cross-pollination at Board level and working to reduce the regulatory initiatives impacting firms by an aspirational ambition of 10%. The intention is to free up more capacity for innovation.

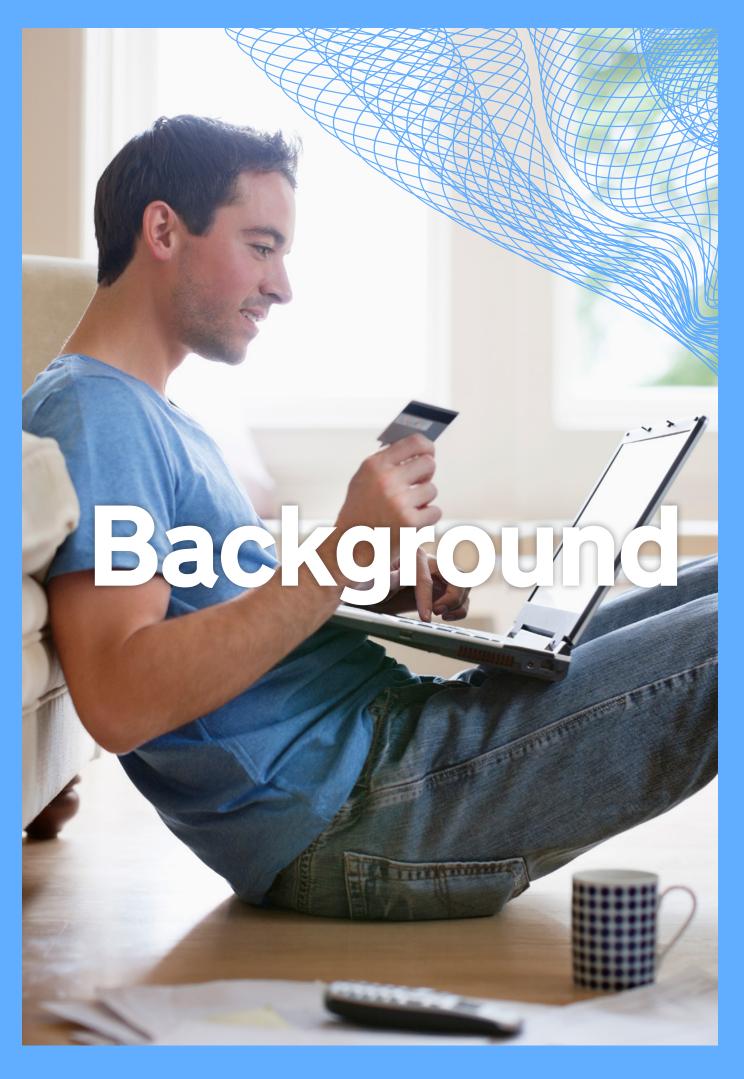
For consideration

Through this report, as well as recommendations, we call out a number of thoughts for consideration. The strongest theme emerging under this heading is the nature of Government engagement with Big Tech.

- Across Government there are a number of high priority issues relating to Big Tech – national security, online harms, artificial intelligence as well as financial services.
- The impression formed through researching this report is that Government engagement with Big Tech could be better coordinated.
- Multiple attempts to direct and regulate Big Tech may result in deteriorating relations or in extremis Big Tech stepping back from their strong positions in the UK.
- It feels like there is an opportunity to take a more coordinated approach more like the diplomatic approach to a country with an ambassador⁷ with the aim of agreeing mutually beneficial partnerships overall, rather than narrow transactional outcomes.



⁷ We note that the EU has opened what could be described as a Silicon Valley embassy to strengthen its digital diplomacy. US/Digital: EU opens new Office in San Francisco to reinforce its Digital Diplomacy | EEAS (europa.eu)



Background

Throughout human history, the way that we pay for goods and services has been becoming progressively less tangible and more remote. Early human history was a barter economy. Then, according to the UK Cash Supply Alliance⁸, coins started appearing in the world around 600 BC, and the Romans brought them to Britain around the first century AD. The Royal Mint was founded in 886 and is the 10th oldest company on the planet. Cheques appeared around 1660 - issued by Goldsmith bankers for making loans. Banknotes - exchangeable for the equivalent value in gold - were produced in the UK from the mid-18th century. Wire transfers became possible around 1871. Around 1960, wages started to be paid direct into bank accounts, and the first ATM was introduced in 1967. The rate of change has accelerated rapidly over recent decades, with credit cards, debit cards, contactless, online banking, mobile banking and digital wallets. With each wave of innovation, money is less physical, and increasingly has simply become a digitised number. As our relationship with money changes, the way that we authorise, understand and control our payments have changed at incredible pace over recent years. In 2022, 86% of payment transactions in the UK were digital, compared to 44% in 2012.9







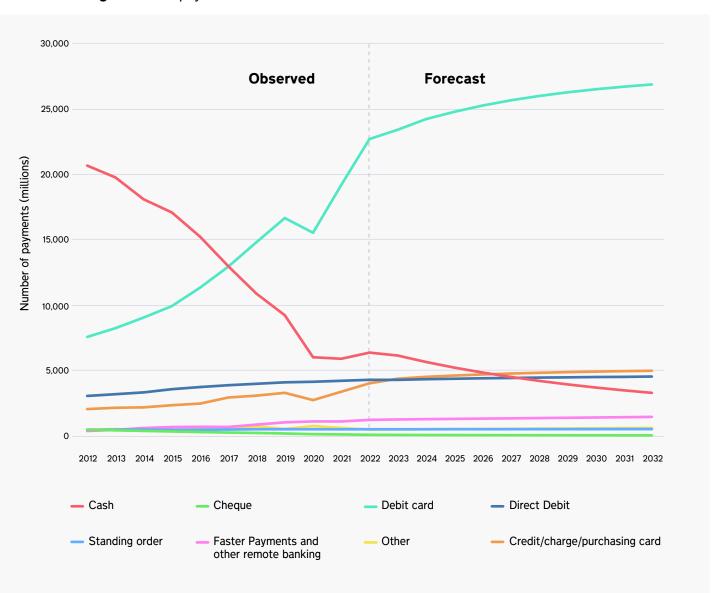
Bank of England, London, Victorian 19th Century

⁸ UK Cash Supply Alliance submission to the FPR Call for Input

 $^{{\}bf 9} \quad \text{All consumer payments except cash and cheque transactions.} \\ \underline{\text{https://www.ukfinance.org.uk/system/files/2023-09/UK%20Finance%20Payment%20Markets%20Report%20203%20Summary.} \\ \underline{\text{pdf}}$

Although total payments have grown slowly over time to £47.5bn last year,¹⁰ there have been rapid shifts – most notably from cash to debit cards. Additionally, payments through the Faster Payments System have also grown as they have progressively also replaced cheques. These trends are forecast to continue – albeit at a more moderate rate – over the coming years.

Figure 1 - UK payment volumes (millions) 2012 to 2032¹¹



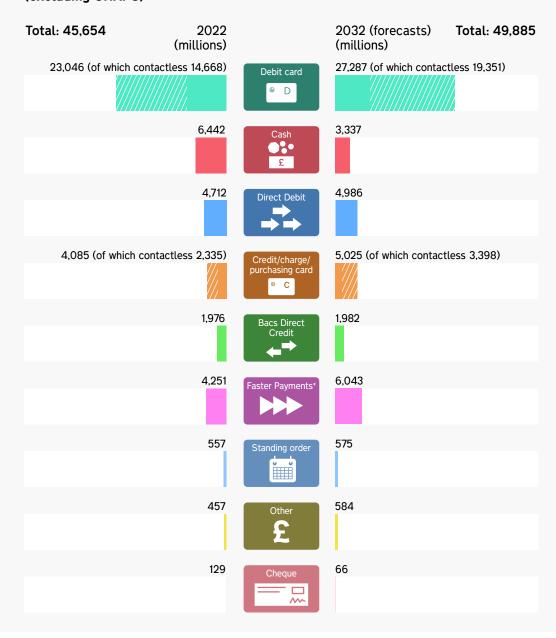
¹⁰ https://www.ukfinance.org.uk/system/files/2023-09/UK%20Finance%20Payment%20 Markets%20Report%202023%20Summary.pdf

¹¹ Ibid

When looking at all the ways that people make payments today in the UK, debit cards are by far the most popular in terms of both volume and value.

Figure 2 - Share of consumer payments by volume and value, 2022¹²

Total payment volumes in the UK (millions) 2022 vs 2032 forecasts (excluding CHAPS) $\,$



https://www.ukfinance.org.uk/system/files/2023-09/UK%20Finance%20Payment%20 Markets%20Report%202023%20Summary.pdf

Aligned with our terms of reference, we have chosen to focus on how people send money to other people (person-to-person), and how people pay for goods and services within the UK. We have been directed to focus on the retail market,¹³ and so have looked at how people pay for goods and services at the point of sale instore (circa £367bn) and ecommerce (circa £127bn).¹⁴ Additionally, we have focussed on person-to-person payments which are very important for the workings of our society. Cash, corporates, crypto and the larger end of payments (CHAPS¹⁵) are out of scope, although we reference where relevant. We reviewed a variety of data points which indicate that use of BNPL varies between 8-17% of ecommerce purchases – depending on the context.¹⁶ However, we have chosen not to look closely at BNPL since this was recently subject of a separate review and actions are in train.¹⁷

Consumers quote a number of benefit areas that they appreciate when making a payment – but the critical needs of reliability and security are assumed. When asked, consumers favour a method that they are familiar with – presumably because they trust it and assume it will work. Additionally, consumers will often quote convenience and speed as key benefits. However, when thinking about building, running and regulating infrastructure, it is vital to appreciate that operational resilience and reliability are more important than anything else. Payments simply must work – all the time. Beyond this, speed, security, control, consumer protection and, increasingly, privacy of data are important. There is some tension between these benefit areas, and the countries that score well on speed and ease also demonstrate the highest fraud rates. (e.g. India 44.6%, Nigeria 40.4%, Saudi Arabia 33.2%, Thailand 25.7%, and Singapore, where 25.3% of the population reported being a victim of fraud in the last four years).¹⁸

¹³ For note, we are aware some higher value markets are out of scope – for example, significant consumer payments flows are salary payments to consumers, and bill payments from consumers via direct debit. Payments to consumers for example, are over £1.2tn/year. Other large volumes of payments include payments from Government, which total up to c.1bn, including DWP, HMRC and supplier payments.

¹⁴ www.statista.com

¹⁵ Clearing House Automated Payment System

¹⁶ e.g. The Global Payments Report 2023, FIS, 2023.

¹⁷ https://www.fca.org.uk/publication/corporate/woolard-review-report.pdf

¹⁸ ACI Worldwide, 'Prime-Time-for-Real-Time-Report' 2023

Figure 3 – Most important factors when choosing payment methods in the UK, 2021¹⁹

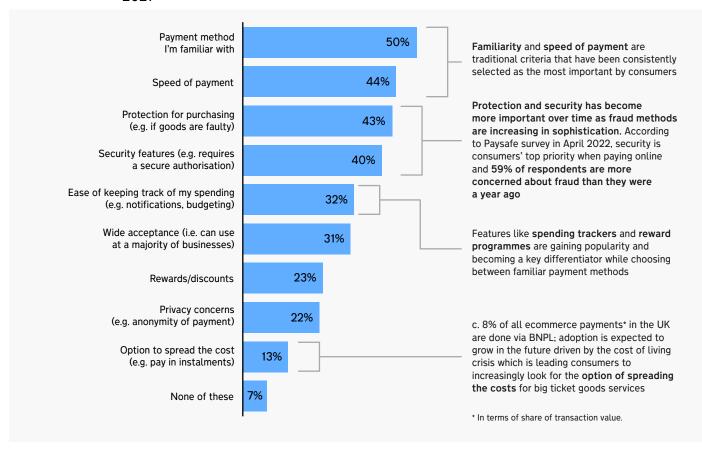
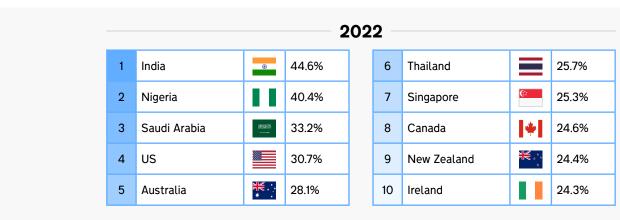
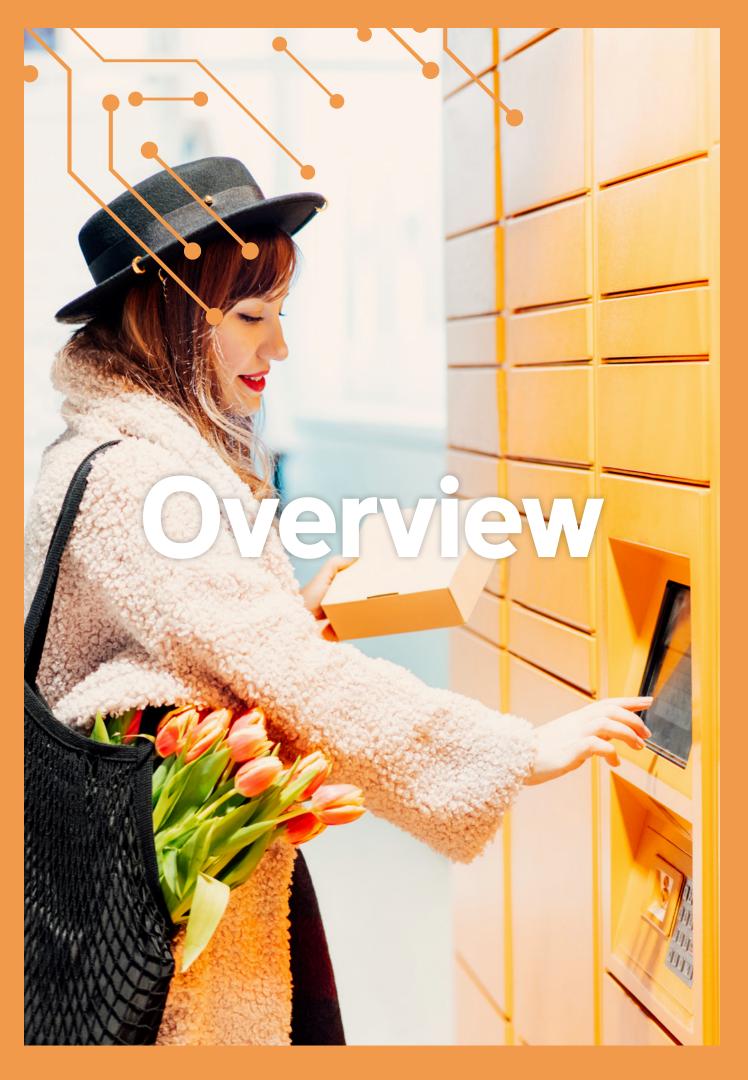


Figure 4 – % of the population who reported being a victim of fraud in the past 4 years²⁰



¹⁹ Thanks to EY for producing this analysis, using FIS, Mintel and PaySafe data

²⁰ ACI worldwide: Prime time for Real Time report 2023



Overview

A healthy economy relies on a thriving payments ecosystem. Payments facilitate trade, commerce and every aspect of the economy. With over £100 trillion²¹ flowing through the existing UK payments infrastructure, for the UK to have a leading economic growth, we need a leading payments infrastructure. Nations with thriving retail growth, ecommerce and flourishing Fintech innovation also have a world class payments infrastructure. The UK is in that category today.

What is the future of payments?

In the future, digital payments will continue to become easier, less hassle and increasingly disappear from our lives. There is a long-term trend for payments to become more convenient, simpler and less hassle. As we moved from paper money to cards, and now increasingly payments by mobile, the amount of human intervention required to make a payment is less and less. To illustrate, once upon a time, we had to actively handle every transaction in our lives: from receiving our wages, paying our utility bills or reaching into our pocket to pay a taxi driver at the end of a journey. Over recent years, many recurring payments have become automated via direct debits, standing orders and more recently subscription models such as Netflix. Now, we are beginning to see spontaneous transactions becoming embedded - in the way that you now simply get out of an Uber without the need to transact - the payment happens in the background. As Artificial Intelligence (AI) and payments technology advances, more and more of the routine payments in our lives will become less visible to us as they become embedded in the wider customer journey. To illustrate, WorldPay recently surveyed senior executives in financial services and found that 44% will invest significantly in developing embedded finance products within the next 12 months.²² Additionally, existing payments methods will become smoother and easier to operate.

²¹ UK Finance Payments Report 2023

²² Worldpay from FIS submission to FPR Call for Input

The rapid adoption of digital wallets may also indicate that Big Tech companies are beginning to show the potential to make banking even more convenient to consumers. For example, Apple are experimenting with using consuming Open Banking APIs – enabling them to provide the consumer with real time current account information at the point of purchase through their iPhone.²³ While still embryonic, the rate of change is rapid and we predict that Big Tech's role in consumer payments will continue to rise, and that they will increasingly deliver slick customer experiences that in some situations will obsolete consumers' need to interact with their bank.

The above shifts represent a transformational opportunity but will also have profound implications for the security, resilience, privacy, consumer protection, regulation, the economics of payments and indeed the wider economy. They also raise important questions of how digitisation changes our ability to control our spending as well as access to digital payments for vulnerable consumers. If the UK is to thrive in a competitive global economy, it is important that UK consumers and businesses have access to world leading payment solutions in a secure and reliable environment.

Where do we stand today in the UK and how do we compare internationally?

The UK is in a relatively good position today but needs to make progress in order to stay ahead. We have focussed on three key payment journeys:

- i) how do people pay for goods and services in person?
- ii) how do people pay online via ecommerce? and;
- iii) how do people transfer money person-to-person in the UK?

 The UK has high digital adoption, some leading capabilities and a highly and well-regulated environment. That said, there are areas where the UK will progressively fall behind if action is not taken in the near term.

 $^{{\}color{blue} {\bf 23}} \quad \underline{\text{https://www.finextra.com/newsarticle/43028/apple-soft-launches-uk-open-banking-integration-for-iphone-wallet} \\$



The good news

First, the UK has delivered a long-term strong track record of reliability, resilience and safety in the payments space. While consumers value speed, convenience and security, the fact that the system works is of primary importance. Therefore, resilience is the most important aspect of a payments ecosystem, and the UK has traditionally performed well on this attribute.

Second, in terms of paying for goods and services at the point of sale, the UK consumer benefits from a very smooth and secure experience. The primary reason for this is the very high usage and acceptance of contactless payments. Contactless is fast, easy, secure and contains a good degree of consumer protection as it is embedded in the cards experience. The success of contactless is built on: a) very high banked population, b) very high debit card usage and c) very high merchant (and transport) acceptance.

Third, the UK consumer also benefits from a leading online and mobile purchasing experience. Again, the high card usage in the UK created a strong platform on which ecommerce could quickly and successfully grow. The user experience has been further enhanced by the advent of digital wallets. In the case of Apple and Google, these further enhance the customer experience and adoption is very high. Additionally, Paypal plays an important role in facilitating online shopping (and person-to-person transfers).

Taken together, and purely from a consumer point of view, the purchasing payment experience is one of the best in the world today, and there is a pipeline of innovation that looks like it will retain this position. The one area of obvious opportunity is around SCA. Many submissions to this review have highlighted that the very prescriptive implementation has reduced fraud but also harmed the shopping experience and led to lost sales and some frustrated consumers. Around 20% of written submissions to this review talked about SCA. Examples include a lack of flexibility around the contactless limit, the occasional PIN prompt and perhaps most significantly the need to enter extra credentials when shopping online which leads to basket abandonment.

Revisiting SCA now presents the opportunity to further improve both the point of sale and ecommerce experience. Both are limited to a degree by the need to comply with very detailed SCA technical standards which flow from the EU Payment Services Directive. We recommend that HM Treasury accelerate the process of taking advantage of the post-Brexit flexibility and that the FCA translate them into outcomes-based rules and/or guidance. If regulated on an outcomes basis this would increase convenience for consumers and reduce basket abandonment whilst balancing the primary need to manage risk. It will enable firms to compete on consumer experience while managing the fraud risk, rather than being restricted to all follow very prescriptive requirements.

Trouble brewing

The first issue is the degree of retailer and service providers (merchants) dissatisfaction with the cost of accepting card payments. Although there is some evidence that card costs to merchants have increased, we did not see data which indicates that costs are out of line with relevant international comparators. However, the UK is almost unique in that merchants have no established digital alternative to cards with which to take payments from consumers. In most other countries, there is a convenient alternative process which enables consumers to pay merchants at a lower cost than cards. We believe that this absence of choice is one of the key drivers of dissatisfaction among merchants. Currently, the only digital alternative to cards are bank transfer processes which, if accessed via online banking, involves entering a name, sort code and account number. This bank transfer process: a) is a bit clunky and typically takes over a minute to complete, b) lacks consumer purchase protection or dispute resolution process and c) does not have attractive commercials to scale.

Despite these failings, on the use of bank transfer process overall, the UK is currently in the top ten countries for frequency of use. Additionally, consumer perception is in line with the global average. However, the UK is slipping down the table as other geographies have implemented slicker bank transfer journeys – notably Sweden, Brazil and India have invested in a real time payment system (like UK Faster Payments) but have also deployed a better customer interface – there is no need to enter account details and sort codes. The interface is app-based and can be deployed by third parties, thereby boosting development and providing a solution for both person-to-person and retail (customer-to-business) journeys. Increasingly, there are countries where bank transfers are now possible in under 30 seconds. There are opportunities for the UK to catch up, but they involve choices.

Both the above issues (person-to-person payments and an alternative for merchants) can be addressed if the UK bank transfer payment process can be improved. While we considered a number of options to achieve this, the recommendation is that we focus on Open Banking as the primary solution. Open Banking is live in market and recent innovations indicate that it has the capability to improve the consumer journeys. From a technical perspective, Open Banking is capable of competing with some of the best bank transfer journeys around the world.

The financial services industry has already invested over £1.5bn²⁴ into building Open Banking. Open Banking enables third parties to view account information and initiate payments (with the customer's permission). Open Banking payments flow on the Faster Payments System rails. However, for adoption to scale, we need to: a) move the provision of Open Banking onto a sustainable commercial footing and b) embed a degree of consumer protection in the payment process. The current pricing approach means that the providers of regulated Open Banking services cannot charge for the service and hence it is unprofitable to provide. At the same time, it is free to consume. Unless the commercials are put on a more sustainable footing, the costs to the incumbent providers will rise significantly, and they will be unable to recoup these through charges. This will lead to some combination of a) deepening cross subsidy from other areas of their business, b) reluctance to invest in consumer protection on an unprofitable service and c) ongoing challenge to maintain regulatory performance standards as volumes rise and associated revenues do not.

By contrast, if the pricing model is changed so that firms can recover some part of their costs on a sustainable commercial basis, and invest in consumer protection, it will incentivise innovation and growth. Great care needs to be taken to ensure that any changes do not harm existing Fintech stability and investment, but it is believed that this can and should be navigated. With appropriate change to the pricing model, Open Banking can flourish and create a lower cost alternative to the cards schemes while improving the bank transfer journey to the benefit of consumers.

²⁴ The 2019 Future of Finance Report (chaired by Huw van Steenis) reported the cost of Open Banking as approximately £1.5bn. This figure has consequently grown in the last 4 years, with a number of other regulatory demands built into the Open Banking Roadmap. Annual running costs are in excess of £100m. Additionally, these figures relate only the CMA9; the overall costs of Open Banking to the industry will be higher.

Looking at the in-flight plans and initiatives across the payments landscape, how likely are they to deliver world leading payment journeys for UK consumers?

First, the UK payments landscape benefits from a highly regulated environment and we have received positive comments about the capability of regulators in comparison to other countries. However, the landscape is complex with more regulatory and industry bodies than comparable countries.

Second, the roadmap is congested with multiple major initiatives in flight, led from different parts of the landscape. The potentially highest impact initiatives over the coming years are Open Banking, New Payments Architecture (NPA) and (if introduced) Central Bank Digital Currency. UK Finance estimate that the total cost to deliver the Payments roadmap over the next 5 years is between £10bn and £20bn,²⁵ and that firms estimate that 91% of their allocated budgets are allocated to regulatory projects.²⁶

Third, we could not find any clear and agreed vision of the long-term future or desired 'end-state' of the payments landscape. This third point is the most material and in the words of one key contributor "more than any other part of financial services, payments suffers from the lack of a North Star." We received this feedback consistently across a broad base of contributors, for example in the words of the FCA Consumer Panel "The Panel is unconvinced that the plethora of disjointed initiatives currently underway will deliver the desired outcome – however well-intentioned each one might be."²⁷ In the absence of a clear vision or North Star for UK payments, it is hard to be confident that the long list of activity will add up to world leading consumer journeys over the long term. In the words of the Startup Coalition; "...the UK sprinted ahead but is starting to flag, whilst other markets, who started later and at a gentler pace, have begun to catch up."²⁸

²⁵ https://www.ukfinance.org.uk/system/files/2023-10/The%20future%20payments%20 delivery%20roadmap.pdf

²⁶ UK Finance submission to FPR Call for Input

^{27 &}lt;a href="https://www.fs-cp.org.uk/sites/default/files/20230905_final_fscp_response_-_hmt_future_of_payments_review_call_for_input.pdf">https://www.fs-cp.org.uk/sites/default/files/20230905_final_fscp_response_-_hmt_future_of_payments_review_call_for_input.pdf

²⁸ Startup Coalition's submission to FPR Call for Input

Additionally, as payments have become increasingly digital over recent decades, payments systems have become increasingly important to our national infrastructure. £107trn flowed through UK payments systems last year – equivalent to 44 times GDP.²⁹ The payments systems' importance recently featured in the Government's published National Risk Register at a higher risk likelihood than a pandemic, and the impact of a potential outage running to tens of billions of pounds.³⁰ Much good work is done at the operational resilience level (e.g., the Cross Market Operational Resilience Group (CMORG)³¹ and Financial Sector Cyber Collaboration Centre (FSCCC)³²) across Financial Services. While this work helps in terms of operational resilience, there is less focus or deep thought around future strategic resilience. Payments are central to the lives of every citizen of the UK, and hence the delivery of resilience and convenience today, and innovation and competitiveness in the future, is of national importance.

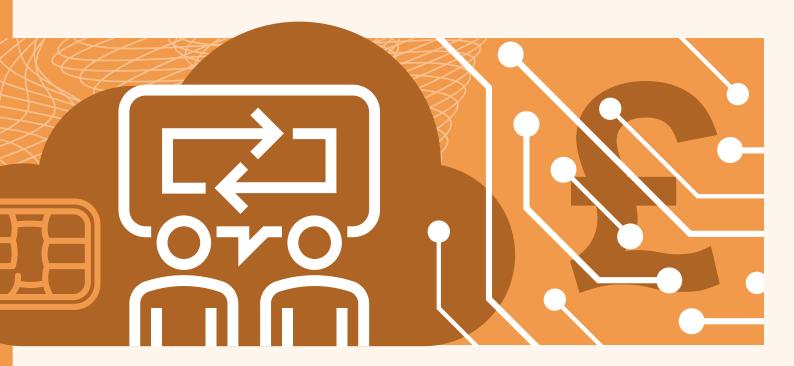


²⁹ Payment values from UK Payment Markets 2023, UK Finance, September 2023; GDP value from OBR (https://commonslibrary.parliament.uk/research-briefings/sn02783/)

 $[\]frac{\textbf{30}}{\textbf{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1175834/2023_NATIONAL_RISK_REGISTER_NRR.pdf}$

^{31 &}lt;a href="https://www.bankofengland.co.uk/financial-stability/operational-resilience-of-the-financial-sector">https://www.bankofengland.co.uk/financial-stability/operational-resilience-of-the-financial-sector

³² https://www.ncsc.gov.uk/information/financial-sector-cyber-collaboration-centre-fsccc





Primary recommendation

The top recommendation is that the Government develop a National Payments Vision and Strategy. Given that payments are essential to economic growth, constitute such a major part of the UK's important infrastructure, the rate of technological change and the volume of in-flight activity, it is recommended that Government provide more central, highest level forward-looking direction to the category.

A vision for payments is vital to underpin a globally competitive economy. This vision should include high level guidance on the relative priorities, so that both regulators and industry can become more aligned in their delivery. Importantly, this should sit above the existing work with a key objective to **simplify** the current plans and landscape.

A National Vision and Strategy should define clear guiding principles such as safety, simplification, coordination of initiatives, responsiveness (to innovation), inclusivity (to build broad alignment on priorities) and accountability to drive progress.

Sitting below these, a National Strategy can resolve and guide on key ambiguous areas such as:

- a) the importance of resilience and safety relative to customer convenience,
- b) the degree to which there should be competition 'for' the market at the infrastructure level relative to competition 'in' the market for the consumer experience,
- c) the degree to which our national payments infrastructure should be open internationally, relative to domestic alternatives,
- d) the roles of respective regulators and industry bodies,
- e) the allocation of responsibilities for tackling fraud and financial crime including high level principles of liability
- f) resolve questions of interoperability between key initiatives and
- g) take a position regarding Digital ID for payments.

Currently, some of these questions are being worked through between different interest groups which appears slow, inefficient and may deliver compromise rather than clarity of direction. Rather, the proposed approach would – as an outcome – settle on a smaller number of better aligned initiatives relative to today with clarity of direction around priorities and pace of change. As such, a National Payments Vision and Strategy can release GDP growth through increased competition and support a post-Brexit economy by facilitating the growth of cross-border trade.

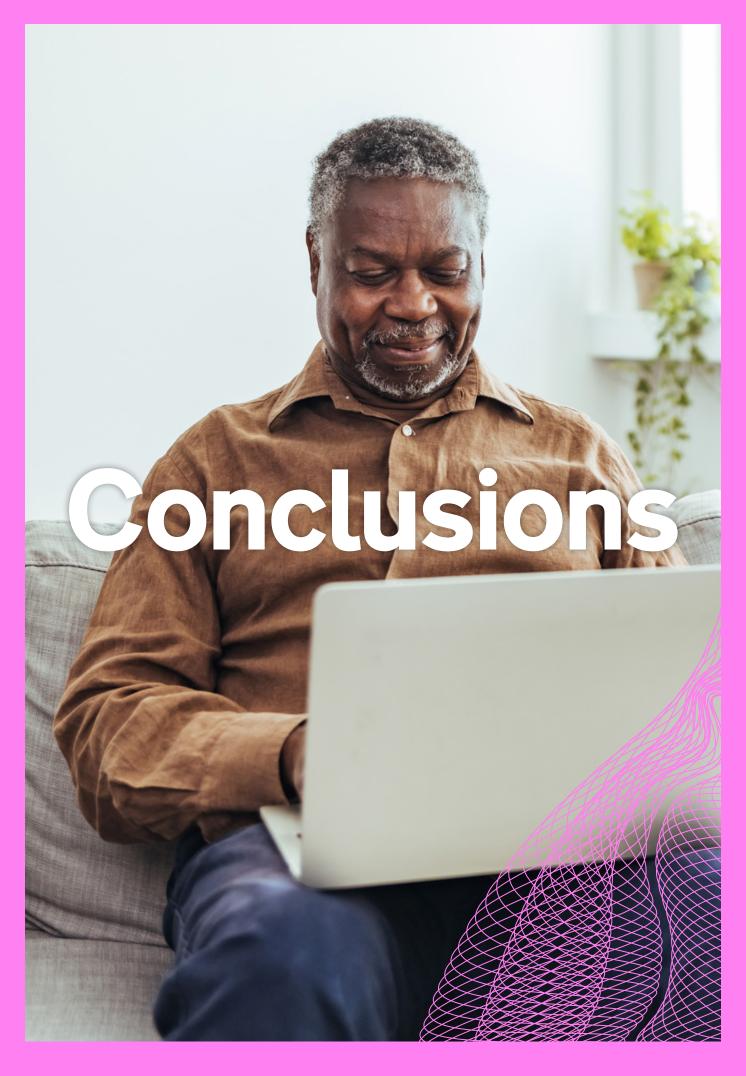
This is not the first time the need for a National Vision and Strategy for Payments is being called out. Huw Van Steenis wrote in his 2018 Future of Finance report³³ "As our payments habits shift, we need a national payments strategy to improve our payments infrastructure and regulation – which doesn't leave anyone behind." Interestingly, the Australian Government has recently launched a "Strategic Plan for Australia's Payments System"³⁴ which seeks to deliver against the above need for Australia.

We considered where the creation of such an overriding vision and strategy should be led from and concluded that only HM Treasury has the influence and oversight to provide leadership to the entire payments landscape. To be successful, HM Treasury needs to allocate an adequate level of resource to develop the blueprint and to ensure its delivery.

The following sections cover the conclusions in more detail and evidence on which they are based.

³³ https://www.bankofengland.co.uk/report/2019/future-of-finance

³⁴ https://treasury.gov.au/publication/p2023-404960



Consumer experience conclusions

The UK consumer experience of making payments is generally quick, easy, free and reliable. But there is scope for improvement and future proofing.



Conclusion 1: Consumer spending in person

The UK has a leading consumer experience for paying for goods and services in person - driven by cards in general and contactless in particular. The UK has high card adoption, and the contactless experience is faster and contains better consumer protection than international alternatives to cards. This is reflected in 86% of UK consumers who stated they have access to all the payment options they need.³⁵ The card schemes have invested in the UK since it has provided scale and margin to innovate. 75% of UK consumers use cards at least five times per month, compared with a Global average of 64%. Although satisfaction is high at 81% for debit cards and 73% for credit cards there is the opportunity to further optimise the UK consumer experience³⁶ – for example by optimising contactless limits or eliminating the occasional PIN prompt. Currently, firms are required to adhere to a very detailed set of requirements³⁷ that are hard coded into law from the EU Payments Services Directive.³⁸ In a post-Brexit environment, there is the opportunity to move to a more outcomes-based regime where the FCA has greater flexibility to enforce the intent of the regulations. This will enable an even more convenient consumer experience, while not increasing risk.

³⁵ With a further 5% who 'don't know' - Source: EY Parthenon data

³⁶ Figures from Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries

³⁷ SCA requirements: https://www.handbook.fca.org.uk/techstandards/ PS/2021/2021_01/?view=chapter

³⁸ EBA's PSD2: https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/5402



Key recommendation

HM Treasury to rapidly progress the process of removing the detailed technical standards and moving to regulatory rules and/or guidance. It is important that the old technical standards are not translated into equivalent low level regulatory rules, but rather defined in terms of outcomes and regulated as such. This will enable firms to innovate to achieve the outcome – rather than to be compelled to follow the narrow rules which can sub-optimise outcomes.



For consideration:

Despite delivering a strong customer experience today, there is no viable alternative to cards at the point of sale apart from cash which is in decline. The rise of contactless payments via the mobile device opens more opportunities. It is encouraging that Big Tech have opened the Near Field Communication (NFC) on their devices to varying degrees. However, they have only been opened for card payments – not Open Banking journeys in the UK. Additionally, the merchants' point of sale card terminal (coordinated by EMVCo³⁹) is also only open to card payments. If these devices remain open only to cards, it will be very hard for any Open Banking journey to fully rival the contactless experience at point of sale. An area to potentially explore is opening the point of sale infrastructure to payment rails other than cards. This raises many technical and security considerations but could be thought about in the mix.

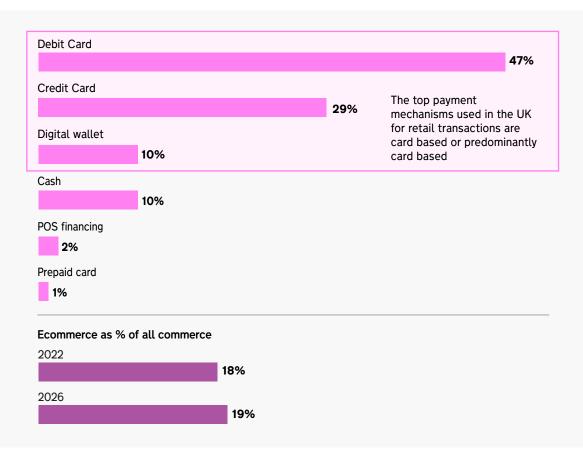


³⁹ Europay, Mastercard and Visa

III Supporting data

The UK has the 5th highest proportion of adults who have a bank account⁴⁰ and 95% of adults in the UK have a debit card as compared to 51% of the global average (and 85% in Europe).⁴¹ Team analysis suggests that the UK is in the top 3-5 countries for usage of global cards.⁴²

Figure 5: Estimated share of UK Point of Sale transactions by payment method 2022⁴³



⁴⁰ The World Bank, Global Findex Database 2021 – % age 15+ with account – https://www.worldbank.org/en/publication/globalfindex/Data

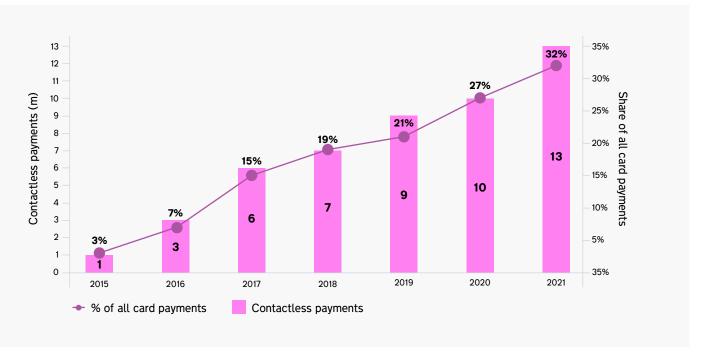
⁴¹ The Global Economy based on World Bank data – https://www.theglobaleconomy.com/ rankings/people_with_debit_cards/

⁴² Based on the % of payments made via cards in the UK, the use of cards in wallets and the use of global cards as compared to a domestic equivalent

 $[\]label{eq:decomposition} \begin{array}{ll} \textbf{43} & \textbf{Worldpay from FIS Global Payments Report 2023 - } \underline{\textbf{https://www.fisglobal.com/en/-/media/fisglobal/files/campaigns/global-payments-report/FIS_TheGlobalPaymentsReport2023_May_2023.} \\ \textbf{pdf} \end{array}$

Following the introduction of contactless on public transport in 2012, and their roll-out in supermarkets such as Tesco, it has grown dramatically and now makes up over a third of all card transactions. In 2022, almost 9 out of 10 UK adults made contactless payments.⁴⁴

Figure 6: The volume of contactless payments in the UK and % share of total card payments⁴⁵



⁴⁴ UK Finance, UK Payments Market report 2023

⁴⁵ UK Finance, UK Payments Market report 2023

International alternatives to contactless are fiddlier for the consumer and retailer to implement, and have only taken off either where debit cards were not as widely accepted or there is a particular drive or need in the country – e.g. The Netherlands and Poland illustrated below. Contactless (card or mobile device) takes under 2 seconds which beats any existing mobile journey.

Figure 7: Examples of POS customer journeys – Bank transfers (iDEAL and Blik) as compared to contactless⁴⁶

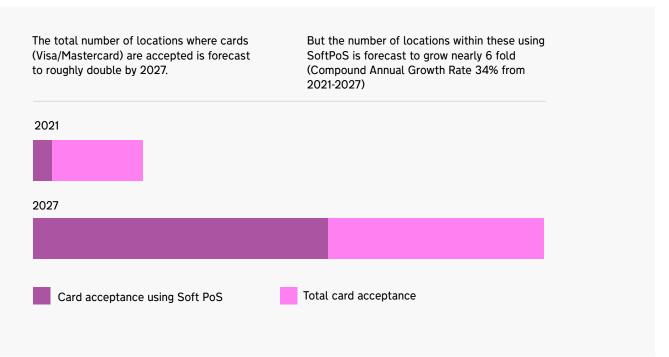


⁴⁶ iDEAL payment: iDEAL website demo, Blik: Blik website, physical stores, Card journey: Future of Payments Team analysis

Recent innovation such as 'soft POS' or 'tap to pay' is expected to further widen acceptance of cards. This new method of accepting card payments on a mobile phone is expected to grow to 18% of transactions by 2027.⁴⁷ Visa claim that 41% of merchants would sign up to soft POS.⁴⁸ Digital wallets (see conclusion 2) are also further enhancing the consumer experience. While these innovations are welcome since they potentially widen acceptance, they do not offer an alternative to the cards schemes at the point of purchase.



Figure 8: Global card acceptance locations 2021 and forecast 202749



⁴⁷ EY Parthenon

⁴⁸ Visa/Ipsos study, 2022. Small and microbusinesses in eight European countries including the UK. 200 respondents per market.

⁴⁹ EY Parthenon research based on Nilson and Jupiter Research market data

Conclusion 2: Consumer spending online

The UK also has a very advantageous position for consumers purchasing online (ecommerce) and digital wallets are rapidly changing the landscape. As with point of sale purchases, the very widespread presence of cards in the UK facilitates online purchases very smoothly. This is complemented by the rapid growth of digital wallets (including Apple Pay and Google Pay) and Paypal. Satisfaction with digital wallets is the highest of all payment types at 83% in the UK and ahead of the global average for digital wallets at 80%.50 The recent implementation of SCA has reduced fraud rates but at the price of some consumer friction. While the very largest players have the resources to invest in lowering fraud rates and improving conversion (Amazon reported an industry leading low fraud rate) most others described how the very prescriptive rules from the Payments Services Directive do not optimise outcomes. To illustrate, in Sweden⁵¹ shopping cart abandonment rates are guoted at 2% versus 30%52 in the UK. Many participants to this review also claimed that shopping cart abandonment rates rose post-SCA implementation, and one quoted 27% drop out from shoppers at the point of challenge.



Key recommendation

As above, HM Treasury to use the post-Brexit opportunity and the emergence of The Smarter Regulatory Framework to rapidly progress the process of removing the relevant technical standards and moving to regulatory rules and/or guidance with flexibility to achieve those outcomes. For example, with post-SCA implementation it is important that the existing rules are not translated into equivalent low level regulatory rules, but rather defined in terms of the outcome. This will enable firms to innovate to achieve the outcome – rather than to blindly follow the narrow rules.

⁵⁰ Figures from Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries

⁵¹ Sweden is considered best in class, although their payments landscape is not a like-for-like comparison to the UK

⁵² Open Banking Third Party Provider response to the FPR Call for Input

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For consideration

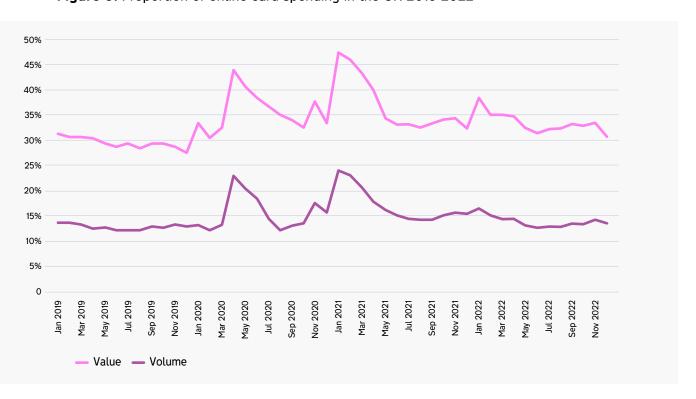
Digital wallets have grown at an extremely rapid rate and are delivering a world leading consumer experience. In Switzerland and (recently announced) the US, banks are working to offer domestic alternatives to the US tech players. With MasterCard, Visa, Google and Apple now having such a strong position in UK payments, Government could consider developing a point of view on having so much of our payments landscape open internationally. The view from this review is that the current international players are enhancing the consumer experience and are well placed to contribute positively to the payments landscape – but the absence of a national strategy and position on this feels like a gap. Some contributors were less positive, with one remarking that UK financial services are "sleepwalking into the hands of Big Tech" and others have made the point that there should be "equal regulation for equal risk."

<u>11.</u>

Supporting data

Although more stable post-COVID, ecommerce now makes up around a third of all spending on cards in the UK





⁵³ UK Finance, UK Payments Market Report 2023

Cards and Paypal represent the most common ways that people buy things online (albeit increasingly with their cards stored in digital wallets). Observed data indicates that digital wallets are a high proportion of transactions online. However, when consumers are asked, some attribute that transaction to their card as opposed to their digital wallet.

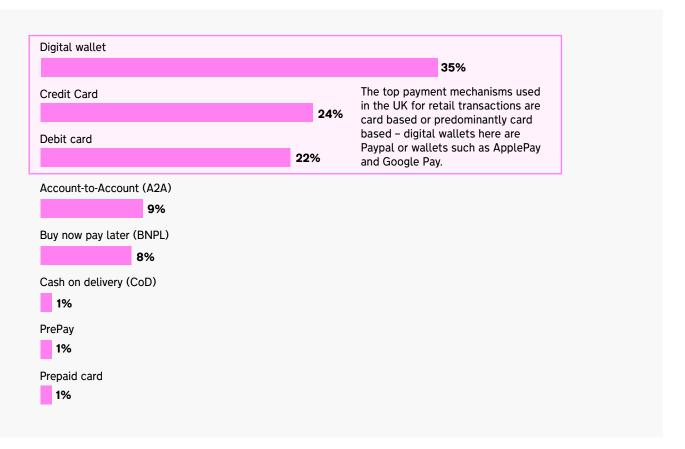
Figure 10: Claimed estimated share of transactions for ecommerce by payment method in the UK 2022⁵⁴

Q17. And thinking about when you have bought something online in the last 3 months, which of the following payment methods do you use most commonly? Please select one option from the list below.

Unweighted base	1,922
Base	1,922
Debit Card	48%
Credit Card	26%
PayPal	20%
Buy Now Pay Later (e.g. Klarna, PayPal 'pay in 3')	2%
Other	0%
Not applicable – I have not bought anything online in the past 3 months	4%

 $[\]begin{tabular}{ll} \bf 54 & Worldpay from FIS Global Payments Report 2023 - $$\underline{$https://www.fisglobal.com/en/-/media/fisglobal/files/campaigns/global-payments-report/FIS_TheGlobalPaymentsReport2023_May_2023. $$\underline{$pdf}$ \end{tabular}$

Figure 11: Observed estimated share of transactions for ecommerce by payment method in the UK 2022^{55}



Increasingly consumers are storing their card details in digital wallets. While data is hard to obtain, there is evidence that digital wallets are growing fast and already taking a leading share. Recent data from the FCA's Financial Lives Survey⁵⁶ indicates that digital wallet usage could be as high as 47%. Research specifically for this review revealed 53% of people claiming that they are using digital wallets more often than their actual cards.⁵⁷

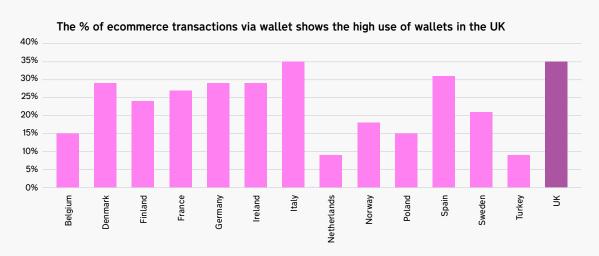
⁵⁵ How often Brits use mobile banking (i.e. accessing account through an app) (https://yougov.co.uk/topics/finance/trackers/how-often-brits-use-mobile-banking-ie-accessing-account-through-anapp?crossBreak=1824)

https://www.fca.org.uk/financial-lives/financial-lives-2022-survey. The Financial Lives Survey 2022 indicates that 47% of UK adults made payments via their mobile device. To note in Germany mobile based devices constitute c. 21% of retail transactions.

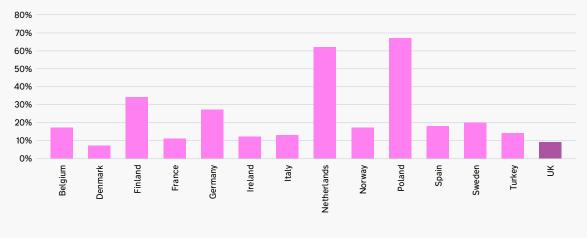
⁵⁷ HM Treasury Consumer Polling: September 2023

Furthermore, adoption of digital wallets in the UK appears to be among the highest in Europe. As referenced in conclusion 1, bank transfer payments for ecommerce appear more cumbersome from a user perspective, however, these are becoming widely used and research shows bank transfer methods (such as Pix in Brazil and UPI in India) are attracting satisfaction scores higher than those of cards.⁵⁸

Figure 12: Payment methods used for ecommerce transactions in Europe 2022⁵⁹



Conversely the % of ecommerce transactions via account to account shows the low use of bank transfers for retail transactions



⁵⁸ Figures from Accenture's Global Consumer Payments study 2022 show a 92% satisfaction in Brazil for Bank Transfers and similar figures for India as compared to the global satisfaction with debit and credit cards standing at 82% and 78% respectively

 $[\]begin{tabular}{l} \bf 59 & Worldpay from FIS Global Payments Report 2023 - $\underline{$https://www.fisglobal.com/en/-/media/fisglobal/files/campaigns/global-payments-report/FIS_TheGlobalPaymentsReport2023_May_2023. $\underline{$pdf$}$ \end{tabular}$

Conclusion 3: Addressing digital and financial exclusion

As the smartphone becomes increasingly central to payments, the risk of financial exclusion through digital exclusion is rising. Paying with a mobile device is increasingly the fastest, most convenient, and most secure way to pay. This is evidenced by the rapid growth of digital wallet adoption.⁶⁰ However, there are many people in the UK who cannot or do not want to pay for goods and services in this way. Estimates vary, but various sources quote approximately 8 million people who are dependent on cash⁶¹ and 3 million who paid for everything or most things in cash.⁶²

Furthermore, the FCA's Financial Lives Survey 2022 indicates that there are nearly 4 million adults in the UK who are digitally excluded.⁶³ Whilst overall, digital exclusion has reduced, this macro trend masks key cohort differences e.g. more than a third of over 75-year-olds are digitally excluded.⁶⁴ Income also plays a role; 14% of adults with a household income of less than £15,000 were digitally excluded, versus just 2% of those with an income of £50,000+.⁶⁵

The role of digital exclusion as a potential vector for financial exclusion needs closer attention. The financial inclusion policy agenda has helped bring more people into the banking system i.e. through basic bank accounts but it could do more to guard against digital payments exclusion.

There is also some evidence of a Poverty Premium where people on lower incomes face higher costs for services, including the way they pay.

The campaign group, Fair by Design, cited examples of consumers paying £200 more for energy when they pay on receipt of bill, instead of direct debit (for period April-July 2023). 66 We also heard evidence of the importance attached to flexibility and control over how people pay, particularly people on lower incomes managing daily cost pressures.

⁶⁰ FIS_TheGlobalPaymentsReport2023_May_2023.pdf (fisglobal.com)

^{61 &}lt;u>final-report-final-web.pdf</u> (accesstocash.org.uk) Based on finding that around 17% of the UK population – 17% of people – or 8m UK adults – are already either unsure of how they would cope or could not cope at all with a cashless society

Financial Lives 2022: Key findings from the FCA's Financial Lives May 2022 survey – In May 2022, 3.1 million adults (6%) paid for everything or most things in cash in the previous 12 months

⁶³ Ibid

⁶⁴ Ibid

⁶⁵ Ibid

⁶⁶ Fair By Design submission to FPR Call for Input

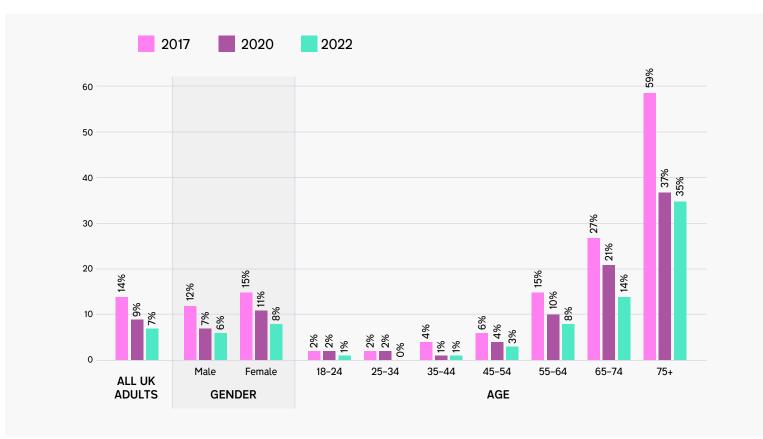


Figure 13: Digital exclusion by sex and age (2017/2020/2022)⁶⁷

*

Key recommendation

While the current commitments to cash and cheques mean that there are alternatives available, the concern is that, as digital smartphone payments dominate, will the digitally excluded keep access to the best deals and convenient payment methods, or will the market evolve in a way that discriminates by payment type? While we have not found widespread evidence of this today, an example is car parks where payment via App is required, or the only easily workable option. We note that the Levelling Up Secretary is already aware of this specific issue,⁶⁸ but we recommend that HM Treasury and the FCA regularly assess whether digital exclusion is driving financial exclusion more broadly and market developments in this area. To avoid duplication, this could form part of the FCA's financial lives survey.

Financial Lives 2022: Key findings from the FCA's Financial Lives May 2022 survey – In May 2022, 3.1 million adults (6%) paid for everything or most things in cash in the previous 12 months
 https://www.localgov.co.uk/Dont-force-drivers-to-pay-for-parking-with-smartphones-Govesays--/55957

8

For consideration

Use the National Payments Strategy to encourage wider adoption of Request to Pay.

Request to Pay can offer much needed optionality for consumers and help them manage monthly budgets. For example, a payee on an irregular income who is struggling to make ends meet could receive a request to pay from her energy provider and choose to either pay the bill in full, pay in part, or request an extension. This would provide greater control than direct debit and smooth the payee's monthly cash flow. Moreover, it might support greater digital inclusion in payments by offering a more flexible way to pay than cash.

The Request to Pay framework was launched in 2020, yet it is not widely available. Consideration could be given to expanding its adoption, particularly in light of cost-of-living pressures.



For consideration

The consumer group Which? Have suggested that this review "should recommend that Government devise a plan of action so consumers who are unable or unwilling to use digital payments are not left behind".⁶⁹ While we have sympathy with this view, at this point we recommend that;

- a) HM Treasury and FCA closely monitor levels of digital payments exclusion on a regular basis (as per above).
- **b)** the Government updates its digital inclusion strategy with a specific focus on digital payments. We note the finding from the House of Lords Communications and Digital Committee that the last digital inclusion plan was published in 2014.⁷⁰
- **c)** HM Treasury could use its financial inclusion policy forum to monitor market developments around digital exclusion.
- **d)** consideration is given to the recommendation of the Natalie Ceeney Access to Cash review that enabling digital payments should be a priority for Government and regulators. We are attracted to the review's suggestion that the Government could set innovation challenges to encourage industry to develop inclusive payment options.⁷¹

⁶⁹ Which? submission to FPR Call for Input

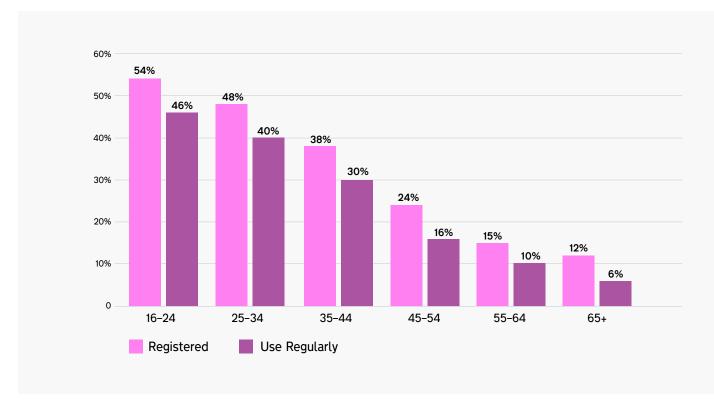
⁷⁰ Digital exclusion (parliament.uk)

⁷¹ final-report-final-web.pdf (accesstocash.org.uk)

Supporting data

Registration and usage of mobile payments among the older population is currently significantly lower than the young. There may also be other demographic and geographic skews, but we could not find data to support this specific point. Additionally, a YouGov report indicates that 39% of over 65s have never used mobile banking, compared with 7% of 18-24s.⁷² This supports Age UK's May 23 report which states that only 14% of the 85+ age group bank online, with 58% relying on face-to-face banking.⁷³

Figure 14: Proportion of adults in each age group using mobile wallets (ApplePay, GooglePay, Samsung Pay etc.), 2022⁷⁴



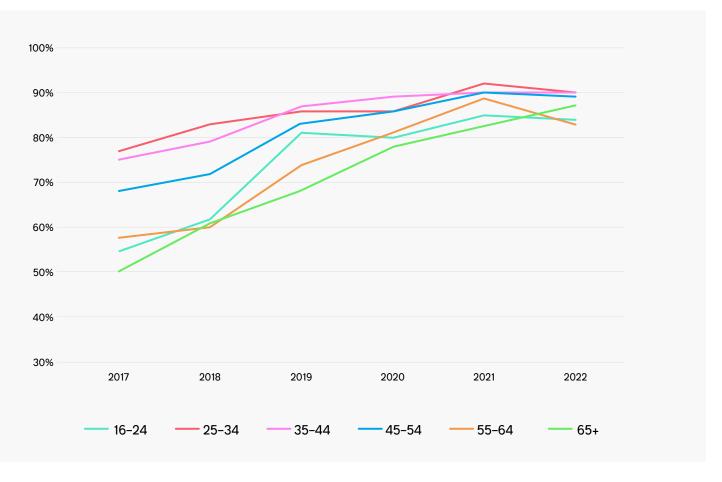
⁷² How often Brits use mobile banking (i.e. accessing account through an app) (https://yougov.co.uk/topics/finance/trackers/how-often-brits-use-mobile-banking-ie-accessing-account-through-anapp?crossBreak=1824)

⁷³ the-impact-of-the-rise-of-online-banking-on-older-people-may-2023.pdf (ageuk.org.uk)

⁷⁴ UK Payment Markets Summary 2023, published by UK Finance

It may be that adoption of mobile payments will increase among the older age groups with time – as it has done with contactless payments. Two years ago, 57% of over 65s had never used mobile banking (compared to 39% now).⁷⁵ There was also a slower adoption of contactless by age as a result initially of fraud concerns, but over time the usage has normalised.

Figure 15: Trends in contactless usage over time, by age group (2017–2022)⁷⁶



⁷⁵ How often Brits use mobile banking (i.e. accessing account through an app) (https://yougov.co.uk/topics/finance/trackers/how-often-brits-use-mobile-banking-ie-accessing-account-through-anapp?crossBreak=1824)

⁷⁶ UK Finance Payment Markets Report 2023 (2).pdf

The UK can perhaps learn from countries that are using digital solutions to tackle financial exclusion - rather than the risk of digital solutions creating financial exclusion. Some countries have innovated simple digital solutions for the excluded to enable them to access latest payment services. Interestingly, the countries that have actively made policy decisions to reduce reliance on cash have focussed most strongly on accessible digital solutions. For example, in Brazil, a specific objective for their new mobile bank transfer service was to be more competitive, digital and inclusive⁷⁷ and with data suggesting that approximately 30% of the population do not hold a bank account this was a major factor of inclusion.78 Likewise in India, where UPI has been built with the objective of reducing cash reliance, they have recently introduced the capability for a consumer to make a payment by telephone - in case they do not have a smartphone. The decisive action in Brazil and India to focus on digital is in contrast to the UK and other parts of Europe where we are legislating to preserve cash availability. It is also ironic that the most recent technical deployment of UK payments infrastructure is the cheque imaging system!

There are some encouraging examples of innovation using latest technology to help vulnerable customers. For example, Sibstar⁷⁹ which is a cards-based proposition specifically for people living with dementia, or prepaid cards (when fairly and appropriately priced) can play a role in enabling people to access the benefits of the card payments systems without linking to a bank account.

⁷⁷ https://www.economist.com/finance-and-economics/2022/05/14/digital-payments-have-gone-viral-in-brazil

⁷⁸ World Bank data Number of Bank Accounts for Brazil (DDAIO1BRA642NWDB) | FRED | St. Louis Fed (stlouisfed.org)

⁷⁹ https://www.sibstar.co.uk

Open Banking conclusions

Open Banking has a number of benefits for consumers and businesses, and progress should be accelerated.



Conclusion 4: Addressing the consumer protection gap

The consumer protection landscape is fragmented, complex and variable – with an urgent gap to be filled regarding Open Banking.

While UK consumer protection overall compares well internationally, a consumer's degree of protection varies significantly depending on how they pay for something. There are various levels of protection flowing from legislative and regulatory rules, and in the case of cards – additional protections put in place by the card scheme operators. The Payments Services Directive covers all payments and gives the consumer some assurance if their payment is misdirected. The new APP fraud rules also give consumers a route to claim from their bank/building society if they are victim of a scam. The degree of consumer protection is most advanced in the cards environment but is emerging as an 'afterthought' in the Faster Payments environment and is still being developed in the context of Open Banking. As one contributor said, the absence of consumer protection on Open Banking is like "Tesla launching a new model without a seat belt." The new Consumer Duty potentially layers requirements on top of systems and processes that were not designed with this in mind. There is a need to simplify and clarify the consumer protection landscape.

We believe that there is a need for some kind of purchase protection or dispute resolution for payments via Open Banking. While it does not need to necessarily be to the same level of cards, this is currently a gap. In the absence of clarity on this point, there is a risk that the new APP fraud rules will be misused and invoked to cover a much wider range of claims than the intended scope. This could be severely problematic.

JROC⁸⁰ is leading a significant programme of work to drive forward Open Banking, not all of which is underpinned by regulatory powers. Despite this, there is a need to rapidly clarify the position regarding purchase protection and liability via Open Banking. Currently third-party payment initiators do not have a share of liability beyond initiation of the payment – as a merchant would in the case of cards. Additionally, the threshold to prove that a consumer was 'deceived' under the new rules is potentially hard to operationalise. For example, if a consumer buys a second-hand car and claims that they were misled about the quality of the vehicle, how could this be validated or disproved? If the absence of dispute resolution is not addressed, our concern is that payments providers will increasingly be compelled to build artificial delays into their payment journeys, with annoying levels of friction for consumers. This would prevent Open Banking reaching its potential.



Key recommendation

HM Treasury, JROC and industry participants should prioritise addressing the need for a basic level of consumer protection and clarity on liability for payments made via Open Banking. This could be a basic dispute resolution service that deals with purchase protection, potentially shared at the industry level (a bit like an industry 'chargeback lite' service). Interestingly in Brazil the Open Finance Structure of Governance (formed by industry associations) is entitled to manage all dispute resolutions between Open Finance participants. Additionally, the central bank has recently imposed liability onto third party payment providers.⁸¹

⁸⁰ https://www.fca.org.uk/firms/future-open-banking-joint-regulatory-oversight-committee

⁸¹ https://openfinancebrasil.org.br

Supporting data

The nature of consumer protection varies considerably depending on the method by which the consumer pays.

Figure 16: Consumer protection by payment mechanism82

Payment method	Consumer Rights Act	Charge back	S.75 Consumer Credit Act	APP Scams Code	PSRs 2017 Unauthorised transactions
Cash	~	×	×	×	×
Cheque	~	×	×	×	×
Bank Transfer	~	×	×	~	~
Open Banking	~	×	×	~	~
Debit card	~	~	×	×	~
Credit Card	~	~	~	×	~
PayPal	~	~	Dependent if customer logs into PayPal account / if someone has paid with PayPal credit	×	~
Apple/ Google Pay	~	~	Dependent if consumer uses debit or credit card	×	~
BNPL	~	×	×	×	×

⁸² Table generated by Future of Payments team analysis

The above variation can lead to different eligibility criteria and claims processes for consumers as the table from the FCA below shows.

Figure 17: Consumer protections and claims process via different payment types⁸³

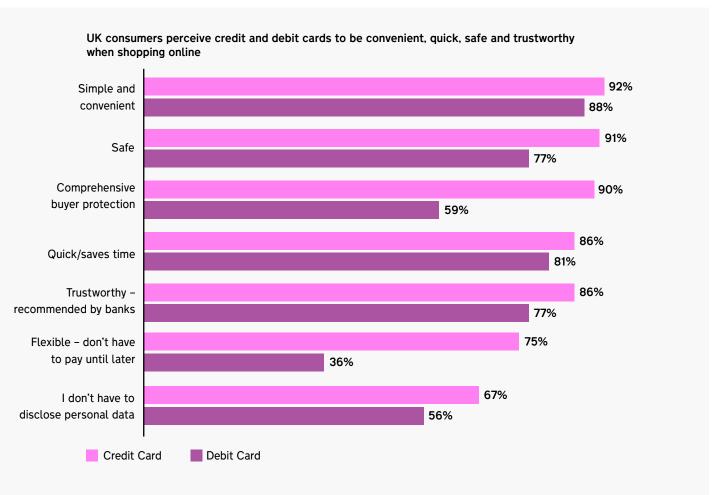
	Protection	Eligibility	Claims process
Credit Cards	The credit card issuer has joint and several liability with the seller if the seller fails to supply the goods or services, or has supplied faulty goods, or misrepresented what it is supplying. The customer can pursue a claim against the seller or the credit card issuer or both.	Customer used a credit card to pay for goods or services between £100 and £30,000. There must be arrangements between the customer, the credit card issuer and the supplier, against whom there is a claim for is representation or breach of contract. If those arrangements are deemed broken by the involvement of an intermediary, section 75 protection will not apply.	Customer writes to the credit card issuer, stating what they bought, where and when they bought it and how much they paid. They also include proof of purchase. Customer explains that they want the credit card issuer to refund the purchase price into the customer's credit card account under section 75 of the CCA.
Debit Cards and Credit Cards	Chargeback is a voluntary scheme for refunds of debit card payments, in which Visa, Mastercard, Maestro and American Express participate.	The scheme enables customers to claim a refund from their card issuer if the goods or service is not provided or is faulty. Usually, no minimum spend requirement. Time limits apply for making a claim – usually up to either 45 or 120 days from making the purchase, depending on the type of card.	The card issuer tries to claim money back from the seller by reversing the transaction.
PayPal	PayPal Buyer Protection PayPal helps buyers get a full refund.	Customer has paid with PayPal on any website, and the goods or services are not provided or are significantly not as described.	Customer opens a dispute in the online Resolution Centre within 180 days of making the payment to the seller. If the customer cannot resolve the issue with the seller within 7 days, they escalate the dispute to a claim within 20 days of opening the dispute.
Direct Debit	DD Guarantee: If an error is made in the payment of a Direct Debit, either by the payee or the payer's bank, the payer is entitled to a full refund from their bank	Payment taken from customer by direct debit in error	Customer contacts their bank. They are responsible for the refund – even if the original error was made by the payee
Non-CCA regulated payments (including Open Banking and internal book transfer)	Unauthorised transactions If a payment transaction has not been authorised by the payer, their payment service provider (PSP) must refund the amount of the transaction under PSRs Reg 76	The payer has not acted fraudulently or with gross negligence, and the payment service is not regulated by the Consumer Credit Act 1974	Customer claims from PSP
Faster Payments (including Open Banking), CHAPS, and internal book transfer	Contingent Reimbursement Model Code for APP Scams If a customer has been the victim of a qualifying authorised push payment (APP) scam, member PSPs should reimburse the customer To note – this will change with introduction of new reimbursement requirement for APP	The customer's PSP is a signatory to the voluntary Code. The customer intended to transfer funds to another person but was instead either deceived into transferring the funds to a different person; or the customer transferred funds to another person for what they believed were legitimate purposes, but which were in fact fraudulent. The payment was made via Faster Payments, CHAPS, or an internal book transfer	Customer claims from their PSP

⁸³ FCA submission to FPR Call for Input

There is some evidence that consumers are broadly aware of the differential in consumer protection between credit and debit cards.

90% of consumers perceive credit cards as providing comprehensive buyer protection compared with 59% for debit cards.⁸⁴ However, we do not believe that consumers have a clear understanding of the degree of protection by payment type.

Figure 18: UK consumers perception of credit and debit cards⁸⁵



⁸⁴ Mastercard UK Survey December 2022, Conducted by Ipsos Mori Ltd

⁸⁵ On behalf of Mastercard, Ipsos interviewed a sample of 800 UK banked consumers aged 18-75 who shop online at least monthly. To qualify for the survey, respondents must also be a non-rejector of credit or debit cards for online spend, not working in sensitive industries (market research, PR, advertising, financial services) and not have participated in financial research in the previous 3 months. The research was conducted as an online self-complete survey, recruited from online consumer panels, between 5th-6th December 2022. Data is unweighted.

As bank transfers via faster payments (Authorised Push Payments or APPs) have grown in popularity they have exposed a gap in consumer protection. The gap is for both purchase protection and protection from scams. The new APP fraud rules which are being implemented will become a primary form of consumer protection which covers consumer payments via bank transfer and – importantly – new Open Banking journeys. Due to the lack of wider consumer protection in a faster payment and (now) Open Banking environment, we are concerned that the new APP fraud rules might be abused in the absence of alternative dispute resolution options for consumers. This requires urgent attention. We do not believe that Open Banking/faster payment purchases require a level of consumer protection comparable with cards, but it needs some kind of dispute resolution capability.



Conclusion 5: Improving person-to-person payments

The UK is starting to fall behind in terms of person-to-person payments made by bank account transfer. Data indicates that the UK is ranked 9th in terms of the number of account-to-account transfers per capita, and it predicted to fall to 17th by 2027.86

The key reason is that other geographies have built newer real time payments systems and simplified the consumer experience via the use of either:

- a) national identifiers such as national ID numbers or
- b) the use of an alias/proxy such as mobile phone number or email address.

In these cases, they have made them available to users via apps that third parties can build into their development and have built as combined retail/consumer-to-business journeys that have helped build adoption and use. In several countries where the central government made a deliberate decision to move away from or reduce the use of cash (e.g., India and Sweden) the imperative for a slick digital process was very high, and hence the focus on delivering it. To be clear, we continue to support the use of cash, and the actions underway to preserve access to cash. The UK does not have an obvious digital identifier and recently closed a failed attempt to put a slicker consumer experience in front of faster payments (PayM87). As a result, the UK consumer needs to input the sort code and account number to make a payment. Customer advocacy with the UK account-to-account process is currently 77% – which is in line with the global average.88 However, best in class is now Brazil at 92%, and if the UK does not improve the user experience, the UK experience will soon look outdated.

⁸⁶ ACI report: It's prime time for Real-time 2023

⁸⁷ https://www.wearepay.uk/paym-closure/#:~:text=Paym%20was%20a%20proxy%20payment,closed%20on%207%20March%202023

⁸⁸ Figures from Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries

*

Key recommendation

We need to improve the bank transfer journey for consumers over the medium term. One option would be to rebuild a Pay-M like alias/proxy system. However, that would be costly, take more than two years and feels like a retrograde step. By contrast, Open Banking is starting to enable much improved bank transfer journeys – in some cases using QR codes or unique URLs. Therefore, the recommendation is that we focus on Open Banking as the route to improve the UK consumer account-to-account payment journey. However, the consumer protection needs addressing as per Conclusion 4 (above), and the commercial arrangements need to be put on a more sustainable footing as per Conclusion 7. We would suggest prioritising completing this work ahead of opening a wider range of application programming interfaces (APIs).⁸⁹



For consideration

In counties where there is a national identifier or digital ID, progress has often been made more rapidly in the payments space. The most prominent example is India, but Scandinavia and The Netherlands are also examples. It was argued quite forcefully by certain contributors to this report that the UK should progress some form of digital ID. Additionally, this issue was raised in 31% of responses. These are not necessarily IDs in a traditional way but could be a much more 'customer centric' ID than previous national attempts. There is difficult political history around national ID schemes in the UK, but there are also many use cases beyond financial services.

Therefore, we do think that:

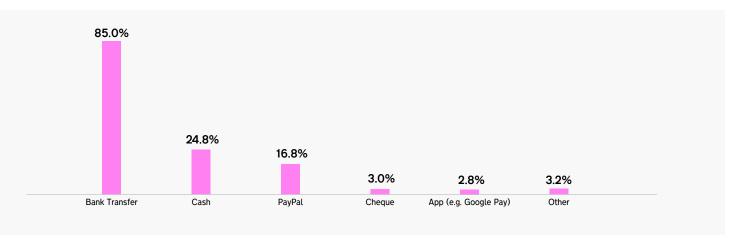
- a) it makes sense for the industry and Government to continue to look at the opportunities in this space that emerge from new technology and
- **b)** Big Tech have the potential to play a key role in the future of digital identity or verification. Although difficult to achieve, we would suggest it would be a good idea to have one 'pan-Government' stream of exploratory work in this area. History indicates that a fragmented approach is almost certain to fail.

⁸⁹ A software intermediary that allows two applications to talk to each other

Supporting data

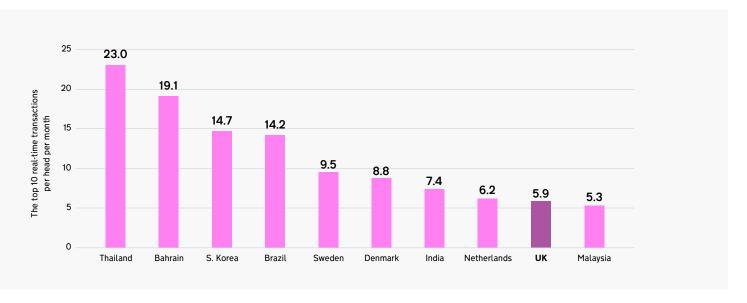
Bank transfers (via Faster Payments) are used by most UK consumers to make person-to-person payments

Figure 19: % of consumers who use payment mechanism for person-to-person payments (NB they could choose up to 2)90



The UK is currently in the top 10 countries for bank transfers per consumer.

Figure 20: Real-time transactions per head per month – the top 1091

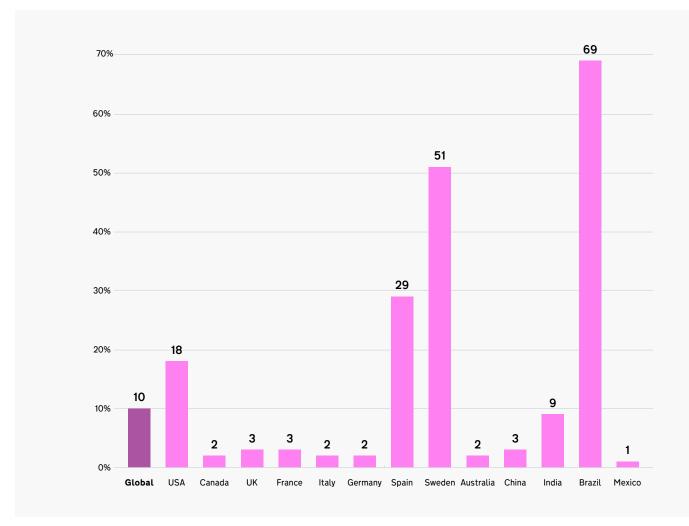


⁹⁰ YouGov Research

⁹¹ ACI report: It's prime time for Real-time 2023

However, usage data also indicates that person-to-person bank transfers using an app are lagging in the UK relative to leading countries.

Figure 21: Which of the following payment methods do you use at least 8 times a month (% of respondents using account-to-account payments app)⁹²



⁹² Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries

The forecast is for the UK to fall from 9th position on bank transfers to 17th. In many countries, bank transfers are used to pay for goods and services. This partly explains the higher frequency in some parts of the world, where they have also built more accessible customer interfaces which facilitate both person-to-person and retail transactions. The UK is judged to be losing ground as the use of bank transfers for commerce grows more rapidly than the UK.

Figure 22: Forecast adoption of real-time transactions per head, per month in 2027, the global top 10^{93}

		1	
1	Bahrain		83.3
2	Brazil		51.8
3	Thailand		43.6
4	South Korea	# • #	21.9
5	Netherlands		21.7
6	Sweden	+	18.9
7	India	•	18.2
8	Denmark		15.5
9	Finland	+	15.2
10	Hong Kong	*	15.0

⁹³ ACI report: It's prime time for Real-time 2023

Summary of payment propositions for highest ranking countries above:

Bahrain – Bahrain is a pioneer of innovation in the Middle East, in part through the creation of the BENEFIT company in 1997 to develop innovative (digital) banking services supported by the CBB (Central Bank of Bahrain). The country has integrated its traditional banking with digital solutions and Fintech firms have been attracted to the proactive approach and bank collaboration. By 2027 Bahrain is forecast to have the highest level of real time payments⁹⁴ per capita driven by BenefitPay the app commissioned by Government and launched in 2017, an Open Banking framework in place by 2022 and EFTS (Electronic Funds Transfer System) with Fawri+ for bank transfers and Fawaater for bill payments.

Brazil – PiX payments are ubiquitous in Brazil and 'to pix' considered a verb. The country had a high proportion of the population who did not hold a bank account and a preference across those who did for credit cards and instalment payments. Pix announced in 2019 and launched 2020 enabled easy adoption – from the c. 800 direct and non-direct participants, merchants to users through multiple forms of access (such as QR code) and the use of 'keys' such as mobile number to identify who you are paying.

India – 83% of person-to-person payments in India are made via Bank transfer⁹⁵ due to the popularity of apps such as PhonePe and Paytm which are based on India's open UPI (Unified Payments Interface). UPI was strongly led by Government, who funded a zero-discount rate for merchants (zero fees for payments) and tax incentives such as the Goods and Services Tax 2017 and strong encouragement for users including media profiling and the physical removal of R500 and R1000 notes.

Netherlands – The Netherlands enabled authenticated bank transactions through iDEAL in 2006, which in under 10 years became the dominant ecommerce payment mechanism. These simple transactions provided by real-time payments are estimated by the Dutch Authority for Financial Markets to reduce admin costs for businesses by c.20% with CEBR estimates of \$338 million in efficiency savings. Further key adoption drivers included a culture in the Netherlands of low card usage, which left a gap in the market for online shopping, and the focus taken on innovation and integration. For example, in 2009 the Dutch introduced 'Collecting PSPs' e.g. partnerships with Stripe, Adyen, Worldpay for merchant payments and partnerships in the person-to-person market such as Tikkie and Knab.

⁹⁴ ACI report: It's prime time for Real-time 2023

⁹⁵ Statista research - https://www.statista.com/forecasts/1348466/peer-to-peer-payments-in-india

⁹⁶ EY Parthenon analysis

South Korea – the population was technically savvy but underbanked and under-served in digital financial products (for example 10% had access to unsecured loans online versus 50% in the US). Government demonstrated strong commitment via the Financial Innovation Support Act for Fintech innovation and KFTC (Korea Financial Telecomms and Clearing Institute) which acts as the operator. Banks were given a three-phase plan initially with voluntary participation, then regulatory requirements and the potential for PSP access to the financial payment network. Government partnered with Toss, a mobile banking Fintech who already had c.15m app users in 2019 and transfer fees were cut to 1/10th of traditional fees for these firms. Within a year of launching the country had 20m users.

Spain – 'Bizum' launched for person-to-person in 2016 (ecommerce 2019) as a response by the banking sector to accelerate digital payments. Bizum enables payments by identifying payee through a mobile number, email address or other. Bizum is targeted at smaller payments previously made by cash with a commercial model to match. Functionality includes integration to the bank's apps (Bizum itself is not a stand-alone app) and the ability to attach photos and Siri integration.

Sweden – Swish payments launched in 2012 by the 7 largest Nordic banks initially focused on how to share a dinner bill using a mobile. Launched in 2012 it now has 8m users,⁹⁷ in a country with a population of 10.6m.⁹⁸ It is free to use for person-to-person payments and using a local digital ID (BankID) it is fast to onboard and authenticate with 70% of merchants stating Swish is positive for their business and estimated to have increased GDP growth by 0.5% and velocity of money by 10%.⁹⁹

Thailand – PromptPay based on the PayNet real time system has become ubiquitous, used from person-to-person payments to small merchant payments and is interoperable with other countries such as Malaysia for cross border.

⁹⁷ https://www.swish.nu/about-swish

⁹⁸ https://www.worldometers.info/world-population/sweden-population/

⁹⁹ EY Parthenon analysis

While the UK scores an average 77% on satisfaction¹⁰⁰ in other countries such as India and Brazil account-to-account payments are receiving far higher satisfaction scores, and we believe that the UK is falling down because of the user experience. The review team's testing also supports this view.

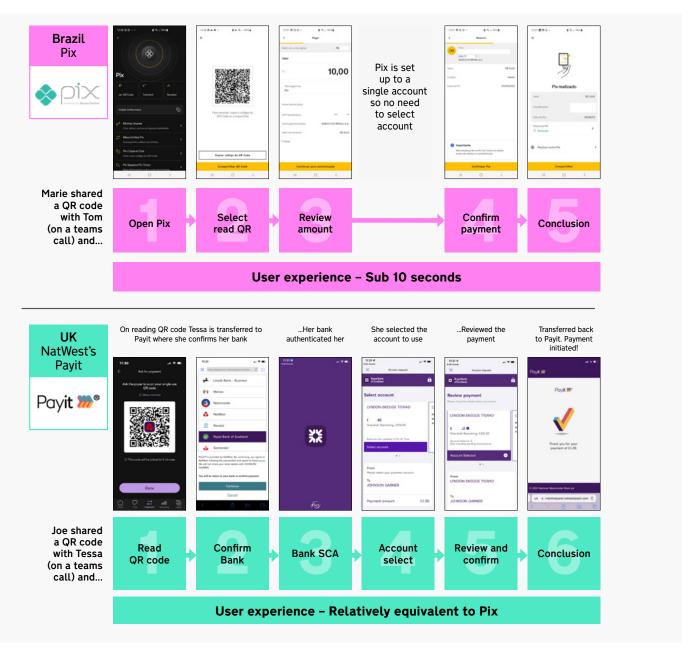
Figure 23: Time taken for user to initiate payment by country

Payment mechanism	Country		Time taken for user to initiate payment
Account to account transfer	UK		70 - 80 seconds
Swish	Sweden	+	10 - 20 seconds
Interac	Canada	#	c. 60 seconds
PayNow (Fast)	Singapore	(:	c. 10 – 20 seconds
PiX (Pic)	Brazil	③	20 - 30 seconds
PayShap	South Africa		c. 60 seconds
РауТМ	India	<u> </u>	10 - 20 seconds
Zelle	US		20 - 30 seconds
iDEAL (SCT Inst)	Netherlands		20 - 30 seconds

¹⁰⁰ Accenture Global payments study 2022

Open Banking is starting to deliver more user-friendly account-to-account payment journeys that can be fulfilled in under a minute with high security. The UK is in a leading position on Open Banking, with an encouraging 200 third party providers registered and approved. Recent Open Banking journeys in the UK are beginning to rival some of the best in class around the world.

Figure 24: Comparing person-to-person payments made via open API based account-to-account mechanisms in the UK and Brazil¹⁰¹



¹⁰¹ FPR team analysis

The UK's unsuccessful 'Pay-M' attempt to build a slick interface in front of Faster Payments yields valuable learnings for the future. Pay-M was a system that enabled mobile number to mobile number payments. It was launched in 2014 and closed in March 2023 due to 'falling numbers of transactions and the lack of customers signing up'.102

The reasons for PayM's failure include:

- a) it was a clunky 'opt in' process rather than automatic opt in,
- b) the branding was not uniform,
- c) the low volumes led to disproportionately high per-transaction costs. 103

Looking to the future, for new and improved payments journeys to be widely adopted, they need to be:

- a) ubiquitous,
- b) slick with and easy or automatic sign-up process,
- c) commercially sustainable,
- d) embedded in the existing customer journey/app and
- e) widely promoted.

Scale is key, as one contributor said; "peer to peer won't work unless it is ubiquitous".

Big Tech's ambitions for person-to-person payments remain unclear. Some major players – even those that offer person-to-person payments in other countries – were clear that they had no ambition to do so in the UK. It appears that triggering a higher level of regulation is currently a barrier to some technology firms moving deeper into payments. By contrast, some other firms talked openly about their desire to "close the loop" on payments. While the position is unclear, we could speculate that if the UK does not proactively improve the person-to-person payment journey in the UK, sooner or later, Big Tech may fill the gap. In the words of one contributor; "If Apple turn on account-to-account, we're all out of business."

¹⁰² https://www.wearepay.uk/paym-closure/

¹⁰³ Pay.UK submission to FPR Call for Input

Conclusion 6: Providing payments choice to retailers and merchants

While cards make a tremendous contribution to the payments landscape, we heard notable dissatisfaction with the cost of card schemes on the part of shops, services, and other merchants – which may be in part due to a lack of choice or digital alternatives to the existing card schemes.

The UK is a 'free if in credit' banking service model which means that consumers are unaccustomed and generally unwilling to pay for financial services at the point of use. As a result, the costs of card transactions fall to the merchants. While the benefits of cards are greatly appreciated, we heard a high degree of dissatisfaction from merchants regarding what they perceive as increases in scheme fees since interchange fees were forcibly reduced by the regulators. "I don't see why we should pay more for the same thing" is one merchant verbatim. However, when we looked at the UK as against international comparators, we could not find evidence to suggest that the UK is significantly out of line internationally. We are aware that the PSR is looking at this question in significant depth. However, we believe that a major driver of merchant dissatisfaction may be in part due to the lack of a digital alternative to the card schemes.

In their own defence, card providers have pointed to their investments in innovation¹⁰⁴ and consumer protection.¹⁰⁵ There are significant changes rolling through the cards market currently. New providers of card machines are emerging, and the prospect of using a mobile phone as a digital card reader has already become a reality.¹⁰⁶ Furthermore, digital wallets are changing the nature of consumers' relationship with their cards, further reducing friction in the payment process, and shifting the economic models. Innovation appears to be occurring in the cards payments market at a significant rate.

¹⁰⁴ e.g., contactless, tokenisation, 3D secure, open APIs

¹⁰⁵ e.g., chargeback

¹⁰⁶ e.g., NatWest Tyl, Revolut



Key Recommendation:

We recommend that the PSR completes its work investigating cards fees. Despite recent innovation and disruption, merchant feeling appeared strong to us on this point, and it is therefore important to see this work through to conclusion. As the Association of Convenience Stores said in their submission: "Retailers are growing increasingly frustrated with the rising costs associated with card transactions." Regardless of the outcome of the PSR's work, we believe the market would be further improved if there was a viable digital alternative to the card schemes.



For consideration:

One of the most significant recent trends in the purchasing journey is the rapid rise of digital wallets. Given the widespread adoption of digital wallets, we considered whether they constitute a core part of the payment infrastructure today and have currently concluded (based on a superficial look) that they do not. The key rationale for this is that digital wallets can perform transactions in an offline state. However, Big Tech's increasing involvement in the payment journey is very interesting, and we imagine that Big Tech will look to build out their consumer proposition, possibly using Open Banking. We recommend that HM Treasury and regulators attempt to maintain an open and constructive dialogue with the digital wallet providers as the pace of innovation is rapid, and there are significant opportunities to collaborate in the interests of UK consumers.

¹⁰⁷ Association of Convenience Stores submission to FPR Call for Input

¹⁰⁸ For example, Apple and Google Pay would still work on the London Underground even if they could not connect remotely for whatever reason

Supporting data

Data in submissions from the retail industry and PSR's data indicate that the total cost of taking cards as payment has increased in recent years. Additionally, the BRC argued that scheme fees have increased by 28% and interchange fees by 10% in 2021 relative to 2020.¹⁰⁹ It was suggested to us that the regulatory driven decrease in domestic interchange charges has been more than offset by increases in other charges. We also heard comments from some merchants that they found it hard to understand the charging structure.

Figure 25: Average Merchant Service Charge as a percentage of card turnover split by interchange fees, scheme fees and acquirer net revenue¹¹⁰

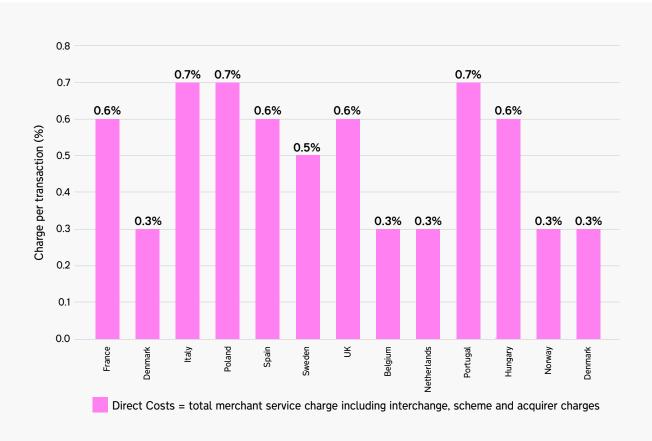


¹⁰⁹ British Retail Consortium Payment Survey 2022

¹¹⁰ Axe the card tax coalition report: 2023

We looked at how the UK benchmarks against international comparators for total cost of cards and found no evidence to suggest that the UK is significantly higher. Available insight indicates that UK total card costs for domestic point of sale transactions are mid-range globally.¹¹¹ Many merchants agreed with the statement that the UK 'is not out of line with international comparators' when it comes to card fees. Merchants also acknowledge the consumer protection that comes with a card purchase relative to alternatives (see Conclusion 4).

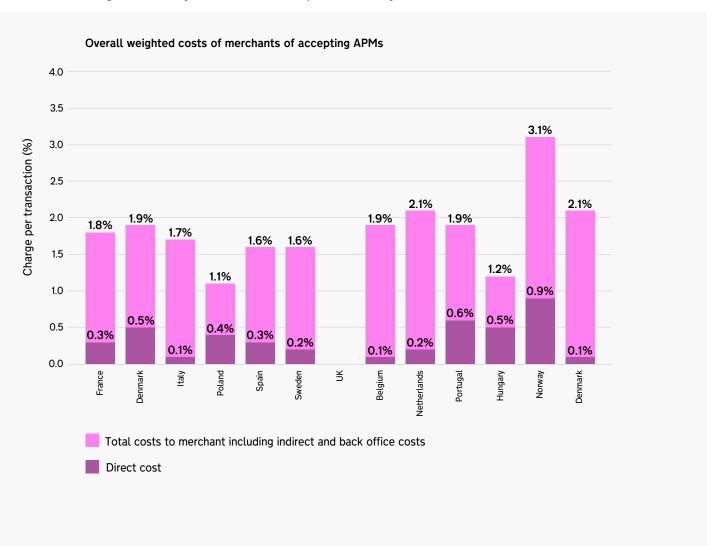
Figure 26: Direct costs for merchants of accepting card payments (4-party schemes) in store by European country¹¹²



One major international retailer asserted that the UK is considerably cheaper than the US
 BCG Research, The hidden Cost of Cash and the True Cost of Electronic Payments in Europe and the UK, White paper March 2023. To note, sample size of 100 per country with data weighted to account for merchant size and mix of instruments.

However, from the data below, the UK stands out as the only country in Europe that does not have a digital alternative to the card schemes. This lack of choice is potentially a major reason for the dissatisfaction around the total cost of cards.

Figure 27: Overall weighted costs for merchants of accepting Alternative Payment Methods (APMs) (majority are account-to-account bank transfers; Belgium, Norway and Denmark are predominantly card-based APMs)¹¹³



¹¹³ BCG Research White paper March 2023 as above

The adoption of digital wallets globally is a major disruption to the user experience in the cards market and continues to challenge the incumbent card schemes to deliver value to merchants and consumers. The speed with which Apple and Google have innovated and further improved the consumer cards experience with Apple/Google Pay is remarkable. This also changes the financial arrangement, as we understand that the bank/issuer typically now pays a fee to the digital wallet provider per transaction. Coupled with Soft POS (see conclusion 1) we see considerable innovation in the cards market over the coming years.

Data indicates that Apple Pay is more popular in the UK than in any other country. However, even though digital wallets are widely used in the UK, it is not a payment system in the traditional sense. Rather, digital wallets sit in front of the existing infrastructure and deliver an enhanced experience. This does raise questions about how regulators should think about players who have a very wide and thin role in the payments ecosystem – as opposed to the traditional narrow and deep role of a payments system provider.

Figure 28: Penetration of Apple Pay in the UK¹¹⁴

		Stores, restaurants or other POS	Online
United Kingdom		70%	37%
United States		57%	34%
Canada	*	60%	30%
Australia	* *	54%	33%
France		63%	19%

		Stores, restaurants or other POS	Online
Switzerland	•	41%	30%
Austria	П	48%	19%
Sweden	+	41%	24%
Netherlands		42%	22%
Germany		46%	16%

¹¹⁴ Percentage of customers who said they had used Apple Pay at a POS or online Apple Pay use by country 2023 | Statista

Figure 29: Payment systems recognised for HM Treasury for Bank of England supervision¹¹⁵

Payment systems recognised by HMT
Bacs (recognised 5 January 2010)
CLS (recognised 5 January 2010)
CREST (recognised 5 January 2010)
LCH Ltd (recognised 5 January 2010)
Faster Payments Service (recognised 24 February 2010)
ICE Clear Europe (recognised 24 February 2010)
Visa Europe (recognised 19 March 2015)
LINK (recognised 23 May 2016)
Mastercard Europe S.A. (recognised 21 October 2021)
Sterling Fnality Payment System (recognised 31 August 2022)

¹¹⁵ https://www.gov.uk/government/publications/banking-act-specification-of-payment-systems

Conclusion 7: Making the commercial arrangements sustainable

Originally initiated by the CMA order, Open Banking now has the technical potential to:

- a) create a viable alternative to the card schemes and
- **b)** improve the bank transfer payment journey but only if the current commercial arrangements are changed. The UK was one of the first countries to deploy a scale real-time consumer payments system in Faster Payments (2008)¹¹⁶ and first to build an open and standardised approach to Open Banking capabilities (2018).¹¹⁷

However:

- a) we have not successfully put a slick consumer experience in front of our real-time payments system (faster payments); and
- **b)** the investment in Open Banking is yet to be fully exploited. We heard consistently that with Open Banking, progress has been slow since 2016 and there is now a need to "move from a regulatory initiative to a functional commercial organisation".

This is being progressed by JROC, but we do not believe that they are currently aiming to go far enough in terms of the commercials. Specifically, we believe that all Open Banking services should be considered – not just Variable Recurring Payments (VRPs).

Feedback is consistent that new payments approaches can only thrive when they have both a sustainable commercial model and adequate consumer protection. Without a sustainable commercial model, there is no money to fund adequate consumer protection and infrastructure investment. Open Banking's current economics create no incentive for their providers to drive, invest and support it, and no margin to invest in consumer protection. While some argue that the costs should be funded from profits made elsewhere, this creates cross subsidy and replicates the problems created by the 'free if in credit' banking model.

¹¹⁶ https://www.wearepay.uk/what-we-do/payment-systems/faster-payment-system/

^{117 &}lt;a href="https://www.openbanking.org.uk/news/uks-open-banking-launch-13-january-2018/#:~:text=The%20Open%20Banking%20Implementation%20Entity,its%20service%20goes%20">https://www.openbanking.org.uk/news/uks-open-banking-launch-13-january-2018/#:~:text=The%20Open%20Banking%20Implementation%20Entity,its%20service%20goes%20 live%20in

With Open Banking, the regulations compel all providers of payment accounts to provide the current services without charge, although there is provision to charge for premium APIs. The impact on the market of this dual priced proposition is likely to be negative for end users. When faced with a choice, merchants (who are not able to pass costs directly onto customers) may be tempted to use the free basic Open Banking proposition as compared to propositions such as VRPs beyond sweeping¹¹⁸ that may provide better customer functionality. Furthermore, decisions on premium APIs appear to be taking a long time, as Ordo said in their submission; "The importance of VRP to the UK is too great, and the case against action too weak, to not act now."¹¹⁹

Furthermore, if the banks cannot charge for the current API provision, as volume grows, the commercial imbalance will worsen. As such, if Open Banking is structurally loss making to those that provide it indefinitely, it is almost certain to fail over the long term. If the Government wants Open Banking to thrive and consumers to be adequately protected, we need to put Open Banking onto a commercially sustainable footing. Importantly, we need to do this without impairing the Fintech community's ability to develop thriving business models. This includes ensuring that any charging structures are simple, transparent, fair and predictable. For example (to illustrate) any pricing could be set at a threshold above today's consumption levels to protect existing business models.



Key recommendation:

JROC is currently reviewing pricing in the context of Open Banking, but many contributors have expressed impatience over the time elapsed. Progress is also hindered by uncertainty around the transition to new governance arrangements and a permanent regulatory framework following completion of the CMA Order, as well as the lack of regulatory powers whilst the Order is still in place. Whilst the Government takes forward primary legislation to deliver the regulatory framework for Open Banking, it is strongly recommended that the process is brought to a rapid conclusion. Importantly, the commercial providers of Open Banking themselves are given a voice and influence in the debate at the top level. It is recommended that the commercial model is revisited, and there are a range of options to be considered including allowing the providers of Open Banking to:

- a) Recoup the costs of providing the infrastructure.
- **b)** Recoup the costs of providing the infrastructure plus funding a level of consumer protection or
- c) Recoup the costs, fund consumer protection and make a small profit margin.

¹¹⁸ Variable recurring payments beyond sweeping whereby consent parameters are set up enabling customer not present journeys in an Open Banking context

¹¹⁹ Ordo Submission to FPR Call for Input

We also advocate that all Open Banking APIs should be considered – not just VRPs and other premium APIs – while carefully balancing against any potential impact on today's Fintech businesses. Ability to charge on any of the above could be linked with improving performance above the regulatory performance minimums, and it is important that Open Banking remains more attractive to merchants than the cards alternative. Currently, there are limitations to what can be achieved while the CMA order remains in place, but it is recommended that the thinking is not limited by the current status. However, the lack of a vision for sustainable commercials on Open Banking needs to be addressed and delivered as a priority. Open Banking had a prolonged and difficult birth, but with decisive action it has the potential to come of age now. As Amazon stated in their submission; "In the UK, we believe products facilitated by Open Banking will be the most promising alternative to payment cards in the next five years." 120



For consideration:

One of the things that we heard multiple times (including from senior regulators) is that major initiatives implementation in general, and Open Banking in particular are too "regulatory led". This contrasts with examples overseas (e.g., Canada, Australia and Singapore)¹²¹ where their strategy talks of close industry engagement and alignment. There are examples of industry leadership (e.g., Regulated Liabilities Network)¹²² but there do not seem to be many. Additionally, we heard significant concerns relating to NPA delivery, and while we do not see an obvious solution, we would advocate that some work is done to better understand the position. We believe outcomes would be improved if there was a more supportive and collaborative relationship between regulators and industry, and we believe that now is an appropriate time to consider a reset in the relationships and a new approach to working together.

¹²⁰ Amazon submission to FPR Call for Input

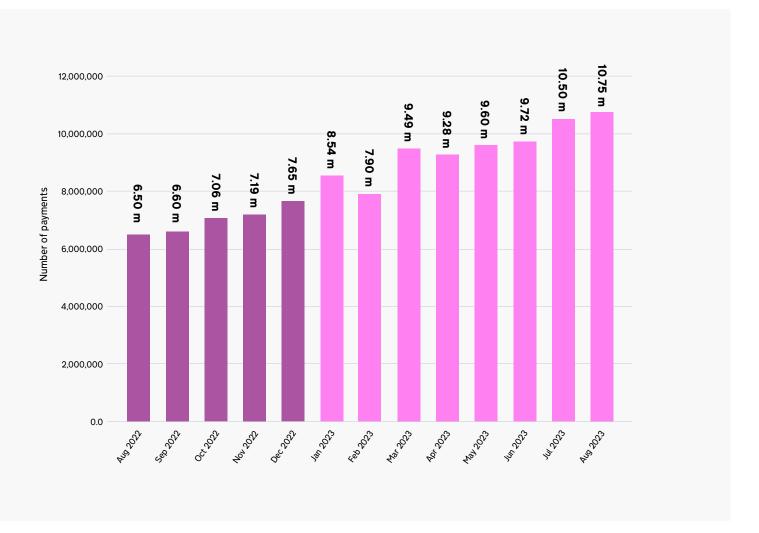
¹²¹ Singapore: the government gave direction for example a requirement for banks to build a 3 click journey, a policy change to allow NFIs to become members of FAST (their real time mechanism) and the introduction of a licencing framework based on the specific activity (such as wallet provision) that they are providing. However, the country then took the innovation forward with for example a range of wallet providers such as DBS PayLah, super apps such as GrabPay and ecommerce platforms such as ShopeePay – https://www.youtube.com/ watch?app=desktop&v=OuUnaHOBvLw

¹²² For example of RLNs: https://regulatedliabilitynetwork.org/

Supporting data

Users of Open Banking are growing with c.12m Open Banking-enabled payments a month, however payments through Open Banking remain a fraction of overall payments today at c.3% of Faster Payments System volumes.¹²³ We do not expect this to change dramatically until the commercial arrangements and consumer protection issues are addressed.

Figure 30: Number of Open Banking payments initiated per month in the UK124



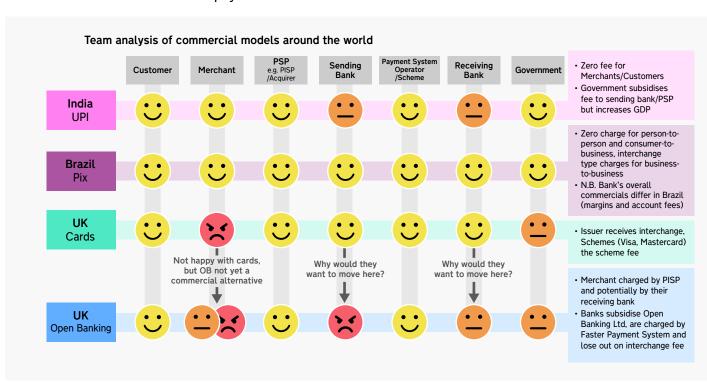
 ¹²³ Team analysis based on OpenBanking.org figures and UK Finance Figures for FPS volumes
 124 OBIE data - https://www.openbanking.org.uk/wp-content/uploads/Historic-Data-Download-4.
 pdf

The commercial arrangements could change to enable the providers of Open Banking to fund an adequate level of consumer protection.

As explained in Conclusion 4, the absence of consumer protection is currently a vulnerability to Open Banking adoption. The CMA9 have to date invested over £1.5bn in Open Banking, and currently pay all the operational costs of service API calls on their infrastructure. Providers of Open Banking are allowed to charge for 'premium APIs', but the detail of how this works is currently undecided. Additionally, this excludes the main costs associated with regulatory APIs. Although charging for regulatory APIs is prohibited under the regulations today, this could be addressed as part of the work to update PSD regulations in a post-Brexit environment. It also requires the CMA to review its order in light of new commercial arrangements and regulatory framework

A comparison of the commercial models around the world demonstrates the merchant frustration with cards but no viable alternative in the form of Open Banking.

Figure 31: Perceived satisfaction of ecosystem players with the cost/price of selected retail payment mechanisms¹²⁵



¹²⁵ Future of Payment Review team analysis 2023



The governance of Open Banking has historically been problematic. 126

Many parties including regulators have commented that there is now a need to move from "a regulatory remedy to a functional commercial organisation". While some contributors commented on an increase in pace since moving to JROC, many expressed frustration and doubt that the group would be able to cut through the issues rapidly. The initiative still appears to have low representation of commercial industry voices (both Fintech and incumbent firms) at the strategic discussion level. Open Banking Ltd stated in their submission: "There is a need for intervention from policymakers, including economic analysis, and extensive evaluation of the different options available to deliver desired policy outcomes. Government direction will be essential to delivering policy objectives in the absence of aligned commercial incentives." ¹²⁷ In this context we interpret policymakers as Government rather than regulators.

The lead alternative to leveraging Open Banking would be to attempt to build a new user experience in front of Faster Payments – a la PayM.

This could use an alias or proxy such as mobile number to replace account details as per Sweden, Brazil, India and increasingly others. While this sounds attractive at one level, the disadvantages are: a) it would layer an incremental major initiative on top of an already overloaded roadmap, b) based on Brazil's experience, it would take minimum 2.5 years to deploy¹²⁸ and c) it could add to the NPA deployment complexity and cost. By contrast, the UK is in the lead in terms of the technical development of Open Banking APIs, therefore it makes more sense to focus on finishing what we have started and building out the existing capabilities further.

To note, it is recommended that we continue to focus on exploiting the APIs that have been built – rather than building out a wider selection of APIs. Experience of iDeal in The Netherlands and Blik in Poland indicates that a well-constructed bank transfer journey can compete (to a degree) with cards – even in markets where cards are well established.

¹²⁶ UK Open Banking boss resigns following report into 'bullying and intimidation' | Financial Times (ft.com)

¹²⁷ Open Banking Ltd's submission to FPR Call for Input

¹²⁸ Feedback given to the team is that Pix build started (with SPI the Instant Payment System) in 2017, being announce for launch in 2019 and going live 2020

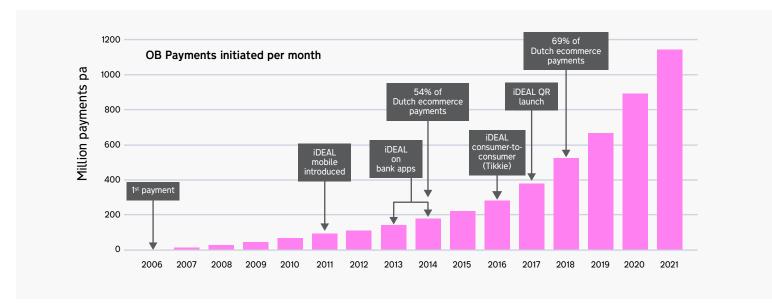


Figure 32: growth in iDEAL transaction volumes¹²⁹

NPA attracted more comments from stakeholders than any other single theme, apart from fraud. NPA is a programme of work designed to replace and upgrade the current interbank payment systems (Faster Payments System and Bacs).¹³⁰ It was initiated in 2016, and after 7 years, it is at the point of appointing a supplier. The terms of reference for this review are specific on saying "The Review should take into account developments in the UK payments industry's NPA, which is being procured by Pay.UK, and may make recommendations building from (not replacing) NPA plans." In our written responses, 58% mentioned NPA. Of these mentions, 36% were positive, 24% neutral and 40% negative. Positive comments related to potential benefits. Negative comments mostly related to the slow rate of progress, and some questioning whether the scope that was initiated in 2016 is now out of date. For example, one contributor queried in their submission whether: "...the design assumptions made in 2017 do not reflect current trends and are less likely to do so in 2026 (the planned deployment date)." At interview, contributors were more forthright, with verbatims across a wide diversity of stakeholders describing progress in emotive terms. We have not sought to validate the substance of these comments but would observe that confidence in a timely and successful delivery of NPA appears variable at best. There was however a strong desire for infrastructure innovation and renewal, and much energy to help NPA succeed.

¹²⁹ LS Consulting based on iDEAL website and press releases

¹³⁰ https://www.psr.org.uk/our-work/new-payments-architecture-npa/

Regulatory oversight and alignment conclusions

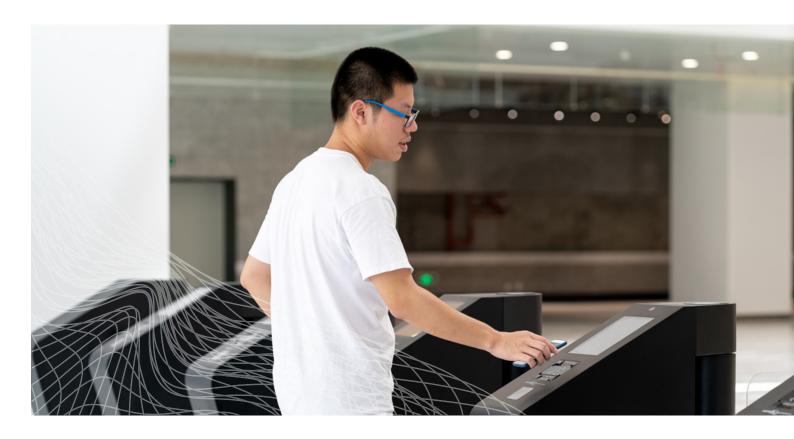
The UK benefits from a strong regulatory framework, but efficiency and innovation in payments could be further improved with greater alignment and coordination between regulators.



The incoming PSR rules on fraud reimbursement will help increase refunds to customers but broader-based actions are needed to tackle the underlying crime. Fraud now makes up 41% of all crime in the UK.¹³¹ It is desperately distressing for the victims of scams who in many cases have lost their life savings. Criminals are adept and ingenious in persuading often vulnerable customers to send them their life savings. Additionally, it is very hard for any amount of technology or 'effective warnings' to stop a determined and lovestruck vulnerable customer sending money to someone that they genuinely believe to be their soulmate in distress.

It is urgent that this issue is addressed, not least because the proceeds of crime are funding further and potentially even more serious crimes. Half of all respondents to this review raised fraud as an issue, and half of those raised the new APP fraud rules. Many raised concerns about possible adverse outcomes. Specifically, respondents were concerned that the new rules would lead to firms increasing friction in making payments more generally. Many participants are also concerned about the risk of rising first party fraud as the new rules are very open to abuse. On the positive, the new rules will cover significantly more firms, and put more emphasis on the receiving account. Coupled with the rising financial incentive to tackle fraud, this is likely to lead to many frauds being stopped, which is progress.

¹³¹ Government data 2021/22: https://www.gov.uk/government/publications/economic-crime-and-corporate-transparency-bill-2022-factsheets/factsheet-failure-to-prevent-fraud-offence



However, much emphasis is being placed on refunding victims of scams relative to effort to prevent the crime in the first place. Scams need to be tackled in a comprehensive way to prevent the crime. First, the place where the crime begins should be tackled. Barclays' data indicates that 87% of all APP scams begin on 'tech platforms'. Second, many scams are facilitated through a voice or text chat – so the telcos also have a role. Third there is the sending and receiving financial entity – which obviously have a key role. Finally, law enforcement has a critical role in following up to pursue the criminals and serve as a deterrent to others.

There is some significant encouragement to be drawn from: **a**) the recently announced Fraud Strategy which aims to take a more end-to-end approach¹³³ and **b**) good work led by Anthony Browne MP during his time as the Government's Anti-Fraud Champion¹³⁴ and **c**) UK Finance leading a broader based approach to tackling scams beyond financial services.¹³⁵

However, in my view the broader actions are possibly not strong enough considering that frauds and scams are the single biggest crime in the UK. The stated Government objective is: "Our ambition is to cut fraud by 10% from 2019 levels, down to 3.33 million frauds by the end of this Parliament." However, data indicates that there were 3.65 million frauds (end 2022) in the most recent reported year, so the stated ambition is a circa 8% reduction by end 2024 versus today. This would represent significant progress in the short term but will still leave much work to do.

 $[\]frac{\text{https://home.barclays/news/press-releases/2023/08/eight-in-ten-brits-feel-unsafe-on-social-media-due-to-scammers/}{}$

¹³³ https://www.gov.uk/government/publications/fraud-strategy

¹³⁴ https://www.gov.uk/government/people/anthony-browne

¹³⁵ https://www.ukfinance.org.uk/our-expertise/economic-crime/fraud-scams



Key recommendation

PSR to formally review the costs and benefits of the new fraud and scam rules after 12 months of implementation have elapsed. Particular attention should be given to understanding the additional friction placed in the payments process and how that compares internationally. Additionally, first party fraud rates and abuse of the new rules more generally should be understood, as well as any impact on the overall fraud crime rate. To note, HM Treasury now have the powers under the new Financial Services and Markets Act¹³⁶ to compel this review if needed.



For consideration

While it is encouraging to see that the new Government Strategy in this area is looking across departments, the response is still in its early days relative to the challenge which is tackling the UK's most prevalent crime. There is a huge prize for the private sector if the costs of crime could be reduced. I advocate that a higher level of ambition should be set for the coming period and consideration given to a strong public/private partnership with the opportunity to reinvest savings from tackling crime together.



Supporting data

Frauds and scams are the single largest category of crime in the UK and have been growing over recent years. Additionally, the proportion of crimes where the customer consciously authorises the transaction has also been growing, and now makes up the majority of cases. The primary issue today is that people are being deceived into sending money to criminals - rather than a technical failing or vulnerability.

¹³⁶ https://www.legislation.gov.uk/ukpga/2023/29/contents/enacted

Figure 33: Police recorded crime types in England and Wales, 2023¹³⁷

Offence	Numbe of incident YE March 2	ts in	Percentage change compared to YE March 2020	Percentage change compared to YE March 2022	Timeline to 2023 Source
Fraud	3,526,000		-4% [NS] 🔻	N/A	2017 CSEW
Theft	2,650,000		-20% [S] 🔻	N/A	1981 CSEW
Violent crime	998,000		-19% [NS]	N/A	1981 CSEW
Computer misuse	745,000		-15% [NS]	N/A	2017 CSEW
Vehicle offences	405,872	•	-13%	13% 🛕	2003 PRC
Burglary	275,919	•	-28%	4% 🛕	2003 PRC
Robbery	75,265	•	-17%	13% 🛕	2003 PRC
Knife and sharp instruments	47,292	•	-7%	6%	2011 PRC
Homicide	602		-16%	-14%	2003 PRC
			[S] = Significant [NS] = Not significant		= Comparable data not available

Figure 34: Estimated change in proportion of authorised/ unauthorised frauds¹³⁸

Year ending	Authorised	Unauthorised	
March 2022	54%	46%	
March 2020	44%	56%	

¹³⁷ Crime Survey for England and Wales (CSEW) from the Office for National Statistics, Police recorded crime from the Home Office: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingmarch2023.

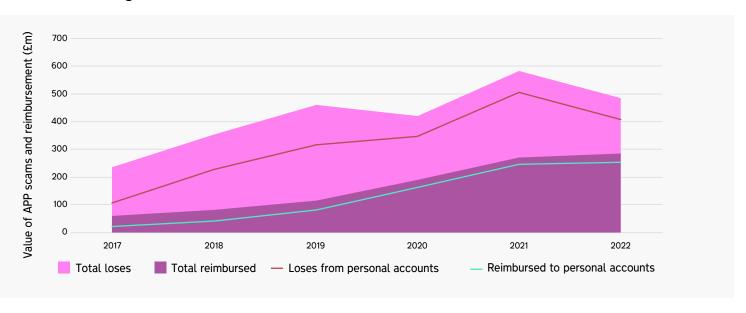
¹³⁸ Government Fraud Strategy 2023: https://www.gov.uk/government/publications/fraud-strategy/fraud-strategy-stopping-scams-and-protecting-the-public

The value of refunds by the industry has been growing as the total magnitude of scams has been growing. 16% of the UK population have reported being a victim of fraud in the last four years. 139

Figure 35: Incidents of Fraud 2016/17 to 2021/22140

Year	Incidents (millions)
January 2022 to December 2022	3.65
April 2020 to March 2021	4.64
April 2019 to March 2020	3.68
April 2018 to March 2019	3.81
April 2017 to March 2018	3.26
April 2016 to March 2017	3.40

Figure 36: APP fraud value lost and reimbursed (£m), 2017-2022141



¹³⁹ ACI Worldwide 'Prime-Time-for-Real-Time-Report' 2023

¹⁴⁰ Government Fraud Strategy 2023: https://www.gov.uk/government/publications/fraud-strategy/fraud-strategy-stopping-scams-and-protecting-the-public

¹⁴¹ FPR Team Analysis based on UK Finance Fraud Reports 2019-2023

The PSR is in the process of introducing a new set of APP fraud rules (implemented via Pay.UK) which will compel firms to refund customers who have been a victim of a scam. The only material exceptions are where first party fraud or gross negligence can be evidenced. Both these exceptions are a high bar to prove, and hence it is believed that refund rates will increase compared with today, not least because the rules will apply more broadly to firms in the market. Importantly, third party payment initiators (e.g., Open Banking) who have access to and hold funds during the payment journey will be liable for reimbursement. Under current rules, they are only liable for any losses if they failed to enter the correct details.

Figure 37: Key elements of PSR's new APP fraud reimbursement policy¹⁴²



Reimbursement requirement for APP fraud within Faster

Payments. Sending PSPs must reimburse all customers who fall victim to APP fraud (subject to certain exceptions and limits). See Chapter 2 for the scope of the policy. The reimbursement requirement does not apply to:

- civil disputes
- payments which take place across other payment systems
- international payments
- payments made for unlawful purposes.
- 2 Sharing the cost of reimbursement. Receiving PSPs must pay sending PSPs 50% of the reimbursement that the sending PSP paid to the customer. A time period will be set by Pay.UK with an ultimate backstop to ensure receiving PSPs reimburse sending PSPs.
- **Exceptions for APP fraud claims.** There are two exceptions to reimbursement (noting other policies) under the new reimbursement requirement:
 - Where the customer has acted fraudulently ('first-party fraud')
 - Where the customer has acted with gross negligence. This is the customer standard of caution for APP fraud claims.

¹⁴² https://www.psr.org.uk/news-and-updates/latest-news/news/psr-confirms-new-requirements-for-app-fraud-reimbursement/

Frauds and scams involve a wide variety of organisations – not just financial services. To tackle the crime effectively, the end-to-end journey needs action at each step.

Figure 38: Typical fraud journey¹⁴³

Where does it start?			Where does it go?	What happens next?
Most scams start online in social media	Conversation or text/messaging exchanges	Sending bank/third party	Receiving bank/ building society	Money taken out or transferred out
Big Technology companies	Telcos and messaging platforms	Banks and building societies	Banks and building societies	Law enforcement

Tackling the crime at source becomes more important as more and more 'non-bank money' is flowing on 'non-bank rails'. First, there is the use of crypto currency as an alternative payment mechanism. While not within the scope of this review, it is important to call out that crypto is increasingly becoming integrated into the mainstream (registering in 2022 for the first time as a payment mechanism accounting for c.0.3% of ecommerce payments in the UK),144 and we see PayPal's acquisition and integration of Paxos as particularly significant in this regard. Not only does it provide a simple interface for consumers to buy and sell crypto currency, but it also continues to signal increasing legitimacy of crypto to consumers. Second, the increasing trend to convert bank money into some form of credit within a virtual world. For example, Bytedance enable users to buy TikTok Coins which they can then use to credit performers within their virtual environment. While these coins cannot be traded between individuals, they illustrate the growing trend in this area which amounts to significant flows of funds (in Q1 2023, TikTok became the first app to ever surpass \$1 billion in consumer spend in a single quarter).¹⁴⁵ Third, the rise of Stablecoins – i.e., crypto currencies pegged to a fiat currency. While Libra did not progress, it was illustrative of the opportunity in this space, and stable coins are expected to grow. All the above sit outside the new APP fraud rules but are vulnerable to be used for frauds and scams.

¹⁴³ FPR Team analysis

¹⁴⁴ FIS Global Payments Report

 $^{{\}bf 145} \ \ https://www.data.ai/en/insights/market-data/tiktoks-monetization-dethrones-gaming-royalty/?consentUpdate=updated$

Conclusion 9: Streamlining the environment for Fintech opportunities

The payments Fintech sector is large, commercially significant, and a growing British success story in the global financial services space.

The UK has held a strong position, and in conjunction with a leading position on Open Banking this provides a platform on which to build. As Innovate Finance wrote in their submission: "Digital payments is a significant area of focus for the UK's Fintech community; there are as many as 1,200 companies in the UK operating in this area of financial services, making it the second largest of all Fintech verticals. They have attracted £20 billion of investment funding and are estimated to have been growing (by number of employees) at 46% per year. Payment FinTechs include some of our largest and most successful scale-ups."146



Key Recommendation

The needs of Fintechs are also new and different from the incumbents, and growth could be significantly accelerated if some of the burdens could be lifted, and the landscape simplified as per our overall recommendation. Additionally, we would recommend that Government reviews whether the way the regulatory requirements outlined below are applied to Fintechs is clear and appropriate, and actions from the Kalifa review continue to be prioritised.



For Consideration

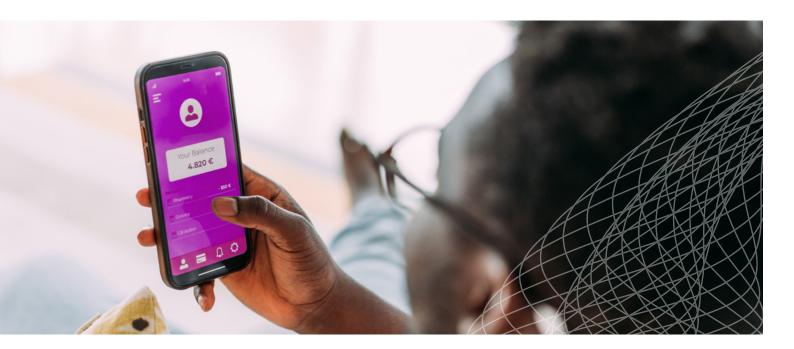
A specific suggestion on how to do this is for HM Treasury and the regulators to publish a streamlined version of the Regulatory Initiatives Grid which highlights only those initiatives that are of critical importance to Fintechs, and guides on relative priorities. It might be helpful to have a more filtered set of priorities for smaller and newer firms.

¹⁴⁶ Innovate Finance submission to FPR Call for Input

Supporting data

The weight and complexity of the landscape is a hindrance to growth. We heard from many contributing Fintechs that the sheer volume and weight of regulation is almost impossible to navigate. Large firms with considerable resources have cited the challenges of the complex landscape, and therefore it is hard to imagine how a single entrepreneur could prioritise such activity. Therefore, the overall recommendation of this review to create a National Payments Vision and Strategy will drive better alignment of priorities and simplification of the landscape in time should help.

There are certain specific regulations where clarification may help accelerate Fintech growth. We have not had sufficient time or resource to look in depth at each of these issues, but we have sensed that the ambiguity is causing frustration, and hence advocate that the issues below are clarified by the relevant bodies. The regulation that is causing the greatest concern is the application of the APP code to start ups. The argument made is that a single case could bankrupt a fledgling start up, and the risk of this is a deterrent to investment in UK start-ups. We note the PSR's policy proposals¹⁴⁷ contain some mitigations to this risk, but these do not eliminate the problem, and this seems to be a relevant point to the competitiveness of the UK for Fintech investment.



147 See https://www.psr.org.uk/publications/policy-statements/ps23-3-fighting-authorised-push-payment-fraud-a-new-reimbursement-requirement/; https://www.psr.org.uk/publications/consultations/cp-23-7-app-fraud-the-consumer-standard-of-caution/; https://www.psr.org.uk/publications/consultations/cp-23-6-app-fraud-excess-and-maximum-reimbursement-level-for-fps-and-chaps/

Figure 39: Regulations where clarification may help accelerate Fintech growth

Issue	Stakeholder feedback	Relevant body
APP rules impact on small PSPs	PSPs will be required to reimburse 50% of any payment which is lost in an APP fraud, where they are either the sending or receiving PSP. Concern that a small PSP could be liable for a large payment that has been made to one of its customers.	PSR ¹⁴⁸
	There are some potential mitigations to this risk:	
	A max cap will be applied to any reimbursement. PSR has consulted on a level (unlikely to be any higher than £415k).	
	A single PSP will only be liable for 50% of that figure	
	HM Treasury is looking to change the law to allow firms (on both sending and receiving side) to take time to assess suspicious payments before crediting them.	
	Ultimately a firm will only be liable if it has given an account to, and allowed a payment to, a fraudster.	
Unclear whether PISPs need to do full AML checks on payers	A concern was raised to us that it is not clear whether the MLRs 2017 require PISPs to carry out AML checks on merchants only, or also on payers. Concerns also raised about competitiveness if it applies to payers, as this would be out of line with existing practice.	HM Treasury (legislation) ¹⁴⁹ FCA (Compliance ¹⁵⁰
E-Money institutions (EMI's) cannot pay interest (or any other benefits related to the length of time the e-money is held)	EMIs argue the prohibition limits their ability to compete with credit institutions. There are different regulatory approaches around the world. 151 But reasons appear to be due to concerns with customers using e-money as long-term savings accounts. E-money is intended to be a substitute for notes and coins (which are non-interest bearing), rather than for commercial banking. However, FCA guidance appears to allow money to be distributed to customers, where the payment is unrelated to the length of time the e-money is held. E.g. this would not prohibit benefits related to spending levels EMIs' prudential requirements are designed to be proportionate to the operational and financial risks they pose. Any review of their permitted activities is likely to be	HM Treasury (legislation) ¹⁵² FCA (reg approach) ¹⁵³
	accompanied by a corresponding review of the appropriate prudential regulation.	
EMIs cannot hold deposits at central bank	UK legislation allows EMIs to safeguard customer funds at the Bank of England. However, EMIs have raised that they are restricted from accessing overnight reserves, which hampers innovation.	Bank of England
	They do have other options: invest the funds in approved secure liquid assets, take out an insurance or guarantee policy, or deposit the funds with an authorised credit institution. Each of these may have challenges and significant costs for smaller institutions.	

 $[\]frac{\text{148}}{\text{for-app-fraud-reimbursement/}} \\ \frac{\text{https://www.psr.org.uk/news-and-updates/latest-news/news/psr-confirms-new-requirements-new-requirement/}{\text{https://www.psr.org.uk/news-and-updates/latest-news/news/psr-confirms-new-requirements-new-requirement/}}$

¹⁴⁹ https://www.legislation.gov.uk/uksi/2017/692/contents/made

¹⁵⁰ https://www.fca.org.uk/firms/financial-crime/money-laundering-regulations

 $[\]frac{\textbf{151}}{\textbf{https://www.cgap.org/sites/default/files/publications/2021_05_Technical_Note_Interest_Float_Accounts.pdf}$

¹⁵² https://www.legislation.gov.uk/uksi/2011/99/regulation/45/made

¹⁵³ https://www.fca.org.uk/publication/archive/emoney-approach.pdf

¹⁵⁴ https://www.legislation.gov.uk/uksi/2017/752/regulation/23/made

Recommendations from the Kalifa review have been progressed, and we would encourage that these are continued to be pursued. And relevant to this review, we would support the UK taking leadership for global standard setting on Open Banking. This is a good example of potential UK leadership in the payments space.



Conclusion 10: Aligning and prioritising Regulatory and Industry initiatives

The landscape is congested with multiple priorities, each of which make sense in isolation. The UK benefits from a very well-developed regulatory environment and is unique in having a dedicated payment systems regulator. 155 Additionally, multiple industry participants complemented the sophistication of the UK regulators in comparison to other countries. We also heard consistently that market participants do want to invest in payments infrastructure. However, there are three initiatives which – if taken to conclusion - will run to many billions of pounds of investment. These are Central Bank Digital Currency (led by the Bank of England), NPA (primarily overseen by the PSR) and Open Banking (now jointly led by the FCA and PSR). While the Financial Ombudsman Service (FOS) is not technically a regulator, some firms made the point that the FOS has a very significant impact on how the regulations are operated in practice. In addition, there are multiple smaller scale but still significant initiatives that firms need to deliver or comply with. Furthermore, for international players, there is a need to comply with requirements from SWIFT and the G20. Within the industry, there are multiple organisations that set standards, including Visa, Mastercard, Pay.UK and Open Banking Ltd.

Taken together, the combined complexity raises two issues. First, the need for regulatory coordination; firms told us that the pressure to comply with such a high volume of competing change could – in extremis – create operational risk. Additionally, several firms described a resistance and aversion to innovate for fear of falling foul of conduct regulations. As one participant said, "firms are terrified to innovate." Another said that they are inhibited from serving their clients for fear of "regulatory backlash." Second, at the strategic level, we could not identify an overall vision or definition of the end state towards which we are collectively aiming.

¹⁵⁵ E.g. https://committees.parliament.uk/writtenevidence/111710/pdf/#:~:text=The%20 Payment%20Systems%20Regulator%20(PSR,systems%20regulator%20in%20the%20world



Key recommendations:

At the strategic level, our key recommendation is the creation of a National Payments Vision and Strategy which is covered earlier in this document. However, there are also immediate steps that can be taken to improve alignment and efficiency. Specifically:

- 1. HM Treasury to use its letters of remit to:
 - **a.** provide a strategic steer of the Government's priorities that drives closer alignment of objectives,
 - **b.** ask all involved regulators to reduce their requirements of the industry by an ambition of 10% in 2024. While 10% is aspirational and hard to measure, such an ambition could help create the space for more innovation.
- Ensure cross-board representation across the various regulatory bodies. In particular to have Bank of England representation on the PSR Board and vice versa.
- 3. Review the Regulatory Memorandum of Understanding between the Bank of England, FCA and PSR, and enhance it.
- 4. As per Conclusion 7, strengthen senior industry representation on relevant bodies (e.g., JROC).



For consideration:

As part of this work, we have analysed successful infrastructure initiatives from other areas. Characteristics of success appear to include a strong Government description of the intended outcome, in some cases underpinned by relevant legislation. For example, The Olympic and Paralympic Games Act of 2006 put in place the enablers for the 2012 games. Another example is the 2013 Electricity Market Reform, or the creation of Broadband Delivery UK. In the case of the latter, Government defined the desired outcome in terms of broadband coverage, and then worked with local Government and industry to deliver it – overseen by the Regulator (Ofcom). We have also looked at successful payments initiatives from around the world. As well as having a clearer definition of outcome, successful initiatives appear to have a better level of industry-regulator cooperation. Following the financial crisis, we have been living through a period where trust in financial services has been negatively impacted. Is it now time to revisit this and explore a more collaborative approach?

III Supporting data

The UK has multiple regulators with unique focuses relating to payments. One contributor said that "there is a lot of fragmentation with diverse and overlapping mandates"

Figure 40: UK Regulators and their focuses

	Bank of England	Financial Conduct Authority	Payments Systems Regulator	Prudential Regulation Authority	Financial Ombudsman Service
Key focus	Financial stability	Firm conduct	Competition & innovation in payment systems	Safety and soundness of systemic firms	Consumer disputes
Consumers		Ensure consumer protections	Ensure payment systems are operated and developed in a way that promotes the interests of consumers		Free at point of use dispute resolution
Infrastructure	Ensure resilience of UK payment systems	Protect the integrity of the UK financial system	Promote innovation in payment systems infrastructure	Promote safety and soundness of the UK's banks and insurers	
Commerciality		Encourage competition and innovation Facilitate international competitiveness of UK economy and its medium- long term growth	Promote effective competition in the market for payment systems, and the markets for services provided by payment systems	Facilitate effective competition in the markets for services provided by UK banks and insurers Facilitate international competitiveness of UK economy and its mediumlong term growth	
Major Payments Related Initiatives	Central Bank Digital Currency (as operator) New Payments Architecture RTGS renewal (as operator, though BoE also play a supervisory role on a non-statutory basis re CHAPS)	Open Banking ¹⁵⁶ Smarter Regulatory Framework repeal and replacement of retained EU law for			APP scams complaint outcomes
		Consumer Duty ¹⁵⁷	Mew Payments Architecture APP scams requirements		

¹⁵⁶ Also involving CMA, who originated the 2016 Order

¹⁵⁷ Not a payments-specific initiative but highly relevant for payment market operators

The UK is unusual in having such a wide range of specialised regulators.

On the positive, we received comments regarding a high level of expertise relative to other countries, and there was a general view that the UK is well and highly regulated. However, questions were raised about the efficiency of the UK set up, and the challenges of coordination. The FCA Consumer Panel noted: "the Panel is not sure the current model under which a plethora of different providers co-exist under a regulatory structure in which macro-prudential regulation is conducted by the Bank, competition regulation by the PSR and conduct regulation by the FCA is satisfactory or future proof." 158

Another contributor described the complexity as frustratingly unproductive and added that "the snake eats its tail".

Figure 41: National Financial Regulators in different countries¹⁵⁹

Country		Central bank?	Competition regulator?	Specific conduct or supervisory regulator?	Specific payments regulator?	Specific prudential regulator?
ик		~	~	~	~	~
USA ¹⁶⁰		~	~	~	×	~
Australia	7 * * * * * *	~	~	~	×	~
Sweden		~	~	~	×	×
Netherlands		~	~	~	×	~
Brazil	•	~	~	×	×	×
Thailand		~	~	×	×	×

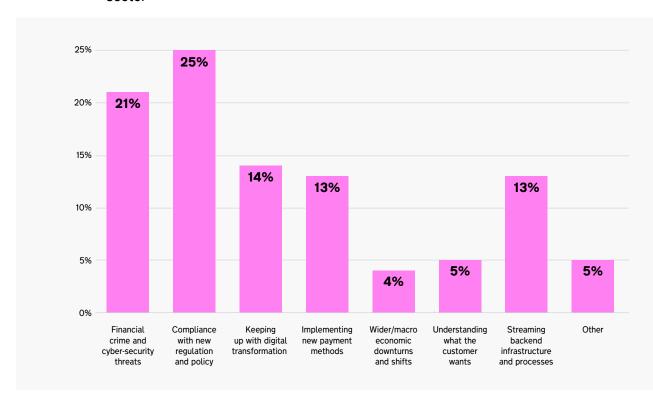
¹⁵⁸ FCA Consumer Panel Submission to FPR Call for Input

 $^{{\}bf 159} \quad \text{FoP Review team analysis and } \underline{\text{https://resourcehub.bakermckenzie.com/pl-pl/resources/global-financial-services-regulatory-guide}}$

¹⁶⁰ We note the US has many more financial regulators than the UK, including the Federal Reserve, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, individual State regulators, the Consumer Financial Protection Bureau (CFPB), the Financial Crimes Enforcement Network, the Federal Financial Institutions Examination Council, the Department of Justice, the Securities and Exchange Commission, and the Federal Trade Commission. Some banks are subject to regulation by the majority of these regulators.

All the major firms cited complying with the volume and intensity of regulation as a key challenge. Firms estimate that 91% of their allocated budgets are allocated to regulatory or mandatory change projects, ¹⁶¹ and this challenge was also evidenced in the Payments Association research. Regardless of budget, large firms are more often constrained by limited subject matter experts and a finite number of change windows when work on their payments systems can take place. Smaller firms and Fintechs are likely to find it even more challenging.

Figure 42: Payments Association data on biggest challenge ahead for the sector¹⁶²



¹⁶¹ UK Finance submission to FPR Call for Input

¹⁶² Payments Association State of the Industry Survey – 2023

Perceptions of the degree of regulatory coordination vary between regulators and the regulated firms. Regulators demonstrate clear efforts to coordinate. The Memorandum of Understanding, Regulatory Initiatives Grid and regular meetings are evidence of this. However, we heard varying accounts of the success of these efforts. From the regulatory side we heard that the memorandum of understanding had recently been reviewed and was working well. Additionally, regulators expressed a view that the initiatives would reduce the regulatory burden in time. By contrast, regulated large firms reflected their impression of competing priorities and Fintech reported challenges in digesting and navigating the complexity of the regulatory landscape. We also heard that payments and crypto account for 15% of the current financial services regulatory pipeline. 163 It should be noted that the regulators have each sought to provide direction through individual strategies.¹⁶⁴ However, there is no overarching integrated strategy for the payments landscape overall. In other examples (e.g., Telco) the Government write the strategy (for example for Broadband Delivery UK) and the regulator then oversees compliance with the strategy. While it is to be expected that regulators and firms have different views, it feels like the current gap is unproductively wide.

¹⁶³ Regulatory Initiative Grid: https://www.fca.org.uk/publications/corporate-documents/regulatory-initiatives-grid

¹⁶⁴ https://www.fca.org.uk/publication/corporate/our-strategy-2022-25.pdf



Annex: International learnings for the future of UK payments

To establish our understanding across the global payments landscape we have taken a number of actions:

- In-country SME discussions: 1:1s with subject matter experts those who
 have been on the ground establishing the technology, those developing the
 customer proposition and regulators across; Singapore, Brazil, Saudi Arabia,
 Malaysia, Sweden, Thailand, New Zealand and Australia.
- International round tables: EY Parthenon arranged round tables for the team with in-country reps including Singapore, India, Brazil, Thailand, The Netherlands, Denmark, Sweden, US, Canada, South Africa, Australia and Saudi Arabia.
- Responses to our 'call for views': our thanks to UK Finance, EY Parthenon, and LS consulting for providing comprehensive country-by-country updates including views on innovation and adoption
- Team desktop research: the SME discussions in particular can give insights on some areas and gaps on others and therefore all our work has been validated and enhanced through research and analysis
- Team analysis: what each country is doing and how the country has responded is half the story for the UK. What we can learn from combining the worldwide views on specific themes that provided some key insights for the UK.

We have used these insights throughout our report, for example on assessing the relative macro trends in payments, the relative position for UK consumers, the position of the UK commercial model for Open Banking bank transfers, and potential technical options for the landscape of change.

However, many of these international learnings merit their own conclusions through this annex.

What did we learn from our review of international payments?

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Conclusion A: Every country's payment industry is shaped by the need of the country.

Worldwide, consumers are changing how they make payments, with cash and cheque transactions declining and being replaced with digital based alternatives.

However, consumer preferences at both point of sale and for ecommerce vary dramatically – in China, ecommerce preferences are dominated by wallets, Japan it's credit cards, Poland account-to-account and South Africa, debit cards. This led us to question why and what therefore is the uniting factor? Our conclusion is that each country has a different starting point (the % of the population with a bank account, the technology maturity in the country, the sheer geographic differences) and different aspirations from payments. We might term this as 'the need' of the country.

For example:

- India identified the need to move from a cash-based economy to a 'digital India'. For payments this meant building a real-time person-to-person system built out from a national digital ID scheme and integrated technology stack to provide end-to-end journeys and a QR code-based proposition that didn't require the vast micro small business market to have access to point of sale terminals. The key benefits for India: they have saved c. \$67-88bn in transaction fee related costs, over 50 million merchants accept UPI payments versus 5-8 million who accept cards and there has been increased tax compliance.¹⁶⁷
- China deemed a 'mobile-first' nation by the end of 2015 (with mobile accounting for 90.1% of internet users)¹⁶⁸ needed a radically different customer proposition for payments – the solution, the rise of Super Apps.
- Brazil in 2017 had 30% of the population who didn't hold a bank account,¹⁶⁹ large geographies and the challenge of distributing COVID payments at a time when cash was deemed unhygienic PiX, the digital real-time payment mechanism was the solution.

¹⁶⁵ FIS, The Global Payments Report 2023 highlights the preferred ecommerce payment mechanism by country.

¹⁶⁶ For example, to Grow GDP as is the case in India, to support cross border per Singapore or to build financial inclusion such as in Brazil

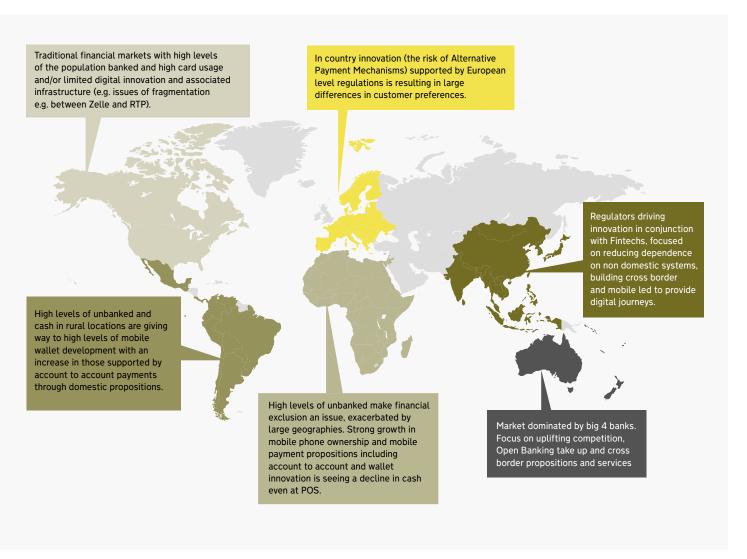
¹⁶⁷ EY Parthenon analysis

¹⁶⁸ https://www.cnnic.com.cn/AU/MediaC/rdxw/2016/201601/t20160127_53309.htm

¹⁶⁹ World Bank data for adults over the age of 15. https://www.worldbank.org/en/publication/globalfindex/Data#sec3

Or Kenya with only c. 19% of the population holding a bank account in 2007¹⁷⁰ and a six-fold increase in 5 years of the population having mobile phone subscriptions,¹⁷¹ clearing through the telephone operators via M-PESA makes sense.

Figure 43: Summary of the worldwide position on payments highlights regional differences, but there are specific country differences within these¹⁷²

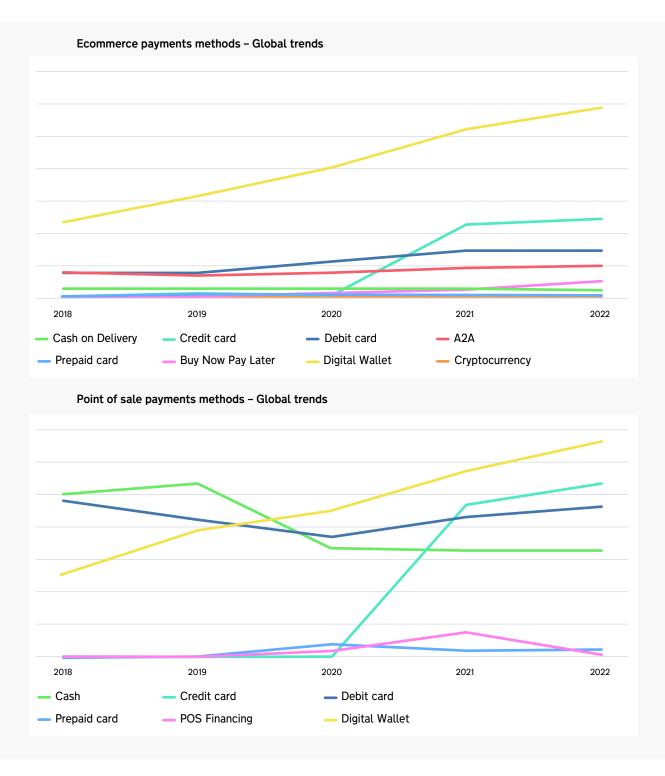


¹⁷⁰ World Bank data https://fred.stlouisfed.org/series/DDAI01KEA642NWDB

 $[\]frac{\textbf{171}}{\textbf{https://www.statista.com/statistics/509516/mobile-cellular-subscriptions-per-100-inhabitants-in-kenya/}$

¹⁷² FPR Team and Baringa Partners LLP analysis

Figure 44: Summary of worldwide changes in payment mechanisms illustrates the move toward digital payments¹⁷³



¹⁷³ FIS, Global Payments Report data. Based on value of transactions \$mn

Conclusion B: success can be achieved in multiple different ways however there are 4 factors these countries have in common – a strong vision, industry collaboration, that the proposal stacks up commercially and trust.

How each country responds to their particular need and the global consumer trend towards digital payments in each country is different.

Some use global payment mechanisms e.g. Apple Pay, others domestic-led solutions and in turn the design of these solutions differs – for example some focused on person-to-person payments (such as Zelle in the US) or consumer-to-business (such as iDEAL in the Netherlands) and indeed what they build differs. For example, the Netherlands (iDEAL) focuses on a bank-based mechanism that is provided to customers through partnerships e.g. via Stripe, Adyen etc on merchant sites, Tikkie and Knab for person-to-person and in others apps. Bahrain has focused on building the customer app itself (Benefit pay) and India has focused on enabling access (and competition) to the underlying infrastructure through UPI that is then used by Fintechs to provide the customer app (e.g. Phone PE, PayTM etc).

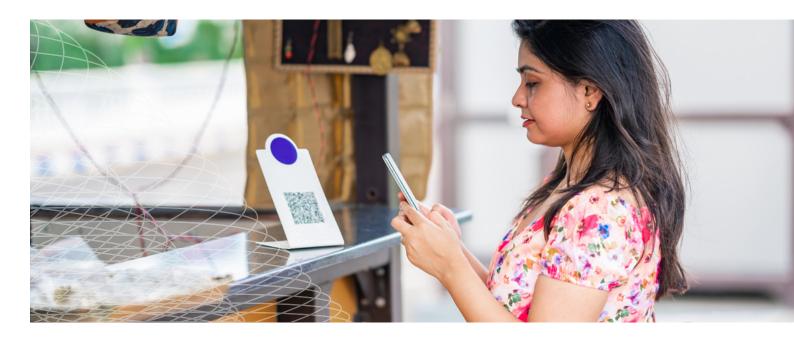
However, success (as determined by have they met the objective they set out) varies across country. Why is it for example that whilst Brazil and Mexico both deployed account-to-account based mobile propositions, Brazil had a 123% account-to-account ecommerce growth 2021-2033 whilst Mexico's fell by 16%?¹⁷⁴ or South Korea had 70% of their population using Open Banking within a year, whilst in Australia only 18% of the population has at least a basic understanding of what Open Banking is?¹⁷⁵

¹⁷⁴ FIS Global Payments Report 2023. N.B. Digital wallets may either be cards based or account to account based

 $[\]frac{175}{\text{https://frollo.com.au/blog/open-banking-awareness/\#:}} + \text{text=Our\%20latest\%20research\%20} \\ \text{shows\%20that,in\%20the\%20mortgage\%20application\%20process}$

In making comparisons, there are four factors that come up time and again for successful mechanisms:

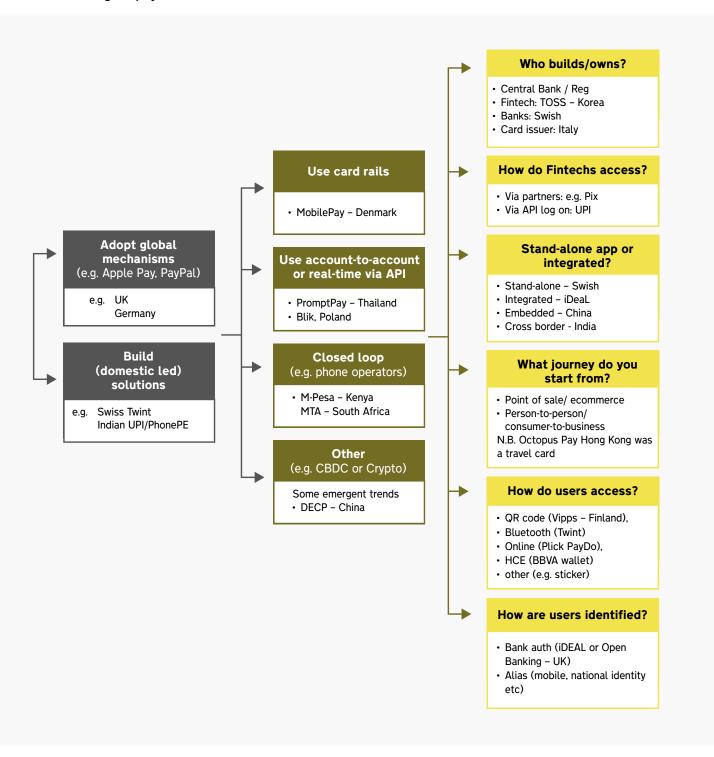
- i) A strong vision: The stronger the drive to a specific end vision the greater the success e.g. in India they were clear on the objective: a drive for end-to-end digital journeys and the potential for an £1trn increase on GDP by 2025¹⁷⁶ and used this to feel confident in incentivising merchants with a zero MDR¹⁷⁷
- ii) Industry collaboration: Innovation can come from Regulators/central parties, banks or Fintechs but they must all play a role
- iii) The proposal stacks up: the market needs to make sense i.e. there needs to be some form of commercial value (for example India's ability to subsidise the model on the basis that this would support significant GDP growth in the economy) and it needs to make sense for customers (e.g. in India it was very focused on the small retail market or person-to-person market and reducing the set-up costs for these merchants)
- iv) Trust: Brand has stood out as a defining factor across successful payment implementation and this trust has been built from central communication, social factors and national pride



¹⁷⁶ MEIT release: India's trillion-dollar digital opportunity – https://pib.gov.in/
PressReleaseIframePage.aspx?PRID=1565669

¹⁷⁷ Zero Merchant Discount Rate: i.e. no fees paid by merchants for using UPI based payments propositions – https://www.moneycontrol.com/europe/?url=https://www.moneycontrol.com/news/business/banks/mc-explains-what-is-mdr-and-why-the-centre-clarified-its-stance-on-upi-9069081. html

Figure 45: Worldwide there is a breadth of responses to the increased consumer trend for digital payments – taxonomy of approaches to providing digital payments worldwide ¹⁷⁸



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Conclusion C: There are international examples that are demonstrating a more sophisticated adoption strategy than the UK.

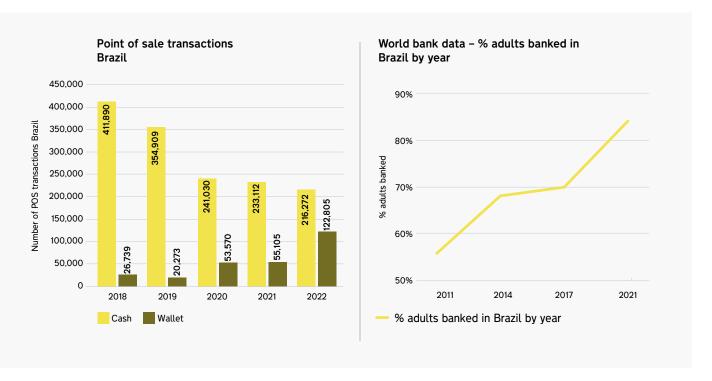
PiX is a good example of adoption approaches being matched to their core objectives (for i) an innovative mechanism for instant payments and ii) financial inclusion):

- Communication: Brazil were very clear on building PiX as a brand (indeed to Pix is now a verb) and made the benefits to merchants and users clear to the right people
- The onboarding process is made as easy as possible for merchants who can sign up to PiX (with Brazil having a market leading 800 direct and non-direct participants) and customers. For example if I look to make a payment to a non-PiX registered colleague rather than being faced with a number of error screens, PiX notifies the colleague and offers them a 'one-step' sign up process
- Simplicity of customer journey: the central bank of Brazil was clear on its requirements for a 3-step journey and the result is PiX has a series of efficiencies as compared to other bank transfer journeys. For example:
 - the authentication of the payer is by opening the app,
 - the identification of the payee is through the concept of a 'Key' which can be a phone number an ITIN or FTIN,¹⁷⁹ email or QR code
 - this 'key' denotes a single account, there is no need for a step to choose which account to use.
- The market is onboard: merchants are provided with an integrated model¹⁸⁰ with zero fees for person-to-person and consumer-to-business and banks are supportive given the wider financial inclusion benefits and therefore all parties were seeking to promote PiX.

¹⁷⁹ ITIN: Individual Taxpayer Identification Number, FTIN: Federal Taxpayer Identification Number

¹⁸⁰ For example, PiX includes capability for reconciliation and inventory write-off

Figure 46: sources demonstrate the success of PiX and its objective to build an alternative mobile based payment mechanism and financial inclusion¹⁸¹



Conclusion D: users are relatively 'future focused' but this stems from mechanisms that provide better value to users.

For example, research shows 42% of worldwide respondents agreed biometrics will be widely used by 2025 and 42% of respondents would use machine-to-machine payments for low value payments, however, 58% of respondents are afraid of losing track of payments if automated machines pay on their behalf.¹⁸² However, in Europe for example 59% believe speed is the most important factor in adopting a digital wallet.¹⁸³

¹⁸¹ Sources: POS Transactions – FIS Global Payments Report, 2023. % adults banked – World bank data

¹⁸² Figures from Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries

¹⁸³ Figures from Accenture's Global Consumer Payments study 2022 in response to question; "In your opinion, what are the most important features for a digital wallet"?

Conclusion E: 'Interoperability' gives food for thought:

The term 'interoperable' was used frequently in discussions with international representatives. Our key take away is that the term – 'interoperable' is used to mean multiple different things, at times denoting interoperability between say different countries, others in terms of merchant acceptance (e.g. Interoperable QR codes) or at other times, interoperability of payment technologies. We have noted examples below but this topic could have been a review/report in its own right and these themes are scratching the surface. We recommend that any future vision of UK payments includes consideration of these options.



Figure 47: We have been given multiple examples of different types of interoperability¹⁸⁴

Cross border

We are seeing an increasing trend for cross border remittance solutions e.g. India has made UPI available to Non Resident Indian's in 10 countries, has partnered with Western Union and is integrating UPI with payment systems such as with Singapore and the UAE to enable all their customers globally to send money (at much smaller costs) via the UPI ID etc.

2

Across journeys

From the more conceptually basic a trend to remove 'walled gardens' (close-loop system for engagement, loyalty, customer service and payments that begins with opening the mobile app and ends with closing the app) so that a payment mechanism in one app works in another (e.g. efforts to bring interoperability between Zelle and RTP as well as ACH) to the more complex e.g. India building truly E2E journeys such as in India who are building an ONDC (Open Network for Digital Commerce) where payment data is interoperable with lending.

3

For merchant & customer acceptance

Simplicity and the ability to offer all payment types requested is key for merchants

- Merchant examples include terminals able to read QR codes (e.g. Swish), the ability to integrate BNPL at POS, terminals that route to either A2A or cards (Kevin), the rise of SoftPoS changing the dynamic on physical location and Marketplace and ISV payments such as Shopify
- For customers alias and proxy databases such as Brazil's pix payments using QR codes and the European Payments Council standardising QR codes for mobile-initiated SEPA credit transfers, mobile numbers as account alias are prolific as is a trend for one payment brand for multiple use cases (e.g. P27 offering a digital wallet, person-to-person and Bill Payments and embedded payments).

In access and development

There is a spectrum in the degree to which use of the real-time payment system is available for use by developers. For example, UPI where developers can sign up for an account on UPI, to Brazil where there is a dual system of participants (c. 80 Direct participants who are regulated financial entities who must hold an SPI (instant payment system) with funds and c. 100 indirect Fintech participants) to the NPA with a broadening membership

At a system level

Interoperability of legacy systems is rare worldwide (some examples include Mexico who have combined RTGS and Fast Payment Services to a single infrastructure – SPEI), however, NPA may be considered a front runner in terms of simplifying the clearing and settlement across systems for FPS and the potential for BACS and possibly others. Consideration here includes alignment of rules including those around the commercial model and customer protection.

¹⁸⁴ Source: Team analysis, Future of Payments review

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Conclusion F: There is much that the UK has and is doing that is the envy to the world

The UK, a front runner in real-time payments, a mature banking ecosystem that takes responsibility for their consumers and payment users who are largely satisfied with them. The phrase 'such and such in the UK is the envy of the world' was stated a number of times in our interviews. There are particular points where the UK is considered to have major advantages:

- VRPs: The UK has long been seen as a front runner on Open Banking in terms of the consistency and quality of our API standards. The current discussions on building VRP beyond sweeping are seen as beyond what the majority of the countries have achieved¹⁸⁵
- Having destiny over its own payments legislation
- Our awareness of the importance of staying on top of fraud for example on bank transfer processes, the UK is one of a very small minority in Europe to have consumer protection for APP scams. This becomes a particularly relevant advantage when we consider the connection between new payment mechanisms and the level of fraud.¹⁸⁶
- Our consumer journeys: UK consumer satisfaction with key payment mechanisms is good across the board, the highest satisfaction being digital wallets that outstrip the global average of customer satisfaction.¹⁸⁷

¹⁸⁵ For example, PiX does not have upfront consent parameter based payments, ditto Saudi Arabia has considered VRP in the UK to be best in class and has factored into their design thinking 186 For example, ACI worldwide Prime time for real time report 2023 shows India, Nigeria, Saudi Arabia, the US, Australia and Thailand as having high proportions of the population who have been a victim of fraud in the past 4 years

¹⁸⁷ Figures from Accenture's Global Consumer Payments study 2022 involving 16,000 banking customers over 13 countries shows 83% of digital wallet users would recommend them to a friend, 77% of those using bank transfers, and 81% and 73% for Debit cards and credit cards respectfully



Future of Payments Review