

Payments after the COVID crisis

Christina Segal-Knowles considers how payments were changing well before COVID-19, and explores the role of digital currencies and emerging issues and challenges

For many if not all of you, the fact that the way we pay has been changing significantly won't be a surprise. You've experienced this. In London, where I live and work, contactless payments have become ubiquitous – from small coffee shops, to farmer's markets, to stalls at sporting and music events, the need to rush to the cash machine is gone - you can tap your card, phone or watch. We've become accustomed to online baskets and clicks; to summoning and paying for services on our phone.

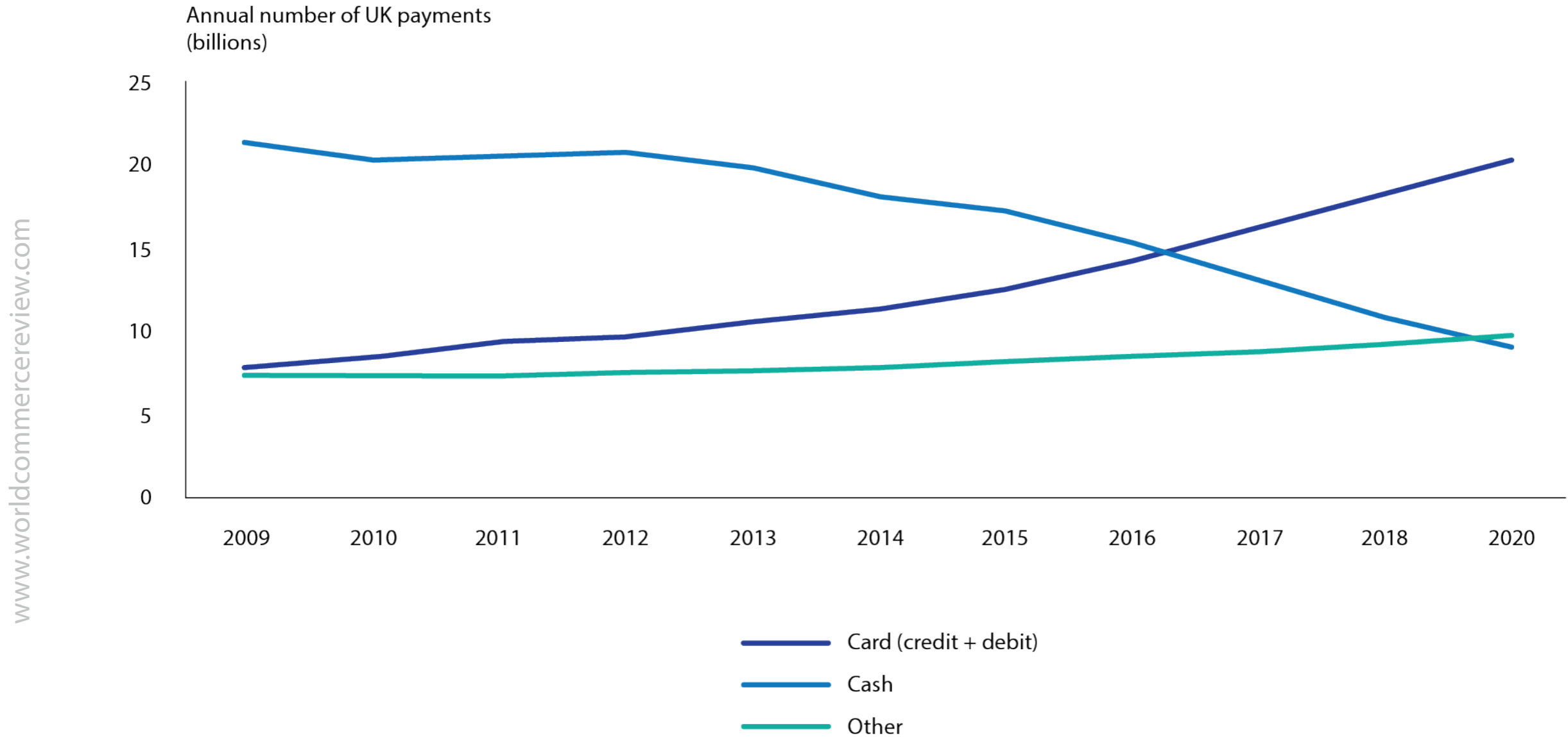
People's behaviour has changed. About a year and a half ago I stopped carrying a wallet with room for cash – all I needed on a daily basis was a debit card and my phone. I am not alone. And this shift is not exclusive to London – from 2017 to 2019 the number of people using cash just once a month or less in the UK more than doubled to 7.4 million¹.

The result has been a marked increase in digital payments, particularly card payments, and a steady decline in the use of cash for retail transactions. In mid-2016 cards overtook cash for the first time as the most frequently used payment in the UK. And the trend hasn't looked back.

This doesn't mean that cash is not still important for some. There are important inclusion implications that I won't do justice to here but that deserve a mention – while UK Finance estimates that 98 percent of people in the UK had a debit card in 2019, there are still groups that continue to rely on cash, with this reliance relating to factors spanning age, income, disability and geography.

The UK government has said that the UK is committed to ensuring that those who rely on cash will continue to be able to access it, and the Bank of England supports this important agenda.

Figure 1. Even before the current crisis, people were changing the way they pay



Other includes: BACS, faster payments, cheques, standing orders. Consumer payments make up nearly 90% of all payments shown; the rest are payments by businesses.

Source: UK Finance, UK Payment Market Report 2020

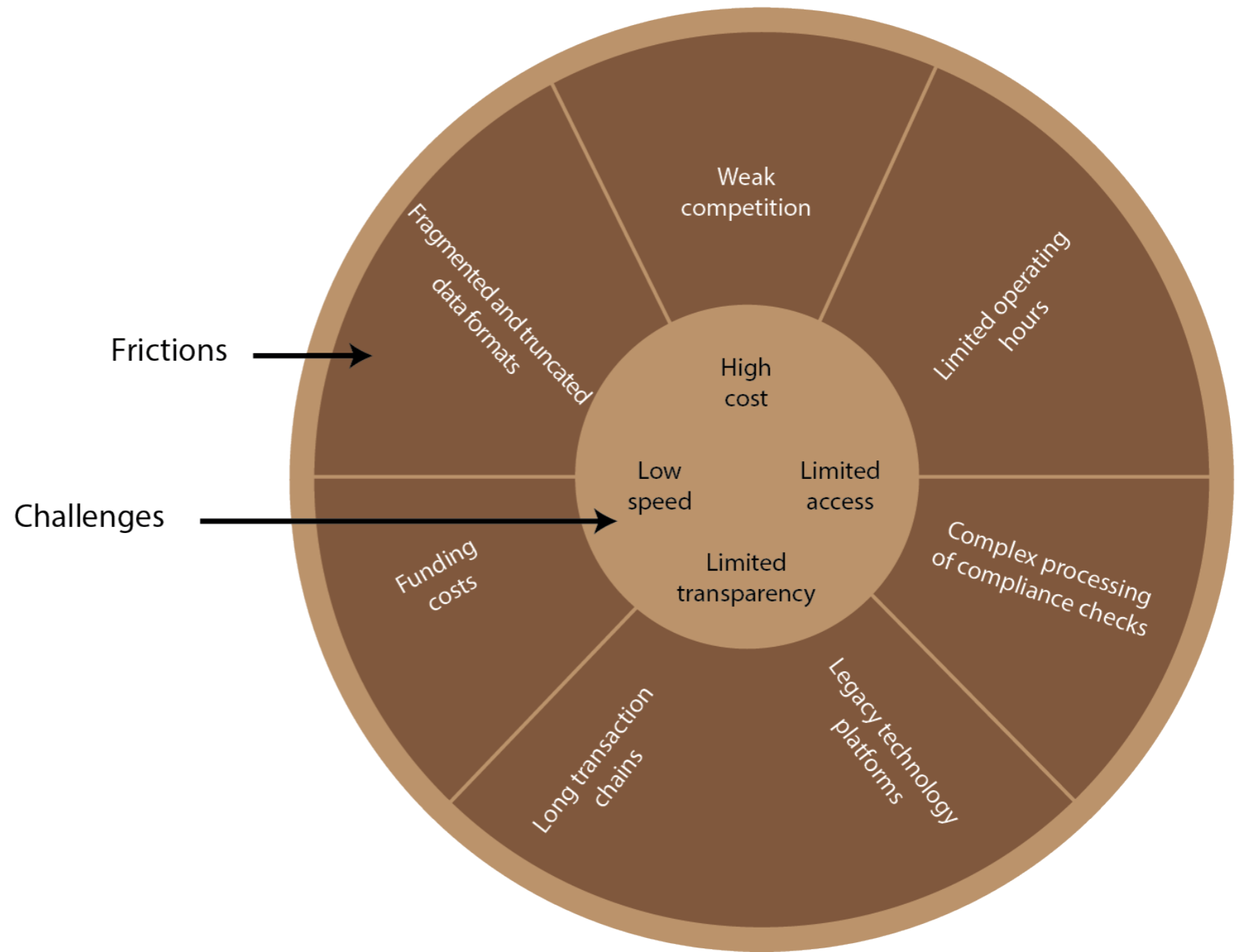
While this story I'm telling about the move to digital payments has been UK-focused – the trend is global. Many emerging market and developing countries have also seen a sharp rise in digital and in particular mobile payments.

As domestic payments are evolving, the importance of international payments is rising. Cross-border e-commerce has risen. And remittances inflows have increased by 64% in the last decade to overtake foreign direct investment as the largest source of external financing for low and middle income countries².

But cross-border payments are often more expensive, slower, less transparent and harder to access than domestic ones. The average cost of remittances, for example, stood at around 7% in 2019, well above the UN sustainable development goal of 3% by 2030³. And the same frictions exist in other types of wholesale and retail cross-border payments.

It is clear that we need to ensure that new ways to pay and new forms of electronic money are offer equivalent protections to existing ones

Figure 2. Some types of international payments – importantly including remittances – remain expensive and cumbersome



Work is underway at the international level to tackle these frictions. Enhancing cross-border payments is a G20 priority for 2020. The international Committee on Payments and Market Infrastructure has a task force looking at possible solutions. But there is no magic bullet.

This will require international coordination on several fronts: with solution elements ranging from harmonised processes (AML checks), agreed targets, improvements to existing infrastructures (aligning opening hours) and even new infrastructures (for example to interlink domestic systems).

The COVID-19 crisis has accelerated these trends. Temporary closure of shops and restaurants, or the desire to socially isolate led people to increasingly turn to online shopping. And many shops are encouraging contactless forms of payment over the use of cash.

In the UK, data from LINK, the UK's largest cash machine network, suggests that cash transactions have plummeted. Since the UK lockdown began (24th of March), ATM cash withdrawals in the UK have dropped by around 60%⁴. A recent LINK survey found that 75% of survey respondents are using less cash than before the crisis⁵. And online sales have taken off, jumping to 30% of total retail transactions in the UK in April 2020 from just over 18% a year earlier⁶.

To make these stats more real, my parents have for the first time in their lives begun shopping for groceries online. Now, I don't know whether my dad's extreme grumpiness about having someone else pick his produce means he'll return to shopping in-person once it's safe for him to do so or whether the convenience of having someone arrive at his door with his groceries will win him over.

In time, we'll see how enduring the broader shifts are. Indeed, in that same LINK survey, 76% of respondents said that the coronavirus crisis will affect their future cash use. Internationally, COVID-19 has also exacerbated challenges in sending remittances⁷. And many countries, advanced and developing, has necessitated sharp increases in government to person payments – raising new challenges⁸.

The private sector is responding. Central banks and other regulators will need to respond too

All this – combined with regulatory changes⁹ has led to an explosion of innovation in payments. Given these challenges, safe forms of payments innovation are welcome. They could meet unfulfilled customer needs, widen access to financial services, lower costs, and facilitate better payments integration.

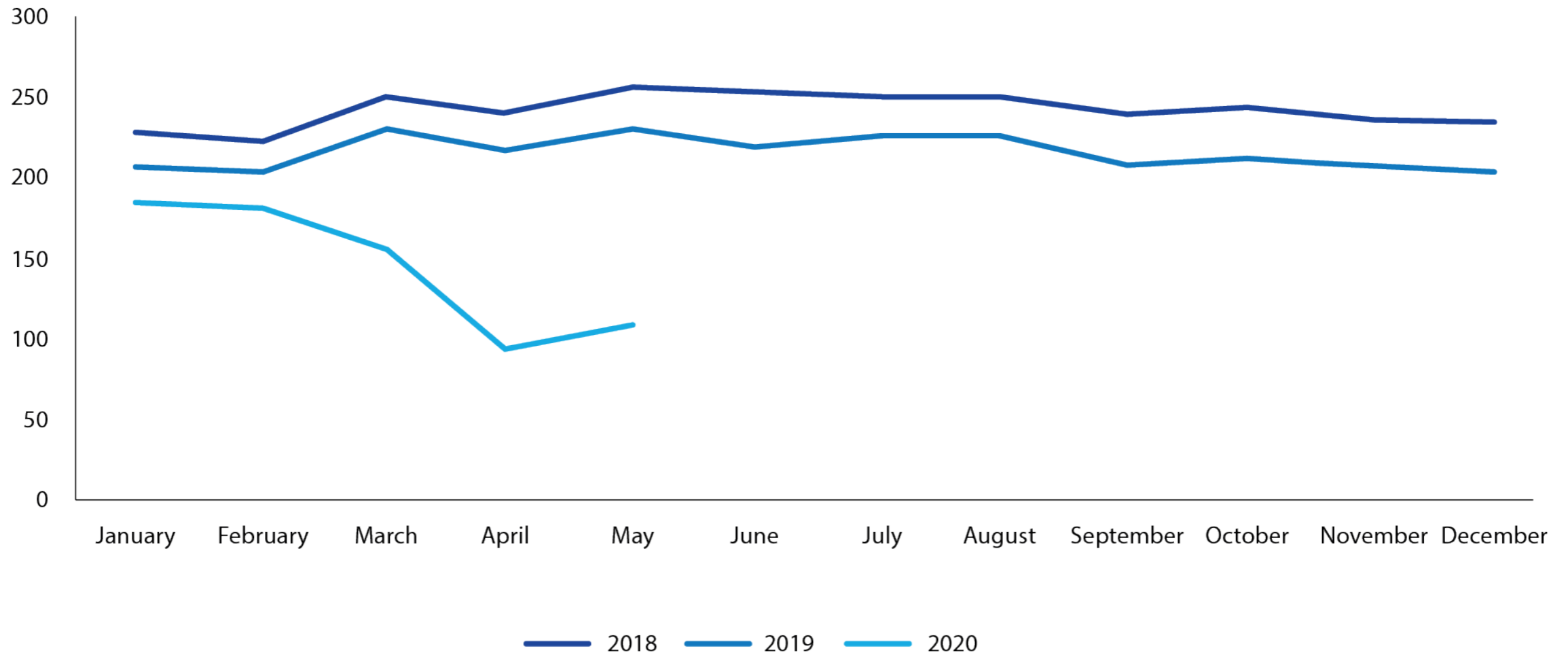
Innovation could also support financial stability by increasing diversity in payment methods. And innovation could potentially address the longstanding challenges in international payments by making them less costly and cumbersome. But even though some new technology seems cutting edge, recent innovation has largely been focused on the 'front' or consumer-facing end, sitting on top of existing card or bank-to-bank payment systems.

Since the invention of the credit card in the 1950s, almost all payments by households and businesses in advanced economies have been made through one of four routes: cash, cheque, card or bank-to-bank. Most new innovation to date hasn't changed that.

Even when we tap our phone or watch on an iPad to pay – we're still generally paying by either card or bank-to-bank transfer. But fintechs, and in some cases big technology firms, are now proposing to change this by using cryptoassets known as 'stablecoins' for transactions currently processed by retail or wholesale payments systems.

Figure 3. The COVID-19 crisis has accentuated these trends and brought new challenges

UK ATM network transactions
(monthly transaction volumes, millions)



Note: these figures include balance enquiries and rejected transactions made through the LINK network, but do not include transactions made by customers at their own banks' or building societies' ATMs.

Source: LINK website, Statistics and Trends

Figure 4. Examples of private sector proposals for new ways to pay



	Unbacked crypto-assets (eg. Bitcoin)	Stablecoin (eg. Libra JPM coin)	Reserve-backed stablecoins (known as RBDC or Synthetic CBDC)
Pegged to fiat currency	No	Yes (single currency or basket)	Yes (single currency)
Redemption rights for coin holders?	None	Varies; often none	Promise to exchange for equivalent value in fiat currency
Backing?	None	Varies	Central bank reserves

The basic idea of a stablecoin is not dissimilar from a pegged currency. Early forms of cryptoassets such as Bitcoin have so far proved too volatile for widespread use in payments. 'Stablecoins' aim to address this by pegging themselves to a fiat currency or basket of fiat currencies. Most propose to maintain reserves or backing assets to defend this peg.

While some stablecoins proposals are designed as investment products, most seek stability in pursuit of becoming a new way to pay for goods and services or make peer-to-peer transactions. Many propose to integrate into popular social media or online technology platforms. With this backdrop and an estimated 3 billion social media users worldwide, it's not hard to imagine that some of these proposals could quickly reach significant scale.

But of course innovation won't be sustained if it's unsafe or detrimental for financial stability. Clear, transparent regulatory expectations are critical to ensure that uncertain rules of the game don't hold innovation back. This poses several challenges for regulators – I'm going to focus on the two that are most important for financial stability.

Problem 1 for central banks is that robust and reliable ways to pay are essential to financial stability. Well-functioning and resilient payment chains allow payments to be made on time, with confidence, even in periods of economic uncertainty. Think – receipt of your salary, benefits and pensions, direct debit bill payments ability to tap and ride the tube home or leave the restaurant after a meal.

The reliability and resilience of payments is so important to our economy that the UK Financial Policy Committee, tasked with identifying, monitoring and reducing systemic risks, lists avoiding serious interruptions in the provision of payment and settlement services as one of the very purposes of preserving financial stability.

If a stablecoin were to significantly replace current systemic payments chains as a way to pay – logic follows that they would pose the same risks to the economy as current payments chains and should be regulated to the same standards.

This is relatively straightforward: regulation should be technology neutral: based on the activity conducted and the risks posed, not the technology used or the entity's legal form. In other words, same risks same regulation.

In the UK, recognising the importance of payments for financial stability, the Bank of England supervises systemic payments systems such as Bacs, the Faster Payments Service, CHAPS, and Visa. And internationally, there are principles – the Principles for Financial Market Infrastructure that govern how payments systems should be regulated and the standards they should meet.

These standards form the basis of the BoE's regulation. While same risk, same regulation may seem obvious, in many countries it will require changes to the regulatory framework.

Problem 2 is how do you ensure the stability of the 'thing' being transferred in the payments chain. Existing systemic payment arrangements transfer money that is stable and reliable – in bad times and in good.

This generally takes two forms: public central bank money - either reserves held at the central bank or cash; or private commercial bank money – bank deposits.

Prudential regulation, access to central bank liquidity, and deposit insurance give holders confidence that underpins their willingness to receive commercial bank money as payment. This gives payment recipients – shops

and businesses - confidence that when someone taps their card or phone to pay, the amount promised will arrive in their account.

International standards explicitly call on payment systems to settle in central bank money when possible and where that's not possible, to settle in commercial bank money and to strictly limit any credit and liquidity risk of the instrument being transferred and settled.

However, stablecoin arrangements propose to transfer new instruments that they will create themselves – and to settle most of their transactions across their own books. With the right regulation, stablecoins may be safe for use in systemic payments chains. But the protections these stablecoins would offer are currently big question marks.

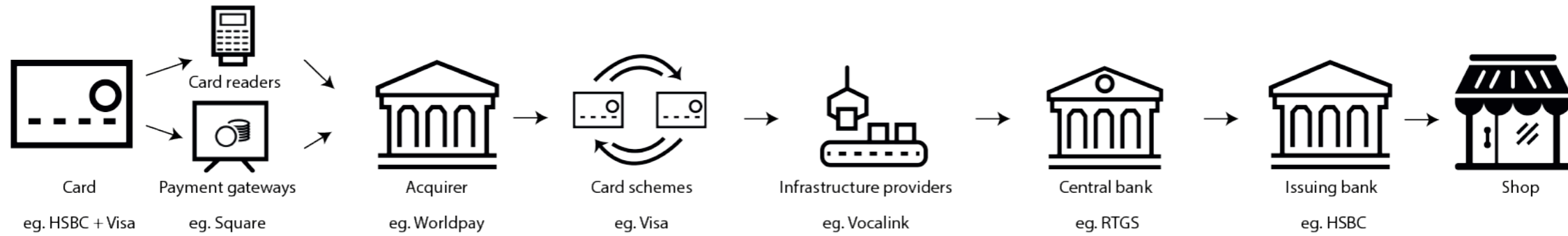
Some major stablecoin proposals offer no legal claim for holders. None. This is significantly different from how we currently pay: When my parents pay for their groceries using their debit card, the shop ultimately receives an electronic deposit in the shop's bank account - a promise from the shop's bank to redeem the amount deposited in local currency on demand.

When – pre-COVID – my parents paid in cash, the shop got banknotes with a central bank promise to “*pay the bearer.*” Were they to pay in the future with some proposed stablecoins, the shop would just get a bunch of stablecoins. If the shop can't sell the stablecoin to get local currency or other goods in an amount equivalent to the price of the grocery order, tough luck.

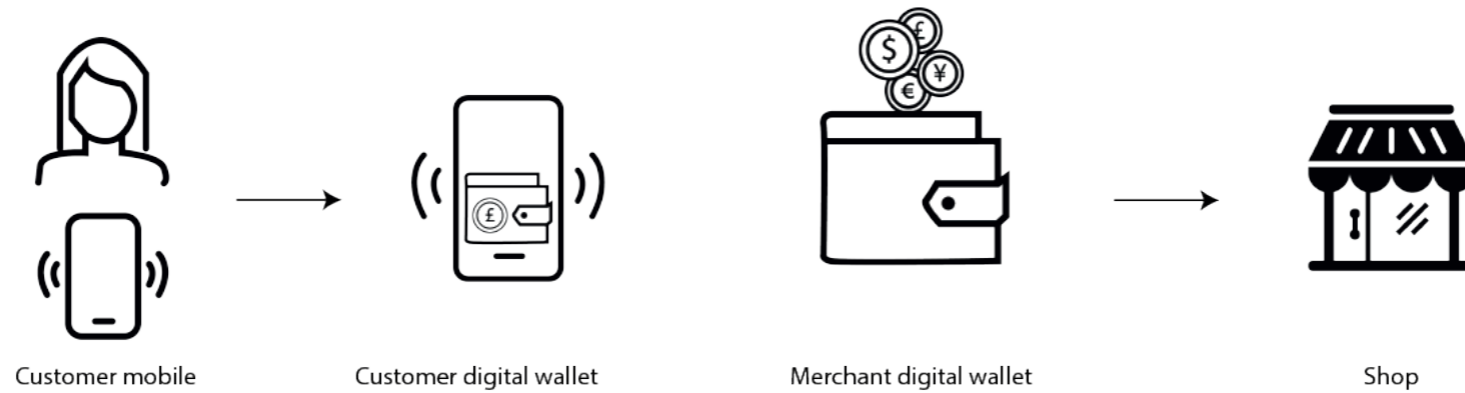
Additionally many stablecoins propose backing in instruments that may have market and liquidity risk. While these risks might be acceptable for speculative investment purposes, payments are different. This is why the UK Financial Policy Committee has said that where stablecoins are used in systemic payment chains as money-like instruments,

Figure 5. We need payments to be secure and reliable

Illustrative card payment chain



Illustrative stablecoin payment chain



Distributed ledger technology infrastructure - platform on which transactions are transferred cleared, settled and recorder

they must meet standards equivalent to commercial bank money in terms of stability of value, robustness of legal claim and the ability to redeem at par in fiat.

Stablecoins' borderless nature of course also means that international regulators' coordination is necessary and work is indeed underway. A Financial Stability Board consultation is ongoing with supervisory recommendations for global stablecoins, aligned with the Bank's view on same risk – same regulation.

Is there a role for central banks (public money strikes back)?

The changes in how we pay I described at the beginning of this presentation have not just involved a switch from physical cash to electronic payment.

It has also necessarily involved a switch from public, central-bank- issued money to private money. This is because central bank money is currently only available in physical banknotes or in reserves, which certain regulated financial institutions hold in accounts at the central bank.

For the public and most businesses, the only current option to hold money backed by the central bank is in the form of physical banknotes.

I've assumed in the story so far that the cash decline and the rise of online continues the march towards the dominance of private money in our transactions. But is this right?

An alternative would be for central banks to issue a new electronic form of central bank money that can be used by households and businesses for payments, also known as a central bank digital currency or CBDC. CBDC presents a number of potential opportunities.

Figure 6. Where stablecoins are used in place of money, they need to offer the same protections as money

Protections offered by current and proposed money-like instruments designed for wide scale use in the UK

Central bank money (notes & reserves)	Scottish and Northern Ireland banknotes	Commercial bank money	Private stablecoins
✓ Claim on central bank	✓ Claim on issuing bank with recourse to banking assets	✓ Claim on issuing bank	?
✓ Monetary stability mandate	✓ 1-for-1 backing in central bank money held at central bank or authorised location	✓ Access to central bank liquidity	?
✓ Inflation targeting regime	✓ Regulation by Bank of England	✓ Deposit insurance	?
		✓ Prudential regime including capital and liquidity requirements	?

It could help respond to some of the changes and challenges I described in the beginning – including helping to meet the future payments needs of the digital economy, addressing the consequences of a decline in access to cash, and providing a building block for better cross-border payments. It also may be a safer alternative to new proposed forms of private electronic money like stablecoins.

But a CBDC may also have significant implications for how our financial system works – in particular if households and businesses were to move their deposit balances from commercial banks to CBDC. This could in turn affect how we implement monetary policy and support financial stability. The Bank has launched a dialogue on the appropriate design of CBDC and an evaluation of whether the benefits of CBDC outweigh the risks.

To conclude – changes in the way we pay and the challenges we've seen over the past several months pose two important and interrelated questions for central banks and regulators. First, how do we ensure that we have legislative and supervisory frameworks in place to support development of safe private sector innovation that could respond to these challenges?

Here, it is clear that we need to ensure that new ways to pay and new forms of electronic money are offer equivalent protections to existing ones. And second, what is the right role for central banks in provision of the money we use to transact? I'm looking forward to the discussion. ■

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Endnotes

1. See UK Finance Press Release: Cards used for half of payments for first time last year. <https://www.ukfinance.org.uk/press/press-releases/cards-used-half-payments-first-time-last-year>
2. World Bank Press Release: Predicts Sharpest Decline of Remittances in Recent History <https://www.worldbank.org/en/news/press-release/2020/04/22/world-bank-predicts-sharpest-decline-of-remittances-in-recent-history>
3. FSB Report on Enhancing Cross-border Payments: <https://www.fsb.org/wp-content/uploads/P090420-2.pdf>
4. LINK: Coronavirus Crisis means cash use down but UK still withdrawing £1 billion from ATMs each week: <https://www.link.co.uk/about/news/coronavirus-cash-usage-data/>
5. See LINK article above.
6. ONS: Internet Sales as a percentage of total retail sales: <https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry>
7. BBC News: Coronavirus: Migrants struggle to send money home: <https://www.bbc.co.uk/news/business-52506797>
8. World Bank blogs: Responding to crisis with digital payments for social protection: Short-term measures with long-term benefits: <https://blogs.worldbank.org/voices/responding-crisis-digital-payments-social-protection-short-term-measures-long-term-benefits>
9. Including open banking reforms in the EU and the introduction of a payments competition regulator in the UK.

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