# Cashing Out

## The hidden costs and consequences of moving to a cashless society

By Tony Greenham and Fionn Travers-Smith
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Action and Research Centre

# Contents

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Since 1754 the RSA has sought to unleash the human potential for enterprise and creativity. We have a strong history of finding new solutions to social challenges by acting on the very best ideas and rigorous research, drawing on the expertise of our networks and partners.

The current mission of the RSA is '21st century enlightenment; enriching society through ideas and action'. We believe that all human beings have creative capacities that, when understood and supported, can be mobilised to make the world a better place for all its citizens.

Central to the RSA's current work are the concepts of convening and change-making. The RSA has also developed a distinctive approach to change: 'Think like a system, act like an entrepreneur' which now runs through most of our projects. Our work combines rigorous research, innovative ideas and practical projects.

## The authors

**Tony Greenham** is the RSA's Associate Director for Inclusive Finance and is an expert on banking reform, inclusive finance and sustainability. Having previously been the RSA's Director of Economy, Enterprise and Manufacturing from July 2015 to September 2018, Tony is now the Founding Director of South West Mutual, which is part of a network of emerging regional co-operative banks supported by the RSA as part of its Transform programme which was initiated as a practical response to the issues identified in this and previous RSA research on the role of banking in supporting inclusive growth.

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## Acknowledgements

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# Foreword

The rise of digital banking has fuelled a lifestyle revolution. The emergence of chip and pin, contactless cards, digital wallets, online banking and mobile apps has, for the most part, made our lives that much more convenient.

However, for many, cash and bank branches still have an important role to play. Bank branches are a point of human contact and personal relationships. Cash is universal and tangible, and for folks of all stripes remains the most convenient and least costly way of budgeting.

The RSA has never been shy of embracing new technologies in the service of the good. However, at the same time, realising our full potential depends much on the manner of technological adoption. Technology exhilarates but we must never lose sight of the human. And there is real human cost to cash being suddenly and without thought being deleted from our lives.

The current system, regrettably, is actually procuring a disorderly and deleterious 'dash from cash'. We see in the current market a misalignment of incentives between individual banking institutions seeking to shed their costly physical infrastructure, bricks and mortar branches and cash machines, and the needs of millions of citizens and thousands of communities that remain reliant upon what for them are vital services.

That's why this report is so important. It offers the purposeful, strategic direction needed if we are to avoid sleepwalking into a manifestly unjust situation: a two-tier banking system with cash users cast from a cliff edge, with nowhere left to go.

It argues that we must protect cash and branches until an orderly transition to an inclusive alternative that is in everyone's interest can be facilitated and shows how we can ensure just that. I urge those who value economic inclusion, social cohesion, and a fair way forward for our banking system to pay heed to this report's message, and work with the RSA to implement its recommendations.

**Asheem Singh**
Director of Economy, RSA

# Executive Summary

Bank branches are disappearing fast from UK high streets and it is clear cash will continue to decline. While this partly reflects the rise of the digital age, this report concludes that the UK banking industry's disorderly dash from cash and the sharp reduction of branch networks is harming many communities and poses material economic and social risks, including to vulnerable consumers and smaller businesses. We also find evidence that branch closures damage and weaken our high streets, by reducing bank lending to small and medium sized businesses.

We need a coordinated strategy between regulators, incumbent banks, the post office and new niche challengers to ensure that the UK maintains a physical banking infrastructure capable of supporting economic resilience and inclusive growth. Improving diversity of banking provision and encouraging a coordinated evolution of the national branch network could address these problems

## Key Findings

- Substantial numbers still rely heavily on cash: 3.4 million people in the UK rarely use cash, but 2.2 million people rely almost wholly on cash, up from only 1.6 million people in 2014. According to the Access to Cash Review, a much larger proportion of the population, some 8 million, would find life "near impossible" without cash.
- Branches are not just about older people: Over one in three of 18 to 34 year olds are regular branch users and 25 to 44 year olds are more likely to deposit cheques or cash face to face in a branch (28 percent) than those over 65 (24 percent).
- SMEs rely on branches for credit as well as cash: Branch closures appear to reduce SME lending and hence are likely to damage employment, productivity and growth. Smaller businesses in many sectors also require cash handling facilities and are suffering harm from branch closures.

## Conclusions: four reasons to protect cash and bank branches

- **Supporting local economies and SMEs.** Bank branches have a positive impact on local economies, high streets and small businesses, including being important for customer services and SME lending.
- **Providing choice and competition.** There are legitimate reasons for cash usage such as free universal access, simplicity, transparency, privacy and lack of digital access. It is the only way that

citizens can directly access central bank money without intermediation by banks. Cash provides a restraint on fees and charges from the Visa/Mastercard duopoly.

- **Promoting financial inclusion.** Cash is the only free means of payments available to the consumer with universal coverage. Phasing it out risks excluding vulnerable individuals and smaller businesses, especially in rural locations.
- **Boosting economic resilience.** Cash insures against cyber risks and other network failures.

## Recommendations

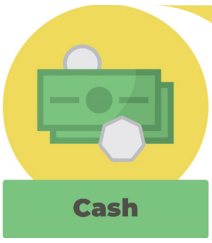
1. Government commitment to maintaining a payment and savings system that is universal, free at the point of use and which protects personal privacy.
2. The Financial Conduct Authority should conduct a review into the impact of bank branch closures on credit to SMEs, and consult on reforming disclosure of bank lending data.
3. National strategy for universal access to cash and branches, developed using deliberative methods of public engagement to ensure a complete understanding of citizens' needs, and considering measures such as guaranteed provision of free-to-use ATMs and a new moratoria on bank branch closures in places where no other branch exists.
4. Regional strategies for diverse and inclusive banking that closely monitor cash and branch access while utilising physical resources to ensure suitable provision is maintained and this is publicised to citizens.

# Less cash, not cashless

Cash has slipped from its preeminent position as the UK's preferred payment method. Cash transactions now account for 34 percent of total payments made in 2017, down from 61 percent ten years earlier.[1] Debit cards and contactless payment, mobile and online banking, and the proliferation of third party payment platforms like Paypal and Apple Pay, have contributed to the relative demise of cash, and industry analysts predict a further drop to only 16 percent of all payments by 2027.[2] These emergent trends have led experts to predict the coming of a "cashless society",[3] with some analysts even advocating such an outcome as beneficial and desirable for society.[4]

Yet, before calling time on cash and consigning coins and notes to history, it's important to understand what is driving these changes and what impact they may have on society and our economy. Given that cash is by far the longest serving payment method and still used for over a third of all payments in the UK, the demise of cash may have been exaggerated, and the writing of its eulogies somewhat premature.[5] Indeed, exploring the anthropology of cash usage and the implications for its decreasing use suggest that cash is still a highly valuable and intrinsically pragmatic payment method.

## Cash use is increasingly concentrated on lower value consumer transactions




- Three out of five cash payments are for £5 or under.
- 97 percent of consumers carry cash.
- 50 percent of all point of sale payments are still made in cash.

1. UK Finance. (2018) UK Payments Market Summary 2018. UK Finance.
2. Ibid.
3. For example, see this prediction by Paypal in 2013 that cash would be obsolete within three years. Available at: www.dailymail.co.uk/news/article-2522358/Paypal-Here-app-launch-says-cash-obsolete-3-years.html [Accessed 25/01/19].
4. For example, see Rogoff, K. (2014) Costs and Benefits to Phasing out Paper Currency. [pdf] Harvard: Harvard University. Available at scholar.harvard.edu/files/rogoff/files/c13431.pdf [Accessed 14/03/18]; and Thomas, H. (2013) Measuring Progress to a Cashless Society. [pdf] MasterCard Advisors Available at www.mastercardadvisors.com/content/dam/advisors/en-us/documents/MasterCardAdvisors-CashlessSociety.pdf [Accessed 14/03/18].
5. UK Finance. (2018) UK Payments Market Summary 2018. UK Finance.

According to the UK's financial industry trade body, UK Finance, there were 38.8bn payments made in 2017, with 13.1bn of these being made in cash (34 percent).[6] The number of transactions in cash has indeed fallen and is forecast to continue to decline over the next 10 years by approximately 6.9 percent annually.[7] Yet, even in this scenario there will still be around 6.4bn cash transactions each year in the UK.

In general, individuals are more reliant on cash than businesses. Only 4 percent of business payments are made in cash compared to 45 percent of consumer payments,[8] and the proportion rises to 50 percent for all point of sale consumer payments.[9]

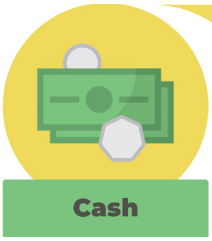
As such, cash remains a popular way to pay, particularly when paying for goods and services 'up front' and over the counter at the point of sale. Reflecting this common use case, the majority of cash payments are made for low value transactions, with three in five cash payments being made for values of only £5 or less.[10]

Since their introduction in 2007, contactless cards have increasingly been used as an alternative means of payment for low value transactions, facilitating payments of up to £30 with speed and ease of use. 48 percent of contactless users cite using it as a replacement for both chip and pin and cash payments, while 12 percent use it exclusively in place of cash.[11] Evidence from the British Retail Consortium shows that the average transaction value of card payments in the UK retail sector is falling. This suggests that cards and contactless payments are slowly replacing cash for lower value payments, although the average transaction value for cards still remains much higher than it is for cash, sitting at £26.14 compared with £9.21 respectively.[12]

Yet despite the technology's growth, contactless cards are still some way off replacing cash for lower value payments. Approximately 97 percent of consumers still carry cash and there remains a wide range of reasons why people continue to do so, from purchasing everyday essentials to carrying cash for emergencies.[13] Whilst contactless payments accounted for only 5.7bn payments in 2017, or just 15 percent of payments in total, compared to 34 percent for cash.[14] In the UK retail sector, combined contactless, debit card, and credit card payments accounted for 76 percent of all transactions in 2017, but cash still accounted for more than one in five transactions (22 percent).[15]

6. Ibid.
7. Authors' calculations based on forecasts from UK Finance of a reduction from 13.1bn payments in 2017 to 6.4bn in 2027
8. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.
9. Ibid.
10. Ibid.
11. Ibid.
12. Cregan, A. (2017) Payments Survey 2016. British Retail Consortium.
13. Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.
14. UK Finance. (2018) UK Payments Market Summary 2018. UK Finance.
15. Cregan, A. (2018) Payments Survey 2017. British Retail Consortium.

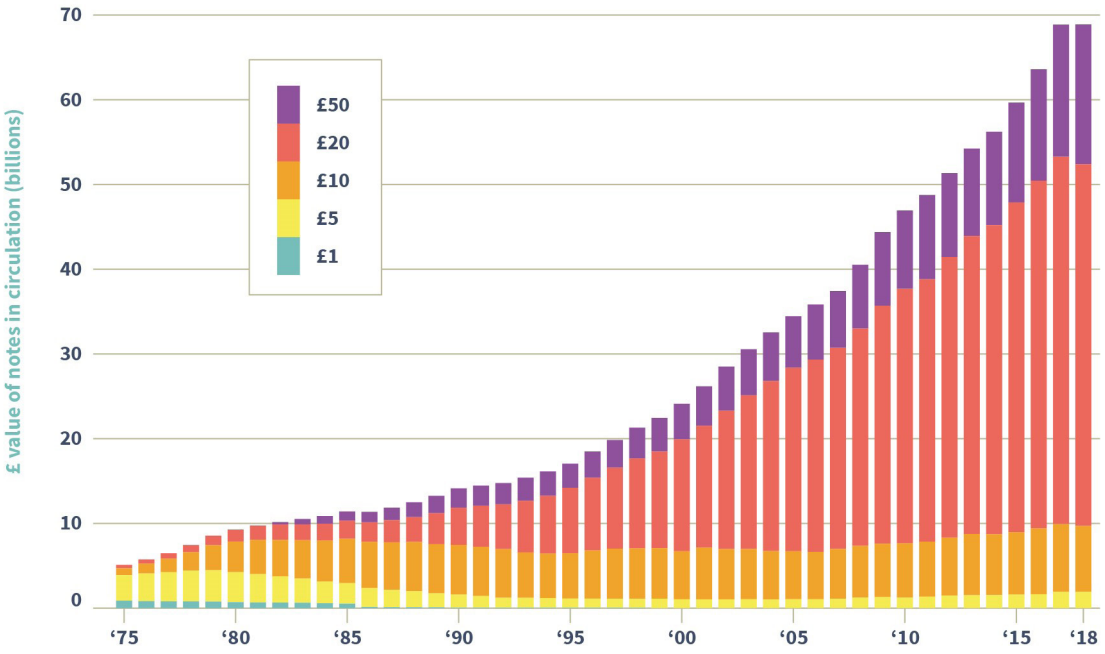
## The total value of cash in the economy is rising




- Value of banknotes in circulation grew 26 percent between 2013 and 2016.
- The £20 note accounts for more than two thirds of all notes in circulation.

As well as the persistence of cash as a means of payment, the physical proliferation of cash continues to grow. By the end of 2016, cash in circulation grew to over £70bn for the first time in the UK, representing a 10 percent increase year on year,[16] and a 26 percent increase since 2013.[17] Today there are over 3.6bn UK bank notes in circulation, with £20 notes accounting for almost two thirds of all sterling notes (see Figure 1).

**Figure 1: Total Value of all Denomination Banknotes in Circulation Source: Bank of England**




16. Cleland, V. (2017) Insights into the Future of Cash. Bank of England. Available at: www.bankofengland.co.uk/-/media/boe/files/speech/2017/insights-into-the-future-of-cash.pdf?la=en&hash=F13A0D0BDADDF3F981DDC2A1B81C01E42BEF806D [Accessed 14/03/18].

17. Bank of England. (2018) Bank note statistics, Bank of England. Available at: www.bankofengland.co.uk/statistics/banknote [Accessed 14/03/18].

Britain is far from alone when it comes to the growth of cash in circulation with the US, Canada, Australia, and most of the Euro area experiencing cash growth of between 5 and 10 percent.[18] The continued production and roll out of the new series of polymer notes until 2020 also demonstrates the ongoing commitment to cash by the Bank of England.

It is not entirely clear what is driving this increase in the total stock of cash during a period when its use for transactions has declined. We suggest a combination of the following factors:

- Very low interest rates mean there is little cost in terms of foregone interest for holding cash rather than bank deposits.
- Lack of trust in banks, fear of future financial crises or bank failure, and/or concerns about vulnerability of digital payments infrastructure to cyberattack or other causes of temporary failure, leading some to maintain emergency cash holdings.
- Demand for sterling notes as a reliable store of wealth by residents of countries outside the UK.
- Temporary increases resulting from the introduction of new polymer bank notes.
- Reduction in the physical infrastructure for cash handling, such as bank branches and ATMs closure making transferring cash in and out of the banking systems more difficult, thereby requiring larger cash floats to be held by individuals, retailers, and wholesalers.

As we discuss further in Chapter 3, the increase is unlikely to be driven by increased criminality and there are a number of legitimate reasons why people would prefer to continue to use cash as a means of payment and store of value.

## Some consumers rely on cash much more than others

For the purposes of public policy, we contend that the trends in aggregate or average data for cash usage are less important the distributional impact between different groups and places.

Demographic data from UK Finance suggests that cash usage is becoming increasingly polarised, with 3.4 million people in the UK rarely using cash at all, whilst 2.2 million people rely almost wholly on cash, up from only 1.6 million people in 2014.[19] The Access to Cash Review suggested that even more people are dependent on cash, with 47 percent

18. Cleland, V. (2017) Insights into the Future of Cash. Bank of England. Available at: www.bankofengland.co.uk/-/media/boe/files/speech/2017/insights-into-the-future-of-cash.pdf?la=en&hash=F13A0D0BDADDF3F981DDC2A1B81C01E42BEF806D [Accessed 14/03/18].

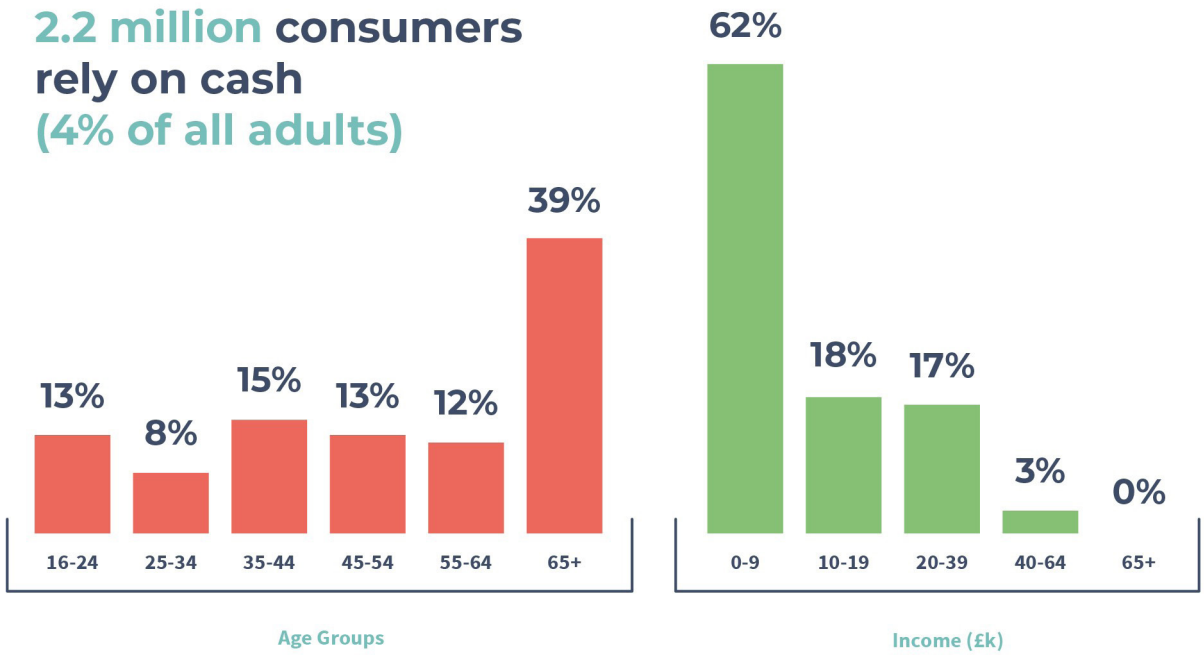
19. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.

of people saying that living without cash would be problematic, representing some 25 million people. Of those, 34 percent said that they would be "unable to cope" or were not sure how they would cope, representing 8 million people or 17 percent of the total UK population.[20] In general, people who rely on cash are far more likely to come from low income households, with more than half earning a household income of less than £15,000 per year.[21]

Whilst income is the clearest demographic indicator of reliance on cash, there are also other indicators. Age appears to also be a factor, with young people much more likely to be rare cash users than older people. Only 2 percent of 55 to 64 year olds rarely use cash, for example, whilst this figure grows to 11 percent for 25 to 34 year olds, suggesting a greater reliance on and usage of cash by older people.[22] In addition, whilst 25 to 34 year olds made up only 8 percent of those 2.2 million people who rely entirely on cash, people of 65 years and over made up 39 percent of reliant cash users (See Figure 2).[23]


20. Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.
21. Payments UK. (2017) UK Payment Markets. Payments UK.
22. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.
23. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.

**Figure 2: Proportion of people in different age groups who are rare users of cash. Source: UK Finance**




## Business ability to accept digital payments varies widely across the country


- Only 68 percent of rural small retailers accept contactless vs 80 percent of urban.
- Only 24 percent of rural small retailers accept mobile payments, vs 43 percent urban.
- 86 percent of small retailers say they have no plans to change payment methods.

It appears that the adoption of alternative payment methods is not spread evenly throughout the country, with evidence suggesting that urban areas are outpacing rural areas in terms of adopting card and contactless payment provision.

Small retailers in rural areas seem most affected, with contactless card capability falling from 80 percent amongst small retailers in urban areas to 68 percent in rural locations, and mobile payments accepted by only 24 percent of rural small retailers, compared with 43 percent of urban ones.[24] The interim report of the Access to Cash Review also recognises slower adoption of digital payments methods in rural areas, citing greater digital

24. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.

exclusion and worse broadband provision as the reason.[25]

Generally speaking, cards and contactless payment methods incur further costs on merchants to process. In 2017, the total value of these costs on the retail sector alone was almost £1bn, which does not include any setup costs.[26] As a result, businesses can find handling cash considerably cheaper than accepting electronic payments. In 2016, the average cost to retailers of a cash transaction was only 1.46p, compared with 5.55p for debit cards and 16p for credit and charge cards.[27] Yet as the share of transactions conducted in cash becomes smaller, businesses are increasingly forced to shoulder these higher transaction costs for processing card payments, and becoming more vulnerable to price rises from digital payment processors. In 2017, the 'scheme fee' charged by card operators increased by 39 percent, whilst in 2018 the figure ranges from 30 to 100 percent according to the British Retail Consortium.[28] These developments demonstrate the real risk of anti-competitive and monopolistic price increases in the event of a wholesale demise of cash. Prices that will, ultimately, be borne by the consumer.

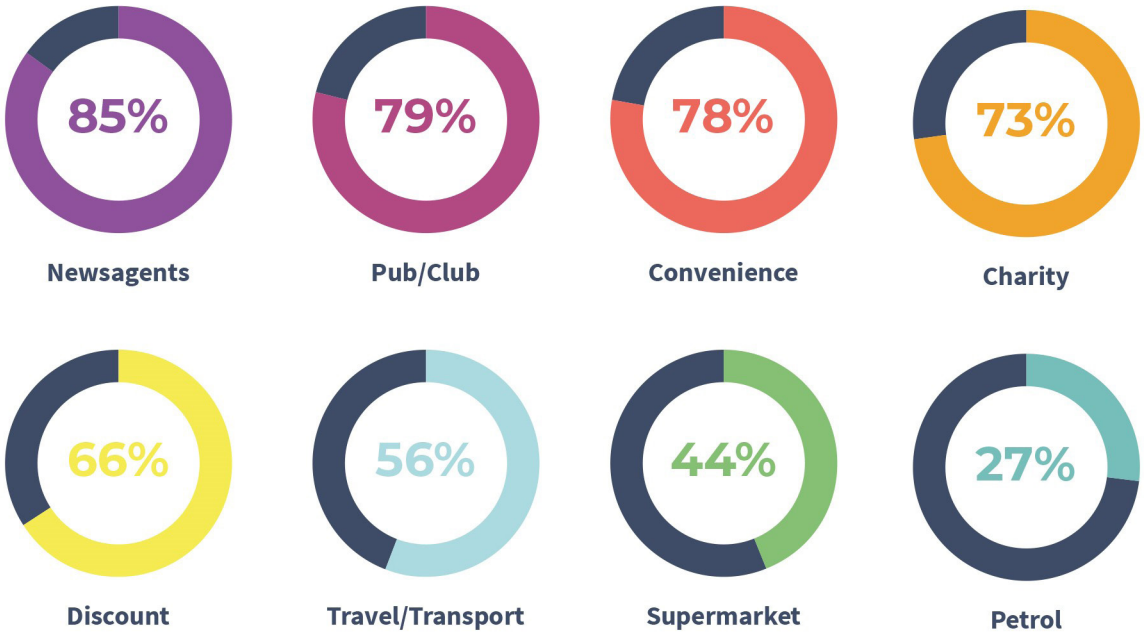
A further advantage of cash is that it can immediately be used to pay for expenses, whereas receipts by card or other electronic payment can take days to clear through the banking system. For business on tight margins and cashflow those few days can make a real difference. This may go some way to explaining why 86 percent of small retailers (whose businesses are most suited to low cost, low value payments in cash) say they have no plans to change payment methods that they accept.[29]

## Cash usage varies widely across different sectors of the economy

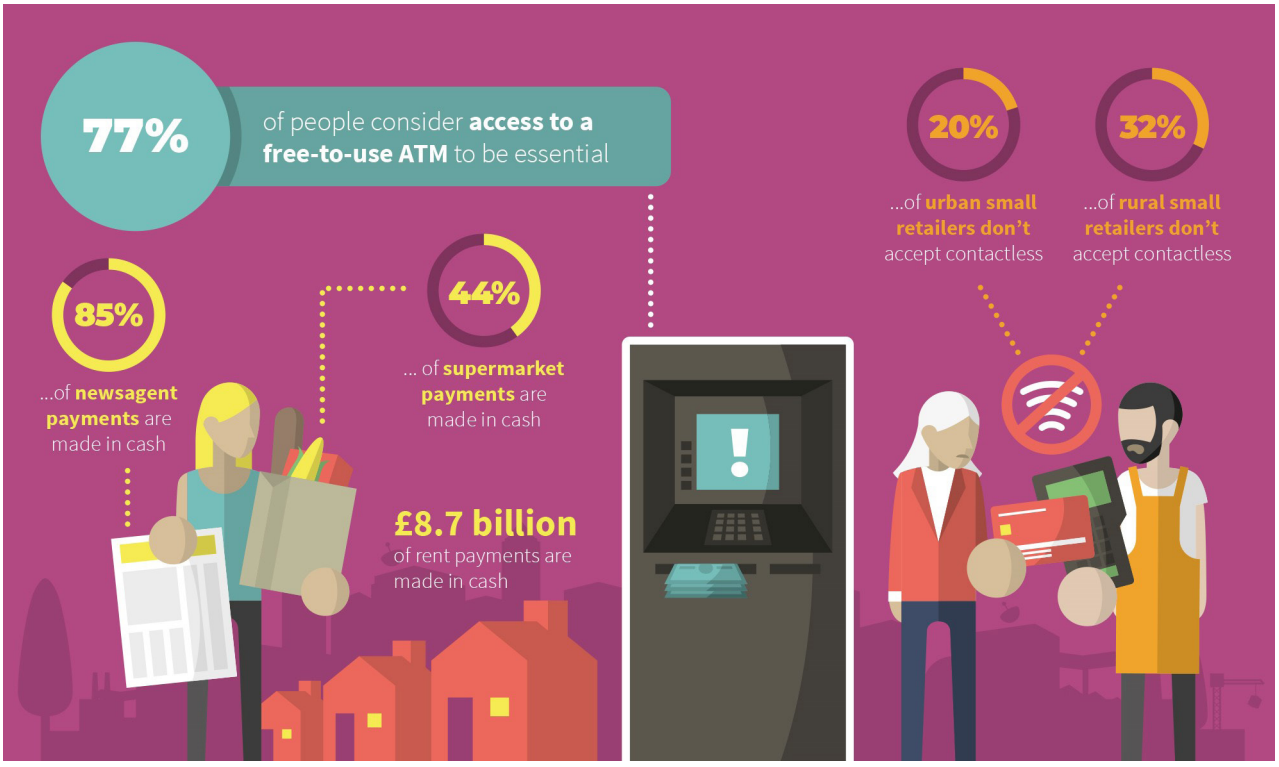
Some sectors of the economy are more likely to rely on cash payments. Some of these, such as newsagents (85 percent of all payments in cash), pubs and clubs (79 percent), and convenience stores (78 percent) are perhaps not surprising given the predominance of high volume, low value transactions in those industries. But other sectors are perhaps more surprising, such as supermarkets (44 percent), petrol stations (27 percent), and even the travel and transport sector (56 percent).

25. Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.
26. Cregan, A. (2018) Payments Survey 2017. British Retail Consortium.
27. Cregan, A. (2018) Payments Survey 2016. British Retail Consortium.
28. Cregan, A. (2018) Payments Survey 2017. British Retail Consortium.
29. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.

**Figure 3: Percent of consumer payments made in cash for particular sectors. Source: UK Finance**




Despite the introduction and adoption of alternative methods of digital payments, and the impression that cash usage is rapidly declining, cash payments are remaining stable in certain sectors.[30]




30. Ibid.

There are also other popular uses of cash that some may find surprising. For example, more than a quarter of payments to savings clubs were made in cash (26 percent), whilst 17 percent of housing rent payments were paid in cash, both up from 2015 levels.[31] This amounts to approximately £8.7bn of rent payments made in cash in 2017.[32] These instances again go to show that there is nothing inevitable or inherently preferable about a switch to a cashless society, particularly for sectors and businesses that are seeing consistent or even increasing levels of cash payments, or for the people who choose to spend their own money using cash.

31. Ibid.

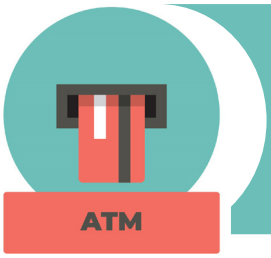
32. Authors estimate based on £51.6bn of rent payments made in 2017. See Collinson, P. (2018) UK tenants paid record £50bn in rent in 2017, The Guardian. Available at www.theguardian.com/money/2018/feb/12/uk-tenants-paid-record-50bn-in-rents-in-2017 [Accessed 16/11/18].

# The benefits of branches

Given the widespread prevalence of cash, its role in financial inclusion and the real economy, and the reliance of many on its availability and usage, the ongoing provision of cash processing services remains vital, even in an increasingly digital age.

Yet despite this, evidence suggests that the physical infrastructure that underpins and facilitates cash usage is shrinking, and is arguably being withdrawn at a faster rate than the relative demise in use of cash actually merits. This development not only implies major inconvenience and disruption to the lives of those who rely on cash, but also threatens negative impacts on major geographic and sectoral areas of the economy.

## ATMs are used by everyone who has access to them




- 77 percent consider access to a free-to-use ATM to be essential.
- More than 90 percent of people from all age groups between 16 to 64 use ATMs
- Despite only accounting for 78 percent of UK ATMs, free to use cash points account for 98 percent of withdrawals.

There are two primary ways that people access their cash. The first of which is through ATMs, and the second is through bank branches.

Since their introduction 50 years ago, ATMs have become practically ubiquitous. Nine out of ten UK adults used a cash machine in 2016,[33] whilst a recent survey carried out by the research and campaign group Positive Money found that more than three in four people said that access to a free-to-use ATM was essential (77 percent).[34]

Interestingly, ATM usage seems to cut across demographics. More than 90 percent of people from all age groups between 16 to 64 use ATMs, with only those over 65 seeing slightly lower ATM use (81 percent). And perhaps surprisingly, given the higher relative reliance on cash of those on lower incomes, the AB socioeconomic group exhibit the highest usage of cash machines (95 percent), with the lowest usage being witnessed amongst the E socioeconomic group at 86 percent.[35]

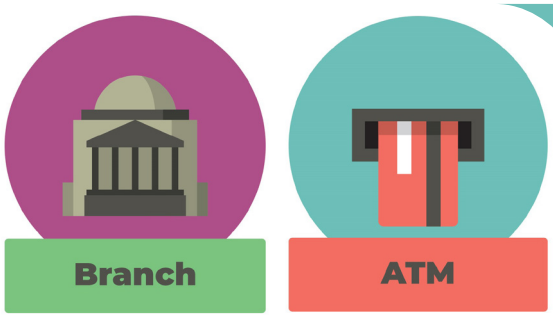
33. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.
34. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.
35. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.

In simple terms, ATM use is both widespread and popular, with the overwhelming majority of people in the UK using ATMs to access their money. As a result, ATMs provide an essential means of accessing cash, and of maintaining cash as a viable means of payment in the economy. Free-to-use cash points are of particular importance, not only because they have been recognised by the Payment Systems Regulator as being essential for financial inclusion, but also because they account for 98 percent of cash withdrawals despite making up only 78 percent of the UK's ATM estate.[36]

Provision of ATMs has been relatively stable over the last few years, whilst the proportion of those that are free to use has been consistently growing. Whilst the overall number of ATMs has seen modest reduction since 2015, the number of free-to-use machines has been growing since 2005, and now account for 78 percent of all cash points. This is the highest proportion of free-to-use cash points since 2001, when there were almost half as many ATMs in the UK.[37] In addition, LINK, the not-for-profit company that runs and facilitates the UK's ATM network, has recently moved to protect free-to-use ATMs in areas of low provision, by increasing subsidies for ATMs where there are few others nearby, and decreasing the fees that card issuers receive in areas that have a high concentration of ATMs.[38] LINK also claims to have helped to introduce free-to-use ATMs in almost 1,700 areas in the UK that previously had low or no provision.[39]

Despite these positive developments, concerns remain over the UK's ATM estate, and the security of its provision.

## But access to ATMs is falling and unevenly spread




- Over 10 million people (16 percent of the population) are more than 1km from a free-to-use cashpoint.
- One in five free to use ATMs could be lost as a result of reduced payments to machine operators.
- Between January and November 2018, 2,300 ATMs closed, a reduction of nearly 3 percent in eight months
- 26 percent of ATMs are in bank or building society branches and therefore branch closures are hastening their removal.

Access to ATMs is not evenly spread throughout the UK. Research from Toynbee Hall suggests that some groups face significant barriers in accessing ATMs, particularly those on low incomes in rural areas, as well as those on satellite housing estates.[40] They also found that 16 percent of the UK population, or around 10.6 million people, do not live within 1km

36. Payments Systems Regulator. (2018) The UK's ATM Network, Payments Systems Regulator. Available at www.psr.org.uk/psr-focus/the-UK-ATM-network [Accessed 22/03/18]
37. LINK. (2018) Statistics and Trends. LINK. Available at www.link.co.uk/about/statistics-and-trends/ [Accessed 22/03/18]
38. LINK. (2018) LINK moves to secure future of free ATMs. LINK. Available at www.link.co.uk/about/news/link-moves-to-secure-future-of-free-atms/ [Accessed 22/03/18]
39. LINK. (2018) Financial Inclusion. LINK. Available at www.link.co.uk/initiatives/financial-inclusion/ [Accessed 21/01/19]
40. Toynbee Hall & the Payments Council. (2013) Qualitative Research on Access to Cash, Toynbee Hall & the Payments Council.

of a free-to-use cash point, including 957 small communities that exhibit high benefit dependency, and who are more likely to be cash users. Even 1km is too far for many with additional needs or mobility issues.[41]

In addition, significant changes to the fees regime that governs ATMs has led industry experts to suggest that the UK could lose up to one in five of its 55,100 free-to-use cash points over the next few years.[42] This is because the 'interchange fee' that ATM operators charge card issuers is being reduced, which is likely to make many ATMs financially unviable and lead to many being removed, as LINK CEO John Howells has admitted.[43] Such fears seem to be being realised, with the latest figures from LINK revealing that around 2,300 free-to-use cash machines have closed between the end of January and the start of November 2018. This represents a reduction of almost 4.2 percent of the UK's cash machine estate in less than 11 months.[44]

These changes have led some civil society groups to advocate for stronger protections for the ongoing provision of ATMs, as well as cash services in general.[45] At the time of writing there is a Private Members Bill being debated in the House of Commons that would prohibit cash machine charges and require the Financial Conduct Authority to supervise an improved access to banking standard.[46] These issues are also being considered by the independent Access to Cash Review.[47]

Whilst LINK has publicly committed to maintaining an extensive network of free-to-use cash machines, concerns remains that such commitments are not guaranteed and could be watered down or abandoned if LINK's constituent members, large scale banks and building societies, choose to withdraw their support for this policy.[48]

Regardless of the commitment from LINK to ongoing free-to-use provision, the role of high street banks in the maintenance of ATMs is critical. 26 percent of all ATMs in the UK are located on bank and building society premises, the second most common location for ATMs after supermarkets and retail outlet locations, which account for 47 percent of all ATM locations.[49] Yet the commitment of the major UK banks to maintaining ATMs remains uncertain. Investigating the impact of branch closures on local communities, the campaign group Move Your Money found that cash points were being retained at only one of every five RBS

41. Toynbee Hall (2018) How Far is Too Far? Is There a Low Income Consumer Detriment from Gaps in Free-To-Use ATM Provision?. Toynbee Hall. Available at www.link.co.uk/media/1184/toynbee_hall_executive_summary.pdf [Accessed 22/03/18]

42. Treanor, J. Plan to Shut Free-to-Use Cash Machines Could Lead to 'ATM Deserts' in the UK. The Guardian. Available at www.theguardian.com/money/2017/nov/01/free-to-use-link-cash-machines-atm-deserts-uk [Accessed 22/03/18]

43. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.

44. LINK. (2018) LINK Monthly ATM Footprint Report, November 2018. LINK. Available at www.link.co.uk/initiatives/financial-inclusion-monthly-report/ [Accessed 21/01/19]

45. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.

46. Banking (Cash Machine Charges and Financial Inclusion) Bill 2017-19, London. Available at services.parliament.uk/bills/2017-19/bankingcashmachinechargesandfinancialinclusion.html [Accessed 22/01/2019]

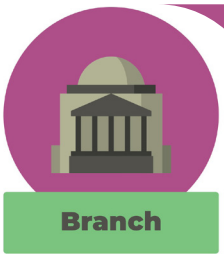
47. Access to Cash Review, Is Britain Ready for a Cashless Society

48. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.

49. UK Finance. (2017) Cash & Cash Machines 2017. UK Finance.

bank branch closure locations announced in the first half of 2016,[50] whilst the Daily Mail found that RBS was preventing other banks from opening new branches on those locations where it had closed a branch but left the ATM.[51] Meanwhile, provision of bank branches themselves is declining precipitously, which not only threatens the provision of ATMs, but also decreases alternative means of accessing and processing cash in the bank branch itself.

## Branches are disappearing and Post Offices are not a complete solution




- Between 1989 and 2012 Britain lost 57 percent of its bank branches.
- 2,961 branches have closed or are due to close between 2015 and January 2019.
- Only 55 percent of consumers are aware that they could use the Post Office for banking.

The number of UK bank branches is declining rapidly. Between 1989 and 2012 Britain lost 57 percent of its bank branches, falling from 20,583 to only 8,837.[52] More recently, the consumer group Which? reports that a further 2,961 branches have closed or are due to close between 2015 and January 2019, a further reduction of branch provision by a third on the 2012 figure, before taking into consideration closures between 2012 and 2015.[53]

Communities are often told that Post Offices are an alternative option, but although they fulfil certain needs well, such as making deposits and withdrawing cash, they do not offer the full range of banking services that customers receive in a branch. Research from Which? found that only 55 percent of consumers were aware that they could use the Post Office for banking, and of those who were aware, 47 percent were unlikely to actually do so. The consumer group also found a broad array of reasons why people would not want to use Post Offices for their banking needs, ranging from long queues and lack of privacy, to a lack of expertise from Post Office staff, and customer preference for dealing with their own

50. Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.

51. Burton, J. (2017) Bailed out Royal Bank of Scotland is accused of ruining towns and villages by banning rivals from reopening its closed branches, Daily Mail. Available at www.dailymail.co.uk/news/article-4824724/RBS-bans-rivals-reopening-closed-branches.html [Accessed: 26/03/18]

52. British Bankers Association. (2013) Annual Abstract of Statistics 2013, table 5.02, cited in Edwards, T. (2018) Bank Branch Closures Briefing Paper, House of Commons Library. Available at researchbriefings.files.parliament.uk/documents/SN00385/SN00385.pdf [Accessed 06/09/18]

53. Which?. (2019) Bank Branch Closures: Is Your Local Bank Closing?. Which? Available at www.which.co.uk/money/banking/switching-your-bank/bank-branch-closures-is-your-local-bank-closing-a28n44c8z0h5 [Accessed 21/01/19]

bank directly.[54] Similar concerns have been raised by Citizens Advice,[55] Age UK,[56] and the Federation of Small Businesses.[57] Small businesses also perceive the Post Offices to be slower in clearing cheques, less able to manage cash, and have less banking expertise.[58] In addition, Post Offices are closing almost as fast as bank branches are, calling into question their viability as a long term replacement.[59] Mobile banking trucks were also seen as providing an inadequate alternative, with both businesses and consumers citing concerns about quality of service, the short hours of availability, and security concerns.[60]

## Branch use is changing, but consumers still want branches


- At least one in four people from every age group have used a branch regularly within the past 12 months.
- Over one in three of 18 to 34 year olds are regular branch users
- Almost 60 percent of those on a household income under £15K are regular branch users.
- Over half of retired people use branches regularly.

Although customers have increasingly taken advantage of online and mobile banking to carry out routine tasks such as checking their balance and making payments, branch access remains important for a range of personal customers for a range of different uses.

According to the FCA's recent extensive Financial Lives survey (the largest and most detailed study of UK consumers banking habits ever undertaken), 40 percent of people use their bank branch every month, with 75 percent of branch users depositing cash or cheques, and 30 percent of branch users withdrawing cash. At least one in four people from every age group were regular bank users,[61] including one in three 18 to 34 year

54. Which?. (2018) Can the Post Office Really Plug the Gap as Bank Branches are Shut Down?. Which? Available at www.which.co.uk/news/2018/11/can-the-post-office-really-plug-the-gap-as-bank-branches-are-shut-down/ [Accessed 19/11/18]

55. Citizens Advice. (2018) The Government Needs to Find Out Why People Aren't Banking at Post Offices, Citizen's Advice. Available at wearecitizensadvice.org.uk/the-government-needs-to-find-out-why-people-arent-banking-at-post-offices-80d3aa158970 [Accessed 19/11/18]

56. Age UK. (2016) Policy Position Paper: Banking. [pdf] Age UK. Available at www.ageuk.org.uk/globalassets/age-uk/documents/policy-positions/money-matters/ppp_banking_gb.pdf [Accessed 19/11/18]

57. Baruch, B. (2016) Locked Out: The Impact of Bank Branch Closures on Small Businesses, London: Federation of Small Businesses.

58. Ibid.

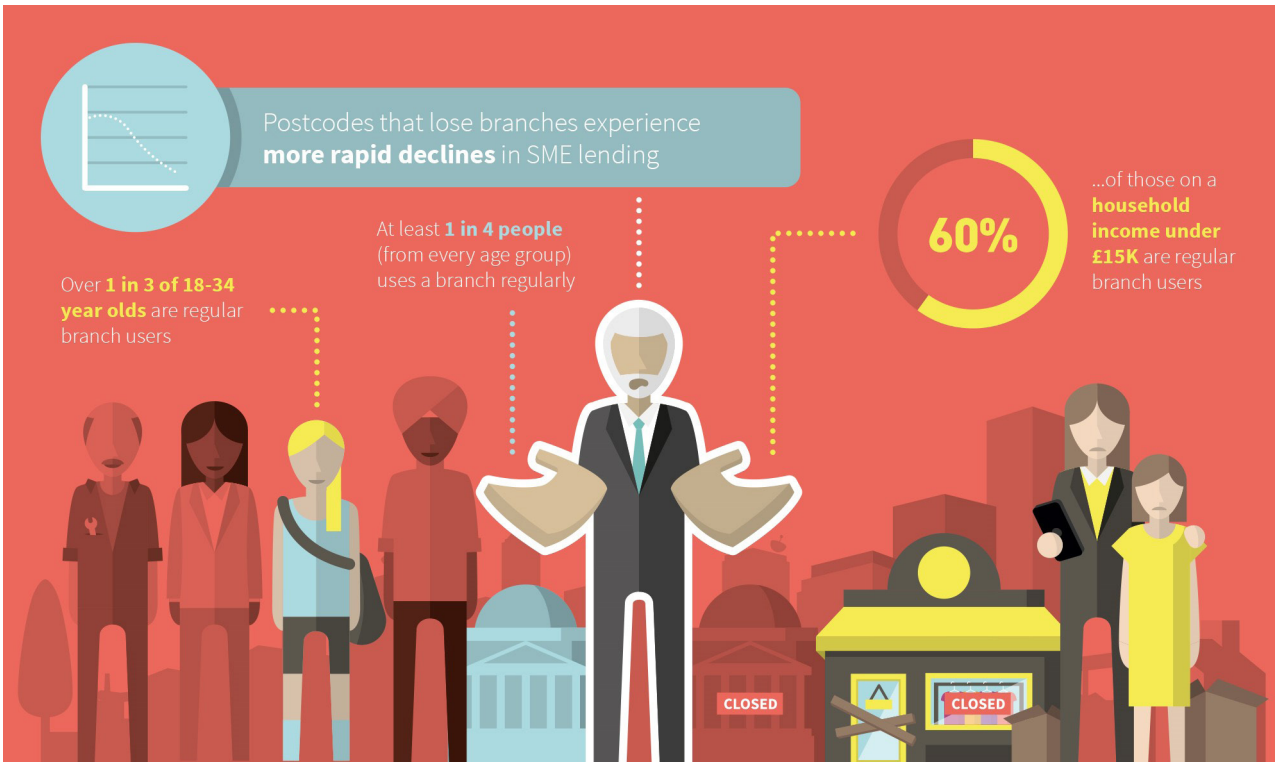
59. Bank of England Future Forum. (2018) How the British High Street has Changed in 5 Charts. Bank of England Future Forum.

60. Which?. (2019) Bank Branch Closures: Is Your Local Bank Closing?. Which? Available at www.which.co.uk/money/banking/switching-your-bank/bank-branch-closures-is-your-local-bank-closing-a28n44c8z0h5 [Accessed 21/01/19]; Baruch, B. (2016) Locked Out: The Impact of Bank Branch Closures on Small Businesses, London: Federation of Small Businesses. ; Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.

61. For these purposes 'regularly' is defined as at least once a month and so excludes less frequent visitors who are still nevertheless branch users.

olds, indicating demand for branches is not tied just to older groups.[62] These usage figures also appear resilient, with research conducted for the Competition and Markets Authority investigation into retail banking in 2014 also finding that 39 percent of people use a branch monthly, and a further 9 percent of people using branches weekly.[63] Another study by the Social Market Foundation in 2016 found that more than three in five people continue use branches in some way (62 percent),[64] whilst other consumer surveys consistently cite branch provision and location as being highly important for consumers regarding how they bank and who they bank with.[65]

Those that are heavier users of cash are more affected by branch closures, implying a disproportionately negative effect on vulnerable consumers, particularly as branch closures have been concentrated in areas that have greater proportions of elderly and low income people.[66] For example, over half of retired respondents to the Financial Lives Survey used their branch at least once a month (55 percent), whilst almost 60 percent of those on an annual household income of less than £15,000 did so.[67] Both these groups are more likely to be cash dependent, as demonstrated in Chapter 1.




62. FCA. (2018) Financial Lives Survey. FCA. Available at www.fca.org.uk/publications/research/understanding-financial-lives-uk-adults [Accessed 06/09/18].

63. GFK Nop for the Competition and Markets Authority. (2015) Personal Current Account Investigation. GFK Nop. Available at assets.publishing.service.gov.uk/media/555cabd0ed915d7ae2000007/PCA_Banking_Report.pdf [Accessed 06/09/18].

64. Evans, K. (2016) Balancing Bricks & Clicks: Understanding How Consumers Manage Their Money, London: Social Market Foundation.

65. Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.

66. McAskill, A. & Wright, L. (2016) Briatin's Poorest Communities, Hit Hardest by Bank Closures, May Face Shutout. Reuters. Available at uk.reuters.com/article/uk-britain-banks-branches-idUKKCN0Z60BP [Accessed 06/09/18]; Ibid.

67. FCA. (2018) Financial Lives Survey. FCA. Available at www.fca.org.uk/publications/research/understanding-financial-lives-uk-adults [Accessed 06/09/18].

It is not just the elderly or low paid that use bank branches however. According to the Financial Lives survey, 71 percent of 18 to 24 year olds and 66 percent of 25 to 34 year olds who deposited cash or cheques did so in a branch, and more than one in five of both age groups withdrew cash face to face in branch.[68] These are functions that online and mobile banking platforms will never be able to perform, demonstrating again that ongoing bank branch provision is important for enabling access and facilitating the ongoing use of cash in the real economy, even in the face of rising usage of digital banking channels.

Even those customers who prefer to carry out routine transactions online or on mobile apps find it valuable to visit a branch when they have a more significant issue such as a complaint or seeking advice for larger, more complex or simply more important transactions such as seeking a loan or mortgage.[69]

These figures suggest that regular bank branch usage is more widespread than is commonly thought to be the case. Indeed, many major banking groups have sought to encourage the view that bank branches are not commonly used by adopting particularly onerous definitions of "regular usage". The same banks then frequently justify branch closures based on low numbers of regular users.

The danger of creating misperception is illustrated by the following three different definitions of "regular":

- RBS/NatWest: a visit to the same branch for 23 out of the last 26 weeks.
- Lloyds Bank: a visit to the same branch for 48 of every 52 weeks of the year.
- Church of England: attending any church 12 times in a year.

As critics have pointed out, this means that an individual who visited the branch every week except for Christmas, Easter, and a two week holiday could fail to be classified as a "regular customer", even though a bank branch closure could dramatically impact their access to financial services and their own money.[70] This definition also excludes people who visit multiple branches of the same bank.

Not only does this cast doubt on the justifications given by banks for closing particular branches, but it also erodes trust in the banking sector in general, particularly where communities witness local branches being heavily patronised yet simultaneously defined by the bank as having very few "regular customers".[71] This may be a contributing factor as to why a

68. Ibid.

69. Evans, K. (2016) Balancing Bricks & Clicks: Understanding How Consumers Manage Their Money, London: Social Market Foundation.

70. Burton, J. (2018) Lloyds and RBS Bosses Playing Down Customer Numbers to Justify Branch Closures, Shocking Investigation Finds. Daily Mail. Available at www.dailymail.co.uk/news/article-5797125/Lloyds-Royal-Bank-Scotland-bosses-playing-customer-numbers-justify-branch-closures.html [Accessed 06/09/18]

71. Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.; Burton, J. (2018) Lloyds and RBS Bosses Playing Down Customer Numbers to Justify Branch Closures, Shocking Investigation Finds. Daily Mail. Available at www.dailymail.co.uk/news/article-5797125/Lloyds-Royal-Bank-Scotland-bosses-playing-customer-numbers-justify-branch-closures.html [Accessed 06/09/18]

recent survey indicated that two thirds of the British public don't believe banks act in the best interests of society.[72]

## Branches are important to the local small business economy

Branch networks also play an important role for SMEs to process and handle their cash, particularly where these SMEs are highly dependent on this form of payment. As described above, there are many industries and business types that remain reliant on or even prefer cash, whilst others are unable or unwilling to convert to digital payment methods. For these businesses, bank branches provide the facilities to deposit cash takings, trade change denominations, and help manage cashflow.

Where branch closures occur, additional costs are levied onto such businesses. For example, through cash collection charges, increased insurance premiums and increased risk due to leaving cash on the premises overnight. Sole traders may have to close their businesses for longer during the day to travel further during business hours to bank their takings. And even where branches don't close, access to cash handling is becoming increasingly restricted through reduced opening hours and often through stricter policies on cash.

Concern over these issues within the SME community is widespread, with the Federation for Small Businesses publishing a report that found that branch closures and reduced access to cash services is seriously damaging the financial inclusion and business productivity of SMEs in several different ways:[73]

- Reduced footfall caused by customers being unable to access cash is damaging local economies, including in some cases towns and villages running out of cash during peak periods of economic activity.
- Some small businesses find the charges for accepting digital payments prohibitive.
- Internet access is often too unreliable for processing payments or registering for a service.
- Some small businesses lack confidence in the cyber resilience and security of digital services.
- Branches are an important source of advice, and closures create an advice gap in some communities with limited access to alternative support.
- Small businesses identify a lack of digital skills as a key obstacle to their doing more online. This was a more significant issue for older small business owners. Partly as a result, businesses in rural areas are disproportionately vulnerable to both financial and digital exclusion.

Yet despite the ongoing need for bank branches, the network is

72. Positive Money. (2018) Polling: 10 Years After the Financial Crisis, the British Public Still Don't Trust Banks. Positive Money. Available at positivemoney.org/2018/08/british-public-dont-trust-banks/ [Accessed 07/09/18]; Edelman. (2018) Trust Barometer. Edelman. Available at www.edelman.com/trust-barometer [Accessed 10/09/18].

73. Baruch, B. (2016) Locked Out: The Impact of Bank Branch Closures on Small Businesses, London: Federation of Small Businesses.

shrinking far faster than the number of businesses that remain cash dependent. It seems the case that, as with personal usage of bank branches, provision is falling much faster than usage is declining. A continuation of this trend risks serious economic impacts, as it would make operations increasingly difficult and costly for those businesses that continue to rely on cash and branches.

## Branch closures negatively impact SME Lending

There is also some evidence to suggest a correlation between branch closures and declines in SME lending, which shows that branch networks are about more than transactional banking and play an important role in supplying credit to smaller businesses.[74]

This would imply that businesses are less able to take advantage of opportunities to grow, become more productive or employ more people in areas where branches have closed.

We can assess this by comparing bank branch closures with postcode lending data reported by UK Finance. We carried out a comparison of outstanding SME loan balances before and after the closure of branches in a sample of postcode areas. Unfortunately, there are two significant barriers to carrying out this analysis that prevent strong conclusions being drawn from this preliminary study:

1. **Lack of public data on branch closures.** Which? has released data by the year of closure, but not the date or month.[75] No other consolidated reporting mechanism for bank branch closures exists, whilst the major banking groups that are closing branches have been unwilling to release closure dates and locations. The RSA (Royal Society for the Encouragement of Arts, Manufactures and Commerce) has been able to identify the closure dates and locations of 259 bank branches since the start of the postcode lending data series, yet despite being the largest analysis of the impact of bank branch closures to be published to date, this sample represents only 9 percent of the branch closures over the last four years. For the remaining 91 percent of branches, only the year of closure has been published, allowing only for a far more basic and less nuanced analysis of these closures.
2. **Postcode lending data is not fit for purpose.** The postcode lending data provided by the seven largest lenders in the UK

74. Lammy, D. (2016) Local businesses will pay the price of Lloyds branch closures. The Guardian. Available at

www.theguardian.com/small-business-network/2016/jul/29/local-businesses-pay-price-lloyds-branch-closures [Accessed on 16/11/18]; Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.

75. Which? were unable to gain permission from contributing banks to provide us with the dates of closure that would have enabled more precise analysis of the potential correlation between bank lending and branch closures

is meant to provide insights on lending volumes, changes over time, and geographic distribution of loans.[76] Yet the database is heavily flawed because of the ability of banks to redact data under certain conditions. For SME lending, these redactions are extensive. As a result, the ability to track changes over time is eroded and geographical coverage of the UK is patchy. The flaws in postcode lending data are discussed further in the Technical Appendix.

Bearing in mind these caveats in the quality and availability of data, we believe that there is sufficient evidence of a negative impact of branch closures on SME lending to merit a more extensive study being mandated by and/or carried out by regulatory authorities that have the powers to request the full data sets necessary to properly analyse the correlation.

We used two different approaches to measuring the impact of bank branch closures on SME lending in order to draw this conclusion.

### Approach 1: total change in SME loans between Q2 2013 and Q4 2017

First, we compared the change in the stock of SME loans between Q2 2013, when postcode lending data was first published, and Q4 2017. We excluded postcode sectors that did not have data for every quarter within the period, leaving a set of 6,752 post code sectors. We then compared the change in loan balances between sectors where branches had closed to those without closures.

However, can the 68 percent of sectors with complete datasets be used as a proxy for all sectors in aggregate? While SME lending in total fell by 14.3 percent from Q2 2013 to Q4 2017, the average (mean) change in the sectors with complete datasets was an increase of 2.6 percent, a marked difference.

Using median values can mitigate this problem to a certain extent. The median change in lending volumes over the period for postcodes with complete data was -12.43 percent compared with -12.87 percent median for all postcodes, a much closer approximation.

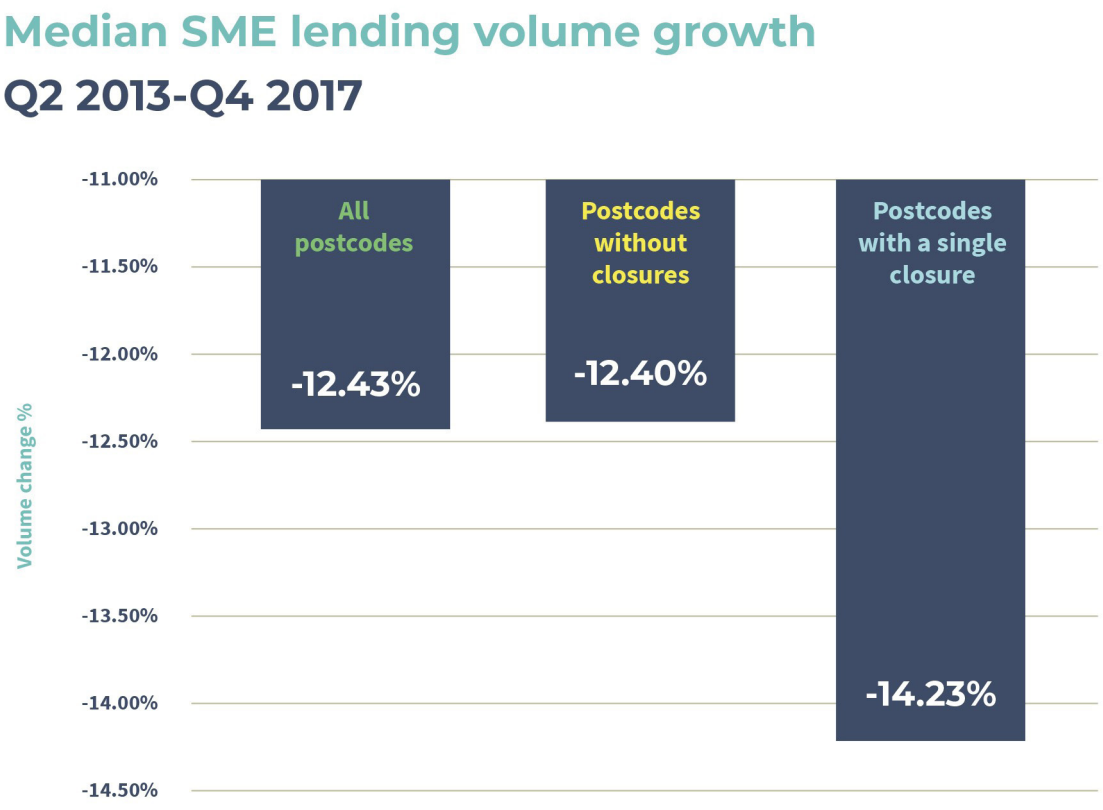
Using the median SME lending volume change for each group, the 1,259 postcode sectors that had experienced a branch closure at some point during the period experienced a faster decline in SME loans than those postcodes without a closure (see Figure 4).

76. Barclays, CYBG, Lloyds Banking Group, HSBC, Nationwide Building Society, Royal Bank of Scotland and Santander UK

**Table 1: Comparisons of Median Change in SME Lending Volumes by Postcode**[77]

| Type of postcode sector | Number of postcode sectors with complete data | Median SME lending volume growth, Q2 2013 to Q4 2017 |
|---|---|---|
| All postcodes | 6,752 | -12.43 percent |
| Postcodes without a closure | 5,173 | -12.40 percent |
| Postcodes with a single closure | 1,259 | -14.23 percent |

**Figure 4: Comparisons of Median Change in SME Lending Volumes by Postcode. Source RSA analysis of UK Finance data.**




However, when we disaggregate the postcode sectors with a branch closure, there is a wide variation in the movement in SME loans. Whilst two thirds of postcodes that experienced a closure suffered significant declines in SME lending (-29.41 percent on average), one third of closure postcodes actually experienced improved lending outcomes (+43.62

77. We have not included postcodes with multiple branch closures as the sample size was considered insufficient to draw meaningful conclusions.

percent on average).

Furthermore, the range of change in closure postcodes that suffered lending decline was almost 91 percent. By comparison, those closure postcodes that experienced lending growth saw a range in growth rates of over 615 percent.

In other words, closure postcodes that suffered lending declines displayed a higher level of consistency, whereas closure postcodes that experienced growth showed significant variation and inconsistency.

Some of this high degree of variation may be explained by large loans being granted to individual SMEs, or it may be reflective of the reporting and methodology issues in the dataset as described above and in the Technical Appendix. In either case, the implication is that in the majority of cases, postcodes that have lost a branch have suffered significant and consistent decline in SME lending volumes, whilst a significant minority experienced unpredictable and inconsistent growth.

### Approach 2: quarterly changes in SME loans in branch closure postcodes

Another way of assessing the impact of branch closures on SME lending is to look at the change in lending volumes on a quarterly basis, rather than net change between the beginning and the end of the four and a half year period. This allows for greater accuracy in assessing the impact of the actual closure itself, because it shows the trend in lending in that postcode both before and after the closure in a certain postcode.

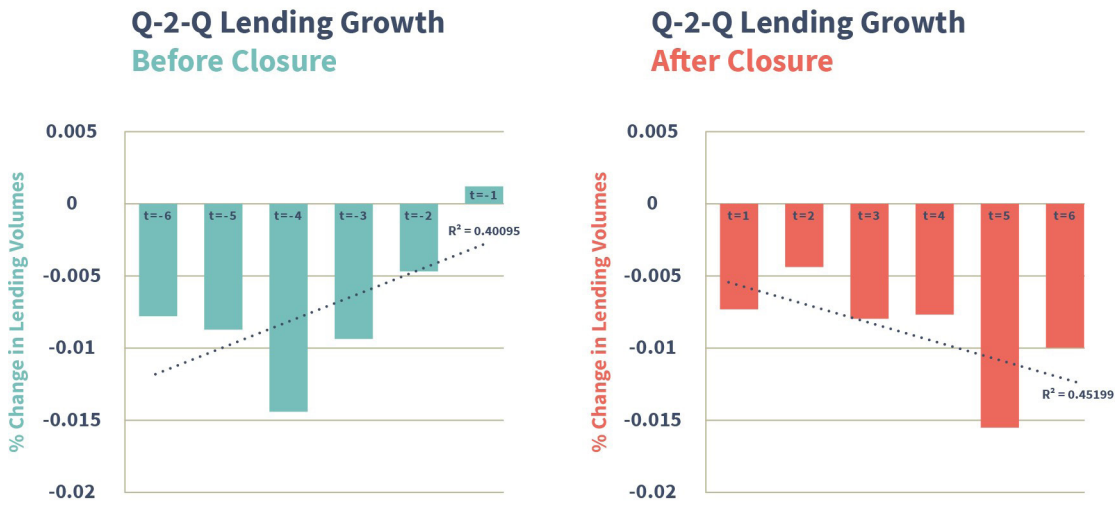
Given the difficulty in acquiring the exact closure dates of bank branches in the UK, we were only able to identify 259 postcode sectors with sufficient data to measure the impact of branch closures on quarter by quarter SME loan balances. While smaller than we would wish for, this is a significantly larger sample than any other published analysis.[78]

The closures we analysed occurred in the second half of 2014, throughout 2015, and a few in early 2016, allowing us to mitigate against short term economic impacts affecting the results. Given the closure dates of the branches that are available, we have also limited our timeframe of reference to six quarters of data either side of the quarter of branch closure, to allow comparable data for both. This gives a total timeframe of over three years of analysis, with each branch closure occurring in the middle of this time frame.

Taking this approach, the data suggests that branch closures have a significant impact on SME lending outcomes, as shown in Figure 5. Pre-closure, SME lending growth is negative for five of the six quarters under analysis, but with a positive trendline indicating that the rate of lending growth is improving over time. The last quarter of pre-closure data is positive, culminating a period of four consecutive quarters of improving results. By comparison, all six quarters display negative growth after closure, and the trendline is reversed, suggesting rapidly worsening credit conditions for SMEs in postcodes that have suffered a branch closure.

78. Travers-Smith, F. (2016) Abandoned Communities: The Crisis of UK Bank Branch Closures and their Impact on Local Economies. London: Move Your Money.

**Figure 5: Median changes in quarterly lending volumes before and after branch closure. Source: RSA analysis of UK Finance data**




Although these results are not conclusive, we believe they warrant commissioning further comprehensive research based on full access to the required data.

## Summary: the benefits of branches

Bank branches play a crucial role in facilitating access to cash for both individuals and the SMEs. They contribute to the health of local economies and high streets and provide a place where customers can seek valued face to face service.

Despite the limitations of data availability, we also find evidence that branch closures are associated with reductions in credit to SMEs. This suggests that for some types of lending, particularly where local knowledge and relationships are required to make sound credit decisions, bank branches are not fully replaceable with other distribution channels such as online, brokers, or post office branches.

Treated in tandem, these factors suggest that the decline of bank branch provision is not only occurring far faster than is warranted, but that it is also having a negative impact on the economic viability of communities up and down the country.

In conclusion, we believe that the current disorderly and rapid dismantling of bank branch infrastructure, and threats to the extent and viability of the ATM network, poses significant risks to local economic vibrancy, small business productivity, customer service, and financial inclusion. Branches are not obsolete. Instead they need to evolve to fit future needs, and some degree of policy coordination is likely to be required to maintain a minimum level of branch service required to protect the overall public good.

In the next Chapter we examine a similar case for maintaining cash as a universally available and viable payment method.

# The case for cash

We saw in Chapter 1 that despite the fall in proportion of payments made in cash, the amount of cash in the economy has risen in recent years. Some might argue that this must be due to criminal activity, not recorded in official statistics, and society would be well served to eradicate cash to help fight crime. We reject that argument as not well founded in evidence. Neither are we convinced by technocratic arguments that monetary policy could be more effective if citizens are denied the choice of holding cash instead of bank deposits. We consider both these arguments below before setting out three positive reasons to maintain cash as a viable and widely accessible means of payment: choice and competition, financial inclusion, and economic resilience.

## Cash is not fundamentally about criminality

Advocates for a cashless society often paint the cash economy as a hotbed of financial crime and tax evasion, claiming that a cashless society will address or even eradicate these ills. Kenneth Rogoff, for example, argues that any cash not recorded in domestic consumption or held overseas must be "mainly held" in the shadow economy, which "includes agents evading taxes, laws, and regulation".[79] Yet Rogoff also recognises the importance of legitimate cash usage, from gifts and peer to peer exchange, to saving in cash and using currency as a store of value. His preferred solution is not to eliminate cash but to withdraw high denomination notes from circulation as these are less likely to be used for day-to-day transactions, and this is an option the UK Government could consider.

Nor is the amount of cash in the economy necessarily correlated with the scale of financial crime. Sweden, for example, saw dramatic increases in reported offences of money laundering, even as the share of cash in the economy relative to GDP declined precipitously to one of the lowest levels in the world.[80]

Whilst this might reflect an enhanced ability on behalf of banks and public authorities to detect and report instances of money laundering in a reduced cash environment, evidence from across the Eurozone shows no direct correlation between the share of a country's payments in cash and the size of the shadow economy.[81] Digital currencies such as Bitcoin can be used for criminal activity just as effectively as physical cash.

HMRC estimates that unregistered paid work, which can be facilitated by cash payments, cost £6.2bn in unpaid tax in 2013/4, but this is in the context of a total loss of £34bn from a variety of factors to which the

79. Rogoff, KS. (2015) Costs and Benefits to Phasing out Paper Currency. NBER Macroeconomics Annual 2014, Volume 29, Parker and Woodford.

80. Mai, H. (2016) Cash, Freedom, and Crime: Use and Impact of Cash in a World Going Digital, Deutsche Bank Research.

81. Ibid.

elimination of cash would make little difference.

As Victoria Cleland, chief cashier and director of notes at the Bank of England, has pointed out, "HMRC estimates that the value of uncollected tax has been broadly stable in the last decade, a time when demand for cash has increased 75 percent, suggesting that contrary to some commentators the shadow economy is not a key contributor to the strength of cash demand".[82]

We conclude that firstly, if reduction of financial crime is an overarching goal of a move towards alternative payment methods, then far more research is needed to demonstrate the nature and extent of any causal link between cash and the level of crime and, second, any potential benefits to crime reduction of moving to a cashless society would need to be weighed carefully against the potential economic and social harm of such as disruptive move.

## Monetary policy should not coerce citizens

Another argument advanced in favour of moving to a cashless society is to enhance the effectiveness of monetary policy tools. In short, if citizens cannot withdraw their bank deposits in the form of cash, central banks can impose negative interest rates on their balances.

Today's ultra-low interest rate environment gives policymakers little room to cut rates to stimulate the economy through higher spending. This characteristic of cash is known as the 'zero lower bound', and has been cited as a reason to eradicate cash to allow more power for central banks to implement unorthodox monetary policy including negative interest rates.[83]

This is a poor reason to eradicate cash or to artificially encourage a shift to a cashless society. Evidence from countries such as Sweden, Switzerland and Denmark does not show a requisite increase in demand for cash when interest rates turn negative, suggesting that the true zero lower bound is somewhere below 0 percent, and thus does not preclude central banks from effectively implementing negative interest rates.[84] Moreover, abolishing cash for the sake of implementing negative interest rates on people's deposits, effectively charging rather than rewarding them to save, would likely significantly erode trust in civil institutions and the banking sector,[85] on which success of the sector relies and which is already challenged by low levels of public trust.[86]

82. Cleland, V. (2017) Insights into the Future of Cash. Bank of England. Available at: www.bankofengland.co.uk/-/media/boe/files/speech/2017/insights-into-the-future-of-cash.pdf?la=en&hash=F13A0D0BDADDF3F981DDC2A1B81C01E42BEF806D [Accessed 14/03/18].

83. Rogoff, KS. (2015) Costs and Benefits to Phasing out Paper Currency. NBER Macroeconomics Annual 2014, Volume 29, Parker and Woodford.

84. Bech, M. & Malkhozov, A. (2016) How Have Central Banks Implemented Negative Policy Rates?, Bank of International Settlements. Available at www.bis.org/publ/qtrpdf/r_qt1603e.htm [Accessed 14/03/18]

85. Mai, H. (2016) Cash, Freedom, and Crime: Use and Impact of Cash in a World Going Digital, Deutsche Bank Research.

86. Palenicek, J. (2017) Most Brits Trust Banks but Don't Think They Work in Customers Interests, YouGov. Available at yougov.co.uk/news/2017/05/19/most-brits-trust-banks-dont-think-they-work-custom/ [Accessed 15/03/18]; Edelman. (2018) Trust Barometer. Edelman. Available at www.edelman.com/trust-barometer [Accessed 10/09/18].

## Cash offers choice and competition

The first positive argument for preserving cash is that is provides consumer choice and market competition to private digital payment systems. It is the only way that citizens can directly access central bank money without intermediation by banks. By providing an alternative to using digital forms of payment (all of which are owned and supplied by private sector, for-profit companies) cash provides an important restraint on fees and charges for digital payment services.

As the Bank of England have noted, no other payment method can match the broad and diverse characteristics that cash offers, including universal acceptance, instant settlement, no cost at point of use, no reliance on technology or infrastructure for its use, budget management, and privacy.[87] As well as its utility, cash creates an emotional, psychological and tangible connection with those who use it, and has proven to be a surprisingly resilient and enduringly popular payment method. In the words of Victoria Cleland, "Because cash has such a wide range of uses and is valued by different people at different times for different reasons, it does have a future, and a significant one".[88]

One legitimate use of cash is simply for building up savings. A 2014 Bank of England survey estimated that almost one in five people in the UK hoard cash (18 percent), with the Bank predicting that this was an underestimate. The primary reason given for this hoarding was to provide comfort against potential emergencies.[89] Similarly, research from the European Central Bank found that almost a quarter of consumers across the Euro area keep cash at home as a store of value,[90] and the Access to Cash Review estimates that 85 percent of British people keep cash at home.[91]

Whilst cash hoarding in this way accounts for only £3bn to £5bn in the UK according to the Bank of England,[92] those on lower incomes seem more dependent on cash for savings as well as for payments. Contemporaneous research from the Family Resources Survey and the Department for Work and Pensions also showed that whilst informal

87. Fish, T. and Whymark, R. (2015) How Has Cash Usage Evolved in Recent Decades?. Bank of England Quarterly Bulletin Q3 2015. Available at www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2015/how-has-cash-usage-evolved-in-recent-decades-what-might-drive-demand-in-the-future.pdf?la=en&hash=4AA04C755C1B8BBDC70CE55CAD488E348FEDDAC5 [Accessed 14/03/18]; Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.

88. Cleland, V. (2017) Insights into the Future of Cash. Bank of England. Available at: www.bankofengland.co.uk/-/media/boe/files/speech/2017/insights-into-the-future-of-cash.pdf?la=en&hash=F13A0D0BDADDF3F981DDC2A1B81C01E42BEF806D [Accessed 14/03/18].

89. Fish, T. and Whymark, R. (2015) How Has Cash Usage Evolved in Recent Decades?. Bank of England Quarterly Bulletin Q3 2015. Available at www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2015/how-has-cash-usage-evolved-in-recent-decades-what-might-drive-demand-in-the-future.pdf?la=en&hash=4AA04C755C1B8BBDC70CE55CAD488E348FEDDAC5 [Accessed 14/03/18].

90. Esselink, H & Hernández, L. (2017) The Use of Cash by Households in the Euro Area. Available at www.ecb.europa.eu/pub/pdf/scpops/ecb.op201.en.pdf?f3670de4c470a5361c8b3e250d656699 [Accessed 19/11/18].

91. Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.

92. Fish, T. and Whymark, R. (2015) How Has Cash Usage Evolved in Recent Decades?. Bank of England Quarterly Bulletin Q3 2015. Available at www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2015/how-has-cash-usage-evolved-in-recent-decades-what-might-drive-demand-in-the-future.pdf?la=en&hash=4AA04C755C1B8BBDC70CE55CAD488E348FEDDAC5 [Accessed 14/03/18].

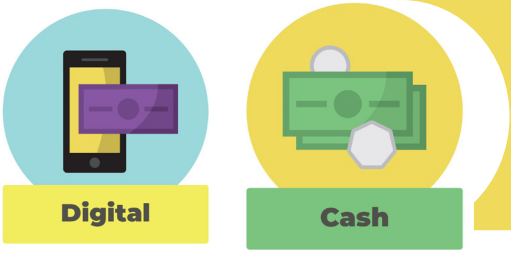
savings in cash outside of the banking system remains a niche choice, used by only 3 percent of households, this preference more than doubles for households on a low income (7 percent).[93]

There are also arguments for the retention of cash to help protect civil liberties and the right to privacy. The large amount of information generated from citizens' financial data can build a deep and complex picture of their lives. Modern data analytics techniques are able to extend this analysis deep into individuals' current and historical spending habits, income, and financial behaviours. Such data is extremely valuable to the financial companies that hold it (which perhaps helps explain some companies' enthusiasm for a cashless society), but it also creates asymmetries of information that some may feel uncomfortable with or downright suspicious of.[94]

As well as an asymmetry of information, such deep data capture and analysis also creates a data security and usage risk, where citizen's data can be stolen, misused, or manipulated in ways that they would not agree with. Even in countries with strong data protection laws, protection of individual privacy is only as strong as the adherence to and enforcement of such laws. Recent revelations in the media about inappropriate data usage and large scale data hacking only serve to increase suspicion around the appropriate usage and storage of big data.[95]

Cash, by contrast, creates no such data or privacy vulnerabilities. As Deutsche Bank analyst Heike Mai writes, "the most robust data protection is provided by cash, as no data is generated at all".[96] Whilst this may be of no use for advertisers and big data analysts, it helps to protect the privacy of individuals who use it. A unilateral switch to a cashless society driven from above would force people into a level of transparency with government and corporations that many would not prefer. Such a development has also not yet received the level of public debate or approval that would be required to justify the removal of a viable, popular, and anonymised method of payment.

## Cash is an important component of financial inclusion




- Approximately 1.23 million people live without a bank account.
- 94 percent of people without a bank account have a personal income of less than £17,500 a year.
- 4.5 million adults in the UK are offline and a further 9.2 million adults have low digital capacity.

93. Toynbee Hall. (2017) Savings for the Future: Solving the Savings Puzzle for Low Income Households. Toynbee Hall. Available at www.toynbeehall.org.uk/data/files/Research_and_Evaluation/Savings_for_the_Future_Final_v6_002.pdf [Accessed 14/03/18].

94. For an example of the enthusiasm of card companies to switch to a cashless society, see Oliver, M. (2017). Credit card giant Visa plans to pay Britain's shops and restaurants to ditch coins and notes. Daily Mail. Available at www.dailymail.co.uk/news/article-4694894/Credit-card-giant-Visa-wants-shops-ditch-cash.html [Accessed 15/03/18].

95. See, for example, Cadwalladr, C. and Graham-Harrison, E. (2018) Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Data Breach, The Guardian Available at www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election [Accessed 17/03/18].

96. Mai, H. (2016) Cash, Freedom, and Crime: Use and Impact of Cash in a World Going Digital, Deutsche Bank Research.

As we stand today, cash is the only payment method that is universal and free at the point of use. Some individuals, businesses and localities remain much more dependent on cash than others, and less likely to convert to other methods of payment. Such groups are more likely to face barriers to economic participation and greater financial exclusion, thus worsening their wellbeing, quality of life, and ability to engage in the economy. The UK's current disorderly and unplanned demolition of cash infrastructure presents serious challenges for social justice and inclusive growth.

For example, changes to the role, accessibility and availability of cash in the UK is most likely to affect people in low income households. Yet this is also the group that is most likely to have poor financial resilience and higher risk of deprivation, exhibited by low savings rates, everyday bills and expenses becoming a burden, and the inability to afford an unexpected expenditure.[97]

Approximately 1.23 million people live without a bank account in their name in the UK,[98] with research from Lloyds Bank suggesting that 94 percent of people without a bank account have a personal income of less than £17,500 a year, and 91 percent live in households where the total income was at or below this figure.[99] Further research from anti-poverty charity Toynbee Hall found that more than half of unbanked people (53 percent) lived on less than £5,000 per year, suggesting that being unbanked is not just a problem related to those on low pay, but also to those living in poverty and deprivation.[100]

There are several reasons why some, often more vulnerable, customer groups are more likely to rely on cash than others.

First, many find it easier and more tangible to manage budgets and to allocate expenses accordingly, with case studies of those on low incomes frequently citing cash usage as a primary means of budgeting.[101] Almost a third of unbanked people (31 percent) said their main reason for remaining unbanked was that they prefer not to use banks, with a further 10 percent saying their main reason was because they are paid in cash.[102] Despite the rise of banking apps that include budgeting tools, reminders and analysis of expenses, recent research suggested that users of such apps were more likely to make poor financial decisions and rack up debts.103

Second, many have no real alternative to cash, because they lack online

97. Rowlinson, K. and McKay, S. (2017) Financial Inclusion Monitoring Report 2017, CHASM, University of Birmingham. See also Financial Capability Strategy for the UK Adults Outcome Framework; and Gregory, J. et al. (2016) Savings for All: A Manifesto for an Inclusive Savings Agenda, CHASM, University of Birmingham.

98. McKay, S. and Rowlinson, K. Financial Inclusion Annual Monitoring Briefing Paper 2018, University of Birmingham. Available at www.barrowcadbury.org.uk/wp-content/uploads/2018/10/financial-inclusion-2018-briefing-paper.pdf [Accessed 16/11/18].

99. Lloyds Bank. (2017) Consumer Digital Index 2017: Benchmarking the Digital and Financial Capability of Consumers in the UK, Lloyds Bank.

100. Toynbee Hall, Unbanked Research Paper, private communication, 2018

101. Gibbons, D. et al. (2016) Improving the Financial Health of Low Income Groups. London: Centre for Responsible Credit; Access to Cash Review. (2018) Is Britain ready to go cashless?. Access to Cash Review.

102. Lloyds Bank. (2017) Consumer Digital Index 2017: Benchmarking the Digital and Financial Capability of Consumers in the UK, Lloyds Bank.

103. Finextra. (2018) Want to manage your money better? Ditch your banking apps. Available at www.finextra.com/newsarticle/32933/want-to-manage-your-money-better-ditch-your-banking-apps [Accessed 15/11/18]

access and the digital skills to use them. Some 8.4 percent of the UK adult population is offline (roughly 4.5 million people),[104] and a further 9.2 million adults have low digital capacity.[105] Older people are far more likely to remain offline and not be internet users, with evidence suggesting that amongst older people that remain offline their attitudes are hardening and that their behaviour is becoming entrenched.[106] Other commentators have also suggested that those with poor mental health are also more likely to suffer from a reduction in cash circulation and usage.[107] These groups are therefore highly vulnerable to the withdrawal of cash facilities.

Third, some consumers are wary of using bank accounts due to low levels of trust or fears of unexpected fees and charges. Research on the unbanked, for example, consistently reports that people chose not to use a bank account because they predominantly manage their money in cash, prefer not to use banks, or previously had negative experiences.[108]

Finally, a substantial number of people continue to face "hard barriers" to opening a current account, such as no correct ID, poor credit files, or struggling with existing debt.[109] Research from Toynbee Hall has consistently found ID issues to be the primary reason for unbanked people not having a bank account,[110] whilst access to and affordability of ID has been explicitly recognised as a primary barrier to financial inclusion by the FCA.[111]

Given these factors, it remains unclear what benefit these groups would receive from a move to a cashless society. Instead, compared to the majority, they would face greater barriers to economic participation and worsening financial health. It should be noted that some 5.2 million households earn a disposable income of £17,000 per year or less,[112] demonstrating the broad scale of people who could be susceptible to detriment should society go cashless.

104. ONS. (2018) Internet Users, ONS. Available at www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2018 [Accessed 16/11/18]

105. Lloyds Bank. (2017) Consumer Digital Index 2017: Benchmarking the Digital and Financial Capability of Consumers in the UK, Lloyds Bank.

106. Ibid.

107. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money

108. Rowlinson, K. and McKay, S. (2017) Financial Inclusion Monitoring Report 2017, CHASM, University of Birmingham; Williams, S. and Packman, C. Living Without a Bank Account: Our Research on the Unbanked. Financial Health Exchange. Available at financialhealthexchange.org.uk/living-without-a-bank-account-findings-from-our-research-on-the-unbanked/ [Accessed 19/11/18]; and Research on the Unbanked, Toynbee Hall 2018

109. Lloyds Bank. (2017) Consumer Digital Index 2017: Benchmarking the Digital and Financial Capability of Consumers in the UK, Lloyds Bank.; Toynbee Hall. (2017) Savings for the Future: Solving the Savings Puzzle for Low Income Households. Toynbee Hall. Available at www.toynbeehall.org.uk/data/files/Research_and_Evaluation/Savings_for_the_Future_Final_v6_002.pdf [Accessed 14/03/18].

110. Williams, S. and Packman, C. Living Without a Bank Account: Our Research on the Unbanked. Financial Health Exchange. Available at financialhealthexchange.org.uk/living-without-a-bank-account-findings-from-our-research-on-the-unbanked/ [Accessed 19/11/18]; and Research on the Unbanked, Toynbee Hall 2018

111. Roe, B. et al. (2015) Mind the Gap: Consumer Experiences of Financial Exclusion Across the UK, London:Financial Conduct Authority.

112. ONS. (2017) Household Disposable Income and Inequality in the UK: Financial Year Ending 2017. ONS. Available at www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2017 [Accessed 19/11/18]

## Cash boosts economic resilience and mitigates cyber risks


- Cyber attacks on financial firms increased 200% between 2016-2017
- Cybercrime has been estimated to cost UK consumers £3.1bn per year

Digital payment systems carry additional and specific risks that emerge from their fundamental characteristics, specifically that they are centrally owned and operated by private firms, and that they rely on data exchange between payment processors that are remote from the transaction. By contrast, cash is decentralised and enacts payment at the point of use. As a 'bearer instrument', cash provides settlement of transaction without the need for any digital intermediation.

One such risk is the ongoing maintenance and operability of the systems that facilitate digital payments, which can crash and cause major disruption to the ability of people and businesses to transact. Whilst digital payments systems are generally quite robust, the major collapse of the Visa network in Europe in June 2018 demonstrates that even the largest and most well-known providers can experience outages, causing widespread disruption and significant economic losses (incidentally, consumers could still make ATM cash withdrawals from their Visa cards even whilst their payment systems were down).[113] Up to 1.9 million customers of TSB Bank also experienced additional issues accessing their accounts when the bank's systems went down, with some still unable to make payments or view their accounts over a month after the initial "IT meltdown".[114] Similarly, customers of NatWest and its parent company RBS also suffered the latest in a "litany of IT failures" this year,[115] whilst Barclays, HSBC, and Co-operative Bank customers have also experienced issues accessing their accounts in 2018.[116]

Digital payments infrastructure can also be susceptible to cybercrime and hacking. According to the FCA, cyberattacks on financial firms more

113. Megaw, N. (2018). Visa's European payment systems back up after outage. FT.com. Available at

114. Monaghan, A. (2018) Timeline of trouble: how the TSB IT meltdown unfolded. The Guardian. Available at

www.theguardian.com/business/2018/jun/06/timeline-of-trouble-how-the-tsb-it-meltdown-unfolded [Accessed 19/11/18].

115. Collinson, P. (2018) RBS and Barclays asked to explain 'addition to litany of IT failures'. The Guardian. Available at

www.theguardian.com/business/2018/sep/21/rbs-natwest-ulster-bank-customers-locked-out-latest-banking-glitch [Accessed 19/11/18].

116. Jones, R. (2018) Barclays internet banking restored after technical problem. The Guardian. Available at www.theguardian.com/business/2018/sep/20/barclays-internet-banking-down-bank-tsb-accounts [Accessed 19/11/18]; Which?. (2018) Can the Post Office Really Plug the Gap as Bank Branches are Shut Down?. Which? Available at www.which.co.uk/news/2018/11/can-the-post-office-really-plug-the-gap-as-bank-branches-are-shut-down/ [Accessed 19/11/18]

than doubled in 2017 compared to the year before,[117] with the regulator making cyber-resilience one of its top priorities for 2018/19,[118] after fining Tesco Bank £16.4m for deficiencies in its cybersecurity systems.[119] Whilst cash can also be susceptible to criminal activity, such as fraudulent transactions or counterfeit notes, the scope and scale of these issues is far lower than it is in the digital payments arena. The Bank of England reports that there is roughly £4.83m worth of counterfeit notes in circulation, for example,[120] whereas cybercrime has been estimated to cost UK consumers £3.1bn per year, and the Financial Services sector almost £2.5bn per year by comparison.[121] In addition, analysts have identified ways that cybercrime attacks on financial services infrastructure can swiftly escalate and undermine the resilience of the financial sector as a whole, potentially causing major disruption and even credit or liquidity crises in the economy, an outcome that is not possible through cash related crime.[122]

Finally, digital payments methods create risks related to the control and administration of those systems, because the owners of those platforms can choose, or be forced, to block access or turn off those systems completely. Whilst such scenarios remain unlikely, there are examples where they have been witnessed. For example, the Ugandan government shut down all mobile phone payment platforms for four days during its 2016 elections, preventing 6.7 million people from accessing basic services like bill payments and money transfers through those digital platforms during the outage.[123] Whilst institutional and governance protections make such a scenario less likely in the UK, the potential for increased financial coercion has been noted by some critics,[124] and cannot be entirely discounted in an age where some governments have proven willing to manipulate and restrict digital access in times of increased tension or

117. Jones, R. (2018) Building Cyber Resilience. FCA. Available at www.fca.org.uk/news/speeches/building-cyber-resilience [Accessed 19/11/18].

118. FCA. (2018) Business Plan 2018/19. FCA. Available at www.fca.org.uk/publication/business-plans/business-plan-2018-19.pdf [Accessed 19/11/18].

119. Press Association. (2018) Tesco Bank fined £16.4m by watchdog over cyber-attack. The Guardian. Available at

www.theguardian.com/business/2018/oct/01/tesco-bank-fined-cyber-attack-fca [Accessed 19/11/18].

120. Bank of England. (2018) Bank note statistics, Bank of England. Available at: www.bankofengland.co.uk/statistics/banknote [Accessed 19/11/18].

121. Cabinet Office & Detectica. (2011) The Cost of Cyber Crime. Cabinet Office. Available at assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/60943/the-cost-of-cyber-crime-full-report.pdf [Accessed 19/11/18]; for a discussion on the costs of cyber crime and the reliability and methodology of various cyber-crime estimates, see Home Office. (2018) Understanding the Costs of Cyber Crime, Cabinet Office, Available at www.techuk.org/images/understanding-costs-of-cyber-crime-horr96.pdf [Accessed 19/11/18].

122. Oliver Wyman & DTCC. (2018) Large-Scale Cyber-Attacks on the Financial System: A Case for Better Coordinated Response and Recovery Strategies. Oliver Wyman. Available at www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2018/march/Large-Scale-Cyber-Attacks-DTCC-2018.pdf [Accessed 19/11/18]

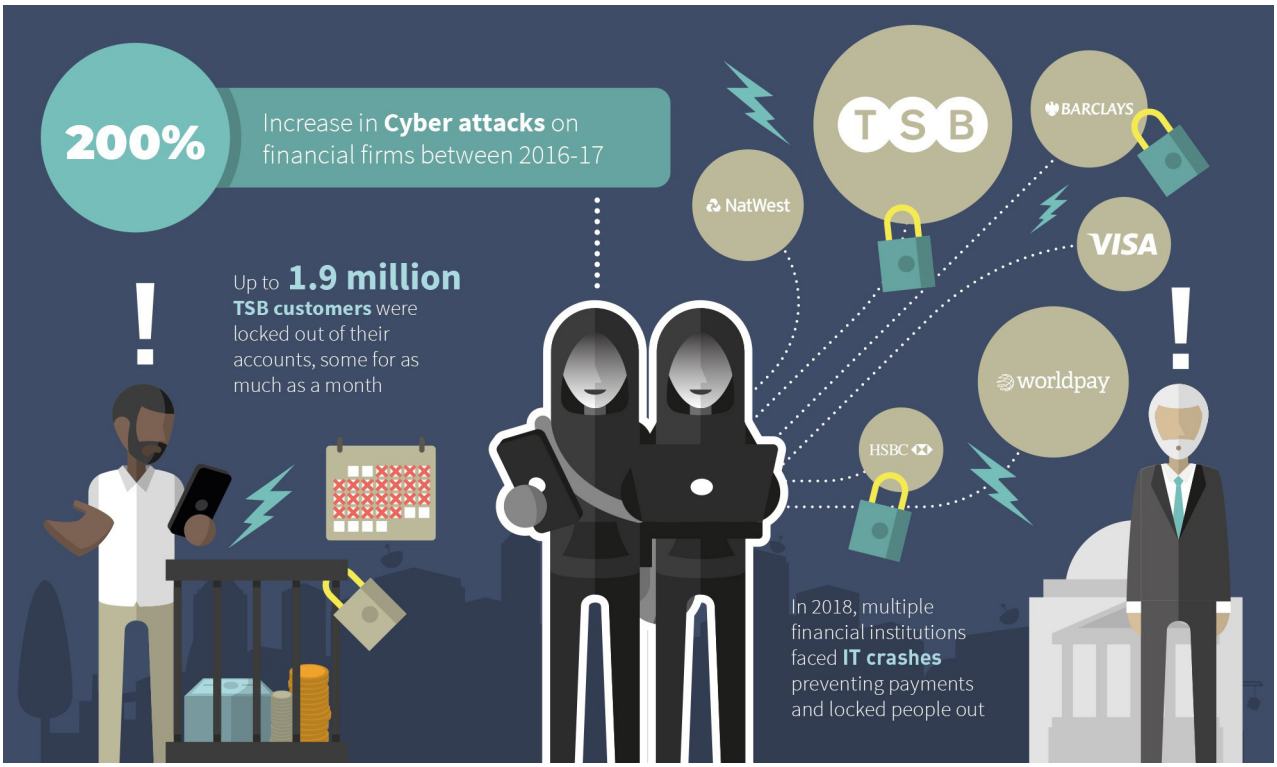
123. Bold, C. & Pillai, R. (2016). The Impact of Shutting Down Mobile Money in Uganda. CGAP. Available at

www.cgap.org/blog/impact-shutting-down-mobile-money-uganda [Accessed 19/11/18].

124. Scott, B. (2016) The War on Cash. The Long and The Short Magazine. Available at thelongandshort.org/society/war-on-cash [Accessed 19/11/18].

civil unrest.[125]

Consequently, the maintenance of cash as a viable means of payment not only provides an alternative means to pay when digital systems fail, but also improves the resilience of the financial system through ensuring the ability to transact under almost any circumstances. It is these characteristics of cash that have increasingly led central banks to promote the payment method's ongoing utility and provision,[126] and which provide the litmus test for the utility of any potential central bank issued digital currencies.[127]




125. Cerulus, L. & Contiguglia, C. (2018). Central bankers warn of chaos in a cashless society. Politico. Available at

www.politico.eu/article/central-bankers-fear-cybersecurity-chaos-in-a-cashless-society/ [Accessed 19/11/18].

126. Engert, W. et al. (2018) Is a Cashless Society Problematic?. Bank of Canada. Available at www.finextra.com/finextra-downloads/newsdocs/sdp2018-12.pdf [Accessed 19/11/18]; Ingves, S. (2018) Money and Payments: Where are we Heading. Speech for Swedish Riksbank. Available at www.riksbank.se/globalassets/media/tal/engelska/ingves/2018/tal_ingves_180604_eng.pdf [Accessed 19/11/18]

127. See, for example, Walter Engert et al, Is a Cashless Society Problematic?, Bank of Canada, October 2018 accessed at www.finextra.com/finextra-downloads/newsdocs/sdp2018-12.pdf on 19/11/18; and Stefan Ingves, "Money and Payments: Where are we Heading", Speech for Swedish Riksbank, June 2018, accessed at www.riksbank.se/globalassets/media/tal/engelska/ingves/2018/tal_ingves_180604_eng.pdf on 19/11/18

# Recommendations

We argue in this report that cash is the only payment method that is universal and free to use for citizens. Therefore, its usage is not only desirable, but in fact essential for the continuing lives and livelihoods of a broad array of stakeholders operating in society and the real economy. The importance of bank branches extends beyond simply processing cash transactions as consumers value them for face to face contact and advice, and there is evidence that branch networks facilitate the provision of credit to smaller businesses.

This is not to say that the growth of contactless and card payments is undesirable, or that the demise of cash usage has been exaggerated. Usage of cash has been in decline for some time, and with 68 percent of manned point of sale terminals in the UK retail sector,[128] and 80 percent of small retailers across the UK already accepting contactless payments,[129] the likelihood is that the share of cash payments will continue to shrink even amongst this cohort.

However, while some sectors, industries and groups of people are well suited to transitioning away from cash and are adopting the means to do so, this isn't the case for all. In sectors where cash remains a viable or even increasingly popular means of payment, these industries should be supported and provided for in their dealings with cash, rather than pushed towards other payment methods that may be less appropriate for their industry, or which may incur fees that are unsustainable for their businesses. Similarly, individuals who are excluded from mainstream banking facilities or who chose not to use them should not be locked out of economic life through the restriction of cash as a viable payment method.

The implications of the findings set out in this report are that the UK should commit for the foreseeable future to maintaining universal coverage of physical cash infrastructure, in other words ATMs and branches. Currently there is no national strategy to achieve this. Instead, the UK faces a 'fallacy of composition' where each bank's individual pursuit of a rational business strategy leads in aggregate to an undesirable outcome for society. Therefore, we need a coordinated strategy between regulators, incumbent banks and new niche challengers to ensure the ongoing provision of cash as a viable payment method, as well as the infrastructure that underpins its availability.

## Four policy responses to support cash and branches

### 1. Government commitment to maintaining a payment and savings that is

128. Cregan, A. (2017) Payments Survey 2016. British Retail Consortium.
129. Cash Services UK, private communication

**universal, free at the point of use and which protects personal privacy.**
Recognising the critical importance of cash processing, handling, and distribution infrastructure, some civil society organisations have begun to advocate for the protection of cash users in law, and for the provision of cash services to be guaranteed by government as a public good.130

We would add some nuance to this. It is the qualities of cash that create a public good and it is possible that in the future alternative methods of payment can demonstrate all these qualities. In other words, we can only support cash to be phased out if there is an alternative that is:

- Free at the point of use for consumers and small businesses.
- Accessible for 100 percent of the population.
- Allows individuals to protect their personal data and privacy.
- Resilient to systems failures and able to provide payments settlement at all times.

At present, digital means of payment, being privately owned and controlled by for-profit corporations, cannot perform the public interest functions of cash. For this reason, policymakers such as the head of the International Monetary Fund,131 and the central banks of Sweden and Canada have called for the introduction of a digital version of cash that is issued and controlled by central banks in the public interest.132

**2. The Financial Conduct Authority should conduct a review into the impact of bank branch closures on credit to SMEs, and consult on reforming disclosure of bank lending data.**
The FCA should commission or conduct a study into the correlation between branch closures and SME lending based on the full set of data. Participating banks can provide unredacted data to the FCA without fear of breaching commercial or client confidentiality so there cannot be any legitimate excuse for the analysis to be prevented.

Going forward, a review should be undertaken on how to improve the utility of postcode lending data through an open consultation process including academic researchers, civil society groups, regulators and the business sector.

Our recommendation is that:

- Figures are compiled at postcode district level (approximately 3000 places) rather than postcode sector level (approximately 9500 places).
- The aggregate figures for all lenders are published without redactions for every district in each quarter, to produce

130. Clarke, D. (2018) The Future of Cash: Using Our Money in the Way We Choose. Positive Money.

131. Finextra. (2018) IMF chief call for central bank backed digital currencies. Finextra. Available at www.finextra.com/newsarticle/32952/imf-chief-call-for-central-bank-backed-digital-currencies?utm_medium=dailynewsletter&utm_source=2018-11-15&member=105029 [Accessed 25/01/19]

132. Finextra. (2018) Sweden's central bank prepares for cashless future with e-krona. Finextra/ Available at www.finextra.com/newsarticle/32856/swedens-central-bank-prepares-for-cashless-future-with-e-krona [Accessed 25/01/19].

meaningful time series data.
- Individual bank's data can still be redacted if necessary to preserve client confidentiality.
- Figures should be backdated to Q2 2013 on this new basis.
- In future, more banks and non-bank lenders should be required to participate to ensure that a minimum of 80 percent coverage is achieved for SME lending.

**3. National strategy for universal access to cash and branches.**
Bank branches and ATMs are essential for the viability of cash as a payment method due to their utility in cash processing, handling, and dispensing. As a result, the government has a responsibility to ensure their continued provision through a national strategy that supports ongoing provision and provides clarity and transparency on branch and ATM coverage. This strategy would be more robust, effective and widely supported if developed using deliberative methods of public engagement to ensure a complete understanding of citizens' needs.

In particular, the strategy should consider:

- Guaranteeing the provision of free-to-use ATMs by law, building on the industry standard commitment of no one more than 1km away from a free-to-use machine.
- Strengthening the requirements in the Access to Banking Standard to implement a three to five year moratorium on branch closures if no other bank branch exists within a three mile radius, subject to consultation on alternative measures such as travel time.

We also believe that that strategy must be informed by higher quality data and research and therefore recommend that:

- The FCA conducts an investigation into the economic impact of bank branch closures, particularly on SME lending and local economic activity.
- A regularly updated database of bank branches, similar to the LINK database of operational ATMs, is compiled by the FCA or UK Finance and made available to the public. The database should include opening hours, postcode locations, bank brand, and the date of closure (if applicable).

**4. Regional strategies for diverse and inclusive banking.**
LEPs, Combined Authorities and Local Authorities all have responsibilities to their constituents to support financial inclusion, regional development, and economic opportunity. As part of these responsibilities, local and regional authorities should leverage their resources to ensure ongoing provision of cash infrastructure, including:

- Monitor ongoing access to cash and branch facilities across their regions, particularly in areas of low income, high deprivation, or

concentrations of vulnerable or cash reliant individuals.

- Use their physical resources, including sites of service provision, real estate, and retail spaces, to enable and encourage ongoing provision of cash infrastructure.
- Leverage their communication and outreach capabilities to publicise and promote sites of cash infrastructure provision to their constituents, including free-to-use ATMs and bank branches.

# Technical Appendix: Flaws with postcode lending data

UK postcodes are made up of areas, districts and sectors as illustrated below:

| Level | Example | Approximate number in UK |
|---|---|---|
| **Area** | EX | 121 |
| **District** | EX2 | 3,000 |
| **Sector** | EX2 4 | 9,500 |
| **Unit** | EX2 4XX | 1.8m |

The outstanding loans in each postcode sector are published quarterly by seven banks in Great Britain, and five in Northern Ireland.[133] However, from quarter to quarter the reporting banks can disclose loans at area level rather than the sector if they believe there is a danger of the borrower being identified.

Loans outstanding for a postcode sector are not disclosed if:

- There are fewer than 10 borrowers active in the postcode sector, or
- Borrowing within the postcode sector is highly concentrated amongst a small number of borrowers.

In addition

- Individual lenders are not obliged to publish borrowing at postcode sector level if they hold less than 10 per cent of SME borrowing in that postcode sector.

For SME lending, which involves fewer borrowers within any given postcode sector than personal lending, the number of redactions is material. For example, for the quarter ended 31 March 2018 some 16.8

133. UK Finance. (2018) Postcode Lending. UK Finance. Available at www.ukfinance.org.uk/statistics/postcode-lending/ [Accessed 25/01/19].

percent of loans by value, and 25.7 percent of postcode sectors were redacted.

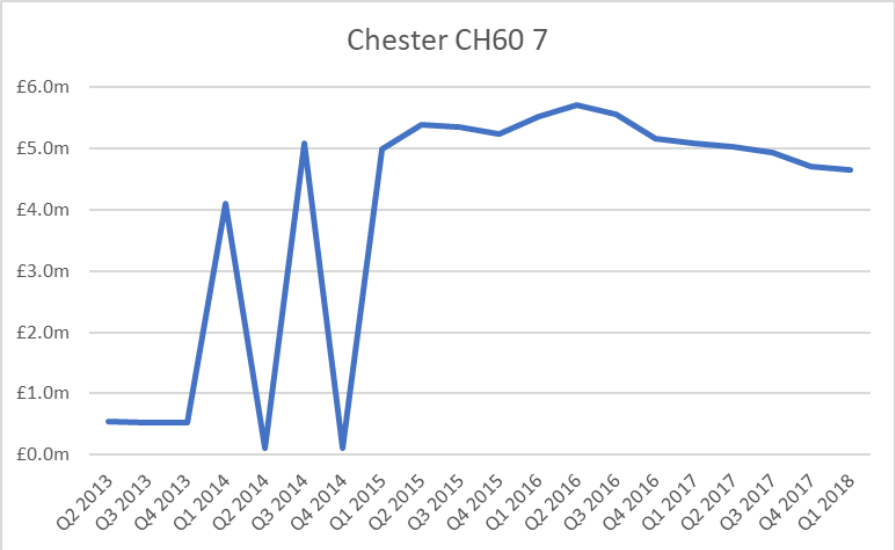
| **SME borrowing as at end Q1 2018** | **£bn** | **Percent** |
|---|---|---|
| Publishable at sector level | 76.0 | 83.2 |
| Publishable only at area level | 15.3 | 16.8 |
| *Of which: redacted to preserve confidentiality* | 11.0 | 12.0 |
| *Of which: other lending which cannot be allocated at sector level* | 4.4 | 4.8 |
| **Total lending publishable** | **91.3** | **100.0** |
| | **Number** | **Percent** |
| Number of sectors publishable at sector level | 7,559 | 74.3 |
| Number of sectors redacted | 1,942 | 25.7 |
| **Total number of sectors in quarter** | **9501** | **100.0** |

The sectors redacted vary from quarter to quarter, which means that the total proportion of sectors that are missing some information in at least one quarter is much higher. For example, in Liverpool, one of Britain's 10 core cities, only 23 percent of sectors have a complete time series data set, and only 10.3 percent in East Central London which includes Clerkenwell, Farringdon as well as the City of London (see table below). Similar levels of redaction and missing data occur across the dataset, in areas as diverse as Swindon, Perth, and Milton Keynes. Overall only 68 percent of postcode sectors have complete quarterly time series data, whilst more than one in five postcode sectors have no data at all (20.8 percent).

| **Postcode** | **East Central London (EC)** | | **Liverpool (L)** | | **Total UK** | |
|---|---|---|---|---|---|---|
| **Sectors with data reported in every period** | 13 | 10.3 percent | 96 | 23.0 percent | 6,742 | 68.1 percent |
| **Sectors with data redacted in some periods** | 106 | 84.1 percent | 294 | 70.5 percent | 1,094 | 11.1 percent |
| **Sectors with no data in any period** | 7 | 5.6 percent | 27 | 6.5 percent | 2,057 | 20.8 percent |
| **Total number of sectors** | **126** | **100.0 percent** | **417** | **100.0 percent** | **9,893** | **100.0 percent** |

| Area name | Chester |
|---|---|
| Sector | CH60 7 |
| QUARTER | AMOUNT £ |
| Q2 2013 | 552,402 |
| Q3 2013 | 519,021 |
| Q4 2013 | 519,543 |
| Q1 2014 | 4,108,609 |
| Q2 2014 | 116,077 |
| Q3 2014 | 5,084,025 |
| Q4 2014 | 101,195 |
| Q1 2015 | 4,983,417 |
| Q2 2015 | 5,392,338 |
| Q3 2015 | 5,358,174 |
| Q4 2015 | 5,239,667 |
| Q1 2016 | 5,529,627 |
| Q2 2016 | 5,702,873 |
| Q3 2016 | 5,554,661 |
| Q4 2016 | 5,163,047 |
| Q1 2017 | 5,086,820 |
| Q2 2017 | 5,031,762 |
| Q3 2017 | 4,933,727 |
| Q4 2017 | 4,702,103 |
| Q1 2018 | 4,645,068 |

Even among the sectors with complete datasets, other inconsistencies emerge. These might arise from change of registered address of a borrower, a switch to another credit product that is not classified as an SME loan, or changes to the customer base in that sector which trigger the criteria for data to be redacted. For example, the 'CH60 7' postcode sector in the Wirral reports lending that can change by orders of magnitude from quarter to quarter, as shown in the table and chart below. Due to the nature and terms of bank lending to SMEs, it is highly unlikely, if not impossible, that the actual amount of lending in this postcode could vary so significantly and in such short time periods. Sectors with these inconsistencies are simply not useable for reliable correlation analysis.



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