Cashless Society: The Shape Of Things To Come

After four millennia, we are reaching the point when cash could feasibly be phased out, but what would a cashless society look like, and who would benefit?

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Cash has been around for about 4,000 years in one form or another. But several recent developments suggest its days might be numbered.

The central banks of China, the UK and Canada, to name just a few, have been investigating the possibility of creating digital currencies. Meanwhile, the European Central Bank has decided to phase out the €500 note, leading to speculation that other high denomination notes may eventually follow.

'There are certainly signs that many top policymakers are becoming more open to the idea of a cash-free society,' says Mark Calabria, a fellow at the Cato Institute and a former aide to the US Senate Committee on Banking, Housing and Urban Affairs. 'Notes and coins won't disappear any time soon. But cash looks to be entering its twilight period.'

So why have some central bankers started to warm to the idea of a purely digital monetary system? What would a world without cash look like? And would we end up being worse off without this millennial-old monetary device?

Below Zero

The idea of a cashless society has become bound up with the debate on unorthodox monetary policy – especially negative interest rates. 'Cash provides a limit on the power of central banks,' says Marc Chandler, chief currency strategist at Brown Brothers in New York. Central banks in much of the rich world have pushed interest rates below zero in an effort to invigorate economic growth. (Countries accounting for about a quarter of global GDP now have negative rates.) But this policy can only go so far. At a certain point, high street banks will be forced to pass on the cost of storing cash to their depositors. 'Bank clients then have the option of withdrawing their cash and putting it under their mattresses,' says Chandler. 'That gets more inconvenient and expensive without large bills such as the €500 note, and it becomes impossible in a purely digital currency system.'

Without cash, central banks would be able to set interest rates as far below zero as they liked, eliminating what economists call the 'zero lower bound problem'. Willem Buitter, a former member of the Bank of England's monetary policy committee and now chief economist at Citi, has recently written that under such a system 'the central bank would be more likely to be able to achieve its objectives of high employment and low, stable inflation'. Withdrawing notes and coins, he argues, could be 'achieved gradually by first eliminating the largest-denomination notes until only $1 and $5 notes are left. To compensate people for the loss of cash, every legal resident age 12 or older and every legal entity could be given a free bank account with the central bank.'

This shift to a digital currency would supercharge bank powers beyond enabling deeply negative rates. Persistent slow growth in Japan and the eurozone has increased talk about the possibility that central banks may resort to 'helicopter money' – a term coined by economist Milton Friedman to describe private transfers of money direct to the accounts of citizens. 'This radical technique may never happen and would really require a renewed economic crisis to become a serious possiblity,' says Calabria. 'That said, it would be far easier to engineer in a purely digital monetary system.' At present, he points out, about 7% of the US population – 25 million people – do not have a bank account, typically the poorest members of society. 'Any monetary stimulus that excludes this group would be seen as inequitable,' he says.

It is notable that central bankers opposed to recent monetary experiments have also seen the phasing out of the €500 note as an ominous step. Ewald Nowotny, the governor of the National Bank of Austria, has claimed that the central bank risks 'running into a general debate about abolishing cash'. Jens Weidmann, Bundesbank president, has said it would be 'fatal if citizens got the impression that they are dispossessed of cash'.

Going Digital

Leaving aside monetary policy, technological advances have been demonstrating other potential advantages to digital currencies. The rise of bitcoin and its blockchain technology – a distributed ledger of the payment history of every unit in circulation – has impressed many policymakers. The People's Bank of China, for example, which is aiming to roll out a digital currency of its own soon, has argued that such systems can improve the efficiency of transactions and cut costs.

'For a start, issuing digital currency would be far cheaper than printing and distributing notes and coins,' says David Birch, director of innovation at Consult Hyperion. 'It would also enable nations to more accurately track developments in the economy – including inflation and GDP.'

At the retail level too, technology has been driving down the market share of cash. The near ubiquity of smartphones and popular financial applications – such as Google Wallet and iPay (see page 46) – has made a growing share of the population more comfortable with electronic payments. Even small retailers and sole traders can now take card payments via small devices attached to smartphones. 'Technologically, we are getting closer to the point where we could start to phase out cash,' says Birch. Cash was overtaken by other payment methods for the first time last year in the UK, according to the Payments Council. Many other nations are far further down the road to marginalising cash.

In Sweden a growing number of businesses have stopped taking cash altogether. Even Sweden's answer to *The Big Issue* – a magazine sold by the homeless – can now be purchased with plastic; the vendors have been equipped with portable card readers. Some would-be robbers have even been turned away empty-handed from cashless banks. Bills and coins account now for only 3% of Sweden's GDP, versus an average of 9% in the eurozone and 7% in the US, according to data from the Bank for International Settlements. Meanwhile in 2015 the Danish parliament proposed a law allowing stores to refuse to accept cash payments – a move supported by the nation's chamber of commerce. The Danish government has even set the goal of eliminating cash altogether by 2030.

Criminal Behaviour

The latest statistics in several countries have also underlined the concern that cash is mainly being used to hoard cash – or worse, in black market transactions. For example, the $100 notes in the US now account for 80% of the value of banknotes in circulation, up from 60% several decades ago. And in 2015 the US Federal Reserve ordered another $127bn worth of these $100 notes, against just $37bn of $20 bills, which are more commonly carried for cash transactions. The same pattern is clear in Bank of England figures. Since 2004, the stock of £50 notes, which are rarely used by consumers, has increased by 129%. By contrast the more commonly used £10 note has only risen by 35%.

'Aside from some very inefficient saving, the main use of large denomination notes is for tax evasion or criminal enterprises such as drug dealing,' says Birch. 'It is fairly » routine for plumbers or builders to offer lower prices if they are paid in cash. It is no coincidence that there was a particularly big jump in the demand for cash shortly after the last time that VAT was increased.' The €500 bill was even dubbed the 'Bin Laden' note, reflecting its popularity as a medium for illicit transactions.

By contrast, a digital currency has the advantage that transactions can be traced, which could inhibit tax evasion, money laundering, corruption and terrorist financing. There is even research showing a reduction in street crime. University of Missouri criminologist Richard Wright documented a 10% reduction in the crime rate in Missouri in the late 1990s after the government started transferring social welfare benefits electronically, rather than via cashable checks. 'Of course, the effect in aggregate may be to redistribute crime, with more cyberattacks and less street crime,' says Birch. 'Still, overall the introduction of a digital currency would make life harder for tax evasion along with various types of criminal enterprises.'

Open To Abuse

While the case against cash is compelling for many experts, the debate has also raised several concerns. Some fear that the elderly could be inconvenienced. The Swedish National Pensioners' Organisation has pointed out that retirees are often less accustomed to using plastic or smartphones to make payments. They have urged their anti-cash government to 'take things slowly'.

A more widespread concern is that a digital currency would hand too much power to government and compromise civil liberties. Already the marginalisation of cash has made it easier for government agencies to curtail the financial activity not just of illicit activities, but also ones that the officials consider morally questionable. The US Department of Justice has come under fire for Operation Choke Point, launched in 2013.This started out as an initiative to investigate the activities of payday lenders, which the US administration considered to be at high risk of being involved in money laundering. The initiative ended up targeting a wider range of activities, including pornography, gun sales and escort services. A variety of adult entertainers reported being cut off from the financial system, with personal bank accounts being closed. 'The authorities can already make the compliance cost too high for banks to deal with people involved in certain activities,' says Calabria. 'This is one potential abuse of the power that results when governments control the payment system – they can disrupt activities that are legal but that some people may morally disapprove of.'

Supporters of cash believe that such powers, and the potential for abuse, would increase with full digitisation. Those who aren't so afraid of the government worry that their finances will be increasingly vulnerable to cyberattacks from criminals.

Proponents of a cash-free society counter that such dangers already exist and can be managed. 'There are ways of protecting civil liberties without simply giving up on a project that offers so many other benefits,' says Birch. To enhance protection for consumers from identity theft and exploitation from hackers, Birch suggests that banks could provide anonymised debit cards. The bank would know who you were, and so could trace you if your card was involved in any criminal activity. 'But the vendor and anyone who hacked their computer system would not,' he says. Meanwhile, lawmakers may need to adopt more detailed rules on how government can use its financial and monetary powers. 'Merely sticking with a wasteful cash-based system is not the answer; rather governments need to think carefully about how to deal with the potential problems that could arise in a purely digital world,' says Birch.

After four millennia, cash may be approaching the point where it could feasibly be phased out. But that is a prospect that appalls many, who see cash as a defence against an over-mighty state. Such concerns have only intensified as the power of central banks has increased. Despite the many benefits of a purely digital monetary system, it may still take a long time before cash finally fades away.