



CAPITAL & ECONOMICS

Money For Nothing: Are We Ready To Go Cashless?

OVERVIEW

How do you prefer to pay? Have you embraced the digital revolution, with your payment-enabled smartwatch and alternative currency? Or do you prefer to hang on to your paper bills and coins? These questions might seem trivial, but as the world spends more of its life online, big decisions will need to be made.

On November 8, 2016, the government of India surprised its people — and its banks — by announcing that, as of midnight, 86 percent of the banknotes in circulation would no longer be valid. The move was designed to be a surprise attack on the country's black market. However, as India is 90 percent reliant on paper money, the following days saw widespread disruption, shortages and civil unrest, as citizens lined up to deposit and exchange their defunct cash. Meanwhile, Indian stock indexes fell by 6 percent.

India's demonetization is just one chapter in the broader story of the gradual – but global – migration to digital transactions. The Financial Times has described cash as a "barbarous relic." ATM withdrawals have been declining in Australia by 7.7 percent annually for the last three years. Consumers in Kenya and Tanzania are bypassing traditional bank outlets entirely to make their transactions on their cell phones.

Around the world, digital cryptocurrencies compete to provide people with what is designed to be a completely decentralized currency. Underpinned by "blockchain" technology, these currencies are designed to exist outside the traditional financial system. Understanding why people are looking to stop circulating cash and what the advantages and pitfalls could be will only become increasingly important.

IN DEPTH

From the gold coins of Croesus and the banknotes of the Chinese Song dynasty, to the first ATM machine in 1960s London – physical cash or "paper money" has been with us for centuries. But as we move further into the 21st century, will digital advances mean the end of this long-term relationship?

Why Would We Want To Go Cashless?

"After hundreds of years of paper notes and cashiers in our banks, I predict that we will be cashless and digital within the next 30 years," says John Brosnan, Head of Financial Services Group, Aon Risk Solutions.

Why might a society decide to get rid of its hard cash? There are several reasons:

- Cost Reduction: Keeping paper money in circulation is expensive, and considerable resources are required to administer it. In the U.S., \$200 billion is spent every year on keeping cash in circulation on bank tellers, ATMs, safety deposit boxes, and security vans, among other expenses. One cent costs one-and-a-half cents to manufacture.
- Increased Tax Revenues: Going cashless could increase tax revenues, because people are less able to pay for goods and services "cash-in-hand" which is hard to trace and monitor. The Institute of Economic Affairs (IEA) estimated 10 percent of the U.K.'s economy goes untaxed. In 2013, only one percent of Indians paid tax on earnings.
- Decreased "Black Market" Activity: Illegal activity is often conducted in cash. It was partly a desire to combat illegal economic activity that prompted India's demonetization program.
- Convenience: It's much easier not to have to carry around a lot of cash. This is particularly relevant in rural or less-developed regions, where access to ATMs is limited. The growth of mobile payment systems in Kenya meant the share of people with access to banking in the country rose from 42 percent in 2011 to 75 percent in 2014.

However, economies also face a number of dangers from going cashless:

- Social Upheaval: Abrupt attempts at demonetization can provoke widespread disruption. In India, cash was withdrawn from circulation with little warning, leaving people waiting in lines for hours, and seriously affecting the national economy and civic stability.
- Financial Disconnection: Cash is often the way many informal economies, such as those in the developing world, function. If governments remove hard cash from circulation without making sure that digital alternatives such as mobile banking or acceptance of credit cards are properly established, it risks casting people into the financial wilderness.
- Increased Risk of Cyber Crime: Creating a fully digital economy could put people and organizations at greater risk of systemic cyber crime. Even at a smaller scale, methods have been developed to digitally pickpocket people carrying contactless payment cards, by putting card readers up against the victim's pockets.
- Too Much Transparency: Law-abiding citizens may feel uncomfortable with the lack of privacy and security implied by a fully digital financial system particularly in an era when personal records and data are regularly hacked.

How Close Are We To Becoming Cashless?

Europay, MasterCard and Visa (EMV or "Chip and PIN") payments have been standard in Europe since the early 2000s – allowing quick and easy payment for goods and services by credit or debit card. Contactless card payments are becoming increasingly popular, and are expected to handle more than \$17 billion in transactions in 2021, up from \$6.7 billion in 2016.

Some countries are making particularly strong progress. There are about 1,600 bank branches dotted around Sweden, but only 700 of those still take checks or carry cash. "According to Sweden's central bank – the Riksbank – cash transactions made up barely two percent of the value of all domestic payments last year and are forecasted to reduce further to half a percent by 2020," says Brosnan. "In shops, cash is now used for barely 20 percent of transactions, half the amount of five years ago. Circulation of Swedish krona (SEK) has fallen from around SEK106 billion in 2009 to SEK80 billion last year."

Some of the most innovative cashless solutions are emerging in developing economies. In Africa, where the physical infrastructure of banking is often inadequate for the needs of rural populations, mobile banking is the rule. M-Pesa, a mobile banking platform launched by Vodafone in 2007, is now used by two-thirds of the adult population of Kenya alone (17 million people), and is rapidly spreading throughout the region. The system facilitated six billion transactions in 2016 – processing around 529 every second.

The Challenges Of Cashing Out

A handful of nations may be poised to become cashless – but we are not quite there yet. The final, definitive step to becoming cashless will mean more than tinkering around the edges. India has demonstrated the disruptive short-term effects of demonetization. And even if the administration of cashless policies is handled well, there remain considerable security challenges, such as cyber crime.

Even digital cryptocurrencies including bitcoin, developed with security in mind, are subject to challenges – such as regulatory changes, or even competition over standards. Bitcoin recently split into two over disputes about whether the algorithms that underpin its "blockchain" ledger should be changed.

There are also countervailing trends. Statistics suggest that most of the world is not on the cusp of a cashless revolution just yet. The amount of paper money in circulation in the U.S. grew by 42 percent between 2007 and 2012. And the U.K. continues to install new ATMs – with over 70,000 around the country.

There are also more human obstacles: Our attitudes. For instance, multiple studies have found that the human brain regards and values paper money differently than it does electronic money. We have a measurable emotional attachment to our paper bills and coins, which might make giving them up more difficult.

The Future Of Cash

What will a cashless society look like? Will it be built around a mobile banking system along the lines of Sub-Saharan Africa? Or will it be bank- as well as cash-free, as the more radical elements within the blockchain community foresee?

As digital technology spreads throughout the financial system, paper cash will continue to face increased competition when it comes to how people choose to make a transaction. "With increasing investment into FinTech companies, and the rise of digital payment solutions such as PayPal," states Brosnan, "the trend towards a cashless society is likely to continue."

As people are given more choices for how to pay, it is possible that they, rather than their governments, will be the ones to decide how cashless the future might be, or if they prefer to keep a little money in their back pocket.

TALKING POINTS



"Digitization of payments processes will go a long way in improving systems and productivity ... innovation in these areas must be able to identify and address gaps and pain points, not just innovate for the sake of innovation" – Rahul Shingal, South East Asia General Manager, Paypal



"If we were able to have a cashless economy, look at how much money we could save in terms of printing, how much we could save the environment with less paper being used, less transport. We would also be able to have more transparency on what is happening, and trace things more effectively" – Chea Serey, Director General, National Bank of Cambodia

FURTHER READING

- Big Push To Go Cashless In India –The Nation, August 24, 2017
- A Cashless Economy Is Crucial For Driving Kenya's Socioeconomic Transformation Agenda Huffington Post, February 28, 2017
- Hunt On For A Billion Kronor About To Be Worthless In Sweden Bloomberg Markets, August 17, 2017
- Cybercrime's Threat In A Cashless World Financial Times, August 14, 2017
- Bitcoin Splits As New Currency Takes Off BBC, August 2, 2017

