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Abolishing notes and coins would bring huge economic benefits

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SINCE cash was invented in the seventh century BC, it has generally been the most convenient way to pay for everyday purchases. But as electronic payments get easier—most recently with the launch of a "contactless payment" system by Apple—economists are beginning to ask whether notes and coins have had their day. Kenneth Rogoff, of Harvard University, reckons they have. Scrapping physical currency, he argues, would help governments to collect more tax, fight crime and develop better monetary policy.

On the surface, Mr Rogoff's plan seems like a minor change. Notes and coins make up only a tiny part of the money in circulation: just 3% in Britain, for instance. (In America, the proportion is 10%, partly because foreigners hold lots of dollar notes.) The rest is simply records of balances in accounts, either at a bank (in the case of businesses and individuals) or at the central bank (in the case of banks). It tends to be moved around by electronic transfer, never taking physical form.

Cold, hard electronic transfers

Rich countries are becoming ever less dependent on cash, as debit and credit cards, "virtual wallets" and other substitutes grow in popularity. According to the World Bank, they had 83 cash dispensers for every 100,000 adults in 2008; by 2012 they had only 68. A paper from the Federal Reserve Bank of San Francisco shows that, in America, the share of transactions using cash has fallen in recent years. Until the mid-1990s the total value of all bills of \$50 or less grew in line with the economy. From 1993 to 2013, however, the American economy grew in real (inflation-adjusted) terms by 65%, but notes of \$50 or lower grew by just 19% (see chart).

Yet cash remains important. There is \$4,000 of the stuff for every American. And it causes all sorts of problems. Forgery is one: in 2013 the Bank of England removed 680,000 counterfeit notes, with a face value of £11.5m (\$19m), from circulation. Genuine cash helps criminals of other sorts, since notes and coins keep transactions anonymous: you cannot tell who has bought a kilo of cocaine by looking at the cash they used to pay for it. In the OECD, a club of rich countries for the most part, the "underground economy" of activity hidden from the government, whether drug-dealing or undeclared income from babysitting, makes up about one-fifth of GDP. What is more, that share has barely shrunk in a decade. Mr Rogoff estimates that in most countries, the desire to hide something from the authorities accounts for more than half of cash transactions by value.

Higher-denomination notes are particularly useful for criminals. There are €295 billion (\$382 billion) of €500 notes in circulation. Yet most Europeans have never seen one: criminals hog them, as they are so useful for moving ill-gotten gains around. (€1m-worth of €500 bills weighs just 2.2kg.)

Abolishing cash would eliminate counterfeiting at a stroke, and make it much easier to trace illicit payments. The reduction in crime that would follow would be a huge boon, both socially and economically. The reduction in tax evasion alone would bring big fiscal benefits. Research from Tufts University estimates that Uncle Sam could collect an extra \$100 billion a year if America went cashless.

Monetary-policy experts also see benefits in cashless economies. Many rich economies are stuck at the "zero lower bound", with interest rates close to zero. These economies would gain from further monetary stimulus in the form of negative rates, which would prod those hoarding money to spend and invest. An article published by the Cleveland Fed in 2012 found that the "ideal" interest rate for the American economy at the depth of the crisis would have been -6%.

However, the continued existence of cash makes moving rates below zero much less effective. Central bankers assume that people would simply withdraw their money from the bank and hold it as high-denomination notes. In fact, they already seem to be doing so in countries where interest rates are very low. From 2009 to 2013 the total value of \$100 bills in circulation grew by 30% in real terms. The San Francisco Fed reckons that rock-bottom interest rates were partly responsible.

Going digital does pose problems. For one thing, even in the rich world, there are still plenty of honest but "unbanked" people who rely completely on cash. Some economists think central banks might suffer too. They inject money into the economy, in both physical and virtual form, by buying government debt. They do not pay interest on the money they have created, but they earn interest on the bonds they have bought. The profits they earn in this way, known as seigniorage, are sent to government coffers. Bhaskar Chakravorti, of Tufts University, reckons that in America seigniorage typically brings in \$20 billion a year. The Bank of England earns about £500 million a year in this way.

Mr Rogoff thinks that scrapping physical money would reduce seigniorage revenues. Tax-evaders and other criminals, fearful of being noticed, would cut back on spending; demand for money would fall. Mr Chakravorti, though, reckons that the lost revenue would be dwarfed by higher tax receipts. It might also be offset by the lower per-unit cost of producing currency.

There is also the question of whether voters would tolerate the loss of privacy that the abolition of cash entails. Some might be so outraged that they stop using local currency and convert their bank balances into alternative stores of value, such as foreign exchange or Bitcoin, a digital currency.

One compromise might be to phase out big notes, such as €500 bills. That would allow small transactions to be kept completely private, while making life much trickier for all but the pettiest of criminals.

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