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Abstract

Over the past decade the media have regularly reported on the imminent death of cash amid rapid innovation in payment technologies. However, cash in circulation has actually been growing strongly in many counties. Perhaps unsurprisingly given Coronavirus-related health concerns, there have been renewed calls to abandon cash and some observers have argued the virus will accelerate its demise. Data thus far suggest, however, that currency in circulation has actually surged in a number of countries. While the economic shutdowns and increased use of online retailing are currently diminishing cash's traditional function as a medium of exchange, it seems that this is being more than offset by panic driven hoarding of banknotes.

JEL Classification: E40, E41, E49, E63, N10

Keywords: Currency usage, Coronavirus, Payment technologies, Hoarding in panics

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Coronavirus panic fuels a surge in cash demand

by

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Abstract

Over the past decade the media have regularly reported on the imminent death of cash amid rapid innovation in payment technologies. However, cash in circulation has actually been growing strongly in many counties. Perhaps unsurprisingly given Coronavirus-related health concerns, there have been renewed calls to abandon cash and some observers have argued the virus will accelerate its demise. Data thus far suggest, however, that currency in circulation has actually surged in a number of countries. While the economic shutdowns and increased use of online retailing are currently diminishing cash's traditional function as a medium of exchange, it seems that this is being more than offset by panic driven hoarding of banknotes.

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Not a week seems to pass without a media story on the ongoing demise of cash amid the rapid technological advances in payment systems that are supposedly making it obsolete. Many observers cite Sweden, where the share of cash in payment transactions and in Gross Domestic Product (GDP) has fallen precipitously, as a template for where other countries are heading. However, as we highlighted in Ashworth and Goodhart (2020), cash in circulation as a share of GDP has actually been increasing quite rapidly in a number of countries since the Great Financial Crisis (GFC), despite the implication that it should be falling due to the shift toward electronic/digital payments. Whilst acknowledging a fair degree of uncertainty, we argued that this surprising development likely reflected the marked long-term decline in interest rates and the growth in the underground economy in the aftermath of the financial crisis.

When it first became realised that Coronavirus would have a significant and deleterious effect on economic activity, there was a 'dash for cash', as emphasised by Andrew Hauser in a recent speech 'Seven Moments in Spring: Covid-19, financial markets and the Bank of England's balance sheet operation' (June 4, 2020); this 'dash for cash' quite naturally involved a surge in demand for both cash/currency and bank deposits.

Perhaps unsurprisingly though, given fears that Coronavirus could be transmitted over surfaces and via objects, there have been calls by some governments and various institutions for consumers to use electronic payments instead of cash (see Cohn; Thomas and Megaw; Arnold; 2020) and former US Commerce Secretary Gary Cohn argued in a Financial Times article that the Coronavirus was speeding up the disappearance of cash (see Cohn, 2020). He noted that he had not even touched a banknote or coin in several weeks, highlighted the surge in demand being experienced by online retailers and suggested that firms that had previously resisted credit cards for decades were now accepting or even requiring them. Indeed, it is notable that signs have sprang up in many open shops either giving preference for other means of payment, or even refusing to accept currency at all; quite how this is consistent with the role of currency as legal tender is a question that, perhaps wisely, has not been widely noted nor tested in a court of law. Another Financial Times article (see Thomas and Megaw, 2020) echoed Cohn's sentiments and highlighted the recent collapse in ATM transactions in the UK and some other European countries.

With a reasonable amount of data now available we examined the trends in cash in circulation in a number of countries that have been affected by the Coronavirus to see what exactly was going on. We had thought that there might be a subsequent reversal of the initial surge, but, so far at any rate, there has been very little sign of that, rather the increase in currency usage has continued, at least in the data to date to which we have had access. The surge in cash in circulation has been particularly notable in the US, Canada, Italy, Spain, Germany, France, Australia, Brazil and Russia to name but a few.

In the US, cash in circulation increased by 0.9% in the week to the 23th March, which was the third largest weekly increase on record after the surges in late December 1999 and the beginning of January 2000 amid Y2K fears. After increasing by 1.1% over March currency in circulation increased by 2.1% in April and 2% in May – the second and fourth largest gains on record, albeit almost equal to the December 1999 record. The large gains have resulted in the year-on-year percentage increase in currency in circulation surging to 11% in the week to the 1st June, which is close to the peak from the panic driven surge in cash demand around the time of the GFC (see Figure 1). To put these numbers into some context, the average annual increase in cash in circulation has been around 7% over the last decade – which in itself is quite high and consistent with a rising currency-to-GDP ratio. Elsewhere in North America, Canadian weekly currency in circulation has also accelerated from around 3%Y towards the end of February to over 10%Y in June (above its peak in the GFC).

Figure 1: US Weekly Currency in Circulation (%Y)

Source: Board of Governors of the Federal Reserve System, Federal Reserve Bank of St. Louis (FRED)

In the Euro area, we have also seen huge surges in currency in circulation. In the week to the 16th of March, currency in circulation increased by 1.5%, which was the largest weekly gain since December 2008 and the monthly percentage increases of 2.8% and 1.5% in March and April respectively were around three and two times the comparable average monthly increase over the previous decade. Weekly data suggest another large gain is likely over May. The large denomination €200 note appears to have been an important driver of gains, consistent with the panic hoarding of notes. Despite representing around 7% of the value of the stock of banknotes in circulation, it represented around 30% of the increase over March and April. The year-on-year rate of gain in currency in circulation has currently risen to around 10% in the week to the 1st June (see Figure 2). This is still below the peak of around 15% in the aftermath of the GFC though. At the country level, France, Germany, Spain and Italy all registered monthly gains in currency in circulation of around 3% in March, with the German figure at 3.6% - broadly equivalent to the gain over the previous nine months to the end of February! All four countries recorded solid monthly gains in April too, with a range of 0.7%M in Germany to 1.4%M in France.

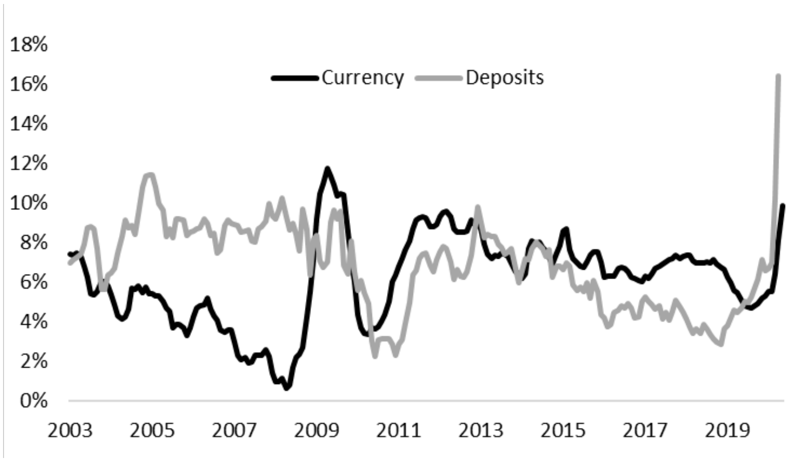
Figure 2: Euro area Weekly Currency in Circulation (%Y)

Source: European Central Bank

We have also seen noticeable surges in cash demand in a number of other countries such as Russia, Brazil and Australia. In Russia, we only have data until April, but the year-on-year percentage increase in cash in circulation increased from 6.5% in February to over 17%. In Brazil, the year-on-year rate of growth of currency in circulation accelerated from 7-8% in January/February to 10% in March and 24% in April. In Australia, the 3.5% seasonally adjusted monthly jump in cash demand in April was the second largest on record after the 5% jump in October 2008 amid the GFC and the year-on-year percentage increase has soared from a 4-5% recent trend to 9% on the latest reading.

In contrast to typical panic driven surges in cash demand, however, currency-to-deposit ratios (a metric often used by economists to gauge the magnitude of the shift from bank deposits into cash – see for example, Ashworth and Goodhart, 2015) may not necessarily have risen, and could actually have fallen. This reflects the fact that due to the enforced shutdowns of major parts of most economies, deposits at commercial banks have also been growing sharply as businesses and households have refrained from or been unable to spend money on some of their usual activities. As Figure 3 highlights for the US, the value of commercial bank deposits is currently growing at a year-on-year rate of around 16% on the latest available data for April. This has resulted in a declining currency-to-deposit ratio. Arnold and Storbeck (2020) also highlight a surge in commercial bank deposits in the euro area. They seem to be growing at a broadly similar year-on-year rate as currency in circulation consistent with a roughly unchanged currency-to-deposit ratio in the euro area.

Figure 3: Growth in US Currency and Commercial bank deposits (%Y)



Source: Board of Governors of the Federal Reserve System, Federal Reserve Bank of St. Louis (FRED)

The surge in cash demand has not been quite as consistent and pronounced across all major countries affected by the Coronavirus. In the UK, the data appear a little puzzling. Currency in circulation on a seasonally adjusted basis was basically flat over the first four months of the year suggesting little impact from the Coronavirus. However, there was a surprising large jump of 2% over the month of May - the largest increase since the Y2K surge in December 1999 and the second largest increase since the beginning of the 1980s. Why such a jump occurred in May is less clear. Given the weak prior trend it only resulted in an acceleration of the year-on-year pace of increase to a rather modest 1.8%. Gauging an accurate picture in Japan is also a little difficult at present. There had been a larger than usual surge in currency demand in April 2019, perhaps related to the extended Golden Week holiday due to the beginning of the Reiwa period. Due to base effects this had resulted in the year-on-year rate of increase falling to just 0.4% in April 2020 after a steady 2% trend over the previous six months. However, the monthly changes in April and May this year have been larger than on average when compared with comparable months over the previous decade and the year-on-year rate of increase accelerated to 4%Y in May. In China, the year-on-year rate of increase in currency in circulation has accelerated from around 5%Y in the fourth quarter of last year to over 10%Y in April. However, such an increase does not look particularly remarkable by the standards of recent years.

All in all, only time will tell if the experience of the Coronavirus becomes an additional factor alongside technological advances in payment systems in reducing cash usage. Thus far, the economic shutdowns in most countries and increased use of online retailing are clearly diminishing, at least temporarily, one of cash's main traditional functions as that of a medium of exchange. However, the data actually suggest that cash in circulation has surged in a number of countries affected by the Coronavirus. Even after the initial March jumps in some countries, subsequent gains have been quite large. The rise likely reflects the use of cash for one of its other traditional functions - panic driven hoarding.

Bibliography

Arnold, M, (2020), ‘Banknote virus fears won’t stop Germans hoarding cash’, Financial Times.

Arnold, M. and O. Storbeck, (2020), ‘European consumers stockpile savings, adding to economic drag’, Financial Times.

Ashworth, J. and C.A.E. Goodhart, (2020), ‘The Surprising Recovery of Currency Usage’, *International Journal of Central Banking*, 16 (3), June 2020.

Ashworth, J. and C.A.E. Goodhart, (2015), ‘Measuring public panic in the Great Financial Crisis’, voxeu.org.

Cohn, G., (2020), ‘Coronavirus is speeding up the disappearance of cash’, Financial Times.

Hauser, A., (2020), ‘Seven Moments in Spring: Covid-19, financial markets and the Bank of England balance sheet operations’, Bank of England speech, available online from the Bank of England.

Thomas, D. and N. Megaw, (2020), ‘Coronavirus accelerates shift away from cash’, Financial Times.