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INSIGHT

# Pandemics, Payments, and (Digital) Property

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Many people have heard the phrase "cash is king," but is that still true? Even in today's digital world, cash is still an important tool for retail transactions among many consumers, and some still rely on it. But today, electronic payments are the primary mechanism for consumers to use money.

Electronic payments are an old concept. For 60 years, Americans have been using cards that, when swiped, send a signal electronically to financial institutions to make a transfer of funds from the purchaser to the seller. Congress first passed the Electronic Fund Transfer Act (P.L. 95-630) in 1978 to regulate debit card transactions. Today, debit cards are the most common tool for consumer retail payments. But new forms of electronic payment have emerged for consumers ranging from prepaid cards to digital wallets to cryptocurrencies and other forms of digital assets.

One of the byproducts of the Coronavirus Disease 2019 pandemic is an economic environment that encourages electronic payments. Perhaps not coincidentally, the universe of electronic payment options has increased substantially, with a few new types of tools gaining prominence in the past year.

This Insight looks at how the pandemic has impacted consumer payments and how some of these trends are altering the way consumers pay for goods and services. Additionally, it considers how a prolonged pandemic economy may contribute to a new level of comfort among consumers seeking to use innovative payment options and how this may impact the future payments landscape.

## Mobile Payments, Contactless Payments, and the Potential Decline of Cash

Before the pandemic, 82% of consumers used cash, and almost 92% used electronic payment cards. Federal Reserve survey data shows that in 2019, nearly 35% of payments were made with debit cards and 24% were made with credit cards, while cash comprised less than 22% of transactions.

Electronic payments occur in two ways: card present and card-not-present (CNP). Card present transactions are purchases where the consumer presents a card in person and pays at a register. Alternatively, with CNP transactions, the consumer provides payment account information remotely over the phone or through the internet. CNP transactions accounted for 27% percent of debit transactions and 40% of debit transaction value in 2019.

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Mobile payments, which are conducted with a mobile phone through a webpage or an app, have become more popular as smartphones have gained popularity. According to Pew Research Center, over 80% of Americans own smartphones. Further research by the Pew Charitable Trusts suggests that in 2018, over half of Americans used smartphones to make a payments. Mobile payments are not really a new payment type; instead, mobile phones simply facilitate other types of payments, such as debit and cards, by storing the account data in an app or allowing the consumer to input that information in an internet-based payment window. In other words, mobile payments facilitate CNP transactions.

## Has the Pandemic Facilitated More Fundamental Innovation?

The response to the pandemic has led to a significant increase in remote work and online commerce. With fewer people going to storefronts to shop or dine, the role of in-person, cash transactions in the retail economy has become increasingly marginalized, at least temporarily. The pandemic has created a unique environment that fosters the use of mobile payments and other electronic payment innovations. For example, demand for “contactless payments”—remote payments made without having to physically hand a payment to a merchant or press buttons—has increased. This rise in demand has, at least temporarily, reduced demand for cash transactions. Mobile payments are well-suited to remote forms of contactless payments. Another innovation that predates the pandemic is card readers that allow many card holders to tap or wave their cards near payment terminals to complete transactions. (This technology has existed for some time and is also used in, for example, the Washington, D.C. Metro’s *SmarTrip* card.)

These mobile and contactless payment methods rely on underlying payments technology that was built decades ago. They are essentially new ways to do old things: send money between bank accounts using debit and credit card infrastructures. The recent advent of blockchain-based payment innovations such as cryptocurrencies and other digital assets may present an opportunity to change the landscape of consumer payments more fundamentally. Until recently, these new products—such as Bitcoin, Ethereum, and Facebook Libra—appeared to be niche products, but there is the possibility that the pandemic has laid the groundwork for consumers to adopt these new payment methods.

One new adaptation of these digital assets that poses interesting prospects for property ownership in the post-pandemic digital age is the use of smart contracts in non-fungible tokens (NFTs), which allow people to purchase the rights to digital assets such as photographs, videos, highlights, and music without the need for a third party to validate the contractual transfer of property. (NFTs were made popular by the blockchain-based game CryptoKitties, where players can buy and trade virtual cats using NFT technology.) The proliferation of blockchain-based transaction tools has given consumers no shortage of alternative payment options; the question is whether these products will become mainstream enough to be widely used in serious, everyday transactions. Some anecdotal examples suggest they may: Real estate offerings are accepting Bitcoin, and recently Tesla announced that it would accept Bitcoin to purchase vehicles. However, these technologies are a long way from widespread adoption and face numerous obstacles to achieving ubiquity.

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