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Déjà Vu All Over Again: What the Return of Private Currencies Could Mean for Central Banks

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Private digital currencies, or "crypto-assets," have surged in popularity recently, but they are not new to the payments landscape and may present familiar challenges for central banks. Although they have yet to fulfill the main functions of money, crypto-assets still have the potential to affect financial stability and the implementation of monetary policy.

The recent revival of private digital currencies has captured the imagination of those who envision a world where value can be transferred as seamlessly as information. Many individuals across a range of industries, from government to payments to finance, wonder whether private digital currencies may somehow sideline fiat money—the government-issued money that, coupled with reserves at central bank accounts, underpins the global financial system. In this article, we review the history of private currencies, reevaluate whether present private digital currencies satisfy the functions of money, and discuss the implications that "crypto-assets"—whether considered money or not—may have for monetary policy and financial stability.

Historical Perspective

Private currencies based on commodities have existed for millennia. Since around the sixth century B.C.E, commodity money has been the predominate monetary system (Velde 1998). Metal coins were a useful early means of payment to facilitate everyday transactions. Over time, paper currency, issued by a private entity and backed by a commodity such as gold, became the norm for money in circulation. During the early years of the United States and into the 20th century, paper currency largely consisted of privately issued bank notes.

In the past, private currencies have coexisted with currencies issued by central banks (Maniff 2020). In the United States, both were in circulation between 1914 and 1935. Privately issued currencies were phased out as the U.S. Treasury withdrew the government bonds that could serve as security for their issuance (Weber 2015). During this era, some considered private currencies a potential source of bank reserves, possibly threatening the Federal Reserve's control of reserves and leading to concerns about whether large quantities of private currency in circulation could impede monetary policy. Governments also questioned whether private currencies could affect the safety and stability of financial systems.

In recent years, central banks have been the primary issuers of currency, but private currencies have resurfaced as transactions have increasingly become digital. Originally, digital currencies emerged in closed systems, such as airline miles or currencies used in online games. But in the past decade, a different type of digital currency has sparked broader interest—currencies that operate without a central controlling entity and third-party intermediaries, often allowing direct use by the public. These crypto-assets, or cryptocurrencies, have renewed central bank interest in private currencies and raised

questions of whether these new assets are actually money and whether they could affect monetary policy and financial stability.

Are Crypto-Assets Money?

Since the invention of bitcoin, researchers have continuously questioned whether crypto-assets can be considered money (Yermack 2015; Lee and Martin 2020). To be considered money (and to be called cryptocurrency), crypto-assets need to fulfill three functions: serve as a store of value, a medium of exchange, and a unit of account. Money is a store of value in that 10 dollars today should be worth approximately 10 dollars tomorrow. It is a medium of exchange in that consumers can use it as a means of making payments. And money is a unit of account as it can be used as a measurement of value—prices of goods and services are listed in it. One example of a private currency that could be considered money are carnival tickets: people exchange dollars for tickets and then only transact in tickets. Ride prices are listed in terms of tickets (unit of account), riders hand over tickets to pay for the ride (medium of exchange), and the value of tickets does not fluctuate day-to-day while the carnival is in town (store of value).

We agree with previous analyses that crypto-assets have yet to fulfill the three functions of money. First, as recent price swings in 2021 so far indicate, crypto-assets are generally not a stable store of value. Many crypto-assets rely on a fixed supply, meaning that like commodities, a finite amount of the asset will be issued. If the supply of the asset is fixed, the price increases as demand increases. This is especially true when there are questions about the asset's intrinsic value. Speculation remains a common use for crypto-assets. In fact, many early adopters of crypto-assets hoped for a price increase so they could make a return on holding the asset. Thus, most crypto-assets are currently too volatile to be a stable store of value. A subset of crypto-assets, informally known as stablecoins, have attempted to remove price volatility by tying the value of the asset to something more stable, such as fiat currency. The majority of crypto-assets, however, continue to be volatile.

Second, consumers are not yet using crypto-assets in a manner consistent with a medium of exchange. Many payment providers have recently announced plans for engaging with crypto-assets with little evidence of consumer demand to use crypto-assets for payments. In fact, studies have shown that consumers are purchasing crypto-assets as investment vehicles rather than to make payments (Hundtofte and others 2019; Henry and others 2019). If consumers expect a crypto-asset to appreciate, they will keep the asset rather than using it. Although stablecoins have the potential to act as a medium of exchange, as consumers are unlikely to hold them for investment, there is little sign that stablecoins are actually being used to purchase goods and services. Instead, they are predominately used in exchange for other crypto-assets; because stablecoin can exist entirely on an exchange, it is easier to trade a stablecoin than to move fiat currency on and off of an exchange.

Third, crypto-assets have yet to establish themselves as a new unit of account. Many crypto-assets remain highly volatile; using them would require merchants to frequently re-price goods and services, making crypto-assets a poor unit of account. Even where crypto-assets are accepted as a means of payment, the unit of account will likely remain in fiat currency. Today, most stablecoins are pegged directly to fiat currency, which makes listing the price in stablecoins seem redundant.

What Crypto-Assets May Mean for Central Banks

Although crypto-assets do not currently fulfill the three functions of money, they may still—like the private currencies of the early 20th century—have the potential to affect monetary policy and financial stability. If actors in the financial and payments industries use crypto-assets to fulfill at least one of the three functions of money, crypto-assets could indeed affect the economy.

If crypto-assets are considered a store of value, especially one that may appreciate or depreciate compared with other assets, concerns related to monetary policy and financial stability are similar to those for other financial assets. Imagine a scenario where institutions buy crypto-assets with the expectation that prices will increase. If, for example, the crypto-asset market crashes and crypto-asset purchases are debt-financed, contagion across financial markets is possible. Even those who never purchased crypto-assets may be affected by a crash, which could threaten financial stability and weaken the transmission of monetary policy (Stevens 2017).

If crypto-assets are used as a medium of exchange, the network may grow large enough to become a "systemically important payment system," a payment system whose failure could threaten financial stability. Although systemically important payment systems exist now, involving crypto-assets may exacerbate financial stability concerns. For example, because crypto-asset networks are often decentralized, with no controlling entity accountable for operating the network and managing risks, the networks lack a tool commonly used to address financial stability concerns: oversight by a regulator. With no controlling entity to regulate, there may be no way of protecting against a disruption to the system or ultimate failure.

Lastly, in the unlikely situation that crypto-assets become units of account, monetary policy may become "irrelevant" (He 2017, p. 15). If prices are listed in terms of crypto-assets, the potential exists for real, permanent substitutability between fiat currencies and crypto-assets. If a large number of holders permanently substitute crypto-assets for fiat currency, demand for currency in circulation and reserve balances will likely decrease. In this case, fiat currency may no longer serve as base money. If controlling the fiat money supply no longer has a substantial effect on the economy, the central bank may have difficulty pursuing its economic goals.

While concerns about monetary policy and financial stability are not new, certain fiat currencies face a question that was irrelevant in the early 20th century: Could crypto-assets, and private currencies more broadly, affect the status of reserve currencies? Reserve currencies are held in significant quantities by other central banks and used in international trade and financial transactions. Researchers have identified four key elements in determining reserve currency status: the economic size and dominance of reserve issuers, the credibility of reserve issuers, the transactional demand of reserve holders, and inertia (Iancu and others 2020). Meeting any of these elements may be a high hurdle for private currencies; nevertheless, it is important for central banks to monitor private currencies, especially those linked to large global organizations. These organizations could exert economic dominance with their private currencies if significant geopolitical events result in the loss of credibility for the central bank or influence their jurisdictions' official or private sector to shift away from the reserve currency status quo.

The resurgence of private currencies in the form of crypto-assets has led central banks around the world to once again ask how private currencies can affect monetary policy and financial stability. Many of the questions have not changed from the early 20th century, providing a bit of private money déjà vu. However, private money may evolve, and central banks will need to continue to monitor and research crypto-assets to determine whether they pose new risks.

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