

JUST MONEY PROFILES

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Secretary of the Treasury and senior advisor to the Assistant Secretary of the Treasury for Financial Institutions. He has also worked as an economist at the Federal Reserve Bank of New York in both the Bank's Supervision Group and in its Research and Statistics Group, where he helped to develop econometric models for the Federal Reserve System's first Comprehensive Capital Assessment and Review. During his time at the New York Fed, Lev was seconded to the Financial Stability Oversight Council, where he helped to prepare the Council's first financial stability report. Lev has a B.A. from Harvard College and a J.D. from Yale Law School. He clerked for Judge Jed S. Rakoff on the Southern District of New York and Chief Judge Robert A. Katzmann on the U.S. Court of Appeals for the Second Circuit.

M. Ricks, J. Crawford, L. Menand, FedAccounts: Digital Dollars

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In 1989 the Board of Governors of the Federal Reserve System came out against the “basic banking” legislation that Congress was then considering, which would have required U.S. banks to offer no-frills transaction accounts at cost to all Americans.[1] While the Board “share[d] the belief that banking services should be widely available to all,” it doubted that there was really a problem to begin with. Low-income households might just have difficulties managing bank accounts and might distrust banks and prefer dealing with alternative payment service providers, it noted. “The Board does not believe that enough of a problem has been demonstrated to justify sweeping legislation.”[2]

But even granting that there was a problem, the Fed said, the proposed solution was wrongheaded. “[A]s a general matter, we question whether it is wise for the government to mandate the services that financial institutions must provide.”[3] A mandate to serve low-income households with basic banking services might “stifle innovation and experimentation,” it warned. “The Board believes that voluntary efforts by financial institutions will continue to be successful in meeting many of the concerns that have been expressed without

the burden and cost that rules and regulations inevitably impose.”[4]

Thirty years later, those voluntary efforts have not borne much fruit. Today, 6.5 percent of U.S. households are unbanked, meaning that no individual in the household has a bank account.[5] Another 18.7 percent of U.S. households are underbanked, meaning that, despite having a bank account, they rely to some degree on expensive nonbank services—such as nonbank money orders, check cashing, and payday loans—for payments and other financial needs.[6] These un- and under-banked households are primarily low-income and disproportionately minority.

In contrast to the United States, bank account penetration in other advanced economies like Canada, France, Germany, Japan, and the United Kingdom exceeds ninety-nine percent. At least some of those other jurisdictions achieve universal service through just the sort of mandate that the Fed opposed back in 1989.[7]

If universal service mandates are off the table, another possibility is direct public provisioning: a public option for bank accounts. The United States already has a big public bank, the Federal Reserve, and it already offers bank accounts (with trillions of dollars in total balances) and processes payments between them. These accounts consist of digital dollars—they are dollar balances maintained as ledger entries on the Fed’s electronic books. The Fed’s digital dollar accounts are highly attractive, offering instant payments, higher interest than ordinary bank accounts, and full government backing no matter how large the balance, with no need for deposit insurance. These accounts, however, are restricted to an exclusive clientele, consisting of banks, certain other large financial institutions, and certain governmental entities. Privileged access to these accounts creates a striking asymmetry at the core of our monetary framework: government-issued physical currency is an open-

access resource, available to all, but government-issued digital currency (in the form of central bank accounts) is not.

This asymmetry is a policy choice—one that appears increasingly anomalous in the modern digital world. Other policy choices are available. In particular, Congress could direct the Fed to make its digital dollar accounts—call them FedAccounts—available to anyone who wants one. Digital dollars would be an open-access resource, available to all, just like the physical dollars that the Fed issues. Why should the central bank make its physical dollars available to the general public but restrict its digital dollars to banks?

FedAccounts might offer all the functionality of ordinary bank transaction accounts—debit cards, ATM access, direct deposit, online bill payments, online and mobile phone access, and so forth—but without any fees or minimum-balance requirements. Moreover, the Fed could partner with the U.S. Postal Service to serve as a ubiquitous physical branch network to service these accounts. Thus, FedAccounts could be merged with postal banking proposals[8] to create a robust public system for money and payments. The U.S. money-and-payments system would, in effect, become fully public infrastructure akin to roads, sidewalks, public libraries and the judicial system.

Opening up access to FedAccounts would have an astonishing range of benefits, which we describe in detail in a paper outlining the proposal. It would foster financial inclusion, bringing millions of households into the mainstream system of money and payments and lessening their reliance on expensive and subpar alternatives. It would reduce the likelihood of future financial crises by “crowding out” unstable deposit substitutes, which are a major source of financial instability. It would make the U.S. payment system faster and more efficient, because all payments between the accounts would clear in real time. It would improve the transmission of monetary policy, because the Fed’s interest-rate adjustments

would be transmitted directly to a wide swath of the public rather than just to banks. The Fed could also conduct direct “helicopter drops” of money into FedAccounts for emergency stimulus if necessary.[9] And it would reduce payment system tolls, because the Fed would not charge interchange fees to merchants accepting its debit cards.

Over the past few years, central bankers around the world have become increasingly worried that privately controlled digital currencies, like Facebook’s Libra, will relegate them to the sidelines of monetary affairs. To avoid this fate, central banks have been studying, and in some cases actively pursuing, issuing digital currencies of their own: so-called central bank digital currency (CBDC).

The FedAccount system *is* a CBDC—it is a digital dollar—and it would be far superior to the CBDC approaches that dominate current discussions. Most existing proposals portray CBDC as a sort of disembodied physical currency—a digital “token” that retains physical currency’s properties of anonymity and direct peer-to-peer transfer.[10] These proposals typically envision a closed system of digital “wallets” that is segregated from the existing system of money and payments and that is based on distributed ledger technology, like the blockchain technology that undergirds Bitcoin and (prospectively) Libra.[11] We question these design features. We do not think that the Federal Reserve and other central banks should be eager to facilitate anonymous transfers, which can be used for terrorist financing, money laundering, tax evasion, and other illicit activities. Nor is it apparent to us why central banks should wish to create a segregated, closed system that is walled off from the mainstream payment system. When it comes to money and payments, integration and interoperability are demonstrably better than fragmentation and balkanization. On top of that, distributed ledger technology, however ingenious its conception, remains extremely slow and inefficient compared to centralized ledger systems. For central banks,

these cryptocurrency design features are a needless distraction.[12] The FedAccount system would be seamlessly interoperable with the existing system of money and payments and would rely on low-cost, reliable systems and technologies that the Federal Reserve has used successfully for decades.

The Federal Reserve should keep it simple. CBDC does not require new technologies, it merely requires expanding access to a desirable, proven product that the Federal Reserve already offers: bank accounts at the central bank. Physical currency is already an open-access resource; digital dollars should be as well.

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[1] Martha R. Seger, Member, Board of Governors of the Federal Reserve System, Statement before the Subcommittee on Consumer and Regulatory Affairs of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, June 7, 1989, 75 Fed. Reserve Bulletin 550 (1989).

[2] *Id.* at 555.

[3] *Id.*

[4] *Id.* at 557.

[5] See 2017 FDIC National Survey of Unbanked and Underbanked Households 1 (“Approximately 8.4 million U.S. households, made up of 14.1 million adults and 6.4 million children, were unbanked in 2017.”).

[6] See *id.* (“Approximately 24.2 million U.S. households, composed of 48.9 million adults and 15.4 million children, were underbanked in 2017.”).

[7] For example, Canadian banks are required to open accounts for applicants unless an enumerated exception applies (generally relating to fraud prevention). See Access to Basic Banking Services Regulations (SOR/2003-184), § 3 (issued

pursuant to §§ 448.1(3), 458.1(2), and 459.4 of the Bank Act (2001)).

[8] See, e.g., Mehrsa Baradaran, *Postal Banking's Public Benefits*, *American Affairs* (Fall 2018); Mehrsa Baradaran, *It's Time for Postal Banking*, 127 *Harv. L. Rev. F.* 165 (2014).

[9] See, e.g., Julia Coronado & Simon Potter, *Securing Macroeconomic and Monetary Stability with a Federal Reserve-backed Digital Currency*, *PIIE Policy Brief 20-4* (2020).

[10] See *Central Bank Digital Currencies*, Bank for Int'l Settlements Committee on Payments and Market Infrastructures and Markets Committee, March 2018, at 6.

[11] See, e.g., Tommaso Mancini-Griffoli et al., *Casting Light on Central Bank Digital Currency*, *IMF Staff Discussion Note*, Nov. 2018, at 29 (describing a CBDC design involving "preloading tokens onto a wallet"); Benoit Cœuré, *The Future of Central Bank Money*, speech at the International Center for Monetary and Banking Studies, Geneva, May 14, 2018 ("[C]entral banks today could make use of new technologies that would enable the introduction of what is widely referred to as a 'token-based' currency—one based on a distributed ledger technology (DLT) or comparable cryptographic technology.").

[12] Cf. Aleksander Berentsen & Fabian Schär, *The Case for Central Bank Electronic Money and the Non-case for Central Bank Cryptocurrencies*, 100 *FRBSL Rev.* 97 (2018).

Lacewell v. OCC

Author: Lev Menand & Morgan Ricks

When it comes to U.S. monetary policy, the Federal Reserve looms large. But a lesser-known agency also plays an important role: The Office of the Comptroller of the Currency (“OCC”). Congress created the OCC in 1863 – fifty years before it set up the Fed.[1] Congress charged the OCC with chartering, regulating, and supervising a system of “national banks.” Today there are 1,200 of these privately-owned federal instrumentalities. They issue and maintain \$15 trillion of deposit balances, and these balances – not the paper notes issued by the Fed – make up the vast majority of the U.S. money supply.

Exactly two years ago, the OCC announced that it would begin granting new “special purpose” national bank charters to financial technology (“fintech”) companies that do not issue or maintain deposit balances. These new national banks would be exempt from federal regulations governing depository institutions, while still benefitting from the federal status national banks enjoy. Thus, they would be entitled to ignore many state business regulations as well as large portions of the federal securities laws (from which banks are explicitly exempt).

In September 2018, the Superintendent of the New York State Department of Financial Services (“DFS”) challenged the OCC’s proposed charter in federal court.[2] It argued that a nondepository national bank was an oxymoron. In October 2019, the Honorable Victor Marrero agreed, entering judgment in favor of New York and enjoining the OCC from issuing its proposed charter. In December, the OCC appealed. The substantive question presented in the appeal is whether the OCC has the authority under the National Bank Act (“NBA”) to charter nondepository national banks.

This week, thirty-three banking law scholars[3] filed a brief in support of the DFS.[4] The brief – available below – argues that the OCC has no such authority. It explains that the OCC’s position is based on a fallacy: that “banking” is just another word for “lending.” As the amici put it:

Banking involves lending, but mere lending does not constitute banking. When a bank makes a loan, it posts a credit in the amount of the loan to the borrower’s deposit account. It need not have any cash on hand. By contrast, before a nonbank lender can lend, it must procure cash or its equivalent. Thus, while nonbank lenders “deal” in money, “banks do not merely deal in[,] but are actually a source of, money.” United States v. Philadelphia Nat’l Bank, 374 U.S. 321, 326 (1963) . . . [I]t is for this reason that banks are subject to strict federal oversight.

A ruling in favor of the OCC would conflate banks’ *permissible* activities with their *essential* activities. While, under prevailing doctrine, national banks are permitted to engage in a wide range of financial commerce, the OCC does not have the power to charter entities that do not augment the money supply. The OCC’s contrary position contravenes not just the text and purpose of the NBA, but also the Federal Deposit Insurance Act, the Bank Holding Company Act, and the Federal Reserve Act, the last of which it would undermine by giving nondepository companies that play no role in monetary policy the ability to participate in selecting six of the nine members of the Boards of the regional Federal Reserve Banks. The consequences of a judgment in favor of the OCC would also extend far beyond money and banking – opening up the possibility of general business incorporation at the federal level for much of the financial sector and perhaps large portions of the nonfinancial sector.

For those who are interested in the case, we have included links below to other public documents, including an amicus

brief filed by Wharton Professor David Zaring in support of the OCC's position and several amicus briefs filed in support of DFS.

Documents Related to Spotlight:

District Court Opinion

Brief of 33 Banking Law Scholars

Brief of the OCC

Brief of the DFS

Brief of David Zaring

Brief of ICBA

Brief of Consumer Groups

Brief of State Credit Regulators

Brief of State Conference of Banking Supervisors

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[1] And twenty-five years before it created the Interstate Commerce Commission, what is often erroneously considered to be the country's first regulatory agency.

[2] DFS is the oldest banking agency – and oldest independent regulatory agency in the country – predating the OCC by twelve years. See Lev Menand, *Why Supervise Banks? The Forgotten Past and Uncertain Future of a Distinctive Form of Governance*, 71 Vand. L. Rev. __ (forthcoming).

[3] Hilary J. Allen, Dan Awrey, Mehrsa Baradaran, Lawrence G. Baxter, Prentiss Cox, John Crawford, Nakita Cuttino, Christine Desan, Adam Feibelman, Gina-Gail S. Fletcher, Anna Gelpert, Erik F. Gerding, Jeffrey N. Gordon, Robert Hockett, Kristin N. Johnson, Jeremy Kress, Adam J. Levitin, Da Lin, Jamie

McAndrews, Patricia A. McCoy, Lev Menand, Saule Omarova, Christopher K. Odinet, Nadav Orian Peer, Christopher L. Peterson, Katharina Pistor, Sarah Bloom Raskin, Morgan Ricks, Heidi Mandanis Schooner, Graham Steele, Joseph Sommer, Jennifer Taub & Arthur Wilmarth.

[4] Brief of Thirty-Three Banking Law Scholars as Amici Curiae in Support of Appellee in *Lacewell v. OCC*, No. 19 Civ. 4271 (2d Cir. July 29, 2020).

Virtual Currencies and the State

Virtual Currencies and the State

Prompt for Discussion

Contributors: Bill Maurer, Lev Menand, Lana Swartz, J.S. Nelson, Benjamin Geva, Hilary Allen, David Golumbia, Finn Brunton, Gili Vidan, Marcelo De Castro Cunha Filho, Susan Silbey, John Haskell, Nathan Tankus, Katharina Pistor, and Joseph Sommer

On October 10th, 2019, the SEC brought suit against Telegram, asserting that its \$1.7 billion offering of Gram “tokens” violated federal securities laws. The same week, five large investors including Visa, Mastercard, Stripe, eBay, and

Mercado Pago pulled out of Facebook's virtual currency Libra, apparently taken aback by the fierce criticism leveled at Libra by politicians and regulators. These events were striking, occurring as they did against a baseline of official inaction, ambivalence, or accommodation of virtual currencies. It is an opportune moment to ask: What are virtual currencies – money, securities, or speculative assets? How do they relate to modern political communities and to the financial architecture that those states support? Why at this moment have governments chosen to crack down on virtual currencies?

The movement towards virtual currencies took off in 2008, when an anonymous person or group introduced Bitcoin. In the decade that followed, Ethereum, Peercoin, and others offered similar products: digital assets created and maintained by a decentralized set of participants that can be traded for goods and services. Many users praised virtual currencies on the ground that they eliminated the role of law, the government, and/or the financial industry. According to the Bitcoin model, rules intended to operate mechanically control the production of virtual currencies and limit the quantity of virtual currency ultimately created. Exchange occurs according to a technology that Marco Iansite and Karim Lakhani describe as “an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way.” (Harvard Business Review, 18 January 2017.) The same description suggests the theory underlying virtual currencies: as a community of independent users opts in and confirms the transfer of digital assets, it makes unnecessary both public payment systems and commercial banks as financial agents.

Within the virtual currency family, differences in technology, industry location, and ideology have emerged. While Libra

claims the mantle of virtual currencies, for example, it does not use a blockchain nor, at least in its initial version, a decentralized network of users to confirm transfers. See FT Alphaville. And rather than aiming at avoiding governmental oversight, it offers a vision of financial inclusion.

In this roundtable, we invite participants to comment on the questions recently raised by the difficulties faced by Telegram and Libra. What are virtual currencies and how do they relate to public moneys? What is the theory of value that virtual currencies offer and are those theories supported historically? Are these monetary systems that are working outside the state – or payments systems derivative of state power? How do the differences between Libra and more traditional cryptocurrencies explain the governmental response? Are virtual currencies meant to fix problems with the current monetary or payments systems, and if so, what problems? Or are virtual currencies meant to evade those systems?

Contributions

July 3, 2020

Why Do We Keep Taking the Cryptocurrency/Blockchain Scam Seriously?

David Golumbia, Virginia Commonwealth University

June 12, 2020

Decentralization: The Rise of a Hazardous Spec

Gili Vidan, Harvard University

April 28, 2020

Virtual Money at the Edge-of-State

Finn Brunton, NYU Steinhardt School

April 22, 2020

Payment in Virtual Currency

Benjamin Geva, Osgoode Hall Law School of York University

April 15, 2020

What lies behind the apparent trust in cryptocurrencies?

Marcelo de Castro Filho, Massachusetts Institute of Technology

Susan Silbey, Massachusetts Institute of Technology

April 9, 2020

Virtual Currency (in the Shadows of the Money Markets)

John Haskell, The University of Manchester

Nathan Tankus, The Modern Money Network

March 31, 2020

The Case for Cryptocurrencies as a New Category of Regulated Non-Sovereign Fiat Currency

J.S. Nelson, Villanova Law School

March 11, 2020

How is Private Money Possible?

Joseph Sommer

March 4, 2020

Starbucks, Libra, and the Boring Future of Money

Lana Swartz, University of Virginia

February 26, 2020

Cryptocurrencies as Privately-Issued Moneys

Hilary J. Allen, American University Washington College of Law

February 20, 2020

Money at the Zero Lower Bound

Bill Maurer, University of California, Irvine

February 14, 2020

Regulate Virtual Currencies as Currency

Lev Menand, Columbia Law School

The Monetary Basis of Bank Supervision

Author: Lev Menand

Administrative agencies typically operate at arm's length from the institutions they regulate, making rules and then enforcing them after the fact. Banks are different: they are not just regulated, they're supervised. Special government agencies examine banks and tell bankers what to do, not only when bankers break bright-line rules, but whenever the agencies believe bankers are engaged in "unsafe and unsound practices." Supervisors' authority to identify and address these practices is so extensive that oversight mostly proceeds through confidential agency actions and rarely leads to

litigation. As a result, supervision has received little attention from legal academics, even though it plays a critical role in our monetary architecture and its failure to fill that role was one of the reasons that the 2008 financial crisis was so severe.

This Article provides the first scholarly account of bank supervision, how it functions and why it exists. It argues that legislators gave government agencies the power to control various aspects of bank operations because Congress understood banks to be government instrumentalities augmenting the money supply on behalf of the state. Supervisors' mandate—to prevent unsafe and unsound banking—is a monetary one. The “unsafe and unsound” standard authorizes officials to address practices that jeopardize the bank money system by undermining a bank's ability to redeem its notes and deposits in cash on demand. In recent decades, scholars and practitioners have lost sight of this meaning, obscuring the monetary nature of bank liabilities and reducing safety and soundness to a vague platitude.

Today, just twelve years since 2008, we are facing a renewed episode of “de-supervision.” Recent agency appointees have questioned the legitimacy of supervisory oversight, proposing to convert supervision into something akin to notice-and-comment rulemaking. This Article rejects their arguments, showing why agencies that coordinate the activities of government instrumentalities like banks do not fit neatly within traditional administrative law frameworks. Supervision is better understood as one of the terms and conditions of the banking franchise than as a form of administrative lawmaking restricting private liberty. Supervision has become so contested since the 1990s because changes to our monetary architecture have allowed unsupervised nonbanks to compete with banks and banks to engage in nonmonetary commercial

activities. Structural reforms are needed to restore a stable equilibrium.

Menand, Lev, *The Monetary Basis of Bank Supervision* (October 17, 2019). Available at SSRN: <https://ssrn.com/abstract=3421232> or <http://dx.doi.org/10.2139/ssrn.3421232>

L. Menand, Regulate Virtual Currencies as Currency

February 14, 2020

Lev Menand, Columbia Law School

Eleven years ago an unknown person—or group of people—going by the name Satoshi Nakamoto launched Bitcoin, “a purely peer-to-peer version of electronic cash [that] allow[s] online payments to be sent directly from one party to another without going through a financial institution.” Nakamoto’s “electronic cash,” which users can transfer to each other with the right password, was followed by thousands of other “cryptocurrencies”—digital (or virtual) methods of payment that use cryptography for security—among them Litecoin, released by a Google employee in 2011 (“the cryptocurrency for payments”); Dogecoin, launched as a joke in 2013 and valued at over \$250 million today (“the internet currency”); Ripple,

created by a technology company to “instantly move money to all corners of the world”; and Ether, launched in 2015 as a “digital money” that can be used in “a global, open-source platform for decentralized applications.” Recently, established businesses have joined in, with Facebook announcing last summer its plans to launch a “global currency” called Libra, and J.P. Morgan Chase, the biggest bank in the U.S., debuting JPM Coin to settle payments with its clients around the world.

As these new “coins” have skyrocketed in value, briefly surpassing \$700 billion in January 2018, the reaction in Washington has been ad-hoc. The Financial Crimes Enforcement Network has intervened at several points to address the use of cryptocurrency to launder dollars. Securities regulators have also gotten involved to protect investors from entrepreneurs looking to raise dollars through “initial coin offerings.” And commodities regulators have taken steps to protect people who trade virtual currencies on exchanges. (Relatedly, much attention has been directed to whether virtual currencies are securities or commodities.) But the country’s monetary authorities—the Comptroller of the Currency and the Federal Reserve—have been largely silent, leaving the question of whether virtual currencies are money unanswered. Congress too has watched from the sidelines, and commentators have said little about whether virtual currencies should be regulated as money or what would that mean.

This post considers virtual currency from a monetary perspective. It distinguishes between three types and argues that all three threaten serious *monetary* harms. Among them are reduced economic control, lost seigniorage, illegal transactions, regulatory arbitrage, and financial instability. To address these potential harms, it suggests that the government regulate virtual currencies as currencies—that the

government require that people exchanging virtual currency comply with existing laws governing monetary transfers and that the government subject virtual currency issuance to regulation by the Comptroller and the Federal Reserve. It further recommends that the government blunt demand for virtual currencies by improving the existing dollar payment system.[1]

A. What is Virtual Currency?

It's helpful to begin by distinguishing between three types of virtual currency. Bitcoin and most of the other cryptocurrencies launched since 2009 are what I call *utopian coins*. They aspire to be what, in other work, I refer to as *root money*. Root money has its own "unit of account," like the "dollar," the "euro," the "pound," or the "yuan," which a group of people use to measure the value of goods and services and other forms of tangible and intangible property. Root money can be distinguished from what I call *synthetic money*—money which uses an existing unit of account and is generally issued by a bank. (Bank deposits are the classic example.)

Unlike existing root moneys, utopian coins are not issued by states, or by any single entity. They are issued by their users through a set of rules codified in computer code (called distributed ledger technology). No single entity can control their supply. This is a core feature of utopian coins, as their creators see the ability of issuers to adjust the supply of dollars, yen, and euros as a bug (not a feature) of the existing monetary architecture. (Some like Ripple Labs are less ambitious. They retain some flexibility to alter the supply of Ripple, which currently exceeds \$8 billion, and aim more modestly to offer their users a way to bypass, rather

than replace, existing payment systems.)

A second and growing category of new moneys might be called *corporate coins*. Corporate coins resemble utopian coins in that they aspire to be root moneys (they do not use existing measures of value). But unlike utopian coins, corporate coins are issued by individual persons—corporations—who, much like states, can change the amount of money in circulation. Prominent examples of corporate coins include Saga, a money launched in December by a UK company, and Libra, the currency proposed by Facebook. Unlike utopian coins, these coins embed collateral: some other asset that people can fall back on. In the case of Saga and Libra, this asset is a claim on a basket of existing moneys. Such collateral is nothing new. For hundreds of years, states combined their moneys with precious metals to encourage people to accept them and to stabilize their value. Coins made of gold and silver functioned as money when they changed hands “by count.” But people could melt them down and sell them for scrap (for example, if their issuers were conquered by a neighboring power), shrinking the amount of money in the economy.

A third type of virtual currency—sometimes called a *stablecoin*—is also issued by corporations. Stablecoins are just synthetic money in new garb. Like bank deposits, stablecoins borrow an existing unit of account and attempt to trade at par with it. Stablecoin issuers, therefore, are nothing more (or less) than shadow banks. And like most shadow banks, stablecoin issuers embed collateral to encourage people to accept their coins. This collateral mainly takes the form of claims on pools of debt instruments denominated in state-issued root moneys. The most prominent stablecoin is Tether, issued by Tether Limited, a Hong Kong company. (There is \$4 billion in Tether outstanding.) Tether Limited originally claimed that each Tether was backed by one dollar in bank

deposits or other dollar assets. But Tether Limited recently conceded that there was substantially less collateral backing their coins, and that it “reserves the right” not to redeem tethers “on a case by case basis.” Other stablecoins, such as USD Coin, Paxos, Gemini, TrueUSD, TrueGBP, and TrueHKD seem to include stronger legal obligations. As do coins launched by existing financial institutions. (J.P. Morgan’s stablecoin is called JPM Coin and is collateralized by the bank’s promise to pay dollars.) More of these coins seemed poised to hit the market soon.

B. Why is Virtual Currency Dangerous?

Each of these virtual currencies threatens to damage our existing monetary architecture. Below, I consider several of the dangers they pose:

(1) Reduced Economic Control, Lost Seigniorage, Poor Price Discovery

To the extent that new root moneys succeed in displacing the dollar, the government would lose its ability to modulate the money supply. Although this is trumpeted as a *feature* of most utopian coins, groups of people who are unable to create new purchasing power to finance new productive projects generally are unable to grow their economies over time. And when faced with exogenous shocks, such economies tend to enter vicious cycles of default and decline. One of the twentieth century’s great achievements was monetary flexibility (the ability to break vicious cycles of default by expanding the amount of money in circulation). Even a partial shift to utopian coins would likely mean greater rigidity. And it would also bring monetary fragmentation. The use of multiple currencies in the

same economy would increase transaction costs and incentivize arbitrage. There is a reason why the Yen, despite being a stable currency, is not used in Los Angeles.

Corporate coins appear to promise greater monetary flexibility. But existing monetary systems are subject to political control. *The public*, acting through governments, decides when to issue more money and who benefits, and the state receives the revenues that accrue from issuance (between \$50 and \$100 billion a year in the United States). Corporate coins would put monetary policy into the hands of private corporations, which would be able to decide how and to what extent to augment the money supply and who would benefit from monetary expansion. Corporate coins would privatize the returns from money issuance, transferring wealth from the government to corporations and their shareholders.

In addition, virtual currencies would hamper price discovery. The technology behind utopian coins is extremely costly to operate, so costly that it would be literally impossible to process the transactional volume of the U.S. economy in Bitcoin even if all the energy resources on earth were devoted to the effort. And none of the new units of accounts have robust transactional histories. People in the United States today value goods and services and tangible and intangible property in dollars and use vast stores of information about how much things are worth in dollars to order their economic lives. New units of account are completely unmoored by comparison.

(2) Illegal Transactions

Neither utopian coins nor corporate coins function today as

real moneys. No one uses them to value things. But they do function as alternative payment systems, remonetizing illegal transactions. (They also function as speculative assets, diverting social resources from productive investment.) This is dangerous because one of the main ways that governments enforce their criminal laws, promote their interests abroad, and ensure payment of taxes is by regulating their payments systems. For example, the United States prevents criminals and terrorists from using digital dollars to buy goods and services and store up transaction reserves. (It attempts to do the same with physical dollars, but with much less success.) It also blocks foreign actors from using digital dollars, deterring military aggression, terrorist financing, and nuclear proliferation. And it monitors payment flows to keep taxpayers honest.

To date, utopian coins have been used by Russia to interfere in U.S. elections, Iranian hackers to attack American hospitals and government agencies, and North Korea to finance its nuclear missile programs. Iran is currently exploring ways to use Bitcoin to evade U.S. sanctions. Because utopian coins can be transferred easily and securely, drug traffickers use them, as do criminals and other participants in black markets. Further, income earned and retained in utopian coins is likely to evade tax authorities. Corporate issuers would presumably comply with tax laws and anti-money laundering reporting requirements. But the adoption of corporate coins would still make it harder for the United States, which cannot control foreign transactions in these currencies, to use sanctions to discipline adversaries.

(3) Regulatory Arbitrage and Financial Instability

Corporate coins and stablecoins would also impair financial

stability. This is because moneys with embedded collateral carry the seeds of their own destruction. If their users lose confidence in them, they have a ready, nonmonetary alternative at hand. For example, people who have doubts about the value of deposits at Bank of America—about their ability to exchange their account balances with other people at par—can demand that Bank of America pay them coins and bills. This is called a bank run, and it can cause large amounts of synthetic money to vanish. All the people who had been using these moneys to buy and sell goods and services or store up purchasing power for future transactions suddenly aren't able to anymore. Prices plummet, and incomes fall. Rapid economic contractions usually follow.

Governments have erected elaborate regulatory mechanisms to mitigate these problems. But stablecoins issued by entities outside this regulatory perimeter threaten to arbitrage these restrictions. Circle, which issues USD Coin, has a New York State license to deal in virtual currencies—but is not subject to bank regulations. The same is true for TrueUSD (issued by TrueCoin LLC), Paxos (which holds a trust charter from New York), and Gemini (which holds a New York virtual currency license). Tether has no U.S. regulatory recognition. Additional growth of these deposit substitutes will likely lead banks to lobby for decreased restrictions on their own activities. Each of the three most recent collapses—1929-1933, 1988-89, and 2007-09—were preceded by similar races to the bottom.

(What Would Currency Regulation Entail?)

While utopian coins may die out on their own, absent a change in government policy, they are likely to survive as moneys for criminals, “rogue” nations, ideologues, and people in

countries without functioning monetary systems. It is hard to predict whether corporate root moneys will succeed, although it would be foolish for Congress to wait and find out. And if the past is any guide, stablecoins, left alone, will expand. Regulated institutions will have every incentive to use these new synthetic moneys to avoid existing regulations, in much the same way that they turned to repurchase agreements and commercial paper prior to the 2008 crash.

So, what should policymakers do?

First, they should regulate all virtual currencies as currency. This would mean, for example, treating utopian and corporate coins as currency under the Bank Secrecy Act and using existing authorities to require individuals to report cross-border transactions exceeding \$10,000. The federal government already has an elaborate regime governing monetary transfers designed to prevent illegal transactions. There is no respectable policy basis for exempting digital “tokens.”

Regulating virtual currencies as currency would also mean treating virtual currency *issuers* as banks. A bank is an entity that creates money. One type of money that banks create is called bank notes. During the Civil War, the federal government created a national banking system, giving “national banks” an effective monopoly on note issuance by imposing a prohibitive tax on all other issuers. The notes created by national banks were printed by the government and regulated by the Comptroller. In the 1930s, the government pulled the plug on national bank notes, and today only the twelve Federal Reserve Banks (FRBs) are permitted to issue physical money.

But national banks, national credit unions, and other entities

chartered by states still issue another type of money called deposits or account money. Account money is a type of digital currency—it is a ledger entry that can be transferred online. Account money makes up the vast bulk of the money people use every day, an order of magnitude more than notes issued by the FRBs. When denominated in dollars, virtual currencies are, in many respects, indistinguishable from account money issued by banks. When denominated in other units, they are a lot like account money in a foreign currency, especially if they use dollars or other currencies to back their issuances. We have a regulatory regime for ensuring that this sort of money is “sound”—that it maintains a stable value over time. It makes little sense to allow new entrants to copy this business but evade the regulatory regime designed to ensure its stability.

Accordingly, the government should require virtual currency issuers to apply for bank charters from the Comptroller. It should also subject stablecoin issuers to regulation by the Federal Reserve, the government agency charged with modulating the supply of dollars and setting reserve requirements for entities that maintain accounts denominated in dollars. And it should prevent states from erecting competing regulatory regimes for virtual currency issuers by restoring and extending the tax on state bank notes to cover corporate coins and stablecoins issued by entities without national charters.

Second, policymakers should improve our existing monetary architecture. Efforts by the Fed to build faster rails for regulated synthetic moneys issued by banks are a step in the right direction. But the Fed already has FedWire, which settles immediately, and so it could also expand access to this system by allowing households and business to open accounts at the Fed. This would permit households, nonprofits, and businesses to easily hold digital dollars in large quantities, likely dulling demand for stablecoins and other

corporate coins. A FedAccount program would also have an array of other benefits, including a more inclusive financial system, better consumer protection, greater financial and macroeconomic stability, improved monetary policy transmission, reduced payment tolls (interchange fees), streamlined regulation and regulatory structures, and increased fiscal revenue.

New technology is transforming the way we pay for goods and services, store value, and settle debts. While the back end is different, the functions are not. We already have a regulatory framework for money and payments. We should apply it to virtual currencies.

[1] This post draws on unpublished work: *Why Private Money is Bad (And What To Do About It)*.