

**SPRING 2020**

## **Virtual Currencies and the State**

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### **Prompt for Discussion**

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On October 10<sup>th</sup>, 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**

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**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

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**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

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

J.S. Nelson, Villanova Law School

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**How is Private Money Possible?**

Joseph Sommer

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**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

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**Money at the Zero Lower Bound**

Bill Maurer, University of California, Irvine

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**Regulate Virtual Currencies as Currency**

Lev Menand, Columbia Law School

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# **J. Haskell & N. Tankus, Virtual Currency (in the Shadows of the Money Markets)**

April 9, 2020

**John Haskell, The University of Manchester**

**Nathan Tankus, The Modern Money Network**

Off the radar in academic, professional and public experience until the early to mid-2000s, virtual currencies are a hot topic in contemporary academic literature. Like most successfully scaled digital schemes (e.g., computers, online payment systems, smart phones), the subject's ubiquity tends to dispel any mystery at the immediate user-interface (e.g., we get the 'hang' of the new Gmail layout) but simultaneously relies on complex dynamics and internal processes that resist easy clarification and organisation (e.g., we send our computer in to the shop when it stops working). For academics, two interrelated questions emerge around the trope of virtual currencies: first, how does scholarship currently engage and second, what might we be missing – and 'missing' in a way that is not simply 'gap filling' or 'bringing coherency' but identifying blind spots that highlight structural biases and links to inherently partisan intellectual traditions (e.g., American Legal Realism, Institutional Economics). In this paper, we address the former before centering on the latter line of questioning and conclude with a couple suggestions about future work that academics might usefully push under the

phenomena of virtual currency.

The legal scholarship operates according to a relatively formal rhetorical economy. In typical 'lawyerly' fashion, there is often an early effort in the text to provide definitions of core concepts, which are geared toward recent initiates into the 'law and technology field' and that at once gesture to the sophistication of the topic and offer a sufficiently pat resolution to that difficulty. One of the most common conventions would be to tell the reader that a 'blockchain' is a 'decentralised digital ledger' that requires 'miners' and 'nodes' to authenticate and secure various types of data communication in a way that may 'disrupt' the necessity of trusting in current third-party mediators, such as governments and banks. For some literature, the aim then is to unpack these technicalities further: hard and soft forks, hash functions, permission-ed and permission-less systems, tokens of investment versus utility, proof of stake versus proof of work (or other cryptographic procedures), and so forth.

Another common convention is to highlight the difficult jurisdictional complexity and regulatory compliance posed by virtual currencies. If we conduct an Initial Coin Offering, what regulatory protocols will the Securities & Exchange Commission impose? If transferring data to a 'third party' non-European Economic Area member country, what obligations does the General Data Protection Regulation impose on 'the controller'? Is the currency treated as 'property', and if so, what type, and how would this function in different social scenarios (e.g., divorce proceeding, theft)? How might we think of virtual currency platforms in relation to company law? Intellectual property? And so on.

When taking these approaches, authors tend to a 'centrist' or 'practical' oriented tone, usually not too critical of technological futures, with the aim to get colleagues 'caught up' with the state of play. It is meant to be the sort of information that would be useful for industry, practitioners and regulators. In the coming years, one can imagine a series of quasi-white papers emerging by academics (as often the case with other topics), staking out their competencies as the consultants of the new field of law and technology – in fact, to some extent, they are already being produced, just not so much directly on 'virtual currencies'. That approach facilitates almost endless opportunities to map this or that legal regime, apply various legal doctrines, compare the benefits and risks of different jurisdictions, get into the weeds of legal or technical details – in short, the field is ripe for an explosion of spam jurisprudence. The volume will exponentially increase, taking on a life of its own, but with diminishing intellectual returns.

Another tack in the scholarship, though not as prevalent, is to take a 'critical' approach, highlighting the dark sides or limitations of technology – e.g., the data-driven infringement on personal autonomy, its oligarchical momentum, the possible incompatibilities between computer science and legal grammar. No one really disagrees within this literature that technology is here to stay nor that it offers important gains. But for some, any of these (quite substantial) costs can be off-set if only we awaken to certain dangers and make (usually modest) reforms. When taking this perspective, there is little call for any larger structural change nor any effort to situate technology within broader socio-economic contexts. In many respects, this literature is not all that different from the approaches already discussed; it is more that they are not interested to simply 'map' jurisdictional regimes or offer definitional clarity, but are concentrating on the risks attached to merging two formerly separate professional

industries (primarily computer scientists and lawyers). Having identified a failure with the liberal cosmopolitan order, the law steps in to mediate different interests and find a happy consensus.

A smaller body of literature situates observations within a more inter-disciplinary and/or structurally complex analysis. While empirical data reminiscent of law and society genres are used across the board in law and technology writing, scholars in this smaller cohort tend to be more open to experimenting with insights from disciplines outside of technology – and in particular, anthropology, political economy and sociology. So, for example, “critical technology” scholars will often point out that law is geared to remain ambiguous and open to interpretation and renegotiation while digital code is oriented toward stricter privacy, more rigid closure requirements. The takeaway they come to is that one cannot avoid interpretative disagreement and reliance on legal professionals. In contrast, law and political economy scholars might emphasise how the inability to resolve ambiguity not only means future claims mediated by lawyers, but that the entire enterprise is reliant (or even generated) by a dense background public institutional infrastructure, which casts shade on the assumption of discrete public/private domains with distinct characteristics (e.g., private innovation disrupts and leads change in governance and society) and foregrounds how the current regime perpetuates inequalities within society (e.g., racial inequity built into algorithmic metrics).

It is this small but growing literature that we believe will (and does) offer the most interesting experiments and insights into the law/technology interface. What unites this effort is not only that its critique is interdisciplinary and structural, but also that a) capitalism is itself ‘the’

problem, b) the capitalist critique is kept implicit (e.g., it does not denounce capitalism but seeks to understand embedded socio-economic inequality outside of monadic 'identity' politics or show how the very promises of the liberal order are built on exclusionary, unsustainable foundations), and c) the author is measured on their ability to 'out-perform' more conservative colleagues and professionals at their own game (e.g., directly taking on finance rather than condemning finance from an outsider aesthetic, snatching money debates away from austerity economists by looking to other economic traditions). It is in this vein that we would like to offer a small thought piece.

Our argument is that virtual currencies have yet to enter the realm of money's central nervous system – the modern money market. In our view, a key place to watch for the evolution of virtual currencies is the entry of retail online monetary actors into wholesale payments and collateral provisioning. In other words, the undiscussed set of possibilities, dangers and mutations for virtual currency is that of shadow money and shadow banking.

Shadow banking has gotten quite a substantial amount of discussion over the last decade, especially when it comes to dissecting what happened in the run up to the great financial crisis of 2007-2009. However, just as the law and technology literature has largely stayed clear of modern money markets, the non-technology law and finance literature is usually focused on either the expansion of the repo market or developments in other countries that may more accurately be termed "informal banking". What is often missed in these discussions is the specific nexus of legal, monetary, social and technological innovations that opened the door to shadow banking in the first place (from trust formation and management to security issuance and payment collection). Or to

put this as a formal rule: actor and market behaviour always takes place because of pre-existing institutionalised (legal) policy constraints and motivations.

An essential ingredient to explain the past and future of this phenomena in our case study is the ongoing shortage of safe financial assets globally. In short, the development of shadow monies is (to a significant extent) fueled by shortages of certain types of money. Because of deposit insurance caps, the lack of a universally available federal book entry (or digital) currency and a meagre supply of short maturity treasury securities, there are persistently not enough treasuries to fill the demand from money managers globally. Adding to this “park it” motivation, there are those who not only want relative safety but also an asset that beats minimum rates of return guidelines set by institutional investors. While not often conceived of this way, both of these are in essence a shortage of large denomination money.

Existing digital entities involved in communication and payment may be particularly situated to capitalise on this shortage. A digital social media platform (e.g., Facebook) or a digital payment processor (e.g., Paypal) could issue large balances to money managers under the promise that regularly processing payments for retail users and investing proceeds into high quality assets reduces the likelihood of sudden large outflows. Processing payments within their large payment ecosystems may lead to little outflow – “all your payment needs can be handled by us (and maybe, for early entrants, with a discount)”. Dominance over retail payments may yet convince money managers to trust telecommunication companies’ ability to provision and sustain liquidity for themselves. This could be reinforced by the wider access to credit telecommunication companies have because of their main businesses. In other words, these actors can artfully promise

safety with a combination of collateral, network effects and commercial bank lender of last resort access.

Notice that rather than emerging outside the context of law and regulation (as financial innovation is sometimes presented), this scenario involves the manufacture of a finance franchise from the telecommunication franchises these companies have been legally granted. We are back to our first rule. The history of non-bank, corporate currencies is not a history of "unregulated" currencies or the lack of state legal construction but is rather a creative redeployment of legal privileges already granted by the state. The paradigmatic example of shadow banking is similarly beneath the surface. Rather than emerging outside the context of law and regulation, pre-2007 shadow banking was in essence the manufacture of an expanded finance franchise from a multi-subsidiary financial corporate entity granted Bank and/or Financial Holding Company status. Money creation financed (though didn't fund) the origination of new mortgages while access to preferential credit from the bank subsidiary provided protection against liquidity uncertainties. The largest finance holding companies, secure in their own liquidity, provisioned liquidity across short term funding markets and essentially sub-franchised finance to non-bank subsidiaries and even vertically disintegrated securitization chains.

Analyzing changes in the financial ecosystem as creative uses of various state franchised powers provides a very different view of the history of finance in the United States. Viewed this way, the potential threat of virtual shadow currencies is more like the rise of antebellum U.S. railroad, canal and municipal currencies than a brand-new technological development. At that time, the problem was not a shortage of large denomination money, but small denomination currency. A

lack of small denomination coinage combined with legal prohibitions on small denomination paper banknotes led to a persistent shortage of small change. At the time, it was widely believed that issuing small denomination notes was too tempting a source of funding for banks as their role in circulation made redemption exceedingly unlikely.

This shortage was (in part) alleviated by what can usefully be considered the telecommunication companies of their day – railway and canal companies. They issued what were at the time technologically cutting-edge: paper note obligations of a corporate entity which were receivable in payment to that entity and often in state taxes as well. The ubiquity of transportation needs made their redemption far more likely, while their value nonetheless ensured successful circulation as small denomination money. The 21st century shortage of large denomination money and collateral may be (in part) alleviated by the telecommunication companies of our day. When we take this view, the problems and patterns in monetary innovation and crises take on a cyclical pattern rather than a unidirectional and triumphant one. Technological innovations shift from being the dawn of a new age to an integral part of a recurring pattern in monetary history.

Our suggestion that telecommunication companies may creatively invent a synthetic finance franchise from “money transmitter” privileges combined with their telecommunication franchise does not preclude state action or prevention. As we see with the response to Facebook’s Libra, some attempts at synthetic finance franchise making are too audacious to be contemplated. Rather, we would like to reorient those interested in money design and financial stability to adopt a “wall street view” and see the possibilities (and thus the dangers) in future financial and legal innovation. This is key to taking the initiative in money design away from large corporations and

their brilliant lawyers. This exercise also reveals that for all the technical details and seeming mundanity, those who seek to synthesize “shadow monies” use imagination and creative speculation as much as any other tool in the development of finance. We must be similarly inventive in disrupting them as money designers ourselves, which means eliminating the structural drivers of large denomination money shortages and the demand for benchmark yielding safer collateral.