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Back to the Future with Cryptocurrencies: Comments by Randall Morck on “From Commodity to Fiat and Now to Crypto: What Does History Tell Us?” by Barry Eichengreen

I largely agree with Eichengreen’s historical parallels and conclusions, and so can only suggest extensions and amplifications. His discussion of emerging Western nation states monopolizing money creation to capture seigniorage, and more detailed description of U.S. monetary history is excellent. The tension between competing versus monopolistic money creation is actually far older. At the beginning of written history, ancient Egyptians used a competing moneys – metals by weight, oils and grains by volume (Janssen 1975). Are cryptocurrencies resurrecting a world of multiple competing moneys?

A money must serve as a medium of exchange, unit of account and store of value. Eichengreen explains cryptocurrencies’ high costs in all three roles. Just as lugging urns of olive oil about gave way to metals by weight, which gave way to coins, costlier cryptocurrencies will be culled by economic selection. Olive oil leaks, spills, spoils, or loses value in a glut from an olive press up the Nile; metal needs reweighing and re-assaying for each transaction; coins are heavy and can be debased; so central bank fiat currencies ultimately won the cost contest (Davies 2010). Eichengreen sees little chance fiat money likewise give way to cryptocurrencies. Central banks’ seigniorage is secure.

First generation cryptocurrencies, such as bitcoin, are poor mediums of exchange (you must check their fluctuating values every few seconds to reprice olive oil in bitcoin), units of account (successive bitcoin transaction entries in a ledger cannot really be added because the value of the bitcoin changes so fast), and stores of value (big swings relative to the costs of consumer goods make bitcoin a risky investment). “Stable” cryptocurrencies, such as tether or etherium, are backed by central bank moneys or government-backed securities. The overcollateralization needed to stabilize their prices is costly; insufficient collateralization invites even costlier asset runs.

Blockchain allegedly provides an anonymity that trumps such issues. But even diehard libertarians are cost-sensitive. Blockchain costs rise sharply with their scale, and all are currently miniscule compared to credit cards. If cryptocurrencies are used on large scales, they will encounter opposition from new quarters. Bitcoin mining already uses enough electricity to power Austria, much of it from coal in China (Krause and Tolaymat 2018). A bitcoin global payments system would make eco-activists are costly foes.

Who would use high-cost cryptocurrencies? Old-fashioned police work (Foley et al. 2019) provides answers. Police raids on dark website servers readily upend cryptocurrency anonymity. Illegal transactions linked to names, shipments of illegal goods and connected accounts reveal up to 70% of bitcoin holdings and up to 60% of bitcoin transactions to be illegal.

Eichengreen sees central bank digital currencies, effectively letting individuals have digital demand deposit accounts at central banks, as likelier. These could instantly settle all individual and business transactions, eliminating the roughly 3% overhead in credit cards or check clearing. The Bank of Canada has successfully tested such a system for buying and selling goods, stocks, and foreign exchange. Blockchain anonymity is futile if the central bank knows you anyway; all that’s needed is vast computer power and massively redundant storage.

A CBDC would let central banks run “helicopter” monetary policy. Currently, central banks stimulate the economy by creating money to buy treasury securities to increase their prices to lower debt yields to depress bank interest rates to encourage borrowing to stimulate business expansion, consumption and employment. This Rube Goldberg mechanism can be like pushing on a string, perhaps because treasury security sellers are typically wealthy, have low marginal propensities to consume, and use the newly created money to buy other securities. If everyone had CBDC accounts, a recession-fighting central bank, like pharaoh meting out grain amid seven years of drought, could drop new money, as if by helicopter, into the accounts of low-income people, more apt to spend it on consumption goods.

Eichengreen correctly points out that an attack on the central bank could shut down an economy run this way. Massively redundant hardened geographically separated backup computers, each with an isolated dedicated power source might mitigate this. But I see more daunting challenges. Commercial banks, credit card companies, securities brokers, stock exchanges, and providers of all manner of back-office settlement services would lobby intensely to prevent such efficiency, or at least for tollbooths in it they could man (Duffie 2019). Big Finance is a formidable foe (Johnson and Kwak. 2010).

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