"The main point on which one system of credit differs from another is 'soundness' Credit means that a certain confidence is given, and a certain trust reposed. Is that trust justified? and is that confidence wise? These are the cardinal questions." – Walter Bagehot¹

I. Asking the right question

Central banks do not issue currency – or at least, they barely do. Almost all the money circulating in a modern economy consists of private debts in the form of bank deposits,² which are created when a bank credits an account with the sum it has agreed to lend. ³ Granted, central banks issue coins and most banknotes⁴; but their real role is to supervise and speed or slow the process of private money creation. For most purposes, privately-issued money is the only game in town.

Why do we trust this private money? In the past, we often didn't: private banknotes in the 19th century USA would trade at shifting discounts to their dollar face value, depending on the bank's perceived creditworthiness or even the distance from the nearest branch in which to redeem the note.⁵ What gives private money its stability is the legal framework which underpins modern banking: regulation and supervision in good times, and liquidity support, resolution mechanisms and deposit insurance when things go wrong. In the UK, that really means that the value of your money depends on the Financial Services and Markets Act 2000 and the Banking Act 2009.

But that framework is now being bypassed. Over the last few years, the development of blockchainbased payment systems has led to the creation of a wave of privately-issued digital currencies. Their advocates sometimes claim that these unregulated currencies can be more stable than those maintained by states and their central banks, which – according to the usual critique⁶ – are dogged by

¹ W Bagehot, Lombard Street: A Description of the Money Market (1873)

² Foley v Hill (1848) 2 HLC 28

³ "Money Creation in the Modern Economy", Bank of England Quarterly Bulletin (2014 Q1)

⁴ Though not all – see Glasgow Pavilion Ltd v Motherwell [1903] 11 SLT 409

⁵ B Champ, "Private Money in our Past, Present, and Future", Federal Reserve Bank of Cleveland Economic Commentary, January 1 2007

⁶ Satoshi Nakamoto, "Bitcoin open source implementation of P2P currency", 11 February 2009, <u>http://p2pfoundation.ning.com/forum/topics/bitcoin-open-source</u> (accessed 21 December 2020)

distorting incentives to debase the currency by speeding the process of money creation in pursuit of economic growth, asset market stability or low government borrowing costs.

In some ways, this is a curiously dated critique: in the developed world and in many emerging markets, both currency markets and inflation have been remarkably stable for at least 30 years. If anything, the problem has been disinflation. However, past performance is a poor guide to future returns, and the critics' point could still be correct in principle.

Now, the first generation of digital currencies haven't exactly been notable for their stability. The lack of an institutional underpinning and their markets' completely unanchored price expectations have made for serious volatility, undermining claims that they could serve either as currency or less ambitiously as a store of value. This has led in turn to the creation of "stablecoins", which attempt to resolve this problem by tying the value of a digital asset to some real-world benchmark. Could these privately-issued stablecoins, notwithstanding their lack of regulation, be more stable than official currencies?

II. Stablecoins under the lid

There are several ways to make a stablecoin. Simplifying somewhat, you can peg it to an existing asset, and back it with collateral either one-to-one (as Facebook plans to do for its pegged Libra coins, and as the dollar-pegged Tether claimed it would do in its original White Paper),⁷ or on a partial basis if you're willing to risk a market run (which is what Tether seems to have actually done). ⁸ But that does very little to answer our question, because its value will be no more stable than that of the pre-existing reference asset.

 ⁷ Tether Ltd, "Tether: Fiat Currencies on the Bitcoin Blockchain" (White Paper), June 2016
⁸ "Every tether is always 100% backed by our reserves, which include traditional currency and cash equivalents and, from time to time, may include other assets and receivables from loans made by Tether to third parties" <u>www.tether.to</u>, accessed 15 December 2020

In theory, you can also try to manage your stablecoin by using "smart contracts" – ie contracts which automatically perform themselves.⁹ Much like how a central bank conducts its market operations, these contracts will automatically buy and sell digital bonds, which cannot be used in transactions but which pay a small return funded by seigniorage on the subsequent issuance of bonds and currency. But in the event of the currency ceasing to grow or losing investor confidence, the only way not to default on the bondholders will be to break the peg.¹⁰ So smart contract-based cryptocurrencies actually face much greater incentives for debasement than do central banks.

The other, perhaps more promising option is to tie the value of your stablecoin to that of an underlying basket of liquid, high-value assets. That was the original idea behind Facebook's Libra currency,¹¹ and it remains the aspiration for its "composite" Diem coin. You could compare a currency like this to settling payment by means of shares in a conventional money market fund – in Diem's case, through a proprietary payments system.

III. A money-market fund by another name

That the composite Diem would be in substance so similar to a money market fund helps to explain why it has so far received a cool reception from regulators.¹² Money market funds are "shadow banks", performing the same core role of maturity transformation but carrying a lighter regulatory burden and lacking the formal banking system's state underwriting – and they were a major contributor to the 2008 crash.¹³

The inevitable worry is that Diem will face the same challenges to its stability as private bank money did in the past, or as would an unregulated, supersized money market fund. After all, with the safest

⁹ "Legal statement on cryptoassets and smart contracts", Lawtech Delivery Panel UK Jurisdiction Taskforce, November 2019

¹⁰ B Eichengreen, "From Commodity to Fiat and Now to Crypto: What Does History Tell Us?", NBER Working Paper 25426, January 2019

¹¹ Libra Association, "An Introduction to Libra" (White Paper) 23 June 2019

¹² J Light, B Bain and O Kharif, "Facebook Weighs Libra Revamp to Address Regulatory Concerns", Bloomberg News, 3 March 2020

¹³ See eg A Tooze, *Crashed: How a Decade of Financial Crises Changed the World* (Allen Lane 2008)

assets currently yielding low or negative rates, it will be hard to accumulate Diem's intended "capital buffer" and pay a return on any subscribed capital from its backers without changing the makeup of its reserves and diversifying into riskier, less liquid assets.

In the absence of regulation, investor trust in the governance framework sketched in the Libra White Papers becomes even more important. Notwithstanding the envisioned need for a supermajority of Association members for approval, any prospect of a change in the makeup of its collateral basket would drive speculation and eventually redemptions, as might the explicitly floated possibility of suspending convertibility or imposing redemption haircuts in the event of a run.¹⁴ Like any other limited liability company, the Diem Association would then face the choice of subscribing more capital and risking more losses – or stepping back and letting the currency devalue. In 2008, the Reserve Primary Fund famously "broke the buck" and failed to maintain its \$1 NAV per share. Diem could quite easily do the same.

But that may be more of a systemic risk for the financial sector than a problem for retail investors or for the purchasing power of the Diem in your digital pocket. A run on a widely-adopted Diem might bring about a global asset fire sale – but by the standards of FX markets, the actual currency's value might not actually fall that far. After all, shares in the Reserve Primary Fund only fell around 3%.

IV. Conclusion: The answer is obvious

Admittedly, it's not clear why (say) US citizens would have much demand for non-interest-bearing, non-state-underwritten shares in a basket of securities. That means that comparing the Diem with the dollar is somewhat beside the point. It also seems predictable that demand will be strongest in places where governments already struggle to maintain a stable local currency, and where anyone with any wealth already tries to hold it in foreign-denominated assets. To take a marked but by no means extreme example, the Turkish lira lost over 30% against the dollar in 2020.¹⁵

¹⁴ Libra Association, "Cover Letter – White Paper v2.0", 23 April 2020

¹⁵ <u>https://www.bloomberg.com/quote/USDTRY:CUR</u>, accessed 16 December 2020

So the practical question is whether an easily-exchanged token, redeemable for a share of the assets of a minimally-regulated but globally diversified money market fund, could be more stable than a volatile local currency. With the question framed in those terms, the answer is almost self-evident: of course it could.