

# Cashing Out?

## Biblical thoughts on the future of money

By Paul Mills

### Summary

Monetary systems are innovating rapidly yet also losing the public's trust. Given that trust (and government solvency) are critical to the survival of banks, recent bank failures may presage the transition to a new monetary paradigm. The Bible's pointers to the features of a desirable monetary system are used to assess the merits or otherwise of the challengers to the status quo – notably cryptocurrencies and Central Bank Digital Currencies. The latter, in particular, raise a number of concerns regarding governmental surveillance and control.

### Introduction

We are living through tumultuous times in monetary affairs. After a decade of record low, even negative interest rates, inflation has returned with a vengeance and interest rates have increased at a record pace. Some 'safe' long-term government bonds have more than halved in value. Meanwhile the United States suffered its second, third and fourth largest bank failures<sup>1</sup> in Spring 2023, just as the rescue merger of Credit Suisse created a single bank (UBS) with assets over twice the size of the Swiss economy. On the retail front, over 4,000 Swedes are trialling microchips inserted subcutaneously, allowing them to make payments by waving their hand; armed customers of Lebanese banks held up their own branches in 2022 for refusing to honour withdrawal requests; and US wholesaler Costco sold out of one-ounce gold bars within hours of them going on sale in 2023. Our existing monetary arrangements are simultaneously innovating rapidly yet losing trust.

After the 2007–09 financial crisis shook confidence in the existing monetary system, multiple technological and policy developments have coalesced, namely:<sup>2</sup>

Money is often not only a medium for the expression of personal relationships, such as through gifts, purchases and legacies, but also for the exercise of power.

- Rapid innovation in digital payment systems, including internet and mobile banking;
- The launch of Bitcoin and other cryptocurrencies as alternative stores of value and payment systems;
- Proposals by over 100 central banks to develop their own digital currencies (Central Bank Digital Currencies (CBDCs));
- The increased use of currencies other than the US dollar to settle global trade, and the proposed 'BRICS' countries' creation of a competitor reserve currency.<sup>3</sup>

These innovations mean that we are fast approaching a crossroads at which the

<sup>1</sup> First Republic, Silicon Valley and Signature banks.

<sup>2</sup> For a comprehensive overview of recent developments see E. S. Prasad, *The Future of Money* (Cambridge, Mass: Belknap Press, 2021).

<sup>3</sup> BRICS – Brazil, Russia, India, China, South Africa. This project was given impetus by the freezing of Russia's foreign currency reserves within its jurisdiction by the US government in February 2022. Space precludes further discussion of the threat to US\$ dominance in trade and currency reserves.



choice of path will determine the future of money for generations to come. Why is this issue so important? Money is often not only a medium for the expression of personal relationships, such as through gifts, purchases and legacies, but also for the exercise of power. For whoever controls ‘the printing press’ heavily influences the allocation of resources across society.<sup>4</sup> In addition, the means for upholding personal privacy, or facilitating state surveillance and the potential means for persecution, will be forged in the process. It is therefore crucial that Christians understand and engage in the debate and bring biblically-informed wisdom to bear.

This paper will briefly explain the desirable features of a monetary system; survey the biblical material addressing money as a means of payment; explain the current bank-money system and examine its inherent problems; analyse its two main competitors being developed (cryptocurrencies and CBDCs); and draw conclusions for how Christians should interact with, and campaign about, the developments to come. For explanations of the technical terms used in the paper, please refer to the glossary (see page 8).

### The desirable features of a monetary system

What has been used as money has varied widely throughout human history. In practice, ‘money’ is what others will accept as having monetary value. Monetary

innovations have regularly marked human civilisation with the move from weights of precious metals to coins, then paper money acting as a claim on precious metals, to unbacked paper money and claims upon a bank ledger. Throughout this process, credit substituted for, or amplified, the money supply available.<sup>5</sup>

To be widely used, money needs to act as an efficient *medium of exchange* (to facilitate trade) with low transaction costs; as a *unit of account* (to set prices) that is relatively stable in value; and as a *store of value* (to transfer purchasing power to a future time and/or place) that does not deteriorate over time. To achieve these characteristics, it is desirable that money is *fungible* (that is, one unit is equivalent to another), relatively *scarce* with limited new supply (to retain value), *portable* (easy to move), *divisible* (into smaller units), *counterfeit-resistant* (so as to be trusted) and *durable* (to resist decay and retain value).<sup>6</sup> In the digital age, we can also add that the electronic ledger should be *decentralised*, *robust* to hacking and sabotage, *a respecter of user privacy*, and a *facilitator* of swift and low-cost transfers.

### Biblical wisdom on monetary systems

When assessing current monetary arrangements and potential innovations, what additional wisdom can be gleaned from the Bible’s teaching on the form that money should take? The Bible’s discussion of money focuses predominantly on the spiritual dangers and positive uses of money in God’s service, rather than definitive prescriptions over what form money should take. That said, there are explicit commands and useful pointers as to what characteristics a sound and fair monetary system should possess.

The explicit OT commands relevant to one’s assessment of monetary arrangements are:

- The need to uphold the use of fair and constant weights and measures in trade (Leviticus 19:35; Deuteronomy 25:13).<sup>7</sup> Any falsification of weights and measures is regarded as theft and condemned (Ezekiel 45:10; Micah 6:11; Amos 8:4–6). By extension, money should ideally be stable in value over time so that it can perform its function of a reliable unit of account.
- The periodic cancellation of debt (Deuteronomy 15:1–6) and prohibition of the charging of interest amongst fellow-citizens (Deuteronomy 23:19; Psalm 15:5; Nehemiah 5:1–13 etc.). These provisions would militate against the creation and use of credit as a durable form of money that stored its value long term. However, laws regulating the taking of collateral (Exodus 22:26; Deuteronomy 24:6, 10–13, 17) envisage the granting of short-term interest-free transactional credit.

While economists accept that high levels of inflation are

4 ‘Let me issue and control a nation’s money and I care not who writes the laws’ – Mayer Amschel Rothschild, founder of the Rothschild banking dynasty.

5 David Graeber, *Debt: The First 5,000 Years* (Melville House, 2011).

6 G. Brandon, *Crumbling Foundations* (Jubilee Centre, 2016, pp.6,7). <<https://www.jubilee-centre.org/s/Crumbling-Foundations-2016.pdf>>.

7 See also Prov. 11:1; 16:11; 20:10, 23.

damaging to the effective running of a monetary system, the circumscribing of credit acting as money by the interest ban and debt cancellation is unique to OT law.

Other biblical references relevant to the consideration of monetary arrangements include:

- The earliest recorded use of silver in an exchange is Abraham's purchase of Sarah's burial site (Genesis 23:16; see also Genesis 20:16). Precious metals (especially silver) were used in the early second millennium BC to facilitate trade.
- The use of precious metals in fixed weights is assumed, and legislated for, throughout the OT law (e.g. Leviticus 27:3, 6, 16; Numbers 18:16; Deuteronomy 22:19, 29). However, the use of any particular type of money is neither prescribed nor required.
- There are indications within the biblical text of long-term price stability over many centuries, when measured in silver.<sup>8</sup> For instance, Jesus was betrayed for roughly the same price, 30 pieces of silver (Matthew 26:15), for which Joseph was sold into slavery, and the price of a slave in the Mosaic period (Genesis 37:28 (20 shekels); Exodus 21:32 (30 shekels)). Also the price of the Potter's Field bought after Judas' betrayal (Matthew 27:7–10) is comparable to the price paid for it by Jeremiah (17 shekels), given the depressed land market at the time (Jeremiah 32:9; see also Zechariah 11:13).
- The model given for central government in Israel, in the form of the godly king, is one of limited power and ability to amass wealth (Deuteronomy 17:14–20) given concerns over the willingness of a despotic monarchy to centralise and abuse power (1 Samuel 8:10–18). No power was given to the king to regulate or impose a form of money on the population.<sup>9</sup>
- When questioned on the legitimacy of Rome's tax-raising power, Jesus drew a close connection between the acceptance of the political authority of a polity (through respecting its tax-raising powers) and the use of its currency (Matthew 22:15–22).
- In Revelation, John's vision portrays how the ability to transact is, or will be, weaponised against the people of God who refuse to take 'the mark of the Beast' (Revelation 13:16, 17).

Together, these laws and references outline criteria we can use when assessing monetary systems and innovations. Notably, a desirable monetary system is one that fosters

long-term price stability; is not effected through long-term, interest-bearing debt; and is not open to abuse by a centralised political institution to reinforce its power, wealth or control. Having set out these criteria, we can turn to assessing both the features and vulnerabilities of our current arrangements, as well as the innovations challenging them for monetary hegemony.

### How is money created in the existing fiat/bank-money system?

Since the breaking of the US dollar's link to gold in 1971 due to Vietnam War-induced inflation, and the accompanying fracturing of other currencies' fixed exchange rates to the dollar, most high-income countries have operated a monetary system whereby the state, via the central bank, issues unbacked fiat money (cash) and operates the clearing mechanism for transactions between clearing banks. These banks hold reserves at the central bank to facilitate the clearing process. Cash in circulation and banks' balances at the central bank constitute liabilities (debts) of government and are collectively known as 'base' or 'narrow' money.

However, the bulk of what is now used as money is deposits at banks and other credit institutions (drawn upon by cheques, debit cards or internet bank transfers) and borrowing rights from those institutions (through credit cards and overdrafts). The means and speed of making these transfers have proliferated and accelerated in the digital age but they all still ultimately entail entries on

an electronic ledger of a clearing bank, which then settles their net positions with other banks through the interbank settlement system. The total of bank deposits constitutes 'broad' money.

This money is created when banks lend it into existence and credit the borrower with a deposit (or drawing right) against the debt that they now hold. When borrowers, in aggregate, repay loans, deposits across the system shrink and the amount of broad money

falls. Banks cannot create loans ad infinitum because they need to expect repayment (and so won't lend to uncreditworthy borrowers) and because bank regulators require them to hold a minimum amount of capital (and liquid assets) against the loans they make.<sup>10</sup>

### The growing shortcomings of the fiat/bank-money system

Recent innovations in internet and mobile banking, as well as payment settlements, are increasing the speed and

Recent innovations in internet and mobile banking, as well as payment settlements, are increasing the speed and efficiency of the bank-money system.

<sup>8</sup> Commodity standards produce long-term price stability as newly-mined supplies tend to be limited and stabilising. If gold becomes more valuable, it becomes profitable to increase gold mining. However, such arrangements are vulnerable to technological innovations (that make mining easier) and discoveries of new supplies (such as the Spanish conquest of Latin America in the 16th century).

<sup>9</sup> Inspired by these OT restrictions on centralised power, post-Reformation Christian political theorists have generally favoured the dispersal of political and economic power as a bulwark against tyranny.

<sup>10</sup> See 'Money in the Modern Economy', in *Bank of England Quarterly Bulletin*, (Q1, 2014). <<https://www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2014/money-creation-in-the-modern-economy.pdf>>.

efficiency of the bank-money system. Smaller cheques can now be cleared through a mobile phone, the time and cost of sending money across borders has shrunk significantly, and the ability to make instant payments through phone apps has meant that emerging economies (notably India, China and Kenya) have largely dispensed with bricks-and-mortar bank branches. It is tempting just to hope that these incremental improvements in cost and convenience will continue. However, various flaws of the bank-money system mean that this path will be increasingly difficult to maintain.

First, the fundamental problem is that the money transferred is ultimately always a liability of a bank or financial intermediary, which holds limited liquid assets and is highly leveraged. Hence, the system only survives if these intermediaries retain the trust and confidence of their creditors – notably depositors. If this is lost, banks can quickly fail due to depositor ‘runs’ or the loss of access to wholesale funding markets. In such crises, rather than allow banks to fail and risk contagion, authorities bail out larger banks through blanket guarantees of deposits, subsidised loans, arranged mergers and capital injections. Unfortunately, banks have been made even more fragile by recent technological innovations. The speed of the failures of Silicon Valley Bank and Credit Suisse in Spring 2023 were accelerated by adverse reports on social media that triggered rapid withdrawals by corporate depositors, aided by digital platforms allowing instant transfers to competing banks.

These examples highlight the second major problem with the bank-money system. Since governments allow leveraged and illiquid banks to operate the payments system and create money, they are now implicitly liable for when those banks fail. This creates incentive problems for banks and their depositors, who are tempted to take speculative risks, believing that a bailout will occur if those risks materialise. But most Western governments’ balance sheets are rapidly deteriorating, due to low growth and aging populations. Hence, a future banking crisis could quickly morph into a fiscal crisis as governments struggle to borrow even more, thereby triggering either sharply elevated interest rates or a currency collapse.

Third, the bank-money system is endemically inflationary. This has been demonstrated over the century and more since fiat/bank-monies came off the gold standard in 1914, with the US dollar losing 97 per cent relative to consumer prices and the pound over 99 per cent.<sup>11</sup> In-built inflation is a feature, not a bug, of the bank-money system, for it could not survive a sustained period of falling prices, whereby the real burden of debts would increase and threaten the solvency of



indebted households, companies, banks and ultimately governments. Hence central banks do all they can to avoid prices actually falling.

Two bouts of inflation have followed the Global Financial Crisis. Initially, asset values (property, bonds and shares) soared due to record low policy rates and Quantitative Easing (QE) by central banks despite subdued retail inflation. The second bout was produced by the massive fiscal stimulus associated with lockdowns in 2020–21, which was largely or wholly paid for through further QE.<sup>12</sup> By financing money transfers to households, central banks dramatically increased the broad money supply and ignited elevated inflation. This policy error, combined with lockdown-induced supply chain disruption and worker shortages, the re-engineering of supply chains and expensive energy (due to costly ‘net zero’ policies) resulted in an inflationary spike and structurally higher future inflation.

Even so, inflation is often far higher in ‘Emerging Market’ economies where governments commonly resort to central bank money-printing to finance deficits.<sup>13</sup> In such circumstances, those holding cash or deposits lose significant value over a short period and so hold their savings in precious metals, jewellery or ‘hard’ currencies (usually US\$ or €). Economic activity is significantly impaired by unreliable price signals and the minimising of cash and bank deposit holdings.<sup>14</sup>

Fourth, the bank-money system is squeezing the role of cash<sup>15</sup> while government authorities and banks are

11 An ounce of gold was worth roughly US\$19 and £4 in 1914 and is now around US\$2,000 and £1,600 – 105 and 400 times increases respectively.

12 Indeed, the gross policy error of lockdowns was facilitated and enabled by QE.

13 Annual inflation is 318% in Venezuela, 208% in Lebanon, 138% in Argentina and 62% in Turkey (September 2023) < <https://www.tradingeconomics.com>>.

14 Countries currently operate 160 distinct currencies. Only a handful of these are widely accepted in other jurisdictions, resulting in significant transaction costs and payment delays to move value across currencies.

15 The maximum transaction allowed in cash in Greece is currently €500, with that in France, Italy, Spain and Portugal set at €1,000.

more willing to limit access to the payments system for political or religious dissenters. Many retailers have moved to accepting only digital payments meaning that soon a bank account will be indispensable to participate in society. Conversely, banks and payments providers are withdrawing facilities from customers or businesses that they object to on ideological grounds, and have included Christian charities and individuals in their bans for upholding orthodox beliefs on marriage and sexual ethics.<sup>16</sup> Governments have deployed covert financial sanctions on legal businesses that they wish to constrict,<sup>17</sup> while the Canadian government froze the bank accounts of those involved in, and donating to, the truckers' protest against vaccine mandates in early 2022.

Fifth, the bank-money system is fragile because each holds its own electronic ledger of deposits, loans and transactions. Such systems are vulnerable to coding errors, hacking, and sabotage that could corrupt or make inaccessible the ledger, while customers are increasingly vulnerable to scams.<sup>18</sup> External threats also include the risk of an electromagnetic pulse attack or solar flare wiping computer records, and the potential for quantum computing advances to render obsolete current encryption technology.

In summary, the bank-money system is innovating but increasingly vulnerable and endemically inflationary. Cash is vital to preserve access, anonymity and resilience but is being marginalised to cut costs and increase government surveillance.

## Cryptocurrencies

These concerns have prompted a push for alternative digital monies. The most influential of these was the creation of the Bitcoin (BTC) network initiated by the elusive 'Satoshi Nakamoto' following the publication of a personal White Paper in 2008.<sup>19</sup> This solved a technical problem in maintaining a digital public ledger of transactions on a blockchain to enable a viable digital payment system to be constructed and maintained over the internet in a distributed (decentralised) manner. This allows users to send and receive BTCs recorded on the public ledger without needing a third-party intermediary. Only 21 million BTCs will ever be created (or 'mined') with new supply halving every four years, making Bitcoin

akin to an electronic commodity standard with limited new supply.<sup>20</sup> Hence, if Bitcoin becomes widely used, there is theoretically no cap on how valuable a BTC can become relative to other bank-monies, whose supplies grow at around 6–7 per cent per annum.

This arrangement has many appealing features. The primary advantage is that the Bitcoin network is a peer-to-peer payments mechanism outside the control of private or central banks, or governments. Hence, BTCs are not vulnerable to the inflationary supply to which bank-money is prone and can act to preserve wealth in particularly inflation-prone countries.<sup>21</sup> A holder can store their BTCs in a 'cold' electronic wallet (which may only require a 12-word encryption key to be stored or memorised) thereby facilitating international transfers of BTCs – a feature that is of particular use in contexts (e.g. Iran) where dissidents need to make transfers without the knowledge of hostile authorities. The decentralised nature of the BTC ledger means that it is now simultaneously stored and updated across the globe on tens of thousands of independently-operated computers, thereby providing a resilient network with a publicly-available record of every transaction ever performed on the ledger.<sup>22</sup>

Nevertheless, Bitcoin faces a number of hurdles that slow its widespread adoption. Crucially, Bitcoin's value has been highly volatile relative to other bank-monies, restricting its usefulness as a store of value.<sup>23</sup> Consequently, making payments in BTC remains largely confined to niche uses, with only one country (El Salvador) declaring BTC as legal tender.

Other cryptocurrencies have sought to address some of these weaknesses or apply the blockchain concept in different contexts, but none has broken out of specialised applications into a mainstream alternative payments system. High-profile bankruptcies of crypto-exchanges (notably Mt. Gox (2014) and FTX (2022)) have highlighted dubious industry business practices and further set back crypto adoption. In response, 'stablecoins' have been developed to combine the digital transactional benefits of cryptocurrencies (albeit with a centralised ledger) but replace the soon-to-be fixed supply of BTCs with a reserve of assets that secure, and underpin the value of, the coin. These have primarily been backed by US\$ assets

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16 See P. S. Mills, 'Debunking the de-bankers' (Jubilee Centre, August 2023). <<https://www.jubilee-centre.org/blog/debunking-the-de-bankers>>.

17 Notably 'Operation Chokepoint' was the Obama administration's attempt to restrict gun-sellers' access to US banking facilities in 2013. Similar restrictions have recently been applied to some cryptocurrency operations.

18 There were three million cases of fraud in the UK in 2022, with a total of £1.2 billion stolen: UK Finance *Annual Fraud Report* (2023). <<https://www.ukfinance.org.uk/policy-and-guidance/reports-and-publications/annual-fraud-report-2023>>.

19 Satoshi Nakamoto, 2008, 'Bitcoin: A Peer-to-Peer Electronic Cash System', <<http://satoshinakamoto.me/bitcoin.pdf>>. The precise identity of the pseudonymous 'Satoshi Nakamoto' is yet to be established.

20 Around 19.5 million BTCs have already been mined, so the remaining new

supply available is limited. In contrast, roughly 1.5% of the existing stock of gold is mined each year.

21 Unsurprisingly, BTC usage is particularly high in Argentina, Turkey and Nigeria.

22 While specialist intermediaries can be used to conceal transactions, these can all ultimately be pierced if legal authorities have need. Although the BTC base layer's ability to process median-sized transactions is limited to 0.3–0.7 million per day, many more retail transactions are batched and processed on the BTC Lightning network.

23 A frequent allegation is that the maintenance of the Bitcoin network uses a disproportionate amount of electricity. In practice, BTC mining moves to jurisdictions where electricity is cheapest and often would otherwise be wasted. See L. Alden, *Broken Money* (Timestamp Press, 2023, pp.381–409).

(e.g. Tether (\$78 bn in issue), and USDC (\$51 bn in issue)) or gold (e.g. PAX Gold – \$0.6 bn in issue).

While cryptocurrencies and stablecoins are very recent developments, prone to speculative waves and some dubious industry practices, they offer potential solutions to some of the weaknesses of bank-monies (notably endemic inflation and cross-border payment hurdles). As such, they should be regulated as competing monies to address fraudulent practices, rather than restricted out of existence.

### Central Bank Digital Currencies

Over 100 countries' central banks are now working on creating their own digital currencies, with Nigeria and ten Caribbean nations being the first to launch schemes, and 21 countries (including China, Russia, India and Sweden) conducting trials.<sup>24</sup> Essentially, a CBDC entails citizens being offered a transactions account at their country's central bank with digital access to an electronic wallet.<sup>25</sup> These are not envisaged as being backed by any real asset (such as gold) although theoretically they could be. After an initial phase-in period, many proponents of CBDCs also envisage the withdrawal of cash, or its significant limitation.

There are a number of reasons why central banks and governments are pursuing CBDCs. They were initially prompted by the fear that either a successful cryptocurrency or a private corporation's digital token (e.g. Facebook's Libra) would disrupt their own fiat/bank-money arrangements. In addition, phasing out cash appeals to policymakers thwarted in their ability to take interest rates significantly negative in the 2010s. If cash was not a viable alternative, negative interest rates of two or more per cent could have been imposed on bank deposits to discourage saving. Policymakers are also tempted by the potential for 'programmable' CBDCs – that is, the discretion to alter features of the token to influence citizens' economic behaviour. For instance, to stimulate the economy, money credited to accounts could be time-limited – if not spent by a specified date, it would be cancelled. Alternatively, 'carbon limits' could be set on annual expenditure, thereby capping spending on certain goods or activities. In addition, limiting cash transactions would entail even greater information flowing directly to the central bank and government about nearly every transaction made, thereby restricting tax evasion. A universally-used CBDC embodies the dream of near total information and control for the social planner.

Central banks are complicit in overseeing a system of unfair weights and measures as the money they oversee is intended to diminish significantly in value over time.

However, these very reasons make CBDCs extraordinarily dangerous to the public, as the end-users of money. Primarily, CBDCs would entail a further concentration of power and information within the central bank that government could then freely access. Transaction data reveal not just what one is buying but also where and with whom. Whereas law enforcement and tax authorities currently need to justify accessing an individual's bank records, this layer of protection could easily be dispensed with under a CBDC. The central bank would own the ledger and economic privacy would effectively end. This information could also be used to track and persecute political opponents, journalists and dissenters through restrictions on their means of payment.

Another concern is that CBDC issuance and programmability would give policymakers tools to exercise significant power in shaping consumption and production patterns. If a run on private bank deposits resulted in a flight to CBDCs, funds would need to be lent back to the rescued banks, and the central bank would dictate the terms on which they were on-lent. As a result, the banking system could be transformed into something akin to that of the Soviet Union in which the central bank decided which borrowers received credit and on what terms. CBDCs would likely also be inherently inflationary as there would be no technical limit to how much could be issued, and governments would be tempted to cover their deficits through CBDC creation.

The introduction of a CBDC and elimination (or severe limitation) of cash would entail significant restrictions of economic freedom if the population did not trust the CBDC, as with Nigeria's eNaira currently. To force the use of a CBDC on reluctant citizens, the government would need to proscribe or limit alternative monies, including cryptocurrencies, physical gold, foreign currencies and even Amazon gift cards. Further restrictions on the use of cash would increase transaction costs for those currently without a bank account, the elderly, charities, religious institutions, as well as those begging or busking on the streets. A universal CBDC would further increase the risk of data breaches and vulnerabilities through the centralisation of the transactions ledger. Given these significant concerns, it is difficult to understand central banks' eagerness to pursue CBDCs without the motivations of protecting their power within the fiat/bank-money system and increasing the tools of control and surveillance.<sup>26</sup>

<sup>24</sup> <<https://www.atlanticcouncil.org/cbdctracker/>>.

<sup>25</sup> The focus of the following discussion is retail CBDCs. In parallel, there are proposals for a wholesale CBDC for use by clearing banks and payment systems. Such an innovation to facilitate interbank transfers should increase the speed and efficiency of domestic and international payments settlement

transfers and has far fewer systemic and social implications.

<sup>26</sup> The UK Treasury/Bank of England 2023 consultation on their 'Bitcoin' proposal failed to give a clear rationale as to why it was needed, thereby being characterised as 'a solution in search of a problem'.

## Implications for assessing current monetary trends and innovations

Given the earlier-mentioned biblical pointers on the design and context for the use of money, what implications can be drawn for assessing these monetary innovations? First, the tendency of the current system to be inherently inflationary is a major concern. Effectively, by targeting a rising (+2 per cent per annum) rather than stable price level, central banks are complicit in overseeing a system of unfair weights and measures as the money they oversee is intended to diminish significantly in value over time. Inflation tends to disadvantage the most vulnerable in society without the economic power or wherewithal to protect their incomes or wealth from erosion. These considerations point in favour of forms of money that feature general price stability over long periods.

Second, governments of high-income countries tend to have significant debts denominated in their own currencies and yet oversee (through their central banks) the price level and creation of base money (through QE) that erodes the real value of their debts. For a state to inflate away the real value of its debt constitutes a form of theft (cf. Psalm 37:21) and an abuse of power.

Third, while Christians are enjoined to obey God-ordained authorities (Romans 13:1–7; 1 Peter 2:13–17) subject to obeying the primacy of God's commands, the potential for both evil acts and costly mistakes is great as all rulers are fallen, flawed and operate with limited information. Hence, we should 'put our trust not in princes' (Psalm 118:9; 146:3) and advocate for limitations on, and dispersal of, centralised power. In the monetary context, this would argue for payments mechanisms that operate in a decentralised manner and limit central authorities' discretion to abrogate to themselves power, information and resources.

Fourth, the power to surveil, prohibit and direct electronic payments is a dangerous tool to place in the hands of banks, payments providers or governments in an increasingly politicised age. This power needs to be tightly regulated to apply only to criminal activity or commercial necessity. Giving any entity this power opens citizens to abuse and persecution, as is currently being seen with the Chinese 'social credit' mechanism. The stark warning of Revelation 13 is that 'principalities and powers' can/will use the exclusion of dissidents from the means of payment as a tool of persecution.

## How should Christians approach current monetary innovations?

Christians can engage with the process of monetary innovation through both advocacy of policies for the wider social good, motivated by love of neighbour, and how we arrange our own financial affairs as stewards before God.

With regard to the monetary innovations addressed above, concerns over abuse of power, potentially unlimited inflation, surveillance, control and concentration of operating risks would argue strongly against the introduction of retail CBDCs. Indeed, concerns over endemic inflation should go further than just opposing CBDCs. The current fiat/bank-money system needs to be reformed to facilitate the move to a stable price level. This would entail not just changing the central bank inflation target, but also reducing overall indebtedness to make long-term price stability viable. This can be encouraged by removing the corporate tax subsidy for debt, recapitalising the banks further and financing house purchase through equity-share arrangements.<sup>27</sup>

The ability to use cash needs to be protected from banks seeking to marginalise its use to reduce their own costs at the expense of the unbanked, the old and those on low incomes. The UK Treasury currently works to ensure bank branch closures do not constrain access to cash but may need to follow the example of some US states (including Massachusetts and New Jersey) that require retail businesses to accept cash. In addition, authorities should go further in ensuring that individuals, businesses or charities cannot be 'de-banked' because banks disapprove of their politics or religious persuasion. Access to a bank account is now akin to the need for basic utilities, such as water or electricity, so financial intermediaries should be required not to discriminate against customers for their views.

Finally, the principle of the dispersal of power points towards the fostering of alternative viable digital monies



<sup>27</sup> <<https://www.jubilee-centre.org/blog/equity-share-housing-finance-a-biblically-based-fix-for-the-crisis-of-housing-affordability>>.

as brakes on the inflationary abuse of the current system and to act as back-ups in case of banking system collapse. Hence, policymakers should facilitate the development of Bitcoin and commodity-backed stablecoins as viable payments systems and credible stores of value.

Approaching these questions when managing one's own household's monetary affairs can be daunting. In order for a Christian to further the above objectives (and heed the implied warnings) one could consider: consciously seeking to use cash to encourage its continuation; ensuring that investable savings are deployed in hedges against inflation (typically equities, property and commodities); exploring whether direct ownership of Bitcoin or a commodity-backed stablecoin may be appropriate as an alternative store of value; and using whatever political influence we have to express opposition to the introduction of retail CBDCs.

## Conclusion

We are fast approaching a hard fork in the road of monetary arrangements. While the current fiat/bank-money system is increasingly efficient in processing digital payments, its underpinnings are becoming ever more fragile. However, the alternative of retail CBDCs represents a dystopian extension of state power, while cryptocurrencies have not yet become stable enough to attract widespread interest as a store of value. The path each society chooses will rest on its faith in centralised power. If the track record of unbacked fiat currencies is anything to go by, paths that limit the potential for the abuse of centralised power are the wiser options.



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## Glossary

**Bitcoin:** the first true peer-to-peer digital currency, using a decentralised blockchain to transfer value directly between users online, without requiring an intermediary.

**Blockchain:** a shared and transparent ledger of transactions maintained collectively by a network of computers.

**Central Bank Digital Currency (CBDC):** a digital currency and ledger operated directly on a central bank balance sheet, rather than being intermediated through a private bank or other credit institution.

**Cryptocurrency:** digital money based on a blockchain.

**Clearing bank:** a commercial bank that is a member of a network allowed to process interbank transactions.

**Commodity money:** money which has value because it is made from, or consists of, a commodity that has intrinsic worth – typically precious metals, but also grain, salt, tobacco, cowrie shells etc.

**Fiat money:** money that is created by government decree and given value and use by law, in contrast to the intrinsic value of commodity money.

**Ledger:** a record of debits and credits on a balance sheet. In a digital payment system, it is the record kept of transactions and can be centralised onto one system, or decentralised across many.

**Leverage:** the degree to which debt has been used to fund acquired assets. A bank's leverage is measured by their debt:equity ratio.

**Liquid assets:** assets that are stable in value and can be transacted quickly, in size, with limited loss of value.

**Quantitative Easing (QE):** the practice of central banks buying assets (usually government bonds) to increase the money supply and reduce long-term interest rates.

**Quantitative Tightening (QT)** is the reversal of this process whereby assets are sold or allowed to mature without replacement.

**Seigniorage:** the profit made by the issuer of a currency arising from the difference between its face value and its cost of production.

**Stablecoin:** a cryptocurrency that is backed by fiat currency-denominated assets or commodities.

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