

LAW AND ECONOMICS YEARLY REVIEW

ISSUES ON FINANCIAL
MARKET
REGULATION,
BUSINESS
DEVELOPMENT AND
GOVERNMENT'S
POLICIES ON
GLOBALIZATION

Editors

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Mission

The “Law and Economics Yearly Review” is an academic journal to promote a legal and economic debate. It is published twice annually (Part I and Part II), by the Fondazione Gerardo Capriglione ETS (an organization aimed to promote and develop the research activity on financial regulation) in association with Queen Mary University of London. The journal faces questions about development issues and other several matters related to the international context, originated by globalization. Delays in political actions, limits of certain Government’s policies, business development constraints and the “sovereign debt crisis” are some aims of our studies. The global financial and economic crisis is analysed in its controversial perspectives; the same approach qualifies the research of possible remedies to override this period of progressive capitalism’s turbulences and to promote a sustainable retrieval.

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COMMERCIAL BANKING IN TRANSITION

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CRITICAL ISSUES AND CHALLENGES AHEAD

SPECIAL ISSUE OF LAW & ECONOMICS YEARLY REVIEW

EDITED BY

MARCO BODELLINI AND VALERIO LEMMA

CONTENTS

Presentation of the special issue.....	1
---	----------

Marco Bodellini – Valerio Lemma

Commercial banking in transition: a cross country analysis.....	5
--	----------

Rosa M. Lastra

Fintech and the impact on the corporate governance of commercial banks.....	12
--	-----------

Valerio Lemma

Monetary devolution and the political economy of central bank digital currencies... ..	37
---	-----------

Leonidas Zelmanovitz - Bruno Meyerhof Salama

Environmental sustainability, business and banking: making the case for sensible regulation.....	67
---	-----------

Marco Bodellini

Navigating the complexities: challenges for banks in understanding and adapting to EU sustainability legislation.....	101
--	------------

Lela Mélon

Banking business and appealing myths: a critical review of fintech as a panacea for competition concerns.....	126
--	------------

Gabriella Gimigliano

International sanctions and geopolitical tensions: the impact on commercial banking...	146
---	------------

Christos Hadjiemmanuil

Conflict and economic sanctions and the impact on bank resilience and stability: a primer...	175
---	------------

Dalvinder Singh

PRESENTATION OF THE SPECIAL ISSUE

Marco Bodellini * – Valerio Lemma **

We are very pleased to collect and present, in this special issue of Law and Economics Yearly Review, the papers – written by highly regarded experts and scholars – which were discussed at the conference ‘*Commercial Banking in Transition - Critical Issues and Challenges Ahead*’ held, on 10 April 2024, at the Bank of England in London, during which the book ‘*Commercial Banking in Transition – A Cross-Country Analysis*’ co-edited by Marco Bodellini, Gabriella Gimigliano and Dalvinder Singh was firstly launched.

In this regard we thank professor Francesco Capriglione for publishing this special issue in his journal, which represents an important venue to discuss law and economics-related subjects in Europe as it aims at involving scholars from different countries, by treasuring their expertise in order to achieve the goal of fostering the academic debate on the role of «law» in a global economic system.

Due to a number of exogenous factors, traditional commercial banking – which entails collecting deposits from the public and extending loans – is transitioning toward new business models while trying to adapt to a novel external environment where credit institutions are still expected to provide a meaningful contribution to economic growth and social development.

In dealing with these issues, the papers collected, relying upon law and economics analysis, look into concepts such as wealth maximisation, rational

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behaviour, and market equilibrium under perfect competition and evolving environment(s). Accordingly, they employ both the Chicago Law and Economics approach and the Posners' Economic Analysis of Law. Indeed, starting with the analysis of real world – instead of a desired standard model set forth by the policy maker – the papers take into account economic and, more specifically, market failures, building on fundamental considerations, such as how to regulate markets in which innovation is becoming a key force; the efficiency of regulation in case of disintermediation; and the role of public authorities in the promotion of innovation and efficiency.

As the role of banks is driven by their monetary power (manifesting itself by collecting deposits, multiplying their value and granting credit), the research conducted in the papers starts by looking at the effects of creating central bank digital currencies. Considering CBDCs as a form of “monetary devolution”, the money creation power moves back, at least in part, from commercial banks to the state through the central bank. Hence, the need exists for considering a design of CBDCs that would preserve the current balance between private and public money, and then give a partially new role to commercial banks.

On the other hand, the creation of CBDCs along with other technological innovations impact on the corporate governance of commercial banks. Accordingly, the papers recognize the importance of exploring the effects of such innovations on the organizational structure of banks and the liability regime of directors and auditors. Exploring the developments resulting from the use of machine learning, big data computation, artificial intelligence, innovative products, and cryptocurrencies, the papers assess the adequacy of the current forms of public intervention in ensuring the sound and safe management of banking and financial institutions.

Relatedly, attention is paid also to the relationship between innovations and competition, as the EU legal framework governing commercial banks was not

created to regulate credit institutions that leverage upon the use of outsourcing. In this respect, specific doubts concern the residual social function of commercial banks, as innovations can enhance their efficiency, but they can also change the methodological approach to the creditworthiness assessment and to the whole commercial banking business model, with outcomes that might be difficult to precisely predict.

All of the above interplays with a significant paradigm shift propelled by global sustainability objectives as set forth by the United Nations Sustainable Development Goals and other crucial international initiatives. As a stringent set of sustainability-related provisions is reshaping commercial banking, regulators could and should support credit institutions in facing these existential changes. Indeed, environmental sustainability and the fight against climate change are key challenges of the current century, requiring a structural paradigm shift concerning the way businesses do business. Banks, in turn, should be aware that for a paradigm change of that sort to take place, a huge amount of financial resources will be needed: while public money has been and will be mobilised, the big chunk of capital needs to be provided through private investments. This supports the consideration that commercial banks still have a key role to play, but they and their supervisors need to quickly adapt.

In this context, it is worth considering that international sanctions impact on both commercial banking and the configuration of the market for capital. This issue has come to the fore following Russia's invasion of Ukraine in February 2022, and they have already had the effect of disrupting cross-border financial links and networks. However, the impact of international sanctions does not stop at Russia's borders, as the active use of sanctions and other tools of political coercion and geo-economic decoupling pose significant risks for bankers.

It is also important to stress that a symbiotic relationship between commercial banking, central banking and policy making is emerging. Hence, the EU

regulator is called to focus on the areas of convergence and divergence across jurisdictions and to mitigate the risk that innovation can alter the current proper functioning of the internal market for capital.

In conclusion, the contents of the papers and the deep knowledge of the authors in the explored areas have fostered a debate in which the interdisciplinary approach between economics and law has led to interesting results that push the research on banking and banking regulation a step ahead.

Considering the results, we believe that that the reference points set forth by the authors may raise the interest for going even further in the analysis of the new models of banking and finance, taking into account the possible evolution in the role of EU financial regulation and supervision from a global perspective.

MONETARY DEVOLUTION AND THE POLITICAL ECONOMY OF CENTRAL BANK DIGITAL CURRENCIES

Leonidas Zelmanovitz * – Bruno Meyerhof Salama **

ABSTRACT: *Creating central bank digital currencies, or CBDCs, can be considered a form of “monetary devolution.” The devolution lies in the power to create money shifted, at least in part, from commercial banks to the state. This is particularly clear if the CBDCs have cash properties and are made available to the public. We discuss the institutional incentives of digital currencies in general and monetary devolution in the United States in particular. Next, we outline an alternative that incorporates the technological edge provided by CBDCs. This alternative would be the creation of wholesale CBDCs to serve as the monetary base for settling retail payments with stablecoins. Designed as such, CBDCs could preserve the current balance between private and public money. Nonetheless, this approach faces significant obstacles due to the prevalence of fiscal considerations.*

SUMMARY: 1. Introduction. – 2. Value judgement on Bitcoin. – 2.1. Bitcoin security. – 2.2. Volatility and uses of bitcoin. – 2.3. Cost. – 2.4. Grounding Theory in Reality. – 2.5. Fiscal Considerations Prevail. – 2.6. Applying the regression theorem after bitcoin. – 3. What Would “the Treasury View” of Libra Be? – 3.1. The Treasury View. – 3.2. Monetary Prerogatives. – 3.3. Management of Capital Flows. – 3.4. Fractional Reserves. – 3.5. Stablecoin Issuers as Regulated Banks. – 4. What can go wrong with Bitcoin, Libra and other cryptocurrencies? – 5. Calls for a Central Bank Digital Currency in the US. – 6.

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This article is an expanded version of our chapter titled “Central Bank Digital Currency and the Agenda of Monetary Devolution,” originally published in *Commercial Banking in Transition* (edited by Marco Bodellini, Gabriella Gimigliano, and Dalvinder Singh, American Publisher Palgrave Springer, 2024). It incorporates some of the comments provided during our presentation of that chapter at the Bank of England on April 10, 2024, for which we are grateful.

The agenda of monetary devolution. – 6.1. Sovereign money and the fragility of private money. – 6.2. Devolution of monetary powers as a response. – 6.3. The mechanics. – 6.4. Fiscal Mandates Undermine Central Bank Independence. – 7. The choice at hand. – 8. Conclusion.

1. The political economy of digital currencies is a dynamic field profoundly influenced by the emergence of cryptocurrencies such as Bitcoin and proposals for creating stablecoins like Libra/Diem. Such digital currencies challenge traditional state-controlled monetary systems by offering alternative means of transactions that can bypass governmental oversight and control. The proposed shift toward decentralization and reduced state monetary power has significant implications, the most relevant of which was to prompt a reaction from governments and financial authorities worldwide.

Central Bank Digital Currencies (CBDCs) are pivotal in this ongoing monetary counter-revolution. Positioned at the intersection of innovation and regulation, CBDCs are proposed by states as a means to reassert control over the monetary systems. This response is not merely about introducing new technology but is a strategic endeavor to reclaim the authority that the widespread adoption of private digital currencies could dilute. By incorporating retail and wholesale digital instruments that mimic the properties of cash and are accessible to the general public, CBDCs aim to balance the technological advancements seen in the private sector with the regulatory and fiscal responsibilities of the state.

Our exploration begins with an in-depth look at how cryptocurrencies like Bitcoin have reshaped perceptions of monetary sovereignty and continue to influence the design and function of digital currencies. We then extend our discussion to the broader spectrum of digital currencies, delving into security, volatility, and the economic costs associated with their use.

The subsequent sections are structured as follows: Section 2 evaluates Bitcoin's role in diminishing state monetary power, and Section 3 examines Libra's challenges

and potential in the evolving financial landscape. Section 4 addresses broader cryptocurrency concerns, while Section 5 discusses the motivations behind and the critical examination of CBDCs. Section 6 presents our argument that CBDCs are a case of monetary devolution. Finally, Section 7 contemplates the future of banking and monetary policy in light of potential CBDC implementation, assessing implications for financial stability, sovereignty, and innovation.

2. Before delving into the intricacies of Central Bank Digital Currencies (CBDCs), it is crucial to understand the broader context of digital currencies, starting with Bitcoin. As the first and most well-known cryptocurrency, Bitcoin introduces several pivotal economic and political dynamics that mirror the challenges and opportunities posed by CBDCs. This section evaluates Bitcoin's impact on monetary sovereignty, its role as an alternative to traditional currency systems, and its implications for state-controlled monetary systems. These discussions lay the groundwork for appreciating the transformative potential of CBDCs, both in terms of technology and policy.

As a starting point, we can ask: *Is Bitcoin a good or a bad thing?* The answer depends on how we view the role and control of currency by the state versus the individual. Bitcoin's utility is providing an alternative to sovereign money, enabling users to evade government controls. This can be seen as either a positive or a negative, depending on one's perspective on monetary sovereignty. On the one hand, Bitcoin can be viewed positively if the weakening of state control over money is considered beneficial, especially in regions where the rule of law is inconsistently applied, or monetary policy is detrimental to economic stability. On the other hand, Bitcoin's ability to facilitate illegal activities, such as evading sanctions or funding criminal enterprises, undoubtedly undermines the rule of law. Additionally, the issue of purchasing power stability comes into play; Bitcoin might offer a more stable alternative in jurisdictions where the local currency performs poorly. This dichotomy

presents a complex picture of Bitcoin's role in local and global economies.

2.1. But is Bitcoin able to deliver such protection? Paraphrasing Satoshi Nakamoto, "the network provides a distributed ledger to certify the first transaction done with the private key." That is the strength and the weakness of bitcoin since it requires the network to exist. How about if the set of incentives are no longer sufficient to keep the network operating? The moment you stop "mining" Bitcoin (the moment that recording the transactions ceases to be profitable), the network ceases to exist if the price that users are willing to pay to have a transaction certified may become uncompetitive. What about mining done under jurisdictions in which the government may be interested in forcing the miners to do not process some blockchains? 49% of mining is currently done in the US, a jurisdiction that has not been shy in using the monetary infrastructure for political purposes.

2.2. Furthermore, the stability of prices is the most important feature of a monetary system, given its function. If it is conceded that Bitcoin cannot provide that, then Bitcoin is subpar money. In order to keep price stability, you need a supply of money that increases as production increases. A fixed supply of money or one that increases at a lower rate than production is a recipe for deflation, not for stability. The cost of the base money creates an incentive for its substitution. Interesting to question why claims on bitcoin have not developed yet. A possible explanation is that the use of wallets managed by intermediary exchanges (that is, to accept claims on Bitcoins instead of clearing transactions directly on the blockchains) defeats the purpose of getting privacy by the use of bitcoin. Given the most important function money performs, the most important feature money must have it is stability of price value. That is better achieve with flexible endogenous money. Bitcoin is the opposite of that (not flexible and not endogenous).

2.3. Using Bitcoin as a medium of exchange entails significant consumption of real resources, particularly energy, compared to fiat money which is less resource-intensive. The economic implications of Bitcoin's high energy cost raise concerns about its efficiency as a currency. Users' preference for Bitcoin, despite its higher resource costs, is often driven by the benefits of privacy and decentralization it offers. However, objectively, if there are viable monetary alternatives that fulfill similar functions without the high resource costs, it becomes difficult to justify the extensive use of energy that Bitcoin requires. Therefore, from an economic and environmental standpoint, it is crucial to evaluate and consider more sustainable monetary systems that balance utility with resource efficiency.

2.4. While sovereign states exist, they will not easily relinquish their monetary prerogatives, although these may be constrained during peacetime. Bitcoin's expansion is tolerated only under favorable conditions, revealing the limits of its impact on state-controlled monetary systems.

The real trade-off involves evaluating whether the presence of Bitcoin, potentially weakening the U.S. government's military and political strength, results in a better or worse outcome for society. If stability in price and quantity were the sole concerns, Bitcoin could potentially serve as "base money," with competing commercial banks issuing money substitutes denominated in Bitcoin. However, this scenario is unrealized because the primary appeal of Bitcoin is its ability to offer anonymity, a feature not compatible with the transparency required in traditional banking systems.

Moreover, Bitcoin's role in evading political sanctions is clear and significant. It challenges the strength of sovereign currencies that underpin the economies of Western democracies. Consequently, the widespread adoption of Bitcoin might actually impede human flourishing by undermining the financial systems that support

stable, democratic societies."

2.5. The fiscal dominance hypothesis posits that fiscal policy can often override monetary policy, particularly when government fiscal stability is threatened. This framework helps explain why a Bitcoin-based monetary system is unlikely to be implemented by governments. Central banks use monetary policy tools such as currency issuance and interest rate adjustments to manage economic cycles and stabilize markets—capabilities that are incompatible with Bitcoin's fixed supply and decentralized nature.

Moreover, Bitcoin challenges traditional revenue mechanisms like seigniorage—the profit made from issuing currency—which is crucial for many governments. Additionally, Bitcoin's ability to circumvent capital controls can exacerbate financial crises, increasing capital flight and undermining national economic stabilization efforts. The global and borderless nature of Bitcoin also introduces complexities beyond any single government's control, posing significant challenges to traditional fiscal and monetary governance. As such, governments are likely to remain cautious about integrating Bitcoin or similar cryptocurrencies into their monetary systems, prioritizing fiscal stability over the decentralization benefits of digital currencies.

2.6. As we explore the evolving landscape of digital currencies and their implications for monetary sovereignty, it becomes essential to understand the underlying principles that govern their value. The "Regression Theorem," an application of the subjective theory of value, suggests that the value of a monetary medium stems from the utility it provides. This principle is crucial in analyzing digital currencies like Bitcoin, which lack physical backing yet gain widespread acceptance and utility, such as being used to pay taxes. The absence of a need for physical

commodity backing, like gold, highlights the modern shift in how value is perceived and established.

In the specific context of Bitcoin, this utility extends to the ease of circumventing capital controls and conducting transactions with a level of anonymity unparalleled by traditional currencies. This aspect of Bitcoin's utility has led to a unique valuation by its holders, underscoring the Regression Theorem. Bitcoin's value arises not just from its potential as an investment but also from its functional use in providing financial autonomy and privacy. This demonstrates a key transition in the perception of money within our discussion on monetary devolution, where digital currencies challenge traditional state-controlled monetary systems by offering alternative means of transactions that can operate outside conventional regulatory frameworks.

3. Following the analysis of Bitcoin, it is essential to examine other forms of digital currencies, such as Libra, proposed by private entities like Facebook. This section explores the potential responses from national treasuries and central banks to private digital currencies, which challenge traditional monetary mechanisms. Understanding the “Treasury view” helps illustrate the complexities and regulatory hurdles digital currencies face, providing a clearer perspective on the institutional resistance to integrating such technologies into the existing financial systems. This analysis is key to assessing the feasibility and implications of CBDCs as they interact with private digital currencies in a competitive monetary landscape.

In a White Paper released on June 2019 by Facebook and its associates describes the Libra, a new cryptocurrency they were planning to launch some time in 2020. Judging from the white paper, they hoped to have designed a mechanism that, by overcoming the problems facing all previous forms of cryptocurrency, could become a generally accepted medium of exchange on the Internet worldwide. The intent with the Libra was to create a privately issued currency that would be backed

by a basket of hard currencies issued by major central banks. What the plan really does is make one wonder how much thought they gave to: 1) the nature of money, and 2) how their creation fits within existing constraints. Not enough—or so it seems at first glance.

3.1. As a way to indicate skepticism about the capacity of Facebook and company to achieve these goals, in a piece posted on Law & Liberty in July 2019, one of us contrasted them with “the Treasury view,” that is, the responses to Libra that are likely from the civil servants and politicians in charge of exercising the monetary prerogatives of the U.S. government. The “Treasury view” entails recognizing that, in order for the state to protect the life and property of its citizens, it must be able to use force— either externally, through the armed forces, or domestically, through the police.

3.2. Monetary prerogatives give the state the capacity to procure stocks of goods beyond the limits of its taxing base at any given time, either by borrowing or, in extremis, by inflating the currency.

Notwithstanding the fact that the monetary prerogatives (issuing money and regulating finances) have been applied to uses other than war-finance, that is the original reason for the national state to monopolize them, and that reason to hold those prerogatives still remains.

3.3. Before addressing Libra’s relation to these existing arrangements, let us talk about one of the derivative applications of the government’s monetary prerogatives: the management of capital flows.

First, let us assume the validity of the “impossible trinity” as proposed by the Mundell-Fleming Trilemma, which is that a country cannot simultaneously have a fixed

exchange rate, monetary discretion, and free international flows of capital.

Next, let us agree with Facebook and its partners that “global, open, instant, and low-cost movement of money will create immense economic opportunity and more commerce across the world.” However, something needs to give.

It is not realistic to assume that you will be able to create a “global currency” that will allow “open, instant, and low-cost movement of money” around the world when this would infringe with impunity on the monetary prerogatives of those countries who wish to control their own money supply and at the same time keep their foreign exchange rate fixed.

Another relevant activity performed by a central bank, as mainly responsible for the exercise of the sovereign’s monetary prerogatives, is its provision of liquidity (as lender of last resort) to financial institutions issuing claims denominated in the currency the central bank issues.

3.4. The fact that no single Libra would be minted without the backing of a corresponding reserve in hard currency (as happens with a currency board) does not eliminate the problem that claims denominated in Libras may be issued. Were Facebook and its partners prepared to forbid the nodes in their network, such as the managers of digital wallets, from opening credit in Libras to their customers?

3.5. Alternatively, would Facebook and its partners accept being regulated as financial institutions by the U.S. government in order to benefit from its umbrella? If so, from where will come the cost reductions they are hoping to realize in comparison with regulated banks? The main impediment, though, remains the question of the state’s monetary prerogatives as an instrument for financing defense. Anything that would reduce the capacity of the U.S. government to float its debt is a security risk. I do not think that reducing the floating of U.S. dollars, and lessening the dollar’s role as

the reserve currency of the world—which the creation of a system like the Libra would do—would be acceptable to those holding “the Treasury view.”

4. For investors, what can go wrong with cryptocurrencies? In regular times, not much. First, the brokerage of crypto-assets is something new, and neither a body of self-regulating norms nor regulation have evolved yet. In short, investors can be defrauded, harmed, hacked or swindled.

Second, crypto-assets price can float abruptly. Investors may lose (but also gain) fortunes. In theory, stablecoins minimize this risk. But what if normality doesn't hold? To answer that, first we should consider that there is a sharp difference between what crypto-assets are today, and what they may become. In the US, there are online sales shops that accept payment in bitcoin. Cryptocurrencies are also used for some daily operations in countries undergoing monetary instability. But even in these places, ordinary payments with cryptocurrencies are still uncommon.

This is very different from what cryptocurrencies enthusiasts consider “success”. Theirs is a vision where e-wallets, cryptos and other forms of digital money have been completely normalized. The banking model as we know it today may or may not change drastically, because entrants in the payment arena may operate similarly to banks. One of the characteristics of this futuristic world dreamed by crypto-enthusiasts is that governments would have a hard time stimulating the economy with monetary policy.

Nowadays, to face low activity cycles, governments issue money and buy bonds. This causes a fall in bond yields, driving down interests, stimulating consumption and investment. It can only work if savings are kept in the national, fiat currency. If savings are kept in crypto-assets, the monetary impulse given by the government does not do the trick, because it does not change relative prices in the economy. To be sure, hindering government from doing monetary interventions has its advantages; just do

not expect central bankers to see things that way.

So, under severe pressure, what could governments do? History helps us here. In 1933, during the “abnormal” times of the Great Depression, president Roosevelt forbade people from keeping gold.¹ The decree determined that all gold should be sold to the government at a predetermined price. Roosevelt’s strategy was to push aggregate demand, punish savers and force people to spend so as to inflate prices and stop the deflation cycle. It was an extreme measure, of debatable efficacy and employed during a severe crisis. This historical example illustrates well the kind of problem that can happen outside of economic normalcy. Fast forward and place yourself in the future where cryptocurrencies have “succeeded,” savings are kept in cryptos, especially in Bitcoins, the “synthetic gold,” and prices are not denominated in fiat currency. Suppose there is an economic depression for whatever reason. Could a government put in place a measure similar to that of the Great Depression?

A good question is whether digital confiscation is even possible. For instance, in the case of Bitcoin, all that is needed to trade is a digital wallet and internet access. If transactions are forbidden in one country, a simple VPN will allow international operations. So killing Bitcoin may be impossible, but that does not mean that a Bitcoin prohibition would be inconsequential. If crypto operations became less attractive, their value could plummet. Would people then migrate back to fiat? This is a little tricky. Moneys are not all created equal, and neither are the governments that create them. If a crypto prohibition were tried by the government of a developing country, odds are it would not work. Developing countries governments tend to be overall weaker and to lack popular support.

The story is very different in developed countries. In the latter, governments are stronger and their actions can be more effective. Recent initiatives by the Chinese government to close bitcoin brokerages and prohibit ICOs (Initial Coin Offerings) at

¹ See Sebastián Edwards’ *American Default*.

least demonstrate the ability of government to change the rules of the game when needed. Of course, not every cryptocurrency is the same. If a cryptocurrency is run by a centralized system, such as in the case of Libra, the government stands to have a much greater chance to effectively regulate, control or ban the crypto. To illustrate, Congress sent Facebook a letter requiring the suspension of the Libra project. If Congress had instead wanted to suspend Bitcoin, there would simply be no one to even address the letter.

Another relevant aspect that conditions government efficacy would be the extent of private adoption of cryptos. A company such as Uber offers a relevant benchmark. In some places, Uber services have become so ingrained that makes it impossible for governments to reinstate the rules that had once favored taxi drivers. The lesson is that beyond a certain point, a cryptocurrency can become too big to ban.

5. Calls for the Federal Reserve (Fed) to adopt a Central Bank Digital Currency (CBDC) that the public can use at large – or “retail” CBDCs – have become common in the United States. The idea first gained political attention in 2019 after the release of a white paper by Facebook proposing the creation of a stablecoin called *Libra* (subsequently rebranded as *Diem* before the project was discontinued). Later, in the context of the response to the COVID crisis, several proposals were introduced in the U.S. Congress for creating “Digital Dollars” and “FedAccounts.” In parallel, the Federal Reserve Bank of Boston partnered with the *Digital Currency Initiative* at the Massachusetts Institute of Technology to gain a hands-on understanding of a CBDC’s technical challenges and opportunities. Despite occasional pushback from the commercial banking industry² and even from within the Fed,³ CBDCs increasingly look

² See e.g. G. Baer, Central Bank Digital Currencies: Costs, Benefits and Major Implications for the U.S. Economic System, Bank Policy Institute, Staff Working Paper.

³ R. K. Quarles, Parachute Pants and Central Bank Money, June 28, 2021, Speech delivered at the 113th Annual Utah Bankers Association Convention, Sun Valley, Idaho.

like a question of “when,” not of “if.”⁴

And yet, create a CBDC with what purpose?

The question is daunting, and there is no shortage of voices saying that CBDCs are *a solution looking to a problem*. Not that there aren’t justifications: a Fed-issued digital currency is said to be necessary to secure American financial dominance, particularly in light of the impending coming about of China’s digital renminbi; to improve monetary policy, particularly in the implementation of stimulative measures; to promote financial inclusion or to address longstanding economic inequalities; to help spur innovation in ways that the current system cannot; and to avoid fragmenting liquidity or to allow the United States to compete with private-sector money substitutes, specially stablecoins.

Some of these contentions rest on feebleness grounds than others. For example, the idea that a CBDC is needed to increase financial inclusion begs the question of why not using instead more straightforward solutions that rely on basic commercial accounts, like the FedNow or the “Bank On” accounts initiative promoted by the Fed, or other solutions that have a proven track record, such as those involving telecommunication companies in Africa or payment platforms such as Brazil’s PIX.⁵ Similarly, the idea that a CBDC is needed to preserve the international status of the US Dollar seems to elevate form over substance and to heavily discount both the strengths of the US Dollar – the size of the US economy, the depth of its financial markets, the absence of foreign exchange controls in the US, the country’s international military presence, inertia, and so on – as well as the US Dollars vulnerabilities – the US fiscal imbalances and internal political divisions, the damage caused by the use of the Dollar to sanction nations in political disfavor, and, of course, the ascent of China.

⁴ Financial Times, June 23, 2021. CBDCs now seem a matter of when not if.

⁵ A. Duarte et al., Central Banks, the Monetary System and Public Payment Infrastructures: Lessons from Brazil’s Pix, BIS BULLETIN NO. 52 (Mar. 23, 2022).

Moreover, it is not inconceivable that condoning (instead of opposing) the technological innovation housed within a CBDC could, help spur innovation in ways that are not entirely foreseeable. In any case, inefficiencies of commercial banking as it stands today should not be ignored. Even in the best case, of course, adopting CBDCs is not risk-free. Damage to privacy is a concern that is often remembered (since retail CBDCs can be a tool for the government to track people's monetary outlays directly). Moreover, cyber-security and (especially in the case of retail FedAccounts) administrability figure prominently.

Discussing CBDCs from the perspective of tradeoffs, that is, of pros and cons, is, however, an incomplete enterprise. The risk is that of concealing the political economy that underpins the enterprise of money creation and money regulation. Once we turn to the political economy of money – or perhaps, to the *Law and Macroeconomics* of money –⁶, a more fundamental interpretation of the creation of CBDCs can be formulated, one that finds a unified meaning in the myriad of policy goals and rationales that are enlisted to support their creation: retail CBDCs represent yet another step towards the devolution of monetary powers from commercial banks to the state. They are, to put it bluntly, a fiscal and monetary tool and not simply a strategy to reduce transaction costs.

We find the agenda of monetary devolution in that retail CBDCs displace fractional reserve commercial banking and private money in favor of sovereign money. At the same time, as we explain, there is an alternative to use the technological edge provided by CBDCs without going down the road of monetary devolution. To visualize it, we must let go of the idea of adopting retail CBDCs and focus instead on a CBDC available only to intermediaries. This wholesale CBDC, sometimes called wCBDC, could ground the transition to a crypto-based monetary system where stablecoin issuers

⁶ L. Zelmanovitz and B. Meyerhof Salama, *LawMacro and the Schism in Law and Economics*. *Law and Liberty*, 2020, available at <https://lawliberty.org/how-money-could-revive-law-and-economics/>.

would adapt money creation to market needs, complementing and perhaps eventually replacing on-demand deposits. CBDCs would then be used as base money to settle transactions between the stablecoin issuers. The result could be one where the United States improves the technological footing of its banking and financial system without running into the problems of capital misallocation that inevitably come about when endogenous money cedes room to sovereign money.

The fiscal implications of CBDCs, however, mean that the push for monetary devolution – that is, the push for the creation of retail CBDCs and FedAccounts – does not come mainly from the attraction of the new technologies underlying CBDCs. Its root cause lies elsewhere, especially in the structural deficits of the United States Treasury. These structural deficits place the Treasury in a position where it is constantly seeking additional buyers of government debt – preferably at negative real rates. Retail CBDCs are then appealing precisely because they increase the ability of the government both to create inflation (engineering the negative interest rates needed to reduce the public debt) and to use such CBDCs to make up for the decreased demand for Treasuries that can come when real interests are negative.

6. When we first wrote about the prospects for the adoption of retail CBDCs in the United States, we found that the devolution of monetary powers to the state was CBDCs’ “hidden agenda”.⁷ This agenda is now increasingly visible.

The motivations behind the push for sovereign money are many. To refer to only some of them, ESG represents a call for the government to step in to finance the shift to a green economy; international geopolitical competition with China and the outburst of the COVID pandemic have led to calls for industrial policy; political

⁷ See e.g. Morgan Ricks’ testimony before the United States House of Representatives Committee on Financial Services Task Force on Financial Technology June 11, 2020. Available online at: <https://www.congress.gov/116/meeting/house/110778/witnesses/HHRG-116-BA00-Wstate-RicksM-20200611.pdf>

grievances animate calls for the incorporation of state-owned banks; and, last but not least, the deterioration of the United States fiscal situation generates pressure for greater financial repression to facilitate placement of public debt. These and other considerations explain why the base case for the adoption of retail CBDCs in the United States continues to be one of devolution of monetary powers to the state to enable greater financial repression – that is, political allocation of money and credit – and monetary financing of the Treasury.

To see why, the starting point is to understand that CBDCs are a form of sovereign money. At its core, a CBDC is a digital payment instrument that is a direct liability of the Fed. Like currency and reserve balances, it would be part of the monetary base. Moreover, if available to the public, CBDCs would have the same legal tender privileges granted to cash and be part of the money supply. But unlike currency, a CBDC can only exist in electronic form. The specific electronic form would depend on whether the CBDC is created as a “token” or as an “account.” Electronic tokens are designed to mimic paper money. They are like electronic pre-paid debit cards or gift cards in that they are not connected to an account relationship between the depository bank and the token holder. Depending on the institutional design that may be chosen, this depository entity could be the Fed or any other digital wallet provider.

Account-based CBDCs can be thought of as universal central bank accounts. They are designed to give retail customers access to online bank accounts directly with the Fed. Like electronic tokens – but unlike bank deposits or e-money stored in prepaid cards – these accounts are central bank liabilities. They are reserve balances held at the Fed, except that they would be available to everyone and not only to the 5,000 or so depository institutions that maintain accounts at the Fed. Currently, the Fed provides those accounts to banks and governmental entities only. Extending them to individuals would require the enactment of new legislation.

The BIS (Bank of International Settlements), which is involved in developing

international standards, has advised countries to prefer account-based instead of token-based CBDCs.⁸ It also recommends including a privacy layer to curb fears of government surveillance, since they would be identity-linked.⁹

The critical point, however, is that whether in the form of a token or bank account, a CBDC will be a form of money created by the US Federal Government through its monetary authority. This is why we refer to it as “sovereign money.” It follows that the proposals to create CBDCs should be accounted in practice for what they are in theory: an attempt to crowd out privately created money – and, therefore, an invitation for a greater degree of government-directed credit, money creation, and financial repression (or political allocation of money) than what we already have today.

6.1. To make sense of the distinction between private and sovereign money, we must go back in history. For the last three hundred years, in Western societies, money has been supplied partly by the state and the market. The state portion of the money supply has taken the form of coins and commodity money and, later, fiat money with legal tender. Commercial banks have provided the other part of the money supply: first in the form of banknotes redeemable in government-issued coins and later in the form of bank credit payable in government-issued paper money –which is why these money-claims issued by banks are also referred to as money “substitutes.”

The supply of money by the government first depended on the availability of precious metals. The sovereign was forced to use real resources to invest in the mining of silver and gold or to purchase bullion from which it could mint coins. It was only much later that sovereign money was made possible solely on the government's will (fiat money). In any case, the amount of money the government supplies is said to be determined “outside” the market.

⁸ BIS Annual Economic Report 2021, III. CBDCs- an opportunity for the monetary system, p. 82.

⁹ *Id.*, p. 74.

Banks, on the other hand, give credit by creating banknotes or credit bank account balances for their borrowers. The crucial point is that credit is created only when borrowers develop investment propositions that are likely to allow for a profit. Because the amount of money substitutes created by banks depends on profitable opportunities for lending in the market, that part of the money supply is called “inside money.” The beauty of this system is the supply of money adjusts “naturally” to the ever-changing demand for money.

This is the essence of what is now known as “modern finances,” that is, fractional reserve banking. This system came about in 1694 with the creation of the Bank of England. Instead of using metal as a medium of exchange, people started to use the Bank’s promise to pay gold and silver for their private exchanges. This promise was represented on the Bank of England’s balance sheet and took the form of banknotes.

The English commercial banks rapidly started to create more money substitutes than the counterpart of the amount of money initially borrowed by the UK Crown or the amount of reserves they kept. The banks started to finance credit to commerce and, later, farming and industry. These arrangements with “fractional” reserves financed the Industrial Revolution. They usually worked well when prudently managed under the rules of their creation – especially that the bank could not fund the government with the issuance of banknotes.

However, in situations of emergency, usually because of the need to finance armed conflicts, said arrangements would end up being abused. At that point, inflationary war finance would come about and lay bare the fragility of built-in fractional reserve banking. Everywhere (and until today), banks are organized under a legal framework that allows the sovereign to exercise its monetary prerogatives to force them to lend to the government in emergency cases.

Focusing on this fragility should not obfuscate an under-appreciated benefit of

this system: it is geared towards directing funding to the most promising investment opportunities. This improves overall economic efficiency both directly and indirectly: directly because capital is allocated productively and indirectly by aligning the interests of bankers and depositors, since the search for profit by the former signals to the latter that their savings will be parked in a solvent institution.

This trust-based system can be broken in three situations: first, when the sovereign thinks that it is politically expedient to force the banks to lend money to the state (primarily to finance war, as explained); second, when, in the absence of adverse clearing, the banks are perceived to have overextended themselves by creating more money substitutes than the amount of money people want to hold (leading to bank runs); and third, when bank lending is politically driven or poorly managed and systematically forgoes the most profitable opportunities. The ensuing evils include bank failures, inflation, and capital misallocation.

6.2. It is because these evils have plagued Western societies for centuries that some politicians, policymakers, and academics have considered abolishing inside money altogether. A well-known example was the monetary reform proposal known as the Chicago Plan, which, in the 1930s, proposed a strict form of monetary devolution called “full reserve” or “narrow banking,” where the government would take back the money monopoly. The idea was to separate the credit and monetary functions of the banking system by forcing commercial banks to operate under a 100% reserve requirement where deposits and other short-term liabilities would be backstopped with sovereign money on a 1:1 basis. Thus, at the cost of worsening capital allocation, this system would eliminate the risk that taxpayers would have to shoulder the costs of bank runs.

Most CBDC proponents partake in the Chicago Plan authors’ concern with bank runs, and perhaps more importantly, they also dispute the ability of the banking

system to efficiently allocate capital, whether due to shortsightedness or inability to factor broader societal goals into their decisions to price and extend credit. Hence, their optimism towards CBDCs expected reduction of the role of inside money.

So far, the Chicago Plan represents the road not taken. In fact, despite private money's fragility, the government actively promotes its creation. For instance, governments worldwide offer or promote "deposit insurance" and "lender of last resort" facilities to entice people to surrender money in exchange for deposits, propping up bank-issued money claims. These and other measures approximate bank deposits to the risk-free, sovereign money produced by the government.

There is, however, a flipside: banks may be forced to help finance the government directly (by having to buy Treasuries) or indirectly (by lending to protected segments). Beyond that, banks will have to lend themselves to extensive regulation. However, compared to regulation, retail CBDCs offer a more radical solution to the problem of fractional "fragility": curbing the ability of banks to create money or further regulating its quantity, depending on the particularities of each CBDC scheme.

But to return to our starting point – to return monetary powers to the government with what purpose? On the one hand, we could say with the coming about of CBDCs; the government will target the fragility of private money head-on by eliminating it. From this viewpoint, CBDCs are a tech-based variant of previous attacks on inside money, such as the "Chicago Plan" or other proposals for full reserve banking. But instead of being simply a tool to deal with the risk of bank runs, retail CBDCs would represent more of the same since, in the end, what they would do is make it possible for the government to increase its ability to do something that it already does today – that is, to gain access to real goods without imposing greater taxation in the present. From this viewpoint, retail CBDCs would be nothing but one more stance in which it is advocated that the liquid funds of the community should be politically allocated.

To see why, consider that retail CBDCs will stand in direct competition with bank

deposits. CBDCs and demand deposits develop the same function and have similar features: they are both digital, they are assets that can be redeemed on-demand at face value, and they are used to make ordinary payments. But while demand deposits are a bank promise to repay the asset in sovereign money, CBDCs are sovereign money itself. From the user's perspective, all else equal, CBDCs are therefore superior in quality to demand deposits. As a result, the issuance of CBDCs tends to displace demand deposits, especially in times of financial stress. Expectedly, therefore, some deposits will be exchanged for CBDCs, a phenomenon often referred to as “disintermediation.”

The expected result would be those that traditionally fall under the rubric of *financial repression*. For one, credit would be allocated to the sorts of projects that the political process deems more worthy of receiving the funds (for example, the United Nations *sustainable development goals*, or SDGs) to a greater extent than today. Moreover, the crowding out of private by sovereign money would, at least, assist the government in accelerating debt monetization. The increase in non-bank lending would be another expected, even if unwanted, result.¹⁰

6.3. Let us see how any of that can be accomplished. As a first approximation, we can use the Chicago Plan model to illustrate the mechanics of FedAccounts. Suppose the Fed creates a ledger for all bank accounts in the country directly in its balance sheet. The Fed then announces that depositors can choose between opening new accounts directly with the Fed or keeping their deposit accounts with their current commercial banks – but in the latter case, under the caveat that each commercial bank must transfer one hundred percent of deposits in real time to corresponding accounts held with the Fed by their customers.

¹⁰ It is worth noting that, like it or not, a CBDC is a form of high-powered money. Therefore, it should come as no surprise that it will be leveraged, either formally, if paths for that are open, or, otherwise, informally.

Under such arrangements, the commercial banks will, in practice, be put in a regime of 100% reserve requirement and will not have money to lend to private borrowers from the floating of the deposits. In turn, the Fed will have as base money (bank reserves with the Fed) the entire liquidity of the country, including the other component of base money, paper currency. Thus, all the demand for “cash” (paper money and bank deposits) becomes “Fed-accounts.” The money supply becomes a Fed liability, all of it. The counterpart of those liabilities on the asset side of the Fed’s balance sheet are Treasuries and other bonds that are determined based on the Fed credit policies.

Now, under this regime of “full reserve” banking, if the banks wish to lend money, they first need to borrow from the Fed or borrow in the capital markets like any other business. Then, of course, the function of commercial banks changes quite radically. Instead of creating inside money, banks focus on screening consumers, onboarding, servicing, and off-boarding them, and watching over and updating the technology platforms. To maintain the level of money supply, the government steps in. It could seem like a regulators’ utopia but the practical outcome can differ. The problem is that the repression of financial intermediation by commercial banks expectedly creates market incentives for other nonbank agents to step in and develop new forms of shadow banking.

6.4. The devolution of monetary powers to the state that comes up with the creation of retail CBDCs also helps undo the operational independence of central banks and the formal separation between monetary and fiscal policy. Early framers of the Fed intended this separation. It was reinforced in 1933 with the creation of the Federal Open Market Committee (FOMC) and in 1935 with a statutory limitation on monetary financing. Of course, this is not to deny that the separation has always worked best during peaceful times, since in times of war debt monetization tends to

become the norm rather than the exception.¹¹ Thus, during World War II, Congress amended the Federal Reserve Act to authorize the Fed to purchase securities directly from the Treasury – which it always did at low-interest rates.¹² After the War, inflationary pressures pushed for the reinstatement of a prohibition against monetary financing – first, in a 1951 one-paragraph “Accord” between the Fed and the Treasury, and later with an amendment to the Federal Reserve Act that allowed the Fed to buy and sell Treasury securities only in the secondary market.¹³

The point to be noted is now a strong movement exists to undo this framework of separation of fiscal and monetary policy in times of peace. To be sure, any realistic assessment must acknowledge that the line between fiscal and monetary policy is already very much blurred. To respond to the 2008 financial debacle, the Fed set to purchase unprecedented quantities of government debt under its “quantitative easing” programs. This trait was sometimes perceived as the Fed backstopping public debt.¹⁴

Besides that, the Cares Act enacted in response to the COVID-19 pandemic further expanded the Fed’s lending capabilities to non-bank entities by authorizing it to provide “liquidity to the financial system that supports lending to eligible business,

¹¹ Although in the United States little money was created to fund the war efforts of World War I. See Richard Sutch, Liberty Bonds, RESERVE HISTORY, FED. RESERVE BANK ST. LOUIS, <https://www.federalreservehistory.org/essays/liberty-bonds> (“the [United States] federal government relied on a mix of one-third new taxes and two-thirds borrowing from the general population [...] The borrowing effort was called the “Liberty Loan” and was made operational through the sale of Liberty Bonds. These securities were issued by the Treasury, but the Federal Reserve and its member banks conducted the bond sales.”).

¹² G. Richardson, The Federal Reserve's Role During WWII FED. RESERVE HISTORY, FED. RESERVE BANK ST. LOUIS, <https://www.federalreservehistory.org/essays/feds-role-during-wwii>.

¹³ Federal Reserve Act § 14(2)(b), 12 U.S.C. § 355 (2018). For a summary of the evolution of the statutory limitations to monetary financing in the United States, *see* Marcelo Prates, Money in the Twenty-First Century: From Rusty Coins to Digital Currencies, 15 Ohio State Business Law Journal 164, 197-199 (2021).

¹⁴ J. B. Bolzani, Independent Central Banks and Independent Agencies: is the Fed super independent?, 2022, 22 Bus. L. Journal 195, 228.

States, or municipalities.”¹⁵ In particular, the Cares Act authorized the Secretary of the Treasury to use almost half a trillion dollars in programs with funds appropriated to a fund that belongs to the Treasury.¹⁶ Given the Fed’s limited discretion in allocation, some scholars sustained the Fed was acting as a “conduit” for fiscal policy implementation through the financial system.¹⁷ But this, in any case, is far from a rigid separation between monetary and fiscal authority.

For instance, calls for central banks in general and the Fed in particular to “help” with climate change is an evident attempt to bypass the political process, where the merits and demerits of funding the desired initiatives must be evaluated. To attribute a “third,” environmental, mandate to the Fed is obviously a political decision. To fund environmental policies by monetary, extra-budgetary means is more than “blurring” the lines between monetary and fiscal policies, it is to eliminate those lines. No central bank may expect to keep its independence if it accepts responsibilities used before only in emergencies.¹⁸

As such, the adoption of CBDCs along the lines described herein (representing a devolution of monetary powers to the state) can be framed simply as normalizing a situation previously treated as exceptional. Theoretically, the Fed typically holds operational autonomy vis-à-vis the Treasury and the executive power. Base money is created to facilitate monetary policy to keep inflation at bay and to permit the Fed to ease economic fluctuation within the business cycle. In practice, expanding the Fed mandate to backstop an ever-increasing number of non-bank agents creating money-

¹⁵ Cares Act, Section 4003(b).

¹⁶ *Id.*

¹⁷ See J. B. Bolzani, Has the Cares Act Expanded the Fed’s Legal Mandate? The FinReg Blog, October 26, 2020, at https://sites.law.duke.edu/thefinregblog/2020/10/26/has-the-cares-act-expanded-the-feds-legal-mandate/#_ftnref5.

¹⁸ The risks associated with that have been clearly stated by Mr. Jerome Powell, the Fed Chairman (<https://www.federalreserve.gov/newsevents/speech/powell20230110a.htm>), and further developed by Mr. Michael Gibson, Director of Supervision and Regulation (<https://www.federalreserve.gov/newsevents/testimony/gibson20230718a.htm>).

claims within the shadow banking system has rendered the Fed's independence less relevant, and debt monetization has blurred the frontier between the Fed and the Treasury.

The coming about of retail CBDCs would accordingly be the coronation of this process, where commercial banks are forced to renounce their ability to produce money in response to profitable opportunities, and the accommodation of the economy's needs for liquidity is shifted to the government.

7. Foes of private money may aspire for direct retail accounts with the Fed, a "postal bank" associated with the Fed, and lending done directly by the Federal government and some of its agencies. In this scenario, the entire financial sector is nationalized in one way or another. Leveraging and deleveraging the private sector has become increasingly a political matter, and the incentives for efficient capital allocation are severely hurt. The market-driven allocation of capital is undone, and the efficiency of wealth creation in society is reduced.¹⁹ All of that justify caution in CBDCs.

A steadfast opposition to CBDCs is a different story. It is a dangerous path because it can accommodate several errors, especially self-deception, in assuming that the current system, despite all its advantages, presents the endpoint of monetary history. Besides that, opposing CBDCs as a matter of principle can amount, perhaps, even to a form of neo-Luddism, this time represented by oblivion to CBDCs' technological advantages and possibilities. More concretely, one should recognize that current commercial bank systems are expensive and that CBDCs can offer means to streamline payments, making them cheaper and faster, particularly in international payments.

¹⁹ Of course, not all proposals for the creation of CBDCs are that extreme. Some of the proposals for the creation of digital "token dollars", for instance, will only marginally (although no one can know for sure by how much) reduce private banking intermediation by inducing a greater portion of the liquid holdings to be kept in cash – now, in its digital form.

An additional point is that, with or without CBDCs, the role of commercial banks is changing. Traditional commercial banks are now in competition not only among themselves but also with non-banking institutions that, thanks to new technologies, found niches in financial markets and became fintechs. Given the quick expansion of cryptocurrency markets, it is impossible to envision a payment system where CBDCs become the basis for financial intermediation.²⁰

Among the different types of digital money currently being created, stablecoins hold the most potential for broader adoption. Stablecoins are, in the words of the Financial Stability Board, “crypto-assets that aim to maintain a stable value”.²¹ Stablecoins can be pegged to commodities, gold, or other cryptocurrencies. More daringly, stablecoins can be backed by an algorithm that tries to keep the peg with a national currency (this was famously the case of Terra USD, which collapsed in May of 2022). Stablecoins can also be tied to a currency basket (as intended by the Libra project).

Our interest here, however, lies in stablecoins which become a claim on a single currency. Under this model, stablecoins contain private liabilities that can be redeemable in base money, just like bank deposits.²² That is as much as a traditional form of financial intermediation done through fintechs as it is possible to conceive, except that they are offered by, so far, non-financial institutions.

Importantly, stablecoins are a form of credit money, that is, a currency that is redeemable in something else. Here, the contrast with Bitcoin is striking because stablecoins are an “I owe you something” form of money, whereas Bitcoin is an “I owe you nothing” form. Because stablecoins are a form of credit money, they can be leveraged by issuing more debt than they will hold in liquid reserves. As such, they can

²⁰ See M. K. Brunnermeier, H. James, and J.-P. Landau, The Digitalization of Money, Working paper, available online at: <https://scholar.princeton.edu/markus/publications/digitalization-money>

²¹ Fin. Stability Bd., Addressing the Regulatory, Supervisory and Oversight Challenges Raised by “Global Stablecoin” Arrangements 4, 2020, <https://www.fsb.org/wp-content/uploads/P140420-1.pdf>

²² For a good description of stablecoins, see Larry White’s “Should we fear stablecoins?” (White, 2021).

become a source of risk of financial instability, as the recent run on Terra USD has shown.²³

Here is no place to discuss whether prudent management of individual issuers of money substitutes would suffice to keep the financial system stable. What should be clear is that in the presence of governmental regulation, if it is for stablecoins to be incorporated into the financial system, most likely, the issuers of stablecoins will eventually be put under the umbrella of liquidity facilities provided by the central bank, becoming “Payment Interface Processors” (PIPs) in the terminology adopted by the Bank of England, or “Currency Connectors” (CCs) as some have suggested.²⁴ Stablecoins would, therefore, create money in response to profitable business opportunities in much the same way that commercial banks and trustees of mutual funds typically do.

If we endorse the entry of stablecoins into the financial system, wouldn’t we replicate the same fragility held by commercial banks, but now with new players and uncharted technological waters? To allow for more stringent regulation, one possibility would be to require these stablecoin issuers to obtain a bank charter.²⁵

But to even consider extending bank charters to stablecoin issuers, we must first understand what the issuers of stablecoins bring to the table.

²³ See “Digital Currency and the Next Financial Crisis,” posted by P. H. Kupiec on the Law & Liberty website on August 30, 2021. Available online at: <https://lawliberty.org/digital-currency-and-the-next-financial-crisis>. On the collapse of TerraUSD, see Stablecoins: The Collapse of TerraUSD and the Road Ahead for the “Less-Risky” Form of Cryptocurrency, from May 19, 2022 available online at: https://www.mayerbrown.com/en/perspectives-events/publications/2022/05/stablecoins-the-collapse-of-terrausd-and-the-road-ahead-for-the-less-risky-form-of-cryptocurrency?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration.

²⁴ See D. G.W. Birch “When The CBDC Revolution Comes, It won’t be on the Blockchain,” posted on August 3, 2022, at Forbes.com and available at <https://www.forbes.com/sites/davidbirch/2022/08/03/when-the-cbdc-revolution-comes-it-wont-be-on-the-blockchain/?sh=7649877483af>

²⁵ For a detailed articulation of this proposal, see M. Ricks, *The Money Problem: Rethinking Financial Regulation*, 2016.

Today, in the United States, dollar wholesale payments are cleared and settled through the Fedwire, Real-Time Payments systems (RTP), and the Clearing House Interbank Payment System (or CHIPS, used for cross-border payments). Consumer and commercial payments occur through the Automated Clearing House System or ACH.

The clearing of payments has, over time, been burdened by an increasing number of regulations that attach political goals to that of settling monetary obligations. Chiefly among them are Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) and the economic sanctions by the Financial Crimes Enforcement Network (FinCEN). Taken together, these measures have led to a sharp decrease in correspondent banking networks and thwarted efforts to streamline cross-border payment systems.

But just like the printing press and the evolution of communication technologies eventually led to the demise of settlement in coins, the coming about of distributed ledger may also lead to changes in the architectures for settlement of transactions. Here, stablecoins, such as USDC powered by the Ethereum blockchain, represent a new form of money substitute that may force regulators and existing financial intermediaries to rethink their political priorities.²⁶

It is at this point that CBDCs may play a role by offering the money base to settle payments between stablecoin. To be clear, the CBDCs here would be wholesale, not retail, since they would not be available to the public. With a wholesale CBDC, the Fed would provide an Application Programming Interface (API) for all the issuers of stablecoins and their correspondent digital wallets to be cleared in this digital form of sovereign money. Wholesale CBDCs would bypass the need for correspondent banking. This would be particularly efficient in cross-border payments.

Wholesale CBDCs could also be employed at the domestic level. The roadmap

²⁶ See “Visa Becomes First Major Payments Network to Settle Transactions in USD Coin (USDC)” available online at: <https://usa.visa.com/about-visa/newsroom/press-releases/releaseld.17821.html>

we envisage here would be one where the Fed would eventually allow the issuers of stablecoins to access its ordinary clearing mechanisms. A first step in that direction was taken by the Office of the Comptroller of the Currency with the enactment of Interpretive Letters allowing national banks to use Dollar-based stablecoins as a settlement infrastructure in the US payment system. The Interpretive Letter issued in October of 2020 authorized national banks to hold stablecoin reserves as a type of service to their clients.²⁷ Another Interpretive Letter, issued in January of 2021, authorized national banks as independent nodes to validate transactions performed on stablecoin DLT ledgers.²⁸

After the change of administration, the OCC enacted a new Interpretive Letter confirming that national banks can engage with Dollar-based stablecoins but will need a supervisor's letter of non-objection before they can start offering the services.²⁹ The topic is still uncertain, but a fruitful path has been established to create a channel between fintechs' private currency and the Fed.

It is difficult to imagine that new digital monies, public or private, could achieve simultaneously both goals of becoming instruments for more efficient payments (like stablecoins premised by wholesale CBDCs, as outlined above) and instruments for financial repression (as most proposals for retail CBDCs suggest). CBDCs could probably assist in the implementation of either of these agendas but hardly in the implementation of both at the same time. The choice is, therefore essentially political.

Which way will politics point to? National indebtedness alongside other pressures for public expenditure have been forcing US monetary authorities to accommodate the increased demand for borrowed funds by national governments – including, of course, the US government. As the process continues and fiscal deficits grow, we can expect that the Fed may be tempted to increase the crowding out of

²⁷ Interpretative letter # 1172, October 2020.

²⁸ Interpretative letter # 1174, January 2021.

²⁹ Interpretative letter # 1179, November 2021.

private productive investment by increasing financial repression not only in favor of the political allocation of credit to favored sectors but, above all to attend the direct fiscal needs of the Treasury.

The alternative path is worth contemplating: CBDCs could be used to disintermediate commercial banks and to re-intermediate credit with stablecoins. Stablecoins would be privately issued but settled with wholesale CBDCs. The issuer of the stablecoins would extend credit in stablecoins, in the same way that commercial banks have continuously operated with fractional reserves.

8. In the old days, there were gold and silver coins issued by governments, bank notes issued by banks redeemable in coins and account credits to be honored with the notes issued by the banks themselves. We contemplate a similar architecture with digital technology where wholesale CBDCs or tokens play a role partly identical to that of gold and silver coins.