Post-Pandemic Recovery from the Global Financial Crisis

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Dedicated to my mother, father, and the entire family – for their continued and never ending support. Also particularly to the most important men in my life – who have helped weather the stormiest of all crises: who have not only been the "wind beneath my wings", but silent partners and soulmates: known to Almighty God whose immense support and guide has to be acknowledged and who indeed works in mysterious ways.

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ABSTRACT

Why are some global financial crises more difficult to recover from and overcome than others? What steps are necessary in ensuring that financial stability and recovery are facilitated?

What kind of environment has the previous financial environment evolved to and what kind of financial products have contributed to greater vulnerability in the triggering of systemic risks? These are among some of the questions which this book attempts to address. In highlighting the role and importance of various actors in postcrises reforms as well as the huge impact of certain factors and products that are contributing in exacerbating the magnitude and speed of transmission of financial contagion, the book provides an insight into why global financial crises have become more complicated to address than was previously the case.

Whilst considering and highlighting why matters related to procyclicality and capital measures should not constitute the sole focus of attention of the G20's initiatives, the book is aimed at identifying other important issues such as liquidity risks and requirements which have constituted, to a large extent, the focus of international standard setters and regulators. It also aims to direct regulators, central bank officials and supervisors, academicians, business and legal professionals, and other relevant interested parties in the field toward current and previously ignored issues such as the "cartelization" of capital markets. The need and concern for increased regulation of bond, equity markets, as well as other complex financial instruments which can be traded in Over-the-Counter (OTC) derivative markets is evidenced by Basel III's focus—which is addressed in the book. "Cartelization" and organized activities, relating to rate rigging in global capital markets—as evidenced recently by sophisticated Euro Interbank Offered Rate (EURIBOR) and London Interbank Offered Rate (LIBOR) rigging practices and occurrences, are also covered.

The aims and objectives of the book would not be complete by merely identifying and highlighting the general root causes of global financial crises and the current issues. Hence each chapter will also recommend (as well as bring to the fore) measures that should be (and have been) put forward in

order to address the issues and factors that contribute to the magnitude and severity of global financial crises.

This revised edition incorporates the impacts of the recent Global Pandemic Crisis on global financial markets: as evidenced by the restrictions on global supply chains, as well as fluctuations in interest rates. Rationales for unconventional monetary policy tools and policies implemented by central banks during the crises, as well as their implications, will be highlighted. Ongoing consequences of the global pandemic crisis, the growing popularity of digital technologies, digital currencies and platforms and plans to resort to central bank digital currencies (CBDCS), will certainly impact the ever evolving financial environment in the immediate years and aftermath of the Global Financial Crisis and Global Pandemic. How are central banks responding to the evolving financial environment? Will traditional monetary policy tools be able to address issues triggered in a changing financial environment? This volume aims to address, amongst other objectives, these questions.

Keywords: financial stability, procyclicality, supervisors, systemic risks, counterparty risks, shadow banking, Basel III, capital, liquidity standards, over-thecounter derivatives, central banks, central bank digital currencies, crypto currencies, distributed ledger technologies, US Inflation Reduction Act 2022

LIST OF ABBREVIATIONS

ABCP	Asset-Backed Commercial Paper
BBA	British Bankers’ Association
BIS	Bank for International Settlements
BCBS	Basel Committee on Banking Supervision
CBN	Central Bank of Nigeria
CCP	Central Counter Party
CCR	Credit Counterparty Risk
CDO	Collateralized Debt Obligations
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors EBA European Banking Authority
ECB	European Central Bank
EFSF	European Financial Stability Facility
EIOPA	European Insurance and Occupational Pensions Authority
ESA	European Supervisory Authorities
ESFS	European System of Financial Supervisors
ESMA	European Securities and Markets Authority
ESR	European Securities Regulators
ESRB	European Systemic Risk Board
EU	European Union
EURIBOR	Euro Interbank Offered Rate
FASB	Financial Accounting Standards Board
FEE	Federation des Experts Comptables Europeens
FSA	Financial Services Authority
FSB	Financial Stability Board
FSF	Financial Stability Forum
HRE	Hypo Real Estate
IASB	International Accounting Standards Board IRB Internal Ratings Based
LCR	Liquidity Coverage Ratio
LIBOR	London Interbank Offered Rate
LTRO	Longer Term Refinancing Operation
NSFR	Net Stable Funding Ratio
OTC	Over-the-Counter
SRR	Special Resolution Regime

INTRODUCTION

> "Experience has shown that political institutions often do not maintain stable prices. They have several powerful incentives to expand the money supply beyond the rate of real growth in the economy. In non-democratic societies, the control of the money supply is an important instrument of economic policy that can address various political needs, most notoriously the financing of government needs. It is against this background that independent central banks find their contemporary justification: central bank independence is conceived as a means to achieve the goal of price stability. Central bank independence has been the preferred institutional arrangement to promote monetary stability since the end of the 1980s and beginning of the 1990s. A number of factors have contributed to this development."[1]
> —Rosa Maria Lastra, *Legal Foundations of International Financial Stability*, 2006

1. How Independent Are Highly Independent Central Banks?

Theories that appear to suggest that absolute independence exists (i.e., "the theory that recognizes no limits on central bank independence, so long as the bank itself is reliably pre-committed to achieving price stability"[2]), indeed, cannot be sustainable.

A sufficient and appropriate degree of central bank independence is definitely necessary for the goal of achieving price stability. However, despite the levels of independence claimed to be enjoyed by several central banks, recent events indicate shifts in focus of monetary policy objectives by various central banks, notably, that of the Fed Reserve.

The impact of political and government influences on central banks' monetary policies has been evidenced from the recent financial crisis and in several jurisdictions. Many central banks have adjusted monetary policies having been influenced by political pressures that have built up as a result of recent financial and sovereign debt crises. However, such lack of absolute independence (from political spheres) could prove symbiotic, in the sense that, despite the need for a certain degree of independence from political interference, certain events which are capable of devastating consequences, namely, a drastic disruption of the system's financial stability, need to be responded to as quickly and promptly as possible. Is it possible for a central bank with absolute independence to operate effectively, particularly, given the close links between many central banks and their Treasury in several countries?

It may be inferred that central banks' crucial roles in establishing a macroprudential framework provide the key to bridging the gap between macroeconomic policy and the regulation of individual financial institutions. This however, on its own, is insufficient—close collaboration and effective information sharing between central banks and regulatory authorities is paramount.

Consequences of lack of close collaboration, coordination, and timely exchange of information between tripartite authorities, such as the relationship which exists between the United Kingdom's Financial Services Authority (FSA), the Bank of England, and the Treasury, were witnessed during the Northern Rock Crisis. The Bank of England could not effectively perform its traditional role as lender of last resort for a limited time without such a role being made public.

The need for the establishment of "bridge banks" and special resolution regimes (SRRs) has also been acknowledged in various jurisdictions. Hence, whilst a certain degree of independence from political interference is necessary, as well as an affirmation of the commitment to monetary policy objectives, absolute independence could also result in a process whereby the necessary coordination required between regulatory and government authorities exacerbate problems which they (the authorities) were designed to solve.

Here, Rosa M. Lastra's observation does appear to be manifesting itself ever increasingly:

> Perhaps in the twenty-first century we shall witness the emergence of a rebalanced framework of macroeconomic policy (with fiscal policy regaining part of its earlier role) that may lead to a realignment of the goals to be pursued by the monetary authorities, which in turn will lead to a new wave of legal reforms.

Other consequences of the recent financial crisis include increased implementation of fiscal policy measures—in respect of taxing and spending activities [which are distinguished from proposals relating to quantitative easing measures (an inflationary policy measure)—in respect of the need to address the Eurozone sovereign debt crises].

As regards the implementation of fiscal policy measures, caution is to be had to the implementation of fiscal measures which are such that whilst they generate corrective effects, they do not impede the prospects of growth and development of the economy.

Even though the Fed Reserve is not involved in determining fiscal policy measures (the Congress and the Administration being responsible for this), fiscal policy measures impact the Fed's monetary policy decisions. The indirect effect of fiscal policy on the conduct of monetary policy through its influence on the aggregate economy and the economic outlook and the impact of federal tax and spending programs on the Fed Reserve's key macroeconomic objectives—maximum employment and price stability and "in making appropriate adjustments to its monetary policy tools"—is notable in several situations and instances.

Hence, how independent is the Fed really from government and fiscal policy influences? Could it not be said that the government really has a dual role in fiscal and monetary policy setting? As indicated initially, an appropriately and sufficiently independent central bank has a crucial role in ensuring price stability objectives.

The following remark highlights the level of impact as well as the influence of political pressures on the Fed's monetary policy objectives:

> … for several decades, a generally healthy monetary policy balance produced good results. The Fed's focus has shifted dramatically to the short-run objective of lowering unemployment and recently the willingness to (temporarily?) set aside its inflation target.[3]

In view of such political interference, would it be wise to thrust more powers into the hands of the Fed Reserve, namely, through a widening of its scope of powers since the executive (Government), as well as Congress, have a degree of influence over the decision-making capacities of the Fed Reserve. Further, and addressing the issue independently of political influences on the Fed Reserve, would it really be in the interest of accountability to delegate more powers to an already relatively powerful Fed Reserve?

Recent changes in the delegation of supervisory responsibilities in the United Kingdom, namely the transfer of bank supervision from the FSA back to the Bank of England, and the resulting increased scope of the Bank of England's powers, would appear to suggest that in certain cases, regulatory bodies as well as central banks should assume greater functions in certain capacities. Accordingly, jurisdiction specific cases have to be viewed individually and based on prevailing circumstances.

Hence, ensuring that absolute independence is achieved, in respect of central bank financial independence, constitutes a difficult task. Is it possible for a central bank to operate effectively—given the presence of absolute independence? Close collaboration and exchange of information between the tripartite authorities in the United Kingdom (the FSA, the Treasury, and the Bank of England), as highlighted by the Northern Rock Crisis, if effective as it should have been, could have helped, not only in identifying the problems which existed at Northern Rock, but more importantly, facilitated timely intervention which would have averted the scale of the crisis.

Crisis faced by IKB, Landesbanken, and Hypo Real Estates not only revealed an absence of an SRR for banks, but also raised the issue of optimal measures which could be implemented to control (in part) privately owned but publicly sponsored or (in part) publicly owned financial enterprises.[4]

2. Jurisdictional Approaches to Central Bank Independence and Monetary Policy

Mervyn King's reference[5] to central bank independence in the United Kingdom highlights the importance being accredited to the ever increasing and significant role of monetary policy. He adds: "How much discretion to give to the Monetary Policy Committee and how much should remain with the Chancellor is an interesting question that was raised, but not fully resolved, in 1997," referring to the date when the bank gained operational independence.[6]

However, despite the growing importance of, and emphasis on central bank independence as highlighted previously, lack of absolute independence (from political spheres) could prove beneficial in the event where (despite the need for a certain degree of independence from political interference), certain events which are capable of devastating consequences, namely, a drastic disruption of the system's financial stability, need to be responded to as quickly and promptly as possible – that is, in the case where effective communication mechanisms operate to ensure prompt and timely actions. Further, subjecting actions and decisions of the central bank to other authorities could actually incorporate greater accountability and transparency into the supervisory and regulatory framework.

In relation to legislative reforms that result in a reduction in central bank autonomy, it has been noted by several commentators generally, that a reduction in central bank autonomy by subjecting its actions and decisions to legislative procedures and approvals could result in more serious problems which would aggravate the stability of the economy and financial system.

However, it needs to be added that the issue does not necessarily relate to a subjection of actions and decisions for approvals, but how well the authorities involved are able to communicate and coordinate information between themselves effectively.

In 2022, the current Bank of England Governor, Andrew Bailey, added that it "was critically important" that central banks maintained their independence, following possible calls for, and suggestions of a review of the scope of the Bank's powers to set interest rates.

More recently, the House of Lords in its first report of the Session, highlighted the following:

> "High and persistent inflation since 2021, is in part, due to supply shocks brought about by the COVID pandemic, as well as ongoing wars and invasion. Nonetheless, the persistence of above target inflation over this period, also reflects errors in the conduct of monetary policy, including an over reliance on inadequate forecasting models……
>
> When inflation rose, central bankers focused on supply side shocks as the cause, and the higher inflation rate was seen as transitory. Some witnesses therefore considered that the inflationary potential of elevated rates of money supply growth were given insufficient attention by the Bank."
>
> Four key issues which were identified as being in need of redress "in order to improve Bank's performance", are as follows:
>
> 1) To safeguard economic and financial stability, interaction between fiscal and monetary policy, as well as the need for clear lines of responsibility and effective communication between HM Treasury and the Bank. This was to be facilitated through the publication of a Memorandum of Understanding (MoU), which would clarify how interaction between monetary policy and debt management would take place.
>
> 2) Bank's expanding remit was to be reviewed - notably and possibly, with respect to its involvement in matters relating to climate change.

3) Fostering a diversity of views to fortify "a culture that encourages challenge" - with particular focus including governance and appointments.

4) That owing to Government's inability to challenge Bank's decisions without compromising its independence, it would as a result, be "imperative" that Bank and its scope are effectively monitored, and that its officials are held accountable to Parliament - with Parliamentary review being proposed to be conducted every five years."

Notes

1. See Lastra (2006) particularly chapter 2 "Institutional Developments to Promote Monetary Stability," pp. 34–79.
2. See ibid., p. 30.
3. See Levy (2012).
4. Nier (2009), at p. 22.
5. See Reuters, "Bank of England's King Says Time to Review Inflation Remit" https://jp.reuters.com/article/us-britain-boe-king-idUSBRE90L13R20130122/
6. ibid

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CHAPTER 1

FINANCIAL STABILITY AND THE ROLE OF CENTRAL BANKS: EVOLVING PAYMENTS SYSTEMS, CLIMATE RISKS AND FINANCIAL STABILITY RISKS

Abstract

Even though unregulated and decentralized platforms such as crypto assets are considered to have the potential to provide low-income earners with cheap banking alternative and "perhaps put pressure on banks to lower fees" (WSJ, 2019), its volatile nature, lack of consensual standards as regards its definition, and more importantly the lack of a centralized regulatory authority or governance in respect of regulatory and reporting procedures, has given rise to concerns. Such concerns gravitating in cases where particularly potentially systemic repercussions are generated by virtue of such assets being tied to government issues currencies or backed by governments.

The recent pandemic has further increased the trend towards declining cash activities and transactions. Even prior to the pandemic, there had been extensive discussions relating to preferences of introducing electronic means of payments which would be regulated by central banks – as opposed to private electronic money which are controlled by private actors – in view of growing concerns relating to the popularity of stable coins over de centralized platforms. As well as considering what measures and initiatives have been adopted by international bodies such as the Financial Stability Board, this chapter also considers why the need for central bank digital currencies is becoming a popular consideration – as well as challenges and benefits presented through the use of decentralized platforms.

In accentuating the role of central banks in the future and current payments system, this chapter also highlights its role in addressing climate risks – as well as financial stability risks – with the impact of Securities Financial

Transactions on systemic risk, also being taken into consideration.

Keywords: Securities Financing Transactions, stable coins, climate risks, financial stability risks, e krona, central bank digital currency (CBDC)

1. Introduction

Decentralized Platforms

Even though unregulated and decentralized platforms such as crypto assets are considered to have the potential to provide low-income earners with cheap banking alternative and "perhaps put pressure on banks to lower fees" (WSJ, 2019), its volatile nature, lack of consensual standards as regards its definition, and more importantly the lack of a centralized regulatory authority or governance in respect of regulatory and reporting procedures, has given rise to concerns. Such concerns gravitating in cases where particularly potentially systemic repercussions are generated by virtue of such assets being tied to government issues currencies or backed by governments.

Decentralized Blockchain Technologies: Potentials and Challenges

> "New enterprise blockchain projects continue to crop up week after week. Siemens is exploring car sharing on the blockchain, Samsung has teamed up with three mobile carriers and three financial firms to form a consortium to launch a blockchain identification system, and State Farm and USAA confirmed that they've had early success using blockchain to help manage insurance subrogation claims. Further, Oracle is using blockchain technology to track declining honeybee populations and verify that honey from beehives in its network is sustainably produced." (Forbes Crypto Confidential, 2019)

This not only highlights the growing popularity and importance of block chain technologies, but also emphasizes its potential in fraud detection, as well as sustainable development. However the need for centralized regulation cannot be ignored – particularly if such technologies are to assume greater roles – on which many other systems will be dependent.

2. Literature Review and Background to the Topic

According to the Basel Committee on Banking Supervision 2019 Report "Designing a Prudential Treatment for Crypto Assets", "there is no single or generally recognized definition of crypto assets, currently – with terms such as crypto currencies, virtual currencies, tokens, and coins being used in different contexts to refer to some or all forms of crypto assets. Further complexities which contribute to a fixed legal definition are also highlighted. These include:

- The evolving nature of crypto assets
- The different purported uses of crypto assets
- The different associated legal and regulatory implications across jurisdictions

The following characteristics are attributed to crypto assets (see BCBS: 2019:5):

- Digital and virtual in nature
- Reliance on cryptography
- Use of distributed ledger technologies

In arguing for safe, secure and reliable payments systems as crucial to preserving the sustainability of innovation, Segal-Knowles (2020:6) is of the opinion that "innovation won't be sustained if it's unsafe or detrimental for financial stability". Changes in the financial regulatory landscape as being partly contributory to innovation – as well as the need for appropriate responses by the private sector, is also highlighted (2020:5) as follows:

Examples of private sector proposals for new ways to pay

	Unbacked Crypto-Assets (e.g. Bitcoin)	Stablecoin (e.g. Libra, JPM Coin)	Reserve- Backed stablecoins (known as RBDC or Synthetic CBDC)
Pegged to fiat currency?	No	Yes (single currency or basket)	Yes (single currency)
Redemption rights for coin holders?	None	Varies; often none	Promise to exchange for equivalent value in fiat currency
Backing?	None	Varies	Central bank reserves

Source: Bank of England (2020:5). "Payments after the COVID Crisis – Emerging Issues and Challenges" Speech given by Christina Segal-Knowles Executive Director Webinar: London School of Economics and Centre for Economic Policy Research 11 June 2020 Financial Market Infrastructure Directorate

The trend in the declining use of cash in financial transactions is also highlighted by Ingves (2019:18). Further, he adds that in view of such decline (see 2019:19):

- Cash may soon no longer be generally accepted;
- There would no longer be a means of payment guaranteed by the State all means of payment issued and controlled by private actors

In accentuating the need for a more centralized form of system whereby central banks are better able to regulate transactions, as well as "promoting a safe and efficient payment system", he also highlights considerations related to the introduction of the e krona – in so doing, also shedding light on the monetary policy implications of the introduction of an e krona (2020:19).

Effects on monetary policy of an e-krona	Interest-bearing or not?
Non-interest-bearing e-krona probably raises the lower bound for the policy rate to zero	• Less costly than holding large volumes of cash (storage, transport, insurance) • Negative policy rates of recent years not possible
Interest-bearing e-krona reduces the lower bound	• Negative return on the e-krona itself • New monetary policy instrument • Major change, legality unclear

Source: Sveriges Riksbank (2019:21) "Swedish monetary policy experiences after the global financial crisis: What lessons are there for other countries?" Money Macro and Finance Research Group, London, 15 October 2019

In a similar vein, Segal-Knowles (2020:5) adds that an alternative would be for central banks "to issue a new electronic form of central bank money that can be used by households and businesses for payments, also known as a central bank digital currency or CBDC." In supporting the CBDC, it is further added that it may "also may be a safer alternative to new proposed forms of private electronic money like stable coins."

The Argument for Central Bank Digital Currencies (CBDCs)

> "Central bank digital currencies (CBDCs) can foster competition among private sector intermediaries, set high standards for safety and risk management, and serve as a basis for sound innovation in payments."

> "CBDCs could become a complementary means of payment that addresses both specific use cases and market failures – as well as a catalyst for continued innovation in payments, finance and commerce, at large."

And as further highlighted by the Bank for International Settlements (2020):

- The combination of traditional and new market failures calls for central bank policy approaches that combine a number of roles;
- In their role as operator, many central banks directly offer and run payment infrastructures.
- As catalysts, central banks can support inter operability to foster competition.
- As overseer, central banks (and other authorities) may develop and implement new policies and standards.
- Finally, central banks could combine the above -mentioned elements

> to support the development and introduction of CBDCs – all scenarios requiring central banks' commitment towards ensuring safety and integrity of the payment system.

Further roles whereby central banks are able to promote and facilitate competition through the expanded engagement of non bank payment service providers (PSPs) in their systems, are also highlighted.

3. Other Main Issues to Be Addressed: Climate Risks

Are decentralized markets better at judging climate risks than central banks? Given the difficulties of incorporating climate risks in current predictive financial tools, it would appear to be the case. However there are also advocates of the argument that climate risks and regulation should fall within the ambit of governments – rather than central banks. Whilst central banks should undertake some initiatives in ensuring that forecasting tools and instruments of monetary policy incorporate and provide for climate risks, it is also evident that the nature and difficulties associated with quantifying such risks may necessitate the engagement of governmental and also non governmental actors.

The problems associated with central banks – as government delegates and agencies – along with central bank independence is well documented in the literature.

It is further argued, that there are two schools of thought on the approaches that central banks should adopt in "going green".[1] The first it is argued, "encourages policymakers to consider the financial risks thrown up by a warming planet" – with reference to recent stance adopted by the former governor of the Irish central bank who called for central banks to apply the same standards being advocated for private banks, to their own bond purchases.

In this sense, it is further added that:

> "The ECB's corporate bond purchase program would then avoid environmentally unfriendly assets.[2]

The second option put forward, considered more radical, holds that "central banks should finance, directly, the transition to a low carbon economy."[3]

In the light of the above mentioned observations, caution is also given to central banks with the remarks that "preventing financial crises is its job – however re shaping the economy is not – and that further, acting without the support of the Government and the ECB's largest stakeholder (– this case, Germany, being referred to), would be a mistake.

Hence the role and importance of stakeholders – as well as independence of central banks from funding and political influences is also highlighted. Many other jurisdictions are increasingly "Going Green" and engaging in environmentally friendly initiatives – however, the quantification if financial risks, ultimately is one that should be accounted for even where it appears that the costs may appear to be significant in relation to attributed benefits.

Whilst cost benefit considerations ultimately determine and may determine governmental policies, certain environmental costs have greater monetary and non monetary repercussions in terms of delayed failure to act – as well as irreversible repercussions. The question then relates to timing – and how much damage can be mitigated or addressed.

4. Designing an optimal system to facilitate the introduction, development and circulation of CBDCs

"Central bank money provides ultimate settlement because claims on the central bank are typically free of the credit and liquidity risks associated with other settlement assets – this being particularly relevant since the finality of payments made with some digital assets relying on decentralized validation protocols has been questioned."

This being of vital importance, not only in view of the potential risks arising from crypto asset exposures, the following of which include: Liquidity risks, market risks, credit and counterparty credit risk – referred to as financial risks, but also non financial risks which include: cyber and operational risks, legal risks, reputational risks, third party risks, as well as implementation risks (see (BCBS; 2019 :10).

In view of the numerous benefits and opportunities to be conferred through the introduction of CBDCs, the introduction of retail CBDCs are actually considered feasible with the following considerations being taken into account (BIS, 2020):

i) The need for cooperation between central banks and other bodies such as securities regulators, competition authorities, financial intelligence units, consumer and data protection authorities.
   In becoming successful, a retail CBDC would need to provide a resilient and inclusive digital complement to physical cash – retaining all those characteristics (and probably more) that make cash so attractive to users – elements such as i) trust in the issuing entity, legal tender status, guaranteed real time finality and ease of access/availability.

   Further features include:

ii) CBDCs need to be user friendly
iii) CBDCs should be highly resilient to infrastructure outages and cyber attacks
iv) CBDCs need to guarantee safety and integrity of payment systems

5. CBDCs, public and private sectors: complementary and facilitating roles

A system which allows for continued use of cash payments and current electronic payments options is favored by many proponents (see Ingves; 2019:23 and also BIS 2020). In such regard, the BIS further adds that this could be made fully consistent with the two-tiered payment system, allowing public and private sectors to focus on their respective comparative advantages, namely:

- Central banks could focus on ensuring trust, stability and integrity in payments.
- The private sector being best placed to undertake the consumer facing activity of CBDCs

However, the BIS also highlights that the assumption of a substantial role by the private sector would necessitate the guarantee of compliance with regulatory standards. Further, a “level playing field in terms of access combined with adaptability”, one where PSPs are able to access the CBDC via multiple channels (back-end interfaces and APIs inclusively), as well as a “flexible and adaptable central bank operated infrastructure”, is favored.

The "Hybrid private-public partnership CBDC"

> *"The foundational design consideration for a CBDC needs to balance the operational role of the central bank and private intermediaries. CBDC payment intermediaries need to offer valuable services that have the same convenience, innovation and efficiency in today's payments. On approach which makes for a safe means of payment while allowing the private-public partnership to continue is a "hybrid" CBDC.*
>
> *In this arrangement, private intermediaries execute real time payments and handle all customer-facing aspects whilst the central bank operates a backup infrastructure – enabling it to protect the payment system during a financial crisis or cyber attack."*

6. Conclusion

Securities Financing Transactions and shadow banking industries are markets which have not only immense and strategic roles in view of their functions – as well as in terms of their systemic relevance and effects, but which many enterprises have used to conceal real assets values and disguise or transfer assets in the forms of Special Purpose Vehicles (SPVs).

The Financial Stability Board (FSB:2019) recognizes the vital role assumed by SFTs such as securities lending and repurchase agreements (repos), in supporting i) price discovery – as well as ii) secondary market liquidity for a wide variety of securities. However, it is also recognized that such transactions can also be used to iii) take on leverage as well as iv) maturity and liquidity mismatched exposures, and therefore can pose risks to financial stability.

The ongoing initiatives relating to Securities Financing Transactions and Shadow Banking Regulation represent a robust step in the efforts to address problems associated with unregulated and de centralized financial platforms. Whilst potentials exist for the increasingly popular crypto asset markets and blockchain technologies, federal regulators – as well as governments are also concerned of the systemic relevance which such markets could generate where adequate measures are not in place before assigning highly sensitive tasks to emerging technologies such as Artificial Intelligence and blockchain technologies. However the potential of such technologies – particularly in respect of their role and function in forward looking policy tools should be explored and not overlooked.

More importantly, the role and potential for CBDCs in "fostering competition among private sector intermediaries, setting high standards for safety and risk management, and serving as a basis for sound innovation in payments",

As well as possibilities

> "to become a complementary means of payment that addresses both specific use cases and market failures – as well as a catalyst for continued innovation in payments, finance and commerce, at large", as highlighted by the BIS, are also evidential of why the introduction of CBDCs would help resolve current challenges and risks posed through the introduction of stable coins."

> "*Investing to support the transition to zero net emissions will be a critical part of recovery. COVID has further hit investment, including the investment intentions of firms. An important part of the recovery from Covid will be to stimulate and support investment, particularly if we do see some elements of structural change in the economy, reflecting, for instance, the way we work"*

> —Andrew Bailey.

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