



Webinar—CBDC: International and domestic challenges, 22-23 April 2021

Summing-up

Hosts and organisers

Andrés Velasco, LSE (co-host and co-organiser)
Ricardo Reis, LSE (co-host and co-organiser)
Ousmène Mandeng, LSE and Accenture (co-organiser) *

Panellists (in the order of the programme)

David Mills, Federal Reserve	Darko Pilav, Digital Asset
Jürgen Schaaf, ECB	Ricardo Correia, R3
Tim Masela, South African Reserve Bank	Kathy Yuan, LSE
Keyu Jin, LSE	Lee McNabb, NatWest *
Daniel Heller, Fnlality	Scott Hendry, Bank of Canada
Laetitia Grimaud-Agaesse, Natixis *	Björn Segendorff, Riksbank
Christian Pfister, Banque de France	John Whelan, Santander
Richard Hay, Linklaters	Christian Catalini, Diem Association
Philipp Haene, BIS Innovation Hub	Piroska Nagy-Mohacsi, LSE *
Peter Bramm, SAP *	Gerardo Uña, IMF
Matthieu Saint Olive, Consensusys	Ian Roxan, LSE

All panels lasted 60 minutes. * Panel chair.

Introductory remarks 22 April 2021, 09:00 (EST), 14:00 (GMT)

The introductory remarks highlighted how CBDC has been elevated from the fringes to the core of the economic policy agenda during the past 12 months. One participant stressed that the innovation with CBDC is the adoption of a new format of money, a digital token akin to a digital bearer instrument, to complement bank notes and reserves and offer new payment functionalities. Given the centrality of central bank money, any significant changes are set to have broad-based implications for the financial system and the economy as a whole. Another participant underlined that the debate about CBDC has evolved from an initial focus on monetary policy effectiveness and new avenue of monetary policy transmission and the risks to financial stability and the role of banks in the economy to a broad range of specific use cases. The participant stressed that Covid-19 made more urgent exploring new tools to deliver public policies.

Panel—International payment problems and CBDC. 22 April 2021, 09:15 (EST), 14:15 (GMT)

The panel discussed a possible role of CBDC to improve international payments. Participants indicated that for most central banks CBDC is still only in its exploratory stages while a few are more advanced. Doubts about the use case and value added of CBDC remain while participants highlighted that CBDC were part of a more generalised convergence between the economy, payments and technology.

Participants indicated that one central motivation for the adoption of CBDC is avoiding foreign CBDCs and private currencies from undermining monetary sovereignty. Concerns about the impact of CBDC on financial stability through bank disintermediation and monetary policy remain. One participant stressed that control will be critical to safeguard financial stability. One participant highlighted that the use of CBDC off shore may be necessary to improve international payments while another participant underlined that the use of CBDC offshore could also adversely affect capital flows and the exchange rate and give rise to currency substitution in third countries.

Views on CBDC adoption were mixed. One participant underscored that adoption will be governed by the notion of “not doing harm” to existing arrangements and to aim for co-existence rather than substitution of existing bank channels. The participant questioned whether CBDC were sufficient to improve international payments or whether other frictions including legal and political were not more important warning that existing frictions cannot only be addressed by technology. Another participant advanced that dollar shortages and weaponization of the dollar are key motivations for CBDC while underscoring that liquidity, trust and well-functioning financial markets remain essential for adoption. The participant highlighted that CBDC could allow countries to “leapfrog” to the



newest payment technology. Participants outlined that the technology choice for CBDC has implications for the payments environment. CBDC could be either account-based or value or token-based.

The use of CBDC was seen as addressing regional payment challenges. One participant indicated that CBDC in a regional setting may offer advantages and be conducive towards using local currencies rather than third-country currencies in intra-regional transactions with reference to the Southern African Development Community (SADC). Another participant remarked that China may aim to build a payments corridor based on a renminbi CBDC as integral part of its Belt and Roads Initiative.

Central bank money today cannot be used in international payments [except for bank notes]. One participant indicated that Finality offers an alternative medium reserved by central bank money that can offer to a large extent the safety of central bank money and be used as settlement medium in international payments.

The adoption of Special Drawing Rights (SDR) as a complement to CBDC was evoked. One participant explained that the role of SDR will unlikely be significant and that adoption of a digital SDR may strengthen the role of SDRs but would be sensible only if holders are significantly enlarged to include the private sector.

Panel—Jurisdictional and regulatory boundaries. 22 April, 10:45 (EST), 15:45 (GMT)

The panel explored possible legal and regulatory implications of the introduction of the CBDC with a focus on international payments. The panel highlighted the risks of currency substitution (“dollarization”) for emerging markets, role of CBDC and fundamental questions of law about the approach to regulation.

Currency substitution was seen as a significant risk for emerging markets as an outcome of the adoption of CBDC. Participants distinguished between onshore and offshore use of CBDC by non-residents highlighting that central banks remain undecided about the use of CBDC offshore. One participant stressed that capital controls could be more easily implemented with CBDC than with crypto-asset to contain offshore use if required. Global stable coins were seen as possible complements to CBDC but not as substitutes.

The approach to regulation of CBDC remains unclear. One participant questioned whether to regulate CBDC as an asset and/or the underlying payment system. Another participant highlighted that the adoption of the E.U. regulation on markets in crypto-assets (MiCA), establishing a harmonised regime in the E.U. for cryptocurrencies, may offer some regulatory guiding principles. Another participant underlined that long held concepts like the definition of an asset are imprecise with reference to the provisions governing Bank of England notes; the “promise to pay” [as written on a Bank of England note] to be a “fiction.” Ownership of money also remains ill-defined and so the responsibility for transferring money including a lack of clarity about the allocation of liabilities. There is also no determination if a claim can be directed at a “thing,” a token, or whether it must be a person [natural or legal].

CBDC or central bank money is often associated with public good properties. One participant asked that if CBDC is a public good should transition costs to adopt CBDC be borne by the public? The significant costs that normally accompany large financial infrastructure initiatives may pose an obstacle to adoption.

Panel—Inter-operability between DLT platforms. 22 April, 12:00 (EST), 17:00 (GMT)

The panel focused on the inter-operability of different blockchains and other DLT-platforms. A CBDC issued on one blockchain cannot normally be transferred to another blockchain and inter-operability between blockchains is seen as critical for the adoption of blockchain-enabled payments solutions. One participant argued that standards had in the past established conditions for inter-operability but that blockchain standardisation seems premature. Participants underlined that an essential objective of blockchain-enabled payments applications is the convergence between cash and asset cycles or to allow payment and settlement to become one.

Participants acknowledged that different stakeholders will use different networks. They indicated that inter-operability solutions already exist but that standards would facilitate their technical implementation. Within the technology stack, there are several options to offer inter-operability. One participant highlighted that APIs could offer effective inter-operability. Another participant stressed that inter-operability poses different challenges when connecting business networks, independent networks or networks based on different DLT platforms. Another participant further outlined that inter-operability can take place at different levels in the technology stack, that is, at the business level, core applications, API gateway, security, wallet or other frontend applications or other. Existing standards like the ERC token already allows interaction with an asset for any wallet following the standard.

The essential goal of DLT-platforms in finance is to achieve atomic transactions across blockchain networks [transactions whereby both legs of the transaction occur or none]. It rests on a swap of tokens and would allow to



exchange values irrespective of where the asset resides and eliminate all open positions and settlement risks. One participant explained that with existing systems payment and settlement do not occur at the same time. The integration of payment and settlement, one participant argued, that is, the integration of a payments network with an asset network, is essential as otherwise DLT-enabled platform would only just add another payment rail. One participant explained that where price formation takes place outside the settlement provisions, a blockchain oracle would be required to offer needed price information. Another participant stressed that using APIs will not enable true atomicity.

The impact of atomic settlement may change liquidity requirements. One participant emphasised that many costs associated with foreign exchange trading are due to trapped liquidity and collateral. One participant argued that real time atomic transactions may require significantly less liquidity. The DLT-enabled environment, one participant indicated, may also help democratise markets with reference to the foreign exchange market, as conditions would allow for everyone to be a liquidity provider.

Panel—Do we need a retail CBDC and why? 23 April, 10:00 (EST), 15:00 (GMT)

The panel discussed the utility of a retail CBDC. The panel underscored the importance of central bank money and the additional features CBDC could offer including programmability while softening concerns for bank disintermediation. Panellists differed in their views about the advantages of DLT-enabled CBDC.

The importance of central bank money was highlighted for its role in financial integration. One panellist explained that central bank money unifies the banking system through convertibility between bank monies and central bank money. Another panellist stressed that CBDC is about access to digital central bank money since the general public has currently access only to digital bank money. The concern about disintermediation of the banking system was seen as a lesser concern. One panellist argued that as the demand for liquid payments is small, the adoption of CBDC should be manageable for the banking system.

The programmability of DLT-enabled CBDC was underlined as a critical feature. One applicant stressed that programmability brings new applications and represents a central opportunity with CBDC as it allows for the specification of conditional behaviour for money that can affect the velocity of transactions, e.g. automatic deductions of VAT payments. It may also offer building on top of money to offer benefits that are unanticipated today. Another participant was sceptical as to the benefits of programmability and whether CBDC would need to be based on DLT-platforms. Another participant stressed that if CBDC wants to be more than a mere upgrade and exhibit truly new features then DLT will be necessary stressing that the available technology should make for a more ambitious approach. The participant underscored that DLT enables bundling of technology and thereby offering a higher degree of inter-operability with other platforms.

Central banks may benefit from third-party DLT-financial market infrastructure. One participant explained that the existing infrastructure may allow prompt adoption but while a dollar diem would represent a digital dollar medium it would not co-exist with a dollar CBDC and be phased out when a dollar CBDC comes onstream.

The effect of CBDC on monetary policy was questioned. One participant indicated that if CBDC were an equivalent to cash, it would not have an impact in the same manner that cash currently is unimportant for monetary policy. The participant also argued that an interest-bearing CBDC may not be needed as a tool to increase the effectiveness of monetary policy and monetary policy transmission though it may offer some advantage in a negative interest rate environment.

Panel—New approaches to fiscal operations with CBDC. 23 April, 11:15 (EST), 16:15 (GMT)

The panel explored the institutional inter-dependencies between monetary and fiscal authorities in relation to the adoption of a CBDC. As most fiscal operations have a monetary impact and vice versa, cooperation between the central bank and ministry of finance was seen as essential underscoring the importance of considering implications of the adoption of CBDC beyond the financial system. In the UK, the recently announced CBDC taskforce including the Treasury and Bank of England seem a step in the right direction.

The promise of CBDC to alter fiscal operations could undermine the integrity of the fiscal accounts. One participant highlighted the need for the treasury single account to remain the main tool to manage fiscal operations and ensure a clear allocation of responsibility is maintained between line ministries and the treasury. The participant indicated that the payment remittance information is critical to locate the public funds at the central bank and commercial banks to maintain necessary fiscal oversight.



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The advantages of CBDC were considered to offer new opportunities amid persistent important deficiencies in public service delivery as revealed by the Covid-19 crisis. One participant emphasised that CBDC may enhance the ability to reach vulnerable groups. The participant further outlined that CBDC may offer a real option to digitalise the operations of the treasury. At the same time, a precondition of using CBDC for fiscal operations is the level of digitalisation of fiscal operations. Another participant underlined that CBDC should create few additional tax liabilities. But the traceability of CBDC can be a powerful tool to control tax evasion, and CBDC can also contribute to the emerging trend of digitalising tax administration – Tax Administration 3.0 – though there are also risks that must be taken into account.