



Task Force 5  
**Purpose & Performance: Reassessing  
the Global Financial Order**



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# IMPROVING G20+ MONETARY COOPERATION IN THE ERA OF CBDCs

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# Abstract




**C**BDCs are still a project in the making, but there are many doubts about the economic, political, and societal implications of this dramatic change in the representation of money. These uncertainties stem from the various policy goals, operational models, design features and technology choices available to monetary authorities. Beyond the domestic challenges of designing and implementing CBDCs, however, there are concerns about their broader impact on cross-border capital flows, financial stability, and


international monetary relations. This Policy Brief analyses the general state of play of e-currencies to understand the main policy developments and identify key risks ahead; discusses the relevance of the G20 and assesses the main coordination channels available at the multilateral level; and proposes ways to improve monetary cooperation among G20 countries. The brief calls on the G20 to provide expertise for countries trying to design their CBDCs and help smoothen the interoperability aspects of countries' different schemes.



# The Challenge



# 1




**R**ecent developments in the field of digital payments have left central bankers increasingly pondering new types of electronic money. The steady decline in the use of cash, combined with the boom of blockchain and crypto assets, has urged policymakers to think critically about the prospects of losing control over monetary sovereignty and consider issuing their own form of digital money instead. These are known as Central Bank Digital Currencies (CBDCs).

CBDCs are a novel type of electronic money that, unlike cryptocurrencies such as Bitcoin, are regulated and issued by central banks (thus equivalent to the country's fiat currency). Their aim is to leverage the advantages of new technologies with the stability and trust associated with central bank-backed money. CBDCs can be easily stored and accessed using digital wallets on mobile phones, making them accessible even for unbanked individuals, and they can be used for various types of transactions, including online purchases, peer-to-peer transfers, and offline payments. They also represent a risk-free alternative to commercial bank deposits, as they are, in effect, a liability

with the central bank, just as physical banknotes are.<sup>1</sup>

According to the Atlantic Council, by December 2022 there were 114 countries, representing 95 percent of the world's GDP, actively exploring a CBDC; 18 of the G20 members are already in an advanced stage of development.<sup>2</sup> The Bahamas became the first country to officially launch a CBDC in October 2020, but other countries have followed since then, including Jamaica, Nigeria, and the Eastern Caribbean Currency Union. Others, including Australia, Brazil, India, and South Africa are currently at a pilot stage—testing various features before making a final launch decision. The People's Bank of China (PBOC) is arguably the most advanced large-country central bank in this area, with several pilot programmes already reaching hundreds of millions of Chinese citizens.<sup>3</sup> In the Eurozone and the US, by contrast, the introduction of CBDCs is undergoing a much slower process, as monetary authorities are taking a cautious approach to avoid making premature decisions without first assessing the risks of issuing a potentially disruptive new form of digital money. However, they also recognise that they must be ready for unexpected



market developments, since developing the technical capacity to launch a fully-operational CBDC could take years.<sup>4</sup>

Indeed, designing and implementing a CBDC is not easy; there are many choices and considerations that central banks must reflect on to avoid making false steps.<sup>5</sup>

- For starters, CBDCs can have different policy goals, including enhancing financial inclusion, increasing payments efficiency, and protecting monetary sovereignty. These differ across jurisdictions, reflecting countries' domestic challenges, and they are crucial to help establish the guidelines needed for the ensuing design and technology choices. For example, a CBDC aiming at financial inclusion must be catered to the unbanked population with an easily accessible digital wallet, or to those without internet access with some offline functionalities. On the other hand, these decisions also involve trade-offs. For instance, if a central bank wants to ensure financial system stability, it might introduce holding limits to mitigate the risk of deposit flights. However, these restrictions also affect usability, as they could prevent people from performing

certain activities, such as receiving salaries.<sup>6</sup>

- Another crucial choice is related to the operating model—specifically, how the CBDC will be issued and circulated and what the role of the central bank and the private sector will be. The decision is important because it determines the ultimate liability frameworks in case of errors and breaches. For example, a key question is who should perform background screenings to ensure compliance with know-your-customer and anti-money laundering (KYC/AML) regulations. Most central banks are delegating this responsibility to financial institutions to mitigate privacy concerns and reassure people that the government would never gain access to personal information. However, by doing this, central banks could face future operational and reputational risks.
- Design features will also be important, as they support policy goals and help mitigate risks that could arise from issuing a CBDC. These include quantitative restrictions aimed at ensuring financial stability (see above), anonymity features to protect privacy, and interoperability for cross-border payments. One of the most controversial proposals

is to include remuneration schemes akin to commercial bank deposits. Some argue that interest rates can help increase CBDCs' attractiveness as savings instruments and protect central banks' monetary transmission mechanisms.<sup>7</sup> However, most monetary authorities have bluntly rejected the idea in fear of aggravating the risks of financial disintermediation. While a tiered remuneration structure could offer certain benefits, the idea has not gained much traction outside academia.<sup>8</sup>


- Lastly, the decisions related to technology must be appropriately selected to operationalise the central bank's objectives. In particular, monetary authorities must make two choices. First, they must decide which external vendors to partner with in developing proprietary solutions. Many such vendors have appeared in recent years and begun testing their applications together with central banks, leveraging advanced technologies to enable a wide range of innovative use cases. Several countries have even held CBDC competitions to

identify promising companies and reward original ideas, including the G20 Techsprint, which is due to take place in India later this year. The second choice relates to the technology itself, namely, whether to rely on distributed ledger technologies (DLTs) or instead use existing centralised systems. DLTs hold promise, as they would enable unique advantages from the use of blockchains, including atomic settlements, delivery versus payment, and tokenisation. However, the technology is still in its infancy, and its capacity to handle complex distribution systems has only recently begun being tested.

- If, finally, central banks decide to issue a CBDC (especially a retail option<sup>a</sup>), another important aspect is to develop an effective public communications strategy. Monetary and political authorities must explain why the introduction of CBDCs is necessary and how they might affect daily life. They also must reassure citizens that CBDCs will not be used for surveillance and that cash will continue to be made available as long as there is a public use for it.

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a Retail CBDCs are those that are aimed at the general public, akin to electronic cash. By contrast a wholesale option refers to digitised central bank liabilities that are designed mainly for interbank transactions.



With these considerations in mind, we must then ponder the domestic and international implications of CBDCs. At home, several doubts are still hovering over central bankers' heads. Many have not arrived at a final decision on issuance because some of the risks remain unaddressed and most benefits do not yet seem apparent.<sup>9</sup> After all, many of the new functionalities enabled by CBDCs, especially in digital payments, are already covered by private sector actors. However, as mentioned, monetary authorities continue studying potential use cases and building the technical capacity to be ready for future market developments, including other countries' launch decisions. The risk is that the situation could change rapidly and require them to issue a CBDC of their own to avoid migration to other currencies and retain control over monetary sovereignty. Three challenges remain ahead:

- The first could be described as pertaining to **usability**. Central banks are studying numerous applications for CBDCs to solve a wide range of existing industry challenges, but some have argued that CBDCs are a solution looking for a problem.<sup>10</sup> Moreover, widespread adoption is still not

guaranteed. For example, the PBOC has tried to encourage citizens to use the e-yuan by offering pre-charged e-wallets and other incentives, but that has not necessarily translated into a continued and massive use, partly due to existence of popular commercial applications like WePay and AliPay.<sup>11</sup>

- Besides a lack of necessity, many people, particularly in the West, want to stay away from CBDCs due to **privacy concerns**, arguing that a government-controlled digital currency could easily evolve into a surveillance tool.<sup>12</sup> Indeed, several US Republicans have proposed new legislations to curb efforts to issue retail CBDCs,<sup>13</sup> and in Europe, surveys show that privacy is among citizens' top concerns.<sup>14</sup> In both places, monetary authorities have rushed to reassure people that any future CBDC would be privacy-preserving.
- Lastly, the literature discusses the potential dangers of introducing a CBDC for the **stability of the banking sector**. These analysts argue that digital currencies increase the risk of crowding out banks by offering an alternative to customer deposits, which could therefore facilitate bank runs.<sup>15</sup>



These risks would be particularly acute during crises<sup>16</sup> and spell even greater danger for smaller banks.<sup>17</sup> Experts have argued that mitigating them might require introducing restrictions on CBDC holdings or taxing balances above a certain threshold.<sup>18</sup>

Beyond the domestic challenges of designing and implementing a CBDC, these new forms of digital money will also have profound implications for international monetary affairs, especially if several countries decide to issue them simultaneously. Some central banks have been working on building multi-CBDC bridges to enhance interoperability and ease frictions in cross-border settlements, but these remain somewhat isolated cases, with no ambitious multilateral efforts to date. Another important question is how CBDCs will affect global capital flows, since the increased speed of transfers could increase volatility, but the technology might also make capital controls more manageable. The international monetary and financial system's stability will largely depend

on the ability of countries to cooperate, especially in times of crises. However, geopolitical tensions could hinder attempts to set international standards.

## Bridges

- The BIS Innovation Hub has been leading **practical experiments** to understand the benefits of CBDCs for cross-border payments, broadly agreeing that common systems encompassing multiple CBDCs are both feasible and efficient.<sup>19</sup> But while central banks and international organisations have been keen to evaluate these applications bilaterally or regionally, there have been no active efforts to discuss these at scale. Technical experiments on wholesale and retail CBDCs for cross-border usage have been conducted for years,<sup>b</sup> but the interconnected nature of the international monetary and financial system calls for ambitious monetary cooperation at the global level.

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b See for example Project Jura (2021), Project mBridge (2022), and Project Icebreaker (2023)



## Capital flows

- The introduction of wholesale CBDCs is expected to bring large benefits for cross-border capital flows in the form of reduced transaction costs and faster settlements,<sup>20</sup> but there is certain fear that these developments might also aggravate the impact of speculative waves, thus increasing financial volatility. This would affect developing countries in particular, which could experience even more disruptive **sudden stops** and suffer greater financial and exchange rate crisis. On the other hand, the introduction of CBDCs could also enhance states' centralised monitoring capabilities, which could make capital controls more effective in case of such crises.

## (In) Stability

- Along the same lines, if retail CBDCs became easily available across borders, they could have adverse effects on countries' monetary sovereignty, for example by increasing the risk of **currency substitution** and vulnerability to

financial shocks.<sup>21</sup> These risks could also be compounded by the increased competition with private forms of money, including stablecoins and other cryptocurrencies. The ECB, in particular, appears to be keen on mitigating these issues.<sup>22</sup>

## Geopolitical competition

- As there is competition between currency areas in today's monetary system, this will also be the case with CBDCs. The extra-territorial use of major CBDCs might create friction, and even **geopolitical tensions**, between the world powers. The access, storage, and possible abuse of payments data, in particular, is a sensitive issue.

Ultimately, the answers to these questions will have a profound impact on future monetary relations. As the National Bank of Denmark Governor noted in a recent speech, “digitalisation, new technologies, and financial innovation are changing the nature of society.”<sup>23</sup> These global trends are at the core of central banks' mandates of monetary and financial stability and secure and efficient payment systems.

Monetary authorities should thus pay close attention to ensure that people are able to reap the benefits of these developments while minimising their adverse effects. The age of CBDCs is upon us; to guarantee the stability


of domestic monetary systems and smoothen the interoperability of future CBDC schemes, the imperative is a new approach to international monetary cooperation.



# **The G20's Role**

# **2**





**T**he G20 must stand to the challenge and lead in this new era of international monetary cooperation for both tactical and technical reasons.

First, the G20 comprises important economies with the power to reach political consensus through G20 Summits and working groups. As shown in the previous section, CBDCs will have profound implications at both the national and international level, so the G20 is the right place to develop a vision and agenda and encourage international cooperation. The main economies must show resolve and remain committed despite their differences, leveraging their organisational capacity to provide a framework for cooperation that can be adopted by countries around the world. Indeed, the G20, through the Financial Stability Board, has already developed a roadmap for enhancing cross-border payments which has also considered the potential of CBDCs to increase their efficiency,<sup>24</sup> so it could encourage cooperation in other areas.

Second, the G20 is well-suited to advance multinational issues related to the international monetary and financial system because of its high degree of technical capacity. After all, the G20 has often been convened to respond to periods of uncertainty and instability, including the financial crises of the 1990s and 2000s. G20 countries often have access to resources that are not widely available, both in terms of finance and skills, so they are perfectly placed to develop a top-down and bottom-up approach to help with the diffusion of technologies and the sharing of best practices.


Third, the G20 might be able to strengthen cooperation with international standard-setting bodies to integrate efforts and establish a comprehensive framework on the multilateral level. In particular, the G20 could build on existing collaborations with the Bank of International Settlements and the Financial Stability Board to encourage greater North-South collaboration and facilitate technical exchanges on CBDCs.



# **Recommendations to the G20**

# **3**





**T**he introduction of CBDCs is a process that is eminently transversal. Money affects all aspects of life and the transit to digital money will affect all countries, not only G20 members, as well as both public and private sectors. The approach, therefore, needs to be both top-down and bottom-up. Our policy recommendations can be broadly divided into two sets of solutions, in line with the challenges described in the first section. To manage this possible transition in the best possible way, the G20 should:

### **Provide expertise for countries trying to design their CBDC schemes**


- **Facilitate technical exchanges:** Right now, there are multiple national experiences in evaluating, testing, and even implementing the possibility of introducing a CBDC, but there are no institutionalised multilateral working groups among the G20 countries to facilitate technical exchanges, discuss best practices and assess possible risks. The BIS and FSB could facilitate this process.
- **Include the experience of non-G20 countries:** These exchanges should not only

include the G20 countries, but also encourage the presence of, and therefore draw experience from, smaller non-G20 countries, many of which appear to be more advanced in the introduction of CBDCs. This G20+ approach would also encourage discussions between the Global North and South and possibly help reduce geopolitical tensions and currency competition.

- **Bring in the private sector:** In these working groups or task forces it would be important to count with the presence of commercial financial operators and their expertise. CBDC vendors have high technical capacities that have not yet been developed in many countries, so their experience should be as relevant as that of central banks. Participants might include banks and non-bank financial institutions, but also big, and small, tech companies specialised in these matters.

### **Help smoothen the interoperability of the different CBDC schemes**

- **Interoperability:** There is a risk that in a few years' time we will have hundreds of CBDCs, some for retail and others for wholesale purposes, with their



own operational systems, but incompatible between them. It is important to start thinking about the interoperability of CBDCs from a very early stage so that they can be used across borders. The existing multi-CBDC corridor network projects, or “bridges”, could provide a solid basis, but more ambition is needed at the multilateral level.

- **Multilateral Regulation:** More broadly, monetary authorities and the private sector need to start thinking about the necessary regulation that is required for a smooth transition to a world of multiple CBDCs. New international rules might need to be written on important topics such as transnational capital flows and the access, storage, and treatment

of (particularly personal) data generated by the CBDCs. Here again the BIS and the FSB, in collaboration with the private sector, can facilitate the process.

- **Introduction of an e-SDR:** In times where data sovereignty is increasingly seen as a key factor to preserve national security, and therefore transnational cooperation will be difficult, it might be useful to test the implications of the introduction of digital money, even across borders, with the design and circulation of an e-SDR by the IMF. The e-SDR would be a multilateral CBDC from its origins, and all the testing and experimentation, that could be developed with it, would serve the international community as a whole.

Attribution: Miguel Otero Iglesias et al., “Improving G20+ Monetary Cooperation in the Era of CBDCs,” *T20 Policy Brief*, July 2023.



## Endnotes

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- 1 Igor Mikhalev, Kaj Burchardi, Igor Struchkov, Bihao Song, and Jonas Gross, *CBDC Tracker Whitepaper*, (CBDC Tracker, 2021), <https://cbdctracker.org/cbdc-tracker-whitepaper.pdf>
- 2 “Central Bank Digital Currency Tracker,” Atlantic Council, last modified December 2022, <https://www.atlanticcouncil.org/cbdctracker/>
- 3 Ananya Kumar, “Practice Makes Perfect: What China Wants from Its Digital Currency in 2023,” *Atlantic Council*, April 24, 2023, <https://www.atlanticcouncil.org/blogs/econographics/practice-makes-perfect-what-china-wants-from-its-digital-currency-in-2023/>
- 4 European Central Bank (ECB), *Report on a Digital Euro* (Frankfurt: ECB, 2020), [https://www.ecb.europa.eu/pub/pdf/other/Report\\_on\\_a\\_digital\\_euro~4d7268b458.en.pdf](https://www.ecb.europa.eu/pub/pdf/other/Report_on_a_digital_euro~4d7268b458.en.pdf); Federal Reserve, *Money and Payments: The U.S. Dollar in the Age of Digital Transformation* (Washington DC: Federal Reserve, 2022), <https://www.federalreserve.gov/publications/files/money-and-payments-20220120.pdf>
- 5 International Monetary Fund (IMF), *Behind the Scenes of Central Bank Digital Currency: Emerging Trends, Insights, and Policy Lessons* (Washington DC: IMF, 2022), <https://www.imf.org/en/Publications/fintech-notes/Issues/2022/02/07/Behind-the-Scenes-of-Central-Bank-Digital-Currency-512174>
- 6 Seraina Grünewald, *A Legal Framework for the Digital Euro: An Assessment of the ECB’s First Three Progress Reports* (Brussels: European Parliament, 2023), [https://www.europarl.europa.eu/thinktank/en/document/IPOL\\_IDA\(2023\)741518](https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA(2023)741518)
- 7 Hanna Armelius, Gabriela Guibourg, Stig Johansson, and Johan Schmalholz, “E-Krona Design Models: Pros, Cons and Trade-Offs,” *Sveriges Riksbank*, August 2020, [https://www.riksbank.se/globalassets/media/rapporter/pov/artiklar/engelska/2020/200618/2020\\_2-e-krona-design-models-pros-cons-and-trade-offs.pdf](https://www.riksbank.se/globalassets/media/rapporter/pov/artiklar/engelska/2020/200618/2020_2-e-krona-design-models-pros-cons-and-trade-offs.pdf)
- 8 Annelieke Mooij, *Digital Euro’s Legal Framework-The Legal Framework Concerning Legal Tender, Privacy and Inclusion* (Brussels: European Parliament, 2023), [https://www.europarl.europa.eu/thinktank/en/document/IPOL\\_IDA\(2023\)747840](https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA(2023)747840)
- 9 Bank of International Settlements (BIS), *Central Bank Digital Currencies: Ongoing Policy Perspectives*, (Basel: BIS, 2023), <https://www.bis.org/publ/othp65.pdf>
- 10 Christopher Waller, “CBDC - A Solution in Search of a Problem?” BIS, August 6, 2021, <https://www.bis.org/review/r210806a.htm>

- 11 Kumar, "Practice Makes Perfect: What China Wants from Its Digital Currency in 2023."
- 12 Nicholas Anthony and Norbert Michel, "Central Bank Digital Currency: Assessing the Risks and Dispelling the Myths," *Cato Institute*, April 4, 2023, <https://www.cato.org/policy-analysis/central-bank-digital-currency#>
- 13 Ted Cruz, "Sen. Cruz Introduces Legislation To Prohibit The Fed From Establishing A Central Bank Digital Currency," Cruz.Senate.Gov, March 2023, <https://www.cruz.senate.gov/newsroom/press-releases/sen-cruz-introduces-legislation-to-prohibit-the-fed-from-establishing-a-central-bank-digital-currency>; Ron DeSantis, "Governor Ron DeSantis Announces Legislation to Protect Floridians from a Federally Controlled Central Bank Digital Currency and Surveillance State," Florida Governor, March 2023, <https://www.flgov.com/2023/03/20/governor-ron-desantis-announces-legislation-to-protect-floridians-from-a-federally-controlled-central-bank-digital-currency-and-surveillance-state/>
- 14 ECB, *Eurosystem Report on the Public Consultation on a Digital Euro*, (Frankfurt: ECB, 2021), [https://www.ecb.europa.eu/pub/pdf/other/Eurosystem\\_report\\_on\\_the\\_public\\_consultation\\_on\\_a\\_digital\\_euro~539fa8cd8d.en.pdf](https://www.ecb.europa.eu/pub/pdf/other/Eurosystem_report_on_the_public_consultation_on_a_digital_euro~539fa8cd8d.en.pdf)
- 15 Ulrich Bindseil, *Central Bank Digital Currency - Financial System Implications and Control* (SSRN Electronic Journal, 2019), <https://dx.doi.org/10.2139/ssrn.3385283>; Reimo Juks, "When a Central Bank Digital Currency Meets Private Money: Effects of an e-Krona on Banks," *Sveriges Riksbank*, November 2018, <http://prod-upp-image-read.ft.com/c080e86a-966c-11e9-8cfb-30c211dcd229>
- 16 William Chen and Gregory Phelan, *Digital Currency and Banking-Sector Stability* (Office of Financial Research, 2023), [https://www.financialresearch.gov/working-papers/files/OFRwp-23-01\\_digital-currency-and-banking-sector-stability.pdf](https://www.financialresearch.gov/working-papers/files/OFRwp-23-01_digital-currency-and-banking-sector-stability.pdf)
- 17 Yasmin Osman, "Eine Gefahr Für Kleine Banken?" *Handelsblatt*, March 8, 2023, <https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/digitaler-euro-eine-gefahr-fuer-kleine-banken/29019410.html>
- 18 Ulrich Bindseil, *Tiered CBDC and the Financial SystemS* (SRN Electronic Journal, 2020), <https://dx.doi.org/10.2139/ssrn.3513422>
- 19 BIS, *Using CBDCs across Borders: Lessons from Practical Experiments*, (Basel: BIS, 2023), <https://www.bis.org/publ/othp51.htm>
- 20 Raphael Auer and Rainer Boehme, *Central Bank Digital Currency: The Quest for Minimally Invasive Technology* (BIS, 2021), <https://www.bis.org/publ/work948.htm>
- 21 BIS, *Central Bank Digital Currencies for Cross-Border Payments*, (Basel: BIS, 2021), <https://www.bis.org/publ/othp38.htm>; IMF, *Digital Money across Borders: Macro-*

*Financial Implications*, (Washington DC: IMF, 2020), <https://www.imf.org/en/Publications/Policy-Papers/Issues/2020/10/17/Digital-Money-Across-Borders-Macro-Financial-Implications-49823>

- 22 Fabio Panetta, "The Present and Future of Money in the Digital Age," *European Central Bank*, December 10, 2021, <https://www.ecb.europa.eu/press/key/date/2021/html/ecb.sp211210~09b6887f8b.en.html>
- 23 Signe Krogstrup, "Governor Signe Krogstrup's Speech at the Conference New Types of Digital Money," *Danmarks Nationalbank*, March 9, 2023, <https://www.nationalbanken.dk/media/zh3n2jbu/skro-keynote-cbdc.pdf>
- 24 Financial Stability Board (FSB), *G20 Roadmap for Enhancing Cross-Border Payments: Priority Actions for Achieving the G20 Targets*, (Basel: FSB, 2023), <https://www.fsb.org/2023/02/g20-roadmap-for-enhancing-cross-border-payments-priority-actions-for-achieving-the-g20-targets/>

