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Task Force 03
REFORMING THE INTERNATIONAL FINANCIAL ARCHITECTURE

Central Bank Digital Currencies: Opportunity for Developing a New, Just and Equitable Global Payment System

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Abstract

Digitalization is provoking meaningful changes in the sphere of the monetary system to the point where the IMF (2022) has referred to them as a "money revolution". At least 105 countries are currently studying the possibility of implementing a Central Bank Digital Currency (CBDC). Discussions about the international usage of CBDCs are gaining momentum. In fact, there is a general perception of the dysfunctionality of the current international payment system. The reasons are diverse, but firstly, the international migrants pay exorbitant fees for their remittances; secondly, the SWIFT platform can be used as an international economic warfare instrument. The advent of CBDCs and corresponding changes in the global infrastructure for international payments are then expected to have important consequences for the world economy. Discussions are still in the early phase regarding these developments, so it is a proper moment for a concerted effort aimed at erecting a financial architecture that fulfils the role of a "global public good". The main problem, however, is that countries are tempted to enter into a race for the development of systems that respond to their own national interests. The Bank for International Settlements is coordinating pilot-projects for cross-border payment systems. Yet, the discussions are rather devoted to the creation of faster and cheaper services, with no concern for political aspects. This policy brief proposes a joint-policy of the G20 Central Banks aimed at developing a CBDC's international payment system which can: i) reduce the asymmetries of the International Monetary and Financial System (e.g., by enabling the use of diverse national currencies and eliminating exorbitant fees for international payments); ii) foment green finance (especially due to the traceability and the possibility of accumulation of gigantic realm of data related to investments and consumption).

Diagnosis of the issue

Digitalization is a process whose impact on all aspects of human life and society is immense. The Covid-19 pandemic accelerated digital transformation into various facets of our daily lives. In the sphere of the monetary system – understood as the domain of money and payments (BIS, 2022) –the changes are very meaningful, to the point where the International Monetary Fund (IMF, 2022) has referred to a “money revolution”. A watershed was the appearance of the crypto-assets (e.g., Bitcoin and Ether), allegedly aimed at creating a decentralized and self-organized payment system which circumvents the necessity of state money. At the same time, new platforms for payments emerged, becoming the main mode of payment in some countries (e.g., China). The emergence of crypto-assets is connected with the development of new technology, which policymakers consider progressive (e.g., blockchains). Nonetheless, academic literature, Central Banks (CBs) analysts and multilateral institutions (e.g., Bank for International Settlements – BIS) stress the risks associated with indiscriminate usage of these assets and the private digital payments – notably potential financial instability for national economies (e.g., UNCTAD, 2023).

These developments have stimulated interesting debates about the pertinence of CBs creating their own digital currencies. At least 105 countries are currently studying the possibility of implementing a Central Bank Digital Currency (CBDC), allowing analysts to claim that this will be the future of money. While many CBs insist that the CBDC is being planned for domestic use, discussions about its international usage are gaining momentum. There is a general perception of dysfunctionality associated with the current international payment system (e.g., international migrants pay extremely high fees for their remittances), clearly highlighted by several institutions including the G20 (BIS *et al*, 2021).

Discussions about cross-border payments in CBDCs are still in an early phase. It is, therefore, a proper moment to concerted efforts to erect an infrastructure that fulfils the role of a *global public good*. These discussions are being made by multilateral institutions, CBs and private corporations, focusing as much on the technical issues related to these new platforms, as they do on the potential gains for business. Most studies and reports make allusion to "faster, cheaper, more transparent and more inclusive cross-border payment services" (BIS *et al*, 2021, p. 1). Still, these discussions overlook the political dimension of such institutional transformations.

The aim of this policy paper, therefore, is to contribute to the debates on the creation of CBDCs and the corresponding payment systems by proposing a joint policy which aims to bring to the fore the political dimensions of the process, allowing the involved actors to engage in the effort to develop a new, just and equitable global payment system. In particular, we understand that the advent of CBDCs and corresponding changes in the global infrastructure for international payments may open a window of opportunity to address two crucial aspects of the International Monetary and Financial System (IMFS).

First of all, the IMFS is deeply asymmetric, with only a few currencies being used for international payments, different costs for transactions involving diverse currencies and countries, etc. (details in the next section). These asymmetries create strong harms for countries issuing "peripheral currencies"[1] (De Conti, 2011). If the new CBDCs

[1] Peripheral currencies are currencies which are not representatives of general wealth at the international level (De Conti, 2011).

international payment system is developed and implemented by the dominant countries of the world economy, it may reinforce the existing asymmetries or create new ones.

It is therefore absolutely necessary that the creation of the new system is under the responsibility of a group of countries, representing both the Global North and South.

Second, the urgencies related to climate change and its effects on humanity require a concerted effort for a rapid and global green transition. Given the centrality of finance for the world economy, several studies indicate the role of green finance as a crucial vector for this transition. Yet, most initiatives related to green finance are so far being developed at the national level. The proposed joint policy would therefore be very important to reshape the IMFS, facilitating the future development of green finance on a global scale.

Given its history and its representativeness, the G20 is undoubtedly a group which could and should assume the responsibility of coordinating the establishment of this new international payment system. Very importantly, this joint policy would be directly related to two of the three priorities defined by the Brazilian government for its G20 presidency, namely, priority (ii) Energy transition and sustainable development in its three aspects (social, economic and environmental); and priority (iii) Reform of global governance institutions. We claim, therefore, that G20 is a proper group and the moment is proper for the formulation of a joint-policy envisaging the creation of an international payment system which may be considered as a global public good.

Recommendations

This policy brief recommends the G20 to initiate discussions for the elaboration of a joint policy aimed at the development of a CBDC cross-border payment system, which will be a global public good. As discussed above, the existing debates on the constitution of a CBDC cross-border system claim that it should enable higher efficiency, more transparency and lower costs for international transactions (BIS *et al*, 2021, p. 1). These are indeed important targets. Yet, we claim that there are two crucial dimensions which should be considered as core objectives for the development of such a system, namely: i) reducing the asymmetries of the IMFS; ii) fostering green finance.

1) Reducing the asymmetries of the IMFS

As indicated above and widely discussed in the literature, the IMFS is deeply asymmetric (Carneiro, 1999; Prates, 2002; De Conti, 2011; Kaltenbrunner, 2015; Fritz et al, 2018; Carneiro and De Conti, 2022). In fact, only a very small number of currencies are used at the international level. Among them, the US dollar (USD) dominates as the world's most widely used currency, accounting for 88% of all transactions made in the global foreign exchange markets. Concerning international reserves, the USD's share is 58.4%[2]. For the sake of comparison, the US GDP is about 25% of the world GDP. Thus, the use of US currency goes far beyond its importance for the global production of goods and services.

[2] Data coming respectively from the BIS Triennial Survey on Foreign Exchange Markets (2022) and the IMF survey on Composition of Foreign Exchange Reserves (Dec. 2023).

The benefits for the country issuing the key currency of the world economy are profound and diverse, having been appropriately characterized by Valéry Giscard D'Éstaing (French Minister of Finance in the 1960s) as an "exorbitant privilege" (Eichengreen, 2010). To sum up, the US has virtually no risk of running into a balance of payment (BoP) crisis, is less sensitive to changes in its exchange rates, and has a very high degree of autonomy in its economic policy. In contrast, countries that issue currencies that are not used internationally suffer from balance of payment constraints and lack autonomy in their conduct of economic policy (Bortz and Kaltenbrunner, 2017; Fritz *et al*., 2018).

Recent geopolitical events have also brought light to another privilege of the issuer of the world's key currency, namely the possibility of using it as a weapon. In fact, an IMFS, which is centred on a single national currency, empowers its issuer to use not only its currency but also the associated payment system as political weapons to destabilize a rival economy. As a result, some countries are currently accelerating the search for alternative payment systems and, ultimately, a de-dollarization of the world economy. Nonetheless, if new payment systems are established, but they are also centered in a national currency (for instance, the Chinese renminbi), the same problem will arise, because this system will also be potentially used as a weapon, also bringing uncertainties and instability to the economy.

G20 countries should, therefore, agree on the joint development of a new cross-border payment system aimed at reducing the asymmetries and avoiding platforms that are based on only one or a few currencies. First of all, the system has to be built in a way which integrates all countries of the world. Second, the system has to accept all currencies, allowing for the bilateral exchange of any pair of currencies. Third, it has to ensure that the speed and the cost of the transactions will be the same for all pairs of currencies.

Fourth, the technological framework which embraces this new system may not be under the domain of any specific country; instead, it has to be based in a technology which is also taken as a global public good. Fifth, the regulations involving these cross-border transactions have to be defined multilaterally. In sum, if the CBDCs are being created under the isolated initiative of the national governments, the system which will enable the international circulation of these CBDCs should be developed and operationalized under multilateral governance.

2) *Fostering green finance*

The endeavor for an ecological transition is necessarily multidisciplinary. In the field of Economics, one of the areas which is receiving much attention concerns "green finance", an approach which was created during the Global Financial crisis and is gaining momentum after the Covid-19 pandemic. The main motivation comes from the perception that in the current era, the world economy relies on gigantic volumes of financial stocks that could be used for constructive purposes instead of only serving speculation. The basic principle is that – through market incentives and public policies – an increasing share of these financial stocks and flows can be channelled to green investments. Green finance is, therefore, a crucial conceptual innovation in the realm of finance which has the potential to contribute to the ecological transition.

If the creation of CBDCs will profoundly change the characteristics of money and finance worldwide, it is absolutely necessary that debates on this issue take into consideration the necessity of the IMFS to be used as a vector for the green transition. Yet, in the discussions related to CBDCs and corresponding international payment systems, it is surprising that aspects related to green finance have still not received due treatment[3].

Our recommendation, therefore, is that this joint effort should be aimed at shaping a new cross-border payment system that is supportive of green finance, both for retail and wholesale payments. For that purpose, smart contracts may play an important role. After all, given the higher transparency and traceability for the international flow of payments, financial institutions providing green finance may track the resources and be sure that their loans are indeed being used for green investments – avoiding the so-called "greenwashing". In addition, this joint policy may consider if, respecting the principle of anonymity, the collection of huge reams of data related to virtually all cross-border economic transactions might equally be useful for the development of green finance – and/or for the design of policies aimed at stimulating sustainable patterns for transactions within the global value chains, for instance.

The technical details of a CBDC cross-border system devoted to these objectives are yet to be defined during the discussions of the policy makers involved in this joint-policy, but our perception is that the new technologies and an adequate regulation will allow higher degrees of transparency, traceability and knowledge about the global economic transactions, being more favorable to green finance than the current payment systems.

In sum, the technical issues should respond to the two political wills discussed above, i.e., reducing the asymmetries of the IMFS and fostering green finance. That's why it is crucial that these political dimensions are collectively discussed and the political wills are

[3] Especially in the academic field. To the best of our knowledge, the sole exceptions to date (at least in English, Portuguese, Spanish, French and Italian) are Becerra *et al.* (2023) and Yang *et al.* (2023).

collectively defined and collectively pursued, enabling this system to serve as a global public good.

Scenario of outcomes

The BIS is leading an initiative for the development of a fast cross-border payment platform (Nexus). Yet, this platform is not designed for CBDCs. At the same time, the BIS Innovation Hub supports several initiatives aimed at developing CBDCs' multilateral payment systems. Nonetheless, each initiative involves only a few countries, without any stimulus for discussions involving the whole global community. As a consequence, there is a strong risk that these platforms, which are currently being developed, will not contribute to a less asymmetric IMFS.

For the efforts aimed at creating a global platform, the G20 is certainly a very appropriate forum because it involves countries of the Global North and South. Yet, it is important to keep in mind that the G20 countries are currently at different stages in the development of their CBDCs. A few have already launched pilot projects (e.g., China, Japan, South Korea, Russia, South Africa), while some are in the stage of development (e.g., USA, Brazil), and others are still inactive (e.g., Argentina). This means that a new CBDC cross-border system involving all G20 countries may not be planned for the short term. Our claim, however, is that a working group at the G20 has to be created now for discussions aimed at defining a roadmap for the establishment of this new international payment system. It is undoubtedly easier to shape a system during its creation process than after its establishment.

After all, money is power, and the control over this payment system can be also a strong source of power. The most powerful countries of the world will be therefore tempted to enter a race for controlling this system (both through the definition of the technological standard and the regulatory framework). Thus, the Global South has to step up and collectively defend a system which is not favoring any country or group of countries.

Last, but not least, private companies are involved in the research and development of the CBDC payment pilot systems. It will be therefore necessary to avoid putting the private interests above those of the global public interest.

This policy paper proposes a joint policy of the G20 Central Banks whose deliverables should be organized in four phases: 1) Joint definition of the priorities in the construction of the new CBDC cross-border payment system (as discussed above, our recommendation is that this system should be aimed at reducing the asymmetries of the IMFS and fostering green finance); 2) Joint-development and adequation of the technology embedded in the new payment system to cope with the priorities defined in phase 1; 3) Joint-design of a regulation framework which is in line with the priorities defined in phase 1; 4) Implementation of the new CBDC cross-border payment system.

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