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# Ready, steady, go? – Results of the third BIS survey on central bank digital currency

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# Ready, steady, go? – Results of the third BIS survey on central bank digital currency<sup>1</sup>

Most central banks are exploring central bank digital currencies (CBDCs), and their work continues apace amid the Covid-19 pandemic. As a whole, central banks are moving into more advanced stages of CBDC engagement, progressing from conceptual research to practical experimentation. Around the globe, interest in CBDCs continues to be shaped by local circumstances. In emerging market and developing economies, where central banks report relatively stronger motivations, financial inclusion and payments efficiency objectives drive general purpose CBDC work. A testament to these motives is the launch of a first "live" CBDC in the Bahamas. This front-runner is likely to be joined by others: central banks collectively representing a fifth of the world's population are likely to issue a general purpose CBDC in the next three years. However, the majority of central banks remains unlikely to issue CBDC in the foreseeable future.

### Introduction

This report presents the results of a survey carried out among more than 60 central banks in late 2020 about their engagement in CBDC work, their motivations and their intentions regarding CBDC issuance. Central banks also provided their views on legal frameworks for CBDCs and their assessment of the use of cryptocurrencies and stablecoins in their jurisdictions.

During the course of 2020, work on CBDCs continued apace amid the Covid-19 pandemic.<sup>2</sup> The vast majority of central banks in the survey – 86% – are now exploring the benefits and drawbacks of CBDCs. In recent months, major central banks have published a multitude of in-depth assessments of related policy issues and tested a variety of designs (Auer et al (2020a)). 2020 also marked the arrival of a *"live"* general purpose CBDC when the Bahamas launched its Sand Dollar for its residents on 20 October 2020.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> We thank Raphael Auer, Giulio Cornelli, Umar Faruqui, Jon Frost, Jenny Hancock, Thomas Lammer, Thomas Nilsson, Tara Rice and Takeshi Shirakami for their valuable comments. We are also grateful to Ilaria Mattei for her excellent research assistance. The views expressed in this article are those of the authors and do not necessarily reflect those of the BIS.

<sup>&</sup>lt;sup>2</sup> For more details on the impact of the Covid-19 pandemic on CBDC see Box A.

<sup>&</sup>lt;sup>3</sup> For more details on Project Sand Dollar see CBB (2020). Several other projects which have been referred to as CBDC in the media are not taken into account for the purpose of this paper. This is because we consider them either private initiatives (eCFA in Senegal and other countries in West Africa), not intended as means of payment (Lithuania's LBCoin), prefunded electronic payment systems (Project Bakong in Cambodia) or carried out in the absence of a monetary authority (SOV in the Marshall Islands).

That said, a broader roll-out of CBDC is still impending.<sup>4</sup> Some central banks with advanced CBDC projects are becoming more cautious about issuance timeframes while assessing their work. Meanwhile, a growing awareness of the cross-border implications that CBDCs can have for the financial system has spurred international collaboration between central banks to find common ground on policy.<sup>5</sup>

### What are central bank digital currencies?

CBDC is central bank-issued digital money denominated in the national unit of account, and it represents a liability of the central bank. If the CBDC is intended to be a digital equivalent of cash for use by end users (households and businesses), it is referred to as a "general purpose" or "retail" CBDC.<sup>6</sup> As such, it offers a new option to the general public for holding money. CBDC is different from cash, as it comes in a digital form unlike physical coins and banknotes. CBDC is also different from existing forms of cashless payment instruments for consumers such as credit transfers, direct debits, card payments and e-money, as it represents a direct claim on a central bank, rather than a liability of a private financial institution. This type of riskless claim also makes CBDC different from cryptocurrencies (such as Bitcoin) or other private digital tokens (eg so-called stablecoins such as Tether).

In contrast to retail CBDC, "wholesale" CBDC targets a different group of eligible users. It is designed for restricted access by financial institutions and is similar to today's central bank reserve and settlement accounts. Accordingly, it is intended for the settlement of large interbank payments or to provide central bank money to settle transactions of digital tokenised financial assets in new infrastructures (Bech et al (2020)). This survey covers both types of CBDCs.

## Adding a Covid-19 component to the established survey

#### Questions in the 2020 CBDC survey

The survey was carried out in the fourth quarter of 2020. While most of the questions from the 2018 and 2019 surveys<sup>7</sup> remained unchanged to ensure consistency, some questions were added to capture the impact of the Covid-19 pandemic.

The survey asks central banks if they are working on CBDCs and, if they are, it further enquires about the type of CBDC and how advanced the work is. Motivations

- <sup>5</sup> See eg Group of central banks (2020).
- <sup>6</sup> Throughout the paper, the terms "general purpose" and "retail" are used interchangeably.
- Another similar, but smaller scale and unpublished survey was conducted in 2017. Results are included where relevant.

<sup>&</sup>lt;sup>4</sup> For the previous editions of this survey, see Boar et al (2020) and Barontini and Holden (2019).

and current expectations for potentially issuing a CBDC were queried, as well as whether central banks have the legal authority to issue a CBDC. As in previous editions, the survey includes questions about cryptocurrencies and other private digital tokens and their use for payments. These encompass a wide variety of digital tokens not issued by central banks. The survey differentiates between so-called cryptocurrencies<sup>8</sup> and other private digital tokens (eg stablecoins<sup>9</sup>). All questions are listed in Annex 2.

#### Sample and geographical coverage

In 2020, 65 central banks replied to the survey<sup>10</sup> (Graph 1 and Annex A). Respondents represent close to 72% of the world's population and 91% of global economic output. Twenty-one respondents are located in advanced economies (AEs) and 44 are in emerging market and developing economies (EMDEs).

#### Respondents to the survey



The black circles represent the Dominican Republic, the European Central Bank, Hong Kong SAR, Singapore and Tonga. "Advanced economies" and "emerging market and developing economies" are indicated as defined by the IMF *World Economic Outlook* country classification.

Use of this map does not constitute, and should not be construed as constituting, an expression of a position by the BIS regarding the legal status or sovereignty of any territory or its authorities, the delimitation of international frontiers and boundaries and/or the name and designation of any territory, city or area.

- <sup>8</sup> "Cryptocurrencies" are defined in the survey as decentralised digital tokens without an issuer that are not representative of any underlying asset or liability.
- <sup>9</sup> Private digital tokens that have an identifiable issuer or represent a claim and/or underlying assets.
- Of these, 54 also took part in the 2019 survey and 48 had replied for the third time. A comparison of the results using the full 2020 sample and using the subsample of the central banks who replied to all three surveys showed broadly consistent results. Where relevant, differences due to the changing sample are highlighted in the text.

Graph 1

# Central banks' interest in CBDC rises further

Over the last four years, the share of central banks actively engaging in some form of CBDC work grew by about one third and now stands at 86% (Graph 2, left-hand panel). The survey data show that work related to retail CBDCs is gaining in relative popularity, with more central banks either looking at both wholesale and retail or narrowing their scope of work down to retail only (centre panel).

The central banks not currently involved in any CBDC work are primarily in smaller jurisdictions. This finding is consistent with the results of the previous two surveys. Research also suggests that CBDCs are more likely to be under research and development in jurisdictions with high mobile phone use, innovation capacity<sup>11</sup> and internet search interest for CBDCs, albeit with some differences across retail and wholesale CBDCs (Auer et al (2020d)).

Central banks are moving into more advanced stages of CBDC engagement, progressing from conceptual research to experimentation. About 60% of central banks (up from 42% in 2019) are conducting experiments or proofs-of-concept, while 14% are moving forward to development and pilot arrangements (Graph 2, right-hand panel). Not surprisingly, these general trends encompass large differences across jurisdictions and types of economies. Also, stepping up CBDC work does not prejudice the policy decision of whether or not to actually launch a CBDC, but it does demonstrate a strong interest.



#### Central banks' work on CBDC advances further

Share of respondents

<sup>1</sup> Share of respondents conducting work on CBDC.

Source: BIS central bank survey on CBDCs.

<sup>11</sup> Using the World Intellectual Property Organization (WIPO) Global Innovation Index.

Graph 2

#### Local circumstances shape the motivations for CBDC work

Central banks continue to consider issuing a CBDC for a variety of reasons. The survey asked about a predefined set of motivations – including financial stability, monetary policy implementation and financial inclusion as well as payments efficiency and safety. In order to differentiate the relative importance of these motivations, central banks ranked these predefined potential factors from "not so important" to "very important" for issuing retail and wholesale CBDCs.

Overall, the answers show that all of these factors contribute to respondents' interest in CBDC to some degree. At the same time, this seemingly balanced picture (Graphs 3 and 4) masks differences between AEs and EMDEs as well as certain jurisdictions' specific motivations, some of which are discussed below. It appears that the weight given to different motivations depends on factors such as the national payment system's state of development and structure and the degree of financial inclusion in the jurisdiction (Richards et al (2020)). Motives for wholesale and general purpose CBDCs also differ.

# Financial inclusion and enhancing payments are key motivations for retail CBDC

Generally, EMDEs report stronger motivations for issuing CBDC than AEs (Graph 3). Financial inclusion emerges as a main factor across EMDEs and remains a top priority for CBDC development.<sup>12</sup> A case in point is the live CBDC in the Bahamas: the Sand Dollar was introduced to help facilitate financial inclusion in this nation of 390,000 people spread across 30 inhabited islands, many of them remote.



#### Motivations for issuing a retail CBDC

(1) = "Not so important"; (2) = "Somewhat important"; (3) = "Important"; (4) = "Very important".
Source: BIS central bank survey on CBDCs.

<sup>&</sup>lt;sup>12</sup> This aspect is also discussed in the report by the CPMI and the World Bank Group on the payment aspects of financial inclusion in the fintech era; see CPMI-WB (2020).

Payment-related motivations, such as domestic payments efficiency and payments safety remain at the heart of both AEs and EMDEs' motivations for issuing general purpose CBDCs.

The survey also shows that financial stability and monetary policy have, over time, become more important motivations for CBDC work in EMDEs. In contrast, these motivations appear to have become less important in AEs. However, considerations of the potential role of CBDCs in these areas resurface distinctively in the "others" category as well as in the comments of some AEs central banks: a CBDC could help to maintain a country's monetary sovereignty in the face of "digital dollarisation" or provide a public alternative in the case of a widespread adoption of private digital currencies denominated in major foreign currencies. Another important motivation highlighted by several AE and EMDE central banks is ensuring continued access to central bank money for households and companies in a context of declining use of cash in transactions.

#### Clearly focused wholesale CBDC projects

Wholesale CBDCs are seen as less of a priority globally compared with the general purpose variant. This is reflected both in the number of ongoing projects and in the weaker motivation indicated by central banks (Graph 4) regarding this kind of CBDC.

The distribution of priority across motivations mirrors that for retail CBDCs – notably, payments-related motivations emerge as most important. Nonetheless, there are also notable differences. Financial inclusion is a less important motivation for wholesale CBDCs, which is self-evident given its focus on transactions between financial institutions, rather than between end users<sup>13</sup>.



#### Motivations for issuing a wholesale CBDC

(1) = "Not so important"; (2) = "Somewhat important"; (3) = "Important"; (4) = "Very important".
Source: BIS central bank survey on CBDCs.

<sup>&</sup>lt;sup>13</sup> However, wholesale CBDC could still support smoother remittance flows or less expensive transfers for end users.

The only area where – on average – motivations for wholesale CBDCs are stronger than for retail CBDCs is in cross-border payments efficiency. As noted previously (Boar et al (2020)), this assessment is underscored by ongoing central bank experiments<sup>14</sup> and will be investigated in more depth as part of an international collaboration to enhance cross-border payments (CPMI (2020), FSB (2020a)).

Responses to the survey highlight other important motivations for issuing a wholesale CBDC, such as development of capital markets, enhancement of cyber resilience, and improvements in securities trading and settlement. Experiments are under way for the latter. For example, Project Helvetia by the BIS Innovation Hub, the Swiss National Bank and infrastructure provider SIX, explored the functional feasibility and legal robustness of settling tokenised assets with a wholesale CBDC (BIS et al (2020)).

#### As CBDC work progresses, motivations change

A stronger perceived need for CBDCs in EMDEs also means they are more likely to have advanced to a pilot or implementation phase. The survey shows that seven out of eight central banks in advanced stages of CBDC work are in EMDEs. In these jurisdictions, the focus is generally on CBDC for domestic payments. However, larger EMDEs with ongoing pilots do also consider cross-border payments efficiency as important.

The central banks in the survey can be split into three groups according to the stage of work they are in: those only conducting research, those working additionally on proofs of concept and those that are in very advanced stages of development. The survey finds that motivations vary across these groups for both general purpose and wholesale CBDC (Graph 5). While payments efficiency and safety are prime motivations regardless of work phase, those in more advanced stages take additional factors such as financial stability into serious consideration.

<sup>&</sup>lt;sup>14</sup> Examples are Project "Stella" by the European Central Bank and the Bank of Japan; Project "Jasper-Ubin" by the Bank of Canada and the Monetary Authority of Singapore; Project "Inthanon-LionRock" by the Hong Kong Monetary Authority and the Bank of Thailand; and Project "Aber" by the Saudi Arabian Monetary Authority and the Central Bank of the United Arab Emirates.

#### Main motivations of CBDC work by stage

#### Average importance



Graph 5

Source: BIS central bank survey on CBDCs.

### Legal authority to issue a CBDC remains unclear in many countries

A robust and unambiguous legal framework is an essential prerequisite for any central bank issuing a CBDC. As in the previous two surveys, about a guarter of central banks have, or will soon have, the legal authority to issue a CBDC (Graph 6).





Share of respondents

Since the first survey on this question in 2017, there has been a slow but steady trend of more and more central banks either obtaining legal authority or clarifying that they do not have it. Some 26% of central banks do not have the authority to

issue a CBDC and about 48% remain unsure.<sup>15</sup> The continued high share of central banks who have not yet sought clarification on their mandates in this respect reflects the finding that most central banks have not advanced to development and pilot arrangements.

# Majority of central banks are unlikely to issue CBDC in the foreseeable future – but many are becoming amenable to the possibility

While a live CBDC has been issued for use by the general public, it only serves a small part of the world's population. This is likely to change. As in the past year, the survey<sup>16</sup> finds that central banks collectively representing a fifth of the world's population are likely to issue a general purpose CBDC in the next three years. In addition, some 21% of jurisdictions (up from 14%) consider this a possibility (Graph 7).

#### The likelihood of CBDC issuance continues to increase



Short term: 1–3 years; Medium term: 1–6 years. "Likely" combines "very likely" and "somewhat likely". "Unlikely" combines "very unlikely" and "somewhat unlikely".

Source: BIS central bank survey on CBDCs.

As in previous years, EMDE central banks consider themselves more likely to issue a general purpose CBDC than their AE peers. However, in contrast to previous years, a fifth of responding AE central banks estimate that issuance of a general purpose CBDC is at least "possible" in the short or medium term, up from only one central bank in the previous year.

Overall, about 60% of central banks still see themselves as unlikely to issue any type of CBDC in the foreseeable future (ie in the short and medium term). However,

- <sup>15</sup> The increased share of responses indicating uncertainness about the legal authority to issue CBDC can be attributed to changes in the sample, compared to the 2019 survey.
- <sup>16</sup> The survey measured central banks' intentions to issue either type of CBDC in the short (up to three years) and medium (up to six years) term. Likelihood ranges on a five point scale, from "very likely" to "very unlikely".

this reluctant majority has become smaller over time, mainly due to the decreasing proportion of "very unlikely" assessments and a commensurate increase in jurisdictions judging issuance to be "possible", among both AEs and EMDEs. This development may indicate that a combination of factors has pushed more central banks to imagine a future that might include CBDC in one way or another. These factors could include continued research and development on CBDCs, the accelerated digitalisation of payments during the Covid-19 pandemic, and the spectre of global stablecoins.

Issuance of wholesale CBDC is considered less likely compared with general purpose CBDC, and interest is more pronounced in EMDEs. However, similar to the trend observed regarding general purpose CBDC, the survey indicates a continuing decrease in the number of jurisdictions predicting a wholesale CBDC in the short and medium term as "very unlikely" and a growing number see it as "possible" in the medium term.

It should be noted that the composition of the group of jurisdictions where issuance of wholesale or retail CBDC is indicated as "likely" in the short and medium term has changed substantially since the last survey. For example, half of the central banks that said in 2019 that they are "likely" to issue a CBDC in the short term have downgraded their likelihood to "possible" or "unlikely". Responses also suggest that in some jurisdictions, plans are upheld but pushed further into the future. In turn, an equivalent number of countries have shortened their timing estimates. This recast illustrates the substantial complexity associated with CBDC projects. At the same time, the steady share of central banks with CBDC ambitions is also a testament to a continued strong interest in the topic.

# Central banks still see cryptocurrencies as niche products and stablecoin developments are being closely watched

Cryptocurrencies are privately issued digital assets with their own "currency" unit of account, such as Bitcoin and Ethereum. Many cryptocurrencies experienced a surge in their values in 2020, true to their form as speculative assets. This increase was not matched by any change in the perceived usage in payments. Indeed, most central banks continue to see cryptocurrencies as niche products.

Specifically, the survey asked central banks about current and anticipated use of cryptocurrencies for domestic and cross-border payments. The majority of responses indicated only trivial use or use by niche groups at both domestic and cross-border level, in line with previous years (Graph 8, left-hand and centre panel). There are a few exceptions: the paradigm of cryptocurrencies which strive to maintain trust in the stability of their value through the use of technology (BIS (2018)) was seen as holding promise in extraordinary situations where trust in public institutions is low, leading to a more widespread or significant use for domestic payments.

Meanwhile, stablecoins are being analysed by most monetary authorities. According to the survey, two thirds of central banks are studying the impact of stablecoins on monetary and financial stability (Graph 8, right-hand panel).

Notably, in comparison with a year ago, more EMDE central banks have started investigating stablecoins, possibly reflecting a growing awareness of the cross-border implications of widely adopted stablecoins. Those jurisdictions not actively assessing stablecoins are mostly small EMDE economies with active CBDC research.

Despite the broad attention paid to stablecoins, concerns about their emergence as an alternative payment method are not a widespread motivation for work on CBDC – only a handful of central banks included them in their rationales for possible CBDC issuance. Still, the subject of stablecoins has attracted considerable attention from public authorities and standard setters, as witnessed by internationally coordinated work by the FSB and others (FSB (2020b)).



## Conclusion

The year 2020 saw the official launch of a retail CBDC, and it is likely that more will be rolled out in the coming years. Most central banks are now exploring the case for CBDCs in some way and, overall, the survey indicates a continuous move from purely conceptual research to experimentation and pilot projects. Yet despite these developments, a widespread roll out of CBDCs still seems some way off.

Interest and work on CBDCs is global, but motivations for their potential issuance are shaped by local circumstances. Financial inclusion remains a key motivation across EMDEs and a top priority for CBDC development. In AEs, the perceived need for issuance is generally lower and the main areas of interest are related to the efficiency and safety of payments. Precautions to ensure the general public's continued access to central bank money – related to the gradual decline of cash for transactions – is a recurring theme.

International policy coordination on CBDCs is set to intensify over the coming years as central banks thoroughly review the cross-border and economic implications of issuing digital currencies and technical design choices and operational complexities continue to present practical challenges.

When it comes to cryptocurrencies, central banks continue to see these as niche products with no widespread use as a means of payment. Conversely, developments in stablecoins are closely watched given their potential for rapid adoption by consumers.

#### Box A

#### Covid-19 speeds up digitalisation of payments and adds new motivations for CBDC

The survey indicates that overall, central banks try to strike a balance between urgency and caution – leaning somewhat more to the side of caution. About 60% of central banks indicated that the crisis has not changed their priority or preference for issuing a CBDC (Graph A, left-hand panel). For those central banks that have altered their stance on CBDC due to the Covid-19 crisis, main reasons are the goal of enabling access to central bank money during times of emergency and the use of a CBDC as a potential complement to cash and in-person payment methods when social distancing is required (Graph A, right-hand panel). The notion of using CBDC as a means of government-to-person payment, notably direct fiscal assistance or stimulus to households and small businesses, is also widely shared – as has been noted in policy commentaries  $\mathbb{O}$ .



<sup>1</sup> The sample includes countries that replied to both the 2019 and 2020 surveys. For the last statement "The amount of central bank-issued cash in circulation is declining", the sample includes all countries that replied in 2020.

Source: BIS central bank survey on CBDCs.

Some central banks highlighted the acceleration of cash-related developments as an additional motivation to adjust their preference for issuing a CBDC. However, the decline of cash is not uniform across jurisdictions and use cases. This year's responses indicate that, in most jurisdictions, the amount of central bank issued cash in circulation is not declining (Graph A, left-hand panel). At the same time, many jurisdictions reported that cash used for payments is declining. On the one hand, these trends reflect the demand to hold cash for precautionary purposes and as a store of value (Auer et al (2020b)) (Graph B, left-hand panel). On the other hand, they are indicative of prominent changes in retail payments during the pandemic (BIS (2020)) (Graph B, centre panel). It should be noted that both observations are accentuating existing trends, as consumers are increasingly shifting from physical to digital payment instruments (Boar and Szemere (2020)) (Graph B, right-hand panel).



<sup>1</sup> Data are weighted by GDP. <sup>2</sup> "AEs" denotes the simple average of the following advanced economies: AU, CA, CH, EA, GB, JP, SE and US. "EMEs" denotes the simple average of the following emerging market economies: AR, BR, CN, HK, ID, IN, KR, MX, RU, SA, SG, TR and ZA. <sup>3</sup> "Share of contactless in all card-present transactions by a global card network. In many countries, transaction limits for contactless payments were raised in Q2 2020. <sup>4</sup> Excludes MX and TR given data availability. <sup>5</sup> Selected CPMI countries. The start (end) of an arrow represents 2012 (2019). Digital instruments include credit transfers, direct debits, card and e-money payments, and other cashless instruments. Physical instruments include paper-based payment instruments (cheques) and cash withdrawals at ATMs (used as a proxy for cash payments). Data not available for HK and JP. <sup>6</sup> For CA, latest data for cash withdrawals at ATMs is for 2017. For ES, the start of the arrow represents 2014. For CH and GB, physical instruments include cheques and total cash withdrawals.

Sources: Auer et al (2020c); BIS (2020); Boar and Szemere (2020).

D See for instance Auer et al (2020c): "In the future, a widely used general purpose CBDC could enable universal G2P payments."

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# Annex 1: Central banks participating in the survey

Sixty-five central banks participated in the 2020 survey from the following jurisdictions:

-	Argentina	-	Hong Kong SAR	-	Peru*
-	Australia	-	Hungary	-	Russian
-	Azerbaijan	-	India		Federation
-	Bahamas	-	Indonesia	-	Saudi Arabia
-	Belgium	-	Iraq	-	Serbia
-	Bolivia*	-	Israel	-	Singapore
-	Brazil	-	Italy	-	Slovenia
-	Canada	-	Jamaica	-	South Africa
-	Cape Verde	-	Japan	-	Korea
-	Chile*	-	Jordan	-	Spain
-	China	-	Kosovo	-	Sweden
-	Colombia	-	Kuwait	-	Switzerland
-	Dominican	-	Madagascar*	-	Tanzania*
	Republic	-	Malaysia	-	Thailand
-	Egypt	-	Mexico	-	Tonga
-	Eswatini	-	Mongolia	-	Trinidad and
-	euro area (ECB)	-	Montenegro		Tobago*
-	France	-	Morocco	-	Turkey
-	Georgia	-	Mozambique*	-	United Kingdom
-	Germany	-	Netherlands	-	United States
-	Guatemala*	-	New Zealand	-	Uruguay
-	Haiti*	-	Norway	-	Vietnam
-	Honduras*	-	Paraguay		

\*First time participant in the survey

## Annex 2: Survey questions

1. Has your central bank engaged, or will it engage, in any kind of research, experiments or development work related to the development and use of CBDC? [Yes / No]

2. Is your work related to:

- Wholesale CBDC
- General purpose CBDC
- · Both
- 3. What type of work is being, or will be, conducted? Please check all that apply.
  - Research / study
  - Experiments / proofs of concept
  - Development / pilot arrangement

4. How important are the following aspects to your motivations in issuing a:

- General purpose CBDC
- Wholesale CBDC

The following aspects were proposed:

- o Financial stability
- Monetary policy implementation
- o Financial inclusion
- o Payments efficiency (domestic)
- Payments efficiency (cross-border)
- Payments safety / robustness
- o Others (please specify below)

For each: Very important / Important / Somewhat important / Not so important

Please provide any comments on your motivations for any aspects you considered as very important or important.

- 5. How likely is it that your central bank will issue a:
  - General purpose CBDC
  - Wholesale CBDC

For both, two time horizons were proposed:

- Short term (within the next three years)
- Medium term (four to six years)

For each: For each: Very likely/Somewhat likely/Possible/Somewhat unlikely/Very unlikely

How likely is that the Covid-19 pandemic will accelerate CBDC developments in your jurisdiction?

- General purpose CBDC
- Wholesale CBDC

For each: For each: Very likely/Somewhat likely/Possible/Somewhat unlikely/Very unlikely

6. Does your central bank have the legal authority to issue a CBDC? [Yes/No/Uncertain/Laws are currently being changed to allow for it]

7. Please provide any other details about CBDC and the thoughts and work in your jurisdiction, including your key motivations.

8. For your jurisdiction, please tick "True" or "False" for the following statements: [*True/False/Not applicable*]

- The amount of central bank-issued cash in circulation is declining.
- The use of central bank-issued cash for payments is declining.
- The public's ability to access central bank-issued cash could decline in the medium term (within six years), assuming no action is taken by the central bank or public authorities.
- Your central bank has carried out a recent study of public cash use (eg a payments diary).
  - If "true", please provide a link.
- The Covid-19 crisis has changed your central bank's priority/preference for issuing a CBDC.
  - If the Covid-19 crisis has changed your central bank's priority/preference for issuing a CBDC, what are the motivations behind it? Please select all that apply.
    - a. Enable access to central bank money during times of emergency
    - b. Serve as a payment channel for public funding programmes
    - c. Complement to cash and in-person payment methods when social distancing is required
    - d. Provide alternative to private payment systems in case of a credit crisis
    - e. Other (please specify) \_\_\_\_\_

9. In your jurisdiction, how significant do you think consumer use of cryptocurrencies or crypto-assets for payments is?

- For domestic payments
- For cross-border payments

For each: Significant use/Wider public use/Use by niche groups/Trivial or no use/Do not know

10. In your jurisdiction, do you think consumer use of cryptocurrencies or cryptoassets for payments is increasing or decreasing?

- For domestic payments
- For cross-border payments

#### For each: Increasing/Staying the same/Decreasing/Do not know

11. In your jurisdiction, are you analysing the potential impact on monetary and financial stability of private digital tokens that are not cryptocurrencies (ie those tokens that have an identifiable issuer or represent a claim and/or underlying assets, sometimes referred to as "stablecoins")? [Yes/No/Don't know]

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