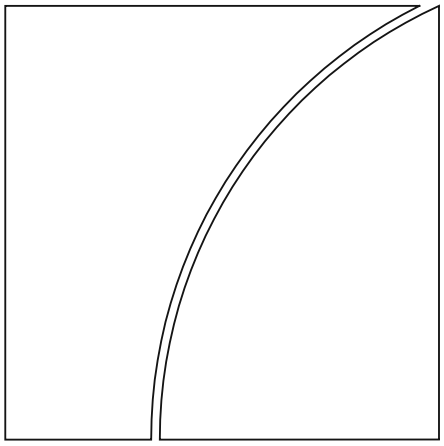

BIS Papers

No 159

Advancing in tandem – results of the 2024 BIS survey on central bank digital currencies and crypto

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August 2025

JEL classification: E42, E58, O33.

Keywords: central bank digital currencies, CBDC, digital innovation, cryptoassets, stablecoins, cross-border payments, tokenisation, tokenised bonds, interoperability, financial stability, regulation.

The views expressed are those of the authors and not necessarily the views of the BIS.

This publication is available on the BIS website (www.bis.org).

ISSN 1682-7651 (online)
ISBN 978-92-9259-879-2 (online)

Advancing in tandem – results of the 2024 BIS survey on central bank digital currencies and crypto[1]

Central banks' involvement in central bank digital currency (CBDC) work remained strong in 2024. Of the 93 central banks surveyed, 91% (85) were exploring either a retail CBDC, a wholesale CBDC or both. At an aggregate level, the exploration of wholesale CBDCs is at more advanced stages than exploration of retail CBDCs. The focus and stage of the work and envisioned use cases and design features of CBDCs vary across jurisdictions. Yet, preserving the role of central bank money amid the decline of cash and the rise of tokenisation of traditional assets is a key driver for many central banks. More than one in three jurisdictions had also accelerated work on CBDCs in light of developments in stablecoins and other cryptoassets. While the use of stablecoins for payments outside the cryptoassets ecosystem is still limited in most jurisdictions, it is more widespread for cross-border payments and remittances in certain emerging market and developing economies. The results show that work on CBDCs progressed in tandem with an increasing number of jurisdictions enacting or developing regulations for stablecoins and other cryptoassets. Work on CBDCs also advanced as private and public sector engagements in asset tokenisation increased in many jurisdictions.

Introduction

This paper presents the results of the 2024 BIS survey on central bank digital currencies (CBDCs) and crypto. A total of 93 central banks participated in the survey. They shared insights into the level of involvement in CBDC work and, conditional on involvement, motivations for potentially issuing a CBDC, envisioned use cases and design features. CBDC is an enhanced digital representation of central bank money and can include both retail and wholesale versions (BIS (2025)). A retail CBDC is a digital version of physical cash that households and firms can use for everyday transactions. A retail CBDC differs from existing forms of cashless payment instruments, such as credit transfers, direct debits, card payments and e-money, as it is a direct liability of the central bank rather than a liability of a private financial institution. As tokenised wholesale central bank money, wholesale CBDCs are intended for use as a settlement asset in transactions between banks, central banks and other financial institutions. A wholesale CBDC would serve a role similar to that of central bank reserves in the current system, but with added functionalities enabled by tokenisation, such as programmability and composability (BIS (2025)). The results presented in this paper shed light on the status of and latest trends in central banks' work on retail and wholesale CBDCs.

The survey also provided insights into the use of stablecoins for payments and regulatory approaches to cryptoassets. Cryptoassets are defined as digital assets issued by the private sector that depend primarily on cryptography and distributed ledger technology (DLT) or similar technology (FSB (2020)). The concept of a stablecoin was created due to abrupt and constant fluctuations in the prices of cryptoassets (G7 (2019)). Stablecoins are a subcategory of cryptoassets that aim to maintain a stable value relative to a specified peg (FSB (2020)).

[1] We are grateful to Codruta Boar, Jon Frost, Tirupam Goel, Hyun Song Shin and Takeshi Shirakami for valuable comments and Fanni Leppanen for excellent research assistance. The views expressed in this paper are those of the authors and do not necessarily reflect those of the BIS.

Applications of tokenisation go beyond wholesale central bank money and cryptoassets. Tokenisation refers to the process of generating and recording a digital representation of assets on a programmable platform (BIS-CPMI (2024)). This can also involve commercial bank deposits and other assets. Interest in tokenisation has been rising in recent years, in anticipation that tokenisation could play an important role in the future financial system (BIS (2023, 2025)). Moreover, tokenisation may have implications for the roles of central banks in payments, monetary policy and financial stability (BIS-CPMI (2024), FSB (2024b)). Within the field of payments, tokenisation raises considerations for the roles of central banks as issuers of money and operators, catalysts and overseers of payment systems. The scope of the 2024 survey has therefore been expanded with questions related to tokenisation of commercial bank deposits and other financial and real assets.

Key features of the 2024 survey

Questions

The latest CBDC and crypto survey was conducted in late 2024. It is the eighth consecutive annual survey (see Annex A for the questionnaire).[2] As in previous editions, the survey collected information on central banks' involvement in developing retail, wholesale or both types of CBDC, the progress of their work, and their motivations. As in previous years, the survey included questions about the use of stablecoins in payments outside the cryptoassets ecosystem and regulatory approaches to cryptoassets. Various new questions were added to collect information on developments in the tokenisation of commercial bank deposits and other assets.

Sample and geographical coverage

Ninety-three central banks responded to the 2024 survey (see Annex B), of which 73 had taken part in the 2023 survey.[3] The jurisdictions of the central banks that participated in the 2024 survey represent 78% of the world's population and 94% of global economic output.[4] Twenty-eight respondents are central banks from advanced economies (AEs) and 65 are central banks from emerging market and developing economies (EMDEs) (Graph 1).[5]

[2] The current survey was carried out between October 2024 and December 2024. The first survey informed a report of the CPMI and Markets Committee on CBDCs published in March 2018 (CPMI-MC (2018)). The subsequent six surveys were published as BIS Papers between 2019 and 2024 (Barontini and Holden (2019), Boar et al (2020), Boar and Wehrli (2021), Kosse and Mattei (2022, 2023), Di Iorio et al (2024)).

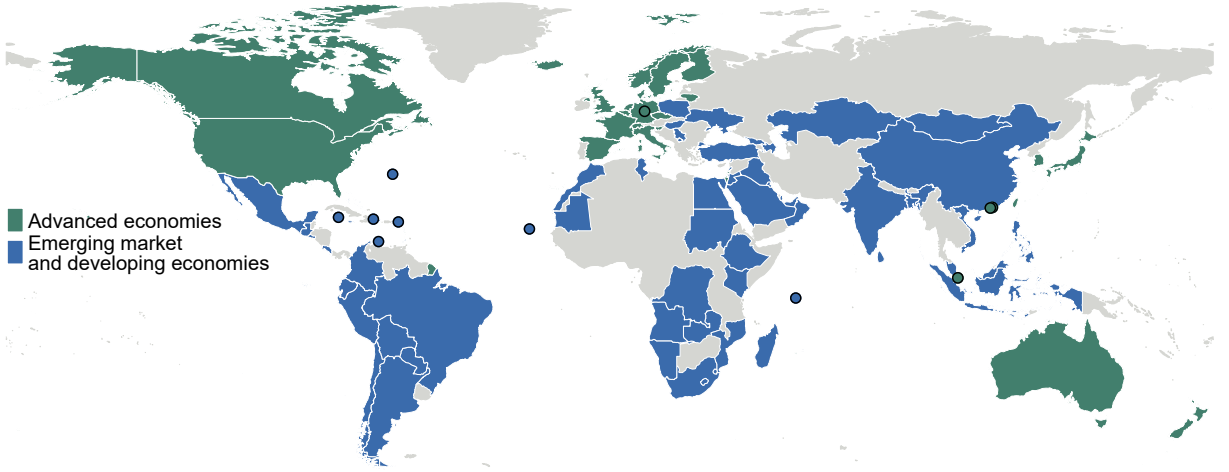
[3] The total number of central banks that replied to the survey in previous years was as follows: 86 in 2023, 86 in 2022, 81 in 2021, 65 in 2020, 65 in 2019, 64 in 2018 and 52 in 2017.

[4] Population and global economic output figures based on IMF (2025). Forecasts were used if actual data were unavailable. The euro area is included as an aggregate, excluding individual euro area jurisdictions to avoid double counting.

[5] The composition of the 28 AE central banks was the same as in the previous two survey iterations. The European Central Bank (ECB) and selected euro area central banks participated. Depending on the question, results in this paper either reflect the ECB's response for the entire euro area or individual central bank responses for jurisdiction-specific information.

Respondents to the 2024 survey

Graph 1



The circles represent Bermuda, Cabo Verde, Cayman Islands, Curaçao and Sint Maarten, the Dominican Republic, the European Central Bank, Hong Kong SAR, Macao SAR, Seychelles and Singapore. The categorisation of jurisdictions into advanced economies (AEs) and emerging market and developing economies (EMDEs) is based on the World Economic Outlook classification of the International Monetary Fund (IMF).

The 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.

Source: BIS survey on CBDCs and crypto, 2024.

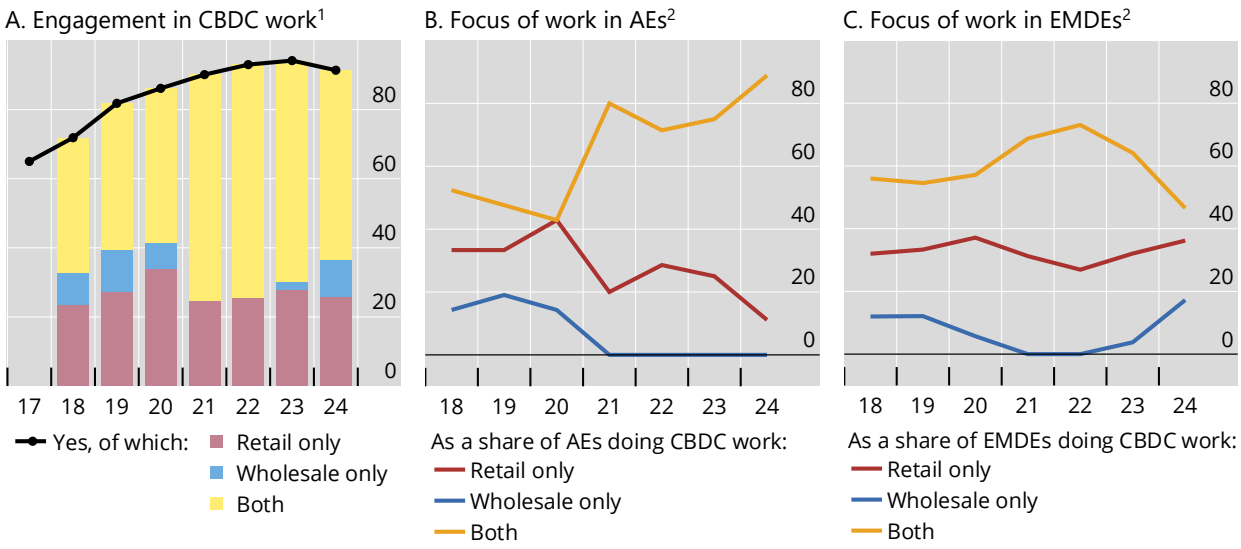
Central banks' involvement in CBDC work remains strong

At the end of 2024, 85 of respondent central banks were engaged in some form of CBDC work. This represents 91% of the respondent central banks (Graph 2.A). While this is slightly lower than in 2023 (94%), the number of respondents working on a CBDC increased from 81. The focus of central banks' CBDC work further diverged between AEs and EMDEs in 2024. AE central banks mostly work on both types of CBDC (89%) while an increasing number of EMDE central banks focus on either retail CBDC (36%) or wholesale CBDC (17%) (Graphs 2.B and 2.C).

Central bank involvement in CBDC work

As a percentage of respondents

Graph 2



[1] As a share of all respondents. [2] As a share of all respondents doing CBDC work within the country group.

Sources: BIS surveys on CBDCs and crypto, 2017–24; authors' calculations.

Work on wholesale CBDC accelerates, especially in AEs

Over the course of 2024, work on both retail and wholesale CBDCs progressed. Central banks are generally at a more advanced stage of their exploration and development for wholesale CBDCs than for retail CBDCs (Graph 3). This is particularly notable in AEs, where 38% of central banks are running wholesale CBDC pilots and 17% are developing a live wholesale CBDC (Graph 3.B) (compared with 15% and 0%, respectively, for retail CBDC (Graph 3.A)). Also, among EMDEs, wholesale CBDC experiments (35%) outnumber retail CBDC experiments (27%). In addition, 16% of EMDE central banks were piloting a wholesale CBDC.[6]

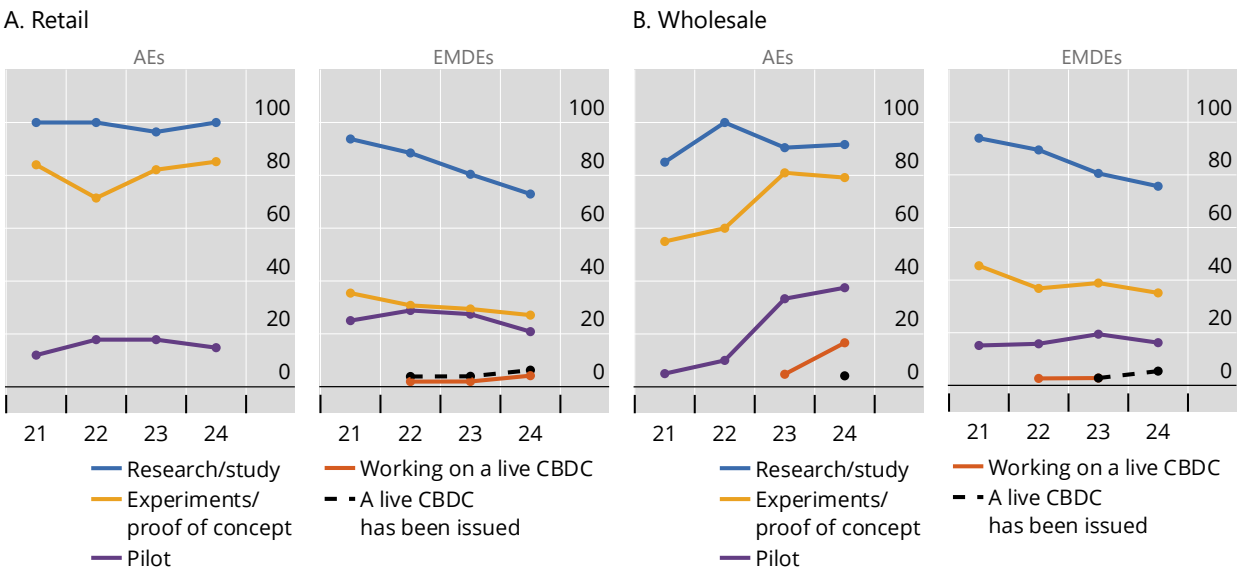
Overall, currently three central banks have launched a live retail CBDC (in The Bahamas, Jamaica and Nigeria).[7] Although no new retail CBDCs were launched in 2024, many central banks were running experiments (48%) or pilots (19%) (Graph 3.A). Some were preparing for live issuances (3%). Differences exist between AEs and EMDEs. The share of EMDEs working on a live retail CBDC (4%) and piloting a retail CBDC (21%) is higher than for AEs (0% and 15%, respectively). That said, 85% of AE central banks are engaged in retail CBDC experiments and/or proofs of concept, which may result in progressing towards piloting or live issuance over the longer term.

6 Some EMDE central banks also completed a wholesale CBDC pilot or proof of concept in 2024, such as the Bangko Sentral ng Pilipinas. See Bangko Sentral ng Pilipinas, "BSP completes testing for Project Agila", press release, 4 December 2024.

7 For the status of CBDC projects, see the CBDC Tracker at cbdctracker.org/ from Mikhalev et al (2021), the CBDC Tracker from the Atlantic Council at www.atlanticcouncil.org/cbdctracker/, and Auer et al (2023) at www.bis.org/publ/work880.htm.

Type of CBDC work by country group

As a percentage of respondents[1] Graph 3



[1] As a percentage of respondents doing CBDC work by type of CBDC and country group.

Sources: BIS surveys on CBDCs and crypto, 2021–24; authors' calculations.

Preserving the role of central bank money is a key driver of CBDC work

Maintaining the role of central bank money remained one of the predominant motivations for central banks' CBDC work (Graph 4). Nearly 80% of central banks working on retail CBDCs and 75% of those exploring wholesale CBDCs see preserving the role of central bank money as an important or very important reason for potential issuance. They mentioned the decline of cash use and the potential of a retail CBDC to anchor the role of central bank money by offering a sovereign digital alternative to cash.[8] Others highlighted that retail CBDC can support the singleness of money and ensure trust in money and the financial system more generally.[9] For wholesale CBDC, central banks mentioned that it could preserve the role of central bank money as a settlement asset for transactions involving tokenised assets, such as tokenised securities.

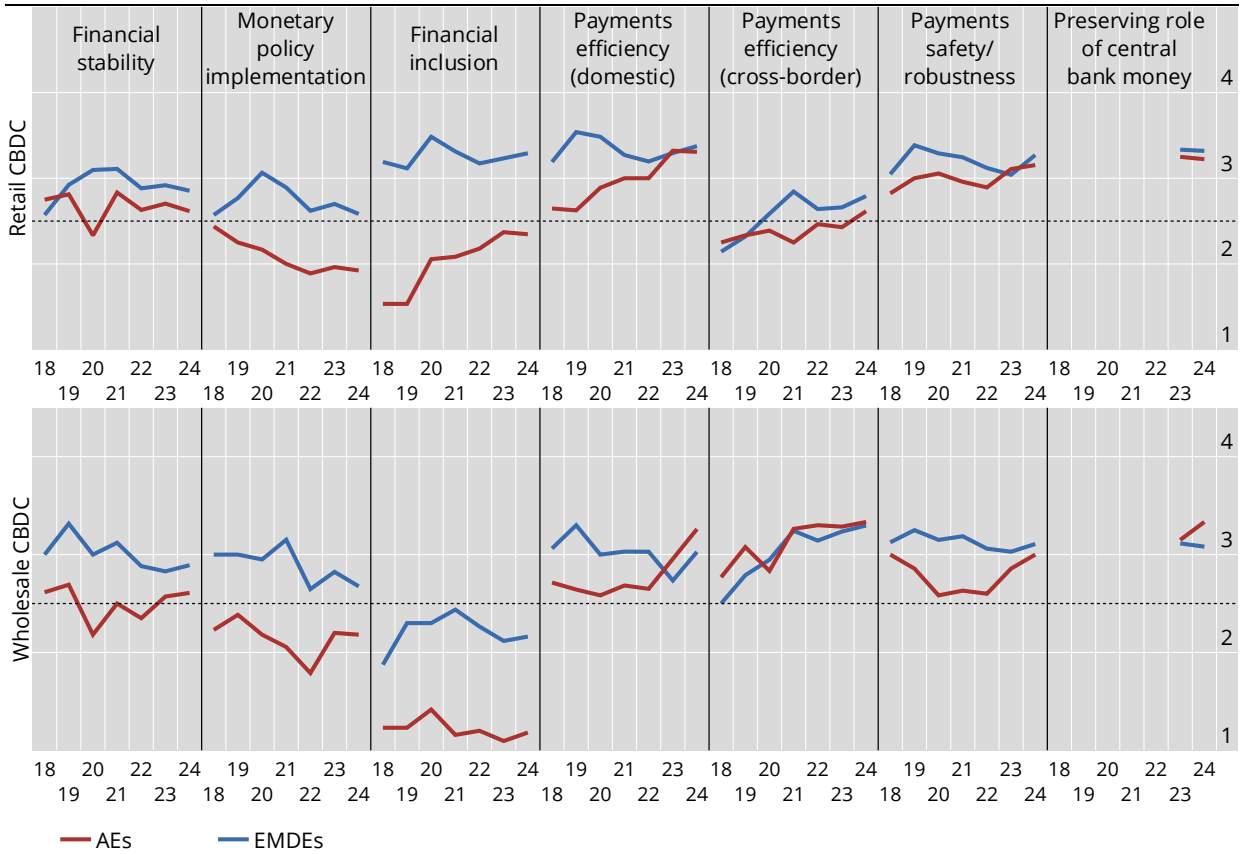
For retail CBDCs, improving domestic payments efficiency and payments safety are other key drivers of central banks' CBDC work (Graph 4, top panel). In EMDEs, much of the retail CBDC work is also driven by the aim of enhancing financial inclusion. As in previous years, work on wholesale CBDCs is primarily motivated by the desire to enhance cross-border payments, followed by improving the efficiency of domestic payments, and safety and robustness. Notably, these motivations have gained significant traction in recent years (Graph 4, bottom panel).

[8] See, for example, P Cipollone, "Shifting payment landscape: what a digital euro will bring", speech at the Bank of Slovenia, Ljubljana, 10 July 2025.

[9] For a discussion on the uniformity of money, see Rivadeneyra et al (2024).

Motivations for issuing a CBDC

Importance (1 = not so important, 4 = very important)[1] Graph 4



1 = not important, 2 = somewhat important, 3 = important, 4 = very important, averaged by respondents working on each CBDC type per country group. To put results into perspective, the horizontal dotted lines represent 2.5, which is the simple average between not important (1) and very important (4).

Sources: BIS surveys on CBDCs and crypto, 2018–24; authors' calculations.

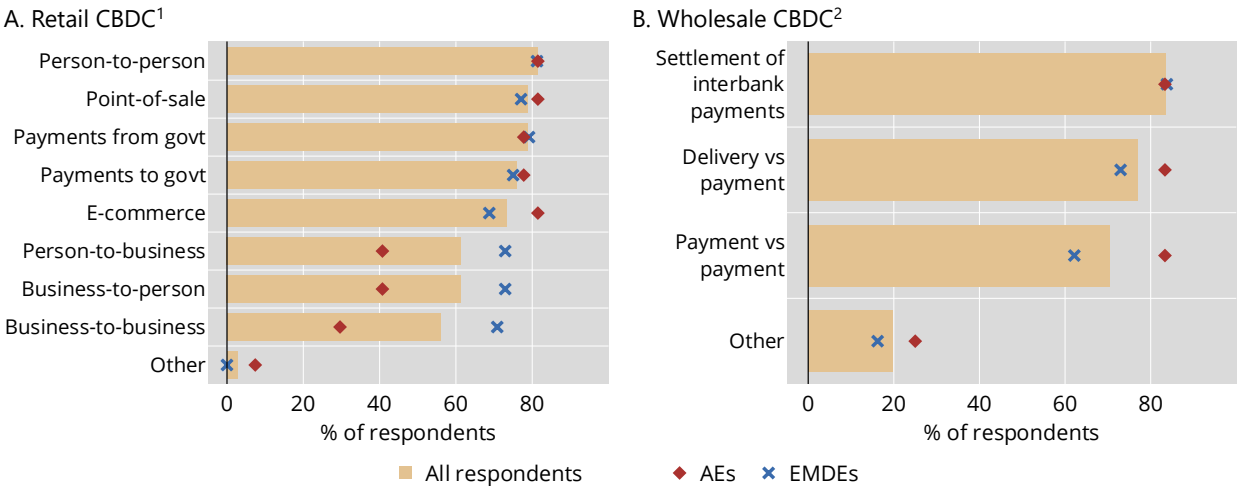
Envisioned use cases vary across jurisdictions and by type of CBDC

There are pronounced differences in envisioned use cases between retail CBDCs and wholesale CBDCs. For retail CBDCs, the most commonly considered use cases are person-to-person payments (81%), point-of-sale payments (79%) and payments from (79%) and to the government (76%) (Graph 5.A). This aligns with the current use cases of today's live retail CBDCs.[10] By contrast, for wholesale CBDCs, the three most often mentioned use cases are interbank payment settlement (84%), delivery versus payment (77%) and payment versus payment (70%) (Graph 5.B). About one fifth of central banks also reported other use cases for their potential wholesale CBDC, such as to facilitate automated margin calls and settlement of tokenised deposits.

[10] See for example Bank of Jamaica, CBDC FAQs, for further information about JAM-DEX. See also Branch et al (2025).

The survey results also show noticeable differences between AEs and EMDEs. AE central banks more often consider a potential retail CBDC that could be used for e-commerce payments than EMDE central banks (AE: 81%; EMDE: 69%). By contrast, EMDE central banks more often anticipate that their potential retail CBDC can be used for person-to-business payments other than point-of-sale or e-commerce payments (EMDE: 73%; AE: 41%), business-to-person payments (EMDE: 73%; AE: 41%) or business-to-business payments (EMDE: 71%; AE: 30%).

Envisioned use cases for a (potential) CBDC — Graph 5



Govt = government.

[1] As a percentage of all/AE/EMDE (depending on the series) respondents working on a retail CBDC or both types of CBDC. [2] As a percentage of all/AE/EMDE (depending on the series) respondents working on a wholesale CBDC or both types of CBDC.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

A majority of EMDE central banks have a clear mandate to issue a CBDC while many AE central banks are uncertain

The issuance of a CBDC requires a robust legal framework that provides central banks with the legal authority to do so.[11] The share of central banks that reported they have such authority is higher among EMDEs than among AEs, especially for a retail CBDC (Graph 6). As of end-2024, the proportions of EMDE and AE central banks with legal authority to issue a retail CBDC were 42% and 4%, respectively (Graph 6.A). Mirroring this, the share of central banks that reported they were uncertain about the legal basis is considerably higher among AEs than among EMDEs. Also, more AE jurisdictions (29%) were changing their laws than EMDE jurisdictions (14%), either to establish or to clarify the legal authority. For example, in Europe, draft legislation for the digital euro is currently under consideration by the Council of the European Union and the European Parliament.[12] Beyond this, just under a fifth of AE central banks and a

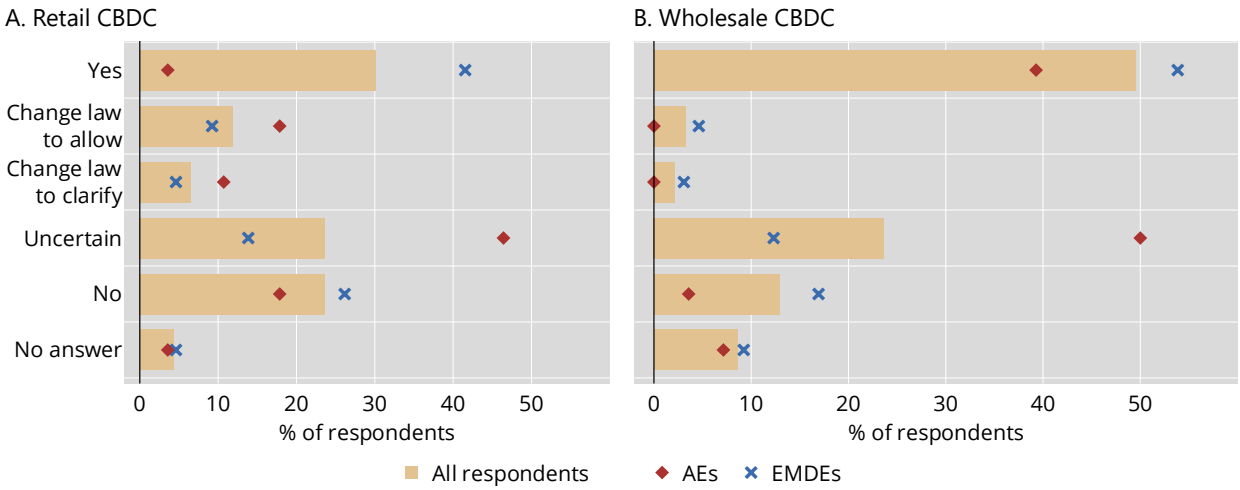
[11] See Bank of Canada et al (2024) for an examination of some key legal questions that may need to be addressed by jurisdictions considering issuing a retail CBDC.

[12] See European Union, EUR-Lex, 52023PC0369, for the proposal for a regulation of the European Parliament and of the Council on the establishment of the digital euro.

quarter of EMDE central banks reported they lack the legal basis for retail CBDC issuance.

Notably the share of jurisdictions with the legal basis to issue a CBDC is higher for wholesale CBDC than for retail CBDC (Graph 6.B).

Does the central bank have legal authority to issue a CBDC? Graph 6



Change law to allow = laws are currently being changed to allow for it; change law to clarify = laws are currently being changed to clarify the legal authority.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Central banks contemplate divergent approaches to the design of their potential retail CBDCs

A CBDC will require central banks to make a wide range of key decisions, including on design features. For retail CBDCs, many central banks are considering a two-tiered distribution, holding limits, non-renumeration and offline functionality. Yet, for numerous retail CBDC features, central banks are envisioning different approaches, such as for pricing and capital flow management measures, and whether to use DLT.

Distribution model

More than two thirds of respondents said they are considering a (potential) retail CBDC that is **distributed to end users** via commercial banks (AEs: 67%; EMDEs: 65%) and about half will or are likely to (also) use non-bank payment service providers (AEs: 56%; EMDEs: 54%) (Graph 7.A). For example, in Europe, the digital euro would be made available to the public via commercial banks and designated public authorities, such as post offices.[13] Similarly, in March 2025, the Reserve Bank of India (RBI) expanded its retail CBDC pilot to allow certain non-banks to offer CBDC wallets.[14]

[13] See ECB, "How would a digital euro work?".

[14] See RBI, "Annual Report 2024-25".

Access

To promote its uptake and use, 33% of AEs and 58% of EMDEs will or are likely to **require merchants to accept** retail CBDC (Graph 7.B). Also, 44% of AEs and 33% of EMDEs are considering making it **accessible to non-residents**. A notable difference is that AE central banks are generally more likely to consider imposing **restrictions on usage by non-residents** (39%) than EMDE central banks (21%) (Graph 7.B).

Central banks are also considering divergent approaches to whether their potential retail CBDC would **require users to have a bank account**. While roughly 40% of AEs and EMDEs are considering a retail CBDC that can be used without a bank account, it would be required in 11% of AEs and 19% of EMDEs (Graph 7.B).

Fees

Central banks are contemplating different approaches to pricing (Graph 7.C). In half (50%) of the AEs, **basic retail CBDC services** may be offered at no charge. For example, the digital euro would be free for basic use.[15] This share is lower among EMDEs (29%). In fact, about 19% of EMDEs are contemplating the imposition of a consumer fee for basic retail services. Moreover, about a quarter of AEs and EMDEs are considering the imposition of a **merchant fee** for accepting retail CBDC payments.

Remuneration, limits and capital flow management measures

More than half of central banks do not intend to pay **interest** on a potential retail CBDC (Graph 7.D).[16] Many jurisdictions are also considering a (potential) retail CBDC that is subject to **holding limits** (AEs: 56%; EMDEs: 63%) and transaction limits (AEs: 28%; EMDEs: 60%). The European Central Bank (ECB), for instance, would set a limit for the amount of digital euros that a person or company could hold in their wallet to help prevent excessive outflows of deposits from banks.[17] In addition to such limits, the Bank of Israel is considering having the option to impose funding limits in times of crisis.[18] Central banks' plans for embedding **capital flow management measures** also differ. About 17% of AEs and 29% of EMDEs are considering implementing such measures (Graph 7.D).

Interoperability, offline functionality, programmability and use of DLT

Numerous central banks are considering a (potential) retail CBDC that is **interoperable** with their domestic payment systems (AEs: 56%; EMDEs: 79%) and/or other (foreign) CBDCs (AEs: 39%; EMDEs: 46%) (Graph 7.E). Other often mentioned design features include **offline payments** (AEs: 56%; EMDEs: 58%) and **programmable, or automated, payments** (AEs: 44%; EMDEs: 44%) (Graph 7.F). For instance, offline functionalities are explored in the e-HKD pilot programme of the

[15] See P Cipollone, "Shifting payment landscape: what a digital euro will bring", speech at the Bank of Slovenia, Ljubljana, 10 July 2025.

[16] The Bank of Israel, for example, is one of those that does not exclude this a priori. The preliminary design of a potential digital shekel allows the functionality of paying interest on balances. See Bank of Israel (2025).

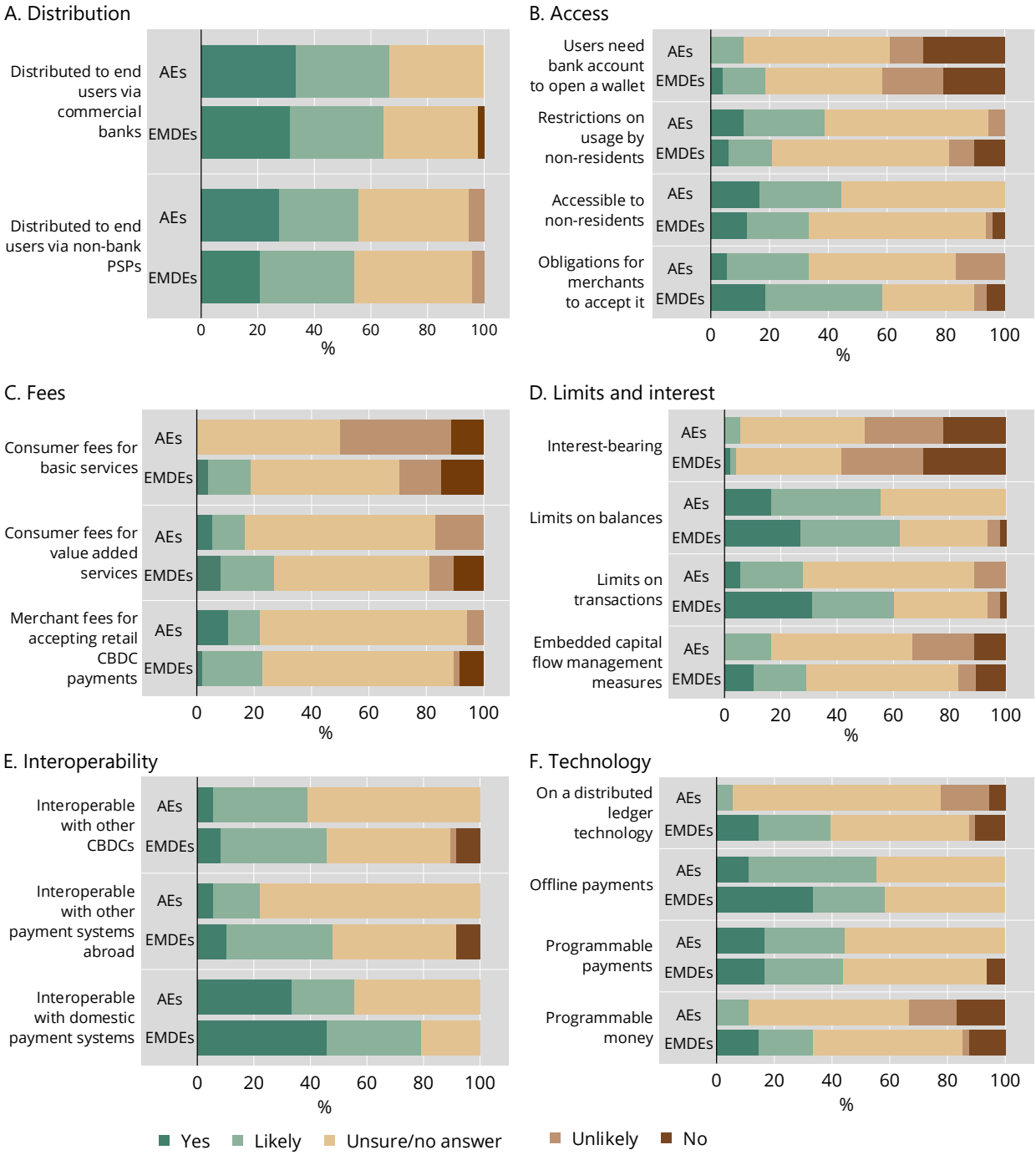
[17] See ECB, "How would a digital euro work?".

[18] The Bank of Israel defines a funding limit as a restriction to the amount an end user can add to the wallet within a given period, regardless of the wallet balance at that time. See Bank of Israel (2025).

Hong Kong Monetary Authority (HKMA) and the digital rupee pilot from the RBI.[19] The Bank of Israel and the ECB are considering offline functionalities for their potential digital shekel and digital euro, respectively.[20]

Design features of a (potential) retail CBDC[1]

Graph 7



[1] As a percentage of respondents working on a retail CBDC or both types of CBDC by country group in 2024. Euro area included as an aggregate figure; excluding responses from individual euro area jurisdictions.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

[19] See HKMA, "Participants of e-HKD Pilot Programme Phase 2 and their proposed use cases" and Reserve Bank of India, "Digital rupee – FAQs".

[20] See Bank of Israel (2025) and ECB, "How would a digital euro work?".

Apart from these commonalities, there are also notable differences between AEs and EMDEs. EMDEs indicate a higher likelihood than AEs of issuing a retail CBDC on a **distributed ledger** (AEs: 6%; EMDEs: 40%) and of having a CBDC that can be programmed for specific purposes (**programmable money**) (AEs: 11%; EMDEs: 33%) (Graph 7.F).[21]

Central banks envisage distinct features for wholesale CBDCs than for retail CBDCs

Use and operation of DLT

More than half of central banks envision a wholesale CBDC **based on DLT** (AEs: 56%; EMDEs: 54%) (Graph 8.D). This is considerably more than for retail CBDC, especially in AEs (Graph 7.F). Examples of DLT-based wholesale CBDC projects include Project Agila of the Bangko Sentral ng Pilipinas and the digital Brazilian real (Drex) pilot of the Central Bank of Brazil.[22]

The majority of central banks that may issue their potential wholesale CBDC on a DLT are considering a DLT platform which would support **multiple digital assets** (66%) (Graph 8.E). More broadly, central banks are considering how central bank money, including existing reserves, may interact with other digital assets on the same platform. For instance, Project Agorá will explore how tokenised central bank money can be integrated with tokenised commercial bank deposits on a programmable platform.[23]

In terms of operation, most central banks are considering **operating the DLT platform** themselves (83%), while a quarter consider it likely that they will jointly operate the platform with the private sector (28%). A handful of central banks (17%) will or are likely to make their potential wholesale CBDC available through a fully privately operated platform.[24]

Programmability, access, capital flow management measures and interoperability

Programmable payments are also a feature that central banks more often consider for wholesale than for retail CBDC, though with a notable difference between AEs and EMDEs: programmable wholesale CBDCs are more often considered in AEs (69%) than in EMDEs (49%) (Graph 8.D).

EMDE and AE central banks also take different approaches towards access, capital flow management measures and interoperability. More EMDE central banks (35%) than AE central banks (6%) are considering **mandatory participation of payment service providers** (Graph 8.A). EMDE central banks (35%) are also more likely to implement **capital flow management measures** than AE central banks (6%) (Graph 8.B), and more often consider establishing **interoperability** with CBDCs of

[21] For example, the ECB has communicated that the digital euro would not become programmable money that can be used for only a restricted purpose or duration. See ECB, "How would a digital euro work?".

[22] See Bangko Sentral ng Pilipinas, "BSP completes testing for Project Agila", press release, 4 December 2024 and Central Bank of Brazil, "FAQ - Drex – Digital Brazilian Real".

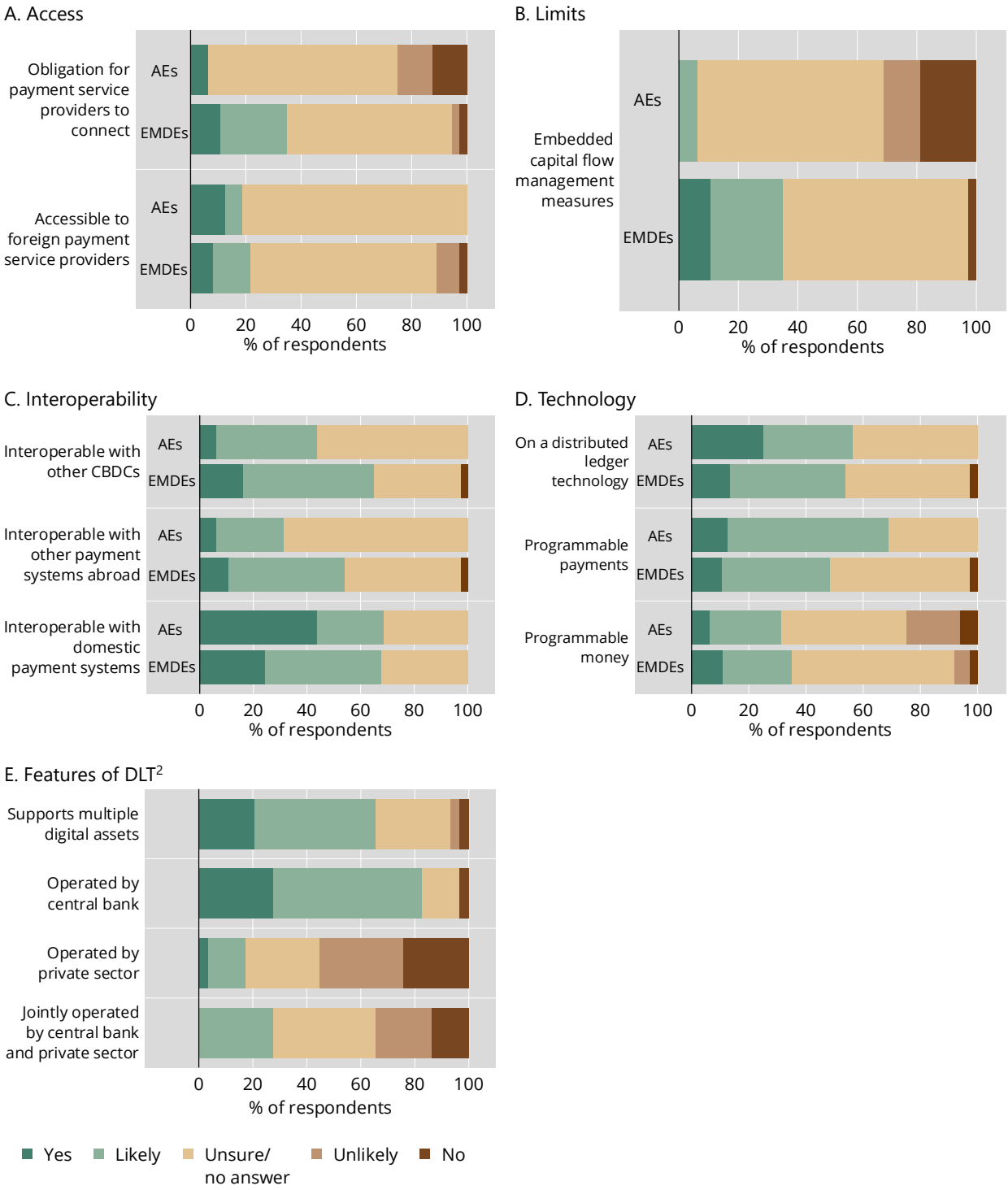
[23] See BIS, "Private sectors partners join Project Agorá", 16 September 2024.

[24] See for example Swiss National Bank, "Project Helvetia".

other jurisdictions (AEs: 44%; EMDEs: 65%) and with other payment systems abroad (AEs: 31%; EMDEs: 54%) (Graph 8.C).

Design features of a (potential) wholesale CBDC[1]

Graph 8



[1] As a percentage of respondents working on a wholesale CBDC or both types of CBDC by country group in 2024. Euro area included as an aggregate figure; excluding responses from individual euro area jurisdictions. [2] As a percentage of respondents (29) that indicated that their potential wholesale CBDC will or is likely to be based on a distributed ledger technology in panel D.

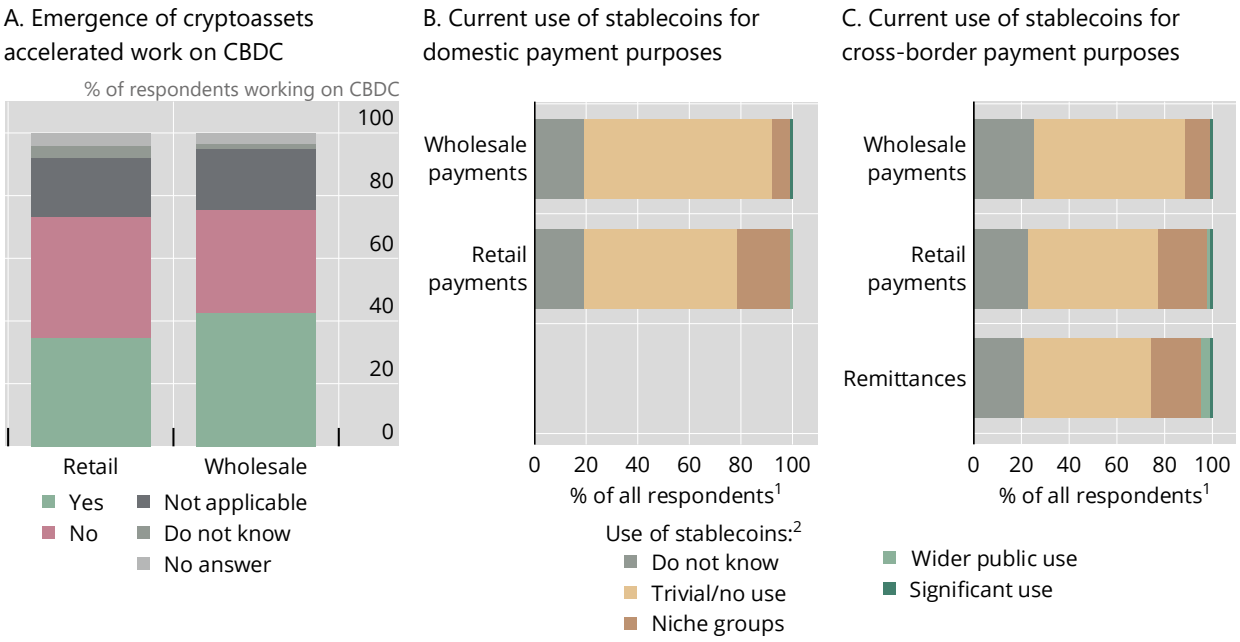
Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Stablecoins are widely used in some EMDE jurisdictions for remittances and other cross-border payments

More than one third of central banks working on a CBDC intensified their efforts in light of developments in stablecoins and cryptoassets. The emergence of stablecoins and other cryptoassets had led central banks to step up work on CBDC (43% for wholesale CBDC and 35% for retail CBDC) (Graph 9.A). If stablecoins are not properly designed and regulated, their large-scale use for payments and settlement could have implications for the safety and efficiency of payment ecosystems or affect the financial and monetary system more broadly (FSB (2022, 2024a), Kosse et al (2023), BIS (2025)).

To date, the use of stablecoins for payments outside the cryptoassets ecosystem is still limited (Graph 9.B and 9.C). Most central banks indicated that the use of stablecoins within their jurisdictions for payments is trivial. Other than for cryptoasset trading or in decentralised finance, they are mainly used by niche groups for domestic retail payments (20%), remittances (21%) and cross-border retail payments (20%). Yet a small number of central banks – all from EMDEs – reported a wider or even a significant use of stablecoins in their jurisdictions for domestic wholesale payments (1%), domestic retail payments (1%), cross-border wholesale payments (1%), cross-border retail payments (2%) and remittances (4%).

Current use of stablecoins for payment purposes — Graph 9



[1] Excludes respondents that did not answer. [2] Trivial/none = hardly used by anyone, and those who do, only use it for a tiny fraction of their total payments; niche groups = mainly used by a particular user group and for a small share of their total payments; wider public = used by different user groups but still for a small share of their total payments; significant = used by different user groups and for a significant share of their total payments.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

The global regulatory landscape for stablecoins and other cryptoassets is rapidly evolving

While jurisdictions accelerated work on CBDCs, they also intensified regulatory efforts to help preserve and promote the safety, efficiency and integrity of the monetary and financial system. At the end of 2024, 45% of jurisdictions had enacted regulation for stablecoins and other cryptoassets (up from 35% in 2023) (Graph 10.A). In addition, 22% of jurisdictions have proposed or are developing a regulatory framework. This means that more than two out of three jurisdictions worldwide currently or will soon regulate stablecoins and other cryptoassets.

Most jurisdictions have opted for or are developing regulation that is bespoke to cryptoassets or to stablecoins, instead of relying on or changing existing general financial regulation (Graph 10.B). Examples of jurisdictions that have or will soon have tailored regulation for stablecoins include Hong Kong SAR,[25] Singapore,[26] the United Kingdom[27] and the United States.[28] Argentina,[29] Australia,[30] Brazil,[31] Mexico[32] and the European Union[33] are examples of jurisdictions that have developed or proposed tailored regulation for cryptoassets more generally.

Given the borderless nature of stablecoins and cryptoasset activities, it is paramount that jurisdictions uphold the timely and consistent implementation of international standards and recommendations to prevent regulatory arbitrage. Regulatory consistency also helps to promote responsible innovation and protect consumers and investors.[34] However, adequate regulation alone may not suffice to address some structural and cross-cutting issues, such as issues related to monetary sovereignty. As mirrored by the strong involvement in CBDC work, many jurisdictions pursue their regulatory efforts in tandem with their exploration or development of

[25] See Legislative Council of the Hong Kong Special Administration Region, "Stablecoins Bill".

[26] See Monetary Authority of Singapore, "MAS finalises stablecoin regulatory framework", press release, 15 August 2023.

[27] See Bank of England, "Regulatory regime for systemic payment systems using stablecoins and related service providers", *Discussion Paper*, November 2023.

[28] In July 2025, the United States enacted "S.394 – the GENIUS Act of 2025" creating licensing and regulatory requirements for payment stablecoin issuers.

[29] In March 2025, the Argentine securities regulator published requirements for the operation of virtual assets and virtual assets service providers (VASPs) (General Resolution number 1058/2025), following the publication of a legal definition for VASPs in 2024 (Law number 27.739) and the creation of a VASP registry (General Resolution 994/2024).

[30] In March 2025, the Australian Government published a statement outlining its approach to digital asset reforms. See "Statement on developing an innovative Australian digital asset industry".

[31] In December 2022, Brazil enacted Law number 14.478 for the regulation of virtual assets service providers (the "Virtual Assets Act"). This act came into force in June 2023 and accompanying regulation is expected to be published soon.

[32] Through the "Law to Regulate Financial Technology Institutions" (Fintech Law) issued in March 2018 (see unofficial English summary), and regulation issued by the Bank of Mexico (Regulation number 4/2019) (see unofficial English summary).

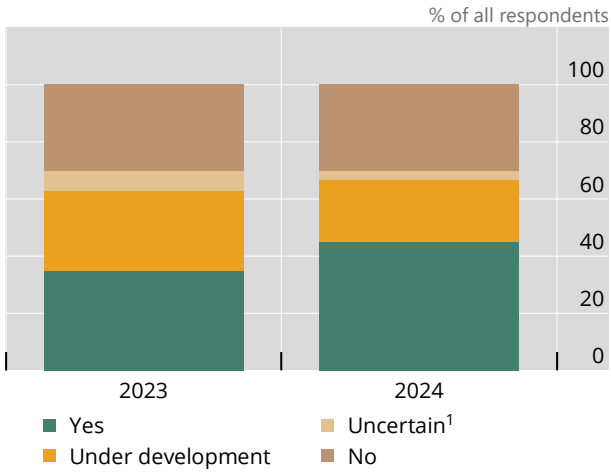
[33] The European Markets in Crypto-assets (MiCA) Regulation took effect in December 2024.

[34] Examples of relevant international standards for stablecoins for payments include the guidance from the BIS Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) on how to apply the CPMI-IOSCO Principles for financial market infrastructures (PFMI) to systemically important stablecoin arrangements (CPMI-IOSCO (2022)) and the FSB's high-level recommendations on the regulation, supervision and oversight of "global stablecoin" arrangements (FSB (2023)).

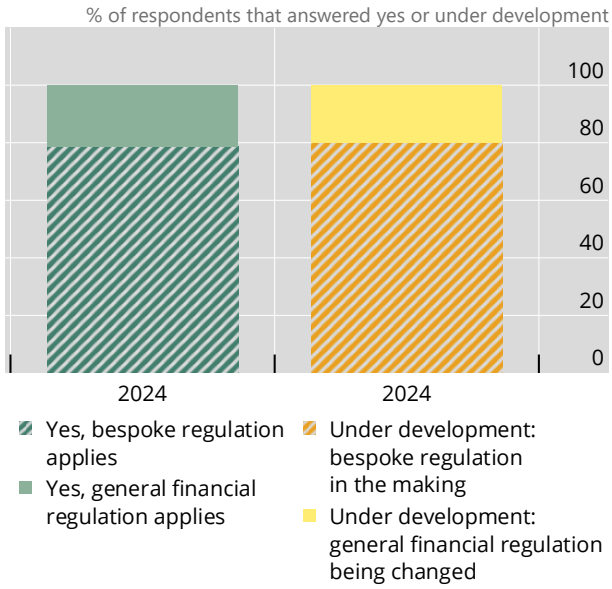
CBDCs. More broadly, public and private sector stakeholders are also working to enhance existing payment systems. These aspects were outside the scope of the survey.[35]

Regulatory framework for stablecoins and other cryptoassets — Graph 10

A. In your jurisdiction, is there a regulatory framework that covers stablecoins and other cryptoassets?



B. If a regulatory framework is in place or under development, is it bespoke or general?



[1] Includes those respondents that did not answer the question.

Sources: BIS surveys on CBDCs and crypto, 2023–24; authors' calculations.

Asset tokenisation has gained ground in most AEs and in one in three EMDEs

In nearly half (48%) of the responding jurisdictions, private or public sector entities had engaged in work related to tokenisation of financial or real assets at the end of 2024. While this entails research and/or proofs of concept in most cases, in 38% of these jurisdictions, tokenised assets have been issued and a similar number of jurisdictions are piloting or working on live issuance.

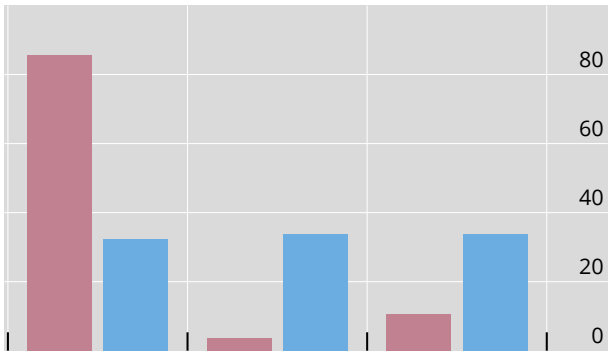
Activities in asset tokenisation were more prevalent in AEs than in EMDEs. Nearly all responding AEs (86%) reported engagement in work related to tokenised assets (Graph 11.A), with half of them (12 AE jurisdictions) already having live cases of tokenised assets (Graph 11.B). By contrast, work related to tokenised assets was taking place in roughly one out of three EMDEs (32%). These EMDEs were mostly engaged in research or proofs of concept, while five EMDEs indicated that tokenised assets had been issued.

[35] Examples include extending the operating hours of central bank-operated wholesale payment systems, introducing fast payment systems and fostering interlinkages of payment systems (see Fitzgerald et al (2024, 2025)).

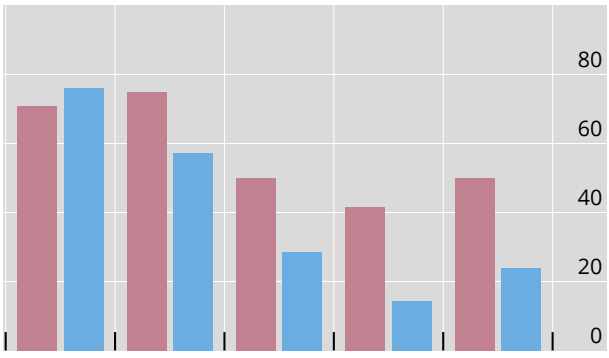
Tokenisation of financial and real assets: general involvement and type of work

As a percentage of respondents, by country group — Graph 11

A. In your jurisdiction, have private or public sector entities engaged in work related to tokenised assets?[1]



B. If private or public sector entities engage with tokenised assets, what type of work is being conducted?[2]



Research = research/study; PoC = experiments/proof of concept; pilot = developing or running a pilot; working on live = working on live tokenised assets; live issued = live tokenised assets have been issued.

[1] Work related to tokenised assets other than work on CBDCs, tokenised deposits, stablecoins or other cryptoassets. [2] As a percentage of jurisdictions that answered "yes" in panel A.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Bonds are the most commonly tokenised assets

By the end of 2024, most asset tokenisation initiatives involved bonds (Graph 12.A). More than two thirds of jurisdictions working on asset tokenisation were either exploring (38%) or had already issued (31%) tokenised government or corporate bonds. This aligns with other reports that mention the potential of bond markets for tokenisation, as bonds are generally traded over the counter (OTC) and thus involve a complex web of intermediaries, messaging instructions, reconciliation efforts and money flows.[36] Examples of issuers of tokenised government bonds, for example, include the Republic of Slovenia, Hong Kong SAR, the Republic of the Philippines and Thailand.[37] Investment fund shares are the second most common asset category in both exploratory and live asset tokenisation initiatives, followed by real estate, equities and commercial paper (Graph 12.A).

Despite the availability of some tokenised financial and real assets, the size of these markets is still limited. According to the respondents, at the end of 2024, the

[36] See Aldasoro et al (2025a) and BIS (2025).

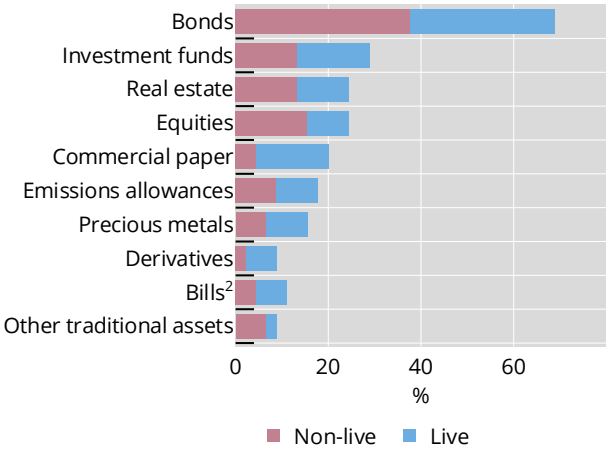
[37] For more examples of sovereign, supranational and agency tokenised bonds, see Aldasoro et al (2025b) and for a broader selection of examples of the application of tokenisation in bond markets, see the International Capital Market Association's Tracker of new fintech applications in bond markets.

use of tokenised assets was either limited to niche groups (for live tokenised bonds) or trivial (for all other forms of live tokenised assets).[38]

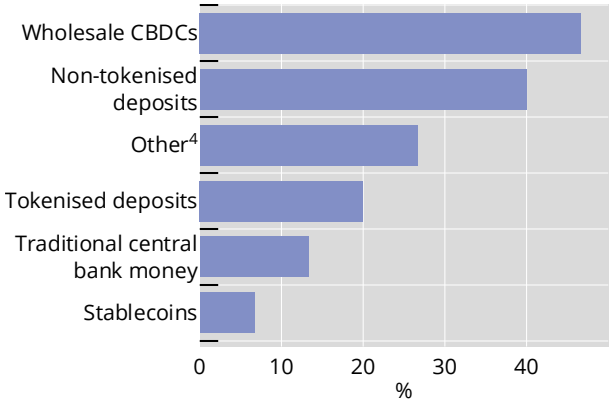
Live-issued tokenised assets are mostly purchased or sold with tokenised central bank money (referred to as wholesale CBDC) (Graph 12.B). Traditional bank deposits are the second most often used settlement asset for buying/selling tokenised assets, followed by tokenised deposits and traditional central bank money. Only one respondent indicated that stablecoins are used as a settlement asset.

Type of tokenised assets and settlement assets used in "live" initiatives — Graph 12

A. Asset tokenisation initiatives by type of financial or real asset[1]



B. Settlement assets used for selling or purchasing live-issued tokenised financial assets[3]



[1] As a percentage of total jurisdictions that are engaged in tokenised assets initiatives. [2] Bills of exchange, promissory notes and/or cheques. [3] As a percentage of (15) jurisdictions with non-trivial issuance/use of live-issued tokenised financial assets. [4] Other includes gold, unbacked cryptoassets and other unspecified settlement assets.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Various commercial banks have issued live tokenised deposit services, and more may follow

Commercial banks in nearly one third of responding jurisdictions (30%) have engaged in work related to tokenised deposits (Graph 13.A). In most cases, they are conducting research and proofs of concept (Graph 13.B). In a few jurisdictions, commercial banks have issued tokenised deposits. In addition to these live cases, multiple commercial banks are preparing to go live or running pilots, which suggests that more may be launched in the near future.[39]

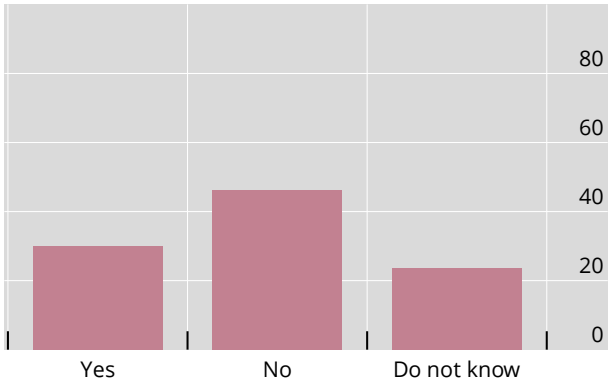
[38] According to Aldasoro et al (2025a), at the time of their writing, over 60 tokenised bonds had been issued, amounting to a total value of $8 billion.

[39] See EBA (2024) for a stocktake of tokenised deposit projects observed in both the European Economic Area (EEA) and outside the EEA.

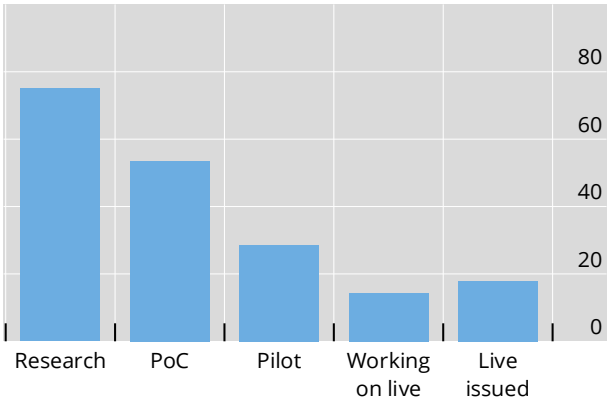
Tokenisation of commercial bank deposits

As a percentage of respondents — Graph 13

A. In your jurisdiction, have commercial banks engaged in work related to tokenised deposits?



B. If commercial banks engage with tokenised deposits, what type of work is being conducted?[1]



Research = research/study; PoC = experiments/proof of concept; pilot = developing or running a pilot; working on live = working on live tokenised deposits; live issued = live tokenised deposits have been issued.

[1] Refers to the jurisdictions (28) that answered "yes" in panel A.

Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Stablecoin issuance by banks was limited; use by FMIs negligible

Issuance of stablecoins by commercial banks is less widespread than work on tokenised deposits (Graph 14.A). At the end of 2024, 8% of responding central banks indicated that commercial banks in their jurisdiction had issued stablecoins. Examples of those that have included ANZ in Australia,[40] KBC in Belgium,[41] BTG Pactual in Brazil[42] and Société Générale in France.[43] These stablecoins have generally been issued for specific use cases, such as for crowdfunding, pension payments, intra-bank or intra-banking group transfers or to offer clients a means to bridge the traditional financial system and the digital assets world. The use of stablecoins by traditional financial market infrastructures (FMIs), such as a collateral asset, an investment instrument or a settlement asset for money settlement was negligible (Graph 14.B).

40 See "ANZ explores stablecoin to track pension payments", *Ledger Insights,* 16 October 2024.

41 See "Belgium's KBC bank launches blockchain-based Kate Coin", *Ledger Insights,* 16 June 2022.

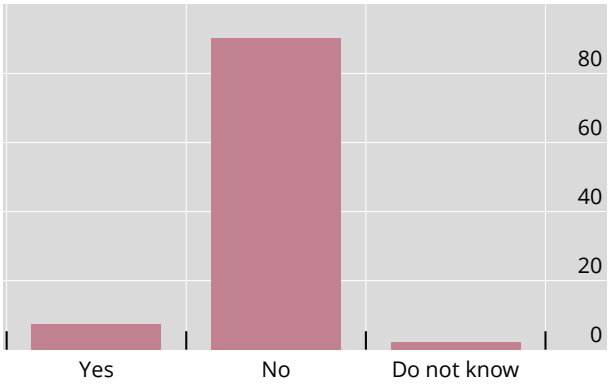
42 See "Brazil's BTG Pactual launches own dollar-backed stablecoin", *Reuters*, 4 April 2023.

43 See SG Forge, "Bridging the gap between capital markets and digital assets".

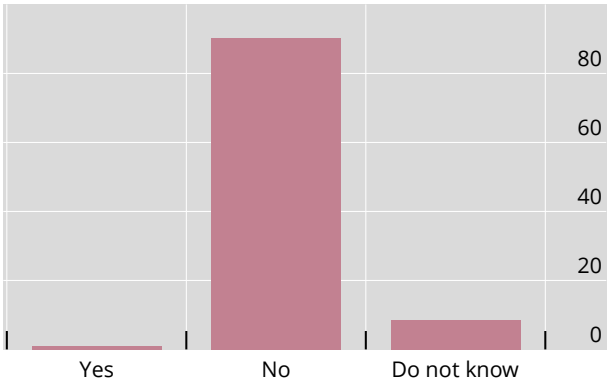
Issuance and usage of stablecoins by commercial banks and FMIs

As a percentage of respondents — Graph 14

A. In your jurisdiction, are there examples of commercial banks that have issued stablecoins?



B. In your jurisdiction, are there examples of FMIs that use or accept stablecoins?



Sources: BIS survey on CBDCs and crypto, 2024; authors' calculations.

Conclusion

Central banks' involvement in CBDC work remained strong in 2024. Of the 93 central banks surveyed, 91% (85) were exploring either a retail CBDC, a wholesale CBDC or both. Preserving the role of central bank money amid the decline of cash, the evolution of cryptoassets and the emerging tokenisation of traditional assets remained a key driver for many central banks.

While the use of stablecoins for payments outside the cryptoassets ecosystem is still limited in most jurisdictions, it is more widespread for cross-border payments and remittances in certain EMDEs. The results show that work on CBDCs progressed in tandem with an increasing number of jurisdictions enacting or developing regulations for stablecoins and other cryptoassets. Work on CBDCs also advanced as private and public sector engagements in asset tokenisation rose in many jurisdictions. At the end of 2024, asset tokenisation had gained ground in most AEs and in one in three EMDEs, especially in bond markets. In addition, commercial banks in nearly one third of responding jurisdictions were studying, testing or already issuing tokenised deposits.

Overall, the survey results reflect that the payments and settlement landscape is undergoing a multitude of changes. Digital innovations and tokenisation offer an opportunity for central banks to reflect on the role of central bank money (BIS-CPMI (2024)). Exploring a CBDC is among a larger set of tools that central banks have at their disposal to ensure the safety and efficiency of the payments ecosystem and the financial system more broadly. A CBDC will require central banks to make a wide range of key decisions. At an aggregate level, the exploration of wholesale CBDCs is at more advanced stages than exploration of retail CBDCs. Yet, the focus and stage of the CBDC work as well as the envisioned use cases and design features of CBDCs vary greatly across jurisdictions. These reflect differences in starting points, constraints and preferences. Although decisions on CBDCs are sovereign decisions, global cooperation remains key. Collaboration and coordination across jurisdictions will help to offer a safe and efficient payment choice, both domestically and across borders.

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Annex A: Survey questions

Questions on central bank digital currencies

1. Has your central bank engaged, or will engage, in any kind of research, experiments, pilots or other work related to the development and use of CBDC?
[Mandatory, to all]

☐ Yes
☐ No

2. Is your work related to:
[Only for those who clicked "yes" under Q1]

☐ Retail CBDC
☐ Wholesale CBDC
☐ Both

2a. Your CBDC work is related to **both**. Please specify:
[Only for those who clicked Both under Q2]

☐ Your retail CBDC and wholesale CBDC work are separate projects
☐ Your retail and wholesale CBDC work are part of the same project
☐ Both: your retail CBDC and wholesale CBDC work include separate and combined projects

3. What type of work is being, or will be, conducted? Please check all that apply.

Research/study: *exploratory work, eg to explore use cases, impact and feasibility, without any technical development.*

Experiments/proof of concept: *early testing of one or a small number of selected aspects of the CBDC in a controlled and internal environment.*

Developing or running a pilot: *developing or testing a prototype in the real world among a restricted number of external participants.*

Live: *CBDC issued for widespread use.*

Retail CBDC
[Only for those who clicked Retail CBDC or Both under Q2]

☐ Research/study
☐ Experiments/proof of concept
☐ Developing or running a pilot
☐ Working on a live retail CBDC
☐ Live retail CBDC has been issued

Please provide links (eg to websites, publications, official communications) about your project(s) where relevant: Click or tap here to enter text.

Wholesale CBDC
[Only for those who clicked Wholesale CBDC or Both under Q2]

☐ Research/study
☐ Experiments/Proof of concept
☐ Developing or running a pilot
☐ Working on a live wholesale CBDC
☐ Live wholesale CBDC has been issued

Please provide links (eg to websites, publications, official communications) about your project(s) where relevant:
Click or tap here to enter text.

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

Retail CBDC

[Only for those who clicked Retail CBDC or Both under Q2]

	Very important	Important	Somewhat important	Not so important
Financial stability	☐	☐	☐	☐
Monetary policy implementation	☐	☐	☐	☐
Financial inclusion	☐	☐	☐	☐
Payments efficiency (domestic)	☐	☐	☐	☐
Payments efficiency (cross-border)	☐	☐	☐	☐
Payments safety/robustness	☐	☐	☐	☐
Others (please specify below)	☐	☐	☐	☐

Others:

Click or tap here to enter text.

Please provide any comments on your motivations for the aspects you considered as very important or important (eg if you chose "financial stability" as an important motivation, how do you see a **retail CBDC** aiding this?).

Click or tap here to enter text.

Wholesale CBDC

[Only for those who clicked Wholesale CBDC or Both under Q2]

	Very important	Important	Somewhat important	Not so important
Financial stability	☐	☐	☐	☐
Monetary policy implementation	☐	☐	☐	☐
Financial inclusion	☐	☐	☐	☐
Payments efficiency (domestic)	☐	☐	☐	☐
Payments efficiency (cross-border)	☐	☐	☐	☐
Payments safety/robustness	☐	☐	☐	☐
Others (please specify below)	☐	☐	☐	☐

Others:

Click or tap here to enter text.

Please provide any comments on your motivations for the aspects you considered as very important or important (eg if you chose "financial stability" as an important motivation, how do you see a **wholesale CBDC** aiding this?).

Click or tap here to enter text.

5. How important is "preserving the role of central bank money" to your motivations in (potentially) issuing a:

	Very important	Important	Somewhat important	Not so important
Retail CBDC *[Only for those who clicked Retail CBDC or Both under Q2]*	☐	☐	☐	☐
Wholesale CBDC *[Only for those who clicked Wholesale CBDC or Both under Q2]*	☐	☐	☐	☐

6. Is this aspect of "preserving the role of central bank money" related to your answers to the previous question (Q4) on motivations?

Retail CBDC

[Only for those who answered very important, important or somewhat important to Q5 retail CBDC]

	Yes: preserving the role of central bank money is **key** to this aspect	**Partly:** preserving the role of central bank money is **only one part of** this aspect	**No:** this is a separate aspect	Please explain
Financial stability	☐	☐	☐	Enter text
Monetary policy implementation	☐	☐	☐	Enter text
Financial inclusion	☐	☐	☐	Enter text
Payments efficiency (domestic)	☐	☐	☐	Enter text
Payments efficiency (cross-border)	☐	☐	☐	Enter text
Payments safety/robustness	☐	☐	☐	Enter text

Wholesale CBDC

[Only for those who answered very important, important or somewhat important to Q5 wholesale CBDC]

	Yes: preserving the role of central bank money is **key** to this aspect	**Partly:** preserving the role of central bank money is **only one part of** this aspect	**No:** this is a separate aspect	Please explain
Financial stability	☐	☐	☐	Enter text
Monetary policy implementation	☐	☐	☐	Enter text
Financial inclusion	☐	☐	☐	Enter text
Payments efficiency (domestic)	☐	☐	☐	Enter text
Payments efficiency (cross-border)	☐	☐	☐	Enter text
Payments safety/robustness	☐	☐	☐	Enter text

7. If you are developing (or have developed) a proof of concept, pilot or a live CBDC, are (were) you collaborating or having a dialogue with other entities to inform your design choices? Please select all that apply.

Retail CBDC

[Only for those who clicked Retail CBDC or Both under Q2]

☐ No
☐ Yes, with other central banks, to inform **domestic** design choices
☐ Yes, with other central banks, to inform **cross-border** design choices
☐ Yes, with the government and/or other public authorities, namely:
Click or tap here to enter text.
☐ Yes, with academics
☐ Yes, with nonprofit and/or international organisations, namely:
Click or tap here to enter text.
☐ Yes, with third-party developers/technology providers
☐ Yes, with commercial banks and/or other payment service providers, namely:
Click or tap here to enter text.
☐ Yes, with end-users (consumers and/or businesses) and/or end-user groups (associations)
☐ Yes, with others, namely:
Click or tap here to enter text.

Wholesale CBDC

[Only for those who clicked Wholesale CBDC or Both under Q2]

☐ No
☐ Yes, with other central banks, to inform **domestic** design choices
☐ Yes, with other central banks, to inform **cross-border** design choices
☐ Yes, with the government and/or other public authorities, namely:
Click or tap here to enter text.
☐ Yes, with academics
☐ Yes, with nonprofit and/or international organisations, namely:
Click or tap here to enter text.
☐ Yes, with third-party developers/technology providers
☐ Yes, with commercial banks and/or other payment service providers, namely:
Click or tap here to enter text.
☐ Yes, with end-users (consumers and/or businesses) and/or end-user groups (associations)
☐ Yes, with others, namely:
Click or tap here to enter text.

8. How likely is it that your central bank will issue a live CBDC in the:

Retail CBDC

[*To all]*

	Very likely	Somewhat likely	Possible	Somewhat unlikely	Very unlikely	Already issued
Short term (within the next 3 years)	☐	☐	☐	☐	☐	☐
Medium term (4 to 6 years)	☐	☐	☐	☐	☐	☐

Wholesale CBDC

[*To all]*

	Very likely	Somewhat likely	Possible	Somewhat unlikely	Very unlikely	Already issued
Short term (within the next 3 years)	☐	☐	☐	☐	☐	☐
Medium term (4 to 6 years)	☐	☐	☐	☐	☐	☐

9. Will your potential future CBDC have the following features, or, if you have already issued a CBDC, does your CBDC have the following features:

Retail CBDC

[Only for those who clicked Retail CBDC or Both under Q2]

	Yes	Likely	Unsure	Unlikely	No	Please provide details
Obligation for merchants to accept it	☐	☐	☐	☐	☐	Enter text
Interest bearing	☐	☐	☐	☐	☐	Enter text
Limits on balances	☐	☐	☐	☐	☐	Enter text
Limits on transactions	☐	☐	☐	☐	☐	Enter text
Accessible by non-residents	☐	☐	☐	☐	☐	Enter text
Restrictions on usage by non-residents	☐	☐	☐	☐	☐	Enter text
Based on a distributed ledger technology (DLT)	☐	☐	☐	☐	☐	Enter text
Interoperable with CBDCs of other jurisdictions	☐	☐	☐	☐	☐	Enter text
Interoperable with other payment systems abroad	☐	☐	☐	☐	☐	Enter text
Interoperable with domestic payment systems	☐	☐	☐	☐	☐	Enter text
Allow for offline payments	☐	☐	☐	☐	☐	Enter text
Users need to have a commercial bank account to open a wallet	☐	☐	☐	☐	☐	Enter text
Embedded capital flow management measures	☐	☐	☐	☐	☐	Enter text
Payments can be automatically executed conditional upon preset criteria (programmable payments)	☐	☐	☐	☐	☐	Enter text
CBDC can be programmed for specific purposes (programmable money)	☐	☐	☐	☐	☐	Enter text

Distributed to end users via commercial banks	☐	☐	☐	☐	☐	Enter text
Distributed to end users via non-bank payment service providers	☐	☐	☐	☐	☐	Enter text
Consumer fees for basic services (eg opening wallet, person-to-person and point-of-sale payments)	☐	☐	☐	☐	☐	Enter text
Consumer fees for value added services (please explain in last column)	☐	☐	☐	☐	☐	Enter text
Merchant fees for accepting retail CBDC payments	☐	☐	☐	☐	☐	Enter text

Wholesale CBDC

[Only for those who clicked Wholesale CBDC or Both under Q2]

	Yes	Likely	Unsure	Unlikely	No	Please provide details
Mandatory access for certain payment service providers	☐	☐	☐	☐	☐	Enter text
Accessible by foreign payment service providers	☐	☐	☐	☐	☐	Enter text
Based on a distributed ledger technology (DLT)	☐	☐	☐	☐	☐	Enter text
Interoperable with CBDCs of other jurisdictions	☐	☐	☐	☐	☐	Enter text
Interoperable with other payment systems abroad	☐	☐	☐	☐	☐	Enter text
Interoperable with domestic payment systems	☐	☐	☐	☐	☐	Enter text
Embedded capital flow management measures	☐	☐	☐	☐	☐	Enter text
Payments can be automatically executed conditional upon preset criteria (programmable payments)	☐	☐	☐	☐	☐	Enter text
CBDC can be programmed for specific purposes (programmable money)	☐	☐	☐	☐	☐	Enter text

10. You have indicated that your potential future **wholesale CBDC** will (likely) be issued on a distributed ledger. Which of the following features are you considering for this distributed ledger?
[Only those who clicked Yes or Likely for "On a distributed ledger technology (DLT)" for wholesale CBDC under Q 9]

	Yes	Likely	Unsure	Unlikely	No	Please provide details
Ledger will support multiple digital assets	☐	☐	☐	☐	☐	Enter text
Ledger will be operated by the central bank	☐	☐	☐	☐	☐	Enter text
Ledger will be operated by the private sector	☐	☐	☐	☐	☐	Enter text
Ledger will be jointly operated by the central bank and private sector	☐	☐	☐	☐	☐	Enter text

11a. What use cases do you envision or consider for your (potential) **retail CBDC?** Please select all that apply.
[Only for those who clicked Retail CBDC or Both under Q2]

☐ Person-to-person
☐ Point-of-sale
☐ E-commerce
☐ Person-to-business other than point-of-sale or e-commerce payments
☐ Business-to-person
☐ Business-to-business
☐ Payments from the government
☐ Payments to the government
☐ Other: Click or tap here to enter text.

11b. What use cases do you envision or consider for your (potential) **wholesale CBDC**? Please select all that apply.
[Only for those who clicked Wholesale CBDC or Both under Q2]

☐ Settlement of interbank payments
☐ Payment-versus-payment
☐ Delivery-versus-payment
☐ Other: Click or tap here to enter text.

12a. Does your central bank have the legal authority to issue a **retail CBDC**?
[To all]

☐ Yes
☐ No
☐ Uncertain

☐ Laws are currently being changed to allow for it
☐ Laws are currently being changed to clarify the legal authority

Please provide any comments or clarifications:
Click or tap here to enter text.

12b. Does your central bank have the legal authority to issue a **wholesale CBDC**?
[To all]

☐ Yes
☐ No
☐ Uncertain
☐ Laws are currently being changed to allow for it
☐ Laws are currently being changed to clarify the legal authority

Please provide any comments or clarifications:
Click or tap here to enter text.

13. If your central bank has issued a live **retail CBDC**, how would you assess its current use?
[Only to be answered by those who have issued a retail CBDC]

Trivial/no use: *hardly used by anyone, and those who do, only use it for a tiny fraction of their total payments.*

Used by niche groups: *mainly used by a particular group of users and for a small share of their total payments.*

Wider public use: *used by different groups of users but still for a small share of their total payments.*

Significant use: *used by different type of users and for a significant share of their total payments.*

	Trivial/no use	Used by niche groups	Wider public use	Significant use	Do not know
Current use	☐	☐	☐	☐	☐

14. For your jurisdiction, please select:
[To all]

	True	False	Not applicable	Do not know
The amount of physical cash in circulation is declining	☐	☐	☐	☐
The use of physical cash for payments is declining	☐	☐	☐	☐
There are measures in place to ensure physical cash remains accessible for people. If "True", please clarify: Click or tap here to enter text.	☐	☐	☐	☐
Your central bank has carried out a recent study of public cash use (eg a payments diary). If "True", please provide a link to publications if any: Click or tap here to enter text.	☐	☐	☐	☐

The emergence of cryptoassets, incl stablecoins, has accelerated your **retail CBDC** work	☐	☐	☐	☐
The emergence of cryptoassets, incl stablecoins, has accelerated your **wholesale CBDC** work	☐	☐	☐	☐

Please provide any comments or clarifications:
Click or tap here to enter text.

15. Please provide any other details about CBDC and the thoughts and work in your jurisdiction:
[To all]
Click or tap here to enter text.

Questions on stablecoins and other cryptoassets

16. In your jurisdiction, are there examples of commercial banks that have issued **stablecoins**?
[Mandatory, to all]

☐ Yes
☐ No
☐ Do not know

If yes, please explain which commercial banks have issued **stablecoins** and for what purpose(s):
Click or tap here to enter text.

17. In your jurisdiction, are there examples of financial market infrastructures (FMIs) that use or accept **stablecoins**? For example, central counterparties, central securities depositories, securities settlement systems, or credit card companies may use or accept stablecoins as collateral, an investment instrument, or a settlement asset for money settlement.
[Mandatory, to all]

☐ Yes
☐ No
☐ Do not know

If yes, please explain which FMI(s) is (are) using or accepting **stablecoins** and for what purpose(s):
Click or tap here to enter text.

18. Currently, in your jurisdiction, apart from (potentially) being used in decentralised finance (DeFi) and crypto trading, how significant do you think the use of **stablecoins** is for the following purposes?
[To all]

Trivial/no use: *hardly used by anyone, and those who do, only use it for a tiny fraction of their total payments made for this purpose.*

Used by niche groups: *mainly used by a particular group of consumers/businesses and for a small share of their total payments made for this purpose.*

Wider public use: *used by different groups of consumers/businesses but still for a small share of their total payments made for this purpose.*

Significant use: *used by different groups of consumers/businesses and for a significant share of their total payments made for this purpose.*

	Trivial/ no use	Used by niche groups	Wider public use	Significant use	Do not know
Domestic wholesale payments	☐	☐	☐	☐	☐
Domestic retail payments	☐	☐	☐	☐	☐
Other domestic payments Please explain: Click or tap here to enter text.	☐	☐	☐	☐	☐
Cross-border wholesale payments	☐	☐	☐	☐	☐
Cross-border retail payments (excl remittances)	☐	☐	☐	☐	☐
Remittances	☐	☐	☐	☐	☐
Other cross-border payments Please explain: Click or tap here to enter text.	☐	☐	☐	☐	☐

19. In your jurisdiction, is there a regulatory framework that covers **stablecoins** and **other cryptoassets**?

[To all]

☐ Yes, general financial regulation applies
☐ Yes, bespoke regulation applies
☐ General financial regulation is currently being changed to cover cryptoassets
☐ Bespoke regulation is currently being developed for cryptoassets
☐ No
☐ Uncertain

Please provide any details (eg links):

Click or tap here to enter text.

20. Has your central bank or (an)other institution(s) in your jurisdiction collected data and/or studied the usage of **stablecoins** (or more broadly **cryptoassets**) among consumers and/or businesses?
[To all]

☐ Yes
☐ No
☐ Do not know

If yes, please provide any details (eg links):
Click or tap here to enter text.

Questions on tokenised deposits

21. In your jurisdiction, have commercial banks engaged in any kind of research, experiments, pilots or other work related to **tokenised deposits**?
[Mandatory, to all]

☐ Yes
☐ No
☐ Do not know

22. What type of work is being conducted? Please check all that apply.
[Only for those who clicked Yes under Q21]

Research/study: *exploratory work, eg to explore use cases, impact and feasibility, without any technical development.*

Experiments/proof of concept: *early testing of one or a small number of selected aspects of the tokenised deposits in a controlled and internal environment.*

Developing or running a pilot: *developing or testing a prototype in the real world among a restricted number of participants.*

Live: *tokenised deposits have been issued.*

☐ Research/study
☐ Experiments/proof of concept
☐ Developing or running a pilot
☐ Working on live tokenised deposits
☐ Live tokenised deposits have been issued

Please provide links (eg to websites, publications, official communications) about your project(s) where relevant:
Click or tap here to enter text.

Questions on tokenisation of other assets

For the purposes of this survey, tokenised assets refer to tokenised forms of financial and real assets, except for the (settlement) assets already covered above. So, wholesale CBDCs, stablecoins and other cryptoassets as well as tokenised deposits are out of scope here.

23. In your jurisdiction, have private or public sector entities engaged in any kind of research, experiments, pilots or other work related to **tokenised assets** other than CBDCs, tokenised deposits, stablecoins or other cryptoassets?
[Mandatory, to all]

☐ Yes
☐ No
☐ Do not know

24. What type of work related to **tokenised assets** is being conducted? Please check all that apply.
[Only for those who clicked Yes under Q23]

Research/study: *exploratory work, eg to explore use cases, impact and feasibility, without any technical development.*

Experiments/proof of concept: *early testing of one or a small number of selected aspects of the tokenised assets in a controlled and internal environment.*

Developing or running a pilot: *developing or testing a prototype in the real world among a restricted number of participants.*

Live: *tokenised assets have been issued.*

☐ Research/study
☐ Experiments/proof of concept
☐ Developing or running a pilot
☐ Working on live tokenised assets
☐ Live tokenised assets have been issued

Please provide links (eg to websites, publications, official communications) about your project(s) where relevant: Click or tap here to enter text.

25. What type(s) of assets are being tokenised? Please check all that apply.
[Only for those who clicked Yes under Q23 and that have not issued live tokenised assets]

☐ Investment funds (eg mutual funds, money market funds, real estate investment trusts)
☐ Bonds (eg government or corporate bonds)
☐ Bills of exchange, promissory notes, checks
☐ Commercial paper
☐ Equities
☐ Derivatives
☐ Precious metals (eg gold, silver)
☐ Real estate
☐ Emissions allowances
☐ Other traditional assets Click or tap here to enter text.

26. Currently, in your jurisdiction, how significant do you think the issuance/use of **tokenisation of traditional assets** is for the following assets?
[Only for those who answered "live tokenised assets have been issued" under Q24]

> ***Trivial or no issuance/use:*** *hardly issued/used by anyone, and for those who do, the tokenised assets only make up a tiny fraction of the total assets issued/used.*
>
> ***Issued/used by niche groups:*** *mainly issued/used by a particular group of entities and for a small share of their total assets issued/used.*
>
> ***Wider issuance/used:*** *issued/used by different groups of entities but still for a small share of their total assets issued/used.*
>
> ***Significant issued/used:*** *issued/used by different groups of entities and for a significant share of their total assets issued/used*

	Trivial or no issuance/use	Issued/used by niche groups	Wider issuance /use	Significant issuance/ use	Do not know
Investment funds (eg mutual funds, money market funds, real estate investment trusts)	☐	☐	☐	☐	☐
Bonds (eg government or corporate bonds)	☐	☐	☐	☐	☐
Bills of exchange, promissory notes, checks	☐	☐	☐	☐	☐
Commercial paper	☐	☐	☐	☐	☐
Equities	☐	☐	☐	☐	☐
Derivatives	☐	☐	☐	☐	☐
Precious metals (eg gold, silver)	☐	☐	☐	☐	☐
Real estate	☐	☐	☐	☐	☐
Emissions allowances	☐	☐	☐	☐	☐
Other traditional assets Please explain: Click or tap here to enter text.	☐	☐	☐	☐	☐

27. Which of the following asset(s) are used as a settlement asset to settle transactions when selling or purchasing the **tokenised assets** selected above? Please select all that apply.

[Only for those who indicated a more than trivial issuance/use for at least one tokenised asset type in Q26]

☐ Wholesale CBDCs
☐ Stablecoins
☐ Tokenised deposits
☐ Other (1), if applicable: Click or tap here to enter text.
☐ Other (2), if applicable: Click or tap here to enter text.
☐ Other (3), if applicable: Click or tap here to enter text.

27a. Please rank the assets selected in the previous question in order of their usage as a settlement asset. Drag and drop the assets to the green box, with the most (least) frequently used asset for settlement at the top (bottom).

[Only for those who selected more than one asset in Q27]

Wholesale CBDCs
Stablecoins
Tokenised deposits
Other (1), if applicable
Other (2), if applicable
Other (3), if applicable

Annex B: Central banks participating in the survey

Jurisdictions of the 93 central banks that participated in the 2024 survey[1] Table B1

Jurisdiction	Country group	Jurisdiction	Country group	Jurisdiction	Country group
Angola	EMDEs	France	AEs	Namibia	EMDEs
Argentina	EMDEs	Georgia	EMDEs	Netherlands	AEs
Australia	AEs	Germany	AEs	New Zealand	AEs
Azerbaijan	EMDEs	Guatemala	EMDEs	Norway	AEs
Bahamas (The)	EMDEs	Hong Kong SAR	AEs	Oman[2]	EMDEs
Bangladesh	EMDEs	Hungary	EMDEs	Palestine[2]	EMDEs
Belgium	AEs	Iceland	AEs	Paraguay	EMDEs
Bermuda[2]	EMDEs	India	EMDEs	Peru	EMDEs
Bolivia	EMDEs	Indonesia	EMDEs	Philippines	EMDEs
Brazil	EMDEs	Iraq	EMDEs	Poland	EMDEs
Cabo Verde	EMDEs	Israel	AEs	Qatar[2]	EMDEs
Canada	AEs	Italy	AEs	Saudi Arabia	EMDEs
Cayman Islands	EMDEs	Jamaica	EMDEs	Serbia	EMDEs
Chile	EMDEs	Japan	AEs	Seychelles	EMDEs
China	EMDEs	Jordan	EMDEs	Singapore	AEs
Chinese Taipei	AEs	Kazakhstan	EMDEs	Slovenia	AEs
Colombia	EMDEs	Kenya	EMDEs	South Africa	EMDEs
(Democratic Republic of the) Congo	EMDEs	Kosovo	EMDEs	South Korea	AEs
Costa Rica	EMDEs	Kuwait	EMDEs	Spain	AEs
Curaçao and Sint Maarten	EMDEs	Lebanon[2]	EMDEs	Sri Lanka	EMDEs
Czechia	AEs	Lesotho	EMDEs	Sudan[2]	EMDEs
Denmark	AEs	Lithuania	AEs	Sweden	AEs
Dominican Republic	EMDEs	Macao SAR	AEs	Switzerland	AEs
Eastern Caribbean Currency Union	EMDEs	Madagascar	EMDEs	Tunisia	EMDEs
Ecuador	EMDEs	Malaysia	EMDEs	Türkiye	EMDEs
Egypt	EMDEs	Mauritania[2]	EMDEs	Ukraine	EMDEs
El Salvador	EMDEs	Mauritius	EMDEs	United Arab Emirates	EMDEs
Eswatini[2]	EMDEs	Mexico	EMDEs	United Kingdom	AEs
Ethiopia[2]	EMDEs	Mongolia	EMDEs	United States[3]	AEs
Euro area	AEs	Morocco	EMDEs	Vietnam	EMDEs
Finland	AEs	Mozambique	EMDEs	Zambia	EMDEs

[1] The survey was carried out between October 2024 and December 2024. The categorisation of jurisdictions into advanced economies (AEs) and emerging market and developing economies (EMDEs) is based on the World Economic Outlook classification of the International Monetary Fund (IMF). [2] First-time participant in the survey. [3] Since January 2025, the United States has not engaged in projects related to CBDC.

Source: BIS survey on CBDCs and crypto, 2024.