

The important, but not yet urgent impact of central bank digital currencies

Central bank digital currencies have gone from a curiosity to reality for some in just a few years. For now, any impact on exchange rates appears either negligible or for something much further down the line. As perceptions change, here's what to expect in 2022



Nigeria has launched a digital currency which the Central Bank of Nigeria says is a "major step forward in the evolution of money"

Here's why it matters

Why do central bank digital currencies, CBDCs, matter? Well, central bankers and policymakers cite a variety of reasons. The importance attached to those also varies considerably between countries. Among the most prominent are:

- the declining use of banknotes and coins, necessitating authorities to look at digital alternatives;
- the need to maintain "monetary sovereignty" in the face of privately issued, non-domestic currency-denominated "stablecoins";
- improving financial inclusion;
- supporting the international role of the domestic currency in a geopolitical context.

The focus of most projects is on the domestic retail use of CBDC. Large-value and cross-currency

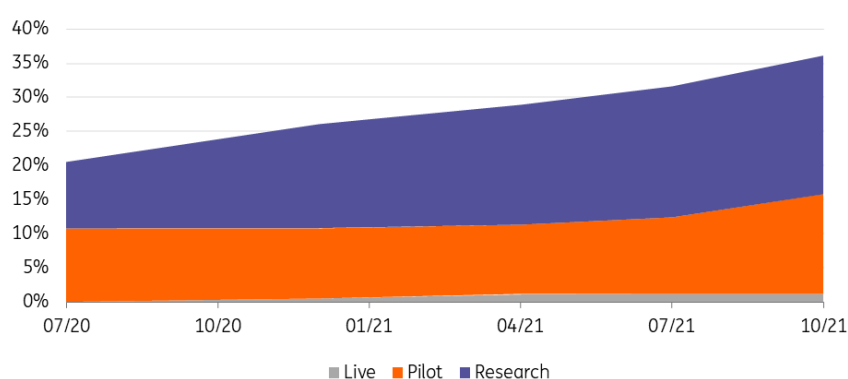
payments are taking a backseat despite the fact that speed improvements, efficiency gains and cost reductions do seem to appear in the wholesale domain.

The CBDC steps taken in 2021

The percentage of central banks looking into a form of CBDC has risen rapidly, from 21% in July 2020 to 36% in October this year. That's just over a third, you may say. Indeed, but the fact that the People's Bank of China is one of the CBDC leaders, makes that by now three-quarters of the world's population live in a country which is at least researching CBDC.

Percentage of central banks looking into CBDC (retail or wholesale)

Source: BIS, ["Rise of the central bank digital currencies: drivers, approaches and technologies"](#)



Large pilot schemes in China

Of the biggest economies, China remains the most advanced on CBDC, having started research back in 2014 and continuing large pilots in 2021. Among smaller countries, major events this year were the rollout of CBDC in the Eastern Caribbean and Nigeria, joining the Bahamas where the "Sand dollar" CBDC was minted in 2020. These rapid steps by small jurisdictions show that CBDC challenges are not related to technology. In fact, some fintechs nowadays provide ready-to-deploy CBDC solutions, ranging from the frontend app to the backend infrastructure.

Global financial authorities are now weighing in. The Bank of International Settlements (BIS) says that ["the time has passed for central banks to get going. We should roll up our sleeves and accelerate our work on the nitty-gritty of CBDC design."](#) The BIS has ramped up its CBDC research, and released [papers](#) containing joint work with Fed, ECB, BoJ, BoE, SNB, BoC and Riksbank. The BIS Innovation hub is [coordinating](#) various domestic and cross-border/cross-currency CBDC projects. The G7 issued [Public Policy Principles for Retail CBDC](#).

The large body of publications notwithstanding, beyond China and small first movers, larger developed economies are not yet close to the actual issuance of a CBDC.

Here's where we stand:

□ The ECB embarked on a two-year 'investigation phase' in 2021

During this phase, the European Central Bank [focuses on technical issues](#) and solutions, and importantly on domestic retail use of a CBDC. The ECB has stepped up its CBDC programme in response to Facebook's original Libra plans and appears most worried about losing "monetary sovereignty" in a scenario where non-euro denominated, privately issued stablecoins would crowd out euros and other euro-denominated forms of money, such as commercial bank accounts.

Facebook has already partly addressed that worry by shelving the idea of a currency-basket denominated Libra, replacing it with domestic currency-denominated Diem, and focusing on the US first. This has not reduced the urgency felt at the ECB.

At the same time, [European policymakers](#) see a digital euro as a vehicle to bolster the international role of the euro and support foreign investment in euro assets. Though European institutions appear united in their wish to realise a digital euro, it seems likely that cracks will occur when more practical choices have to be made. The European Parliament, European Commission, the ECB, national central banks, national governments and national parliaments will all need to converge on a single infrastructure and digital euro rule book.

□ The US is in less of a hurry than Europe

With the dollar as the leading global reserve currency, the US Federal Reserve has little to gain from a CBDC on the global stage. It does have its pole position to defend, however. This starting position no doubt influences opinions. The Fed announced a discussion paper for the summer, but publication has been delayed. Speeches by Fed board members show divided opinions. Fed Governor Brainard for example has been discussing CBDC in quite positive terms, while her colleague Waller recently made clear that he is happy to see privately issued stablecoins grow and prosper.

The Fed Board, therefore, appears divided over fundamental issues such as the role of the public vs private sectors in the provision of money, and the role of transparency vs more proactive user protection. Board divisions may not look good, but [the fundamental debate is very welcome](#) and is more developed than in Europe, where the ECB prefers to focus on technical issues.

□ The Bank of England is taking its time

The Bank of England is at a very preliminary stage of its digital currency exploration project. In November, [the Bank announced](#) that a consultation period with the Treasury will start in 2022, aimed at assessing the benefits and implications of a CBDC. This phase aims at informing a decision on whether to move to a "development" phase, which would then last many years.

□ Sweden's Riksbank has been quick off the marks

Sweden's Riksbank has been one of the fastest-moving central banks in the developed space to explore the introduction of a digital currency. The e-krona project was initiated in 2017 and since 2020, the Riksbank has moved to the practical phase of the project. This is where it aims to test technical solutions to implement the digital currency. In April 2021, the Riksbank published [a report on the first phase](#) of the pilot project. While acknowledging the feasibility of building the technological architecture for an e-krona, it still highlighted open questions about its safety and

reliability when it comes to retail payments.

Expect more on this in 2022 and in the coming years as the Riksbank continues to explore the technical features of the project, although Deputy Governor Cecilia Skingsley recently said that the e-krona is unlikely to be rolled out within the next five years.

Outlook for 2022

The year ahead may see several smaller countries following the example set by the Bahamas, the Eastern Caribbean islands and Nigeria. Such countries may have their own specific reasons to launch a CBDC and may choose to buy an off-the-shelf product enabling them to move quickly.

The Winter Olympics will be a key event to watch as for China's next CBDC move, given persistent rumours the Chinese CBDC could publically be launched there. The eurozone, Sweden and the UK will continue to be in 'research mode' in 2022 and no concrete steps are to be expected. At most, some high level design choices may be made, which provide initial guidance on the scope, intended use, and implications of CBDC in these regions.

The Fed is still in the stage of debating whether a CBDC is a good idea in the first place. 2022 will see a few changes in the Fed Board composition, which may advance this discussion. In any case, any steps forward will be taken in the broader context of the regulation of stablecoins.

We still can't truly quantify the FX impact of CDBC's

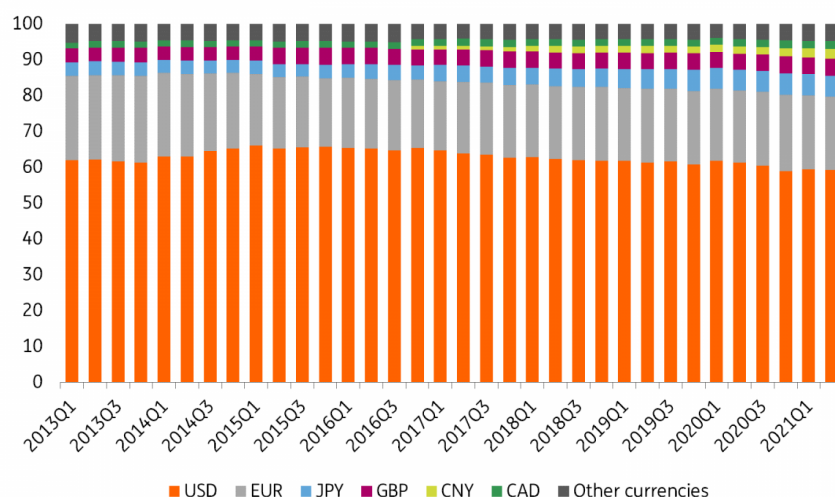
At such an early stage, an assessment of the potential impact of CDBC's on the FX market can only be partial. A starting point could be that the currencies that will become available in a digital form may experience higher demand compared to non-CDBC's and – all things being equal – may face appreciating pressures. Even if true, this point has a lot of caveats and is heavily dependent on the role of each currency in international markets. Important distinctions should be made between major currencies and small emerging market currencies, although in both cases, the theme of de-dollarisation is central.

Digital currencies have the potential to significantly cut conversion and transaction costs

The example of a small emerging economy such as Ukraine is quite significant. Like many other countries of this size, Ukraine is a highly dollarized country, where US dollars are commonly held by individuals and transferred in and out of the economy. Crucially, there is a high incidence of dollar remittances from labour migrants; instead of converting the remitted money into the local currency (UAH), that money is received and stored in dollars. This is not only due to the dollar's role as a global reserve but also to the high costs associated with converting the remitted money into the local (often not very liquid) currency. In countries such as Ukraine, where remittances grew to USD 12.1bn in 2020 (around 8% of GDP), the impact of CDBC's on local currency demand may be noticeable. Still, this will likely require full implementation of the CBDC in the country first. Then it will take some time for individuals to adapt to the new technology. In other words, this is not a short-term story.

Digital currencies, either private or publicly issued (the National Bank of Ukraine recently launched an e-hryvnia pilot project) have the potential to significantly cut conversion and transaction costs and may therefore reduce local demand for dollars. Ultimately, this may lead to an appreciation, all being equal, of the local currency.

Share of the world's allocated FX reserves (%)



Source: IMF

While potentially impacting the domestic currency, a reduction in dollar demand in certain highly dollarized small economies is unlikely to affect the greenback's global role. The question when it comes to the CBDC impact on the dollar is whether larger (EM or DM) economies find incentives to diversify their FX reserves after the introduction of digital currencies in major economies outside of the US. As we've already noted, the likes of China and to a lesser extent the eurozone are moving significantly faster than the US when it comes to CBDC exploration. While we cannot exclude that a digital (in theory, more accessible) yuan or euro may also be seen as more attractive as a reserve currency, the role of the dollar as a global reserve asset also stems from US political stability, central bank independence and liquidity/accessibility of its financial markets.

As you can see in the chart above, there have been very few signs that the USD is losing its dominant reserve role. When looking at the current situation, de-dollarization looks, if anything, like a very long-term story and while the introduction of CBDCs might smooth a shift to other reserve currencies, it will be mostly down to political and economic factors to drive that move.

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