

# Benoît Cœuré: Digital challenges to the international monetary and financial system



SPEECH

**Panel remarks by Benoît Cœuré, Member of the Executive Board of the ECB, at the Banque centrale du Luxembourg-Toulouse School of Economics conference on “The Future of the International Monetary System”, Luxembourg, 17 September 2019**

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When<sup>[1]</sup> the euro was created 20 years ago it was hailed as one of the most important turning points in the history of the international monetary system since the demise of the Bretton Woods system.<sup>[2]</sup> Many observers saw the euro as a natural contender to rival the supremacy of the US dollar in the global monetary and financial system. After all, the euro area was (and remains) the world’s largest trading bloc.<sup>[3]</sup>

The remarkable rise of China in the global economy, its expanding role in international trade, and the inclusion of the renminbi in 2016 in the International Monetary Fund’s Special Drawing Right (SDR) valuation basket, were widely heralded as yet another turning point for the international financial system.

Yet, the US dollar remains the dominant international currency.<sup>[4]</sup> It has

defied all attempts to rival its monopoly position, even going back to the 1980s, when hopes that Japan's emergence as global creditor would support the internationalisation of the yen were also disappointed.<sup>[5]</sup>

The US dollar today accounts for around half of global foreign exchange transactions worth 6.6 trillion dollars per day.<sup>[6]</sup> It is used to invoice nearly half of global foreign trade, a share far greater than that of the United States in the global economy.<sup>[7]</sup> And it is now as widely used as a reference unit for exchange rate arrangements as it was during the Bretton Woods era. By some measures, it has taken on an even greater role.<sup>[8]</sup>

Today, the discussion is about so-called "stablecoins" – crypto-assets with value-stabilising characteristics.<sup>[9]</sup>

Although private digital forms of money have been around for decades, Facebook's large installed customer base suggests that Libra could be the first private initiative to have a truly global footprint from day one. Facebook has over 2.4 billion users – more than a quarter of the world population.<sup>[10]</sup> WhatsApp and Instagram, both owned by Facebook, have 1.6 billion and 1 billion users each.<sup>[11]</sup>

Global "stablecoin" initiatives can make international payments cheaper and faster and support financial inclusion. But they raise formidable challenges across a broad range of policy domains: operational robustness, safety and soundness as payment systems, customer protection, risks to financial stability and monetary sovereignty, and, last but not least, data protection and compliance with anti-money laundering and terrorism financing rules.<sup>[12]</sup>

Some public authorities already expressed strong concerns, suggesting that regulatory hurdles will be set very high for these initiatives to get off the ground.<sup>[13]</sup> Partly in response to these concerns, a G7 working group has been mandated to examine global "stablecoins" in more detail.

The group is expected to provide policy recommendations to G7 Ministers and Governors by the time of the IMF-World Bank Annual Meetings in October this year. The Financial Stability Board has also started looking into the regulatory implications of these initiatives.

In my remarks this evening, I would like to discuss whether Libra, or similar global "stablecoin" initiatives, may be a contender for the Iron Throne of the dollar. I will start by discussing the factors that distinguish the discussion today from previous discussions. I will argue that, in specific circumstances, and if allowed to develop, private digital forms of money could challenge the supremacy of the US dollar more easily, and faster, than currencies issued by other sovereigns.

Yet, whatever faith awaits private digital money, they will likely change the international monetary and financial system in one way or another, either directly or by driving global central banks to innovate.

## **Digitalisation and currency competition**

In the past century or so, competition for pre-eminence in the international monetary system has been confined to currencies issued by sovereigns. Economic size, openness and stability were long considered to be among the key determinants of the success and demise of international currencies.

The fact that the global appeal of the yen, the euro and the renminbi has not risen more forcefully is typically associated with one, or a combination of, these factors. In the case of the euro, for example, fragmented domestic capital markets and the absence of a true European safe asset – one that provides stability in challenging economic times – are likely to have prevented the euro from being used more widely.<sup>[14]</sup> There is a vast body of literature assessing the relative importance of these and other factors.<sup>[15]</sup>

The general consensus, however, is that other currencies continue to face considerable obstacles to displacing the US dollar in the international monetary and financial system, and that the broad contours of the system can be expected to remain unchanged in the near term.

This raises the question of whether the arrival of private digital forms of money could challenge the pecking order of the current system more easily – whether there is something special about these “currencies” that could allow them to compete more effectively with the US dollar, assuming of course that they passed the high bar set by global regulators.

The short answer, in my view, is yes – for two main reasons.

### **Inertial forces may become less powerful**

The first relates to the speed of adoption, or the potential for the system to change rapidly.

Global currencies, much like domestic currencies, serve the three classic functions of money – a unit of account, a store of value and a means of payment.<sup>[16]</sup> But not all functions are equally important. Both history and theory suggest that being a means of payment is, de facto, the leading function of a global currency.<sup>[17]</sup>

In the past, however, international payments were mainly carried out by firms, merchants, banks and governments, and mainly took the form of wholesale transactions by large players in global trade and financial markets. The banks of Amsterdam and Hamburg, for example, performed key central bank functions as early as the beginning of the 17th century, and were created to provide giro deposits to merchants as an efficient and stable means of payment.<sup>[18]</sup>

The pound sterling’s rise as an international currency started with so-called merchant banks in London lending to merchants to finance exports and imports, after which it developed into a vehicle for international investment and became a reserve currency.

For firms, merchants, banks and governments, there are material costs involved in agreeing on one international currency standard, and in switching from one to another. They often hold significant balances denominated in the leading international currency, and in doing so take on exchange rate risk, safe in the belief that this currency will remain the principal global payment unit in the future.

As a result, inertia in international currency use has historically been substantial. High switching costs, lock-in effects and habit persistence were strong forces in favour of the status quo.<sup>[19]</sup> There is an active debate as to how long it takes for one leading currency to replace another. But the consensus is that the process takes years, if not decades.<sup>[20]</sup>

Consumers, by contrast, have generally had much more limited exposure to, and interest in, global currency use, except in “dollarized” or “euroized” economies where the US dollar or the euro, are, or were, formal or informal means of payment in lieu of the domestic currency.<sup>[21]</sup>

This has changed, however. The most recent wave of globalisation, in conjunction with the rapid evolution of online services, has supported consumer demand for payment services that work across borders and that are also faster, cheaper and easier to use.

Global tourism flows, for instance, have doubled over the past 15 years. The number of internet users has doubled too, as has the number of mobile phone users. The cost of sending data has shrunk considerably and access to more convenient services has widened. And in just ten years, global remittances have increased by over 50%, while cross-border e-commerce activity has trebled.<sup>[22]</sup>

It is only natural, then, that new and emerging private payment solutions are mainly targeting consumers and workers, not merchants. Consumers and workers constitute a much larger pool of potential users, with the associated network effects, which has meant that existing digital initiatives have been adopted much more quickly.

Consider M-Pesa. It has revolutionised payments by making it possible to settle low-value transactions without a bank account. The volume of mobile money transactions in Kenya has trebled in less than seven years and today already accounts for half of the country’s GDP.<sup>[23]</sup> Advanced economies are only starting to catch up with Kenya.

In China, Alipay and WeChat Pay, two payment solutions developed by domestic bigtech firms, have attracted almost one billion customers each in less than ten years. Bigtech payment services account for 16% of GDP in China, higher than anywhere else.<sup>[24]</sup> Third-party mobile payment transactions last year in China were 15 times larger than in 2015.<sup>[25]</sup>

The available evidence therefore suggests that transaction and switching costs are much smaller in the case of retail consumer payments than they are for traditional currencies used for wholesale cross-border trade and finance. There is little reason to believe that such network effects would be less

powerful for global networks, possibly making international currency competition a much more dynamic contest in the future.

## **Drivers of international currency use in the digital age**

This brings me to my second point, namely that the factors driving international currency use are likely to change too. With consumers at the heart of competition, we may have to rethink the set of factors, and their relative importance, that will ultimately determine the scale and scope of global currency adoption.

Some fundamental drivers will not change, of course.

Price stability remains, and will remain, a precondition for a currency to gain widespread use, whether digital or not. For this reason, central banks worldwide have adopted price stability as their primary mandate. And this is why unstable crypto-assets, such as bitcoin, whose price in fiat currencies is highly volatile, will never be able to serve as a reliable means of payment. “Stablecoins”, if they meet their promise of stability, are the natural next step in the evolution of digital assets.

This was already understood nearly 50 years ago when Friedrich Hayek proposed abolishing the government monopoly on money issuance, arguing that competitive forces would exert disciplinary effects on issuers and incentivise them to provide stable money.<sup>[26]</sup> Ultimately, the currency with the lowest inflation rate would crowd out its competitors.

Next to stability, other factors are likely to play a growing role in the digital age. Convenience is a prime candidate.

Consider the euro area. Despite the creation of the single currency 20 years ago, cross-border e-commerce in the euro area has not taken off. Home bias remains strong. Only one-third of European e-shoppers make purchases from sellers in other EU countries.<sup>[27]</sup> And around 40% of European websites do not sell to consumers based in other member states, while almost 80% of online sales are domestic.<sup>[28]</sup>

Put differently, it is probably easier to connect a new currency to an existing network – the case of Libra – than to build a new network on an existing currency – the case of the euro. Few retailers have seen the introduction of the euro as an opportunity to build a pan-European network around it. With or without the euro, the single market for services remains incomplete.

Global “stablecoin” initiatives could work in reverse. They could turn the nature of payments on its head. WhatsApp, for example, is a messaging service. Adding a payment leg that enables direct transfers of money between registered users will not change the nature of its business. But it will provide a platform to turn a means of payment into a global currency. This is the exact opposite of what theoretical models of global currency use would predict. According to these models, payments lead and other uses follow.

A second, and related, new driver of international currency use in the digital age relates to privacy.

Historically, privacy was not an issue. Anonymity is one of the salient features of paper money.<sup>[29]</sup> Private digital currencies that run through a distributed ledger have arguably restored anonymity in the virtual world, making them prone to being used to finance illegal activities, such as tax evasion or terrorism.<sup>[30]</sup>

To pass the test of faith, therefore, any “stablecoin” initiative will have to conform to international anti-money laundering and know-your-customer regulations.<sup>[31]</sup>

But assuming they do comply with the applicable regulations, “stablecoins” could differentiate themselves according to how much personal data they collect and process. Some could use or sell customer data, whereas others may give priority to protecting the privacy of their customers.

It is hard to tell just how much the privacy dimension will affect international currency use. But the effects could also work in reverse. There are significant differences across countries in terms of how much consumers value the privacy of their data. In Europe, individuals’ control over their personal data has been protected by an EU regulation – the General Data Protection Regulation, or GDPR – since May 2018.<sup>[32]</sup> Any private initiative operating in the EU will have to comply with this regulation.

## **The future shape of the international monetary and financial system**

All this means that digitalisation may significantly change the way currencies compete with each other. It also means that it will become much more difficult to predict the future contours of the international monetary and financial system.

Several equilibria are conceivable. I would like to briefly discuss three of them, each with very different implications for the future shape of our international monetary and financial system.

### **Preserving the status quo**

A first possible equilibrium may simply be the status quo.

Concerns expressed about Libra in large parts of the world, including in the United States, has been considerable. Some governments have already announced their intention to ban Libra, if and when it gets up and running.

In other words, the standards required to preserve safety against theft, fraud and operational failures may prove too demanding, or too costly, for many initiatives to get off the ground.

This equilibrium would not imply a digital standstill, however. Other initiatives can help meet growing consumer demand for payment services that

work across borders and that are faster, cheaper and easier to use than current payment systems.

Libra has undoubtedly been a wake-up call for central banks to strengthen their efforts to improve existing payment systems. This by itself is undoubtedly a win-win situation for the global community. Progress made by those central banks already operating at the technological frontier can be expected to increase the speed of technological diffusion across borders.<sup>[33]</sup>

Europe is leading by example here. In November last year, for example, the Eurosystem launched Target Instant Payment Settlement (TIPS) – a new market infrastructure which allows payment service providers to offer funds transfers to customers across Europe in real time, around the clock, and on every day of the year.

TIPS could be a role model for developing economies. It not only has the potential to help better prepare incumbents for the challenges arising from digital giants, it has also the potential to be a catalyst for financial inclusion, which should be a key objective of any public initiative in the payment field.<sup>[34]</sup>

## **Central bank digital currencies**

A second, and related, equilibrium is what Bank of England Governor Mark Carney recently called a synthetic hegemonic currency that is provided through a network of central bank digital currencies – CBDCs for short.<sup>[35]</sup>

Many central banks have been working on CBDCs in recent years, though at differing speeds, depending on differences in demand for cash by citizens, among others.<sup>[36]</sup> Sveriges Riksbank and the Central Bank of Uruguay, for example, are among the most advanced central banks in this area. Their experiments with the “e-krona” and “e-peso” provide useful food for thought. The People’s Bank of China has also reportedly accelerated plans for its own digital currency in response to Libra.<sup>[37]</sup>

The costs and benefits of issuing a global synthetic currency have been discussed since John Maynard Keynes’ Bancor proposal and are far beyond the scope of this speech. In fact, they have little to do with new technology, and everything to do with appetite for global economic cooperation, which has been low since the demise of the Bretton Woods system – many would argue that it is even lower today.<sup>[38]</sup>

But cooperation is precisely what Governor Carney is calling for: closer central bank coordination to reap the benefits of recent technological advances more quickly and more efficiently. Much in this spirit, the ECB and the Bank of Japan have already joined forces to examine the possible use of distributed ledger technology in financial market infrastructures.<sup>[39]</sup>

The next natural step would be for global central banks to join forces and jointly investigate the feasibility of CBDCs based on common technical standards.

## Digital currency areas

The third equilibrium that I would like to briefly sketch out would be more disruptive. It would be in the spirit of what Markus Brunnermeier, Harold James and Jean-Pierre Landau have called “digital currency areas” that would cut across borders.<sup>[40]</sup>

Digital currency areas are networks where payments and transactions are made digitally by using a currency specific to the network – be it a fiat currency or not.<sup>[41]</sup>

In this hypothetical world, policymakers would successfully coordinate across borders to ensure that global private payment system providers fully comply with key policy priorities.

At one extreme, cooperation would cut across continents and lay the ground for the rise of a truly *global* private digital currency. This would be a long way to go. Today, even networks such as Facebook, Amazon or Alipay remain confined to geographical blocks, and this is before a discussion on regulatory aspects around payment systems has even started.

More conceivable are therefore digital *regional* currency areas. Given the already high degree of regulatory and economic convergence, Europe is certainly best placed to advance here. But others might follow.

This equilibrium would, however, entail a risk of fragmentation of the international monetary system, and the transition towards it would pose several challenges to public authorities.

Currency substitution would be one of them. The “stablecoinisation” would likely start in economies with stubbornly high inflation or weak institutions – Gresham’s law in reverse.<sup>[42]</sup> The decline in the prime legal tender would, in turn, undermine the effectiveness of monetary policy in these economies. But unlike “traditional” currency substitution, “stablecoinisation” would potentially relegate key policies that belong to the public sphere to private payment system providers – an outcome which citizens clearly cannot accept.<sup>[43]</sup>

Global “stablecoins” would likely also increase capital flow volatility, with potential effects on exchange rates and financial conditions, and hence on domestic inflation outcomes.<sup>[44]</sup> Small open economies, for example, could seek to introduce or increase capital controls to limit or offset such fluctuations, in particular if capital flows are one-sided.

In other jurisdictions with deep and liquid financial markets, purchases of safe assets by global “stablecoin” issuers could compress term premia by increasing scarcity, and thereby reinforce or offset the actions taken by domestic central banks.<sup>[45]</sup>

In other words, the journey towards digital currency areas would be long and full of perils. Ultimately, however, the shape of the international monetary and financial system would be determined by two factors: the citizens’



appetite for being part of global networks, or not, and differences in tastes and preferences, including about privacy.

## **Conclusion**

Wherever our journey takes us, and with this I would like to conclude, global “stablecoin” initiatives, such as Libra, will prove disruptive in one way or another. They are the natural result of rapid technological progress, globalisation and shifting consumer preferences.

But how we respond to these challenges is up to us. We can focus our efforts on ensuring that private payment systems will thrive in a space that respects our common global policy priorities. Or we can accelerate our own efforts to overcome the remaining weaknesses in global payment systems, safe in the belief that only public money can ultimately, and collectively, ensure a safe store of value, a credible unit of account and a stable means of payment. Or we can do both of these things, and create an environment in which market-based and public payment systems effectively complement each other, jointly shaping the payments universe in the 21st century.

Thank you.