

Banking and new forms of money

With the announcement of Libra, Facebook and another 27 companies have put the debate about cryptocurrencies and the operation of existing payment systems back on the agenda. After the fall in the value of Bitcoin and doubts about its ability to function as money, many see stablecoins as an alternative with greater potential for adoption. If this is the case, the two «traditional» forms of money (cash and bank deposits) should face up to this new competition. In this article, we will discuss the competition between different forms of money, the challenges it might entail for banks, and what actions they could undertake to address these issues.¹

Advances in payment technologies enable the emergence of new forms of money, which in the long term could lead to greater competition for bank deposits.

- **Settlement systems ensure that money is debited from the payer's account and credited to the payee's, thereby registering the change in ownership.** With the exception of cash, all major payment infrastructures rely in some way on an entity that centralises the validation of these movements between accounts, whether it is the central bank of each jurisdiction, Visa or Mastercard for card payments, or AliPay and WeChat in their ecosystems in Asia, among others. This centralisation brings certain inefficiencies, especially in cross-border payments, such as delays in transfers and a lack of traceability regarding their status as a consequence of the fragmentation and lack of interconnection between these infrastructures. By eliminating the need to centralise the validation process, the use of DLTs² (blockchain is one example) can generate efficiency gains that would justify the cost of deploying new payment infrastructures and, on them, new currencies.
- **Countless cryptocurrencies have emerged to date, although those with the greatest potential to become a new form of money are those that back their value with some sort of asset.** One option is to back their value with legal tender, as is the case with Tether, USD Coin and Paxos, for instance. Their issuers set an exchange rate – for instance against the dollar – and define mechanisms to ensure that the prices of goods and services in both currencies are fixed. Another option is to peg it with a selection of currencies or other assets whose value fluctuates with the market. In this case, depending on when they are acquired, goods and services paid for in this currency would be either more or less expensive than if they were paid for in dollars. Libra is an example of this last type, along with cryptocurrencies backed by gold.
- **Unsurprisingly, deploying this new infrastructure from scratch is not a task that anyone can assume, and any private issuer with the capacity to do so should face considerable regulatory challenges.**³ In any case, it is conceivable to imagine a future in which deposits could have to compete for the liquidity of economic players not only with cash but also with cryptocurrencies that have achieved sufficient adoption.

For banks, customer deposits are a central part of their business model. Therefore, some⁴ consider that greater competition presents a challenge to traditional financial institutions.

- **Deposits are a stable source of funding for banks and a key element of bank intermediation,** the process by which financial institutions channel savings into productive investment by granting loans.
- **They are also a source of revenue** for financial institutions thanks to the collection and payment services that are associated with them, such as transfers, card purchases, direct debits and bill management, among others.

Advantages and disadvantages of Libra

Store of value	✗ Not covered by a Deposit Guarantee Fund. No remuneration of funds.
Unit of account	✗ The euro is the only legal tender in Spain (the only one with full legal status for the payment of debts). Exchange rate risk.
Means of exchange	
Acceptance	✓ The Facebook ecosystem has 2,410 million active users. ✗ Good user experience when using current payment methods at physical points of sale.
Ease of use	✓ Better suited to digital environments (smart contracts, possibility to add greater amounts of data associated with the transaction, etc.).
Speed	
Ubiquity	✓ Payments with instant settlement to any part of the world, available 24/7/365 from anywhere with a connection.
Security	✗ Does not currently enjoy the highest perception of security (whereas deposits and their associate payment methods do).

Source: CaixaBank Research.

1. This article only analyses the scenario of cryptocurrencies developed by private issuers. A scenario in which cryptocurrencies are developed by central banks would, by design, take into consideration the stability of the financial system and the role to be played by banks. Therefore, it would be a more favourable scenario for banks than that discussed here.

2. See the article «[Blockchain and cryptocurrencies: welcome to the new digital paradigm](#)» in this same Dossier.

3. See the article «[Libra, the cryptocurrency of Facebook](#)» in this same Dossier.

4. See BIS (2018), «Central bank digital currencies», and T. Adrian and T. Mancini-Griffoli (2019), «The Rise of Digital Money», FinTech Notes, FMI.

- **Finally, deposits and their associated means of payment are also a valuable source of information for banks.** For instance, the volume and frequency of these transactions are used to establish patterns of income and expenses or to estimate someone's capacity to repay a loan. This allows banks to improve their risk assessment, customise commercial offers and reduce fraud, among other benefits.
- **Thus, in a hypothetical scenario in which digital currencies were to significantly replace traditional forms of money, the banking business model would face a number of challenges.** Firstly, margin reduction (both in deposits and in collection and payment services) due to the increased competition. Secondly, greater volatility and a higher funding costs due to the potential replacement of retail deposits by other funding instruments. In turn, this greater volatility of liabilities could limit a bank's ability to grant new loans due to the need to comply with the liquidity ratios imposed by Basel III.⁵ Finally, the loss of information generated by transactions in the new currency could limit the banks' capability to extend loans at the interest rate that best matches the risk posed by the customer. All this would tend to increase the cost of credit.

In order to assess whether these challenges are important for banks, it is useful to analyse which elements would determine the intensity of the competition that deposits would face and to define where stablecoins could have a competitive advantage.

- **Stablecoins have certain advantages in key aspects relating to their efficiency as a means of payment.** While it is true that in developed countries traditional money is largely a very efficient mechanism for carrying out domestic transfers or payments at points of sale, new forms of money would allow instant payments to be made to anywhere in the world, at any time and from any location with an Internet connection. Furthermore, in digital environments they would be easier to use, as they have a greater capacity for integration with these environments and for incorporating new features such as conditional payments, automated payments and automated reconciliation processes.
- **Nevertheless, there are various aspects that hinder the adoption of these new forms of money.** The most fundamental one is achieving a sufficiently high degree of trust among users. A digital currency will only be used as a means of payment or a form of savings if people trust in it, because it is issued and backed either by a central bank or by institutions that are subject to governance rules and legal structures that mitigate potential conflicts of interest. In the case of Libra, other disadvantages include the potential exchange rate risks for users, since it would have a variable rate of conversion with a legal tender currency and it would not provide a return in the form of interest.
- **All in all, the major challenge faced by these new forms of money is to generate sufficiently strong network effects to justify the adoption costs.** In the end, there is no use in having the money with the most efficient settlement technology in history if there is nobody to exchange it with. Traditional forms of money have an advantage because they are widely accepted. In the case of digital currencies, for the time being only Libra, thanks to Facebook's massive user base and its ecosystem conducive to e-commerce, could be in a position to take advantage of network effects and promote relatively rapid adoption.

What options would banks have to deal with this increased competition?

- **The main option for banks is to continue to innovate in order to make gains in efficiency and offer the best customer experience.** Changes in customers' behaviour and in commerce will drive the demand for new services such as invisible payments,⁶ scheduled payments, services with high added value for e-commerce retailers, companies and individuals, instant cross-border payments or services for managing data privacy and confidentiality. In recent years, banks have dramatically improved their offer with new services, such as mobile payments and instant domestic payments between individuals.⁷ In addition, some banks are also exploring the possibilities offered by DLTs and are experimenting with stablecoins for wholesale use in order to solve the low degree of interconnection between the different regional interbank markets and thus make instant cross-border payments possible.
- **There are many uncertainties that remain unresolved and it is possible that the Libra project will take some time to bear fruit, if it finally does so. But the speed with which this field is evolving requires the traditional banks to make use of all the possibilities offered by new technologies in order to improve the customer experience in the world of payments.** In the end, the speed of adoption of a new product or service largely depends on its capacity to solve the needs of its users: it must be cheaper, faster or easier to use than the current alternatives.⁸ This is how banks must demonstrate their capacity to innovate and adapt in order to successfully address the challenges and opportunities that emerge from digital currencies: by listening to their customers and offering them what they need.

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5. The Net Stable Funding Ratio (NSFR) requires banks to maintain a certain percentage of stable funding relative to the loans they have issued. See M. Kumhof and C. Noone (2018). «Central bank digital currencies». Staff Working Paper n° 725. Bank of England.

6. The concept of invisible payments refers to the use of payment technologies that dispense with physical formats (such as cards or bank notes) to settle the transaction.

7. In Spain, Bizum, a solution for instant payments between individuals created in 2016, reached 4 million users in June 2019, which represents ~10% of the banked population.

8. See H. Van Steenis (2019). «Future of Finance». Bank of England.