



# **Time to Liberate Libra?**

## Par Ludwig van den Hauwe<sup>1</sup>

Libra, the new private digital money system sponsored by Facebook and a consortium of other firms, was announced on 18<sup>th</sup> June 2019, and officially aims to reduce certain inefficiencies in the remittance industry.

Backed by a reserve of assets designed to give it intrinsic value, and very different from Bitcoin, it should have less volatility than other cryptocurrencies.

To the extent that Libra would be in competition with the currencies issued by governments, it could have important and beneficial repercussions on the functioning of the international monetary system, especially in countries where central banks tend to pursue inflationary monetary policies.

Critics contend that Libra, sitting on a basket of currencies, will suffer from all the economic and ethical deficiencies that come with its underlying fiat currencies. They therefore argue that it is not a real alternative to official fiat currencies, but merely a more straightforward and cost-efficient way to use them.

However, some of the other fears raised by Libra, such as those related to systemic, monopoly, or security risks, are probably inspired more by a political reading of the issues than by an approach related to the project's economic underpinnings.

## I. What is Libra?

By now a significant number of people have heard of Libra, the new private digital money system sponsored by Facebook and a consortium of other firms. It was announced on 18<sup>th</sup> June 2019 and is to be rolled out in 2020. Facebook's hope is to improve access to better, cheaper, and more open financial services — no matter who you are, where you live, what you do, or how much you have. The stated mission for Libra is to create a simple global currency and the accompanying financial infrastructure that empowers billions of people.

The new venture will take advantage of an existing user base among the partner organisations in excess of three billion people. Thanks to network effects, the prospects for Libra's further growth appear great. Those potential users include tens of millions of people who do not currently hold bank accounts, but who are increasingly likely to own smartphones.

The project's official white paper, "An Introduction to Libra," calls it "a new decentralized blockchain, a low-volatility cryptocurrency, and a smart contract platform." A second official document on "The Libra reserve" goes into more detail. Libra's stated intent is to establish a "stable currency built on a secure and stable open-source blockchain, backed by a reserve of real assets, and governed by an independent association," that will be accessible to anyone "using a \$40 smartphone." Its goal is to become nothing less than the "Internet of money."

Libra has three key characteristics:

1. It is built on a secure, scalable, and reliable blockchain

Payday loans can charge annualised interest rates of 400 percent or more, and finance charges can be as high as \$30 just to borrow \$100.

The Libra currency is built on the "Libra Blockchain." Because it is intended to address a global audience, the software that implements the Libra Blockchain is open source — designed so that anyone can build on it, and billions of people can depend on it for their financial needs. A new

programming language called Move is used to define the core mechanisms of the blockchain, such as the currency and validation membership.

2. It is backed by a reserve of assets designed to give it intrinsic value.

Unlike the majority of cryptocurrencies, Libra is fully backed by a reserve of real assets. A basket of bank deposits and short-term government securities will be held in the Libra Reserve for every Libra that is created, building trust in its intrinsic value. The Libra

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Reserve will be administered with the objective of preserving the value of Libra over time and thus supporting stability. The reserves are created when investors exchange bank deposits, denominated in the established currencies, into libra. On both the investor and user side, there is only one way to create more Libra — by purchasing more Libra for flat currencies and growing the reserve.

3. It is governed by the independent Libra Association tasked with "evolving the ecosystem".

The Libra Association is an independent, Swiss, not-for-profit organisation with the mission of empowering billions of people through the creation of a simple global currency and the accompanying financial infrastructure.

The Association's membership is made up of what have been called the "validator nodes" of the Libra network. Initially, these are global companies, social impact partners (SIPs), and academic institutions — the Libra Association's Founding Members. Eventually, the association will include any entity that operates a validator node and holds a sufficiently large stake in Libra. Each member will take part in the validation of Libra transactions and their entry into the Libra ledger.

There are around twenty founding members, and the Association hopes to raise the membership to over 100 by the first half of 2020. Each of the non-profit organisation's members have invested a minimum of US\$10 million into the project.

## II. What problem does Facebook aim to solve with Libra?

Libra's officially stated aim is to reduce inefficiencies in the remittance industry. Libra is targeted at people without access to a bank account, but it will also serve everyone else as an alternative payment method.

Libra's White Paper says:

"All over the world, people with less money pay more for financial services. Hard-earned income is eroded by fees, from remittances and wire costs to overdraft and ATM charges. When people are asked why they remain on the fringe of the existing financial system, those who remain "unbanked" point to not having sufficient funds, high and unpredictable fees, banks being too far away, and lacking the necessary documentation."

The designers of Libra clearly believe that many more people should have access to financial services and cheap capital. They also believe that global, open, instant, and low-cost movement of money will create immense economic opportunity and more commerce across the world.

## III. Libra's differences with Bitcoin

Libra is an experiment in monetary systems for the digital age, and has inevitably been compared to popular cryptocurrencies like

Bitcoin. However, many experts question whether Libra can even be called a cryptocurrency. Other than the fact that they both come with a white paper and are referred to as cryptocurrencies, Libra and Bitcoin are actually very different.

Referred to by many in the industry as a "stablecoin," Libra is intended to maintain a stable value. The Libra White Paper's introduction frames the case for Libra essentially in contrast to Bitcoin:

Bitcoin has a fixed supply ("hard-capped" at 21 million) so cannot react to the market's demand. Libras are created or burned when one of Libra's authorised resellers deposit or withdraw money from its reserve.

"Mass-market usage of existing blockchains and cryptocurrencies has been hindered by their volatility and lack of scalability, which have, so far, made them poor stores of value and mediums of exchange."

Bitcoin is permissionless, fully decentralised, deflationary and volatile. By comparison, Libra is permissioned, more centralised, governed by supply and demand and pegged to fiat currencies.

Bitcoin and Libra are used in different cases. Bitcoin's white paper describes the virtual currency as a peer-to-peer payment system allowing people to exchange money without going through a bank. However, it's commonly used today as a form of investment and is frequently been referred to as "digital gold". Libra's primary purpose is to be used in cross-border payments and money transfers. The currency is tied to a basket of government-backed currencies and other assets, to avoid the volatile swings often seen in cryptocurrencies like Bitcoin and Ether.

One of the biggest differences, however, lies in the underlying technology behind both currencies.

With Bitcoin, transactions are recorded anonymously on a public ledger known as the blockchain. It's essentially a database maintained by a network of computers, on which transactions are secured in such a way that makes it virtually impossible to tamper with.

Libra also uses a form of blockchain, or distributed ledger technology. But strictly speaking it is not a blockchain. The White Paper states that "unlike previous blockchains, which view the blockchain as a collection of blocks of transactions, the Libra Blockchain is a single data structure that records the history of transactions and states over time."

Unlike Bitcoin, Libra's blockchain is permissioned – at least for now — meaning that transactions can only be added to it by a group of trusted parties. Whereas Bitcoin's network can be accessed and maintained by anyone with good enough hardware and access to the internet, Libra will essentially create a centralised structure governed by an unelected association composed exclusively of large institutions who have purchased their voting rights.

This means that, at the start, Libra will not be "decentralised". The system only aspires to achieve decentralisation at some point in the future. For now, the unique benefits of blockchain's "distributed governance" are only theoretical. This is because, in the first instance, the Libra Blockchain will be coming to market in fully "permissioned" form, effectively centrally controlled by the founder Libra holders. Libra plans to start its transition toward permissionless governance within five years of its public launch.

Since cryptocurrencies are defined by their lack of reliance on trusted intermediaries, some believe that Libra is not even a cryptocurrency citing its use of a permissioned ledger and its reliance on a trusted issuer to hold and manage a fund of assets that back the currency.

#### IV. Potential advantages and disadvantages of Libra

In order to understand what the potential advantages and disadvantages of Libra are likely to be, it is important to first understand what kind of money Libra is.

As detailed in the White Paper, Libra will be a fully backed cryptocurrency. It will be issued solely upon demand, and its value will be given by a basket of reserves whose composition will be diversified, privileging safe assets and stable international currencies.

In other words, while commercial banks' money (that is, deposits) can be created simply by granting a loan, Libra would instead be created if, and only if, backed by a formerly existing unit of money, either of central banks or commercial ones.

This means that the fear, expressed by some, that a sudden bank-run may cause the collapse of Libra is either irrational or it confirms early critics have not yet understood the basic structure of the project.

In fact, the fully backed-ness of Libra would make it much safer than commercial banks' deposits we daily accept as means of payment, because Libra would always be redeemable into legal-tender currency. This redeemability would not be just theoretical (as is the case with commercial banks' money and fractional-reserve banking) but also practical. This is because a unit of Libra could be created if, and only if, a unit of monetary base (i.e., legal-tender currency) or a claim on it (i.e., a unit of commercial banks' deposits) were conferred in exchange.

Larry White has pointed out that, as the papers describe it, the Reserve portfolio sounds like a government-bond money-market mutual fund. A mutual fund structure has advantages and disadvantages.

The advantage is that a mutual fund is not prone to bank runs. There is no payoff in running to the head of the line to redeem, because you don't get any more than people at the end of the line. Therefore, even if you hear that the Libra Reserve portfolio has taken a hit, there is no point in racing to redeem, because the value of your one Libra claim has already dropped so that the total of all claims still sums to the value of the portfolio. Furthermore, if a Libra is essentially a mutual fund share, not a deposit or some other kind of debt claim, there is no rationale for subjecting the Libra system to a government deposit guarantee scheme with the accompanying taxes and portfolio restrictions.

The disadvantage is that the value of a mutual fund share cannot be fixed in nominal terms and the portfolio value can sometimes decline. Holders of Libra will have to live with some degree of nominal volatility, even if it is small, in terms of the defining currency basket.

However, stability is crucial for a private currency if it wants to succeed as a medium of exchange in competition with established currencies. This was already made clear by Friedrich Hayek in his pioneering book Denationalisation of Money (1976), when he wrote:

"It seems to me to be fairly certain that a money generally expected to preserve its purchasing power approximately constant would be in continuous demand so long as the people were free to use it."

The lack of stability is precisely what cryptocurrencies have been suffering from so far—in particular Bitcoin, which exhibits excessive volatility. The designers of Libra are aware of this challenge. So the question remains: Will Libra take on the role as a competitor to inflationary central banks? Will it fulfill Hayek's vision of private de-nationalised money? These are tough questions not easily answered at this stage. Some commentators believe Libra passes the Hayek test, while others believe it definitely fails.

In defence of Libra, it will not:

- (a) run its own monetary policy, since it will not be in control of its money supply;
- (b) create commercial-banks money, since it will not leverage on its customers' deposits to create new units of Libra operating under a fractional-reserve scheme;
- (c) be pegged to any existing currency, since it will not take a specific commitment to fluctuate in a stringent range vis-a-vis any currency or basket of currencies.

Furthermore, the analogies between Libra and the first steps of the Hayekian proposal of "Denationalisation of Money" (1976) are striking, insofar as Libra is

- (a) a privately issued medium of exchange;
- (b) subject to a 1:1 reserve system, in which money-creation out of thin air is not allowed;
- (c) fully redeemable in existing legal-tender currencies.

For all these reasons — sticking to what we really know about it so far — Libra should have a value which will be stable relative to the main reserve-currencies of the world. This relative stability, together with its worldwide accessibility, is why many believe it may have positive and interesting repercussions.

## V. Possible impacts of Libra's adoption

Over time, you would expect to see highly inflated legal-tender currencies become gradually less demanded in exchange for goods and services, especially in those countries with governmental interference or political influence over the central bank's activity.

If these governments do not to forbid payments denominated in Libra, then Libra could drive governmental money out of the paymentmechanism and prompt agents to switch to Libra for payment-purposes. Libra may thus become a safe, accessible, cheaply storable reserve of value for those people living in countries that experience unbearably high levels of inflation.

Citizens would eventually be induced to only use governmental money in order to pay taxes — since governments would be unlikely to forego their privilege of imposing which unit of account taxes are to be paid in.

For example, were Libra allowed to circulate in countries which at present experience high level of inflation, citizens of these countries might soon start to be interested in storing their wealth in Libra-coins. This has in part already happened with Bitcoin or major international currencies like the US dollar. However, the advantage Libra could have over Bitcoin is that it promises to deliver far better price stability.

Does this mean that Libra is really good — or sound — money? Critics have pointed out that, unfortunately, this is not the case. Their reasoning is that the quality of Libra depends on the quality of the underlying fiat currencies — and fiat currencies do not make for sound money. Fiat currencies are inflationary; they can enrich some at the expense of others. The issuance of fiat currencies causes distortions in the credit markets, which can provoke speculative bubbles and trigger booms and busts. Fiat currencies can also lead economies into over-indebtedness.

Against this backdrop, the critics contend, it becomes evident that Libra will suffer from all the economic and ethical deficiencies that come with its underlying fiat currencies. For instance, Libra will be inflationary money to the extent that the US Dollar, the Euro, and all the other underlying fiat currencies are subject to inflationary measures by central banks. This would result in Libra losing its purchasing power in step with the fiat currencies. In extreme cases, if the official currencies were to go under, Libra would follow suit.

Libra is, therefore, not a real alternative to official fiat currencies, but rather a more straightforward and more cost-efficient way to use them. Unfortunately, critics conclude that the Libra project does not appear to be driven by the desire to provide people with better money. The fact that Libra will be run on a private ("permissioned") blockchain does not change anything. Libra is just the upshot of an entrepreneurial attempt to profit from the global market for payment services (and later perhaps also from the credit markets), and to collect transaction data.

## VI. Should the spread of Libra be limited or even stopped?

Since trust is at the heart of all financial transactions the biggest challenge to Libra becoming a success, is gaining and maintaining trust. Are there sufficient grounds for intervening to put a stop to, or otherwise limiting the spread of, Libra? Libra sceptics have warned against several possible risks such as systemic risk, monopoly risk, and security risk. However, a close look at the alleged risks of Libra makes them appear quite remote.

(a) Does Libra have the potential to present a systemic risk to the banking system?

Systemic problems in banking typically arise when people realise the bank has less in liquid assets than in demandable liabilities such as deposits. Every depositor then has reason to rush to cash out before others have done so.

The bank has promised to satisfy all depositor claims one-for-one, and it does so until the money runs out. Such an incentive is absent in the case of a mutual fund structure such as the Libra Reserve. This is, because any loss in the net asset value is proportionately distributed among Libra holders, whether they cash out soon after the depreciation or not. Libra holders will therefore lack any incentive to start a "run" on the Libra Reserve.

(b) What about monopoly risk?

The advantage Libra could have over the US Dollar or the Euro is that it has the potential to flow freely over the internet, overcoming the capital control barriers and other kinds of government limitations.

Is there any risk that Libra-based providers, or even Facebook alone, will be able to monopolise payments through the Libra Association? Many people fear that Facebook's entry into retail payments will reduce competition. However, the experience of previous payments innovations, in particular the payment card market, suggests that Facebook will have a hard time extending its dominance into this sector without cooperating with others in the Libra project.

The members of the Libra Association have different complementarities and different specialties. All members will cooperate in the governance of the Libra Association, but will likely compete along other dimensions. Some will compete with others in the provision of Libra-denominated payments. One would therefore expect a diverse ecosystem to emerge, in which different members do different things. Even if Facebook did gain an advantage, competition within and without Libra will help to temper its monopolistic impulses.

(c) How vulnerable will Libra be to criminal uses?

A careful examination of the digital currency's mechanics, and its likely employment by financial service providers, suggests that policymakers have reacted prematurely. In fact, cryptocurrencies are significantly less useful to criminals than cash because they leave a public record of transactions. Furthermore, Libra is even less useful than other cryptocurrencies because its management by gatekeepers means that users will not be able to conceal their identity in the ways available to users of open-access cryptocurrencies such as Bitcoin.

#### Conclusion

As an international private currency, Libra will be in competition with publicly issued currencies. Despite the scepticism expressed by some, it could have large and fruitful repercussions on the workings of the global monetary system. This impact could be particularly significant in those countries where central banks are still heavily subject to political influence and tend to pursue inflationary monetary policies.

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