



Libra

This report provides a comprehensive view into Libra, considering the project's apparent motivations, underlying technology, governance structure, and regulatory outlook, within the context of the broader financial landscape.



Introduction

LIBRA NOTABLE DEVELOPMENTS

JANUARY 2018

Facebook bans advertisements involving Bitcoin, cryptocurrency, and ICOs

MAY 2018

Facebook VP and former Head of Messenger David Marcus launches exploratory blockchain group

MAY 2019

Facebook eases ban on some cryptocurrency-related advertisements, maintains policy against ICOs

JUNE 2019

Official Libra project announcement

JULY 2019

Widespread, often critical regulatory debate begins, including hearings at the Senate Banking and House Financial Services Committees, creation of a G7 task force, and criticism by Federal Reserve Chairman Jerome Powell

Libra is a [permissioned](#) payments network developed principally by Facebook, utilizing some aspects of blockchain technology including [Byzantine Fault Tolerant](#) consensus amongst authority nodes. The Libra token is a quasi-stablecoin pegged to a basket of fiat currencies, similar in design to the IMF's Special Drawing Rights. Libra is intended to be operated by a consortium of technology and finance companies and nonprofits (the Libra Association), including Facebook, Uber, Visa, and Kiva. Through Libra, the Association states aims to expand access to financial services and stable fiat currencies, particularly for un- and under-banked populations globally. Libra differs from stablecoins such as Tether or Circle USD in several respects, including its peg to multiple fiat currencies and the greater monetary policy influence of the Libra Association compared to other stablecoin issuers.

Quickly [drawing](#) widespread [comment](#) and often [criticism from](#) [pundits](#) and [policymakers](#) after the unveiling in June, Libra is arguably the most important blockchain-related project to be unveiled in 2019 to date. Libra's potential impact is a function of the existing user base of the Association members; Facebook alone has over 2 billion monthly active users. This advantage in product distribution over existing cryptocurrency projects renders Libra unique in the current landscape, and represents a path toward broad adoption and awareness of cryptocurrency and blockchain-based systems, even if its actual designs raise concerns from many quarters regarding the ways in which it intends to deploy blockchain technology.

This report provides a comprehensive view into Libra, considering the project's apparent motivations, underlying technology, governance structure, and regulatory outlook, within the context of the broader financial landscape.



How Libra Works

TECHNOLOGY AND NETWORK

Facebook developed the [Libra software](#), which is fully open-source and slated to launch in 2020. The codebase is written in Rust and introduces the novel programming language [Move](#), which supports full smart contract functionality and a virtual machine. This design suggests that metatokens and other uses of smart contracts will be supported, as is common in networks such as Ethereum. Transactions are managed in an account model, similar to Ethereum and in contrast to Bitcoin's [UTXO](#) model. Accounts accessed through third party services may not be required to be linked to a real-world identity, though Facebook's Calibra custodial wallet will link addresses to social media accounts. Libra hopes to function as a platform for third-party developers to build ancillary services, though it is difficult to estimate current developer traction at such an early stage. Per the [whitepaper](#), Libra transactions are pseudonymous, not shielded, and can be viewed with a block explorer; this may permit de-anonymization of transaction flows, as [Chainalysis](#) does with the Bitcoin and Ethereum blockchains.

The Libra network uses LibraBFT consensus, based on the [HotStuff protocol](#), versions of which are used in [Celo](#) and [Thunder Protocol](#). Libra is not [a blockchain, in the typical sense](#). Instead, it is a single [Merkle tree](#) that records checkpoints of the network state, updated as transactions are confirmed. Libra BFT is a leader-based consensus mechanism in which a leader collects transactions from the mempool and proposes a block to the rest of the network's validators. These validators vote to accept or reject the block. Using a verifiable random function (VRF), the protocol selects a rotating set of validators to become leaders for a particular block. All validators are selected with equal probability in the initial version, though the whitepaper notes that future leader selection may be based on previous performance and reliability. Thus, a block is 'proposed' only once (assuming that it is not rejected). This approach contrasts with the Bitcoin [PoW](#) model, in which any miner can propose a block and compete through the hashing algorithm to have their block included in the chain by the rest of the network. In Libra, this process is not competitive. Libra can maintain protocol security even when up to one-third of validators act maliciously. Libra stablecoins are used to pay for smart contract execution, using a similar pricing model to Ethereum gas. The Libra network aims to launch with roughly 100 validators, 10 second confirmation times, and 1000 transactions per second.



TOKEN, INVESTMENT TOKEN, AND RESERVE

There are two tokens associated with the Libra Network. First, the Libra token is designed for use as a low volatility payment mechanism and is fully backed by the Libra Reserve with a basket of major fiat currencies and “short-term, low-risk securities.” In early documentation about Libra, the proposed basket includes USD, EUR, GBP, and JPY, though Association members may vote to change these constituents and their respective weights. Since Libras are backed by a basket of fiat that have floating exchange rates, the value of one Libra can fluctuate relative to any individual fiat currency. Thus, Libra is not a stablecoin per se, and bears closer resemblance to [currency boards](#), such as Hong Kong’s, or the [IMF’s Special Drawing Rights](#), discussed later.

... the Libra Investment Token can be understood as a form of preferred bank equity or an example of ‘securities plus’

In the early stages of the network, the initial token supply is backed by funds held in the Reserve from Association member investment contributions toward the Investment Token. Further, to create new tokens, authorized resellers can purchase Libra through the Association by contributing funds to the reserve basket, with all such transactions subject to KYC monitoring. These intermediary resellers can also redeem Libra for the underlying constituents. The fiat backing held by the [Reserve](#) will be custodied in a distributed network of international banks, with the Libra Association as the ultimate owner. Thus, ultimately, the total supply of Libra is a function of the amount of fiat held reserves.

A key intended use case for Libra is a low-cost remittance system for users in ‘underbanked’ countries. Indeed, the current landscape of international remittances has significant friction through platforms such as Western Union, with users paying 2-10% in fees, and international transfers taking 3-5 days. Libra is envisioned for use in digital wallets to send funds directly between individuals, in a front-end experience similar to Venmo or CashApp, but integrated within Facebook’s various social media properties including Instagram, WhatsApp, and Messenger. Further, other potential Association members such as Uber and Lyft may accept Libra within their platforms, though Facebook (through Calibra) has provided more detailed plans on how Libra will be integrated. Facebook alone has over 2 billion users, while Visa and Mastercard are the largest payment processors in the world. Assuming that Libra is eventually accepted as a form of payment across all of these platforms, this potentially represents a massive advantage in product distribution and customer acquisition over any existing cryptoasset project.

Second, the Libra Investment Token (LIT) is a self-avowed security token that conveys rights to the accrued interest on the Libra Reserve, which is analogous to a money market fund. Notably, Libra users themselves do not accrue this interest, which is allocated solely to the Investment Token holders and as an ongoing funding mechanism to cover operating costs for the Libra network. This interest could be significant were the Libra to gain a large market capitalization. For example, consider a scenario in which Libra achieved a total float of just 1% of the total US M1 money supply, currently \$3.8 trillion, and a 2% yield on the underlying. This would net the Association \$760 million in interest payments per year. LIT were allocated to the [founding members of the Libra consortia](#), each of whom plans to invest at least \$10 million to provide initial capital for the Reserve. At a high level, the Libra Investment Token can be understood as a form of preferred bank equity or an example of 'securities plus', as described further in [S+C's overview of security tokens](#).

The whitepaper leaves open the possibility that the network could transition to [Proof of Stake](#) in the future, though it is unspecified if this stake would be the Libra Token or the Libra Investment Token.

ASSOCIATION

The [Libra Association](#) is a Swiss-based non-profit membership organization that will govern the project, tentatively counting as initial members the following organizations across various industries:

- **Payments:** Mastercard, Mercado Pago, PayPal, PayU (Naspers' fintech arm), Stripe, Visa
- **Technology and marketplaces:** Booking Holdings, eBay, Facebook/Calibra, Farfetch, Lyft, Spotify AB, Uber Technologies, Inc.
- **Telecommunications:** Iliad, Vodafone Group
- **Blockchain:** Anchorage, Bison Trails, Coinbase, Inc., Xapo Holdings Limited
- **Venture Capital:** Andreessen Horowitz, Breakthrough Initiatives, Ribbit Capital, Thrive Capital, Union Square Ventures
- **Nonprofit and multilateral organizations, and academic institutions:** Creative Destruction Lab, Kiva, Mercy Corps, Women's World Banking

Despite much of the attention and potential impact of Libra being due the significance of these members, it should be noted that [their commitments are](#)

[non-binding and presently uncertain](#). Several have expressed reservations about the project and withheld investment at this stage, primarily citing lack of regulatory clarity. Further, only Facebook has announced concrete plans to integrate Libra into its existing services, through Calibra.

Each member of the Association plans to invest at least \$10 million to seed the venture, purchasing the Libra Investment Token, with the fiat used to collateralize the initial stablecoin supply. Libra aims to launch with 100 Association members. Members must meet two of the following criteria: more than \$1 billion market value or \$500 million in customer balances, reach more than 20 million people per year multinationally, or be recognized as an established industry leader by a third party organization, such as Fortune or S&P. Notably, none of the founding members are traditional banks. Each member is required to run their own node on the Libra network, with operating costs covered through interest accrued on the Reserve. The Association will perform a broad set of network governance functions, such as changing fiat constituents of the Libra Reserve or censoring transactions with a supermajority vote. The Association has the sole authority to mint and burn Libra tokens. While individual members can earn any amount of interest rewards based on their Libra Investment Token holdings, their voting weight in Association governance decisions is capped at 1%. This mechanism is designed to limit the amount of formal influence that any one member can have; though Facebook lead development of Libra, its governance weight is fixed at 1%.

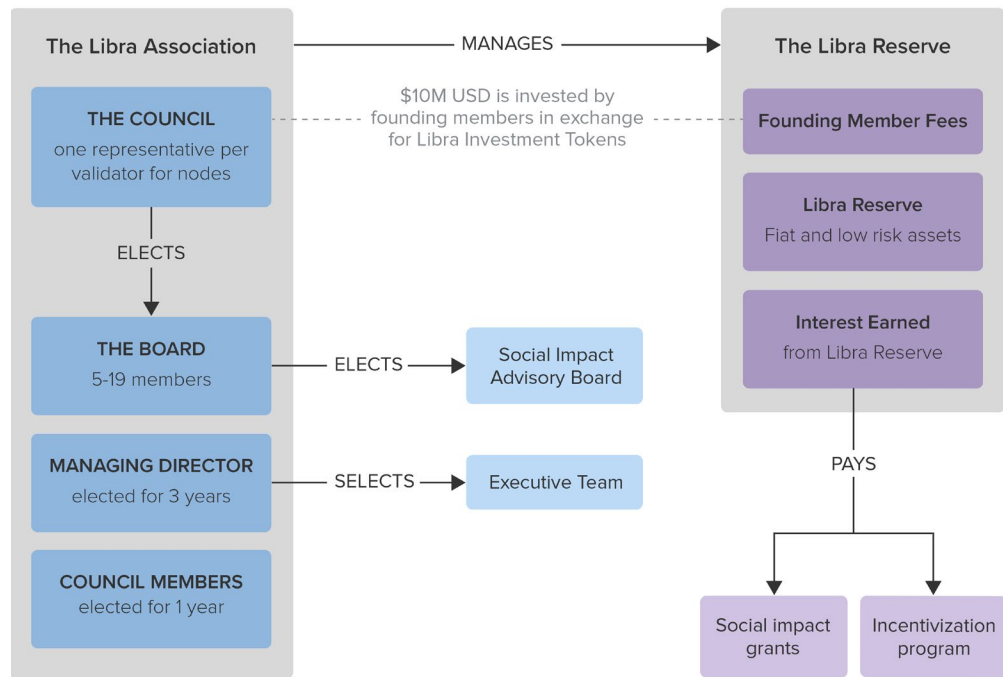
Broadly, the Libra Association will function similarly to the management board of a central bank, such as the Federal Reserve Board of Governors, though with a potentially more limited set of powers. Since all Libra tokens must be backed by fiat holdings, the Libra Association will not be able to directly expand the monetary supply without a commensurate increase in deposits. However, it will be able to change the constituency and weights of the underlying fiat, perhaps in response to financial crisis or uncertainty. If Libra were to become highly adopted and capture a meaningful share of the global monetary base, this power may have geopolitical significance, as inclusion in the basket could potentially impact a fiat currency's global standing. While the Libra Association will not have a central bank's abilities to change the monetary base or otherwise respond to evolving financial or economic conditions, it will have some ability to respond to financial crises from the constituents, at least in terms of altering a currency's weight in the Libra basket.

As Libra has been frequently represented in the media and understood by lawmakers to be "Facebook's crypto project", the company has downplayed its own role, [arguing that it is just one member among many](#). While this has some

merit, particularly given the cap on voting weight at 1%, it is worth emphasizing that Facebook is the largest company by far and has more DAUs than any other member of the Association. Further, development of the Libra codebase and architecture is conducted by Facebook engineers. While Libra is not run solely by Facebook, at the outset it appears primarily run by Facebook.

The following graphic outlines the various roles and responsibilities within the Libra Association.

Figure 1
The Libra Association Governance Structure
 Source: Libra



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CALIBRA

In addition to developing the core software and being a member of the Libra Association, Facebook also operates [Calibra](#), a subsidiary that will manage a custodial Libra wallet and develop auxiliary payment services. Calibra aims to be integrated into products such as Facebook Messenger, WhatsApp, and/or Instagram. Calibra [claims that it will not share customer financial data](#) with other Facebook divisions, except in cases of fraudulent activity or where users have explicitly granted permission. Libra tokens held on Calibra will have full password and private key recovery features. Calibra is not the exclusive wallet for Libra — it is anticipated that third-party, non-custodial wallets will also be developed, though it is unclear if Calibra would receive any favorable treatment within the network.

Transactions between two Calibra users will not take place on chain; Calibra will operate a single address on the Libra network, confirming such transactions in a separate database, which could move on-chain were the user to send to a non-Calibra wallet. This approach alleviates some of the scalability considerations for the network.

Calibra is led by CEO [David Marcus](#), former head of Facebook Messenger and executive at PayPal, Head of Strategy [Morgan Beller](#), former partner at Andreessen Horowitz, and product executive [Kevin Weil](#), all of whom are officially listed as co-creators of Libra.



Libra in Context

Libra's design and outlook can be understood in the context of other blockchain projects, digital payment processors, monetary analogs such as the IMF's Special Drawing Rights, and its currency regulatory environment. This section provides an overview of each such theme.

BITCOIN & OTHER CRYPTOCURRENCIES

A close examination of Libra's features reveals many sharp contrasts with both distributed, permissionless networks such as Bitcoin and private networks such as JPM Coin that are controlled by a single entity. The following table highlights key similarities and differences between these examples; note that [minimal details](#) are presently available about JPM Coin.

Bitcoin (Public)	Libra (Permissioned Consortium)	JPM Coin (Permissioned Private)
Permissionless validator set, thousands of nodes worldwide	Permissioned validator set of ~100 nodes, the Association members	Single validator/administrator, JP Morgan
Ledger has public read access	Ledger has public read access	No public read access
Difficult to censor transactions, requires obtaining majority of hash power or co-opting mining pools	Association can censor transactions upon supermajority vote	JP Morgan can censor transactions
Able to use without KYC	Possibly able to use without KYC, though not within custodial wallets such as Calibra	Not able to use without KYC
Supply fixed by protocol	Supply dependent on user deposits	Supply defined by JP Morgan

Blockchain networks exist on a wide spectrum of centralization in consensus and governance participation, ranging from the generally decentralized Bitcoin to the effectively centralized JPM Coin. Of course, for as much as “decentralization” is often used as a catch-all marketing buzzword for blockchain projects, it primarily refers to a means of achieving various fault-tolerant features of a network by distributing authority across a broad set of users. This concept of the [scalability trilemma](#) between scalability, security, and decentralization applies to many blockchain projects, with Libra trading some amount of decentralization for further scalability.

Having centralized aspects may be desirable for some types of financial technology systems; in Libra’s case, the limited number of known validators likely enables the high transaction throughput required for a potentially global medium of exchange handling thousands of transactions per day. Further, by having only known validators and the ability to censor transactions, Libra can more effectively enforce the KYC/AML regulations required across jurisdictions. Likewise, unlike permissioned private networks such as JPM Coin, Libra’s consortium approach may make it more difficult for single actors to co-opt the network, as governance decisions or transaction censorship requires the approval of at least a majority of the Association’s members, themselves each large organizations with various complex governance structures.

Considering Libra as a ‘decentralized’ project, [as its creators clearly do](#), depends greatly on the basis for comparison. While Libra’s consortium approach renders it much more centralized and less censorship resistant than a network such as Bitcoin, this comes with the benefit of transaction scalability and the ability to directly leverage the existing business lines and user bases of the Association members, and could be considered a comparatively ‘decentralized’ approach relative to projects such as JPM Coin. Crucially, it is only when considered relative to JPM Coin, which is in no way decentralized, that one may think of Libra as having a minimal amount of decentralized or distributed aspects. Thus, even making this latter comparison implies a dilution of these terms, as typically used in the industry. In a counterfactual world with nothing like JPM Coin in existence, the industry would certainly not consider Libra as ‘decentralized’.

Another key distinguishing feature is that Libra is a permissioned network, with only known entities permitted to confirm transactions and perhaps limitations on applications that third party developers may build. Libra argues that this approach is necessary at the project’s outset, given technical challenges in scalability and security for a high-throughput network. However, Libra intends to [transition to a permissionless network](#), in a minimally-defined process to begin five years after network launch. The team [cites many open research areas](#) first necessary, including

on-chain governance design, technical scalability, and decentralizing the Libra Reserve. Given the lack of successful precedent among other projects in this endeavor, this aspect remains with considerable uncertainty.

EXISTING FINANCIAL AND TECHNOLOGY COMPANIES ENTER CRYPTO

While Libra could be considered a landmark project for the cryptocurrency industry, particularly given the user base of Facebook and other companies in the Association, it is also the continuation of the broader trend of large financial and technology companies developing product lines and services utilizing blockchain technology. Examples of such projects include:

- [JPM Coin](#): a stablecoin administered by JP Morgan, allowing direct settlement of funds between institutional clients.
- [Telegram Open Network](#): a smart contract platform, including a sharded Proof of Stake blockchain, distributed file storage, networking protocol, and payment channel network, developed by the popular messaging application Telegram and funded through a \$1.7 billion private token sale.
- [Klatyn](#): an enterprise-focused smart contract platform developed by popular Korean instant messaging platform Kakao.
- [Link Network](#): the Japanese messaging application Line has launched the smart contract platform Link Network, and plans to launch a cryptocurrency exchange.
- [Microsoft ION](#) - a decentralized identity protocol, implemented as a Layer 2 network on top of Bitcoin.

Much like the Venezuelan Petro is arguably notable less for its own long-term impact and more so as a pathbreaker for the category of state-backed cryptocurrencies, Libra's significance may not be for its own success, but for encouraging other cryptocurrencies to be issued by major corporations and consortia.

As discussed further in [our report on enterprise blockchain](#), such projects face highly industry-specific challenges yet are increasingly comfortable exploring how this new technology may be applicable to their business. Much like the Venezuelan Petro is arguably notable less for its own long-term impact and more so as a pathbreaker for the [category of state-backed cryptocurrencies](#), Libra's significance

may not be for its own success, but for encouraging other cryptocurrencies to be issued by major corporations and consortia. Libra is not a new phenomena in this respect, but it is the largest scale of experiment to date in this ‘corporate money’ category.

WECHAT PAY & ALIPAY

Given the many distinctions apparent between Libra and true cryptocurrencies, Libra actually draws [closer resemblance](#) to Chinese mobile payment applications such as [WeChat Pay](#) and [Alipay](#), particularly from the perspective of an end user. Functioning as mobile wallets linked to bank accounts, these apps allow users to send payments between contacts and merchants at very low cost. Their business model [differs from competitors](#) such as Visa and Mastercard: they charge a relatively low transaction fee from merchants (0.6% vs 1.5-3%) and instead sell consumer data to marketing platforms. These platforms have become the dominant means of electronic payment in China, with over 1 billion MAUs and \$15 trillion in yearly transaction volume.

WeChat also functions as a social media and messaging application, and all transactions within Pay are linked to a personal profile. Unsurprisingly, this creates an opportunity for the Chinese government to monitor its citizens financial lives, sometimes censoring ‘inappropriate transactions’. For example, during the recent protests in Hong Kong, [citizens felt forced to use alternative payment mechanisms](#), fearing that their movements would be tracked and lead to arrest. More broadly, this incident highlights the dangers of living without a reasonably-anonymous financial system in a politically unstable environment, and that systems such as WeChat Pay (and perhaps, Calibra) will meaningfully restrict civil liberties if not given proper oversight. This comparison is particularly relevant in the specific case of Calibra, as financial histories could be linked with Facebook’s social media profiles (ostensibly, with the user’s permission). While Libra has repeatedly insisted that the two spheres will remain separate, they also note both that users can opt-in to data sharing (perhaps through offered merchant loyalty rewards or discounts) and that data can be shared insofar as necessary to combat fraud.

Another parallel between Libra and WeChat Pay is the business model of earning interest on customer deposits, or the float, is [common to many other financial technology businesses](#), such as [PayPal](#). Operation costs are funded by holding a significant amount of consumer deposits in interest-earning bank accounts. While China restricted this practice in 2018, [Tencent earned nearly 2% of its total revenues](#) from interest payments on held funds. The Libra Association will take a similar approach, with interest potentially accruing to the holders of the Investment Token, which could become a significant source of revenue.

[Hong Kong's currency board](#) is a monetary authority that pegs the HKD to the USD at a fixed exchange rate. The HK Monetary Authority conducts open market operations to maintain the peg, drawing from a considerable foreign exchange reserve. These reserves consist of low-risk, interest-bearing bonds, and fully collateralize the outstanding money supply of HKD. Compared to independent central banks, [currency boards have less autonomy](#) in responding to economic conditions through monetary policy actions; to some degree, they inherit the monetary policy of the peg. Generally, currency boards are used by less-established countries and pegged to a major, stable fiat.

GOVERNMENT PUSHBACK

Soon after Libra's announcement, many lawmakers and government officials began to hold hearings examining its prospects and considering how it many fit into the existing financial system. While cryptocurrencies and blockchain technology receive periodic attention from governments, they are generally not a top priority. Given Facebook's size and prior data privacy scandals, Libra's announcement quickly became a focal issue, with many top officials strongly criticizing it.

US REGULATORY RESPONSE

- Federal Reserve chair Jerome Powell [expresses strong concerns about Libra](#), particularly its methods for combating money laundering.
- President Trump [tweets](#) that Libra "... will have little standing or dependability. If Facebook and other companies want to become a bank, they must seek a new Banking Charter and become subject to all Banking Regulations," the first instance of a sitting US president commenting on cryptocurrency.
- Hearings at the US [Senate Banking Committee](#) and [House Financial Services Committee](#) see lawmakers question David Marcus over Facebook's role in the Association, how Libra may undermine the sovereignty of central banks, and Facebook's ability to securely handle user financial data in the wake of Cambridge Analytica. Several committee members called on Facebook to halt development until a regulatory framework is developed, with David Marcus agreeing.
- Consumer protection groups including the Open Markets Institute and Public Citizen [issued a letter](#) urging Association members to withdraw from the project, arguing that Libra has "significant competitive, political, financial, and social implications".

INTERNATIONAL REGULATORY RESPONSE

- The [G7 convened a task force](#) to examine Libra's implications for terrorism financial, consumer and data protection, and tax compliance, arguing that projects such as Libra must fall under their full regulatory oversight.
- Other European authorities, including French Finance Minister Bruno Le Maire, [warned](#) that Facebook may become a [shadow bank](#).
- Facebook announced that [Calibra will not be available in India](#), citing the Reserve Bank of India's ban on banks offering services to cryptocurrency companies.

There are numerous regulatory matters that must be resolved before Libra can launch, and this area represents the most significant open question in Libra's go-to-market outlook.

Within the US, Calibra has [registered as a money service business](#) with the Treasury Department, is working to acquire money transmitter licenses in states where required, [has applied for a BitLicense](#), and intends to comply with all relevant guidelines issued by the Financial Action Task Force (FATF). Given that many aspects of Libra's operation venture into uncharted territory, it is likely that it will be required to seek additional licenses internationally, and may face blanket restrictions in certain countries. It is possible that various regulators decide that the project is too systemically risky to the financial system, and ban it from going forward. Calibra lead David Marcus has assured Congress that Libra will not launch without regulatory approval. There are numerous regulatory matters that must be resolved before Libra can launch, and this area represents the most significant open question in Libra's go-to-market outlook.



Prospects and Challenges

As an early stage project in an uncertain regulatory environment that has no guarantee of being fully launched, Libra's prospects are broadly uncertain and have been subject to considerable discussion. In particular, the following areas emerge as key aspects to consider about Libra's future.

THE OSTENSIBLE MOTIVATION: BANKING THE UNBANKED

[Documentation](#) and [public statements](#) promoting Libra allege that the platform will increase global financial inclusion and provide basic financial services to the un- and under-banked. Libra's [stated mission](#) is to be "a simple global currency and financial infrastructure that empowers billions of people." While this goal is laudable, there are reasons to doubt that Libra can actually rectify the causes of exclusion from financial systems or ameliorate exclusion's ill effects: users lacking the principle to maintain traditional banking services will unlikely benefit from Libra's (presumed) cheaper remittances, and users with principle but remote from robust banking services will be challenging and potentially costly to onboard.

Such onboarding would likely require a network of merchants in local communities who act as brokers, converting local fiat into Libra tokens. Indeed, payment networks such as [M-Pesa](#) or Bitcoin versions such as [BitPesa](#) have attempted to address this issue, building a network of local agents that facilitate deposits and withdrawals of local fiat, which can then be transferred through mobile devices. The current Libra documentation lacks specifics on how the Association will establish such local networks and actually onboard those who have been excluded from the financial system. How these onboarding efforts, which are necessarily a local phenomenon, could be done at the scale required for Libra to achieve its stated ambition, is a question without answers in Libra's current public materials.

As highlighted by [this Financial Times article](#), the most common reasons for being unbanked are a lack of principle, lack of trust in banks, and excessive account fees. Considering Libra's prospects to aid in these areas:

- Western Union's fees are not due to it being costly on a technical level to send a transaction within its internal database, but due to the requirement that Western Union operates networks of physical infrastructure and merchants that allow users to easily send and convert money. Libra's use of a blockchain-based system on which transaction fees may be low does not obviate the need to maintain a similar physical infrastructure. Thus, it is uncertain if Libra can actually offer lower fees from an end user's perspective.
- A functional Libra would not meaningfully affect how much principle its users have, as it functions merely as a (possibly more efficient) payment system, not an income opportunity. Even assuming that Libra did succeed in offering lower transaction fees or faster settlement times, these gains are of little use to users who do not have the principle to transfer in the first place.
- There is no particular evidence that users would trust Libra and the Association members any more than they trust local banks or offerings such as M-Pesa.

Libra may represent itself as having this laudable mission, which is likely sincere, but without a clear plan to address the challenges that other outfits in this arena face, it remains useful to conceive of Libra through a more accurate lens: a Venmo-style e-wallet with an independent currency board, integrated into the world's largest social network and payment processors.

Suppose then Libra has an unclear path to 'banking the unbanked', as its mission statement claims: why does that matter? Principally, this issue affects the lens through which interested parties (particularly, regulators) should evaluate Libra. On one view, Libra is a group of multinational corporations leveraging their network effect to expand into financial and banking services in developed countries and unify their platforms under a currency that they control, veiled as an attempt to improve the lives of the poor. It is of course reasonable for Libra to offer financial services to those who value them, but this effort should not be misrepresented as realizing a social good. Libra may represent itself as having this laudable mission, which is likely sincere, but without a clear plan to address the challenges that

other outfits in this arena face, it remains useful to conceive of Libra through a more accurate lens: a Venmo-style e-wallet with an independent currency board, integrated into the world's largest social network and payment processors.

PRIVACY CONCERNS

Among the reactions to Libra in the weeks following the announcement, much centered on what privacy guarantees, if any, would be afforded to users of Libra. This concern came from both ends of the spectrum: lawmakers and regulators worry that Libra will be used for dark or grey markets, while many privacy advocates decried allowing Facebook to access financial data. For Calibra's wallet, which will be integrated within Facebook, Instagram, and WhatsApp and likely the most common way of accessing the network, all transactions will be subject to KYC/AML checks, with illicit transactions able to be censored.

Facebook claims that user financial data will not be merged with user social media data except by the user's permission. Given that the business model of Facebook is to sell ads and the potential gains in targeted advertising were companies to have access to data from Calibra, this suggests that Facebook is motivated to incentivize users to agree to opt-in to share this data. This could take the form of merchant rewards, for example. For transactions outside of Calibra, it is less clear how they will be monitored. The creators envision a variety of third party applications and services being created, though it is unclear if they must undergo an approval process through the Association. It is possible that the brokers of Libra-to-fiat conversions become a key chokepoint for monitoring user behavior.

PUBLIC DISTRUST OF FACEBOOK AND ASSOCIATION MEMBERS

Libra is a general audience, consumer-facing product aiming to displace a variety of payment processors and to some extent the USD. These systems, while somewhat inefficient, are not particularly distrusted by users. As such, Libra's success requires the public to trust it in order to convert them. This may be a significant challenge, as major financial and technology companies have seen a string of data breaches and unethical use in the past several years, most notably Facebook's own [Cambridge Analytica scandal](#). Conversely, one could argue that [mass-market users are not particularly responsive to data privacy concerns](#) or skeptical enough of large technology companies to reject the use of useful, low cost products. For example, many are not aware that Venmo has a default feed of transactions broadcast from each user. Libra's may represent a litmus test for the current public opinion on the balance between highly convenient technology products and demand for strong privacy guarantees.

Part of Bitcoin's appeal is affording users more self-sovereign control over their financial lives. The entire Bitcoin codebase is open source, one can operate a node to independently verify transaction history, and self-custody is possible. In short, dependence on intermediaries is reduced, though not entirely eliminated. In contrast, using Libra requires a great deal of trust in the intermediary institutions. Given the track record of some of these companies, users may be skeptical that they can be a trusted intermediary.

*... The problem is not with a Facebook **cryptocurrency**, but with a **Facebook** cryptocurrency.*

— [Matt Levine](#), Bloomberg Opinion

It may ultimately be irrelevant if Libra is well-designed from an economic or technical perspective if users simply do not trust the Libra Association, who undoubtedly hold a great deal of power within the network.



Conclusion

Drawing from many themes across the industry, Libra is a landmark project. Many uncertainties remain, including the ultimate regulatory environment, user demand and trust in the Association, privacy concerns, and the degree to which Libra can realize its stated mission of ‘banking the unbanked.’ Each of these is likely to have some influence on Libra’s trajectory and eventual significance. Ultimately, Libra’s impact may not be its own long-term success, but as a pathbreaker and example for other organizations to consider integrating blockchain-based systems into their existing business lines. In any event, developments in the coming quarters may have an outsized impact on the industry, and bear watching for close observers.



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