

# DELPHI DIGITAL

## Facebook's Libra Thematic Insights



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# Executive Summary

In December 2018 it was reported that Facebook, the social media giant with over two billion users, intended to launch a stablecoin. Last month, the company finally unveiled their "cryptocurrency" initiative to the world. Their mission? To provide a "simple global currency and infrastructure that empowers billions of people".

This shouldn't come as a surprise to most people who have been following the company for a while. Zuckerberg has long sought an in-house currency for Facebook (see: [Facebook Credits](#)). Additionally, this isn't the first time the company has masked their motive to expand their market and diversify revenue streams with an ambitious goal to empower consumers in the developing world (see: [Internet.org](#)).

What will initially start off as a new digital currency designed for payments ranging from micropayments to remittances without fees, Facebook hopes will eventually evolve into infrastructure for more complex use cases, like blockchain-based loans or insurance.

Given the negative perception the social network has amassed over the past few years, Facebook knew they wouldn't be able to achieve this vision by maintaining control of Libra. They open-sourced the technology and have even created The Libra Association, a non-profit consortium of industry leaders which will help govern the network. They also launched a subsidiary called Calibra that is responsible for its cryptocurrency projects - claiming this was to ensure separation between social and financial data.

Despite it still being very early, as well as there being a lack of information regarding specifics, like the economics of the project, our team wanted to outline what we know so far. Within this report, we'll highlight the key takeaways from Facebook's announcement of Libra as well as try to answer a few outstanding questions:

- 1) How will Facebook profit?
- 2) Will Libra actually launch?
- 3) Is Libra a true cryptocurrency?
- 4) What does this mean for crypto?

## Dual Token Structure



Libra Coin, a low volatility medium of exchange



Libra Investment Token, a security with governance rights

## Calibra



## The Libra Association



28 Founding Members So Far

# Dual Token Structure



Libra will have a dual token structure. Libra as the Medium of Exchange, while Libra's Investment Token will act as a security token to fund the reserves along with governance rights. Below, we provide key takeaways for each token as well as highlight their use cases and purpose.

## Libra (Medium of Exchange)



- At its core, **Libra will be a low-volatility digital currency.**
- The protocol and coin is expected to launch in 2020 and will be governed by The Libra Association, a 28-partner consortium of companies / foundations.
- Libra will be 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.**
- Libra can be used for online-shopping or paying for services like Uber or Spotify. Some stores are even expected to give bonuses and discounts for customers who use Libra.
- Transactions aren't entirely free. They incur a tiny fraction of a cent fee to pay for "gas" that covers the cost of processing the transfer of funds. This fee will be negligible to most consumers, but are in place to deter bad actors from creating millions of transactions to spam the network.
- **Facebook's goal with Libra is to make sending money to a friend or paying for something as easy as sending a Facebook Message.**

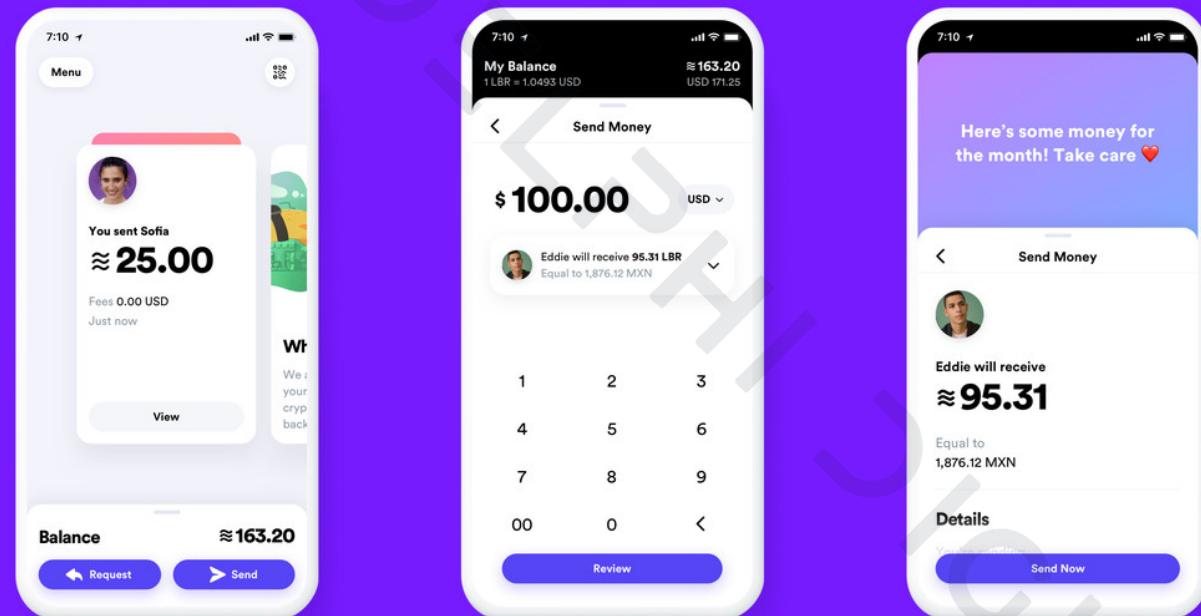
## Libra Investment Token (Security Token)



- **Libra Investment Tokens (LIT) are governance tokens to manage the reserve and the protocol in and of itself.**
- When Libra Association members join and pay their \$10 million investment, they receive Libra Investment Tokens. To join the association, there are specific criteria each organization has to meet.
- **Their share of the total tokens translates into the proportion of the dividend they receive of interest on assets in the reserve.**
- Those dividends are only paid out after Libra Association uses interest to pay for operating expenses, investments in the ecosystem, engineering research and grants to nonprofits and other organizations.
- The assets within the reserve are expected to be low risk and low yield, so **returns for early investors will only materialize if the network is successful and the reserve grows substantially in size.**
- While investors who buy the tokens don't have to run a node (be a validator), only those who do will get a vote as a member of the Association.

# Calibra

Set up as a subsidiary under Facebook, **Calibra will focus on building financial services and software on top of the Libra blockchain**. Their first product, a custodial digital wallet built on top of the Libra network, is set to launch sometime in 2020. At launch, Calibra will allow users to send Libra to each other but Facebook hinted there will be additional services included within the payment wallet, including but not limited to: lending, QR purchases, etc. As expected, Facebook plans to integrate the wallet across its ecosystem in apps such as Messenger and WhatsApp. A point Facebook has stressed throughout their announcement is that Calibra won't share account information or financial data with Facebook or third parties, without consent - aside from "limited cases". That being said, users will have to go through full KYC (the wallet will require a government-issued ID to sign up for an account).



At the moment, Facebook is still early in the process of developing Calibra and will be sharing more information as we get closer to its release. While Facebook has stated their goal is to make Calibra available to everyone, **it won't be global at launch**. Calibra will not be available in jurisdictions that have banned cryptocurrencies, which includes two of the top remittance recipient countries, India and China.

# The Libra Association

Headquartered in Switzerland, **The Libra Association** is an independent, not-for-profit membership organization. The Libra Association launched with **28 founding members**. Each member has to pay a minimum of \$10 million to join and become a validator node operator for the Libra Blockchain. Subsequently, they are entitled to a share (proportionate to their investment) of the dividends from interest earned on the Libra reserve. **Each founding member is entitled to one vote and no more than 1% of voting power (this also applies for Facebook)**. The Association ultimately makes decisions on the future of the network and protocol, and also manages the reserve by minting and burning Libra coins. Major decisions such as removing a founding member or changing the Reserve Management Policy require a supermajority of founding members (>66%), while all other decisions require a normal majority. **One of the association's directives will be to work with the community to research and implement the transition to a permissionless network over time.** Below, we've broken out the 28 founding members by industry.

## Payments



**stripe**

**PayU**

**VISA**



## Venture Capital

ANDREESSEN  
HOROWITZ



## Technology / Marketplaces



**ebay**

**FARFETCH**

**facebook**



**UBER**

## Blockchain



**BisonTrails**

**coinbase**

**xapo**

## Telecommunications

**iliad**



## NonProfit / Multilateral Organizations



**kiva**



Women's World Banking



# Minting Overview

## Investment Token Investors

Money from Investment Token Sale goes to the reserve in a one time purchase. Investors receive Libra Investment Tokens.

## Founding Members

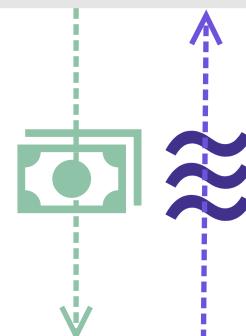
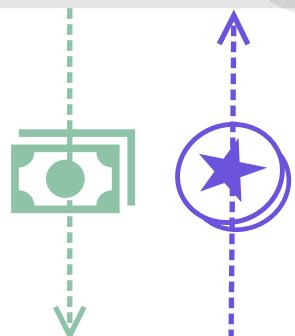
Founding Members are given Libra Coins to encourage merchant, user, and developer adoption. Incentives funded via private placement.

## Authorized Resellers

Libra Tokens can only be minted by an equal purchase of fiat and through an authorized seller. Resellers are authorized by the Association.

## Exchanges/Crypto Trading Firms

## Libra Coin Users



Libra Coin Price is only a function of FX market movements

LIT Price is a function of reserve value & governance value

## LIBRA RESERVE

### Custody

- Geographically distributed
- Network of custodians
- Investment grade credit-rating

### Assets

- Bank Deposits
- Government Securities
- Currencies from "Stable and Reputable Central Banks"
- Debt from Stable Governments
- Short-Dated Securities

### Reserve Investment

- Libra users gain no returns. LIT Holders do
- Invested in low-risk assets
- Revenue supports op-ex
- Funds growth investment, non-profit grants, and engineering research



## LIBRA ASSOCIATION

Libra Association governs the reserve mechanism

# Validator Economics

Despite how early it still is and the lack of information currently available, our team wanted to use a quick thought exercise to help illustrate the profit potential for these Founding Members. **There are two ways for an organization to make money via this initiative: (1) Run a validator node and collect a proportionate amount of fees from the network, and (2) Own Libra Investment Tokens and Collect Interest From The Reserve.**

## ***Validator Economics***

By their launch in 2020, Facebook is aiming to have 100 founding members who will subsequently serve as the initial validator nodes of the Libra blockchain. In addition to the minimum initial investment of \$10 million, there will be around \$280,000 in operating fees based on the technical requirements to run a node. **The amount of income each node collects depends on: their share of the network, the amount of transactions, and the transaction fee Libra will charge.** To keep things simple, we'll calculate the income for 1 of the 100 validator nodes (assuming equal share). Since we still don't have insight into what fees will come with Libra, we've provided a matrix below to allow you to independently assess the profit potential for validators. The table below operates under the assumption that Libra will see 25 million tx per day (their blockchain's theoretical max would be 86 million tx/day). We felt comfortable with this assumption based on Visa's reported 150 million tx/day, Alipay's 170 million tx/day, and a recent report that WeChat sees a whopping 1 billion tx/day. While the table factors in the \$280,000 in operating fees, it does not include the required initial investment of \$10 million to become an initial validator.

## ***Validator's Annual Gross Income From Transaction Fees***

**Average Transaction Fee**

Average Transaction Value	0.20%	0.40%	0.60%	0.80%	1.00%
\$0.25	\$ (232,696)	\$ (185,392)	\$ (138,088)	\$ (90,784)	\$ (43,480)
\$1.00	\$ (90,784)	\$ 98,432	\$ 287,648	\$ 476,864	\$ 666,080
\$5.00	\$ 666,080	\$ 1,612,160	\$ 2,558,240	\$ 3,504,320	\$ 4,450,400
\$20.00	\$ 3,504,320	\$ 7,288,640	\$ 11,072,960	\$ 14,857,280	\$ 18,641,600
\$50.00	\$ 9,180,800	\$ 18,641,600	\$ 28,102,400	\$ 37,563,200	\$ 47,024,000

We believe the fees Libra charges will have to be competitive to current solutions to gain traction. Credit cards fees range from 1.5% to 3.0%, Paypal charges 2.9%, while the average fee for global remittances is between 5.0-7.0%. In the absence of guidance, we provide a range of fees from a 0.20% to 1.0%. While these low fees and removal of the flat \$0.10+ fee may lead to Libra becoming popular for micropayments, a survey done on WeChat Pay showed their average transaction value being ~\$30. For convenience, we've showed annual gross income for validators based on a wide range of average transaction values.

# Libra Investment Token Economics



**Libra Investment Token holders are able to receive dividends paid out by the Libra Reserve. These dividends are essentially the interest earned on the reserve balance, excluding operating expenses of the association (such as R&D, grants to nonprofits, research, etc).** While members are limited to a cap of 1% of total votes within the Association in order to prevent the concentration of power in any single entity, the interest earned from the reserve remains proportional to the amount invested no matter how large. So if Company A invested \$200 million in exchange for Libra Investment Tokens, and the reserve balance was \$1 billion; Company A would receive 20% of the interest earned on reserves (after expenses). While the team has hinted that the investments of each partners will be public once the project is live, we currently do not have insight into how much Facebook has invested into the Libra project or the Libra Investment Token.

**To keep things simple, our exercise below assumes all of the interest earned is paid to 100 validators, or LIT holders, who all own an equal amount of Libra Investment Tokens.** The outputs within the table represent the income for each holder. It's important to note this does not factor in the operating expenses the Association will be paying. Our team believes these could end up being costly due to the regulatory hurdles the Association will have to navigate to execute their vision. Additionally, Facebook has been fronting the costs of setting up Libra and the Association, which it expects to be reimbursed with reserve interest income at some point. Due to the lack of clarity, we've excluded these costs as well.

***Validator's Annual Gross Income From Reserve Interest***

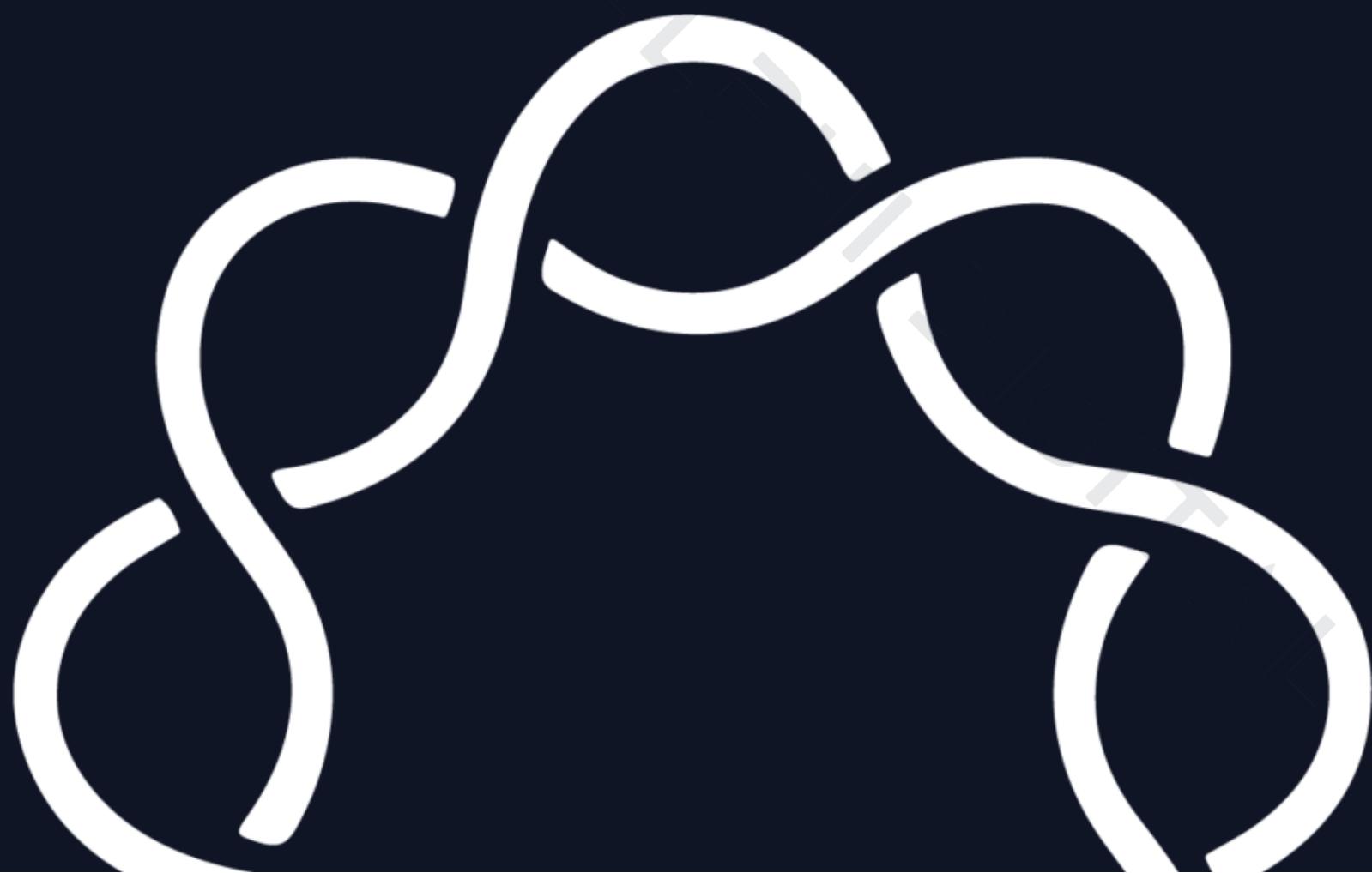
	Reserve Interest Rate				
	0.25%	0.50%	0.75%	1.00%	1.25%
\$1,000,000,000	\$25,000	\$50,000	\$75,000	\$100,000	\$125,000
\$10,000,000,000	\$250,000	\$500,000	\$750,000	\$1,000,000	\$1,250,000
\$50,000,000,000	\$1,250,000	\$2,500,000	\$3,750,000	\$5,000,000	\$6,250,000
\$100,000,000,000	\$2,500,000	\$5,000,000	\$7,500,000	\$10,000,000	\$12,500,000
\$250,000,000,000	\$6,250,000	\$12,500,000	\$18,750,000	\$25,000,000	\$31,250,000

We use a range from .25% to 1.25% when estimating the Interest Rate the Reserve will earn. Since the assets in the reserve are low risk and low yield, returns for early investors will only materialize if the network is successful and the reserve grows substantially in size. Libra's Reserve grows when initial investors purchase Libra Investment Tokens or when users purchase new Libras. While Libra is aiming to launch with a reserve of \$1 billion through 100 founding members, if successful - demand from users could lead to the reserve growing exponentially. We've included a range from \$1 billion to \$250 billion (less than 7% of M1 money supply).

# Technical Summary

- Libra protocol intends to support 1,000 tx/s and 10-second finality time. The Libra protocol charges fees denominated in Libra Coins.
- Over time, the protocol is set to decentralize shifting governance control and network validation solely to Libra Investment Tokens from the founding members. This would be a transition from proof-of-authority to proof-of-stake. This will likely be a multi-year effort that is not without social or technical issues.
- Each founding members had to meet specific technical requirements as well as evaluation criteria. Non-profits were the only organizations which did not have to make the minimum initial investment of \$10 million.
- **The Libra Blockchain is not really a blockchain since it is based on a cryptographically authenticated database and not a series of cryptographically linked blocks.** Simply, transactions occur in sequence but without distinction as to which block contains which specific transaction. Facebook has stated there is no concept of a block of transactions in the ledger history, but instead batches transactions into blocks as an optimization step.
- The Libra Protocol uses an account based model (like Ethereum) and not a UTXO model (like Bitcoin). Facebook has stated the Libra Protocol does not link accounts to real world identities.
- **Their programming language, Move, will launch in a limited manner only allowing pre-defined functionality with the goal of becoming more expressive and open in the future.** This is different from Turing complete smart contract platforms like Ethereum where developers can code in practically anything logical and the code itself lives in a permissionless environment vs. Libra which will be controlled by 100 validators at the start and 500-1000 long-term. Hence programming is limited and its life is limited to the will of 100 validators.
- Validators are allowed to prune old states as they are not necessary to validate new transactions and state rent is on the table. Both of these are also proposals on Ethereum to curtail the size of the blockchain, or database itself.
- The consensus mechanism is LibraBFT or an edited version of the well known PBT consensus mechanism. **This consensus mechanism can progress as long as 66% of validators are honest.**
- LibraBFT progresses through a series of rounds, where a validator is randomly chosen to propose a block of transactions that also contains the full transaction history. If everything is kosher, the validator can execute the block's transactions speculatively, send a signed vote for the block to the leader, and then the leader gathers these votes to form a quorum certificate (QC), which provides evidence of a majority vote.
- A block is committed once a contiguous 3-chain commit rule is met. Example: a block at round  $k$  is committed if it has a QC confirmed by two or more blocks and QCs at rounds  $k + 1$  and  $k + 2$ . As such, all validators will eventually commit the block.
- Innovatively, Libra's protocol includes a pacemaker that drives timeouts for validators to drive consensus forward, unpredictable leader selection through a verifiable random function determined by the proposed of the last committed block (to limit time in which an adversary can launch a DDoS attack).

# *Putting Libra Into Perspective*



# Putting Libra in Perspective

## Bitcoin vs. Libra

Before I dig in, it's important to note the reason I've excluded Bitcoin from much of my commentary: **comparing the two is apples to oranges** (or maybe apples to airplanes at this point). The Libra project intends to create a globally-accessible digital currency to facilitate cheaper, faster transactions, essentially serving as a medium of exchange from day one. **Bitcoin, on the other hand, is unlikely to fill such a role until it's proven its ability to serve as a trusted store-of-value.** In order to maintain a relatively stable value, bitcoin will have to be worth substantially more than it is today. That is why, in my opinion, bitcoin will continue to be used more as a speculative asset than a true peer-to-peer medium of exchange for the foreseeable future.

## Libra's Purpose

It is also important to frame the Libra discussion around its intended purpose rather than simply dismissing it as a "centralized alternative payment option powered by the evil agenda of the Zuckerberg empire." **Just because it may not be the right solution for everyone doesn't mean it can't serve to benefit someone.** In a recent email to her colleagues, Morgan Beller, Head of Strategy at Calibra, stated the Libra project is intended to both "empower people to store their assets in a completely decentralized, safe, and trusted way" while enabling people to "move value to one another in near real-time, for free (or almost free), as long as the other party is part of the same network." Additionally, she went on to explain:

***"Our intention is for this new currency and network to create economic opportunity by enabling trade and removing structural barriers of access to the global economy for billions of people."***

## Key Takeaways

- Libra and Bitcoin are vastly different beasts and, therefore, should be viewed as such.
- Bitcoin is censorship resistant, sitting largely outside the current financial system and is not subject to any single central bank policy. **Libra is, by definition, subject to the monetary policy decisions of multiple central banks** depending on the degree of diversification among its reserve assets.
- Libra has the potential to serve as a cheaper, faster, more accessible network for money transfer and transaction facilitation.
- Current disclosures indicate **several similarities between Libra's target reserve asset base and that of a diversified currency ETF or mutual fund.**
- Contrary to some of the perceived threats Libra poses to central bank policies, it could serve as a boon for U.S. dollar dominance rather than a headwind depending on the breakdown of the securities held in its reserves.

## Contributing Analyst



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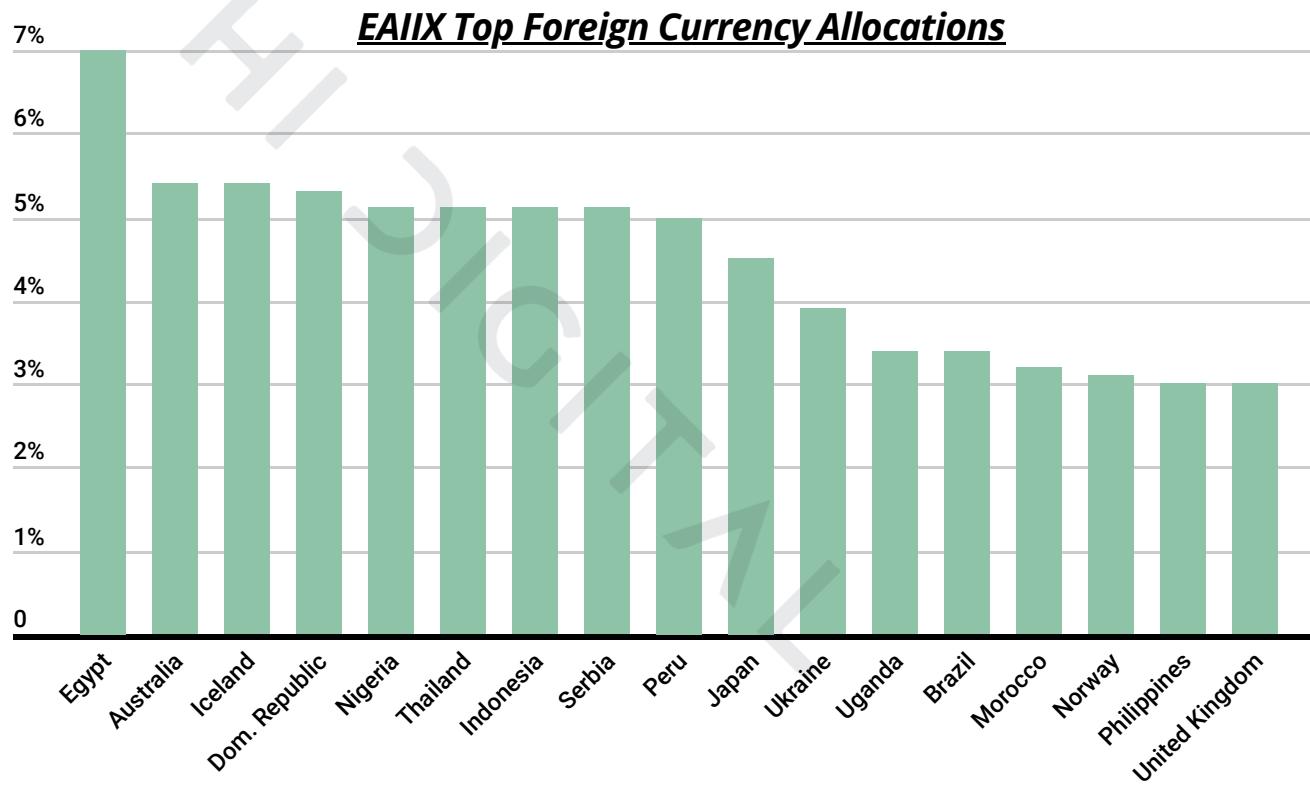
# Putting Libra in Perspective

Even if we assume Libra remains a permissioned blockchain (with restrictions on which entities can become validators on the network), it still has the *potential* to offer more decentralized services than current processes for transferring money. A substantial amount of international remittances, for example, are still processed by money transfer services (i.e. MoneyGram, Western Union), which can cost anywhere from 0.5% to more than 7% in fees depending on the provider. Many service providers also offer subpar exchange rates for international transfers, which tacks on additional costs to the end customer. In fact, some banks don't even offer wire transfer services because of the costs associated with transmitting money through the international banking system. The SWIFT system's global network of intermediaries may also require the involvement of multiple banks, which may add another layer of fees. **Objectively, Libra offers the potential for a cheaper, more globally-accessible system to transfer money and facilitate transactions. That being said, it is vastly different from Bitcoin, and, therefore, should be viewed through its own distinct lens.**

## Currency Fund Similarities

There has been a ton of discussion on the potential impact of Libra, the design decisions (permissioned vs. permissionless), and the cost-benefit for transacting in its native digital currency. But one of the most interesting comparisons, in my view, comes from the traditional finance world. Inspired by a post from Dave Nadig, managing director of ETF.com, **the basis of Libra's reserve is strikingly similar to a diversified currency ETF or mutual fund.**

Take the Eaton Vance Diversified Currency Income Fund (EAIIX), for example, which is described as "a locally denominated international short-term fixed income fund providing broad-based currency and interest-rate diversification." The fund has exposure to many local currencies, including Egypt, Australia, Iceland, and Nigeria (just to name a few). Another example, referenced in the aforementioned Nadig post, is the WisdomTree Emerging Currency Strategy Fund (CEW), which "seeks to achieve total returns reflective of both money market rates in selected emerging market countries available to foreign investors and changes to the value of these currencies relative to the U.S. dollar." **Does that sound familiar?**



# Putting Libra in Perspective

There are, of course, a few notable differences, one of which is the **distribution of interest earned on Libra's reserves**. The yield earned on a diversified currency fund's holdings goes to the fund's shareholders, whereas the **interest earned on Libra's reserves does not get distributed to holders of its digital currency**. Instead, a portion of the money will be used to support further development of the platform (i.e. operating expenses) and the other portion will be paid out to Libra Investment Token holders. However, the similarities between the two are hard to ignore, which could spur another wave of scrutiny once regulators "examine" the issues they've raised and "take action."

## **Impact on Global Monetary Policy**

The implications for global monetary policy could be substantial if Libra turns out to be successful. Much of the focus thus far has been on the negative effects Libra poses to the autonomy of global central banks as currencies and short-term debt securities will be selected for inclusion by members of the Libra Association (and eventually Libra Investment Token holders). Volatile emerging market currencies, for example, **may be more vulnerable to foreign exchange risk** if Libra allows investors and individuals to seamlessly move large portions of wealth out of the country.

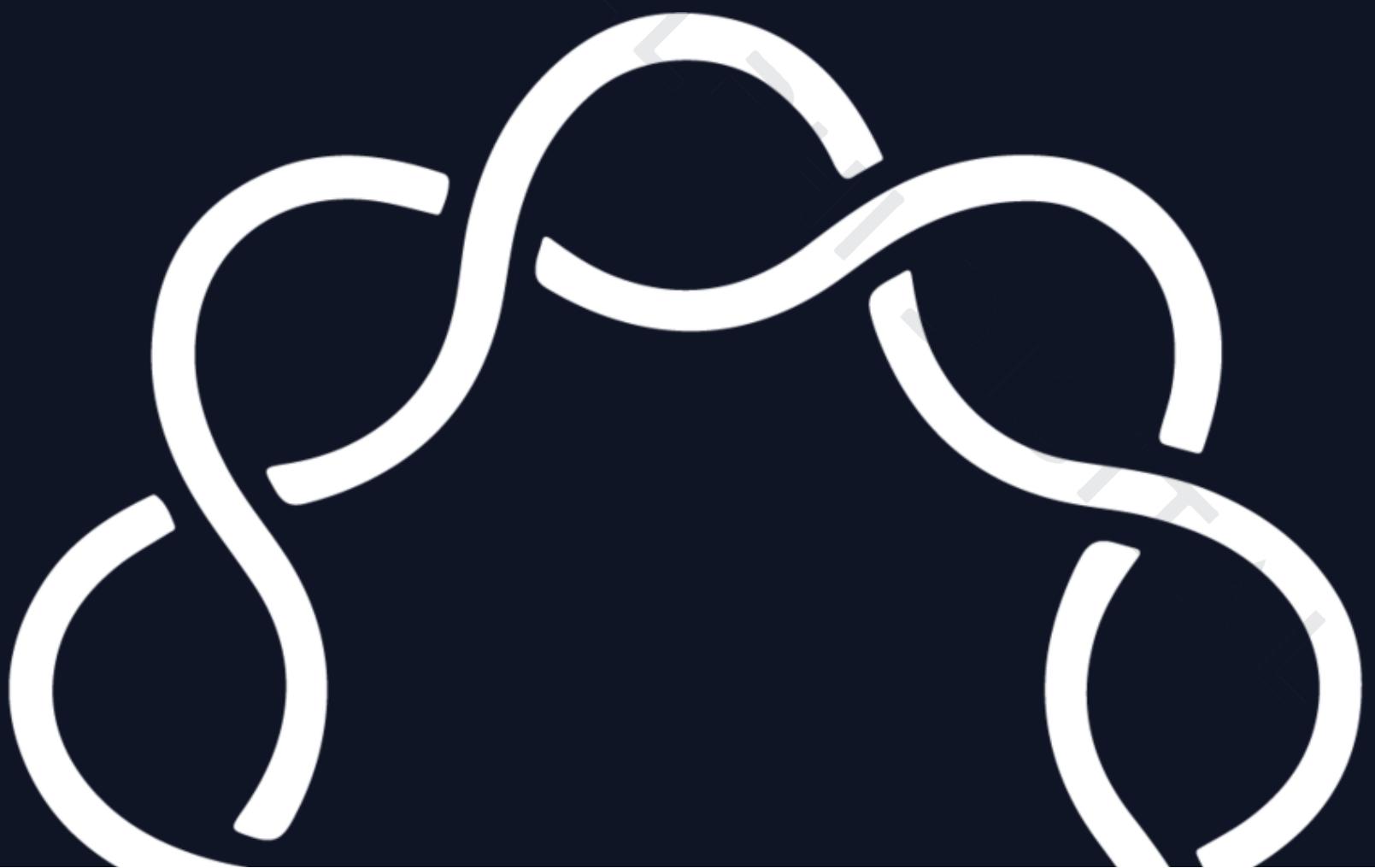
This is one of the primary concerns Chinese officials are mulling over given the country's tight restrictions on capital flows. The People's Bank of China recently expressed its concerns over the breakdown of Libra's reserve assets, and for good reason. **A heavy concentration of U.S. dollar-denominated securities or deposits may enhance the hegemony of the greenback rather than weaken it**. Obviously, the size of Libra's reserve asset base would need to be significant enough to have a meaningful impact, but it's not out of the question given its target market. Interestingly, U.S. regulators have led the charge against the Libra project, demanding the team to halt its development until Congress has had a chance to thoroughly review its implications. **Counter to this stance, Libra may serve as a boon U.S. dollar dominance at a time when most of the world is making strides to dethrone the importance of the global reserve currency.**

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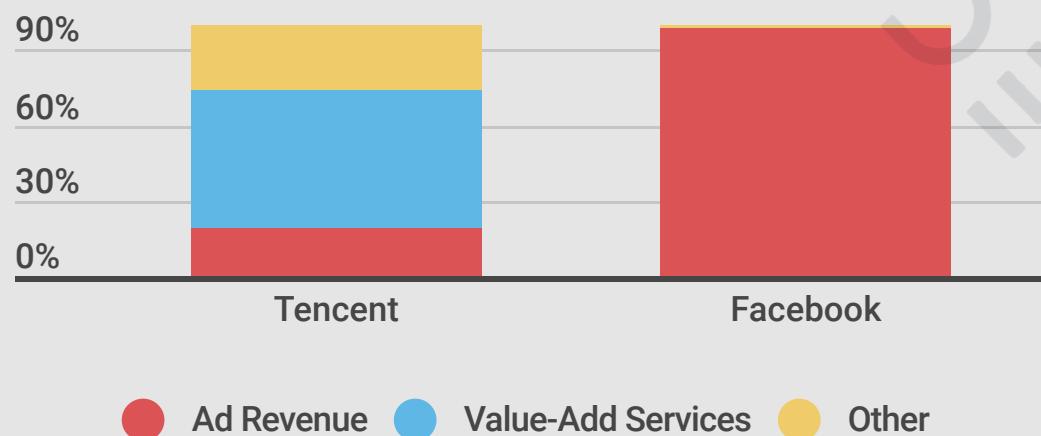
# *Outstanding Questions*



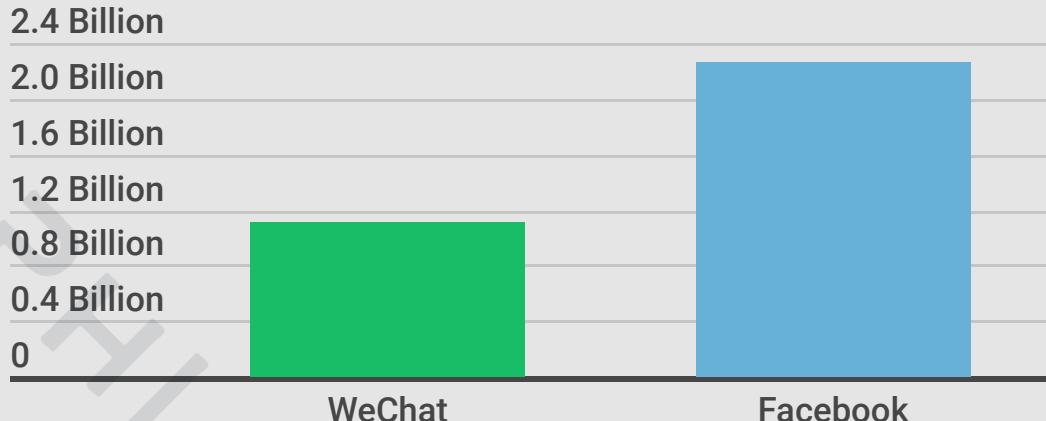
# How Will Facebook Profit?

The company's main motive with this initiative is to help diversify their revenue stream, 98.5% of which came from ad revenue in 2018 (as seen below). Besides the Libra Investment Token distributions Facebook will receive from the interest generated on its reserves (as will all Libra Investment Token holders), the company has been clear regarding how the company plans to benefit. The Head of Calibra, David Marcus, recently stated "**the company's profit model for Libra would come from any commerce that occurs across its family of apps by ensuring that ads are more effective and advertisers are more motivated to buy space on Facebook's platforms**". We can better assess Facebook's move to this space by looking at digital payment titan, Tencent's WeChat.

***Facebook vs. Tencent Revenue Model 2018***



***Monthly Active Users as of 2018***



A report from Beijing-based market consultancy firm Analysis recently showed that **Tencent's WeChat and Ant Financial's AliPay comprised a combined market share of over 90% of all mobile payments in China**. Tencent (responsible for almost half that) transformed WeChat from a simple messaging app into a mega-app encompassing everything from payments, games, taxes, etc. WeChat did this by leveraging their widely used messaging app to incorporate frictionless payments across a variety of third party apps.

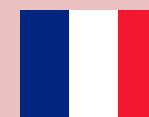
**With Facebook's current reach through their apps like WhatsApp, Messenger, and Instagram, they are poised to recreate WeChat's success in the West by making purchases with Libra seamless through their Calibra wallet integration.** Unfortunately, it's too early to try and quantify the opportunity ahead for Facebook due to a lack of information regarding fees, data monetization, etc. That being said, it's clear they hope to recreate some of the success WeChat has found in China.

# Will Libra Launch?

Facebook is no stranger to global scrutiny by regulators, having received backlash in recent years for how they've managed the data they collect from their users. **Not surprisingly, the social media giant received immediate push back from regulators around the world after revealing Libra last month.** Facebook's team has openly stated that they expected and welcome this scrutiny as they "announced this early by design in order to have this discourse in the open and gather feedback." The company has apparently already spoken with authorities at Britain's Financial Conduct Authority, the Bank of England, and Switzerland's financial regulator, FINMA. Additionally, Facebook has applied for money-transfer licenses in the US as well as a BitLicense, the license required to operate a cryptocurrency business in New York from the state's Department of Financial Services.

The truth of the matter is that **Facebook will ultimately need hundreds of licenses from different regulators across the globe to execute their vision as well as launch by their desired launch date in 2020.** As Reuters reported, "Facebook's Libra coin is likely to run a regulatory gauntlet". Their plan for Libra involves "taking customer deposits, investing them in government bonds, holding traditional currencies in reserves and offering cross-border services and transacting in the new coin will require engagement with central banks, financial regulators and enforcement authorities around the globe." It should come as no surprise that Facebook has been receiving backlash for their ambitious digital currency plans. **The only countries which have come out with less apprehension towards Libra so far are Switzerland and Russia. Most countries (as seen to the right) have not been as welcoming.** France is using its year-long presidency of the Group of Seven nations (G7) to set up a task force focused on the project at an international level. **Just this past week, House Democrats requested Facebook halt development on Libra as well as their wallet, Calibra, until Congress and regulators have time to investigate "the possible risks it poses to the global financial system."** For all the regulatory hoops Facebook will have to jump through, it doesn't seem likely they'll launch in the first half of 2020. However, it will still be interesting to watch this play out given the amount of resources the social media giant has at its disposal.

## Countries Which Have Expressed Concerns Regarding Libra



France



Germany



India



Indonesia



Italy



Singapore



UK



US

# Is Libra A Cryptocurrency?

Now that we have a better understanding of Facebook's new project, our team wanted to outline why we believe Libra is not actually a cryptocurrency. To do this, we leverage the "Five Pillars of an Open Blockchain" outlined by Andreas Antonopoulos.

## 1 Open

Ultimately, validators (initially The Libra Association) will be responsible for transactions occurring on the network and will have to sit in the middle and control transactions.

## 2 Public

Not enough information available to tell whether or not people who are not validators will be able to run nodes that download all of the ledger and verify transactions.

## 3 Neutral

Any payment services which are centralized have to follow the rules of a money transmitter or bank. They cannot be neutral as they have to check who you are, where you are, etc.

## 4 Borderless

Since the payment service will have to follow KYC/AML laws, check who is receiving money and where they are, their protocol cannot be borderless.

## 5 Censorship Resistant

Most importantly, Libra cannot be censorship resistant because their Association will be legally required to prevent the transmission of funds to certain entities (eg. sanctioned parties).

# Crypto Comparison

Despite our team outlining why we do not believe Libra to be a cryptocurrency, we thought it would be helpful to put Libra into perspective by comparing it against the two most popular cryptocurrencies today. **It's important to note that we do not believe Libra will compete directly against Bitcoin nor Ethereum.** Bitcoin's utility as a store of value comes from its fixed supply and the ability for it to remain censorship-resistant, permissionless, and verifiable (read our Bitcoin report [here](#)). Traits which Libra will not be able to compete against. Furthermore, **as a censored-chain, Libra will most likely not attract ETH developers who have enjoyed the freedom of a permissionless network to experiment on** (read our Ethereum report [here](#)). At launch, Libra won't even let developers run arbitrary contracts. Move, their smart contract language, isn't totally specified yet but they've made clear that you will only be able to run their pre-specified contracts initially. Instead, as a few community members outline on the next slide, we believe Libra to be a huge complement and "gateway drug" for crypto.



Permissionless:	Yes	Yes	No
Consensus:	Proof of Work	PoW (Moving to PoS)	LibraBFT
Smart Contract Support:	Limited	Yes	Limited
Nodes:	9,912	6,319	100 Validators to Start
Governance:	Off-Chain	Off-Chain	Libra Foundation
Foundation:	None	Yes	Yes
Free Floating:	Yes	Yes	No, Tied to Basket
Supply:	21 Million, Capped	106 Million, Perpetual Inflation	Mint/Burn Determined by Demand/Foundation

# What Does This Mean For Crypto?



Below, we've included a few relevant comments regarding Libra from community members.



BLOCKCHAIN  
CAPITAL



**Brad Stephens**  
MP at Blockchain Cap

"If Libra takes off we get a billion new crypto users that will eventually migrate somewhat into Bitcoin and grow the whole ecosystem. If Libra gets shut down...boom! Now we know why Bitcoin is so powerful as a global reserve currency."



CONSENSYS



**Joe Lubin**  
Founder of ConsenSys

"It would be a good stepping stone for people towards taking further control of their assets and identity and getting more comfortable with peer-to-peer payments managed from their own wallet. We started educating enterprises on the basics of decentralized technology about four years ago. I've said this before: if we don't bring in the rest of the world, then I think we've failed."



arca



**Jeff Dorman**  
CIO at Arca

"While there are a lot of polarizing opinions on the significance of Facebook and even JPMorgan's entrance into the digital asset world, the fact of the matter is their day 1 will be bigger than any other crypto company's year 10. As a result, it is undeniable that Facebook is a positive for the crypto industry."

# Disclosures

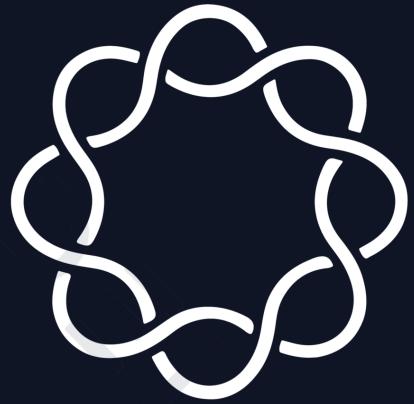
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