

Bitcoin Flaws & Digital Currencies:

Back in December of 2017, during its rapid ascension, we published a detailed research article discussing our issues with bitcoin. We called that note, [“The Safe\(r\) Way To Play Bitcoin” and it can be re-read here](#). Within two weeks of our fairly negative note, the price of bitcoin nearly doubled. How’s that for bad timing? Feel free to look at some of the commentary we received at the time of that article. Let’s just say that the crypto community did not care for or appreciate our opinions. Some of the “feedback” was akin to making fun of my mother....

To summarize our note, we argued that bitcoin **failed** as a currency, for two primary reasons. One, we laid out our rationale why we did not believe bitcoin was a safe “store of value”. In addition, we felt that bitcoin was not a “medium of exchange or payment”. We then stated, even if we are dead wrong on bitcoin being a currency, Manole Capital does not invest in volatile currencies or commodities. We invest in growing companies trading at a discount to their intrinsic value. As we have said many times, we prefer to invest in secular growing businesses, that have predictable ways of generating free cash flow and profits. Instead of trading currencies, we purchase great FINTECH companies that meet our process, strategy and philosophy for long-term investing.

We concluded that instead of buying bitcoin, we favored the exchanges where bitcoin was about to trade on. Our analogy was the California Gold Rush, where thousands went West seeking a fortune in gold. We said, “some hit it big, while others failed to even reach those *“streams filled with gold”*. During the Gold Rush, Levi Strauss made a small fortune, not searching for gold in those crowded steams. He opened a store, selling pans, shovels, bedding and clothing. Those seeking their fortune needed a merchant to supply them with their necessary dry goods. We believe the exchanges are the modern-day bitcoin merchant.”

2018 was a tough year for bitcoin (down 73%), while the CME rose +32% and added a healthy 3% dividend yield. For our investors, this was clearly the better decision. Even though bitcoin has more than doubled this year and recovered from its difficult 2018, we feel comfortable with our decision. We are asset managers, purchasing great FINTECH companies, not f/x traders. We fully expect the Libra announcement to spur the cryptocurrency bulls. We will not be surprised to see some interesting comments following this note’s publishing. We’ll see....

What’s Exactly is a Libra?

On June 19th, 2019, Facebook revealed a [100-page white paper](#), with some of the details behind its involvement in the “Libra” cryptocurrency. Some analysts were quick to state that Facebook just “reinvented money”. The purpose of this note is to summarize that detailed white paper and breakdown the risks and opportunities for the entire payment ecosystem.

The simple, stated goal of Libra is to let you cheaply send money to people or seamlessly buy goods and services without fees. Libra wants to create a currency that is global, mobile, accessible, stable, fast, scaleable and secure.

That’s all, it’s that simple...

[Libra’s website](#) is interesting and insightful. Libra is represented by three wavy horizontal lines, with the name coming from the word for a Roman unit of weight measurement. In addition, the name has a connotation with the French word for free, “LIB”. According to its members, it is attempting to invoke a sense of financial freedom and inclusion.



Libra's Primary Goal:

In our opinion, one of the goals of Libra is to empower users that are outside the banked or financial markets. Libra's website states that there are 1.7 billion underbanked individuals, which is 31% of the world's population. The '17 World Bank study, where this chart comes from, cites that ½ of the underbanked population comes from just 7 countries. The Top 5 lowest banking countries are Bangladesh, China, India, Indonesia and Mexico. These also happen to be some of the largest cash-to-cash money remittance markets in the world.

While its founding members would love for you and I to embrace Libra, we are not the initial target audience. Libra was not designed to create a new P2P payment method, to help me re-pay my friend for picking up the tab at today's lunch. That is already handled (for free) via Venmo, right? Those of us comfortably living in developed countries are not in the market for sending real-time global remittances, nor are we desperately in need of additional banking opportunities.

We believe Libra is targeting those outside of traditional banking channels and financial institutions. Those excluded from these financial entities often find it difficult to pay bills, purchase goods and send money remittances. It is hard for us, as well-to-do Americans, to take the perspective on a younger person, living in an emerging market, with an unstable currency and an erratic government. Would you trust local financial institutions, or would you rather deal in hard currency / cash? The bigger question, in our opinion, is whether these underbanked individuals would feel comfortable trusting Facebook for handling their day-to-day financial transactions?

Spotify, one of Libra's founding members, said that Libra is "an opportunity to better reach our total addressable market, eliminate friction and enable payments in mass scale." It also wants to "empower fans in underserved markets by enabling financial inclusion." We think these comments are true, but are removed from the realities of emerging or less developed countries. Those economies are based on cash, for numerous reasons. For other reasons, certain countries are desperately trying to wean their population off of cash and onto cards (i.e. Philippines, Greece, etc). We have written on cash usage declines several times, and our note titled "[No Cash Accepted](#)", can be read by clicking here. All we are trying to say is that some of these founding members seem to have objectives that are not entirely altruistic.

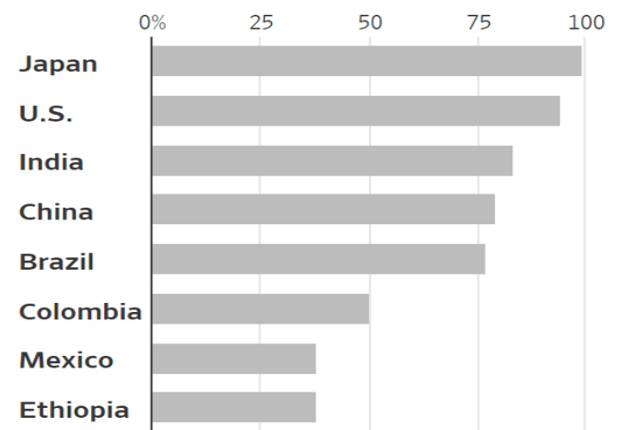
Facebook's Goal:

With its Libra launch, Facebook's CEO Mark Zuckerberg discussed some of his firm's philosophy behind the cryptocurrency. He highlighted how it is "decentralized", with many organization's running it, instead of just Facebook. He specifically said, "It is available to anyone with an internet connection and it has low fees and costs. It is secured by cryptography, which helps keep your money safe. This is an important part of our vision, for a privacy focused social platform."

Zuckerberg wants Facebook to be a platform where "you can privately interact...from messaging to secure payments." Facebook states that it wants to help the underbanked and bring these billion or so people into "financial inclusion". Smartly, none of his comments discussed the opportunity to monetize his massive user base. Clearly, Facebook is hoping to bring this service to its 1.6 billion monthly users on WhatsApp and the 1.3 billion active users on Facebook Messenger.

Underbanked

Percentage of residents over the age of 25 with a bank account



Note: As of 2017

Source: World Bank Global Findex database

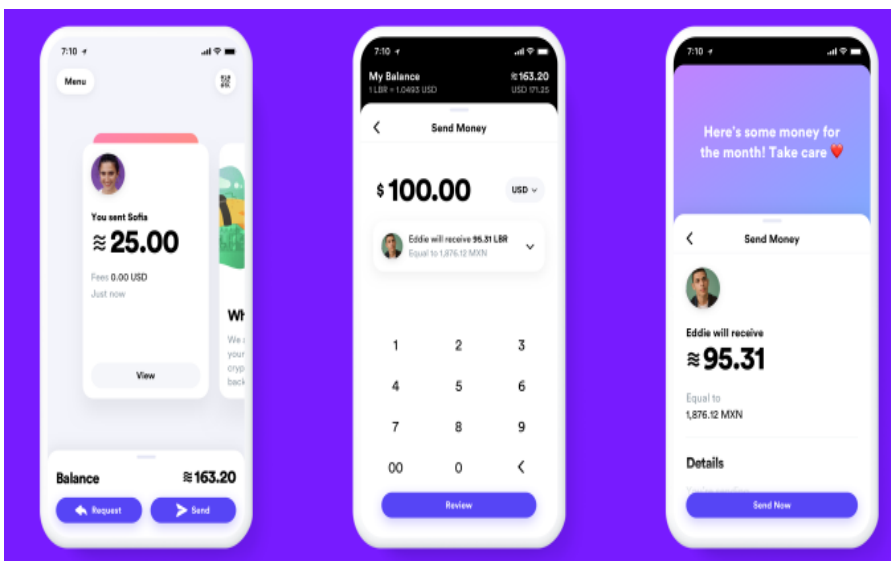
Maybe it is just us, but it might be too quick for Facebook to now ask for financial trust from its loyal users. We think time heals a lot of wounds, but this seems too soon. Call us crazy....

How Libra Works:

For a product that does not exist (and won't for quite some time), we wanted to at least attempt to frame how a Libra transaction would work. Before we discuss the transaction process, we need to start with opening an account. Whenever there are financial transactions involved, there are extensive regulations and rules that need to get followed. For example, when one opens a bank account there are KYC (know your customer) rules that need to be adhered to. The creation of digital wallets (like Facebook's Calibra or Apple's iWallet) will need the help of developers, in order to succeed. The anti-fraud and money laundering process is quite complex and this will become a major hurdle for the digital wallet providers. Once that test is passed, digital wallets will need to drive adoption. This will likely involve costly incentives, in order to get consumers willing to use one digital wallet versus another. Nearly two decades ago, PayPal incentivized users to sign-up for an account by loading \$10 into their account. This worked wonders for account growth, but it became too costly to continue.

Even though Facebook has tried to distance itself from outright ownership of Libra, there will likely continue to be a strong association between the two. People will likely always think of Libra as Facebook's cryptocurrency play. In the event of fraud, especially on Facebook's Calibra digital wallet, Facebook will need to backstop these transactions. If fraudsters emerge on Libra (through developing crypto apps), there is no doubt this will negatively impact Facebook.

Once users are onboard with a digital account / wallet, a transaction could theoretically occur. Users would first need to "cash into" Libra, via their local currency. For example, a consumer could take \$10 and get \$10 worth of Libra loaded onto their digital wallet. In theory, once that 10 Libra is loaded, a consumer could transact. In theory, this Libra could then be easily sent to a friend or relative or even to pay for one's bills. The Libra Association eCommerce members have articulated that their token could eliminate transactions fees and speed up customer check-out. We believe that this is somewhat "wishful thinking", but we certainly understand their excitement for change.



Using Facebook's Calibra example, Libra could be sent via Facebook Messenger, WhatsApp or any other standalone application. The only issue is that the counterparty (your friend or merchant) needs to have an active account, which is also transacting in Libra.

Not only is this easier said than done, but real-time payments are extremely difficult to enable. Let's continue down this path and just assume that transactions can seamlessly occur. How does the infrastructure or back-end look?

Blockchain:

Each Libra blockchain transaction will get permanently written onto its authenticated database, its public ledger. One of the issues we have identified, is the term “permanent”. Transactions on Libra are designed to be permanent and they cannot be reversed. If a transaction is fraudulent, they is no charge-back capabilities or ability to reverse the transaction. We see this as a potential problem, when one compares a Libra eCommerce transaction versus an online purchase today.

In comparison to hundreds of bitcoin miners, using unbelievable amounts of power/electricity, the Libra Association will be the blockchain operator and verifier of transactions. The premise and value-add of blockchain is its decentralized ledger. The Libra blockchain is a permissioned blockchain, where only approved entities can fulfill certain transaction requirements. We think this subtle difference might become a bigger issue. Why?

The entire Libra ecosystem and its blockchain technology was built by Facebook engineers, using their own programming language (called Move). Facebook’s unique blockchain technology has been contributed to Libra, under an open source license. This special group (the Association) controls the governance and rules for Libra and essentially prevents it from being a fully decentralized structure. This bothers the crypto community and some claim this runs counter to the entire concept of cryptocurrencies being anonymous. Some are arguing that this makes Libra inherently more unstable or prone to attack. To counter this argument, Libra’s governance calls for opening up the payment platform, for a broader level of participation, after 5 years.

Without getting too technical, Facebook is using an open source protocol called Apache. It requires its developers to document and save all of their modifications, but not release the source code to the general public. There are details on servers, acting as nodes, to approve transactions. There are details concerning the Merkle Tree structure it will employ and how this code will recognize changes made to the blockchain. Let’s just say that Libra’s Association will bear the brunt of the transaction-based processing. The costs for transacting, however small, will be borne by its users. Unlike a purchase transaction (at a retailer), which is usually free-of-fees, Libra will charge its users a processing fee.

Libra says it is “built for speed and scale” and it is designed to handle 1,000 transactions per second. This is much faster than bitcoin’s 7 transactions per second or Ethereum’s 15 transactions per second, but it is considerably substandard to the current payment system. For example, Visa claims that it has the capacity, during the active holiday season, to handle over 60,000 transactions per second. 1,000 transactions per second is nice, in comparison to bitcoin, but it is a far cry from being at Visa’s scale.

Store of Value:

One of the flaws we have identified (in our 2017 note) in most cryptocurrencies, is their inability “to act as a store of value”. Some digital currencies have attempted to peg their currency to the US dollar, to maintain a more stable value. Being able to transact, in roughly the same amount, has been a challenge for cryptocurrencies.

A Libra unit will be tied to a basket of bank deposits, short-term government securities, as well as some fairly stable currencies, like the US dollar, UK pound, European euro, Swiss franc and Japanese yen. The Libra Reserve is a 1-for-1 concept, with each Libra backed by hard assets. While this is a positive, compared to other un-stable digital currencies, we are surprised that the Chinese yuan is not involved in the f/x basket.



Every time a Libra transacts, an equivalent unit is both created and destroyed. The takeaway is that all of the value of Libra in circulation floats, and that it is also collateralized with real-world assets. By managing the reserve of Libra, the goal is to become a valid “store of value” and more stable currency than bitcoin. From our perspective, this is a positive development for Libra versus bitcoin. However, solving the store of value issue is just one of the requirements. It will need to eventually become a valid and “medium of exchange”.

Medium of Exchange:

The holy grail for Libra, and any other cryptocurrency, is to become a globally accepted “*medium of exchange*”. The ultimate goal would be to replace cash or cards, for all purchase transactions. Merchants complain that MDR’s (merchant discount rates) or the cost associated with card payments, are way too high. Customers want choices, to pay by cash, debit or credit cards or even mobile payments. In our opinion, Libra’s chances of checking the “medium of exchange” box are very low.

We expect the next several quarters to be very complicated, as Libra’s founding members try to “work out its kinks”. In fact, we would not be surprised if Libra was not ready for public consumption or a launch for another year or so. There is nothing in the Libra documentation that indicates how we will be able to transact, at the retail POS (point-of-sale), anytime soon. There is no information how exactly Libra can get spur vital merchant adoption. In order for Libra to get acceptance, at merchants and retailers, it will require significant integration and acceptance by merchant acquirers and processors. Hardware will need to be adapted and software / infrastructure will require significant investment. Considering that EMV (chip in card) standards took years to get implemented, we highly doubt retailers will be willing to bear this expense. We do not believe merchants will be clamoring to complicate their registers. To drive consumer adoption and merchant acceptance, we anticipate a significant amount of resources and marketing dollars will need to get spent.

One of the other items that Libra is attempting to solve is P2P (peer-to-peer or person-to-person) payments. For P2P transactions in the US and many developed countries, Venmo easily handles this process. If somebody wishes to remit funds across state lines, there are a number of regulations that need to be followed. If somebody wishes to send money overseas or to another country, the rules get even stricter. Many FINTECH companies target the “sleepy dinosaurs” of money transfer, Western Union and Moneygram. The ability to pick-up local currency, in over 200 countries, in real-time, is not a simple process to manage. These same companies state that the underbanked community is being ripped off by greedy money transmitters, that charge anywhere from 5% to 10% of the face amount transferred. This is a business that is ripe for change and ripe for technology improvements. We also do not believe P2P payments and money remittances are easy to solve. Good luck to those new FINTECH firms that believe that cross border transactions are simple to handle.

Libra Association:

The Libra Association will promote the use of its open-sourced blockchain, assist in the development of applications and programming, as well as help sign-up businesses to accept Libra for payments. In addition, the Libra Association will maintain the basket of assets that comprise the value of a Libra.

In our opinion, Facebook was very wise in how it launched this endeavor. If Facebook proclaimed that Libra was their cryptocurrency, it would have immediately failed. Facebook has had a difficult year or two on the privacy front. We will not go into the Cambridge Analytica hijacking of 87 million people’s personal data, nor the political ad targeting that was the basis for Congressional testimony. None of that needs to be re-lived in this note. If Libra is to succeed, it needed to be launched as a self-governing, non-



profit, independent venture. The Libra Association will be based in Geneva Switzerland, to further a perception of independence and neutrality.

Facebook does not control Libra, but it is just 1 of 28 founding members of the Libra Association. Facebook gets just one vote in the governance of Libra, just like its other participants. However, there will be some tight connection between Facebook and Libra. While Facebook would like to avoid the perception that it controls or owns Libra, it will be difficult to accomplish.

The Government:

On the day of its launch, Democratic Congresswoman Maxine Waters said *“Facebook has data on billions of people and has repeatedly shown a disregard for the protection and careful use of this data. It has also exposed Americans to malicious and fake accounts from bad actors, including Russian intelligence and transnational traffickers.”* This sure sounds like one lawmaker is directly tying Facebook to Libra, right?

In addition, Congresswoman Waters requested Facebook pause any and all development of Libra, until the House Financial Services Committee (which she chairs), can review it further. She said, *“Given the company’s troubled past, I am requesting that Facebook agree to a moratorium on any movement forward on developing a cryptocurrency until Congress and regulators have the opportunity to examine these issues and take action.”*

In case you thought this was just a Democratic issue, the ranking Republican on the Financial Services Committee, Patrick McHenry, also requested a hearing on Libra. He said, *“While there is great promise for this new technology in fostering financial inclusion and faster payments, particularly in the developing world, we know there are many open questions...”*. From our perspective, it sure sounds like bashing or at least investigating Libra (and its Facebook’s association), is the only thing Democrats and Republicans can agree on in Washington DC.

A Global Currency:

In our December 2017 bitcoin note, we questioned why global central bankers would allow cryptocurrencies to exist. Allowing bitcoin and other anonymous cryptocurrencies to thrive would undermine their ability to control monetary policy. While no central banker would ever say it, we think losing control over its currency is probably the single largest worry they have. Over the last year or so, we have seen several central banks and key regulators squash cryptocurrencies.

As we mentioned above, we think the currency basket approach that Libra is taking helps solves some of the volatility issues around cryptocurrencies. Creating a more stable valuation, should increase the odds of success. Even with this advantage over bitcoin and other cryptocurrencies, we do not believe global central bankers will allow a global currency to succeed. It sure sounds nice to say that we should allow young FINTECH companies to utilize modern technology and create new payment platforms for the benefit of the underbanked. The reality is that when the stability of the financial system is at stake, central bankers will intercede and take full control.

In addition to the House, we expect the Fed to scrutinize the implementation of Libra. On Wednesday June 20th, when asked about the launch of Libra, Fed chairman Powell said that the Fed has *“significant input into the payments system”*. Furthering his point, Powell emphasized that regulators *“have jurisdiction to enforce anti-money laundering regulations on any businesses that operates in the digital sphere.”* Just to emphasize the point (and insure that we don’t put the cart in front of the horse), Powell then said, *“We will wind up having quite high expectations, from a sort of safety and soundness and regulatory standpoint, if they do decide to go forward with something.”* Wow! **If** they decide to go forward doesn’t sound like a ringing endorsement for Libra.

The Libra Association immediately responded by stating, *“We welcome public inquiry and accountability. We are committed to a dialogue with regulators and policymakers. We share policymakers’ interest in the ongoing stability of national currencies.”* We question whether or not this statement was written by the Libra Association or by Facebook’s head of investor relations. In our opinion, it will be a challenge for Facebook to just be one of Libra’s founding members.

How To Join:

The goal is for the Libra Association is to be all-inclusive, but there clearly are some standards and requirements. Manole Capital will not be joining the Libra Association anytime soon and we are reminded of the great 1949 quote from Groucho Marx, where he said “I don’t want to belong to any club that would accept me as one of its members.”

To join the Libra Association, an entity must meet a slew of requirements. For starters, each founding member must invest \$10 million into Libra’s operations. We view this as the “cover charge” for entering the Libra bar. While this is too much for us, it is peanuts for others that want a “seat at the adult table”.



Payment members are Mastercard, PayPal, PayU, Stripe and Visa. Technology and marketplace members are Booking Holdings, eBay, Facebook, Farfetch, Lyft, Mercado Pago, Spotify and Uber. Telecommunication members are Iliad and Vodafone. Blockchain members are Anchoage, Bison Trails, Coinbase and Xapo. Venture Capitalist involved are Andreessen Horowitz, Breakthrough Initiatives, Ribbit, Thrive Capital and Union Square Ventures. Lastly, non-profits and academic institutions joined, including Creative Destruction, Kiva, Mercy Corps and Women’s World Bank.

Also, founding members need to meet a number of specific requirements. Businesses must exceed a threshold of a \$1 billion US dollar market capitalization, \$500 million in customer balances, reach 20 million

people a year and or be recognized as a top 100 industry leader (by S&P). Cryptocurrency investors must have more than \$1 billion in assets under management or custody more than \$100 million in assets. Technical requirements include a half rack of server space, a 100 Mbps of dedicated internet connection, a full-time site reliability engineer, as well as enterprise-grade security.

How Members Profit:

While the Libra Association says it is a not-for-profit organization goal, founding members potentially could be able to earn a profit down-the-road. Once Association members pay their initial \$10 million, they are given a Libra Investment Token. Their share of tokens translates into their proportion of any future dividend payments. Before they earn any revenue, founding members need to share in the operating costs of Libra, pay for infrastructure and engineering, and make important non-profit grants. Once all of these costs are factored in, Libra founding members may be able to earn additional revenue and profits. How?

The first revenue opportunity will come from interest payments. Libra members will get to share in the interest earned on Libra reserves (see above). We have seen some analysts estimate that Libra balances carried by potential users will

generate a huge amount of interest revenue. With interest rates in the US potentially headed down and European markets still dealing with negative rates, we do not believe this will amount to a significant revenue pool to share. Call us skeptical, when a business model is based off of profiting from interest rates. Have these people seen the stock prices of US or European banks?

The other aspect to consider, if Libra is successful and gains traction, is that digital wallets could leverage their customers and offer additional financial services. Kevin Weil is the head of products at Calibra and he recently discussed how Facebook could launch additional financial products and tools to monetize its customers. Could Facebook begin to sell investing tools or lending products to their embedded Calibra users?

Facebook could, but our research shows that this isn't a winner with Gen Z. Last month, our interns did a survey on roughly 200 of their Gen Z peers. In our banking note, [which can be read here](#), we found that Gen Z is not looking to get their banking and brokerage services from "Big Tech". We asked if Gen Z wanted to get banking services from Apple or Amazon or Google or Facebook. Our survey found that mixing social media and financial data is not a great combination. 2/3rd's of Gen Z said they weren't interested.

So, we do not believe the significant revenue exists for founder members to earn a return on their investment from interest payments. We also do not believe members will be able to monetize their users, to a great extent. So, what is the takeaway?

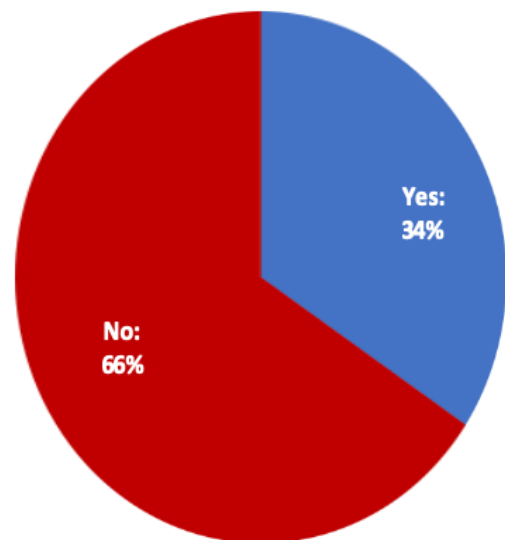
Maybe Libra will not be a money maker, but we hope it can help the underbanked handle payments and certain remittances. If successful, the biggest beneficiary may not be its founding members, but rather a large number of people that are currently on the outside looking in, for traditional financial services.

Conclusion:

It is way too early to tell if Libra will succeed. Like all good start-up's, Libra has a grand plan and vision. Who wouldn't want a new, no-cost global payments platform? The reality is that the payment ecosystem is very complicated and complex. Nothing happens quickly in payments, except for your current credit card transaction.

From our perspective, Libra is a better version of bitcoin, but it is still a theory or concept. We like how there are multiple (and powerful) players involved in the Libra Association. Most joint ventures, especially in the payment community, fail. One recent example is ISIS, which changed its name to CurrencyC, for obvious reasons. JV's typically struggle because one or two members look to push their agenda. Will all Libra Association founding members look to "play nice" with each other? The concept of "frien-emy" is cliché, but very apropos. Visa, Mastercard & PayPal are sworn enemies and actively compete in the market for accounts, banks and customers. While these payment firms might contribute some collective knowledge and expertise, we do not expect them to help construct a business that theoretically could hurt their long-term success. Will they help in governance and cooperate for the greater good of Libra? Sure, but do not expect them to unleash their best ideas and do anything that might disrupt the secular growth of the payments industry. Will Google or Apple or Amazon be comfortable joining Libra, if the perception is that it is Facebook's baby? We aren't so sure. If those

SWITCH TO TECH BANKING?



technology firms launched a similar venture, we would expect to see Visa and Mastercard and PayPal participate as founding members too.

If the cost of buying a billion dollar Powerball jackpot ticket is \$1, people will line up around the block to buy a ticket. I'm sorry to say it, but for Visa and Mastercard, a \$10 million investment (in something like Libra) is the equivalent of a \$1 lottery ticket for you and me.

We will not hold our breathe, waiting for the launch of Libra. It is the equivalent of a "concept stock", with no revenues, profits, or users. All it has is a nice collection of founding members, and a collection of hopes and dreams. We will closely watch its progress and attempt to understand its ramifications. We are long-term investors, with a heavy concentration of wonderful FINTECH companies. We believe that the perception that Libra is a Mastercard or Visa or PayPal killer, is way off base. Libra is trying to become simpler to set-up than a PayPal or Venmo account. It hopes to become a more ubiquitous payment method than Mastercard or Visa. It wants to create a more stable and efficient platform, with dramatically lower fees. Libra also wants to make its services available to nearly 2 billion people currently underserved by traditional banks. These are aggressive goals and we hope that Libra is successful. However, hope is not a reason to invest, at least from our perspective. While hope is nice, facts and reality are more important in our investment criteria.

In the event Libra is a success, we like that our payment companies are involved and have a "seat at the table". In the event Libra successfully helps the underbanked community, this would obviously be a negative for certain money transmitters or payday lenders. For our FINTECH portfolio, the impact would be negligible. Call us crazy, but we think our payment companies made a \$10 million "investment" in Libra, to simply keep a watchful eye on the evolution of the payments and cryptocurrency market.

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