AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

EXAMINING FACEBOOK'S PROPOSED CRYPTOCURRENCY AND ITS IMPACT ON CONSUMERS, INVESTORS, AND THE AMERICAN FINANCIAL SYSTEM

HEARING

BEFORE THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

JULY 17, 2019

Printed for the use of the Committee on Financial Services

Serial No. 116–40

U.S. GOVERNMENT PUBLISHING OFFICE
39–740 PDF WASHINGTON : 2020

HOUSE COMMITTEE ON FINANCIAL SERVICES

MAXINE WATERS, California, *Chairwoman*

CAROLYN B. MALONEY, New York
NYDIA M. VELÁZQUEZ, New York
BRAD SHERMAN, California
GREGORY W. MEEKS, New York
WM. LACY CLAY, Missouri
DAVID SCOTT, Georgia
AL GREEN, Texas
EMANUEL CLEAVER, Missouri
ED PERLMUTTER, Colorado
JIM A. HIMES, Connecticut
BILL FOSTER, Illinois
JOYCE BEATTY, Ohio
DENNY HECK, Washington
JUAN VARGAS, California
JOSH GOTTHEIMER, New Jersey
VICENTE GONZALEZ, Texas
AL LAWSON, Florida
MICHAEL SAN NICOLAS, Guam
RASHIDA TLAIB, Michigan
KATIE PORTER, California
CINDY AXNE, Iowa
SEAN CASTEN, Illinois
AYANNA PRESSLEY, Massachusetts
BEN MCADAMS, Utah
ALEXANDRIA OCASIO-CORTEZ, New York
JENNIFER WEXTON, Virginia
STEPHEN F. LYNCH, Massachusetts
TULSI GABBARD, Hawaii
ALMA ADAMS, North Carolina
MADELEINE DEAN, Pennsylvania
JESÚS "CHUY" GARCIA, Illinois
SYLVIA GARCIA, Texas
DEAN PHILLIPS, Minnesota

PATRICK MCHENRY, North Carolina, *Ranking Member*
PETER T. KING, New York
FRANK D. LUCAS, Oklahoma
BILL POSEY, Florida
BLAINE LUETKEMEYER, Missouri
BILL HUIZENGA, Michigan
SEAN P. DUFFY, Wisconsin
STEVE STIVERS, Ohio
ANN WAGNER, Missouri
ANDY BARR, Kentucky
SCOTT TIPTON, Colorado
ROGER WILLIAMS, Texas
FRENCH HILL, Arkansas
TOM EMMER, Minnesota
LEE M. ZELDIN, New York
BARRY LOUDERMILK, Georgia
ALEXANDER X. MOONEY, West Virginia
WARREN DAVIDSON, Ohio
TED BUDD, North Carolina
DAVID KUSTOFF, Tennessee
TREY HOLLINGSWORTH, Indiana
ANTHONY GONZALEZ, Ohio
JOHN ROSE, Tennessee
BRYAN STEIL, Wisconsin
LANCE GOODEN, Texas
DENVER RIGGLEMAN, Virginia

CHARLA OUERTATANI, *Staff Director*

CONTENTS

EXAMINING FACEBOOK'S PROPOSED CRYPTOCURRENCY AND ITS IMPACT ON CONSUMERS, INVESTORS, AND THE AMERICAN FINANCIAL SYSTEM

Wednesday, July 17, 2019

U.S. House of Representatives,
Committee on Financial Services,
Washington, D.C.

The committee met, pursuant to notice, at 10:13 a.m., in room 2128, Rayburn House Office Building, Hon. Maxine Waters [chairwoman of the committee] presiding.

Members present: Representatives Waters, Maloney, Velazquez, Sherman, Meeks, Clay, Scott, Green, Perlmutter, Himes, Foster, Beatty, Heck, Vargas, Gottheimer, Lawson, San Nicolas, Tlaib, Porter, Axne, Casten, Pressley, McAdams, Ocasio-Cortez, Wexton, Lynch, Adams, Dean, Garcia of Illinois, Garcia of Texas, Phillips; McHenry, Posey, Luetkemeyer, Huizenga, Duffy, Stivers, Wagner, Barr, Tipton, Williams, Hill, Emmer, Zeldin, Loudermilk, Davidson, Budd, Kustoff, Hollingsworth, Gonzalez of Ohio, Rose, Steil, Gooden, and Riggleman.

Chairwoman Waters. The Committee on Financial Services will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time.

Today's hearing is entitled, "Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System."

I now recognize myself for 5 minutes to give an opening statement.

Today, we are here for a hearing on Facebook's proposed digital currency, Libra, and digital wallet, Calibra, and their impacts on consumers, investors, and the financial system. Our first witness is David Marcus, Calibra's CEO. Following his testimony, a panel of experts will share their views on Facebook's plans.

I have serious concerns with Facebook's plans to create a digital currency and digital wallet and its effort to enlist partners that expand its reach, like MasterCard, PayPal, Visa, Uber, Lyft, and Spotify. Facebook is apparently trying to create a new global financial system that is intended to rival the U.S. dollar.

This venture is slated to be based in Switzerland, which has a history of being a monetary haven for criminals and shady corporations. Facebook's plans raise serious privacy, trading, national security and monetary policy concerns, not only for Facebook's over

2 billion users, who will have immediate access to these products, but also for consumers, investors, and the global economy.

In addition, Facebook has proposed backing Libra tokens with government currencies and government-guaranteed securities, and holding them in a so-called Libra Reserve, to be governed by Facebook and its partners. Ownership of government assets on such a massive scale without proper oversight threatens to concentrate government influence in the hands of a few elites.

Ultimately, if Facebook's plans come to fruition, the company and its partners will yield immense economic power that could destabilize currencies and governments. Facebook's proposed entry into financial services is all the more troubling because it has already harmed vast numbers of people on a scale similar to Wells Fargo, and demonstrated a pattern of failing to keep consumer data private, on a scale similar to Equifax.

Facebook remains under a 2011 consent order from the Federal Trade Commission for deceiving consumers and failing to keep consumer data private. In the wake of the Cambridge Analytica scandal, in which Facebook provided 50 million users' private data to a political consulting firm, the company will reportedly pay a record $5 billion fine to the FTC for data privacy failures.

In addition, Facebook has allegedly insecurely stored user passwords dating back to 2012, paid unsuspecting teenagers to download spyware, experienced a hack of nearly 50 million accounts, and experienced a software bug that granted third-party access to 6.8 million users' photos. It has also been sued by HUD and civil rights groups for violations of the Fair Housing Act, in what amounts to modern-day redlining. Facebook also allowed malicious Russian state actors to purchase and target ads in a campaign to influence the 2016 election.

I am also concerned about the lack of diversity in Facebook's upper ranks, and I fear that if these plans go forward, women and minorities, and women- and minority-owned businesses may be excluded from participating fully.

In light of these and other concerns, my colleagues and I wrote to Facebook earlier this month to call on it to cease implementation of its plans until regulators and Congress can examine the issues associated with a large technology company developing a digital currency, and take action. The Independent Community Bankers of America and others support this common-sense step. Facebook's plans also raise larger concerns about big tech's expansion into financial services, as it appears to inappropriately mix commerce and banking activities.

So today, we will discuss a draft bill, the Keep Big Tech Out of Finance Act, which would prevent large platform utilities like Facebook from becoming financial institutions and block them from creating their own currencies. Today's hearing is only the first step in our oversight and legislative process. I look forward to hearing from our witnesses.

The Chair now recognizes the ranking member of the committee, the gentleman from North Carolina, Mr. McHenry, for 5 minutes for an opening statement.

Mr. MCHENRY. We are here to go beyond the headlines. We are here to sift through the speculation and the hearsay. Here is just one of my favorite headlines which asks, “Is Facebook forming a Crypto Mafia as Libra Foundation’s Members Boost Each Other’s Businesses?” Washington must go beyond the hype and ensure that it is not the place where innovation goes to die.

Just because we may not fully understand a new technology proposal does not mean we should immediately call for its prohibition, especially when that proposal is just that, a proposal. But let’s face it. Let’s be honest. It is Facebook. And I am skeptical, but we can either make you a political talking point or we can choose to conduct thoughtful governmental oversight. That is my hope for this day: thoughtful government oversight.

The reality is whether Facebook is involved or not, change is here. Digital currencies exist. Blockchain technology is real and Facebook’s entry in this new world is just confirmation, albeit at scale.

The world that Satoshi Nakamoto, author of the Bitcoin White Paper, envisioned, and others are building, is an unstoppable force. We should not attempt to deter this innovation, and governments cannot stop this innovation, and those who have tried have already failed.

So the question then becomes, what are American policymakers going to do to meet the challenges and the opportunities of this new world of innovation? Some politicians want us to live in a permission-based society, where you need to come to the government, and ask for its blessing before you can begin to even think about innovating. Those are the politicians who would rather kill it before it grows.

But there are others who believe in the vibrancy of American ingenuity, American innovation, who recognize that our economy is built off of generations of entrepreneurs and innovators through competition, through testing, through tinkering, and through iterating, which got us here today.

To be clear, it is not about advocating for a break-it-and-figure-it-out-later approach, but when it comes to finances, we must ensure that consumers and investors are protected.

So, Mr. Marcus, let’s get to work. Let’s have that conversation. Let’s answer those questions. Instead of a knee-jerk reaction of banning something before it begins, my Republican colleagues and I want to first try and understand it, and, in turn, based off what we learn, determine whether or not our current regulatory framework meets the demands of this new technology. That is why we are here today.

Look, I don’t have a crystal ball. I have no idea if Libra will lead to greater financial inclusion, and lower remittance costs, which would mean families could send money to each other more cheaply and easily than today, or if it is just a ploy to shoot Facebook’s Twitter mentions through the roof. We will see.

But what I do know is this: Republicans stand ready to work with innovators to successfully implement responsible technology here in the United States, here, domestically, before we lose out to other countries around the world. So I ask my colleagues on both sides of the aisle to join together in supporting innovation, ingenuity, and the entrepreneurial spirit that this nation was founded upon.

I am grateful for this hearing. I called on Chairwoman Waters to have this hearing a month ago, and this is a bipartisan approach to oversight.

And with that, I would like to yield the balance of my time to Mr. Hill.

Mr. HILL. I thank the ranking member. This timely hearing touches on critical areas of jurisdiction within our committee: fintech innovation; oversight questions related to the use of and trading of cryptocurrencies; and the intersections of financial services and big data. We therefore must ensure that we are asking thoughtful questions, as we learn about and analyze these rapidly emerging trends.

As a former community banker, I understand the importance, with appropriate regulation and balance, to benefit American consumers, and as lawmakers we all need to ensure that all the companies that operate here in America, with American consumers, are in full compliance of those laws. America is evolving into a digital era, and we need to make sure that we are asking the right questions. I urge my colleagues to do that, but always trust but verify.

I yield back.

Chairwoman WATERS. Today, we have two panels. I want to welcome our first witness, Mr. David Marcus, chief executive officer of Calibra. David Marcus has been CEO of Calibra for the last 2 months and also identifies himself as working for Facebook. Prior to Calibra, Mr. Marcus explored blockchain and served as vice president for messaging products for Facebook. He has also served as president of PayPal and other tech companies.

Mr. Marcus, without objection, your written statement will be made a part of the record. You will have 5 minutes to summarize your testimony. When you have one minute remaining, a yellow light will appear. At that time, I would ask you to wrap up your testimony so we can be respectful of both the committee members' time and others.

Mr. Marcus, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF DAVID MARCUS, HEAD OF CALIBRA, FACEBOOK

Mr. MARCUS. Thank you, Madam Chairwoman. Chairwoman Waters, Ranking Member McHenry, and members of the committee, thank you for the opportunity to appear before you today.

My name is David Marcus and I am the head of Calibra at Facebook. For most of my life I have been an entrepreneur, building products aimed at improving people's lives. For many years, my focus has been financial services. I became PayPal's president after it acquired my last startup, and I moved to Facebook about 5 years ago to run Messenger, and more recently to lead our blockchain efforts.

In my written testimony, I describe the mechanics of Libra. Today, I want to explain why I am optimistic about what Libra can offer the world. But before I get there, I want to make clear that we recognize we are only at the beginning of this journey. Federal Reserve Chairman Powell has said publicly that the process for launching Libra needs to be patient and thorough, rather than a sprint to implementation. Treasury Secretary Mnuchin reinforced those views at his recent press conference.

We strongly agree with both of them. We will take the time to get this right. We expect the review of Libra to be among the most extensive ever. We are fully committed to working with regulators, here and around the world. Chairwoman Waters, speaking on behalf of Facebook, I pledge to you that Facebook will not offer the Libra digital currency until we have fully addressed regulators' concerns and received appropriate approvals.

I would like to start by sharing the vision for Libra. Libra is intended to address an important problem. Imagine a daughter who wants to send money home to her mom in another country. Of the $200 she sends, $14, on average, will be lost because of fees. It can also take several days or even a week for the mother to receive the money, a delay that can prove disastrous in an emergency. Not to mention lines may be long and collection points may be in high-crime areas.

But it doesn't have to be that way. Wouldn't it be easier and safer if people could securely and inexpensively receive money transfers through their smartphones, just like they do for so many other things today? That is what Libra is about, developing a safe, secure, and low-cost way for people to efficiently move money around the world.

To realize Libra's promise, Facebook and 27 other organizations have founded the independent Libra Association. These include companies in the payments technology, telecommunications, blockchain, and venture capital industries, and nonprofits like Women's World Banking, who is here today, along with staff from the Libra Association.

The Libra Association will govern the Libra blockchain network and administer the Libra reserve. It will establish the rules of the road and will prioritize privacy and consumer protection, and it will implement safeguards that require service providers in the Libra network to fight money laundering, terrorism financing, and other financial crimes. We expect these safeguards will at least meet, if not exceed, existing standards and improve the integrity of the global financial system.

When fully formed, we expect the Libra Association to include 100 diverse members. Facebook will only have one vote and will not be in a position to control the association, nor will Facebook or the Libra Association position themselves to compete with sovereign currency or interfere with monetary policy. In fact, the Association will work with the Federal Reserve and other central banks to minimize the risk of any competition with their currencies or interference with their monetary policy. These areas are properly the province of central banks.

Finally, I would like to turn to Facebook's role in realizing the potential of Libra. To facilitate Libra's use, Facebook has established a subsidiary, known as Calibra, that will offer one of many digital wallets on the Libra network. Using the Calibra Wallet, consumers will be able to save, spend, and send Libra right from their smartphones. If this is successful, Facebook will benefit from more commerce across the family of apps that it operates.

Calibra will be affordable and accessible and also be safe and secure, with strong safeguards to protect users' accounts and information. We expect that the Calibra Wallet will be governed by rules administered or enforced by FinCEN, OFAC, and the FTC. It will also be regulated by State financial regulators.

Calibra is committed to protecting the privacy of its customers. The Calibra Wallet will not share individual customer data with the Libra Association or even with Facebook except for limited circumstances such as preventing fraud or criminal activity in complying with the law.

I am excited about the potential that Libra and Calibra hold, and I am proud that we have initiated this effort here in the United States. I believe that if America does not lead innovation in digital currency and payments, others will. If our country fails to act, we could soon see a digital currency controlled by others whose values are dramatically different from ours. I believe that Libra can drive positive change for many people and can provide an opportunity for leadership consistent with our shared values.

I look forward to answering your questions.

[The prepared statement of Mr. Marcus can be found on page 164 of the appendix.]

Chairman WATERS. Thank you. I now recognize myself for 5 minutes for questions.

Mr. Marcus, Facebook's 2.7 billion users entrust you with their most intimate thoughts, pictures, feelings, ideas, and sensitive information. Yet at every opportunity to demonstrate growth, competence, and responsibility, Facebook has let us down.

As I already noted, Facebook has a long list of scandals, including its repeated failures to safeguards its users' data. You said that we don't need to trust Facebook because it will only be one of 100 members in the Libra Association that will manage this project. But that is not entirely true, is it? The project was Facebook's idea. Facebook is spearheading it and recruiting partners. Facebook's subsidiary, Calibra, will provide consumers with a digital wallet to store Libra tokens. As I understand it, no member of the Association has paid anything towards the project.

So my question is, why should we trust Facebook to do these activities?

Mr. MARCUS. Thank you, Madam Chairwoman. I think trust is really essential, and it is clear that we have made mistakes. I believe we are owning these mistakes and working hard in remedying them and working hard at improving on all fronts.

But as far as the Libra Association is concerned and the way that this project has been developed, we have invested everything that has been invested so far in Libra—you are absolutely right—and we have built all of the code base, the technology, up to this point. But we have also given, donated, if you will, the technology, because it is now open source for the whole world to be able to use and leverage. As a result, we are not controlling the code base, and by the time we launch, we will be one of 100 members with no special privilege.

As far as the wallet is concerned, I believe that the idea here is that one day we will launch and suddenly 2 billion people will arrive on the Calibra Wallet. This is not the approach we are taking.

People will have to open specific Calibra accounts, so they are not going to be able to use their Facebook account. They have to open new accounts. And in order for them to do that they will have to upload a government-issued ID to identify, so that we can meet our Know-Your-Customer (KYC) requirements.

Chairwoman WATERS. Thank you. Mr. Marcus, I can appreciate that you understand that there is a trust problem here, given its disregard for U.S. law and its massive scale. I think foreign countries could find it difficult to effectively regulate Facebook, Libra, or Calibra. It is not clear the Federal Reserve or other U.S. regulators have the authority to regulate you, and yesterday the Swiss regulator, that you are saying would regulate you, actually said that it has never been contacted by Facebook about this project.

So, Mr. Marcus, you responded to a request by members of this committee for a moratorium on your activities by stating that you would continue to work with regulators before going forward, but if the regulators lack the authority to adequately oversee you, how can you work with them to resolve concerns? Will you stop kind of dancing around this question and commit here, in this committee, before the duly elected Representatives of the American people, to a moratorium until Congress enacts an appropriate legal framework to ensure that Libra and Calibra do what you claim it is intended to do, which to serve the public good?

Let me just say that we are all in support of innovation. It is not one side of the aisle versus the other side of the aisle. But if you talk to any member on this committee, they will know nothing about Libra. They will know nothing about Calibra. They will know nothing about how it is organized. They will know nothing about the role that Facebook is going to play in this big association that now has 28 companies and is looking to get 100 companies.

And so despite the fact that we all support innovation, and we all understand what is important for our economy to grow, and for development and for the future of this country, we need to be on top of and understand something as massive as this project, and that does not mean we don't support innovation.

With that, I will turn to the gentleman—well, yes, if he has time to answer. Please, go right ahead.

Mr. MARCUS. Chairwoman Waters, I agree with you that this needs to be analyzed, understood, and the proper oversight needs to be set up before Libra can launch, and it is in this spirit that we released a White Paper very early, before any launch, so that we could have the time to engage with all of the proper regulators and central banks and lawmakers to ensure that we will get this right. And this is my commitment to you, Madam Chairwoman. We will take the time to get this right.

Chairwoman WATERS. Thank you very much. The gentleman from North Carolina, Ranking Member McHenry, is recognized for 5 minutes.

Mr. MCHENRY. I want to keep this simple. Mr. Marcus, I have read your White Paper. I understand the nature of digital currency and digital technology. What is a Libra?

Mr. MARCUS. Congressman, Libra is a digital currency, a Reserve-backed digital currency.

Mr. MCHENRY. Is it a security?

Mr. MARCUS. We don't believe it is, Congressman.

Mr. MCHENRY. Is it a commodity?

Mr. MARCUS. Congressman, based on current U.S. law I believe it might be a commodity, but we see it as a payment tool.

Mr. MCHENRY. Is it an exchange-traded fund?

Mr. MARCUS. It is not, Congressman.

Mr. MCHENRY. Okay. So it is none of the above, in any pure form, like other digital currencies. Correct?

Mr. MARCUS. Congressman, it is designed to be a payment tool.

Mr. MCHENRY. A payment tool. Okay. So if it is none of the above in our current structure, what I am really getting at is, how do you comply with regulations?

Mr. MARCUS. Congressman, the way that we comply with regulations is in a number of ways. First, as far as the Calibra Wallet is concerned, it is registered as a money services business with Treasury, and with FinCEN. It is applying, and has received a number of State licenses, and will operate the same way that other wallets operate, as far as—

Mr. MCHENRY. That is Calibra. I am asking about Libra.

Mr. MARCUS. As far as the Libra Association is concerned, these are active conversations we are having, notably with the working group of the G-7, as well as FINMA, which is the Swiss financial regulator.

Mr. MCHENRY. Okay. So there is tension between the notion of a decentralized currency, or something decentralized, and ultimately privacy, and ultimately anti-money- laundering and Know-Your-Customer elements. These things stand in conflict with one other and are very difficult things to resolve.

In your White Paper, you say that after 5 years, there will be a transition point, and you will go from a permission-based to a permission-less system. Post-transition, how do you reconcile the need for controls which allow you to comply with anti-money-laundering and Know-Your-Customer (KYC) regulations, with that decentralized notion of a fully decentralized digital currency?

Mr. MARCUS. That is a very good question, Congressman, and the way that this will work is that the association will still have the ability to set the rules when it comes to anti-money-laundering programs, and CFT and KYC requirements for the network. And what we expect, even when the network transitions to permission-less, without getting lost in the weeds, is that the vast majority of validators will likely be the ones providing services, so likely larger companies.

Mr. MCHENRY. So you are saying in the nature of the wallet, that is how you get to anti-money-laundering, and Know Your Customer, not the nature of the digital currency. So going from a permissioned system, with these nodes, ultimately 100, to a permission-less system, you are saying it is not going to be the nature of that technology of a Libra. It will be in the nature of the wallets on either side of this?

Mr. MARCUS. That is correct, Congressman, but on top of that the Libra Association will continue to have an AML program and will still be under the supervision of FinCEN.

Mr. MCHENRY. Okay. So getting into that question of anti-money-laundering provisions, and complying with FinCEN, is your view that you are going to be like Western Union, or is it going to be your view that you are more like your former employer, PayPal?

Mr. MARCUS. Congressman, I believe that it depends on the entities that you are talking about, as far as the wallets are concerned. It will definitely be more like the PayPal types of businesses that operate in the payment space. And as far as the Libra Association is concerned, that is the conversation we are having, because—

Mr. MCHENRY. So is it your view that the development internally at Facebook is for you to be a competitor to Alipay and to WePay?

Mr. MARCUS. Congressman, yes.

Mr. MCHENRY. And to be a competitor to Venmo and PayPal?

Mr. MARCUS. Congressman, so yes, we have a number of wallets that are working with us on the network side but that will compete on the wallet side, on the network.

Mr. MCHENRY. Will that consumer data be kept separate or a part of the Calibra data collected from consumers? Will that be a part of Facebook's overall knowledge of consumers or will it be separate and distinct?

Mr. MARCUS. No, Congressman, we will make a strong commitment to keep that data separated from social data.

Mr. MCHENRY. Separate and distinct.

Mr. MARCUS. Yes.

Mr. MCHENRY. Final question here: If you are seeking to be a competitor to Alipay and to WePay, why are you doing this in Switzerland and why are you using a basket of currencies? Why not the good old American dollar, and to bring down the transaction costs, which is seemingly the ultimate goal here?

Mr. MARCUS. Congressman, first I want to say that the choice of Switzerland has nothing to do with evading responsibilities or oversight. The goal with Switzerland is to home this Libra Association in an international place that is the home of—

Mr. MCHENRY. Okay. Skip beyond that.

Mr. MARCUS. So that is really why. The second thing is for the same reason we would like for Libra to be a digital, global currency, and as a result to be one unit of digital currency for the whole world, and this is why we believe it was the right approach.

Mr. MCHENRY. Thank you.

Chairwoman WATERS. The gentlewoman from New York, Mrs. Maloney, who is also the Chair of our Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets, is recognized for 5 minutes.

Mrs. MALONEY. Thank you. Mr. Marcus, as you can see there are a lot of questions about this project. It is big and very bold. Some would say it is too bold. The Chairman of the Federal Reserve, Jay Powell, was in here just last week saying that he thinks it could be a systemic risk. The former Chairman of the CFTC, Gary Gensler, is going to testify later that he believes it should be covered by the Investment Company Act. So we have a lot of concerns and a lot of questions.

And I take it that it is a "no" to the chairwoman's question about requesting a moratorium on Libra until policymakers can figure out how to handle it. Was that a yes or a no to her question, when she called for a moratorium?

Mr. MARCUS. Congresswoman, the commitment is that we will not launch until we have addressed all concerns fully and have the proper approval.

Mrs. MALONEY. Okay. I take that as a "no." So what I want to ask you is, will you commit, right here in this hearing room, to walk before you run? Will you commit to doing a small pilot program for Libra first, limited to no more than 1 million users, and overseen by the Federal Reserve and the SEC? Will you commit to that?

Mr. MARCUS. Congresswoman, the steps we have taken—and this is the reason why we announced the White Paper in the plans, instead of launching and then figuring it out after, which is what happens sometimes with technology products, most often, actually. In this very care, we are deliberate about taking the time to get this right—

Mrs. MALONEY. With all due respect, that is not what I asked you, and given the lack of trust that people have in Facebook—you breached the trust of users over and over again. Just last week you were reportedly fined $5 billion for selling your users' private data without their knowledge or permission.

So I would like to ask you again, will you commit to walking before you run? Because if you go ahead and launch Libra without doing a pilot program first, there are too many risks. The Libra reserve could be managing too much money, which could make it systemic, too much money could be pulled out of banks in order to buy Libra, which former FDIC Chair Sheila Bair has written about and warned about. So, the risks are very great.

Now personally, and this is only my own personal belief, I don't think you should launch Libra at all, because the creation of a new currency is a core government function and should be left to democratically accountable institutions that are accountable to the American people. But at the very least you should agree to do this small pilot program first, fully overseen by you and the Federal Reserve and the SEC. I think that is a modest request.

So will you commit right now to doing a small pilot program first? Yes or no?

Mr. MARCUS. Congresswoman, we will continue to engage with regulators and the working group at the G-7 that is notably looking after the issues that you raised to ensure that however we launch this it is responsibly and it is with the appropriate oversight, in a very responsible way. You have my commitment on that.

Mrs. MALONEY. If you will not commit to testing this out as a pilot program first—I think it is a reasonable request—then I think that Congress should seriously consider stopping this project from moving forward.

There is a lot of concern about Facebook. A lot of people think that it has really become too powerful, that it has become a monopoly. And now you are telling us that Facebook's digital wallet for Libra, called Calibra, will be the only wallet that can be embedded into What's App and Facebook Messenger. Given how dominant these two apps are, I think that raises serious concerns about market concentration, and potentially, monopoly concerns.

So will you commit to allowing third-party wallets on What's App and Facebook Messenger?

Mr. MARCUS. Congresswoman, may I answer the one point about what you said earlier? I just want to address it really quick, which is that the current system is really not working for people, and for way too many people, and others are leading and plowing ahead, and I believe that if we don't—

Mrs. MALONEY. Please, sir, would you answer my question? I get to ask the questions in this committee. Will you commit to allowing the third-party wallets on What's App and Facebook Messenger? Yes or no? It is a simple question. Yes or no?

Mr. MARCUS. Congresswoman, other wallets are going to actually be interoperable with the Calibra Wallets that will be integrated in What's App.

Mrs. MALONEY. So do you believe in competition and market access? If you believe in it, then you would allow them to be embedded also, third party. Will you allow it?

Chairwoman WATERS. The gentlelady's time has expired.

Mrs. MALONEY. Thank you.

Chairwoman WATERS. The gentlewoman from Missouri, Mrs. Wagner, is recognized for 5 minutes.

Mrs. WAGNER. Thank you, Madam Chairwoman. I am concerned that a 2020 launch date demonstrates deep insensitivities around how Libra could impact U.S. national security, the global financial system, the privacy of people across the globe, criminal activity, and international human rights.

Mr. Marcus, I have a number of questions so let's try and move as expeditiously as possible. Are you taking any steps to ensure that the dollar is not overtaken as the leading international currency that undergirds global economic stability?

Mr. MARCUS. Yes, Congresswoman, and the first of many steps is that the dollar is most likely going to be the predominant part of the reserve.

Mrs. WAGNER. It is 58 percent, generally speaking, euro about 19. I don't know what your numbers are, in terms of—

Mr. MARCUS. Congresswoman, first, the dollar will be one of the predominant currencies backing Libra, and then the other part is really the engagement that we currently have with the G-7 working group, with the Fed, and with the Financial Stability Board. We will continue to engage in those conversations.

Mrs. WAGNER. I serve also as the vice ranking member of the House Foreign Affairs Committee, and I am hoping to understand how the U.S. Government could effectively implement sanctions if Libra were to take off. As you likely know, North Korea uses cryptocurrencies to evade our sanctions all the time. If the Treasury Department demanded that the Libra Association blacklist certain Libra addresses in order to comply with U.S. sanctions, how would Libra respond?

Mr. MARCUS. Congresswoman, I want to make a strong point here because it is really important. Whether Libra launches or it doesn't launch, there will be other networks. There are other networks. There are other cryptocurrencies. And those are not coming here—

Mrs. WAGNER. You are not suggesting that if it is okay if others evade U.S. sanctions, then it is okay if Libra does?

Mr. MARCUS. I am absolutely not saying that, Congresswoman. That is why I am saying that we are here and we are engaging with FinCEN. The Libra Association will be also registered with FinCEN, and we will have strong AML and KYC programs, as well as from all of the wallets operating here in the United States, of course full enforcement of sanctions, and then some.

Mrs. WAGNER. Libra could have significant geopolitical implications, frankly, from a human rights perspective, for instance. Despotic leaders could ban Libra and penalize users. How are you approaching establishing appropriate human rights safeguards as you develop the Libra platform?

Mr. MARCUS. Congresswoman, I believe that one of the driving forces of the association being financial inclusion, we will have the right representatives around the table—

Mrs. WAGNER. Which specific organizations, because your folks sure couldn't answer that yesterday when I asked—which ones are you specifically working with to address potential human rights impacts?

Mr. MARCUS. We have Mercy Corps, Women's World Banking, and Kiva that are already founding members of the Libra Association, and there will be more organizations that have dedicated all of their lives and energy in addressing the very problems that you are raising.

Mrs. WAGNER. I am curious to understand how you think the Libra platform would interact with Section 230 of the Communications Decency Act, which prevents State and local law enforcement from protecting citizens from illicit activities, for instance, if Libra is explicitly being used to further a criminal act negotiated on Facebook Messenger.

Mr. MARCUS. Congresswoman, Section 230, as I understand it, is relating to the Facebook technology product and we have the protections of Section 230. I don't believe that this applies to payments.

Mrs. WAGNER. Terrorists and criminals use Facebook to fundraise, to recruit, and to connect with buyers. Facebook's moderation just does not seem up to the task and Libra could make it, I believe, even easier for these nefarious actors to move money. Before launching Libra and potentially compounding the situation, how will you be addressing the digital back-markets that run rampant on the Facebook platform?

Mr. MARCUS. Congresswoman, the first way we will do that is ensuring that on the Calibra Wallet, everyone who opens a Calibra account has to identify with a government-issued ID, and as a result we will have strong identity and a fullly staffed team to address—

Mrs. WAGNER. My time has expired. I yield back to the Chair. I have other questions I will submit for the record. Thank you.

Chairwoman WATERS. Thank you. The gentlewoman from New York, Ms. Velazquez, is recognized for 5 minutes.

Ms. VELAZQUEZ. Thank you, Madam Chairwoman.

Mr. Marcus, we do not want to stifle innovation, but we do have a healthy dose of skepticism. This is not Silicon Valley. You cannot work out problems as you go. So all of those problems need to be resolved and worked out before you launch Libra.

So for the third time on this side, I pose the question to you: Will you commit yourself to not launch Libra before all the concerns from the Federal Reserve and all the regulators are addressed? Yes or no?

Mr. MARCUS. Absolutely, Congresswoman, and I want to reiterate this commitment that this was the spirit in which we announced early, and we will do what is right to address—

Ms. VELAZQUEZ. Okay. I just want a yes-or-no answer. Thank you.

Mr. Marcus, we gave the Federal Reserve increased oversight over non-banks. We don't know yet what you are. If the FSOC designated you a SIFI, would you submit to enhanced oversight?

Mr. MARCUS. Congresswoman, I don't believe that the—

Ms. VELAZQUEZ. But you don't know what you are, so—

Mr. MARCUS. No, but Congresswoman, the Libra Association or Calibra have no plans to engage in banking activities, and as far as the Calibra Wallet is concerned, we will be active in the payment space, like many other non-banks are active in the payment space. But that said, we will, of course, comply with all regulations.

Ms. VELAZQUEZ. We want to make sure that companies that do not fall into the normal bucket of regulatory authority could not threaten the U.S. financial system. So I would like to ask you, according to the Libra Association's White Paper, members of the Libra Association will consist of geographically distributed and diverse businesses, nonprofit and multilateral organizations, and academic institutions.

Sir, by what criteria were the initial members of the association chosen?

Mr. MARCUS. Thank you for your question, Congresswoman. The way that the initial members joined was a result of a wide outreach, and it is a combination of companies that can accelerate the acceptance and utility of Libra, companies like Uber and Lyft and Spotify, that can accelerate the acceptance of Libra within current merchant networks, like Visa and MasterCard, that can inform how to drive financial inclusion, like Mercy Corps, Kiva, and Women's World Banking. And now, the Libra Association is starting that phase of welcoming more members that will be even—

Ms. VELAZQUEZ. Okay. I hear you. You want to get to 100, right?

Mr. MARCUS. That is correct, Congresswoman.

Ms. VELAZQUEZ. So if a member were to determine that they no longer wish to participate in the association, what is the process for withdrawal?

Mr. MARCUS. Congresswoman, at this stage we are in the process, all of us, the 28 organizations, of ratifying the charter, and as a result of this process—

Ms. VELAZQUEZ. So you don't know yet.

Mr. MARCUS. No. As a result of this process, if members do not wish to participate they can drop, and there will be a process on an ongoing basis for members that do not wish to participate.

Ms. VELAZQUEZ. So do you think a member's withdrawal could threaten the value of the Libra currency?

Mr. MARCUS. No, I don't believe that's the case, Congresswoman.

Ms. VELAZQUEZ. Mr. Marcus, according to the Libra Association's White Paper, the Libra Association has a target launch of the first half of 2020. When do you expect the Association's charter to be finalized, and will the charter be available for review by regulators, lawmakers, and the public?

Mr. MARCUS. Absolutely, Congresswoman.

Ms. VELAZQUEZ. This question was asked before, so I will yield back the balance of my time.

Chairwoman WATERS. Thank you. Point of clarification, Mr. Marcus, did you commit to the moratorium, or to Ms. Velazquez?

Mr. MARCUS. Madam Chairwoman, I committed to waiting—

Chairwoman WATERS. Excuse me. I just need a yes or no.

Mr. MARCUS. Madam Chairwoman, I just want to be precise. I committed to waiting for us to have all the appropriate regulatory approvals and to have addressed all concerns before we move forward.

Chairwoman WATERS. Thank you very much. That is not a commitment. I wanted to clarify that.

The gentleman from Arkansas, Mr. Hill, is recognized for 5 minutes.

Mr. HILL. I thank the chairwoman. Mr. Marcus, again, thank you for being here. I wanted to talk a little bit about what appears to be a core business element for Calibra and that is the issue of remittances. The World Bank says that the single most important challenge in remittances around the world is lack of transparency and cost, and the average cost of global remittances is about 7 percent. So tell me what fees you will be charging for moving money inside the Calibra system?

Mr. MARCUS. Congressman, the goal for Calibra is to charge very little or nothing at all for transactions, for person-to-person (P2P) transactions. We are hoping that we can offer that part of the service for free.

Mr. HILL. And then, therefore, on B2B or B2P, you would be charging something in Libra currency, fractional Libra currency?

Mr. MARCUS. There will likely be small merchant fees that will be competitive, very competitive with the current fees that are paid by merchants.

Mr. HILL. And inside the Calibra system, you will earn revenue from advertising as well?

Mr. MARCUS. No, Congressman. No advertising in Calibra. The Calibra revenue streams, when we start working on that, which we haven't at all and we don't plan to for a number of years, will likely be by offering a range of financial services in partnerships with existing financial institutions and banks.

Mr. HILL. And so in those remittances, which are so important to countries all over the world—we know what percentage of GDP remittances represent—particularly in Central America, and in Mexico, where I think it is the third-largest source of hard currency, for example, 20 percent in Honduras—both sides of that equation would be subject to KYC?

Mr. MARCUS. Yes, Congressman. On the Calibra Wallet, you will not be able to open an account without having proper KYC.

Mr. HILL. And one of the issues in the Third World, obviously, is they don't have a stable currency and are subject to inflation, terrible inflation. I think I read a note that 94 countries, representing 48 percent of the world's population and 16 percent of world GDP, experience, on a regular basis, 10 percent or more inflation per year.

So is it your view that the Calibra Wallet will have a more stable currency than their local currency, or more stable value, I should say, than their local currency?

Mr. MARCUS. Congressman, the way we've designed the reserve, and again, subject to proper oversight and review from the G-7 working group and others, is to have a very stable value-retentive digital currency. So, yes, it will be a very high-quality digital currency, in a number of countries that are currently receiving a lot of their income from abroad, they will now receive a lot of their income from abroad in a stable currency that will retain its value.

Mr. HILL. What do you think, though, about—obviously many of those same Third-World countries, and some larger than Third World, have very strict controls on foreign currency. They have currency controls. They have currency boards. They don't allow their consumers to take action outside their home currency and they don't allow their home currency to be taken out of the country. How does Libra plan on dealing with that?

Mr. MARCUS. Congressman, this is going to be a country-by-country answer. There are lots of countries that have the problems you highlighted and that don't have currency controls, that we think we can address right away. And then for other countries, it will definitely be a country-by-country approach.

The one thing I want to highlight, though, is the fact that any wallet—not only Calibra—that is actually built on top of the Libra network will be interoperable with one another, meaning that to provide the value that we intend to provide for so many people, we don't need to be the only wallets, and in certain regions it will be other wallets, but they would still benefit from interoperability.

Mr. HILL. I thought that was an interesting conversation with my friend from New York about the exclusivity of the wallet, Calibra Wallet, at What's App, for example. You do plan on having—and you have 100 members that are not interested in Facebook having any more monopoly than they do now, so would you have Visas, or debit or credit systems available as a wallet?

Mr. MARCUS. Congressman, we will have a number of other payment methods for commerce on the Facebook platform, and Instagram as well, including debit, credit cards, other wallets. And as far as P2P payments, there will be more—

Mr. HILL. There will be competition on P2P payments, even on Facebook's application?

Mr. MARCUS. There will be on traditional currencies, the same way that in Messenger, you can currently use debit cards to do P2P.

Mr. HILL. I yield back. Thank you, Madam Chairwoman.

Chairwoman WATERS. The gentleman from New York, Mr. Meeks, who is also the Chair of our Subcommittee on Consumer Protection and Financial Institutions, is recognized for 5 minutes.

Mr. MEEKS. Thank you, Madam Chairwoman, and Mr. Marcus, thank you for your testimony.

I can say, with confidence, that Lehman Brothers, Bear Stearns, and the entire subprime mortgage ecosystem did not set out to bring the global financial system to its knees. I can say, with confidence, that the legitimately brilliant minds and Nobel prize-winners, in fact, behind LTCM, did not set out to trigger the Asian financial crisis, but they nearly broke the global markets. And I can also say, with confidence, that the deregulation of the early 1980s and bankers did not set out to trigger the savings-and-loan crisis, but they did.

Not only that, they all typically founded their logic and innovation, expanding access to financial services, and arguments of inclusion, and yet they all broke the system, and the people at the bottom of the socioeconomic ladder systemically paid the heaviest price.

So you may be speaking earnestly when you tell us your lofty goals, but I was here in Congress when Secretary Paulson came to us and told us we were within days of a complete shutdown of the global financial system. Now, I don't expect you to understand what that was like, but I assure you it was absolutely terrifying and one of my worst moments in Congress.

I want America to remain a global leader in financial services innovation, and I believe that we have regulators, et cetera, that are the best in the world. But let's do this. Let's assume that Facebook manages to get even just 10 percent of its current user base to the Facebook Libra wallet. Do you understand that that would absolutely make you a systemically risky financial institution, and that we would expect FSOC to designate you as such, and the Fed to create a special regulatory oversight program for Facebook accordingly? Would you agree to this?

Mr. MARCUS. Congressman, first of all I want to recommit, we will actually—

Mr. MEEKS. Yes or no? Would you agree to this?

Mr. MARCUS. I do want to share that if we have 10 percent of the Facebook—

Mr. MEEKS. I only have a small amount of time.

Mr. MARCUS. I want to answer your question to the best of my ability, Congressman, and if we had 10 percent of our user base, which is 200 million people, using a Calibra Wallet, we would be the same size as many other non-bank payment wallets around the world, including here in the U.S., including another one that is part of the—

Mr. MEEKS. Let me reclaim my time. You are not answering my question, because even banks, anybody that is holding money would be considered a bank.

Let me ask this. Do you agree that, defined simply, an organization that holds deposits and makes loans is a bank? Similarly, banks, in the past, did issue their own currency, or IOUs, and clear their payments. Finally, some banks are run as nonprofit organizations or cooperatives. Therefore, are both Facebook and Libra organizations planning to establish bank holding companies with full organization and capital structure we require to protect the global financial system from systemic risk and systemic collapse?

Mr. MARCUS. Congressman, we will not engage in banking services. We will focus on payments.

Mr. MEEKS. You are taking people's money, right, and you are holding their money, correct?

Mr. MARCUS. Congressman, the same way that you have Venmo and PayPal and Square Cash and a number of other payment companies.

Mr. MEEKS. So what you are telling me is you are not going to organize as a bank—you didn't answer my first question—which would put you under the regulations of FSOC and others, so that we can make sure that there is no systemic risk here, because of what you are doing and your size that could bring down the entire Federal Government, the entire financial services industry, but let me ask you one more question. I have 40 seconds.

In the Dodd-Frank Act, we established the CFPB to serve as a financial regulator focused specifically on the best interests of consumers. Do you believe that the CFPB currently has authority over both the Libra organization and the Facebook Libra wallet? And why did you not conclude—well, do you think the CFPB has jurisdiction?

Mr. MARCUS. Congressman, we are engaged in conversation with all FSOC agencies, including CFPB, and it is not for me to decide who has appropriate oversight.

Mr. MEEKS. Why didn't you include compliance with CFPB in your prepared testimony?

Mr. MARCUS. Congressman, this is because we are currently engaged with all of these agencies, and I wanted to share where we were right now, at this point in time, with the knowledge that we have at this time. But we will have a more complete outreach by the time we are ready for launch, because we are going to take the time to get this right.

Chairwoman WATERS. Clarification. I understand that you are absolutely opposed to FSOC's oversight and that you don't think they should be allowed to designate you as a SIFI. Is that right?

Mr. MARCUS. Madam Chairwoman, I am not opposed to any regulation, and we have had conversations with FSOC.

Chairwoman WATERS. Thank you very much. Thank you. We will move on to the next person.

The gentleman from Missouri, Mr. Luetkemeyer, is recognized for 5 minutes.

Mr. LUETKEMEYER. Thank you, Madam Chairwoman. Over here, Mr. Marcus. Thank you.

You made a statement a while ago where you said that the current system is not working, and that concerns me because I think the current system is working. It is not working as efficiently, maybe, as you would like to see it work, but I think the system right now works because it is kind of traffic control. And if you are on a country road, and you have 5 cars going through an intersection, you don't need traffic control and you can go, whatever you want to do, and it doesn't cost you any time to go through an intersection.

If you have an intersection that has 30,000 cars a day going through it, you need some traffic control to go through there, to protect people, for safety purposes, to be able to transact their ability to go through that thing in an efficient way. And I think you're talking about the size and scope of money transactions, and, yes, it costs a little bit of money right now to be able to transfer money around the world, but that is because of safety and security concerns, as well as the mechanisms that are in place to be able to do that.

I think what you are trying to do is take away some of those costs, but we are concerned about the safety and transactional transparency, what is going on here. So the system is working but you would like to improve it, is what I think you meant to say a while ago. Is that right?

Mr. MARCUS. Congressman, first, I really believe that the system is not working for way too many people right now, and I don't believe that the reason the people who earn less and who have less pay more is because of the regulation and having KYC and AML. I believe we can do that technology at a much lower cost.

Mr. LUETKEMEYER. What you just said, though, is you agree that the system is working. It is just not working as efficiently as you would like to see it, so I accept that.

A while ago, you said that you want to offer more financial services as you go down the road, and just a minute ago, you said you wanted to offer no banking services. So, which one is it? Are you going to have deposits down the road that you pay interest on? Are you going to take deposits at all? Are you going to have lending that you are going to be doing, to some of the customers? What kind of financial services or banking services are you intending to grow into?

Mr. MARCUS. Congressman, it is too early, but if we are to engage in those services we will partner with existing banks and financial institutions the same way that other payment companies have done it. I am talking here exclusively about the Calibra Wallet, and I think I need to be precise here.

Mr. LUETKEMEYER. Okay. With regards to the specific assets that you are going to hold in reserve, who puts the money in? Who puts the assets in to begin with? Who owns those assets? What do you do with any dividends or interest or any returns on those investments that you make? Who shares in those profits?

Mr. MARCUS. Congressman, the way the reserve is built is if consumers buy into Libra, the fiat money they use to buy Libra ends up in the reserve and is actually custodied with large banks, or potentially a better form of custody, even, depending on the outcome of some of the conversations we're having with the G-7 working group and the recommendations that they will come with. And so the reserve is always proportional to the number of Libra coins in circulation.

And if the reserve generates a return, it will be used for two things: number one, to pay for the Association and the operation of the whole Libra network; and number two, to return some of the investment back to original investors and backers of the system who will put in a lot of resources to get it off the ground.

Mr. LUETKEMEYER. One of the things as we look at this is, if I have a business and I am trying to sell a thousand widgets to some company in France, and I want to use the Libra system to facilitate this, when I get done with this transaction, I have an income off of that, and so I have to report that to the IRS. Is there a cost to change back from the Libra to the dollar so that I then can explain to the IRS the kind of transaction and the kind of money I earned off of this transaction? Is there a fee for doing that when you transfer it back from Libras to dollars?

Mr. MARCUS. Congressman, there will be probably small fees because there will be agents and exchanges that will be involved in the process of converting fiat into Libra and back to fiat. But from an IRS and tax standpoint, as far as the Calibra Wallet is concerned, we will have the proper tools built into the product so that people can report their taxes.

Mr. LUETKEMEYER. My time is up. Thank you.

Chairwoman WATERS. The gentleman from Georgia, Mr. Scott, is recognized for 5 minutes.

Mr. SCOTT. Mr. Marcus, I have listened very attentively to your testimony and to the response to several of my colleagues' questions here—Ms. Waters, Mr. McHenry—and you keep mentioning your White Paper as a defense to the answer to the questions. But I want to call your attention to the fact that neither your White Paper nor your subsequent Facebook posts offered any concrete details as to how you plan to implement or enforce strong anti-money-laundering, how you plan to enforce Know-Your-Customer protections, and most importantly, to ensure what all of us are concerned about: the safety of our financial system.

Right now, tell us what specifically—do not say the White Paper—what are you going to do—what do you see as the responsibilities of Libra to combat anti-money-laundering to protect our financial system? Could you tell us right now, just point at it?

Mr. MARCUS. Yes, Congressman. There are wo parts to that answer: first, the Libra Association itself. The Libra Association will be based in Switzerland but will still register with FinCEN, and as a result we will have an AML program, and we will have guidelines for all the members to enforce the right KYC standards, and the AML/CFT programs.

As far as the Calibra Wallet is concerned, for every account opened we will ensure that everyone KYC's appropriately with government-issued ID, and we will have very strong AML programs.

Mr. SCOTT. Okay, but what about this, Mr. Marcus? Currently, the full responsibility to file suspicious activity reports (SARs) is on our banks or other money services businesses, and law enforcement uses these SARs to investigate and prosecute criminal terrorists. And in your July post, you spoke only of the ability for these law enforcement and regulators to conduct their own analysis of off-the-chain activity. Do you feel that this represents a shift away from Libra's own responsibility to monitor and enforce anti-money-laundering or customer protections?

Mr. MARCUS. No, Congressman. The reason I wrote this is that the approach that Libra is taking is using blockchain, and blockchain gives additional visibility to law enforcement and regulators compared to the current system to conduct their own investigations instead of solely depending on banks or regulated entities' self-reporting. But that does not mean that we on the Calibra Wallet side and all of the other members operating on top of this network will not have very strong AML programs and will not file suspicious activity reports.

Mr. SCOTT. All right. So, now you are marketing this currency as a new entity to financial services, and with that will surely come new and innovative methods of committing financial crimes. What you bring is new; criminals out there are going to invent ways to deal with it.

Let me ask you, what are you anticipating as some of the new ways that criminals may attempt to extort and exploit Libra for illicit use? And how do you plan to combat this? You are planning something new, but you also have to have the ability to be able to not just look down the road but to be able to look around corners to see what that criminal has in store for us. What say you?

Mr. MARCUS. I could not agree more with you, Congressman, and I believe that we can improve on the current system because we have a chance this time around to think through the way that the network is designed, the way that the on- and off-ramps are properly regulated with proper KYC controls, the proper way to monitor activity and report it with new technologies. And I think this system might be potentially better on these fronts.

Mr. SCOTT. Thank you, Mr. Marcus.

Chairwoman WATERS. The gentleman from Michigan, Mr. Huizenga, is recognized for 5 minutes.

Mr. HUIZENGA. Thank you, Madam Chairwoman. And there is so much to cover and so little time. I am going to try to go through and get to some new territory.

I was not planning on doing this, but you used the term, "fiat currency" a couple of times, and I thought I knew what that meant, but it seemed a little odd that you were using it in the way that you were. And so I went to Wikipedia. "Fiat money" is a currency without intrinsic value that has been established as money. Fiat money does not have use value and has value only because a government maintains its value or because parties engage in exchange to agree on its value. Wikipedia might need to update its definition a little bit because we see that people are using cryptocurrencies with no backing. And I am curious, why do you feel the need to have a reserve? Because it strikes me that you are using a fiat currency to create a fiat currency and to have a reserve of that.

Mr. MARCUS. Congressman, the reason we have a reserve is that we believe that to create a high-quality payment tool, we need that digital currency to be very stable. And as we have seen with a number of other currencies out there, digital currencies, they are very volatile, and as a result they are not a very good medium of exchange or payment tools.

Mr. HUIZENGA. So it is a trust issue?

Mr. MARCUS. No, Congressman. It is a stability issue. It is an inherent quality that—

Mr. HUIZENGA. I guess, stability and trust.

Mr. MARCUS. —good money has, which is, if it is stable, then it is good money; if it is not stable, then it is not.

Mr. HUIZENGA. But couldn't your stability be influenced by people's trust levels of the currency?

Mr. MARCUS. Yes and no. In other words, the way that—

Mr. HUIZENGA. You fit perfectly into Washington with both a yes and a no.

[laughter]

Mr. HUIZENGA. It does strike me, though, as a little bit, as many nonbanked and underbanked, as you have said, is one of the goals of trying to get in it, get them involved in the financial space, oftentimes they are not in that space because they have a distrust of financial institutions. And it does not take anyone much time to find some well-publicized issues of trust with a number of the companies that are involved in Calibra. And so I am not sure exactly how you are going to address this, but let me get back to the regulatory implications of this.

I had the pleasure of being the Chair of the Monetary Policy and Trade Subcommittee at one point, as well as the Capital Markets Subcommittee, and I am the Ranking Member now on that. And as I have always said, as we have been looking at these crypto assets, cryptocurrencies, and as Ranking Member McHenry asked, is it a security? Is it an exchange-traded product? What exactly is this? Is it fish or fowl? And it seems that it is more of a platypus to me, that it kind of evolves in its different parts. And I am curious, are you able to actually maintain the core and essence of a cryptocurrency and asset if you are really under all this regulation?

Mr. MARCUS. We believe we can, Congressman, because we believe that in order for any form of digital currency and payments system to reach mass—

Mr. HUIZENGA. Would you like to see all of the other crypto assets and cryptocurrencies under the exact same regulation that you are? Or are you trying to create and carve out this new product?

Mr. MARCUS. Congressman, I cannot speak for other crypto assets—

Mr. HUIZENGA. Certainly, you must have some thoughts on that, because if you are looking at it, saying, well, that is not working for them, otherwise why would you be coming and asking for this regulatory burden?

Mr. MARCUS. Because we believe that this is a digital currency. If you compare it to other digital currencies or cryptocurrencies, it serves a different purpose. This one is to serve a purpose of payment. It is a payment tool. And as a result, when it reaches so many people, we believe that appropriate regulation and oversight is required.

Mr. HUIZENGA. As we were having a little confab up here, my friend, French Hill, said you might be the equivalent of American Express traveler's checks of days of old.

Mr. MARCUS. I do not think of it that way, Congressman, but—

Mr. HUIZENGA. Okay. For the benefit of the lower dais and the staff, those were things that were actually paper and you carried them with you.

[laughter]

Mr. HUIZENGA. You bought them at a bank. You actually put in a fiat currency towards it.

All right. My time has dwindled. I'm sorry. We have a lot, and I have one last quick thing, which is the Chair had asserted that you had not been in contact with FINMA, with the Swiss. Is that true or not true? Because you had said earlier that you have been.

Mr. MARCUS. Congressman, we have been in touch with FINMA. The other agency was the privacy agency that we have not reached out to, but we have had continuous engagement with FINMA.

Mr. HUIZENGA. I will be following up with some written questions, so thank you.

Chairwoman WATERS. The gentleman from Colorado, Mr. Perlmutter, is recognized for 5 minutes.

Mr. PERLMUTTER. Thanks, Madam Chairwoman, and I am going to kind of take off where Mr. Huizenga just left off, just to help me understand the deal.

So, I have $5, and I go and I buy one token of Libra for 5 bucks. You take that 5 bucks, and what do you do with it?

Mr. MARCUS. Congressman, the $5 you would use to buy Libra would end up being in the reserve, and so in the current contemplated basket, it would mean that 2½ dollars will be in the reserve and another 2½ of your dollars will be in a basket of euro, pound, yen, et cetera, in the reserve. And as a result, because the reserve is one for one, your Libra unit of value will always be backed by the same value in the reserve at all times, guaranteeing stability and low volatility.

Mr. PERLMUTTER. And that reserve is in the Cloud? That reserve is in a bank? That reserve is where?

Mr. MARCUS. That reserve is custodied with very large global banks that provide custodial services to a number of companies, but this is something that we are also in discussions on with the G-7 working group to ensure that there is proper regulatory oversight in how the reserve is managed and how it is custodied as well.

Mr. PERLMUTTER. All right. We have this medium, this currency of some court, called "Libra," and now it is half here, and half there. I want to use it. I want to buy something in Paraguay, which, if I were using dollars, was going to cost me 4 bucks. So how do I do that? I then go to Calibra, and Calibra is like my credit card, and it wires four-fifths of a token of a Libra to Paraguay?

Mr. MARCUS. Congressman, you would use any of the wallets, Calibra being one of them, to transfer the money that you wanted to transfer to that other country. And the way it would work is the same way that you would use any payment apps here in the U.S. like Venmo or PayPal.

Mr. PERLMUTTER. It is a wiring system, more or less, except that I am using Libra. Calibra is a wiring system. Venmo, you know, I Venmo my daughter 20 bucks, okay? It is done, it is wired, it is over. I could have gone to the bank, and they could have wired it to her. But I use Venmo.

Mr. MARCUS. It is very similar to your experience on Venmo, Congressman.

Mr. PERLMUTTER. I think what we are struggling with is, what are you? I mean, you are a medium. You are an intermediary. You are facilitating financial transactions. And it is not as if we have not had problems with that in the history of the world. You have a money changer in the process of turning my buck into a Libra into a euro. So, that is biblical. The transaction is something we have had from the beginning of time, but it is a faster kind of wiring and more immediate transaction. Am I mistaken in that?

Mr. MARCUS. No, Congressman. It is also much, much lower cost for the people who end up needing it the most.

Mr. PERLMUTTER. And I appreciate that, but for us, we have seen banks fail. We had the old saying, "What is good for GM is good for America." And they had to go through a Chapter 11 back in the recession. I do not think that will happen to Facebook or whomever is backing this whole process. But it is possible, it is certainly possible. And so our responsibility is to your depositors or the people who buy these tokens or who use your credit card system.

We are trying to figure out what kinds of regulations, and I think you are getting really good questions from both sides of the aisle because we all have this same question for you. And that is the resistance you are feeling, because we think you are a bank, but you are not quite like a bank. And if you are a bank, we regulate the heck out of you because we have seen a lot of people lose money where there has not been regulation. That is the resistance that I feel. I want to support your innovation. I want to support the efficiency that you people believe you are bringing to the table. But I also do not want anybody getting hurt here.

Mr. MARCUS. Congressman, we are completely aligned on that. We do not want anyone hurt, and we want the proper regulatory oversight, and this is why we have announced our plans very early, and we are here and engaging with all of the regulatory bodies here in the U.S. and around the world to ensure that we have the right regulatory framework and oversight and we address all the concerns that were raised today, yesterday, and that were raised by Chairman Powell and others.

Mr. PERLMUTTER. Thank you for your testimony.

Chairwoman WATERS. The gentleman from Wisconsin, Mr. Duffy, is recognized for 5 minutes.

Mr. DUFFY. Thank you, Madam Chairwoman. Mr. Marcus, how are you doing? I have to tell you, this is absolutely brilliant, innovative, creative, and to come from Facebook and to leverage your network is pretty amazing. I was shocked at how bright it was, not to hit a sore point. But, quickly, who gets to use Calibra and Libra?

Mr. MARCUS. Anyone can open a Calibra account, go through KYC, in countries where we can operate.

Mr. DUFFY. This is a $20 bill. Do you know who can use a $20 bill?

Mr. MARCUS. Yes, Congressman.

Mr. DUFFY. Who can use it? Or maybe a better question is, who cannot use a $20 bill?

Mr. MARCUS. I believe the answer to your question is everyone, anyone—

Mr. DUFFY. Everybody can use a $20 bill. This $20 bill does not discriminate on anything. You could be a murderer. You can say horrible things. You can say great things. This $20 bill can be used by every single person who possesses it.

With regard to your network, can Milo Yiannopoulos or Louis Farrakhan use Libra? And I bring that up because both of those individuals have been banned from Facebook.

Mr. MARCUS. Congressman, first I want to say that—

Mr. DUFFY. No. A simple question. We only have 5 minutes. You have to answer a question so we can do the best job in vetting what you want to do.

Mr. MARCUS. I know, but we must be thoughtful about those issues, Congressman, so I am trying to respond appropriately.

On one side, I just want to stress that a platform that enables you to communicate and share ideas, while Facebook we believe is a platform that accepts ideas across the political spectrum, it has to protect—

Mr. DUFFY. I somewhat disagree with that, but—

Mr. MARCUS. —from hate speech and others, and so that is one thing. When it comes to money—

Mr. DUFFY. Can Milo use that? Can Louis Farrakhan use this system? They have been banned from Facebook. Can they use it? Yes or no?

Mr. MARCUS. Congressman—

Mr. DUFFY. Yes or no?

Mr. MARCUS. I do not know yet, Congressman, because—

Mr. DUFFY. Okay. If I am a gun dealer, I can use a $20 bill, because if it is a lawful gun, that happens all across America. On Facebook, you do not allow gun sales. So can a gun dealer who is abiding by American law, can they use your system?

Mr. MARCUS. This is a question that is really important to get right, Congressman, and we have not written a policy yet—

Mr. DUFFY. See, and that is what concerns me. I love what you are doing, but when you say, "we at Facebook are going to set the social policies of who can use this cryptocurrency", in a way, you are going to set the social policy of who is in and who is out. And what is great about this is everybody gets to use it. And what I fear is maybe in a roundabout way what is happening in China with their social scoring—if you get the right social score, you can get a loan. You can get an apartment. You can access the train. Maybe Facebook is doing the same thing here where, if you meet our social standards, which a lot of people here do not necessarily agree with your social standards though we use your platform, that is the way you access the network, so we have to conform our behavior to the standards of Facebook to be on the network, where I think the right answer would be, listen, everybody, if you are abiding by the law, has access to this system.

Mr. MARCUS. Congressman, personally, I believe that we should not be in the business of deciding what people can do with their money or not. But that being said, this is an important question, and we need to be thoughtful about the policy.

Mr. DUFFY. I think you are going to get some major pushback when we look at your network and you say who is on and who is off, and you are the judge and the jury. And for this system, I think you are going to see a lot of pushback from both sides. Go ahead, quickly.

Mr. MARCUS. This is why I believe we need to be very thoughtful about this, and my commitment to you is—

Mr. DUFFY. I think the thoughtful answer is, I am going to behave like the fiat currency. The thoughtful answer is, if you abide by the law, you have access to it. That is the thoughtful and the right answer. But you have not given me that, which gives me great pause and concern that the model of Libra is going to be the model of Facebook where you get to decide, and that concerns me.

I am also concerned about the data privacy and how you are going to use the data. A lot of us have had concerns about the data use on Facebook. How will you use this data? Because what we post on Facebook and who we are friends with is one thing. How we spend our money is really powerful information, and you have access to that, too. And I would like to dig deeper with you on that point, but also, the freedom and liberty that comes from the $20, I think you should offer that same freedom and liberty on your network, and maybe we can talk more about that later. And I appreciate you coming here and testifying, and kudos on the innovation.

I yield back.

Mr. MARCUS. Thank you, Congressman.

Chairwoman WATERS. Thank you.

The gentleman from Connecticut, Mr. Himes, is recognized for 5 minutes.

Mr. HIMES. Thank you, Madam Chairwoman. Mr. Marcus, thank you for being here. This has been one of the more interesting hearings we have had in a little while.

In the last Congress, I had the honor of chairing the new Democrat Coalition, 104 Democrats, and if we do one thing, we get excited about innovation. But this is not an app that measures your heartbeat. This is a complete overhaul of the circulatory system of the global economy. A lot of the concern you are hearing here I think is just around its sort of shocking ambition.

I want to ask you a specific question and take you through a specific scenario that gets at a larger concern that I have, and just so that folks at home can kind of follow along, let us just imagine that I am an American user of Libra, and my rent is $1,000 a month, and just for simplicity's sake, let us say that this month it is 1,000 Libra a month.

Now, because Libra is backed by a basket of currencies, let us just imagine that one of the currencies, sterling, devalues dramatically in 2 weeks. I think, if I recall my banking and economic days, that I will find that in the next month, my rent in Libra will be—let's just pick a number—1,100 Libra but still $1,000 a month. What I am getting at is that users will have the profoundly unfamiliar experience of assuming foreign currency risk. Am I correct in that?

Mr. MARCUS. Congressman, yes, there will be fluctuation, but the way that we are intending to design the reserve, again, in consultation with the G-7 working group of finance ministries and central banks, is going to be in such a way that—we have looked historically at the volatility that the dollar would have had in the last 20 years compared to the Libra with the proposed basket. And if you look at the fact that half of the basket is dollars, it should be fairly stable.

That being said—

Mr. HIMES. But wait, wait. You acknowledge—I got it. You acknowledge that consumers everywhere, users of Libra, will for the first time, if they have previously been using their domestic currency to purchase domestic goods, experience foreign currency risk.

Mr. MARCUS. They will have some degree of volatility—

Mr. HIMES. Right. Okay. I think that is an important point for people to understand. And I am not saying that is good or bad, but traditionally, the regulatory apparatus here has said that if you are going to assume an unfamiliar risk, that risk will be disclosed to you with full transparency. And the mechanism we have traditionally used to disclose that kind of risk is through public filings and disclosure.

Now, you said this is not an exchange-traded fund (ETF). I am a former banker. This looks to me exactly like an exchange-traded fund backed by a series of short-term instruments in foreign currency. It looks exactly like an ETF to me. It even has a creation and remittance mechanism. Elaborate for me on why this is not an exchange-traded fund. And if there is any ambiguity, what I really am getting at here is you need to clear—if, in fact, the regulators determine that it is an ETF, you need to clear 1940 Act registration hurdles, which that may sound technical, but that is designed to protect that rent payer who discovers that their rent went up for reasons they do not understand.

So, tell me why this is not an exchange-traded fund?

Mr. MARCUS. Congressman, there are three points of why we believe it is not. Despite the fact that you are right that it uses some operational mechanisms that are similar, we believe that it is not because Libra is a payment tool. And typically, if the question you are asking is whether we—

Mr. HIMES. But wait, I need to stop you there. The SEC does not say if you are a payment tool, you are not an exchange-traded fund. The SEC says if you have a security that is backed by other securities, you are an exchange-traded fund. And you may quibble with me that you are not a security, but you are certainly backed by other securities. Is that not correct?

Mr. MARCUS. Congressman, it is mainly currencies, but I do want to answer your question. First, we believe that no one will buy Libra as an investment because it is designed for stability. That is number one.

Number two is that when you look at the definition of the securities or the Howey Test that has been used by the SEC, it actually uses the idea that you invest for a profit that will result in the management of the product, and this product is not a product, it is a payment tool. It is not going to be actively managed. And you cannot use an ETF for payments. This is actually designed as a payment tool to enable people to retain value, not to—

Mr. HIMES. Since I am almost out of time, let us go back to my original question. How will you make transparent what you acknowledged is foreign currency risk that consumers will face? How do you envision doing that?

Mr. MARCUS. Congressman, as far as the Calibra Wallet is concerned, you will have transparency and education built into the product.

Mr. HIMES. Okay. Thank you. My time has expired. Thank you, Madam Chairwoman.

Chairwoman WATERS. The gentleman from Ohio, Mr. Stivers, is recognized for 5 minutes.

Mr. STIVERS. Thank you, Madam Chairwoman. And welcome, Mr. Marcus.

We all say we want to encourage innovation, and I appreciate your innovation, and I really do want to encourage innovation. And I would just like to kind of walk through a timeline so we know where we are in the innovation process here. And correct me if I am wrong, or I will just ask a couple yes-or-no questions. It was about 60 days ago you announced the idea, correct?

Mr. MARCUS. Congressman, it was on June 18th, yes.

Mr. STIVERS. June 18th. The White Paper was on June 18th, but I thought in May, you put out—there was nothing in May?

[Witness nods head no.]

Mr. STIVERS. Okay. We are 30 days from the White Paper. So, this is a really early congressional hearing. And with that, I understand that you will not have the answer to every question. I do appreciate your commitment to be willing to ensure that you meet all the regulatory hurdles and comply with the law. The value I see in this innovation is, of course, for cross-border payments because that is so expensive today, and, second, for the unbanked, and you talked about both of those domestically. But can you just tell us what is in it for somebody domestically who already has a bank account and is not looking for cross-border payments? I do not see a big application for those folks.

Mr. MARCUS. Congressman, I am glad you asked, because I doubt that people will pay their rent with Libra any time soon, to just answer the question from earlier. The general use case that we believe will happen in the U.S. when you have a bank account and you are properly banked is that if you want to send money abroad, you will connect your debit card with one of the wallets. You will buy just the right amount of Libra you need to actually make that cross-border transaction. You will save a lot in the process, but then if money comes back, you will redeposit it back to your bank account.

Mr. STIVERS. And so you do not expect people to be holding Libra because the point is to have a stable currency, not a volatile currency. That is where the value comes in, in cross-border payments, because about 60 percent of the world's population lives in a country that does not have a stable currency. I appreciate that, and I think there is some value in that.

I do have some concerns about the potential of money laundering. As you know, cryptocurrencies and the Silk Road sort of started as a way to anonymously finance illicit activity or as one of the early things that it was used for. I am concerned about cross-border payments that then are going to people who have sort of bad intent, and I am curious, will you put a limit on the amount of any individual transaction? And I know, again, it is early. I recognize the timeline of where we are. But do you expect to put a limit on how much somebody can transfer in Libra to someone else?

Mr. MARCUS. Congressman, we are going to continue our engagement notably with Treasury on this topic, and my expectation is that there will be limits, depending on where the money is sent or where it is coming from. My hope is that between two consumers of American-regulated wallets like Calibra and others who will have proper KYC and AML, we can avoid having artificial limits. But we will probably need limits across the network to ensure that those activities can—

Mr. STIVERS. And I am not asking you to put artificial limits in. I was just curious, and obviously I want to make sure you comply with Know Your Customer and anti-money- laundering because that is complying with the law, which you said you would do, and I think that is really important.

Mr. MARCUS. We will, Congressman.

Mr. STIVERS. Do you expect to have the Libra Association vote to exclude companies like Chick-fil-A or anybody else that might have social views that you disagree with?

Mr. MARCUS. Congressman, this is actually not going to be my decision or Facebook's decision. It is going to have to be a decision that is going to be made by the council of members of the Libra Association and the Libra Association itself.

Mr. STIVERS. And I recognize that. I will just urge you to not use this for social engineering but to use it to meet the intent that we talked about of helping the unbanked and helping people with cross-border payments. I hope that is the purpose and not just social engineering.

I appreciate your time today. There are a lot of unanswered questions. I may send some in writing. I do appreciate the innovation. I appreciate your time, and I look forward to working with you as you work to make sure that you follow every law and regulation. I know it will be a challenge because you will be dealing with 200 countries' regulations.

Thank you so much.

Mr. MARCUS. Thank you, Congressman.

Chairwoman WATERS. The gentleman from California, Mr. Sherman, is recognized for 5 minutes.

Mr. SHERMAN. Madam Chairwoman, we need to get Mark Zuckerberg here. This is the biggest thing or it tries to be the biggest thing this committee will deal with this decade. And while we have one of his employees here, this is Zuckerberg's program.

Now, we are told by some that innovation is always good. The most innovative thing that happened this century is when Osama bin Laden came up with the innovative idea of flying two airplanes into towers. That is the most consequential innovation, although this may do more to endanger America than even that.

People call this the "Libra." It is not the Libra. If it finally happens, nobody is going to call it a "Libra." They are going to call it a "Zuck Buck." This is Zuckerberg's baby.

Mr. Marcus gave me two promises in our conversation yesterday, both of which he knows they will not comply with.

First, he promised that all the Know Your Customer and anti-money-laundering is going to be adhered to. But that applies only to the Calibra Wallet, and he hopes to have hundreds of other wallets created by others. Keep in mind as to Bitcoin, 46 percent of the transactions, according to one academic study, are for drug dealers and other nefarious operations. Hamas advertises they want Bitcoin contributions. Bitcoin, however, has a problem. There is no off-ramp. There is no way to just go buy something with a Bitcoin. You can eventually with a Zuck Buck.

And, finally, the White Paper put out by Facebook says the Libra protocol does not link accounts to real-world identity. A user is free to create multiple accounts by generating multiple key pairs. So this is a godsend to drug dealers and sanctions evaders and tax evaders.

Zuckerberg has billions, but he does not have the authority to print more until he gets this. We went from the U.S. dollar being linked to gold, and we only printed a number of dollars equal to the gold we had, to the dollar becoming valuable in and of itself, and now how many dollars we print has nothing to do with how much gold we have stored.

Mr. Marcus promised me that they would never do that, but then he testifies here that the Libra Association will make all the decisions and Facebook will not be in control. So much for those promises.

America's power comes from the power of the dollar more, I think, than the power of our military. It lowers the interest rates in the United States by at least $1,000 a family. The seigniorage has allowed the Fed to transfer $100 billion in some years, often less, to the Treasury. Our sanctions in Iran, which I have worked on for over 20 years, are effective only because of the power of the dollar, and we are able to go after human traffickers, drug dealers, and tax evaders because of the power of the dollar.

We are told that they are going to solve two problems with this. They are not going to solve those problems. Cross-border transmission, let us do that in dollars, or let us send quetzals to Guatemala. You have a multi-billion-dollar company, a trillion-dollar-company. Help people make those transmissions at low fees, but use dollars or use the local currency.

And then we are told they are going to deal with the unbanked. If they wanted to help the unbanked, they would not be using a cryptocurrency because cryptocurrencies are illegal in India, the place where they have more unbanked than anywhere else. They do not want to solve those problems.

They want to solve two other problems: problem number one, Zuckerberg cannot print money— yet; and problem number two, Zuckerberg is under attack because he invades the privacy of ordinary Americans and sells it to the highest bidder. He needs to be an advocate for privacy. And so, he is creating a device which will provide privacy to drug dealers, human traffickers, terrorists, tax evaders, and sanctions evaders.

We need Zuckerberg here because we need to tell him that he probably has the power to push this through. He will throw around tens and hundreds of millions of dollars in Washington. His supporters will get huge Zuck Bucks in U.S. dollars. A hundred lawyers will tell him that what he is doing is legal and, therefore, he is safe. But someone with an understanding of the politics of this country needs to explain to Mr. Zuckerberg that if cryptocurrency is used to finance the next horrific terrorist attack against Americans, a hundred lawyers standing in a row, charging $2,000 an hour, are not going to protect his rear end from the wrath of the American people.

This is an attempt to transfer enormous power from America to Facebook and a number of its allies. We need Zuckerberg here.

Chairwoman WATERS. The gentleman from Kentucky, Mr. Barr, is recognized for 5 minutes.

Mr. BARR. Thank you, Madam Chairwoman.

Given the commentary we have heard in this committee hearing today, and some of the very pointed questions directed your way, Mr. Marcus, I think we are discovering why a decision has been made to locate in Switzerland as opposed to the United States.

Having said that, I do want to address some of the concerns that have been raised today and ask you about them. I think there are some legitimate questions that we can ask, but it does seem like in Washington, whenever the private sector produces some kind of innovation or new discovery or new advancement, politicians and bureaucrats rush to criticize and regulate, and there is always a presumption that the private sector innovating is a bad thing. I think the presumption should be totally reversed. I think we should presume that innovation is good; it presents enormous opportunity for financial inclusion, reducing friction in transactions. The opportunities that are created by this innovation is laudable. It is to be commended.

That is not to say we should not ask questions, but the presumption in this hearing room today seems to be in the wrong place.

Let me ask you about the possibilities, the opportunities that this presents, particularly with respect to financial inclusion. What percentage of users on Facebook are underbanked or unbanked in the United States, Mr. Marcus?

Mr. MARCUS. Congressman, I do not have the answer for Facebook specifically, but I know that over 8 million households in the U.S. are—

Mr. BARR. Why don't you know how many Facebook—Facebook is often criticized for invading the privacy of Americans. Why doesn't Facebook know approximately how many of its 2.6 billion users are unbanked or underbanked?

Mr. MARCUS. Because there is no way for us to know that information.

Mr. BARR. Okay. Do you have any idea how many users of Facebook live in rural America or so-called bank deserts?

Mr. MARCUS. I do not have the exact number, Congressman, but I can find out and follow up with your office.

Mr. BARR. Well, if you know or do not know, we would like to know that. How will Libra and Project Libra promote greater financial inclusion in the United States?

Mr. MARCUS. Congressman, we believe that having the ability to access digital money where you can safeguard the value that you want to safeguard but, more importantly transact with the people that you want to transact with for free, simply with just a $40 smartphone and a basic data plan, is something that would enhance the ability for people even here in the U.S., despite the fact that we believe this is not going to be the main market for Libra, it will solve problems for lots of people here in the U.S., notably the very people who are unbanked today and send money abroad home, which makes for the bulk of the income of their families back at home.

Mr. BARR. I will not ask a question, but I will just jump onto the point that Mr. Duffy was making earlier. I think that the opportunity for financial inclusion with Project Libra is enormous and very positive. I share Mr. Duffy's concern about what that inclusion actually means, and to the extent that Facebook and other social media enterprises have been criticized for political bias, I think that is important to earn the credibility of the American people that this platform, this financial platform be viewed and earn the confidence as a neutral player so that the adoption can serve all and really serve that ultimate purpose of financial inclusion.

A final question, and this relates to the testimony that you have delivered that this project will not compete with central banks or interfere with monetary policy. We heard from the Chairman of the Fed, Jay Powell, recently that whereas Bitcoin or other digital currency endeavors really do not present a challenge for central banks, this could, because of Facebook's 2.7, 2.8 billion users and 1.6 billion daily users, that it does have the potential for widespread adoption big enough to potentially displace the U.S. dollar as the world's reserve currency and, therefore, interfere with central banking tools, interfere with monetary policy.

Tell me how Libra will not undermine sovereign currencies and the power of central banks. Or is the very point to undermine central bankers and to provide greater freedom away from central banking?

Mr. MARCUS. Congressman, I want to be very clear. We do not want to compete with the dollar or with sovereign currencies. This is why they make the reserve. And even in our wildest dreams, never will we come anywhere close to the size of any of the currencies that you mentioned. But we will make sure to work with the Fed, with the Financial Stability Board, and with the G-7 working group internationally to ensure that the proper controls—

Chairwoman WATERS. The gentleman's time has expired.

Mr. BARR. Thank you.

Chairwoman WATERS. The gentleman from Illinois, Mr. Foster, is recognized for 5 minutes.

Mr. FOSTER. Thank you, Madam Chairwoman, and Mr. Marcus, I would like to also thank you, as the co-Chair of the Congressional Blockchain Caucus, as well as perhaps the only blockchain programmer and AI programmer in the U.S. Congress, I want to thank you for having rather detailed individual briefings with me on this.

There are a couple of things I was promised during those briefings that my staff tells me have not yet been delivered. One of them is when we got into a detailed discussion of how you would prevent this from being used for ransomware, I was promised that there would be an answer. Are you prepared to give that answer yet? If not, I would like to drill down into just how anonymous these transactions in Libra actually would be.

Mr. MARCUS. Congressman, ransomware is a really important issue, and the way we are thinking about it as far as the Calibra Wallet is concerned—

Mr. FOSTER. No. I am interested in Libra, all right? Libra, which is, as I understand it, an anonymous bearer instrument. Is that correct?

Mr. MARCUS. Congressman, it is not anonymous—

Mr. FOSTER. Is self-custody allowed in Libra?

Mr. MARCUS. Congressman, yes, within limits. And as a result, we believe that especially in countries like the U.S. and others, you will have all the wallets that will have—

Mr. FOSTER. I am not worried about wallets. I am worried about abuse of self-custody. If I own the cryptographic code for a piece of Libra, do I own that Libra, full stop, or not?

Mr. MARCUS. Yes, Congressman.

Mr. FOSTER. Yes, you do. Okay. Now, if I go on the Dark Web and start offering to trade that, do you have any technical way of stopping me from doing that anonymously?

Mr. MARCUS. Congressman, yes, because there are on- and off-ramps, and all of the on- and off-ramps are properly KYC'd.

Mr. FOSTER. All of them?

Mr. MARCUS. Yes, that will be—

Mr. FOSTER. Once a large fraction of Libra would be transferred into self-custody and then there starts to be a significant flow among the self-custody entities out on the Dark Web or other places, how do you prevent that from actually allowing things like ransomware?

Mr. MARCUS. Congressman, again, it's a very important problem, and the way that we are tracking—the way that the association will enable tools so that law enforcement and the different wallets can understand where the movements are happening to prevent those issues is going to be one of the ways that we will address this. The other way that we will address—

Mr. FOSTER. We are going to have to be absolutely dependent on the fact that every single wallet is in a regulatory regime that we trust, is that right? So if there is one wallet out in some set of islands or something like this that does not follow U.S.—are we just out of luck there and that all of the illicit transactions will flow through there?

Mr. MARCUS. No, Congressman, because if you are a U.S. resident and you want to use a wallet, the wallet offering services in the U.S. will need to be properly regulated in the United States.

Mr. FOSTER. All right. We will have to have an ongoing discussion.

I would like to also mention cybersecurity. One of the main jobs of FSOC is to oversee cybersecurity at systemically important firms. Now, you have seen fit to make a new programming language for here, and I spent a little while looking over that. There is some creative stuff in it. Some of it is pretty much copying other things that have been done before. Some of it is brand new. But even if it had zero creativity in it, there would still be a problem that one wrong line of code could generate a hole that could crash the entire Libra ecosystem. And so the governance of that language and all the infrastructure, from what I understand from my reading of it, is that you are going to be distributing runtime executables and things like that as well. And so that all of that has to be bulletproof cybersecurity, and I was wondering how you are going to deal with the governance of that?

Mr. MARCUS. Congressman, two ways. First, we agree with you that this is of absolute importance, and the way we are dealing with that is that the move language that you are referencing will have formal verification in place to avoid issues that—

Mr. FOSTER. To the extent that there are no compiler bugs.

Mr. MARCUS. Yes, but the the compiler will not execute the code if the code is not formally verified, and we have the chance of having David Dill, who is a professor from Stanford in formal verification, helping us with this issue.

The other thing that I want to say is that the association will have guidelines on what third-party code can be published or not.

And at the very early stages, it will be very limited to a set of templates that will avoid the issues that you are raising.

Mr. FOSTER. All right, but it will be an ongoing target because if Libra is taken to scale, it will be an enormously fat target for cyber attacks, intrusion, insertion of inside threats, and so on. So, this is something that, in terms of overall financial stability, is probably as crucial as anything else.

Thank you. I yield back.

Chairwoman WATERS. The witness has requested a 10-minute break. The committee stands in recess.

[recess]

Chairwoman WATERS. The committee will come to order.

The gentleman from Colorado, Mr. Tipton, is recognized for 5 minutes.

Mr. TIPTON. Thank you, Madam Chairwoman. Mr. Marcus, thank you for being here. This is a fascinating conversation, and I think a lot of the questions are expressing concerns not for innovation but just in terms of what we are going to be seeing come out the end once the process is completed.

I did have one question, because there does seem to be some confusion, and you didn't actually clarify, in terms of exactly what we are talking about with Libra, in terms of being a security, an ETF. You said possibly a commodity that could be there.

Along those lines, when you are looking at your association, the Libra Association, you have Visa, MasterCard. Are you doing any active recruitment, talking to any other financial institutions to be in the Association?

Mr. MARCUS. Congressman, the Association membership is actually open, as long as members meet the criteria that has been published. Of course, that could be subject to change and is in control of the Libra Association. But we expect that there will be a number of financial institutions, including banks, joining its ranks.

Mr. TIPTON. Will that have continued monitoring as you are bringing in association members, just to make sure that bad actors don't potentially get into the association?

Mr. MARCUS. Yes, Congressman.

Mr. TIPTON. One of the things that we have had a fair amount of conversation on is Know Your Customer, the ability to be able to identify who those people are. And I wanted to be able to follow up a little bit on that, in terms of the commitment that you are seeing coming out of Calibra.

We passed and signed into law last year the Mobile Act, to be able to open up a bank account with your driver's license. But it was followed with commitment from the banks that that information would be eliminated once the account was open, and it wasn't going to be retained. Are you making the same type of commitments?

Mr. MARCUS. Congressman, the general desire, as far as the Calibra Wallet is concerned, is to only retain the data for as long as it actually is required to operate the service, not any longer. If the government-issued ID that is captured is not of any use, notably, for protections, then we will commit to the same rule.

Mr. TIPTON. Okay. And I think it is important because, not to parse on words, but when you say "desire to," I think that is something that we would like to be able to see a commitment to, in terms of the policies that you are going to be putting in, just to be able to protect privacy, because I think it has been spoken here several times. You know there are some real concerns over Facebook and issues with privacy right now.

You have talked a lot about also wanting to be able to reach out to the underserved, talking about overseas payments, but we have actual banking deserts within the United States right now. One of the key components is obviously to be able to have high-speed internet access. In my home State of Colorado, 14 percent of our population does not have access to high-speed internet. Do you have any plans to be able to do outreach, to be able to build out some of those networks, to be able to provide the access that you said that you would like to see for underserved markets?

Mr. MARCUS. Congressman, not as part of the Calibra effort per se. That being said, Facebook has invested, and continues to invest in helping providing access around the world, and will continue doing so. But as far as the Calibra Wallet is concerned, we are really focused on that population that currently has smartphones and a basic data plan and is underserved or not served at all by current financial services.

Mr. TIPTON. Okay. Thanks. And we have had concerns from some of our constituents, some of our community banks. They are saying that they have some worries that Libra, Calibra, the Libra Association represent a point of competition for traditional financial institutions and payment systems as they overlap on some of the core functions between your proposal and the kind of products that your proposal could lead to, into the regulated institutions.

Do you believe that Libra, Calibra, and the Libra Association should be subject to some of the same regulations on the banking side as our financial institutions are?

Mr. MARCUS. Congressman, first I want to recognize the role that community banks play. It is absolutely essential and I hope that they can participate in services on top of the Libra network as well.

And as far as banking regulation, if we ever enter into providing banking services, which right now we are not considering, then yes, we would need to have proper banking regulation. But as it is contemplated right now, as far as the Calibra Wallet is concerned, we are going to be focused on payments.

Mr. TIPTON. Great. And my time has expired. Thank you. I yield back, Madam Chairwoman.

Chairwoman WATERS. Thank you. The gentlewoman from Ohio, Mrs. Beatty, who is also the Chair of our Subcommittee on Diversity and Inclusion, is recognized for 5 minutes.

Mrs. BEATTY. Thank you, Madam Chairwoman, and thank you, Mr. Marcus, for being here today.

This is kind of a great segue for me, with my colleague talking about the underbanked and the unbanked. You have heard a lot today, and we have tried to gather a lot of information, whether it was cybersecurity, governance, antitrust, investment ownership, and now the unbanked and underbanked.

As you heard, I am the Chair of the Diversity and Inclusion Subcommittee. So when I hear underbanked and unbanked, traditionally that goes to a lot of people who have some challenges economically. I have gone through your White Paper, and as I look at that, it wasn't very unique in your problem statement to me when you were citing 1.7 billion adults globally remain outside of the financial system and that Libra will connect the world to them in a unified financial ecosystem. I think that is a lot of words, but when I think about the underbanked and unbanked, here is the question that I want to ask you.

I want to focus on one of the reasons that I read that Libra gives us for why we need a global currency, and that is to address the millions of unbanked and underbanked people in the world. Despite this claim, in response to a question at yesterday's Senate Banking Committee hearing from Senator Brown, you stated that Libra is not designed to compete with bank accounts. Additionally, you said, in response to Senator Kennedy, that Libra will not engage in banking.

Can you tell me how Libra banked and unbanked and underbanked, how you will work with them if it is not meant to compete with the banking accounts, and if you are not engaging in banking?

Mr. MARCUS. I am glad you asked that question, Congresswoman, and I want to separate the different types of services that will be provided.

Mrs. BEATTY. You have to do that quickly because I have two more questions.

Mr. MARCUS. I will do my best. The first one is that we are—

Mrs. BEATTY. Let me ask you this way. Yes or no, are you competing with banking or not, in your opinion?

Mr. MARCUS. No, Congresswoman, but we will offer—

Mrs. BEATTY. Do you consider yourself a bank?

Mr. MARCUS. No, because we will not offer—

Mrs. BEATTY. Are you taking people's money and letting them pay for things, letting them transfer monies?

Mr. MARCUS. We will be active in payment services, Congresswoman, and enable all of these people who currently don't have access to modern payment systems to move their money around and have access to the world economy, and as a result we will be in the payments business, Congresswoman, as far as the Calibra Wallet is concerned.

Mrs. BEATTY. Let me ask you another question on governance. I think in your opening statement, you said that it would not be overpowered by Facebook because you would only have one vote. In the world of banking—because in my mind it is still banking—we are dealing with a lot of banks who merge. So let's say with your one vote you would buy Stripe, or you would buy Spotify. Would that now still give you just the one vote or would that give you more control? Because we know these things merge and get bought out all the time. If you bought those things, would that give you more power?

Mr. MARCUS. It would not, Congresswoman, because in the way that the governance is currently structured no one entity can have more than one voice or one percent of the vote.

Mrs. BEATTY. Someone asked about the training in financial literacy. We know those who are unbanked and underbanked are that for a reason. This is very complicated. We have some of the best minds here, on both sides, and clearly there are a lot of unanswered questions, or clearly you can tell from our questions there is a lot of disagreement with this.

How do you take somebody from my district, who is underbanked or unbanked, and educate them? No financial literacy. They think you are a bank, because even when you mention PayPal and those systems, which you were the president of—I used PayPal as a store owner, but it was tied to my credit card, it was tied to the regulations of the Federal Government. How do you tell us that it is not banking? Because if it is not tied to any of those things, how does it work? Where is my protection? What happens if I do this—and we already know I am ignorant to the process—and then I want my money, I want my Libras back. Can I get them all back?

Mr. MARCUS. Yes, Congresswoman.

Mrs. BEATTY. With no problems, I can get them all back and put that money back into my account?

Mr. MARCUS. Yes, Congresswoman. In the same way that PayPal and others are connected to the banking system, Calibra Wallet will be also connected.

Mrs. BEATTY. My time is up. I yield back.

Chairwoman WATERS. Thank you. The gentleman from Texas, Mr. Williams, is recognized for 5 minutes.

Mr. WILLIAMS. Thank you, Madam Chairwoman. I want to echo the comments of some of my colleagues that this hearing somewhat seems somewhat premature. So far, private companies are beginning to form an association and have released, as we have talked about, a 12-page White Paper describing the general idea of this global cryptocurrency.

It seems like there is a lot more work to be done internally at Libra before we, in Congress, can seriously examine all the regulatory and security hurdles that we all are concerned about, that you have heard from both sides today.

There are many more pressing issues that we need to deal with, I believe, before we all go home for the August recess in a couple of weeks. We have not acted on the impending debt ceiling. Our reckless government spending is out there. There is still no budget deal. There is no EX–IM authorization bill, and that has businesses all over the country nervous. And we are at the beginning of hurricane season and we still can't get the flood insurance package to a vote on the Floor.

I understand the interest in this new idea. I am from the old school. But I think our time would be much better spent working on issues that will benefit the American people immediately rather than pre-emptively trying to stop this idea from even being explored by Facebook and other industry participants.

We should not discourage the private sector. I am a big private sector guy. We should not discourage the private sector from investing their own time, and their own money to research these new technologies. No matter what policies we enact up here in Congress, the private sector is the engine that creates solutions to some of these great problems.

Mr. Marcus, I applaud your entrepreneurial spirit, and it leads me to believe you are probably a capitalist; are you not?

Mr. MARCUS. I believe we all are in this country.

Mr. WILLIAMS. Okay. Thank you. That is good. That helps our record there.

And also, with that in mind, do you believe that the private sector rather than the government is better suited to explore the potentials of blockchain technology in the financial services space?

Mr. MARCUS. Congressman, I believe that in this specific case it requires both the innovation capabilities of the private sector and the oversight of the government and regulatory bodies for this project to be successful, specifically.

Mr. WILLIAMS. Facebook has already stated that it won't launch the cryptocurrency in India, due to regulatory issues. Can you explain the issues you ran into in India, and do you anticipate that you will not be able to launch this project in other countries?

Mr. MARCUS. Congressman, there will be countries in which the Calibra Wallet itself will not be able to operate, but since the network is interoperable and other wallets can emerge in different regions, and transactions are possible between wallets, unlike the current system, which constrains transactions within one wallet, we believe that others will emerge in other countries that will enable access to a greater number of people who currently don't have access to modern financial services.

Mr. WILLIAMS. Something that I saw in your White Paper is that the Libra Association will be run as a nonprofit, yet it will pay dividends to investors who provide capital to jump-start the ecosystem. Can you go into greater detail on how you reconcile the association being a nonprofit yet you will pay dividends to the investors?

Mr. MARCUS. Yes, Congressman. The association is a nonprofit, membership-based association under the laws of Switzerland, that are slightly different. And the goal for the association is not to generate a profit, but if it has to pay out income streams, it will pay taxes on those income streams, as covered by the Swiss law.

Mr. WILLIAMS. As a small business owner, I am a Main Street America guy, 50 years in business. I see the benefits that this could have on remittance payments to other countries, and with the lowering transaction costs. Innovation is a good thing and there is no reason we should be stopping this idea so early in its existence.

With that being said, I begin to get concerned if this were going to be used in lending. Is the eventual goal to use cryptocurrency for lending?

Mr. MARCUS. Congressman, as far as the Calibra Wallet is concerned, it doesn't have any plans to do so, as of now. I do believe that there might be banks around the world that might want to engage in those types of services, but this is definitely the province of banks and not something that the Calibra Wallet will do itself, and it is not in the plans right now.

Mr. WILLIAMS. Okay. Really quickly, the White Paper also states that the Libra blockchain is pseudonymous, as you say, and allows you to hold one or more addresses that are not linked to their real-world identity. How do you plan on striking the correct balance between privacy and a user's ability to hide criminal activities?

Mr. MARCUS. I am really glad you asked this question, Congressman, because I think this is misunderstood. That fact that there is no personally identifiable information on the blockchain is not a virtue of the fact that people are not identified on the platform. It is just that it would be irresponsible to have personal data be publicly available. That being said, wallets and on- and off-ramps will be regulated and will have proper KYC.

Mr. WILLIAMS. Okay. My time is up. Thank you for being here today.

Chairwoman WATERS. The gentleman from Guam, Mr. San Nicolas, who is also the Vice Chair of the committee, is recognized for 5 minutes.

Mr. SAN NICOLAS. Thank you, Madam Chairwoman.

Mr. Marcus, what does the organization project the average user will have as a Libra balance?

Mr. MARCUS. Congressman, we have not projected average balances at this point.

Mr. SAN NICOLAS. Do you really expect me to believe that? Facebook is built around average users, average number of hits. Visa, MasterCard, all these huge players are signing up, and you guys have no idea how much you expect to have in the average Libra account?

Mr. MARCUS. Congressman, it will really vary, depending on where the usage of Libra, the currency and the network—

Mr. SAN NICOLAS. Okay. Can you give me a low estimate and a high estimate of what the variation is expected to be?

Mr. MARCUS. Congressman, again, we have not made projections for this but we would be happy to follow up with your office and your team when we do.

Mr. SAN NICOLAS. First of all, I absolutely disbelieve that. Like I said, those organizations are built around understanding their users and what they are anticipating their usage is going to be. And I think that you are just trying to hide that figure, because when you actually start doing the math, it becomes very, very alarming.

In your own posts, sir, you mentioned that billions of users—"We firmly believe that if Libra is successful, it can be a nonlinear step change for billions of people who need it the most." So if you are talking about $100 in a Libra account, if you are talking about $100 billion. If you are talking about $1,000 in a Libra account, if you are talking about $10,000 in a Libra account—and so I think that the amounts that we are talking about, in terms of an average user, is critical in order to understand the full scope of how pervasive this kind of action is going to be, and I am going to go through why that is so critical.

If 20 founding members, a lot of big-shot companies that have come together seemingly overnight and surely under the radar, and the White Paper that you submitted says that you will have 100 members in the second half of 2020, which is a year from now, that is 72 new members. You are going to triple your growth in one year, and you guys don't even know what the average Libra wallet is going to hold. We are just going to pretend that that figure is just some unknown number, but we are going to bring in 72 new players.

Are any of these players Fortune 500 companies?

Mr. MARCUS. Yes, Congressman.

Mr. SAN NICOLAS. How are you able to convince Visa and MasterCard and 72 new Fortune 500 companies to sign up for something without even knowing what the average user amount is going to be?

Mr. MARCUS. Congressman, I want to respectfully say that I am not hiding anything. I am here responding truthfully to all the questions with the information I have at this time.

Mr. SAN NICOLAS. Yes, that is what you are saying, but sensibly, I think we can all be sensible people. You won't get these huge Fortune 500 companies signing up if they don't understand what they are signing up for.

And the reason why this is so critical is because when you have—even Facebook alone, in your own post, you said you have 90 million businesses on the Facebook platform that are going to be able to attest to how this is going to be something that is going to be an empowerment for those businesses. And that is just the Facebook platform. We are not talking about the MasterCard platform or the Visa platform or the platform of these 72 other companies that are all lining up without any kind of idea of how much they are actually going to be getting involved with.

And this is so important because we are talking about billions of users, and tens or even hundreds of dollars. That is money that is getting sucked out of the U.S. financial system and being put into whatever this cabal is putting together in terms of Libra and Calibra.

The USA has less than 5 percent of the global population and yet 15.28 percent of the global GDP, in dollars. That many users and that many dollars means that the USA is going to be disproportionately affected by Calibra and Libra. And once we impact disproportionally U.S. dollar demand by sucking dollars into Libras, interest rates will have to rise to attract dollar-denominating investors, higher interest rates will injure the U.S. economy and U.S. jobs, and higher interest rates, perhaps more importantly, will raise the financing cost of funding U.S. military operations and national security.

And if that is going to be the case, how do we put a stop to it? Let's say we have hundreds of millions of users in the U.S., and they have all put in thousands of their own dollars. How do we put a stop to it once that risk presents itself? Because if that risk presents itself and we can't put a stop to it, what happens then? And if you think that the Congress or the elected leaders are going to be able to put a stop to it, one thing that you need to realize is, when you have hundreds of millions of users, in thousands of districts, it is going to be next to impossible politically to do that.

I yield back.

Chairwoman WATERS. The gentleman from Georgia, Mr. Loudermilk, is recognized for 5 minutes.

Mr. LOUDERMILK. Thank you, Madam Chairwoman. Mr. Marcus, thank you for being here. I know it has been a long day. Look, I want to thank you for not only your time being here but also your willingness to look at new ways of doing things. That has been the strength of our country.

Quite frankly, I don't care for Facebook. It is a nightmare for many of us in this type of position. I don't care for some of the filtering that is done, suppressing some of our posts because of political content, but if you are a private business, that is your right to do so.

But I do appreciate anyone who challenges the status quo to look for something new and a better way of doing it. We have concerns here, and I think this is actually a platform where we can address those concerns. We can begin a dialogue, and I appreciate that.

What you are experiencing right now has been experienced by any innovator throughout our history. The Washington Post, in the early 1900s, had an article entitled, "Man Will Never Fly, and Shouldn't." And it went through all the reasons why we should even stop testing an airplane, especially when you had two bicycle mechanics from Dayton, Ohio, trying to fly when scientists and engineers couldn't.

Thomas Edison—there were dozens and dozens of articles written about how the light bulb was a dangerous invention if it was ever accomplished, and would be a public health threat, and it should be stopped immediately.

Now all of those ended up being great advancements that, rightfully so, were regulated by government for public safety and health benefit—reasons that it could be done safely.

But the point is we can't demean these things until we actually look into them, and this is the dialogue I want to have. I have concerns. I do have concerns, but I think unless I am willing to express those concerns, and I am willing to actually hear your answers, we are getting nowhere. And so with that, I don't want to use up all of my time.

One of the big concerns of mine, from spending time in the IT industry, in data security, is, look, cryptocurrency is used for illicit financing—money laundering, terrorism financing, human trafficking. In fact, it is estimated that criminals used cryptocurrency to steal $1.7 billion from investors just last year, and 56 percent of that happened here in the United States. The Treasury Secretary said he is concerned that Libra could be used for these purposes.

How can you assure us and the American people that this isn't going to be just another illicit financing tool?

Mr. MARCUS. Congressman, thank you, and I share this concern, and this is actually something that I care about personally, a great deal. I don't want the creation that we are working towards to be used for those types of purposes at all, and we believe that with the appropriate controls, with the proper AML programs, the proper KYC on- and off-ramps, that we will improve on the current system.

There are a lot of illicit activities that are currently happening in our existing financial system, and I actually believe that with the combination of the right technology and the ability for law enforcement and regulators to also have a view into some of the movements, that we will improve on the efficacy of AML and counterterrorism funding programs.

Mr. LOUDERMILK. Some of the pushback we have gotten from law enforcement—I have been an advocate for looking at blockchain for the technology. A lot of folks here have a fear, some justifiable fear, of cryptocurrencies. When you remove the stigma of cryptocurrency I think blockchain is a valid technology we look at for data security, but we do get a lot of pushback from law enforcement on the use of blockchain.

Have you had engagement with law enforcement on this, and if so, what are their thoughts, their concerns, their acceptability? How are you going to do that interface?

Mr. MARCUS. Congressman, we will continue to engage, notably with FinCEN and the Treasury Department, and notably the department that looks after money laundering and counterterrorism funding, with Under Secretary Mandelker and her team, and also globally with a number of law enforcement and regulators.

Mr. LOUDERMILK. With the remaining time I have, I have other questions I can submit for the record, but you basically are going to be a global payment system, which is typically regulated, as central banks are done, pretty heavily regulated. Would it be appropriate for FSOC to actually designate Libra as systemically important, as some have said that you will be?

Mr. MARCUS. Congressman, again, it is really not for me to say who should regulate us, but we definitely have been engaged with not only FSOC but all of the agencies under the FSOC umbrella, and we will engage mostly in payment services. But it is not for us to determine.

Mr. LOUDERMILK. Thank you.

Chairwoman WATERS. The gentlewoman from Massachusetts, Ms. Pressley, is recognized for 5 minutes.

Ms. PRESSLEY. Thank you, Chairwoman Waters. I really do appreciate your continued leadership and returning this committee to its oversight role. I want to emphasize to you, Mr. Marcus, and to my colleagues on both sides of the aisle, that the reason we are here today is oversight, or more accurately, the lack of oversight in this space. The fact that we have arrived this far along in the conversation without any regulatory guardrails to inform the development of this project, on its face, just that fact alone is a problem.

It is long past time that we stop compromising on consumers' privacy in the pursuit of profit. When consumers' well-being is on the line, echoing the sentiments of the gentleman from Arkansas, we cannot afford to simply trust but not verify. And so that is what we are here to do today, to verify.

So, Mr. Marcus, yes or no, since my time is short, are you familiar with the content of Facebook's press release announcing the launch of Calibra?

Mr. MARCUS. I am, Congresswoman.

Ms. PRESSLEY. Great. At the end of your press release, there is a disclaimer that states, "These forward-looking statements may differ materially from actual results, due to a variety of factors and uncertainties, many of which are beyond our control." In it, you go on to admit that this is all, "based on assumptions that you believe to be reasonable", as of the date of this press release.

Madam Chairwoman, I ask for unanimous consent to submit to the record Facebook's press release announcing the launch of Calibra.

Chairwoman WATERS. Without objection, it is so ordered.

Ms. PRESSLEY. So, yes or no, would you trust your money with a company that essentially admits that it is just winging it?

Mr. MARCUS. Congresswoman, I don't believe that is the case and this is why we have shared our White Papers and our—

Ms. PRESSLEY. Reclaiming my time, the disclaimer ends by saying that you, "undertake no obligation to update these statements as a result of new information or future events." Again, moving on.

On the issue of underbanking, which is an issue this committee is very committed to addressing under the leadership of Chairwoman Waters, Representative Beatty was citing your White Paper where you identify 1.7 billion people globally who lack access to financial institutions. That is a lot of people. Half of all adults who don't have bank accounts are living in just 7 countries: Bangladesh; China; India; Indonesia; Mexico; Nigeria; and Pakistan.

Yes or no, are any of Libra's 27 partner organizations based in these countries?

Mr. MARCUS. Not at this stage, Congresswoman, but by the time we get to 100 members we hope to have a more representative slate of the very people that we want to serve.

Ms. PRESSLEY. Mr. Marcus, do you believe, as has been claimed, that authentication is the reason many of these people don't have bank accounts?

Mr. MARCUS. Congresswoman, there are a number of issues but my understanding is yes, identity is a big problem and—

Ms. PRESSLEY. Okay. Moving on—

Mr. MARCUS. —a greater problem.

Ms. PRESSLEY. Reclaiming my time. So the same bank report finds that almost two-thirds of people who don't have bank accounts say it is because they lack enough money to open one.

Here is a rapid-fire round for you, Mr. Marcus. Does the Calibra Wallet require a bank account? Yes or no?

Mr. MARCUS. No, Congresswoman.

Ms. PRESSLEY. Does the Calibra Wallet require a smartphone?

Mr. MARCUS. Yes, and now you can buy one for—

Ms. PRESSLEY. Reclaiming my time. Would these potential users be paid any interest on the money they store in Libra currency?

Mr. MARCUS. Congresswoman, it is like cash, and as a result it doesn't earn interest.

Ms. PRESSLEY. Okay. So if your solution to the world's unbanked is a currency that requires them to have a bank account—

Mr. MARCUS. It doesn't.

Ms. PRESSLEY. —a smartphone, and no returns on their savings, I am not actually sure you really understand what the source and root of the problem really is. It is clear to me, when it comes to Facebook and its initiatives, we simply cannot trust or verify.

But I would add and underscore that the reason we are here, and that you even have this opportunity to pursue it, is because the Federal Reserve has failed to offer Americans an equitable, reliable, efficient, safe, and secure system to access and move their money.

I yield back.

Chairwoman WATERS. Thank you.

The gentleman from Ohio, Mr. Davidson, is recognized for 5 minutes.

Mr. DAVIDSON. Thank you, Madam Chairwoman. I really appreciate you holding this important hearing today. A bipartisan group of my colleagues have worked for nearly 2 years trying to provide light touch regulatory certainty to many aspects of this market.

Mr. Marcus, I appreciate you being here on behalf of Facebook, and in some ways a representative from the Libra Association, because you have brought to the world's attention a space that previously has been dynamic in the American market, lots of American innovators, but you see a lot of companies leaving the U.S. market for Switzerland, for Singapore, and for others, not to avoid U.S. laws, but to find the regulatory certainty that we have highlighted does not currently exist in the United States today.

With that, Madam Chairwoman, my hope is that the committee will hold future hearings on cryptocurrency regulation so we can properly address these issues, and as we have seen, not entirely conflate them with Facebook's mixed messages here or mixed history across numerous other platforms, if there are platforms.

Already, there are several legislative proposals in Congress that address the cryptocurrency sector, including the Token Taxonomy Act, a bill which I am leading alongside fellow committee colleagues Gottheimer, Budd, Gabbard, and Rose.

With that, one of the key differentiators with Libra as a currency, from many other tokens in this space, is centralization. When you look at an open blockchain token, or you look at the Bitcoin that has come to represent the entire blockchain, to many people, it is like the architecture is the internet but the specific instance is a website. People know this famous website, Bitcoin, but they are not able to really associate the broader architecture of blockchain.

And just like Facebook launched, and many other things will continue to launch, when the internet was in its early stages, we couldn't conceive of all the specific instances that would take place on the internet, in the blockchain space, in the tokenized economy. We are not really yet able to foresee all of the specific applications. That is why I think it is very important that we continue to hold hearings on the topic. Tokens could represent title to a car, deed to a land, software license, or goods or services.

But what you are proposing is essentially different. It is a currency. It is not just a payment system. Calibra is a payment system, but you want to do it in a way that is different with the means of exchange. A store of value that is exchanged in a similar way to currency—not yet legal tender, not required to be accepted everywhere. But, essentially, how is this different than what Christine Lagarde at the International Monetary Fund proposed as a synthetic currency?

Mr. MARCUS. Congressman, the first big difference is that unlike the SDR that you are referencing, this digital currency will be available to consumers and will be designed as a medium of exchange from the ground up.

Mr. DAVIDSON. Yes, I don't think that is different at all. It is just whether the central bank is the Libra Association or the IMF. So, you still have a central banker. If you think of it as a bank, in the sense of that, the central authority, the idea that the Libra Association could ever become decentralized, I think gives a lot of people pause, because you intend to have it pegged to not just a bundle of currencies, but in the White Paper, short-term securities.

Currently, under U.S. law, if you are trading in securities as the underlying basis for the asset that you are selling, that is regulated as a security. Why would it not be considered a security? Do you have a special Facebook clause?

Mr. MARCUS. No, Congressman, certainly not, and the reason we believe that Libra is not a security is because it is designed as a payment tool, and that -

Mr. DAVIDSON. Okay, reclaiming my time. Others have posited that a relatively simple, stable coin—which isn't entirely stable because it is denominated in other things—could be characterized as swaps or demand notes, both of which are treated as securities. The SEC's head of digital assets, Valerie Szczepanik, confirmed at a hearing last week that it does not matter that the stable coin does not have an expectation of profits. The expectation of profit is key because of the structure of it. In the case here, it would be regulated as a security.

Setting that aside, we look at the other issues. The board—I am going to have to submit a ton of these questions in writing—when you look at the Know-Your-Customer provisions, and I listen to so many of my colleagues talk about how are we going to prevent illicit finance, I look forward to seeing Secretary Mnuchin or Chairman Powell ask how we are going to regulate the dollar. Mr. Duffy had an exact right point.

And if you, at Facebook, or the Libra Association presume to sit over top of this and filter transactions the same way that you filter content on your alleged platform, I think the public is going to be out.

Last I would say, do you plan to launch this outside the United States if you can't get regulatory certainty in the United States?

Mr. MARCUS. Congressman, I am glad you asked the question, and we will not actually proceed until we get all of the concerns addressed and the properly regulatory oversight here in the United States.

Mr. DAVIDSON. My time has expired.

Chairwoman WATERS. The gentleman from New Jersey, Mr. Gottheimer, is recognized for 5 minutes.

Mr. GOTTHEIMER. Thank you, Madam Chairwoman, and, Mr. Marcus, thank you for being here today.

Facebook claims that its new Libra venture is motivated, in part, by a desire to serve the unbanked. While I appreciate this motivation, I am a little confused on how your product will directly help the unbanked and underbanked, given that the unbanked are operating solely with cash. How is a person who is unable to open a bank account going to be able to open a Libra account, convert their cash to Libra, and then transmit those Libra to third parties?

Mr. MARCUS. Thank you for your question, Congressman. The way that the Calibra Wallet will approach this is in partnership with cash-in and cash-out agents in the relevant countries where banking penetration is very low. And as a result, consumers who don't have bank accounts will have the ability to access the Libra network and buy and sell Libra.

Mr. GOTTHEIMER. So they have to have a center where they would go to, to actually convert, and help to set those up?

Mr. MARCUS. Congressman, we would use the existing network of cash-in and cash-out. Again, this is speaking for the Calibra Wallet.

Mr. GOTTHEIMER. Okay. Thank you. I think we agree on a key point, that blockchain technology is inevitable, and I believe that the new frontier presented by blockchain and similar financial technologies are an opportunity for American leadership, economic growth, and job creation, versus losing out in disgust to China and to Europe and others.

In my district, the 5th District of New Jersey, so many different people work in the financial sector or on the cutting edge of financial technology, and it can be a tremendous job creator for the State. We also agree that we need to create an environment that encourages technologies to start here, grow here, and create U.S. jobs rather than going overseas.

We know the Libra Association is currently composed of 28 American companies. I am deeply concerned that Libra will be based in Switzerland, as you have also heard. This is a big concern of ours. And so, echoing Mr. Davidson and others, would you agree that part of the reason why you made the decision was not to avoid guardrails but instead to avoid the lack of legislative certainty we have here in the United States?

Mr. MARCUS. Congressman, again, thank you for raising this because the choice of Switzerland, again, had nothing to do with us evading our responsibilities or oversight. But we really wanted the Libra Association, and the Libra digital currency, to be recognized globally as a unit of measure that was acceptable, and as a result, Switzerland offered the international platform to do that. And we hope that one day, many, many years down the line, the Libra Association can work very closely with organizations hosted in Geneva, like the WTO, the WHO, and the Bank of International Settlements in Basel.

Mr. GOTTHEIMER. We have heard quite a bit, many of us, if I can unpack that a little bit more, and why Mr. Davidson and I and others focused on that Token Taxonomy Act, which was bipartisan legislation, as you just heard, which provides some rules of the road for blockchain with a light touch but leaves space for American innovation.

Part of our goal, because many companies that have been to our offices have said, "Hey, we need some certainty here. We need some guardrails." Maybe not Facebook, but others have certainly said to us, "Hey, the reason we are going elsewhere is because we don't actually know the rules of the road here."

Have you heard that? Is that something—and it may not have factored into your decision-making in that direct case, but is that something that you have heard from partners you have talked to?

Mr. MARCUS. Congressman, yes, I have heard from different companies in this space that regulatory clarity would be helpful, yes.

Mr. GOTTHEIMER. And I know you have seen our piece of legislation. Are there other things that you think we should be doing to help the United States establish itself as a global leader on cryptocurrency? Are there other steps we could be taking in this body?

Mr. MARCUS. Congressman, I think the first thing we can do is ensure that projects that are within the right oversight and done responsibly actually see the light of day instead of losing our leadership to other nations that are plowing ahead.

Mr. GOTTHEIMER. That is one of our big concerns here is losing that space but also making sure that people don't, as you pointed out, don't evade, whether it is on privacy issues or others, evade U.S. jurisdiction just to do that, and I think it is a very big concern, I know, of me and many of my colleagues. We are very concerned, and this affects a lot of people and especially, as I pointed out, the unbanked and the underbanked that I am worried about, as time goes on, and how do we make sure that we don't abandon them in this process. I think it is very, very important as we grow.

I yield back. Thank you very much, Madam Chairwoman.

Chairwoman WATERS. Thank you. The gentleman from North Carolina, Mr. Budd, is recognized for 5 minutes.

Mr. BUDD. Thank you, Madam Chairwoman. I think it is important that members of this committee be able to differentiate between Libra, which as I am understanding it, is not truly cryptocurrency, and then other tokens like Bitcoin, before discussing legislation. And I would encourage Members to use outside groups like the Coin Center, the Blockchain Association, and the Digital Chamber as resources. Those are very helpful and they provide a lot of clarity. Topics like this require a different sort of regulation, so the more educated we become, the better.

If America is to remain and continue to grow and be a world leader in financial innovation and technology, then it is vital that this committee not embrace reactionary laws against cryptocurrencies, or even this, Libra. But we must differentiate between Libra and similar tokens, to Bitcoin from Libra.

Mr. Marcus, I want to talk about the issue of Libra remaining politically neutral. I know this came up yesterday in the Senate, and my colleagues who have gone before me, including Mr. Duffy, Mr. Barr, and Mr. Davidson, and some others, have raised concerns on this, and I share those same concerns.

In that vein, do you have any guidelines in place at this point in the process on how you will maintain political neutrality on your platform, and if not, will you commit to us today that you will develop guidelines and make those guidelines transparent to the public?

Mr. MARCUS. It is an important question, Congressman, and there are two parts to this answer. The first is the Libra Association, and the Libra Association will naturally not have oversight or decision-making around how Libra can be used, as long as it is lawful uses. And then the second part is the Calibra Wallet, and my commitment to you is that as far as policies come, we will be very thoughtful and we will share these with you when we get closer to finalizing the policies that are specific to the Calibra Wallet.

Mr. BUDD. Thank you. When you were talking about part one, the Libra Association, to be differentiated from Calibra, you said, "if it is lawful." I think Mr. Duffy really pointed this out, that if it is lawful, it should be able to be used—you should be able to use Libra, and not the whims of the ideology of Facebook.

My concern is that you are going to let hearings like these, where you get nailed on national TV, inform decisions about who you do business with, and who you don't do business with, similar to financial institutions that have sat right where you did.

We trusted Facebook with our data and they failed, so I am concerned that without the proper protocols in place, people should pause before trusting Libra with their financial information. And this opinion is based on countless examples of conservative deplatforming, in general, by big tech.

As my colleague, Senator Marsha Blackburn, said, "Tech companies like Google and Facebook need to start embracing the spirit of the First Amendment, not just their own employees."

Moving on, in its published materials, the Libra Association commits to the Libra network transitioning from a permissioned network to a permission-less one. I think that is in 5 years. Is that correct?

Mr. MARCUS. The stated goal, Congressman, is to start that slow transition 5 years after the launch.

Mr. BUDD. Mr. Marcus, given that this would require investors in the association to give up all their interest in revenue generated from this created reserve, what incentive would they have to do that?

Mr. MARCUS. Congressman, actually this is not the way it will work, because we believe that the current members who will run nodes on the blockchain will likely continue to be represented, because in a transition to permission-less you would have delegation of voting, and the delegation will likely be done to the members that would actually have activity on top of the network. So we believe that it won't be as dramatic of a shift in governance than what has been portrayed.

Mr. BUDD. How can we be assured by you that this off-ramp to permission-less actually occurs?

Mr. MARCUS. Congressman, this is something that we would need to embed in the governance of the association, and we are currently working on finalizing the charter with the other members, and this charter and the set of rules, notably on AML, KYC, and others, will be made public.

Mr. BUDD. Okay. Thank you very much, and I yield back my remaining time.

Chairwoman WATERS. The gentlewoman from New York, Ms. Ocasio-Cortez, is recognized for 5 minutes.

Ms. OCASIO-CORTEZ. Thank you so much, Madam Chairwoman. I am grateful that we are having this hearing today. Thank you, Mr. Marcus, for coming forward today to testify before our committee.

I believe we are here today because Facebook, which is a publishing platform, an advertising network, a personal telecommunications network, a surveillance corporation, and a content distributor, now also wants to establish a currency and act, through its wallet, as, at minimum, a payment processor. Why should these activities be consolidated under one corporation?

Mr. MARCUS. Congresswoman, the one thing that we are focused on, really, is solving problems for the very people who are left behind right now, and we believe it is important because we have the ability to invest, and we have the products to deliver those services that will solve problems, the same way we have reduced costs for people to communicate on our messaging apps.

Ms. OCASIO-CORTEZ. I see. Libra is, according to your White Paper, a unit of currency backed by a reserve governed by the Libra Association. Now, to economists, to Members of Congress, and to accountants, the term "backed" has a very specific meaning, and usually incorporates monetary policy, yet the Libra White Paper does not define "backed." Rather, it states that Libra will be "backed by government currency and government securities."

So what does "backed" mean, in your sense?

Mr. MARCUS. Congresswoman, it means that it will have a reserve, one for one. For every unit of Libra, you will have the corresponding value in stable currencies.

Ms. OCASIO-CORTEZ. Does this mean, as stated, that the Libra Association does not set monetary policy but it mints and burns coins in response to demand from authorized resellers. As it appears today, if there are more Canadian Libra users than U.S. users, will there be more Canadian dollars in the Libra reserve to meet potential redemptions?

Mr. MARCUS. No, Congresswoman. The way that the reserve basket will be determined will be stable and continue to be stable, and we will work with the G-7 working group to ensure that it has the proper—

Ms. OCASIO-CORTEZ. Thank you. And so this governance over the reserve is the Libra Association, correct?

Mr. MARCUS. Yes it is, Congresswoman.

Ms. OCASIO-CORTEZ. And currently, the Libra Association is governed by Facebook, Uber, eBay, Spotify, Visa, Thrive Capital, Union Square Ventures, and a handful of nonprofits as well as some other partners, correct?

Mr. MARCUS. That is correct, yes.

Ms. OCASIO-CORTEZ. Were they democratically elected?

Mr. MARCUS. No, Congresswoman, but we hope that we will have the proper regulatory oversight, because we agree with you that this should have the proper oversight to ensure proper—

Ms. OCASIO-CORTEZ. Who picked the founding members of this governance over the currency?

Mr. MARCUS. Congresswoman, the membership is open, based on certain criteria. The first 27 other companies that have joined are the companies that have shared that desire to come and build this network and solve problems.

Ms. OCASIO-CORTEZ. I see. We are discussing a currency controlled by an un-democratically selected coalition of largely massive corporations.

Do you believe currency is a public good?

Mr. MARCUS. Congresswoman, I believe that sovereign currencies should remain sovereign, and we do not want to challenge sovereign currencies. We just want to augment their capabilities in a way that they can be—

Ms. OCASIO-CORTEZ. But do you believe currency is a public good?

Mr. MARCUS. Congresswoman, I believe that sovereign currencies are sovereign, and as result they should continue to be sovereign—

Ms. OCASIO-CORTEZ. Do you believe Libra should be a public good?

Mr. MARCUS. Congresswoman, again, we will work with all of the regulators and address all concerns, and the regulators will determine—

Ms. OCASIO-CORTEZ. I will take that as a no? I should take that as a no?

Mr. MARCUS. It is not for me to decide, Congresswoman.

Ms. OCASIO-CORTEZ. Okay. I will take that as a no.

You stated yesterday, in front of the Senate Committee, that you would be open to accepting 100 percent of your pay in Libra. In the history of this country, there is a term for being paid in a corporate-controlled currency. Do you know what that term is?

Mr. MARCUS. I do not, Congresswoman.

Ms. OCASIO-CORTEZ. It is called "scrip." Are you familiar with "scrip?"

Mr. MARCUS. I am not, Congresswoman.

Ms. OCASIO-CORTEZ. It's the idea that your pay could be controlled by a corporation instead of a sovereign government. Do you think that there is any risk here? From scrip to the issues with how Facebook handled our elections, we are seeing a destabilizing in our public goods. By facilitating instantaneous purchases to a digital wallet, Calibra and Libra, how could—my time has expired. Thank you very much.

Chairwoman WATERS. The gentleman from Tennessee, Mr. Kustoff, is recognized for 5 minutes.

Mr. KUSTOFF. Thank you, Madam Chairwoman, for convening today's important hearing, and thank you, Mr. Marcus, for appearing today. You have been through 2 days now of questioning, both on the Senate side and now before our committee. And as I have sat here today, I have heard a number of comments, certainly those who appreciate the innovation that Facebook is trying to apply and those that don't want to stifle innovation, but certainly concerns from both sides of the aisle.

And as I listen to the questions being asked today, and your responses, the graphics that have been shown periodically through the day of President Trump's tweets about what Facebook and Libra are trying to do and accomplish, and his concerns—just a few minutes before this hearing, I did a local radio interview in my part of West Tennessee, and the radio host expressed very general concern about Facebook and Libra, which all boils down to this: How do you propose educating and talking to my constituents about the need for what you are trying to do and how it will benefit them? How do you explain it to them where they are not concerned and they are not scared?

Mr. MARCUS. Thank you, Congressman. The way that we are going to make sure that there is proper education in the Calibra Wallet is that it will be designed with education in the product experience itself. And so at every step of the way, consumers will understand what they are doing and what Libra can do for them.

I do believe that it will help many people reduce costs, notably for sending money around the world, and we will be very clear in education on the Libra Association side. We will continue to have social impact partners that are focused on financial literacy, because all around the world it is really important to improve on financial literacy, to improve on financial inclusion itself. And as a result, we, at the Libra Association, will continue funding programs and let experts help on that front.

Mr. KUSTOFF. Do you understand why consumers, and from my standpoint, constituents, are concerned and even maybe a little scared of your technology and what you are trying to do?

Mr. MARCUS. Congressman, absolutely, and this is why we will need to do this the right way. That has been my commitment and is my commitment, that we will take the time to get this right, including on education and communication to consumers.

Mr. KUSTOFF. Mr. Marcus, a number of questions have been asked, most recently by Congressman Gotteheimer, about the decision to locate in Switzerland. You have heard that. I assume you heard those concerns yesterday. I assume you have heard those concerns for some period of time. I would just ask you directly: Why not have it located in the United States?

Mr. MARCUS. Congressman, I want to say that Switzerland has nothing to do about evading our responsibilities or oversight, but we do want the Libra digital currency to be accepted and recognized as a global unit of measure on the internet, and as a result, placing it, homing the association in Switzerland was the right choice because it is the home of many internationally recognized and trusted organizations.

That being said, I believe that the vast majority of corporations, companies, startups, that will benefit from developing and building on the Libra network will be here in the United States and will create jobs here in the United States and will, of course, be subject to all U.S. law and regulation.

Mr. KUSTOFF. Mr. Marcus, I can appreciate that, but isn't it important that Americans trust what you are trying to do, and wouldn't they more likely trust it if it were located in the United States and, in some way, lightly regulated by American authorities?

Mr. MARCUS. They probably would, Congressman, although they will have a relationship with American companies, and as a result they will have a trust, or not, of the different wallets that will operate. And that being said, the goal of the Libra digital currency is also to serve a lot of populations that are not in the U.S., and as a result, we felt that the choice of an international home for the Libra Association was the right decision.

Mr. KUSTOFF. Last question: You understand why American consumers would be concerned that it is not located in the United States and instead located in Switzerland?

Mr. MARCUS. Congressman, I think as far as the consumers here in the U.S. are concerned, their funds, if they use an American wallet, will be here, not in Switzerland.

Mr. KUSTOFF. Thank you. I yield back.

Chairwoman WATERS. The gentlelady from North Carolina, Ms. Adams, is recognized for 5 minutes.

Ms. ADAMS. Thank you, Madam Chairwoman, and thank you for convening the hearing, and, Mr. Marcus, thank you for coming. Like many of my colleagues, I, too, have great concerns about

Facebook's entry into the financial services industry. I have gained a little more insight today, but I do have some questions.

I want to follow up on Ms. Ocasio-Cortez and ask you to explain a little bit more how a company becomes a member of the Libra Association. Can you just give me a brief answer? I have several questions I want to ask you.

Mr. MARCUS. Of course, Congresswoman. There are sets of criteria that have been established and that are public, and any company or organization meeting these criteria can actually join the association as a member. This is a process that is now being led by the Libra Association.

Ms. ADAMS. Is the process public?

Mr. MARCUS. Yes, Congresswoman.

Ms. ADAMS. Okay. So, can a wealthy individual investor become a member?

Mr. MARCUS. No, Congresswoman, because the criteria has different buckets, so it is either corporations that are active in delivering services or companies in the blockchain area, or—

Ms. ADAMS. Okay. Let me move on. So, consumers can't either?

Mr. MARCUS. Congresswoman, all consumers will be able to use Libra.

Ms. ADAMS. That is not what I asked, though. Can consumers become members of the Libra Association? No, they cannot.

Mr. MARCUS. No, Congresswoman.

Ms. ADAMS. All right. It costs at least, what, $10 million to become a member of the association?

Mr. MARCUS. Congresswoman, this is not a cost. Members will have to invest in the ecosystem to ensure that it is properly funded—

Ms. ADAMS. But that is an entry fee?

Mr. MARCUS. It is not a fee, Congresswoman. This is an investment in the ecosystem.

Ms. ADAMS. Okay. Let me circle back on Mr. San Nicolas' line of questioning. Why would any of the companies in the Libra Association make a major investment like this in this payment tool?

Mr. MARCUS. Congresswoman, I believe in my conversations with all of them, they agree with us that the status quo is not working for too many people and that people deserve better. They deserve lower cost and they deserve a lower barrier of entry to digital money, and that is why they have joined. And then, of course, they have their own goals that are business goals because they believe that if lower cost—

Ms. ADAMS. Okay, let me reclaim my time, and move on then. As a free service, Facebook's business model relies primarily on advertising and its marketing platform to make a profit. In 2017, 90 percent of Facebook's $40 billion in revenue came from digital ads and users' data. And that is the core business model. Is that correct?

Mr. MARCUS. Of Facebook, the company, Congresswoman?

Ms. ADAMS. Yes.

Mr. MARCUS. Yes, it is.

Ms. ADAMS. Okay. So you expect us to believe that you are going to start collecting financial data and not share it because you promised not to do that?

Mr. MARCUS. Yes, Congresswoman, and as well because there will be many other wallets that we will have to compete with that are not active in social media or advertising, and as a result, we will have to make good on those commitments.

Ms. ADAMS. Okay. What, if anything, has been learned from the Cambridge Analytica scandal that other data hacks that have occurred on Facebook's platform? What, if anything, have you learned?

Mr. MARCUS. Congresswoman, we have learned a lot, and we now have tighter controls on data. We have tighter controls on keeping data from people using our services safe. We have tighter controls on election integrity, and we have invested greatly in election integrity and ads transparency.

Ms. ADAMS. I would be interested in what the steps are. When you say tighter control, can you give me an example? I have 45 seconds.

Mr. MARCUS. Congresswoman, yes. For instance, what happened with Cambridge Analytica, the way the platform was opened back then is not possible anymore on the Facebook platform today.

Ms. ADAMS. Okay. How much has Facebook invested in the formation of Libra, Calibra, and the Libra investment token that will earn a share of interest?

Mr. MARCUS. Congresswoman, this investment has not happened yet. We are in the phase of ratifying the charter with other members of the association, and then members can decide how much they want to invest, and we will take part in that process like every other member.

Ms. ADAMS. Thank you, sir.

Madam Chairwoman, I yield back.

Chairwoman WATERS. The gentleman from Ohio, Mr. Gonzalez, is recognized for 5 minutes.

Mr. GONZALEZ OF OHIO. Thank you, Madam Chairwoman, and thank you, Mr. Marcus, for being here. I am going to jump right in.

I think what today's discussion is really about is trust and whether we can trust your company. I think you are pretty low on the trust spectrum currently, for very good reason. But essentially, what we are talking about on the association side, is the governing body of Libra, correct?

Mr. MARCUS. Yes, Congressman.

Mr. GONZALEZ OF OHIO. Okay. And of the members today, how many did you hand-select?

Mr. MARCUS. I'm sorry?

Mr. GONZALEZ OF OHIO. How many did you recruit? How many did Facebook recruit?

Mr. MARCUS. Congressman, we approached a wide range of companies.

Mr. GONZALEZ OF OHIO. But how many did you approve of? One hundred percent of them?

Mr. MARCUS. Congressman, they met the criteria, and they had the willingness to participate. When we get to the 100—

Mr. GONZALEZ OF OHIO. But you got them, right?

Mr. MARCUS. —we will not be involved in the decision of who gets to join.

Mr. GONZALEZ OF OHIO. Okay, but to date, you have recruited all of the members, correct?

Mr. MARCUS. Congressman, we have approached a number of companies. Those are the companies that—

Mr. GONZALEZ OF OHIO. I think the answer is yes, so we will keep going. First, you created the coding language. Most decisions to date have been made by your company. The claim has been Facebook will not have undue influence over the platform. We are all politicians in this room. I think if we could hand-select our voters, we would feel pretty comfortable about our ability to influence whatever decisions are made. So, I would suggest that that is not an accurate claim.

Second, there is something glaringly missing from the group, which is everyday users. Why would you exclude users from having voting authority over the association?

Mr. MARCUS. Congressman, first, I do want to correct one fact, which is, yes, we have created an investment in all of the code up to this point, but now it is in the open-source community and available to be contributed.

Mr. GONZALEZ OF OHIO. Great.

Mr. MARCUS. And to the consumers' question, because we believe that to meet our regulatory requirements across the association we need entities that are established, that know how to operate those types of programs that are trusted, but this is also why we believe that over time, it is important to have a transition to giving people more of a voice in—

Mr. GONZALEZ OF OHIO. I will talk about that in a second. Quickly, on the membership side, you have to be able to validate, and you need a $10 million investment. Can a Chinese state-owned enterprise get in?

Mr. MARCUS. Sorry, I could not—

Mr. GONZALEZ OF OHIO. Can a Chinese state-owned enterprise get into the membership?

Mr. MARCUS. Congressman, this is not my decision. It is the Libra Association's decision. But there is—

Mr. GONZALEZ OF OHIO. Which you have undue influence over.

Mr. MARCUS. There is a key principle, which is that if Libra is not accepted in a certain country or cannot be used, I believe that companies for said country should not be part of the—

Mr. GONZALEZ OF OHIO. So, the answer is maybe. Now, I want to talk about how you are actually going to transition. I wonder how you will actually do this, because the promise of a permissionless system is the decentralization. It seems like if you are fully decentralized, you would not actually need the Libra Association. Help me square those two. They seem to be in conflict.

Mr. MARCUS. You are right, Congressman, to raise this important point, and the way that we are thinking about this is that since Libra will always have to have a reserve, that it will be backed one to one, there will be some form of centralization in the management of the reserve because we will need the right oversight to ensure that it is managed appropriately to retain stability. And as a result, we believe that there will still be an association that will not only look after the key principles to operate the network within the bounds of regulation and ensuring that proper programs are around, but that does not mean that the governance and the voting has to be the same as today.

And so I think we can achieve the balance of having more openness, and to me the key issue with a permission-less network is the ability to have nodes be more fungible and as a result ensure the integrity of the network over a long—

Mr. GONZALEZ OF OHIO. I actually think this is the hardest thing for you. I do not actually think it will occur. If I had to predict, I just do not think it will occur because they are just fundamentally in conflict. When you talk to crypto purists or blockchain purists, these things do not match. So I do not think it will happen. I think what we are most likely to see is a 100-member organization that you guys basically control, which, frankly, I love the innovation, but that scares me, if I am being honest.

And then the last point on Calibra specifically, a quick question: Is it the only wallet that will be directly integrated to Facebook?

Mr. MARCUS. Congressman, it will be interoperable with other wallets.

Mr. GONZALEZ OF OHIO. But directly integrated.

Mr. MARCUS. Calibra Wallet will be integrated in WhatsApp and Messenger, alongside other wallets for traditional fiat payments.

Mr. GONZALEZ OF OHIO. And so as a fully controlled company of Facebook, a subsidiary of Facebook, the argument that you will not be sharing data across—I would imagine you share data between Facebook, the Big Blue App, Instagram, and Messenger. I would be shocked if you are not also sharing data at some point with Calibra and Facebook. I hear you: "We promise we will do this." Back to what I said at the beginning, nobody trusts you right now.

I yield back.

Ms. TLAIB [presiding]. Thank you. The gentlewoman from Pennsylvania, Ms. Dean, is recognized for 5 minutes.

Ms. DEAN. Thank you, Madam Chairwoman.

Mr. Marcus, thank you for being here before us, and what I would like to do is, with a focus on that notion of trust, number one, say that I was dismayed by your comments that you said we do not need to trust you—I think this was before the Senate—that we do not need to trust Facebook because there are 28 other partners, and eventually 99 other partners in the association.

No, we do need to trust you. We absolutely need to trust you.

Before we look forward to the possibility of Libra, why don't we look back and take a look at the record $5 billion recommended fine against Facebook. Could you be very specific, not euphemistic but very specific, as to the wrongdoing that generated a $5 billion recommended fine?

Mr. MARCUS. Congresswoman, first, I do agree absolutely that trust is essential and that Facebook should be trusted. What I meant in my comments is that even if you do not, you will not need to because Facebook will not have outside power or governance over the network.

Ms. DEAN. I wonder if maybe you would answer the other piece of my question, which was, it is tough to trust when the collection, storage, and misuse of information of your users generated a $5 billion recommended fine. Can you be specific? What have you learned? What has Facebook learned? What is the specific wrongdoing for which you are being fined?

Mr. MARCUS. Congresswoman, I cannot comment on the FTC investigation because it is not yet public, but what I can tell you is what we have learned. And what we have learned is that we cannot launch a service and then figure out how it can or cannot be misused. We have to take steps in order to ensure that what we launch is actually—

Ms. DEAN. You cannot be more specific than that when the very thing you are putting before us today, a preformed association, is the exact same idea of what you just talked about, putting something forward without really testing it all first?

Mr. MARCUS. Congresswoman, nothing is launched and nothing will launch until all concerns are addressed.

Ms. DEAN. Again—

Mr. MARCUS. I made that—

Ms. DEAN. Again, Facebook has to learn some lessons, lessons that you can actually say in open testimony to the public as to the wrongdoing and the misuse of information. Please, assure us that Facebook has the ability to say so now.

Mr. MARCUS. Yes, Congresswoman, we have made mistakes, it is true.

Ms. DEAN. What are those mistakes, so that we can learn and make sure that you have learned?

Mr. MARCUS. We have made mistakes around how to best protect consumers' data and privacy. We have been working on getting better at that.

Ms. DEAN. Did you share consumers' data in unauthorized ways?

Mr. MARCUS. Congresswoman, there were a number of issues, and we made—

Ms. DEAN. So, the answer is yes. Thank you.

Mr. MARCUS. —a number of mistakes, and we—

Ms. DEAN. The answer is yes. In connection with that fine, consider this: The FTC's investigation was set off by a New York Times and Observer of London report which uncovered that Facebook, the social network, allowed Cambridge Analytica, a British consulting firm to the Trump campaign, to harvest personal information of its users. Do you find that incredibly troubling?

Mr. MARCUS. Yes, Congresswoman, but those things are not possible anymore on the Facebook platform.

Ms. DEAN. But they were possible and they took place.

Mr. MARCUS. Because we reacted too slowly, but this is not—

Ms. DEAN. You allowed the harvesting of information for the Trump campaign. Is that correct?

Mr. MARCUS. Congresswoman, I do not have the details—

Ms. DEAN. Thank you. It is apparent that the reporting shows so.

Let us flip to the other side. I think before you move on to Libra, you ought to clean up the messes of the past and be very transparent. The opaqueness is not working.

Let us talk about this. This is structured as a nonprofit, and yet we know that you are going to take dividends or interest and then distribute it out to the association members. Is that correct?

Mr. MARCUS. Congresswoman, yes, this is correct.

Ms. DEAN. Will that be dividends and income?

Mr. MARCUS. Congresswoman, for whatever streams of income the association will pay out and not keep because it is a nonprofit, it will not generate a profit for itself. It will pay appropriate taxes. And I do want to say that I completely agree with your statement that this process cannot be opaque. It has to be in the open. And this is exactly why we have shared our plan so openly—

Ms. DEAN. And yet you had trouble being transparent about the past, so I do worry about the future.

What is the projected income that will be generated, the interest that will be generated, say in the first year? Certainly, you have some timelines: a first year; a second year; a third year. What is the income you are anticipating for Facebook?

Mr. MARCUS. Congresswoman, we are not optimizing for that. What we are optimizing for—

Ms. DEAN. I do not want to talk about optimizing. I want to talk really hard facts, numbers that people can dig into, because I do not think the simple example you gave of the young woman trying to send $200 and you guys are just on a mission to help her send money to her mother in a war-torn country really explains why you would want to get into this business. It has to be for profit? Where is the profit?

Mr. MARCUS. Congresswoman, we have done that for communications, for the very same woman you were describing. Now, she can communicate with her family for free using our products. It was not the case before those products were available.

Ms. DEAN. I will note—

Ms. TLAIB. Time is up.

The gentleman from Indiana, Mr. Hollingsworth, is recognized for 5 minutes.

Mr. HOLLINGSWORTH. Good afternoon, Mr. Marcus. I appreciate you being here and investing some time with us and talking about these things.

I wondered if you might take a deep breath, and take a step back. This is something that you are clearly passionate about, something that you clearly believe in. I wonder if you might tell us kind of what that North Star is? I know you have said it many times here, but I wondered if you might say it again, kind of why are you so passionate about this? Who is this going to help and how is it going to make a difference to that person?

Mr. MARCUS. Thank you for that opportunity, Congressman. I am passionate about this because too many people are left behind, the costs are too high, and the very people who are left behind are the people who cannot afford to be left behind. So the less you have, the more you pay within our current financial system, and the more you need to depend on digital money and free or very low cost services to move your money around, the less access you have. And so we believe that advancing technology and building the ability for people with a simple $40 smartphone and a basic data plan to have access to digital money services would be a huge progress for many people who need it the most.

Mr. HOLLINGSWORTH. All right. Certainly, the fields of Indiana are far from Silicon Valley, but that is exactly something that they can sympathize with, the feeling as though they are on the outside of the financial system or marginally hanging onto the financial system or that the costs of using the financial system are very high to them. That is something that I hear every day all the way across the district, and it is something that is really important to them. This committee, over a number of years, has done a lot of great work in trying to right-size some of the regulatory framework, trying to help participants get into the market, trying to enable and empower those Hoosiers, who are Americans, and those around the world that you mentioned as well.

If the architecture of this is to be a transaction-oriented platform, tell me a little bit about how that differs from a cryptocurrency? Because this is really a digital currency versus a cryptocurrency, and the architecture is very different, and I wanted to talk about that for a second.

Mr. MARCUS. Congressman, there are two parts that are different.

Mr. HOLLINGSWORTH. Yes.

Mr. MARCUS. The first one is really the digital currency itself because it is backed one for one with a very stable reserve that will confer stability to the digital currency.

Mr. HOLLINGSWORTH. When you pay something, you know what the value is that you are paying, and all the stories about cryptocurrencies—gosh, I paid for my pizza with this, and I could be a billionaire today if only it were worth that then, right? So, it's designed for stability in the system to ease transaction flow?

Mr. MARCUS. Correct. This is one. And, two, the way that the technology has been built and the blockchain has been designed, it has been designed for speed and scale so that it can meet the demands of the large community that we hope to serve one day.

Mr. HOLLINGSWORTH. Right, but the fundamental difference in the architecture—and, again, I will not purport to be a technology expert—is that this is not a permission-less system, right, in the sense that it is peer-to-peer? This will go through a central clearinghouse that says XYZ individual owns Libra because they are in this register. They can access it, but you have to be a permissioned corporation to access it or a permissioned member to access that database. Is that right?

Mr. MARCUS. It is partially right, Congressman. The blockchain is a permissioned but open blockchain, and as a result, you do not need to be a member to be able to build services or products on top of the blockchain.

Mr. HOLLINGSWORTH. Truth. Right. To build services on top of, but you cannot go in and make changes to the ledger itself, right? That requires permission?

Mr. MARCUS. Congressman, there is no central body that actually decides what can be added to the blockchain. The way that the consensus algorithm that is used works is that a transaction is proposed, and then as long as two-thirds of the nodes approve of that transaction being added to the ledger, it is added to the ledger.

Mr. HOLLINGSWORTH. Right, right, which is different, though, than a pure peer-to-peer technology, right?

Mr. MARCUS. That is correct, Congressman, because it uses a consensus algorithm.

Mr. HOLLINGSWORTH. And I guess what I am getting to is this is a different type of asset/currency that looks and feels a lot more like a currency and should be regulated more like a currency, right? As though it is a transacting business, where there is a central place at which we can do AML work? We can do other pieces. That is very different than a cryptocurrency and I guess maybe haphazardly or maybe in a C-minus way I am trying to draw that distinction so that individuals understand that this is different than a pure peer-to-peer network that has no ability to do that by virtue of its design. But the architecture that you have thoughtfully proposed here—not put in place but thoughtfully proposed—has that central piece where we can do that very work. Because the goal of AML is to deny access to the financial system by nefarious actors, right? We have the ability to do that here, that we would not otherwise have the ability to do in a pure peer-to-peer architecture. Is that true or untrue?

Mr. MARCUS. Congressman, yes, and that is why we took the permissioned approach to start with so that we can have trusted parties run nodes to start.

Mr. HOLLINGSWORTH. And I sincerely appreciate how that architecture reflects the North Star that you first—

Ms. TLAIB. The gentleman's time has expired.

Mr. HOLLINGSWORTH. —started talking about. Thank you, Mr. Marcus.

Ms. TLAIB. The gentleman from Illinois, Mr. Garcia, is recognized for 5 minutes.

Mr. GARCIA OF ILLINOIS. Thank you, Madam Chairwoman. Thank you for being here this morning, or this afternoon now, Mr. Marcus.

Following up on some of the previous questions, what is in it for partners if not to entrench Facebook or their own market power by participating in this coalition that you have assembled?

Mr. MARCUS. Congressman, thank you for your question. The different members have different roles that they will play on top of the Libra network, and it will benefit their core business. So, for instance, when you think about the network companies like Visa and Mastercard, they will play a role of enabling that Libra is accepted at their merchants, and as a result will have a business opportunity to do so. When you think about the companies like Uber and Lyft, they will be able to not only reduce costs for accepting payments, but also a number of their drivers, when they get paid, send money back home, and they could build services around this at a lower cost for them.

Mr. GARCIA OF ILLINOIS. Okay, so it is all benevolence.

Mr. MARCUS. No, it is not, Congressman.

Mr. GARCIA OF ILLINOIS. Let me change gears briefly. Hawaii's Senator Brian Schatz has noted, in a private conversation he has had with some of the 27 members of the Libra Association—and the Association includes companies like Uber, Mastercard, and Visa as well as some nonprofits like Facebook and Mercy Corps—that Facebook has portrayed the Libra Association as a collective as if Facebook is just one of many voices in this venture. But as Senator Schatz revealed, Facebook's voice is more like the godfather's voice in the family. It is true that it is just one voice among many, but it is also the only voice that matters.

Here is what Senator Schatz said: "Members of the consortium actually have lots of questions, too, similar to the questions that are being offered on this dais. And they have great reservations about moving forward, but they do not want to be left out because of Facebook's market power."

Facebook's history with partners has added to their caution. The game maker Zynga, for example, faced a dramatic loss of revenue after Facebook backed away from a close relationship with the company. Facebook also strained relationships with many publishers last year when it changed the algorithms behind its newsfeed to de-emphasize news stories.

My question is: Are they participating because they are afraid of Facebook and they might as well be friends with Facebook?

Mr. MARCUS. No, Congressman, and I want to fully own the fact that we are in a leadership position now, but we will not be in that same position by the time the network launches. And the existing 27 other companies and the number of other companies, the long list of other organizations all around the world that are applying to join the association just want to join because they believe that together we can build a better system for people.

Mr. GARCIA OF ILLINOIS. And a better world, I suppose.

A quick question. What content will Facebook harvest when a user transacts with Libra? Will it be just the transaction data?

Mr. MARCUS. Congressman, yes, so on the Calibra Wallet, we, of course, will need to authenticate consumers before they can open an account. But there will be no other data than the actual transaction data that is needed to serve the purpose of the wallet.

Mr. GARCIA OF ILLINOIS. What other data will Facebook monetize apart from the transaction data?

Mr. MARCUS. Congressman, we will not monetize transactional or account data nor share it even with Facebook itself.

Mr. GARCIA OF ILLINOIS. Okay. We have learned that Facebook has repeatedly allowed third-party users access to data without Facebook users' consent. Now Facebook promises that its Calibra subsidiary will not share data with Facebook. How can we be sure that this policy will not change in the future? And what would enshrine this promise that you have made?

Mr. MARCUS. Congressman, it is a very fair question, and I understand that people have concerns, and commitments have been made, and here there is one thing that will be very different, which is that if we fail to earn people's trust and fail to deliver on our commitments, then they will not use the Calibra Wallet. We will have portability built in, and we will have the ability for anyone to use any of the many wallets that will be available that will all be interoperable. And if we do not make good on commitments and if we do not earn people's trust by making good on these commitments for very long periods of time, we cannot actually win. And we do want the Calibra Wallet to be successful, and as a result, we will have to make good on these commitments.

Mr. GARCIA OF ILLINOIS. Thank you. I yield back, Madam Chairwoman.

Ms. TLAIB. The gentleman from Virginia, Mr. Riggleman, is recognized for 5 minutes.

Mr. RIGGLEMAN. Thank you, Madam Chairwoman, and thank you for being here, Mr. Marcus.

One more time, since you can see I am usually close to last in these proceedings, what is your title one more time as we go forward?

Mr. MARCUS. My title is, I am the head of Calibra at Facebook.

Mr. RIGGLEMAN. Head of Calibra at Facebook. I have some questions, and we are going to get right into it, because we have had enough getting going on here.

My first question is: After a White Paper, there is usually an implementation plan. Do you foresee all of your partners being involved with the implementation plan for Libra or for Calibra? And once in place, can we as partners in the U.S. Government look at the regulatory side of this as we go forward?

Mr. MARCUS. Congressman, yes, this is my commitment that we will not go forward until we have addressed all concerns and met the regulatory bar and oversight bar that is needed for this network to operate the right way.

Mr. RIGGLEMAN. Yes, sir, and you might have answered this, but are the partners right now involved in the open-source development of Libra and its applications?

Mr. MARCUS. Congressman, some of them are stepping up and are actually starting to be involved in the development, and I expect that since we just open-sourced the code base about 4 weeks ago, we will have a lot of outside contributions going forward.

Mr. RIGGLEMAN. That was my surprise, so I took a little bit of a look at Libra Core, the JavaScript front end, it actually accesses the back end, which is Rust. It helps with the actual transactions. And I know it is very, very new, but what surprised me was it looked like there is already an international flavor to it. I think Rust is 37 people in San Francisco, so I went ahead and did a GitHub search on who is actually leading the development on the Libra Core side, and it looks like—I think it is going to be international because it looks like a native Nigerian is actually building the actual Libra Code in front of the code development of Libra Core. When I look at things from an intelligence background, I wonder, is this going to be international? Are there going to be scalability issues? Because when you look at the number of transactions that you are doing right now, but I was really surprised by the Rust language as it was in the background.

My first question is: Why was the Rust language chosen as the implementation language for Libra? And do you believe right now from what you have seen, that it is mature enough to handle the issues and the security challenges that will really affect these large cryptocurrency transactions?

Mr. MARCUS. Congressman, excellent question on the security of the code and who can commit to the code, and the Libra Association will own the repository for the code, and as a result, while there are many flavors and branches being developed by third parties, only safe, verified code will actually be committed to the actual Libra Core base that is going to be under the governance of the Libra Association.

Mr. RIGGLEMAN. And that is what I really am hoping, because right now—and when I was looking at the nightly build releases, it looks like Libra was built on nightly builds of the Rust programming language. And it is a little interesting because that is not how we usually did releases in the DOD, and I was wondering what features of Rust are only available in the nightly builds, and this is something you can get back to me on. What features are only available in the nightly builds that are not in the official releases of Rust? And does Facebook see that as a concern that they are depending on unofficially released features of the Rust program language? In other words, do you see right now why the nightly releases and do you see this as just a function of the prototyping phase of this?

Mr. MARCUS. Congressman, I do not have all the answers to your very technical questions, but I commit that we will get back to you with more details on your question once my technical team can get back to you.

Mr. RIGGLEMAN. And, really, some of this is not just based on technical questions but the international applicability of Libra. For instance, we just had 8 members of the major banks sitting here, and their issue was information sharing based on laws that we have in place right now and the confusion over sharing that data with foreign subsidiaries. And I will link into this: If we already have those laws on the books, and if we are looking at CFT, if we are looking at AML, based on my background that is some of the things that concern me. And also with scalability, you are looking at large transactions and blocks, I think, that maybe have never been done before, and you can probably agree that is why we need the White Paper and the open-source development. But when you are looking at the issues that you have for regulatory, especially for AML, I think the problem for me is we have to look at this as an international problem because I think eventually you are going to have international wallets. I think wallets will be built around the world, and I think that is something that we are going towards, and that is why the scalability question, who is actually doing this, who is partnering, and this is very concerning to me. And it is really easy to access these individuals on GitHub and to see that somebody from Lagos, Nigeria, is the main code writer for one of these instances is something that concerns me, just based on my background.

Mr. MARCUS. Those are absolutely fair concerns, Congressman, but, again, I want to stress that the Libra Association as a governance body will actually validate committers to the code and will make sure to be very thoughtful about who can commit to the code. And I would be happy to follow up with your office on—

Mr. RIGGLEMAN. And at the end, I think many Members, bipartisan-wise, would love to see an implementation plan built on top of the White Paper. Thank you, sir.

Mr. MARCUS. Thank you, Congressman.

Ms. TLAIB. The gentlewoman from Texas, Ms. Garcia, is recognized for 5 minutes.

Ms. GARCIA OF TEXAS. Thank you, Madam Chairwoman, and thank you, sir, for being here. I know it has been a long day, and I think the end is almost in sight. But I must tell you I have some real concerns about your premise that you are really doing this to help the unbanked. For me, it just seems that although you have said in a Washington Post article that this will enable anyone who has a $40 smartphone and a basic data plan to have access to a digital form of money—I do not know about you, but my smartphone costs a lot more than $40, and my data plan costs maybe that or more.

How is this really going to work for the unbanked? The unbanked, to me, are like the people in my district, a working-class district in Houston, who really are money-order or paycheck-to-paycheck, cash-only consumers. How is that really going to help them? How are they going to really have access to something like this and be able to negotiate what I think could be a very complex system?

Mr. MARCUS. Congresswoman, thank you for your question. The reason in America that people remain on the fringes of the system is because the costs are too high, and—

Ms. GARCIA OF TEXAS. But the cost of the phones and data plans are also high. Are you going to work with your Facebook foundation to provide more connectivity for people around those areas who do not have access to mobile plans?

Mr. MARCUS. Congresswoman, the focus of Calibra is really on the financial side and enabling people to have digital money. But the costs of smartphones and data plans are coming down as a result of competition in—

Ms. GARCIA OF TEXAS. But why would they need digital money? They can get that $20 bill that my colleague was showing off at the other end?

Mr. MARCUS. I'm sorry. I could not hear you.

Ms. GARCIA OF TEXAS. I said, why would they want digital money if they can get the green dollars?

Mr. MARCUS. Congresswoman, they would because probably they need to send a portion of that money to someone in another country or on the other side of the country, and the ability for them to access these—

Ms. GARCIA OF TEXAS. Let us go to that example that you used, $200 that somebody wants to send, and I think you said it would be, I forget, did you say—

Mr. MARCUS. $14.

Ms. GARCIA OF TEXAS. $14? I guess you are talking about either a money order or some sort of wire transfer?

Mr. MARCUS. Cross-border remittance or payment.

Ms. GARCIA OF TEXAS. They can do that fairly quickly, and they can do it without any advertisement. They can do it without any other charges. So the consumer is the decider of what is going to happen, right? Like with you, how do you see the person who is utilizing this? Are they a customer? Are they a consumer? How will you treat this? And are you just frankly using that person to be able to sell another ad and do something for your company?

Mr. MARCUS. No, we are not, Congresswoman, and I do want to stress that not only the current system is expensive, but it is extremely slow. Cross-border payments take on average 3 days—

Ms. GARCIA OF TEXAS. I think you have already said that, but I am talking about in terms of costs. I sit here and I frankly cannot believe that you are not going to charge anybody for anything. You are not a charity, right?

Mr. MARCUS. No, Congresswoman, and I can explain—

Ms. GARCIA OF TEXAS. You are not a charity. How much money have you all already invested in this project? I think an article I read said you have been in this for a couple of years. How much have you all spent already?

Mr. MARCUS. Congresswoman, quite a bit of resources, but I can explain what—

Ms. GARCIA OF TEXAS. How much have you—

Mr. MARCUS. —the upside is for Facebook.

Ms. GARCIA OF TEXAS. How much have you spent?

Mr. MARCUS. I do not know the exact number but—

Ms. GARCIA OF TEXAS. $20 million, $30 million, $40 million, $100 million?

Mr. MARCUS. We have invested what is required, and I think that is why it is a good—

Ms. GARCIA OF TEXAS. So you are not going to tell me how much you invested, but you are trying to convince me that there is not going to be a time that you are going to want to recoup that investment?

Mr. MARCUS. Yes, we will, Congresswoman, and—

Ms. GARCIA OF TEXAS. And how will you do that without charging people, charging for ads, or charging the person who, in my view, you are using for your agenda to get—I do not even know what to call what you all do. It sounds almost like something straight out of a Dan Brown novel: "We belong to the Libra. We get to decide."

Mr. MARCUS. Congresswoman, if I may answer your question, I—

Ms. GARCIA OF TEXAS. I want you to be more transparent.

Mr. MARCUS. I want to be more transparent, and I want to tell you what is in it for Facebook, if you give me 1 minute.

Ms. GARCIA OF TEXAS. Well, you have 20 seconds. That is all I have.

Mr. MARCUS. Okay. I will do it in 20 seconds. There are two things that we will benefit from at Facebook. One is we have 90 million small businesses and a lot of users who will have the ability to transact with one another and they currently cannot transact with one another. And once that happens, that means more commerce—

Ms. GARCIA OF TEXAS. But see, again, that is something they can do with a credit card—there are so many other ways that they can do that.

Mr. MARCUS. They cannot in a number of regions because they do not have access to those services.

Ms. GARCIA OF TEXAS. Regrettably, I have lost my time, but hopefully—

Ms. TLAIB. Time has expired.

Ms. GARCIA OF TEXAS. —you or someone from your group can—

Ms. TLAIB. The gentleman from Tennessee, Mr. Rose, is recognized for 5 minutes.

Mr. ROSE. I want to thank Chairwoman Waters and Ranking Member McHenry for holding this important hearing, and, Mr. Marcus, if you want to finish the answer you were in the midst of right there, I would appreciate hearing that answer. You might just start over, actually.

Mr. MARCUS. Thank you for the opportunity, Congressman. The two ways that Facebook will make money off the Libra network is, number one, the ability for the 90 million businesses and the billions of users who are currently on our various products to transact with one another. And if they can suddenly transact with one another—some of those businesses cannot even accept digital payments today, so the idea that there is more commerce on the platform will actually drive those small businesses to expand, and as they expand, they will buy more ads on the Facebook platform, and that will be an indirect way for Facebook to benefit.

The second way that we will benefit is that over time, if we earn people's trust and they use the Calibra Wallet, we will offer a range of services, lower-cost access to capital and others, in partnerships with banks and financial institutions, and this will be another source of revenue for the company that is completely de-correlated from ads, but that is in many areas.

Those are the two ways that Facebook will benefit from the Libra network being a success.

Mr. ROSE. Okay. Thank you. One of my general thoughts surrounding blockchain space comes down to a simple dichotomy: either the crypto-tokenization blockchain space will be a valuable innovation in the long term; or it is not a particularly valuable innovation. If the former is true, then it is important that the U.S. creates as certain a regulatory environment or regime as possible. By creating regulatory certainty, the value of the growth in this space can be captured here in the United States, whether that value be in job creation or the creation of intellectual property or other benefits. If the latter is true, and this is not a particularly valuable innovation, then any discussion may not bear fruit, but it is ultimately no harm, no foul.

However, the truth of the matter is that whatever one's feelings are on the Libra Project or any other blockchain-related efforts, currently there does not seem to be an adequate regulatory structure to ensure that innovation can flourish while consumers are still protected. That is why I am a cosponsor of the Token Taxonomy Act. There are still many questions to answer in this space, but the goal of the Token Taxonomy Act is one that is quite laudable. Not all blockchains are created equal, and we as a committee and a Congress should discuss the nuances of distributed ledgers versus blockchains, permission versus permission-less blockchains, and utility tokens like Filecoin versus cryptocurrencies like Bitcoin.

The Token Taxonomy Act is a good first step in that it aims to codify a regime for tokens that do not fit well into our current securities law framework.

Mr. Marcus, was it a coincidence that the Libra Association decided to headquarter in Switzerland, when Switzerland has previously outlined clear regulatory guidelines for the industry?

Mr. MARCUS. Regulatory clarity in Switzerland was just one of the components, but, yes, it was factored in the decision.

Mr. ROSE. Libra strikes me as being very similar to a currency ETF both in that its value is derived from a basket of currencies and the way the basket is managed seems to operate much like an

ETF. If this is true, perhaps it should be regulated by the SEC. Perhaps this is a mischaracterization. The point is that we need to carefully study the mechanisms of any new innovation in this field to understand how they should be regulated. Leveraging existing regulatory agencies like the CFTC, the SEC, and State agencies makes sense, but it is our job here in Congress to write laws that make it very clear who will be the ultimate regulator of a potential product. It is Congress' job to give the SEC clear rules that they can interpret and apply. The SEC is doing its best, but they are stuck applying a litany of very old rules to 21st Century technology. We need to help them succeed by providing some updated guidance. That is the only way we are going to ensure that any development in this space is safe and sound and occurs right here in the most innovative economy in the world.

With that, I yield back the balance of my time.

Ms. TLAIB. Thank you.

Without objection, I would like to enter into the record the following materials: a letter from the Electronic Privacy Information Center, EPIC; "Diversity in Blockchain's Initial Review of Facebook's Project Libra; a letter from the Independent Community Bankers of America; a letter from Americans for Financial Reform Education Fund; a New York times op-ed written by Chris Hughes, the co-founder of Facebook, entitled, "It is time to break up Facebook"; and another op-ed by the same person in the Financial Times entitled, "Facebook Co-founder, Libra coin would shift power into the wrong hands."

Without objection, it is so ordered.

Ms. TLAIB. With that, I would like to recognize myself for 5 minutes. Thank you, Mr. Marcus, for joining us. A lot of people have been using the word "innovation." That is a bit misleading. I think what this is really about is making more money, owning people's information, owning their identification, owning their person, all of which very much is interconnected with the livelihood of the residents we represent.

Mr. Marcus, who picked the first 28 corporations of the Libra Association?

Mr. MARCUS. Congresswoman, the original 28 members are a result of a wide outreach, and those are the first out of 100. Facebook will not be in a position to pick and choose the next members and will not be involved in the process. This is a process that is actually now driven and solely in the hands of the Libra Association.

Ms. TLAIB. Thank you, Mr. Marcus. So, Marc Andreessen sits on the board of Facebook. Mark Zuckerberg, the CEO of Facebook, sits on the board of Breakthrough Initiatives. Peter Thiel is the founder of PayPal and is on the board of Facebook. Ben Horowitz is the founder of Anderson Horowitz and on the board of Lyft. Just looking at that, simply looking at the small sample of individuals, there appears to be multiple close relationships on Facebook's board and across the Libra Association members.

Recently, Forbes asked the following question: Is Facebook forming a crypto mafia as the Libra Foundation members boost each other's business?

One example they provided is that Anchorage, one of Libra Association's founding members, raised funding from Visa, which is also a Libra Association founding member. You do not think that creates a power imbalance for a small group of people to manage a high percentage of the world's transactions? Are you worried about undue influence?

Mr. MARCUS. Congresswoman, I appreciate your question. I can assure you that the participants up to this point are participants that have joined because they can add value on the network and provide services that are relevant to the people we serve—

Ms. TLAIB. I am sure they are valuable, Mr. Marcus. No one, I think, would oppose that they are valuable. But each of the Libra Association companies have investors or shareholders to answer to, so how do you see them serving two masters in a competing payments world?

Mr. MARCUS. Congresswoman, we hope that the Libra network is just a network and that every single company will be able to build services on top of the network the same way that companies build services on top of the Internet, and as a result, we believe that conflicts will be limited by that, and the fact that, 100 members by the time we launch.

Ms. TLAIB. Yes.

Mr. MARCUS. But we hope that we will have many more, and, again—

Ms. TLAIB. So can a member of the Libra Association, the group of friends, be voted out by Libra users?

Mr. MARCUS. Congresswoman, no, this is not currently contemplated. But the way that the governance will evolve will allow for that in the future.

Ms. TLAIB. Mr. Marcus—and this is important—the banked and the founding members have a choice to protect their data, but will the unbanked and underbanked have to trade their data and privacy to transact?

Mr. MARCUS. They will not, Congresswoman.

Ms. TLAIB. How is that possible?

Mr. MARCUS. Because this is a payments network and a payments service, Congresswoman, and consumers will have choices. And if they want to use a wallet that is solely in the business of payments and not in the business of advertising at all, they will have the choice.

Ms. TLAIB. One of the barriers for the unbanked community, as you probably know, is access to an ID. So if the same Know-Your-Customer/anti-money-laundering restrictions exist here for the Libra network and wallet, how will this serve the unbanked now?

Mr. MARCUS. Congresswoman, this is a very important question, the problem of identification for financial inclusion, and this is something that we are actively working on with a number of outside NGOs and others to find the best approach. But there are a number of people who have the ability to identify themselves and who are left behind today, and we can serve them today.

Ms. TLAIB. The public manages large cryptocurrencies such as Bitcoin, as you probably heard. However, with the Libra, each founding member had to pay a minimum of $10 million to join and become a validator, whatever, node operator, thus each founding member gaining one vote in the Libra Association council. How does the Libra Association reflect the diverse population you are trying to reach, including the underbanked and unbanked?

Mr. MARCUS. This is a really important question, Congresswoman, and the way that we plan to arrive to the right level of diversity and representation is by being very thoughtful at the Libra Association as we add more members towards the goal of 100 or more members by the time the network launches.

Ms. TLAIB. Thank you, Mr. Marcus.

I now recognize the gentleman from Wisconsin, Mr. Steil, for 5 minutes.

Mr. STEIL. Thank you. Mr. Marcus, I appreciate you being here. I have been listening to today's testimony. I appreciate you guys innovating, bringing forward a White Paper, having this discussion about how to properly regulate what is a new idea. I think some of the conversation today has drifted a bit, where people are coming after you as if you launched this product, and now we are upset that you did that without the regulatory framework in place. I commend you for the fact that you brought forward a White Paper. You are discussing the idea. We are having the conversation today so we can be ready tomorrow if you choose to move forward with this.

In particular, in listening to the discussion today, I think it is clear that Libra exhibits characteristics of many different things for which we have a regulatory construct. We discussed whether Libra should be viewed as a currency, as a security, an ETC, a money market fund, et cetera. And whatever concrete institution ultimately emerges from this first draft of the White Paper, I think you have stated you do not dispute the fact that at some level it is going to be regulated and you are open to that.

You also signaled that there are deficiencies in the U.S. regulatory approach, and that was part of the decision-making process to locate the Libra Association in Switzerland and not in the United States or in Silicon Valley and under a more clear U.S. jurisdiction. And for me, if America does not lead in the digital world, others will. And I am concerned about the values that some of these others might bring to the table where I feel confident in the values that the United States regulatory approach will bring.

And so can I ask you the question how, not if, because I think we have answered that, that it should be regulated, but how should we regulate Libra, Calibra, the Libra Association, to be thoughtful about this in the context of policymakers?

Mr. MARCUS. Congressman, thank you for the question. There is one important point, which is that the clarity of regulation was definitely one of the factors for Switzerland, but one out of many.

Mr. STEIL. Sure.

Mr. MARCUS. I do think that we would have had the ability from a regulatory framework to do that in the United States, but it is less clear, to your point, what the framework would be.

That being said, as far as the Calibra Wallet is concerned, it is very clear. We are registered as a money services business with FinCEN and with Treasury. We have State licenses that we are obtaining and continuing to obtain, and so there is total clarity there. And I believe that where we need more clarity is really around the Libra Association and how the reserve is managed. And even for that point, there is just no clear regulation right now, even in Switzerland or elsewhere. And this is why the engagement that we are having with the G-7 working group, the Financial Stability Board, and others, the conversation that we are having we hope will result in some form of oversight, especially over the reserve, because this is something that a lot of people have concerns about. I have concerns about ensuring that commitment is bound by law when it comes to the reserve. And that is the commitment we are making, that we will take the time to find—

Mr. STEIL. I appreciate that, and the reason I am digging in on the regulatory approach is from a policymaker perspective, the area that I can have the most influence on is that regulatory framework.

We have noted a couple of times, I think, in your testimony, that you do not look to be regulated as a security by the SEC. Can I ask, is there anything specific as it relates to securities laws that concerns you if you fell under the regulation of the Howey Test in our SEC regulation that we should be looking at today to be prepared for tomorrow?

Mr. MARCUS. Congressman, I do not believe we are a security because we are not—

Mr. STEIL. Not whether or not you are, but remove that because I think that will be debated for days and months to come. But is there anything in the securities law that gives you pause, that makes you not want to fall under the Howey Test?

Mr. MARCUS. Certainly, because as far as Libra is concerned it is a payment tool, and we want it to be accessible to everyone. This is not going to be an investment, and if it was not available to everyone, then it would not be able to deliver on its mission.

Mr. STEIL. I think that note is helpful about how our securities law limits people's access into some of the investment products that we have in the United States, and it will have a significant impact into the product that you are looking to deliver.

I want to shift gears slightly. One of the areas in reading the White Paper and some of the commentary that is out there, I think there may be a real role in countries with unstable currencies. And as you look at the global perspective, shifting away from the United States for a moment—I appreciate your time today. I will follow up with you on the topic, and I yield back.

Ms. TLAIB. The gentleman from Massachusetts, Mr. Lynch, is recognized for 5 minutes.

Mr. LYNCH. Thank you. I am not trying to get in the way of your job, but I do want to say, and I know the gentleman from Wisconsin is new, but I would respectfully remind him that that is exactly what Facebook did when they came in without a regulatory framework, without even a White Paper. That is how they operate. The mantra for Facebook was, "Move fast and break things." That was their mantra when they got into business.

Mr. STEIL. Will the gentleman yield for a moment?

Mr. LYNCH. No. I have limited time here.

I would add that they also have taken an approach to business that, rather than ask permission, they just apologize later, and that is what they have done over and over and over again with the personal data of their customers. Their business model—and thank you for coming—is to really use an adhesion contract, 18 pages, that basically authorizes Facebook to vacuum up the behavioral surplus, all of the information about their users, and then they sell it or they deploy it on behalf of their advertisers. That is the model that you have. And I am just worried that you are going to use the same model for Calibra.

What is the terms-of-service agreement going to look like here? Is it going to be, you click, "I agree," and then all of your rights are gone? Because that is the model you have with Facebook, right?

Mr. MARCUS. Congressman, if you will give me the opportunity, I do want to talk about—

Mr. LYNCH. Well, really quickly. You have to—

Mr. MARCUS. Thank you.

Mr. LYNCH. We only have so much time here.

Mr. MARCUS. First, I do want to defend the advertising business model that Facebook has. It enables people—

Mr. LYNCH. No, no. I am asking about Calibra. I am asking about what are you going to do, what is the terms of service agreement going to look like? Is this going to be another adhesion contract?

Mr. MARCUS. No, Congressman, and we will not share data, financial data and account data, even with Facebook itself, Congressman.

Mr. LYNCH. Okay. You have not had a good record on that. Let me ask you a couple of questions. According to ProPublica, you have about 52,000 data points on every one of your regular users on Facebook. Is that right?

Mr. MARCUS. I do not have the exact answer to that question.

Mr. LYNCH. That is what they have. I think they are right.

We feel that the ability of this to scale is really where the dangers come in. You have 2.7 billion customers. When you come in, if this scales—and it is designed to scale, right?— we are worried that, and not just us in Congress but Jay Powell over at the Fed, and Treasury Secretary Mnuchin, are concerned about the impact it would have on monetary policy and the strength of the dollar. Is this something that could be tested in a sandbox environment, in a smaller environment where we do not have to worry about those scaling problems affecting the economy more broadly or the strength of the U.S. dollar?

Mr. MARCUS. Congressman, the first point I would like to make is that we will—

Mr. LYNCH. Would you commit to doing this in a sandbox environment so that we do not have to worry about the regulatory issues and the privacy issues? We would have a chance to look at your product, and it is a product. You get a token here. That way we would be able to answer some of the regulatory questions. Are you willing to commit to that?

Mr. MARCUS. Congressman, I commit that we will take the time to address all concerns and to ensure that we do this the right—

Mr. LYNCH. In a sandbox environment.

Mr. MARCUS. Congressman, I do not want to get into the specifics now about—

Mr. LYNCH. Well, that is what I am asking you for.

Mr. MARCUS. But my commitment to you is that we will take the time, we will not move fast on this.

Mr. LYNCH. The commitment that you are going to take your time is, first of all, not the way you have operated in the past, and it is meaningless. It is meaningless. If I tell you I am going to take my time, what is that? What is that?

Mr. MARCUS. Congressman—

Mr. LYNCH. That is just an indication of pace. It does not mean you are going to do anything different than we want you to do. And I would just be—it looks to me like you are going to, right from day one you are going to be a systemically important financial institution, and so you should be ready for that regulation coming at you on day one, the way you are operating right now, the lack of transparency.

Let me ask you, Facebook has not done privacy very well. Would you commit to accepting a fiduciary duty on behalf of the private—

Ms. TLAIB. The gentleman's time has expired.

Mr. LYNCH. Okay. Thank you. I thank the Chair.

Ms. TLAIB. The gentleman from Minnesota, Mr. Emmer, is recognized for 5 minutes.

Mr. EMMER. Thank you, Madam Chairwoman.

Mr. Marcus, I have heard some incredibly uninformed comments from Members of Congress today and yesterday. As I am sure you are aware, Bitcoin is now 10 years old and now suddenly, magically, Congress is responding. In other words, after more than a decade, Congress has apparently started to care.

I am glad that after all these years, Congress has finally decided to pay attention to the technology that could again, just like the Internet, upend the way we do everything in our lives.

Unfortunately, some people want to unnecessarily restrict it or even ban it. They fear change. Nothing has been more clear on this committee than the blind aversion to change that some of our Members have constantly espoused, even when it was not required, or even the subject of the hearing.

I am amazed at how easily Representatives from California are so willing to suppress the innovation occurring in their own State and, as much as they would like to be a separate country, the benefits those innovations could have for these United States. I do not want to be partisan. This is not a partisan technology. In fact, Representative Bill Foster, a co-Chair of the Blockchain Caucus like myself, has been a long-time champion and advocate for these innovations. It has never been a cornerstone of my grandfather's Democratic Party to oppose innovation.

Chairwoman Waters was, in fact, correct when she began this hearing that merely learning more about and understanding Libra does not have to include opposing it. I hope that will be the same approach to understanding the breadth and depth of cryptocurrency which Libra does not represent, but thankfully amplifies our discussion of that topic.

Unfortunately, Mr. Marcus, you and your company have decided to approach this undertaking with as equal a level of ignorance and misunderstanding as those who wish to quell any new developments in cryptocurrency. I am afraid you have failed to realize that there is much to do in Washington in terms of educating both Members of Congress and regulators on the benefits of this technology. I hope someone whose opinion you value conveys to you how wrong you have been operating. People have concerns with the amount of data you have on them, and now you want to be their money, too.

I hope members of this committee investigate the fact that, "The people already have options separate from your central control." My colleagues are incredibly fearful of the money laundering and criminal activity in cryptocurrencies, but the dollar in all fiat-backed currencies have been proven to be the largest means of illicit behavior and money laundering. This does not mean we need to suppress individual freedom. Individuals insistent on the exclusion of middlemen and the freedom of the individual will continue to create open networks separate from central control. Unfortunately, Libra is not designed to minimize middlemen. It, in fact, relies on them.

At the end of the day, Libra presents an incredible opportunity to define what it is not. It presents an incredible opportunity for everyone on this committee to learn more about actual cryptocurrencies. The committee has already sent out a press release that this is only our first step in regulation of oversight of Libra. A lot has been said about the concern that the payment systems are unregulated. However, payment systems like the one you propose are already subject to regulation by a number of agencies. I think it is important that my colleagues have a full understanding of the law as it currently exists so that we may make better decisions here.

Treasury, as demonstrated by Secretary Mnuchin on Monday, regulates payment systems for anti-money-laundering compliance. The FTC regulates them for fraud. Each State regulates them for consumer protection, among other things. New York has its own specific regime and so forth. This regulatory landscape applies to payment systems like Libra and is different and distinct from laws that may or may not apply to typical social media platforms.

When this hearing was announced, I was optimistic that this was finally the time a major company wanted to be involved with this revolution and that the Majority wanted to actually think and learn about these new innovations. It appears, however, they have decided to entrench themselves in the fear of the unknown and the fear of change. And your company has done nothing to allay these fears.

As you move forward acknowledging that the bill to ban your actions has no constitutional basis, let alone a basis in logic, and that no one is willing to actually put their name on this proposal to ban private innovation, will you work with me and invest in educational efforts to show these Members of Congress that we should work to better understand the innovations underlying cryptocurrency rather than doing their best to put their head in the same and ignore change?

Ms. TLAIB. The gentleman's time has expired.

The gentleman from Texas, Mr. Green, who is also the Chair of our Subcommittee on Oversight and Investigations, is recognized for 5 minutes.

Mr. GREEN. Thank you, Madam Chairwoman.

Mr. Marcus, I am concerned about the dollar. As you know, there is a competition for currency supremacy. The dollar is the preferred currency in the world. The yen competes, the euro competes, and there are others. But the question I have for you is this: How will this impact the dollar? This is our currency. The dollar is the means by which we have the opportunity to influence the economic order in the world. How will this impact the dollar?

Mr. MARCUS. Congressman, the first thing that I want to state is that we are not competing nor do we want to compete with the dollar and—

Mr. GREEN. The question is not whether you want to compete with the dollar. The question is, what impact will you have on the dollar? The dollar is supreme. Do we give up our supremacy because of a cryptocurrency?

Mr. MARCUS. No, Congressman, and we're engaged in conversations, notably with the Fed and the Financial Stability Board, to explore how we can ensure that the dollar and monetary policy is not influenced at all by—

Mr. GREEN. Here's the concern. Things tend to metamorphose. Things rarely remain stagnant. We live in a dynamic world. You're starting out with just a small piece of the economy as it were. We don't know what this will become. Surely, you can understand the consternation of people who are charged with the responsibility of overseeing the Fed, which happens to be the means by which we have influence with our economy and the dollar.

So we have this consternation and I would greatly appreciate it if you could allay some of my consternation with reference to the impact that this may have on the dollar.

Mr. MARCUS. Congressman, the reserve will be composed mainly of dollars and we expect that a number of—

Mr. GREEN. Excuse me. Sorry to be rude, crude, and unrefined. Please forgive me, okay, but my time is limited.

You said, mainly of the dollar. You said earlier when testifying in this room to questions posed by another Member that another country could also buy into the reserve. I believe China may have been mentioned.

Is it true that China can buy into this reserve?

Mr. MARCUS. No, Congressman. The current contemplated reserve is to be approximately 50 percent dollars and a number of other currencies, euro, pound, yen, notably, and—

Mr. GREEN. Euro, pound, yen, and I've indicated to you earlier that we are in competition with the euro. The pound we would be under competition with it, as well. The yen, that's the Japanese currency, we would compete there.

So you have these other currencies and you have the dollar, but the question becomes, how is this going to be balanced such that it doesn't impact the marketplace itself for currency?

Mr. MARCUS. Congressman, I believe that the use case for Libra is such that it will be used mainly outside of the United States, although it has real solutions to real problems in the U.S., as well, and as a result, because of the composition of the reserve, we believe that the inflow to dollars will be important and as a result retain the relevance, of course, of the dollar.

Mr. GREEN. Our dollar is a currency that is preeminent outside of the United States. So saying to me that this is something that will impact things beyond our borders does not give me the level of comfort I need when my concern is with the dollar, which seems to transcend boundaries.

Any place in the world that you happen to visit, the dollar is available to you. There are countries that prefer the dollar to their own currency. I'm still asking for more, and if you'll send me something, I'll be more than honored to peruse it, and I will yield back the balance of my time.

Mr. MARCUS. Thank you, Congressman.

Ms. TLAIB. The gentleman from Texas, Mr. Gooden, is recognized for 5 minutes.

Mr. GOODEN. Thank you, Madam Chairwoman, and Mr. Marcus, thank you for being here today.

Mark Zuckerberg came in front of Congress in April 2018 and Facebook established its Blockchain Division in May of 2018. Does that sound accurate?

Mr. MARCUS. Yes, we started this journey in May 2018.

Mr. GOODEN. And you served on the board of directors for Coin Base, which is a billion dollar digital currency exchange, from about December of 2017 to August of 2018, is that accurate?

Mr. MARCUS. That is accurate, Congressman.

Mr. GOODEN. Would it be accurate to say that you're more or less an expert on this and you understand how this works, how these exchanges, Bitcoin, Blockchain, et cetera, et cetera, things that many of us are not experts on, you're pretty proficient in?

Mr. MARCUS. I would say that's accurate, Congressman, yes.

Mr. GOODEN. Going down that line, you would also say that you know how profitable this can be, right?

Mr. MARCUS. Congressman, yes, I believe that we have a good opportunity, if we enable more people to participate, to offer services that could generate revenues.

Mr. GOODEN. But this is supposed to be a nonprofit operation, isn't it?

Mr. MARCUS. I'm talking about the Calibra Wallet, which will directly impact Facebook.

Mr. GOODEN. It's going to be a nonprofit?

Mr. MARCUS. No. Calibra is a for-profit entity and it is the entity that will build the wallet that will be offered to Facebook consumers.

Mr. GOODEN. Is digital currency illegal in certain parts of the world? Can you touch on that?

Mr. MARCUS. Yes, Congressman, there are a limited number of countries that prohibit buying and selling or using digital currencies.

Mr. GOODEN. I also want to mention privacy violation concerns, things that Americans have been concerned with. The American consumers, would you say, do they trust Facebook? Do they feel comfortable with your company?

Mr. MARCUS. Congressman, I believe we have a lot of work to do to earn people's trust and clearly we have definitely to make those very strong commitments when it comes to privacy and make good on those commitments for very long periods of time.

Mr. GOODEN. I guess one of my concerns I share, I think it's bipartisan, we're a little concerned. I don't object to innovation and this sounds very exciting potentially, but there's a level of distrust with Facebook just because of some of the things that have taken place over the last year.

Would you be able to tell us if the CEO plans to come and testify before us as this thing goes down the road?

Mr. MARCUS. Congressman, I can't speak to that, but I'm leading this project and I'm here today and I plan to continue to engage appropriately.

Mr. GOODEN. Thank you. I yield back.

Ms. TLAIB. The gentlewoman from California, Ms. Porter, is recognized for 5 minutes.

Ms. PORTER. Hello, Mr. Marcus. Thank you for your patience during the long testimony today.

I want to look back at the history as we try to understand what might become of our future with Libra. Are you familiar with the terms, "Wildcat Bank" or the "Free Banking Era?"

Mr. MARCUS. I am, Congresswoman.

Ms. PORTER. I want to explain to everybody that there's a concept that Wildcat Bank was a bank that was chartered under State law back before banks were federally regulated from about 1836 to the mid-1860s and they were called wildcat banks, according to one theory because they were in locations so remote that you may see wildcats.

The point is that wildcat banks were ultimately unreliable. They became known for distributing worthless currency and putting customers at risk and as a result of that, in 1863, we enacted in Congress the National Banking Act.

How is the basic concept of a single currency pegged Stable Coin, the Libra, where an issuer will take dollars and give digital bank notes and vice versa fundamentally different from the bank notes of wildcat banks where banks took U.S.-backed dollar coins in exchange for their own paper money which could and often did become worthless?

Mr. MARCUS. Congresswoman, I believe that the very important distinction here is that the reserve will be a one-for-one reserve. I understand that the banks and the issues that arose from the wildcat banks are actually that they went into fractional reserves, and as a result had insufficient reserves to back the value of the currencies they were issuing.

Ms. PORTER. Good point, Mr. Marcus. Which regulator will be responsible for ensuring that the association maintains that one-to-one reserve? Will it be the FDIC?

Mr. MARCUS. Congresswoman, this is a concern we have, as well, and we believe that the association will need to have the right oversight and meet the satisfactory bar for oversight in how it guarantees that it cannot deviate from a full one-to-one reserve.

Ms. PORTER. So, it will be self-regulation? Isn't that what the wildcat banks were also doing and that's how they then drifted into fractional reserve and there was no oversight or knowledge of this, which is why customers put their money in those wildcat banks because they believed, perhaps wrongly, that there was a one-to-one reserve, or that their money was safe. Without the FDIC guarantee, isn't this just exposing people to the same—aren't you creating yesterday's problem tomorrow again?

Mr. MARCUS. We are not, Congresswoman, but I do share your concerns, and that's why I believe that having the proper oversight, not self-regulation, at the association level, notably on the reserve, is important, and I want to go further. What I would like is for any consumer at any given point in time when they hold the Libra to have full transparency of the value of the reserve backing the Libra coin at any given point in time.

Ms. PORTER. But structurally, that's always what we believe about banks, that if we go to get our money, it will be there, but that's precisely why we have banking regulations, so that in fact, the consumers' expectation is true.

I wondered if I could ask you, I know with Libra, it's going to be pegged to a basket of currencies, about 50 percent dollars, I believe you just heard my colleague say, and 50 percent like weirdly-sized paper currency from a few different other countries. It sounds a lot like what's in my daughter's piggy bank, which is kind of a mix of U.S. dollars and money she has been given from friends who have come back from other countries.

What's to stop the association from changing the contents of the basket to, say, a hundred percent Venezuelan bolivars at the stated exchange rate and that would again have the effect of making the Libra currency worthless?

Mr. MARCUS. Congresswoman, that is why we believe that we need the right oversight for the reserve. The basket—

Ms. PORTER. What is the right oversight?

Mr. MARCUS. Proper regulation, and we—

Ms. PORTER. By whom?

Mr. MARCUS. To be determined by the G-7 Working Group in collaboration with—

Ms. PORTER. Let's run through some and see if you like any of these. FDIC.

Mr. MARCUS. Congresswoman, we will not engage in banking activities. As a result, I don't think that the FDIC—

Ms. PORTER. You're going to take people's U.S. dollars, give them something that you're going to call currency, and you don't call that banking activity? Do you call it money-changing activity, because we do have laws that apply to money-changing?

Mr. MARCUS. Congresswoman, you have my commitment that we will have the proper oversight and regulatory oversight of the association, notably on the key issue of the reserve, but I—

Ms. PORTER. And respectfully, Mr. Marcus, this is not a personal thing at all, but I had the commitment of so many bankers in my lifetime that they would do the right thing by homeowners they foreclosed on, that I have to have better than that.

I just wanted in my last 5 seconds to suggest that you check out 18 U.S. Code 486, which makes it a crime to create private money that is metallic coin. I don't see why that criminal statute doesn't also inhibit the creation of digital coin.

Thank you.

Ms. TLAIB. The gentlewoman's time has expired.

The gentleman from Missouri, Mr. Clay, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, is recognized for 5 minutes.

Mr. CLAY. Thank you, Madam Chairwoman.

Mr. Marcus, could you discuss where you believe Libra ranks on the scale of global innovation? Is it akin to Facebook, e-mail, or is it merely a new way to move money, similar to PayPal or Square?

Mr. MARCUS. Congressman, at this point, it's an idea and a concept. I hope it is very successful because if it is, many people will benefit from it, and so I hope it's going to be a big success for the very people that we hope to serve.

Mr. CLAY. Thank you. Will Libra holders be subject to counterparty risk if the reserves are mismanaged?

Mr. MARCUS. Congressman, the reserve will be one-for-one, and we need to find the proper oversight so that it remains one-for-one.

Mr. CLAY. Under what circumstances could a holder of Libra lose their money?

Mr. MARCUS. Congressman, for instance, if they use wallets that do not offer consumer protections but in the case of the Calibra Wallet, we will offer full consumer protection in such a way that if you encounter fraud or have issues, we will make you whole.

Mr. CLAY. And so there would be some kind of insurance for the customer?

Mr. MARCUS. Correct. It's going to be something that is part of our Consumer Protection Program when it comes to the Calibra Wallet.

Mr. CLAY. My colleagues have already discussed systemic risk, but I'd like to dig a little further. What are your thoughts about having a separate regulator who would only regulate digital currencies, such as Libra?

Mr. MARCUS. Congressman, it is not for me to say who should regulate us, but my commitment is that we will meet all regulation and work with and consult with regulators and lawmakers to ensure we do this right.

Mr. CLAY. And, of course, the customer would pay a premium for the regulation. Is that how you envision that?

Mr. MARCUS. I'm not sure I understand your question, Congressman.

Mr. CLAY. Someone would have to stand up and fund the regulator. How would that be paid for? Would you have any ideas or thoughts on that?

Mr. MARCUS. Congressman, that is not my province.

Mr. CLAY. Okay. Let's go to another subject. What guardrails would be in place to prevent a run on the Libra currency?

Mr. MARCUS. We have a one-for-one reserve, Congressman. As a result, a run on the bank would be impossible, provided the reserve remains one-for-one, and we hope to have the right oversight to ensure that it remains that way.

Mr. CLAY. Would portfolio managers be incentivized to seek higher returns on their investments from Libra association members?

Mr. MARCUS. Are you talking about the Libra currency itself, because the Libra currency is designed to be stable, and as a result, it will not have appreciation. It's designed to stay stable.

Mr. CLAY. And the association members are the investors, right?

Mr. MARCUS. Correct. Association members invest in the ecosystem in order to kick start the Libra network.

Mr. CLAY. And they would make a return on their money how?

Mr. MARCUS. Congressman, my apologies for not understanding your question the first time around. The way that investors make their money back is by having a portion of the income that is generated by the reserve after it has paid all of the costs for the Libra association.

Mr. CLAY. I see. Thank you for your responses, and I will yield back the balance of my time.

Ms. TLAIB. Thank you. The committee will now take a 5-minute recess to set up the second panel.

I'd like to thank—I'm so sorry. I should have thanked you first, Mr. Marcus. I apologize. It's the first time I'm chairing this committee. But I'd like to thank you so much for coming before this committee.

Again, we'll take a 5-minute recess to set up for the second panel.

Thank you.

[recess]

Mr. CLAY [presiding]. The committee will come to order. Our second panel consists of: Chris Brummer, professor of law, Georgetown University Law Center; Katharina Pistor, Edwin B. Parker professor of comparative law, Columbia Law School; the Honorable Gary Gensler, who is currently professor of the practice, MIT Sloan School of Management; senior advisor to the director, MIT Media Lab; and co-director of MIT's Fintech@CSAIL; Robert Weissman, president, Public Citizen; and Meltem Demirors, chief strategy officer, CoinShares.

Welcome to all of you. Each of you will have 5 minutes to summarize your testimony. And without objection, your written statements will be made a part of the record. With one minute remaining, a yellow light will appear. At that time, I would ask that you wrap up your testimony so that we can be respectful of both the witnesses' and the committee members' time.

Mr. Brummer, you are recognized for 5 minutes to present your oral testimony.

STATEMENT OF CHRIS BRUMMER, PROFESSOR OF LAW, GEORGETOWN UNIVERSITY LAW CENTER

Mr. BRUMMER. Thank you so much. Members of the committee, thank you for inviting me to testify at this hearing. My name is Chris Brummer and I am a law professor at Georgetown University Law Center. I am here today solely in my academic capacity, and it is an honor to be before this committee again.

White Papers like the one we are struggling to understand today have emerged as the common tool through which digital asset companies communicate with potential consumers and investors about new projects and ventures. However, White Papers have faced a mountain of criticism for their hyperbolic language, false promises, and omissions of material information that consumers would need before purchasing a digital asset. Indeed, the last time I was here to share my views before many members of this very committee, we discussed precisely these challenges.

But today, we have a twist. Criticisms of White Paper disclosures have focused on early-stage, cash-strapped startups. Rarely have they been directed at a multinational technology company with the resources to marshal top-flight legal as well as technological talent.

Yet, this time it is different. The Libra White Paper is peppered with big promises and few details, and the project involves risks to purchasers and, at least potentially, the financial system, that are not disclosed. And yet even for me, a staunch supporter of innovations and upgrades to our financial system, this is, at a minimum, disappointing.

The White Paper is no mere public brainstorming exercise or a technical exposition, but is instead intended to condition the market for the adoption of a product that Facebook wishes to sell to billions of people around the world, and the lapses are all the more problematic given the securities-like features of Libra coins and possible implication of U.S. securities laws.

In the limited time available, I want to focus on some of the most problematic red flags. First, the Libra White Paper fails to inform people, in unambiguous terms, that they can lose their money, and that runs on the coin are possible. Instead, the White Paper routinely suggests, and doubles down on the idea that Libra will virtually always provide stability in terms of the purchasing power of the new currency.

But that is not necessarily the case. The Libra is subject to foreign currency risk, something the White Paper does not clearly acknowledge, and, indeed, could cost their holders money in the form of lost purchasing power, should there be a run on any of the underlying currencies in the basket.

Moreover, runs on the Libra itself could be catalyzed for reasons that have nothing to do with the underlying basket, including a hack of Calibra, or revelations that sensitive consumer data had been shared with Facebook or other Libra Association members.

Second, the White Paper fails to clearly explain that Libra holders will be exposed to counter-party risk should the reserve investment strategy prove to be mismanaged or poorly executed. Although, "The goal will always be value preservation," any money raised from interest earnings ultimately, after operational and developmental expenses, is going to fund dividends to early investors in the Libra investment token for their initial contributions. As a result, the fund is structured in a way that creates incentives for their portfolio manager to accumulate, over time, higher-yielding investments.

Finally, the White Paper fails to disclose how its promise of a secure, scalable, and reliable blockchain could be compromised by whatever is the weakest link in its ecosystem, including changes in wallets operating in jurisdictions with lax AML and KYC rules.

And this is, honestly, just the tip of the iceberg, with a host of critical questions about the rights, duties, and selection criteria for authorized resellers and Libra Association members, not to mention how the folks are intending to manage potential conflicts of interest.

In my written testimony, I show how these kinds of disclosure issues populate the document and are especially problematic since this offering has, again, securities-like features, including the fact, among other things, that it appears to operate nearly identically to ETFs.

Critically, these kinds of emissions are more than just a matter of technicalities. They indicate varying ways in which potential Libra coin purchasers, everyday people, are far from fully informed, and are not on a playing field, vis-a-vis Libra's sponsors.

There are 99 problems, and this White Paper is one.

[The prepared statement of Mr. Brummer can be found on page 114 of the appendix.]

Mr. CLAY. Thank you, Mr. Brummer.

Ms. Pistor, you are now recognized for 5 minutes.

STATEMENT OF KATHARINA PISTOR, EDWIN B. PARKER PROFESSOR OF COMPARATIVE LAW, COLUMBIA LAW SCHOOL

Ms. PISTOR. Thank you very much, Chairman Clay and Ranking Member McHenry. Thank you to the other members of the committee. Thank you for the opportunity to participate in this hearing to examine Facebook's proposed global currency, the Libra.

I am a professor at Columbia Law School, where I have taught for the past 18 years, mostly in the field of corporate law and finance, comparative law, and law and development. I am also the director of the Law School's Center on Global Legal Transformation.

Based on my research and analysis of the Libra White Paper and related documents that have been released so far, and a close reading of other comments and analysis of Libra, I have come to the following conclusions.

First, Facebook's Libra is designed to become a new global currency that will complement existing fiat currencies. It is designed as a for-profit currency.

The Libra White Paper promises to create a seamless, global, safe, and inclusive payment system based on modern digital technologies. Libra is labeled a stable coin and, as such, aims at delivering low volatility and high liquidity to its customers, the holders of Libra coins, who shall be able to exchange their Libras against local fiat currency on demand without suffering major haircuts.

To this end, Libra is backed by a reserve composed of safe assets. The safe assets of choice are bank deposits and the liquid debt of reputable sovereigns. These assets owe their safety to public backstopping mechanisms in the form of deposit insurance and the full faith and credit of the issuing sovereign. In effect, the sponsors of Libra and their profit-earning beneficiaries will be free-riding on a public safety net for which they are not paying, and they are extending the safety net to users around the globe.

The main governance architecture of Libra resembles currency boards employed by some countries that use currency baskets to back their currencies, such as Singapore and Kuwait, with the important difference that Libra shall deliver profits for its beneficiaries. All interests and dividends will be allocated to the members of the Libra Association and/or investors in the Libra tokens, which are distinct from Libra coins; none to its customers, the holders of the Libra, and I would suspect that in the event of an insolvency of the reserves, there will be no money transferred to the users of the Libra.

The central node of what will become an ecology of financial intermediaries is the Libra Association, based in Geneva, Switzerland. It will exercise control over the admission of future members, manage the Libra Reserve, determine asset eligibility for the Reserves, decide whether to amend the protocol on which Libra runs, and determine if, when, and how Libra's architecture will evolve from a club-like or permissioned system to a permission-less system.

This concentration of power is unmatched by any meaningful accountability to anyone. The choice of the legal structure means that the members of the Libra Association will be insulated from liability and accountable only to themselves. They will not be accountable to holders of the Libra coins, nor to the citizens of countries that create the safe assets used to backstop the Libra.

Facebook plays a central role in the creation of Libra, and the first 28 prospective members of the association have been recruited by Facebook, and given Facebook's control over the start-up phase, it is reasonable to assume that most, if not all of the other 100 original founding members will be hand-picked by Facebook, as would be the management team which would be put in place after the first 5 members have signed up.

Existing legal regulatory frameworks, in the United States and elsewhere, are highly incomplete and leave ample room for legal as well as digital arbitrage. They were not designed to govern digital currencies. Regulators are currently using a case-by-case approach to extend their reach, which is no match for the fast-moving technological change.

Libra's global reach exacerbates these problems. Many of the activities associated with managing Libra and its reserves will be beyond the reach of regulators in the United States, or any other country, for that matter. The current level of transnational regulatory cooperation does not match the versatility of a private actor, such as Facebook, to pick and choose from legal systems around the globe which laws and regulations best suit its needs.

Thank you very much. I yield back the rest of my time.

[The prepared statement of Ms. Pistor can be found on page 171 of the appendix.]

Ms. TLAIB [presiding]. Thank you, Ms. Pistor.

Mr. Gensler, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF THE HONORABLE GARY GENSLER, PROFESSOR OF THE PRACTICE, MIT SLOAN SCHOOL OF MANAGEMENT; SENIOR ADVISOR TO THE DIRECTOR, MIT MEDIA LAB; AND CO-DIRECTOR, MIT'S FINTECH@CSAIL

Mr. GENSLER. Chairwoman Tlaib, Ranking Member McHenry, members of the committee, thank you for inviting me here to testify. It is so good to be back with you here again.

I began my finance career in the private sector, with Goldman Sachs, for 18 years. Later, as a Treasury official, when I first testified in this room, I also was a witness of the sudden Asian financial crisis. I was later an advisor on the Sarbanes-Oxley Act, with Chairman Oxley right there, and after the crisis, I served as CFTC Chair, helping to reform a $400 trillion swaps market, and I am now honored to be a professor of the practice at MIT, teaching about fintech and digital currency.

These experiences have taught me some lessons I bring to consideration of Facebook.

First, all of the finance has one foundation, and it is trust, for hundreds of years. Unfortunately for Facebook, for some unexplained reason, they chose to make these bold proposals when trust in their company is not in good supply.

Second, although Facebook's Libra proposal may seem unprecedented, if not just for its sheer breadth and scale, we have seen this show before. "Trust us to innovate. Trust us to revolutionize finance."

Enron: "Trust us to set up sophisticated, unregulated electronic energy trading." What did we get? Accounting scandals, manipulated electricity markets, and bankruptcy filing.

Long-term capital management: "Trust us to set up a new type of algorithmic hedge fund with $1 trillion of derivatives." Failure and systemic risk followed.

LIBOR: "Trust us to set up the world's most relevant interest rate." What followed? Manipulated rates on trillions of home mortgages and consumer loans.

These all hurt millions of Americans. They are also personal for me, as I lived each one of these in the official sector, trying to clean up the mess.

Third, tech has already made big strides. Think PayPal, Square, Stripe, TransferWise, Venmo, Zelle, China's Alipay, and WeChat Pay leapfrogged big finance and now dominate Chinese payments. There is Amazon Pay, Google Wallet, Amazon Coin, Apple Pay, and recently Apple announced, with Goldman Sachs, a MasterCard Apple card.

You see, the truth of the matter is there is a lot of innovation going on, and Facebook has tried as well, 3 times, with limited success. Facebook Credits closed in 2013. Facebook Messenger Payments closed their peer-to-peer in Europe just this month. Facebook's What's App Pay Pilot has stalled in India.

Fourth, Facebook's ambitious proposal needs significant regulatory guardrails.

First, the Libra reserve. Where the money is needs to be regulated by the SEC for what it is, in essence, a pooled investment, multi-currency ETF. And if, for some reason, technically the law doesn't cover it, then Congress can step in and ensure that it is covered, or regulated as a bank, like Congresswoman Porter mentioned.

Regulating the Libra reserve, like Western Union, under 49 State money transmission laws, as Facebook suggested here today, forgets tough lessons of failed shadow banking. It just doesn't make sense.

There needs to be tight investment restrictions, including prohibiting loans—I was glad to hear that today—but guarding custody of funds. That is what China and Kenya did when Big Tech came in. They said it was very restricted.

Second, the Libra Association's manager should be registered as an investment advisor.

Third, customers' Libra custody in Calibra needs to be tightly regulated for customer protection, ensuring Facebook doesn't use, lose, or abuse customers' Libra. I think that is part of the economics. They want to use those Libra coins. They also need to protect the data by true firewalls, not just by protecting customer consent clauses.

Fourth, the accounting of the payment system: The Libra blockchain should adopt payment infrastructure rules consistent with Federal Reserve policies. And lastly, Libra will have the same challenges as Bitcoin guarding against illicit activity. Being registered by FinCEN won't stop the rest of the Libra network, the broad global network, from self-custody, and the ground truths are there are no easy solutions.

Trust, so important to finance and innovation, is easy to lose, and best to verify, as Members on both the Republican and Democratic sides have said, and it is critical to be responsively regulated.

I look forward to your questions.

[The prepared statement of Mr. Gensler can be found on page 145 of the appendix.]

Ms. TLAIB. Thank you, Mr. Gensler.

Mr. Weissman, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF ROBERT WEISSMAN, PRESIDENT, PUBLIC CITIZEN

Mr. WEISSMAN. Thank you very much, Madam Chairwoman, and I thank both you and Mr. McHenry for holding this hearing so quickly after the Facebook announcement, and treating this issue with the seriousness and thoughtfulness and care that it deserves.

Facebook is not making this proposal because it is interested in competing with Western Union. Facebook is making this proposal because it wants to be in the middle of as many transactions that occur across the planet as possible. If it can get all of them, it will take that. That is a serious business that this committee absolutely must be paying attention to.

I want to raise three particular concerns with Facebook's proposal that I think could be ameliorated with extremely aggressive regulation, but not cured.

But before that, I want to make a point that follows on from what Mr. Gensler just said. Facebook, as a company, cannot be trusted. I mean that in two senses. First, it is not just that people don't like Facebook. Facebook has repeatedly violated its own privacy policies. It is not an external thing that was exposed on them. They adopted their own policies and they violated them, not once, not twice, but over and over and over and over and over again. Look at the last consent decree. See the listing. Wait until we see this consent decree. See the listing. This is a company that cannot be trusted.

But it is worse than that, and this is the second point. Even as Facebook maintains its promises, they are unilateral, voluntary, and subject to change at any time. Key features of Facebook's Libra proposal are completely up for grabs and change over time.

For example, the one-to-one reserve would make a difference, but they could unilaterally alter that commitment. The idea that the money will be invested in stable currencies would make a difference but a promise that could unilaterally be invested. The idea that there would be a firewall between Calibra and Facebook—a unilateral promise that could be invested, and you would be foolish to think they won't change that one, because they change their privacy policy almost every year.

Against that backdrop, there are three particular considerations I want to raise. First, the competition policy and monopolistic implications of this proposal. As we have heard today from Facebook, immediately upon adoption of Calibra it will be available to 2.7 billion users around the world. It is a certainty that Facebook will dominate the market for Libra and perhaps for all digital financial transactions. There may or may not be other wallet competitors in Libra, but no one is ever going to compete with that. We are going to see Facebook immediately extending its dominance in social media to now the dominance in the payment transfer business.

The Libra Association itself has the makings of a cartel. There is already talk about giving discounts among the Libra members, for sure going to be used to advantage those who are on the inside and disadvantage those who are on the outside, under the leadership of the dominant member of the cartel, Facebook.

We have a long tradition in the United States of separating banking and commerce, under the Bank Holding Company Act. That has expressed a lot of wisdom, and protected us from a lot worse financial crises, and we need to apply those principles going forward.

Second, there are big concerns about consumer protection. Inherent in the Libra proposal is the idea that you are going to make no-interest loans as a user to Facebook, the idea that you can adopt foreign exchange currency risk. Big problems. But within this new Facebook Libra ecosystem, there are massive consumer protection problems as you have a global privatized, orderless currency. What happens when you get that payday loan that they are bragging about? You just didn't realize it was from Ukraine, and the choice of law became Ukrainian law.

Third problem, privacy. Again, as I say, there is no reason to believe that there will be a separation between Calibra and Facebook, but even if there is, Facebook will understand what is going on based on users' use of Facebook. They will gather all this data.

Whether or not they do what they say they are going to do, if this process proceeds, we are likely to see the creation of a corporate surveillance leviathan with no precedent in world history, and only imagined in dystopian science fiction novels.

That is not just a matter of things being creepy; it is a matter of them monetizing, commercializing our lives. It is a matter of them worsening, potentially, the algorithmic discrimination that is already an increasing problem. It is a matter of them then leveraging that data to crush their competitors. It is a matter of overall less innovation, not more innovation, both in the digital economy and in the rest-of-the-world economy.

Finally, as a last point, I just want to say this committee is now floating the idea of the Keep Big Tech Out of Finance Act. We think that is exactly the right approach going forward. This is far too dangerous a proposal to permit to proceed. That is one way to shut it down, and I hope this committee does, in fact, do that.

Thank you very much.

[The prepared statement of Mr. Weissman can be found on page 183 of the appendix.]

Ms. TLAIB. Thank you.

And Ms. Demirors, you are now recognized for 5 minutes to present your oral testimony.

STATEMENT OF MELTEM DEMIROS, CHIEF STRATEGY OFFICER, COINSHARES

Ms. DEMIRORS. Thank you.

Good afternoon, Chairwoman Tlaib, Ranking Member McHenry, and members of the committee. My name is Meltem Demirors and I am chief strategy officer of CoinShares, a digital asset management firm that operates across four jurisdictions, including the United States and the European Union. As of today, we manage $800 million in assets, on behalf of thousands of investors.

I am also here to share my insights as a business owner, an investor, and an advocate for and user of cryptocurrency.

Today, I would like to discuss cryptocurrencies, mainly Bitcoin, emphasize why Bitcoin is different from Libra, and outline what that means for innovation here in the United States. Let's start with Bitcoin. Bitcoin is the best-known, most valuable, and most established cryptocurrency. Bitcoin is three things: Bitcoin is a technology; Bitcoin is a network; and Bitcoin is also a cryptocurrency.

Now, Bitcoin as a technology is not regulated. Much like the internet, the Bitcoin network could be considered a public good. However, the companies being built to provide products and services on top of the Bitcoin network are subject to regulation in their respective jurisdictions.

Over the last 5 years, I have built 3 investment firms and invested in over 150 cryptocurrency-focused companies in over 30 countries. Fully over half of those companies have been incorporated in, and opened from, the United States of America. The United States enjoys a robust, well-developed capital market and boasts a long track record as a place where innovators can build businesses. These 150 companies now employ nearly 5,000 people, in cities like San Francisco, Charlotte, New York, Boulder, Austin, and Atlanta, but also London, Singapore, Zurich, and Berlin, just to name some.

Cryptocurrency has reached a point of inevitability. It is inevitable that the Bitcoin ecosystem will continue to grow and contribute to the digital economy. The question is where.

The traditional approach of drawing a regulatory perimeter, which has been used in the past to saddle jurisdiction, is challenging to apply in this digital world that is not constrained by the physical borders of the past. We are seeing a wave of interest in cryptocurrencies and countless imitators, which borrow some features of, but are decidedly not cryptocurrency.

Libra is not a cryptocurrency. I am not here to pass judgment on Facebook or its efforts, and I commend their altruistic aspirations, but they are just that: aspirations.

First, Bitcoin is decentralized, which means no entity or group has the power to block or censor the use of the network. Libra is centralized. A small group of companies will have the ability to block and censor transactions.

Second, Bitcoin is its own asset, backed by its own scarcity and the demand for it. There is no entity that holds assets that gives Bitcoin value. Libra, in contrast, is backed by a pool of assets that are domiciled abroad. Asset management is a regulated activity.

Lastly, Bitcoin is permission-less, meaning anyone in any part of the world has the ability to enter and exit the network without requiring permission. Libra is permissioned. The Libra network is controlled by a private group which will determine who has permission to access this network.

The Bitcoin network supports thousands of companies all around the world. Libra benefits one entity, Facebook. Facebook is not a public entity. It is a privately owned, for-profit company.

Libra may represent an exciting opportunity for Bitcoin but it cannot and should not be compared to Bitcoin. Like the internet, it is critical that Bitcoin remains open for permission-less innovation. Companies here in the United States serve tens of millions of customers, service billions of dollars of regulated legal commercial activity, and employ thousands of people who are building on Bitcoin and cryptocurrency networks.

While the Bitcoin community is global, we should endeavor to keep companies here, in the United States, regulated under our laws, where benefits accrue to the American people and the economy, not to foreign jurisdictions.

The decisions you weigh now will determine the future of these open, permission-less technology networks and capital formation. That future is not 5 or 10 years away. It is here and it is now. I urge you to view Bitcoin as open public networks that enable innovation and growth, and to treat Libra and its future imitators—and there will be many—in the context of the facts. Private efforts led by corporations holding billions of dollars of the public's money. These things are not Bitcoin and are not cryptocurrencies.

I thank you for your time, and I look forward to your questions.

[The prepared statement of Ms. Demirors can be found on page 131 of the appendix.]

Ms. TLAIB. Thank you. I now recognize the gentleman from Missouri, Mr. Clay, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, for 5 minutes.

Mr. CLAY. Thank you, Madam Chairwoman, and let me thank the panel for your testimony today. Let me start with Mr. Weissman.

Currently, many people believe that cryptocurrency can coexist within our current monetary system, given that cryptocurrencies only constitute a very small fraction of the economy's financial assets. However, if an entity like Facebook, with 2.5 billion users, decides to go ahead and bring Libra to market, this can change rather quickly. How can this pose a threat to the U.S. central banking system if the majority of Facebook users in the U.S., in a few years, use Libra as a viable currency?

Mr. WEISSMAN. I think there are a whole series of potential risks, Mr. Clay. One has to do with the systemic risk created by Libra itself. The possibility that there is a run on the Libra, if it gets up to scale, will require massive intervention by the public, on a scale that would probably dwarf TARP, or the alternative is to let the whole thing go under, which seems almost impossible to imagine.

A second problem is that Libra itself may encourage runs on foreign currencies—maybe not the dollar at first, maybe eventually the dollar. If you lose confidence in a national currency, the ability to move into this allegedly stable alternative currency can create a quite self-perpetuating cycle that creates, itself, another kind of financial crisis.

I think that the scale of this proposal is such that you have to run these scenarios that are very hard to get your head around and take them seriously. You are right to ask the question.

Mr. CLAY. Thank you for that.

Professor Brummer or Mr. Weissman, regarding sanctions, can you please explain how the Libra Association and the companies that grow out of the Libra construct can ensure that international and U.S. sanctions regimes will be followed?

Mr. Brummer?

Mr. BRUMMER. Thank you, Mr. Clay, for that question.

I think one of the challenges that pertain to the Libra ecosystem—and it is not just a problem with sanctions but it is a problem with anti-money-laundering and really the way in which it is being set up—is that ultimately the weakest link in the network can become a gateway for all kinds of wrongdoers.

Now the promise that Facebook is making right now is to say that our infrastructure that we are developing, like Calibra, will be subject to all relevant U.S. rules. The challenge is that it is creating a platform that will allow others to develop infrastructure outside of the United States, and, indeed, outside of internationally well-supervised regimes, and they are making the promise that they will develop certain kinds of codes of conducts and standards for onboarding those applications into the ecosystem, but they fail to explain—

Mr. CLAY. Yes, how would they prevent sanctioned persons from getting on that platform and exchanging?

Mr. BRUMMER. If there is the kind of anonymity that they are claiming, and they explicitly state in the White Paper that their blockchain will allow clients to hold one or more addresses that are not linked to their real-world identity, which, by the way, seems to—while the Bank Secrecy Act travel rule, which requires institutions to pass on certain customer information, including the name and address of the transmitter—it seems to certainly enable, in the absence of further elaboration from Mr. Marcus, exactly how they plan to prevent threats to U.S. national security.

Mr. CLAY. Let me ask anyone else on the panel, in the remaining time, what does the Libra Association need to do to vet those who wish to join it or build on this blockchain? Anybody?

Mr. GENSLER. If I could just say, there is not currently a way that you could actually foreclose somebody on the sanctions list from getting this coin and transacting. The on-ramps and off-ramps, the only way you could do that is if you literally put in the computer code, what they call Libra Core, put in there the prohibitions and so forth, and they are not going to plan to do that.

To your second question, I think the Libra Association, because it could control, for particularly developing countries, the monetary policy, it needs to have wide-open governance, and right now it is just large corporations and a handful of nonprofits.

Ms. TLAIB. Thank you.

Mr. CLAY. Thank you.

Ms. TLAIB. I now recognize the gentleman from North Carolina, the ranking member, Mr. McHenry.

Mr. MCHENRY. Ms. Demirors, my question for you is about the outline you have given in your testimony. You make the distinction between Libra and cryptocurrencies, so let's talk about cryptocurrencies. When you have the President of the United States, the Secretary of the Treasury, and the Chair of the Federal Reserve, in the same week talk about cryptocurrencies a decade after Satoshi wrote the White Paper, it is probably a decent thing to draw attention to the industry, right?

How long have you been in the wider crypto or digital currency space?

Ms. DEMIRORS. I have been working in the digital currency space professionally for the last 5 years, and individually, as a member of this open source global community, for the last 7 years.

Mr. MCHENRY. Okay. Let's talk about the opportunities of cryptocurrency. Innovation is happening, and it is happening across the globe.

Ms. DEMIRORS. Absolutely.

Mr. MCHENRY. You mentioned, though, that there are challenges working in the United States. What are those challenges right now?

Ms. DEMIRORS. The primary challenge is the lack of jurisdictional and regulatory clarity. I do commend many of the regulators here in the United States that companies interact with. I personally have interacted with the CFTC, the SEC, the IRS, OFAC, FinCEN, law enforcement, State banking regulators, and a host of other policy-making bodies and enforcement agencies.

But even in the characterization of cryptocurrency, there seems to be key differences. The SEC has long deliberated whether cryptocurrencies are securities or not, and has reached the conclusion that Bitcoin is not a security.

The CFTC treats Bitcoin, and some of the products around Bitcoin, as a digital commodity, if you will. In contrast, the IRS treats Bitcoin and digital currencies as property. This inconsistent treatment makes it very challenging for companies to determine how to operate within the existing regulatory frameworks here in the United States. It costs a tremendous amount of capital for these early-stage companies to hire lawyers, to find experts, and to come here to D.C., to speak with their representatives on these important topics.

This is of big concern to me, as an investor.

Mr. MCHENRY. What is the key takeaway, as a policymaker? How do we ensure that innovation is going to happen here in the United States, as opposed to some foreign regime?

Ms. DEMIRORS. We need clear guidance, much as Switzerland's FINMA laid out in 2018. They established a very clear set of policies and a regulatory framework that has been applied consistently.

Mr. McHENRY. Okay, permission-less versus permissioned networks, let's talk about the distinction between decentralization, permission-less, versus what is Libra.

Ms. DEMIRORS. Sure. The whole idea that makes the coin so compelling and so exciting is this idea that started with the internet, of open source software development, where you had code that anyone could use to build anything they wanted, but that a group of people chose to run, which established the foundations of the internet.

Similarly, the Bitcoin network, which is operated by individuals and entities that run computers with the Bitcoin code around the world, is open and accessible to anyone. Anyone can make proposals to change the code, anyone can audit the code, but most importantly, anyone can build a business on top of the Bitcoin network and use this network to drive innovation, whether that is in enabling new types of value transfer or whether that's in enabling all sorts of other services we can't yet imagine.

Mr. McHENRY. Why is that important? Why is that an important distinction and architecture—decentralization, permission-less.

Ms. DEMIRORS. Absolutely. As the other experts on this panel have discussed in their testimony, there is a tremendous anti-competitive component to what Facebook is proposing to do. This is a private group of 100 corporations who have ties to Facebook and its executives in various ways, who will be responsible for determining what the code supporting the Libra network is, who gets to run nodes and participate in the network, and what transactions and applications and products and services are allowed and disallowed.

This is in sharp contrast to what Bitcoin and other openly distributed cryptocurrencies are. They are open for anyone to build on. Libra is a private, for-profit enterprise that benefits large corporations and for-profit entities who already have a tremendous amount of power.

Mr. McHENRY. Okay. So what is your take on Libra, the currency, as another competitive force in digital payments?

Ms. DEMIRORS. My position is this: Facebook should be allowed to innovate, just as anyone else in this country is allowed to innovate, but it should not be allowed to pursue this path under the guise of being an open cryptocurrency like Bitcoin. That analogy is very dangerous and it is factually incorrect. It represents something entirely different. It has been categorized as an ETF. I would say it is a mutual fund that represents two classes of interest. It is a for-profit, anti-competitive effort that makes it much harder for small startups and innovators to build businesses serving that same audience and enabling digital value transfer.

Mr. McHENRY. While, at the same time a distributed ledger and cryptocurrency and digital assets are a wave of the future.

Ms. DEMIRORS. Absolutely.

Mr. McHENRY. I yield back.

Ms. TLAIB. Thank you. The gentlewoman from New York, Ms. Velazquez, is recognized for 5 minutes.

Ms. VELAZQUEZ. Thank you, Madam Chairwoman. Earlier today, I told Mr. Marcus that this is not Silicon Valley and that all problems with the Libra and the association need to be worked out before the launch date. He wasn't clear on whether or not Libra was willing to delay its launch date.

By a show of hands, do you agree Libra should delay its launch date until all legal and regulatory concerns have been addressed and approvals have been granted?

[show of hands]

Ms. VELAZQUEZ. Okay.

Professor Pistor and Professor Gensler, many of us questioned Mr. Marcus this morning on the Libra Association's decision to place its headquarters in Switzerland. Why do you think the Libra Association chose Switzerland for its headquarters? What advantages could the Swiss regulatory system offer Libra that the U.S. system does not, and what problems does this present?

Ms. PISTOR. I do not want to deny the fact that Switzerland has the signaling effect of being the home for many international institutions, but that is also interesting because international organizations are actually public, non-profit organizations, so I think there is a signal effect.

In terms of the regulatory benefits, I think the set-up of the association itself is an interesting benefit, because you can set up an association that is supposed to be a nonprofit organization and yet use it to plow back these profits to its members. I also think that Switzerland is trying to position itself right now as a major jurisdictional hub for cryptocurrencies and has issued a number of papers where they are trying to do so.

They have the benefit of trying to be less fragmented than the United States system, but I think they also have a long history of having laxer financial regulations.

Ms. VELAZQUEZ. Thank you. Mr. Gensler?

Mr. GENSLER. I think that Switzerland offered them all the things that Professor Pistor just said, but I also think that they think that under Swiss law, it is probably a little less likely that it is a security than under U.S. law, so there is some of what we used to call regulatory arbitrage that is going on as well, and the tax law arbitrage that Professor Pistor mentioned, that you could have a nonprofit and yet still pay dividends, which is kind of foreign to the way we think here.

I think it is also a signaling effect to all of their users that they are less controlled by the U.S., and when this Libra reserve gets big at some point in time, if any developed country is going to use the Libra instead of the U.S. dollar, and "Libra-ize" instead of "dollar-ize", I think it signals, in the future, hey, we are not under the control of whatever future U.S. President and sanctions regime of the future.

Ms. VELAZQUEZ. Thank you. Professors Brummer and Pistor, earlier today I asked Mr. Marcus if the Libra Association would be willing to submit to enhanced oversight by the Federal Reserve if it was designated a SIFI by the FSOC. He initially responded by saying the Libra Association has no plans to engage in banking activities. However, as you both know, in Dodd-Frank we gave the FSOC specific authority to designate non-banks as a SIFI in order to increase their oversight so they do not threaten the financial system.

In each of your opinions, what type of systemic issues could Libra and the association pose, and should the FSOC investigate these issues?

Mr. BRUMMER. Thank you for that question. It is very important. First, to the extent that there is a run on any of the currencies in the basket, there could be an incentive to ultimately liquidate their Libra holdings, so that destabilizes the coin.

Second, as I mentioned, if there is some kind of operational failure, people can decide, hey, someone can hack into this wallet so why should I keep it, in which case, again, you decide to liquidate the Libra holdings.

If you scale up—and I wanted to add that that is entirely possible, in part because it is Facebook, but it is not just Facebook. What would happen if Uber and Lyft required the use of Libra for their services or offered some of their consumers the benefit? Then, you imagine it becoming quickly systemically important, and, as a result, that is a huge thing.

And the last thing is banks. People are saying to regulate Facebook like a bank, perhaps. One of the questions that I think is worthwhile considering is would Facebook even be eligible for a banking license? A de novo review would require an investigation, of, say, Facebook's earlier violations.

Ms. VELAZQUEZ. Ms. Pistor, do you have a comment?

Ms. PISTOR. Just briefly. I think because the United States is essentially with its own sovereign debt and with its bank deposits that might be used backstopping the currency probably will be the country that will have to backstop any uncertainties or run on the Libra, even if it emanates from elsewhere in the world.

Ms. VELAZQUEZ. Thank you. I yield back.

Ms. TLAIB. The gentleman from Arkansas, Mr. Hill, is recognized for 5 minutes.

Mr. HILL. Thank you, Madam Chairwoman. Thanks for this panel. I hope you found the day as interesting as we have.

Mr. Weissman, thanks for your watchdog work on behalf of Americans.

One thing, listening almost to all the questions on and off today, there is a burden hanging over the room which is that it is Facebook in here testifying. So a question to you, if this were General Electric and they were proposing this innovation, you would still have your same questions, and we would still be monitoring trust-but-verify, Ronald Reagan style. But would you be downshifted a level of alert if it were—and again, we could say JPMorgan Chase or GE, just a personal view on that question.

Mr. WEISSMAN. Since you know the organizations, I don't want to say anything nice about those companies. But that is absolutely correct, and for a couple of reasons.

Mr. HILL. And you would say with logical reasons, and the Majority has screened many reasons, and many Americans are frustrated with—

Mr. WEISSMAN. Two key reasons. One is the history of privacy violations, obviously implicated by this. Two, the anti-competitive effects. No other company can do what Facebook can do, and suddenly, magically make appear this new product, inside your phone, inside your life, inside our mind, for 2 billion people.

Mr. HILL. Yes. Good. Thank you for that.

And on this issue on the business of banking, traditionally, yes, we have separated commerce from banking and we have a long legislative history on that, but the business of banking in those laws—whether you talk about the Bank Holding Company Act or any other—is taking deposits and making loans. And if you are not in both you are not, as a general statement, legally in the business of banking.

Ms. Pistor, when you think about what you have seen, or Mr. Gensler, would you say that that remains to be seen and that is why we are having this hearing, just to find out, well, what is the business mission here? What are the businesses? You suggested that they be regulated like a bank, but they have not yet said they are a bank.

Mr. GENSLER. I spent 18 years at Goldman Sachs and my whole life has been about finance and money.

Mr. HILL. Right.

Mr. GENSLER. I think when you take somebody's money and then you invest it—in this case they want to invest it very tightly and narrowly—it has a banking function. And we have this term, "shadow banking," for banking functions that are not regulated like banks. I think it just would be malpractice to leave it to the 49-State money transmission.

Mr. HILL. No, that is a good point. Thank you.

Mr. GENSLER. That is what I think.

Mr. HILL. And I think that is what this hearing is about, is trying to decide what is the best oversight, and I think Mr. Marcus was fairly open to say, yes, we are interested in what the right oversight is too, and you have your views and we have ours. So, thank you for that.

Ms. Demirors, I was very intrigued, and I thank you for your conversation about all the business you have. One that concerns me—I think a lot of international people fly on Boeing aircraft. I think a lot of them own Apple phones. I think a lot of them attend the World Bank meetings in Washington, D.C. A lot of people are satisfied that the United Nations is headquartered in New York.

I am shocked that we have to go to a neutral country in order to have global acceptance of a product. You seem to take the other side, that you are happy to have these businesses in America. Can't the U.S. be a reasonably good location for the association to be headquartered? Why would we not put it here in the United States?

Ms. DEMIRORS. Absolutely. I think there are two fundamental issues here. First, in the U.S., there are a number of different agencies—the regulators, policymakers—that have oversight of the various functions that the Libra Association would like to perform.

Switzerland, on the other hand, where the association is headquartered, has a different track record. It is in a place that has been very open to cryptocurrency projects and other similar innovators, and it has a clear regulatory framework that is more permissive.

In my view, part of the effort to location the association in Switzerland is to provide that clear, simpler regulatory framework to the Libra Association and its members. So, I think it should be here.

Mr. HILL. Yes, thank you, and I appreciate you having your businesses in the United States. And that is not a jingoistic point of view, from my point of view. You raised it in your testimony.

My view would be that Mr. Weissman would be happy, and you might be happy, if they were domiciled here, and if that compelled the U.S. to have that better operating environment, regulatorily and legally, for this kind of activity, which I don't think we are putting the genie back in the bottle and therefore the use of blockchain, the use of tokenization is going to be around the world as we watch it. And so I would like to see that innovation here under the right regulatory framework. Thank you all for being here, and I yield back my time.

Ms. TLAIB. The gentleman from New York, Mr. Meeks, who is also the Chair of our Subcommittee on Consumer Protection and Financial Institutions, is recognized for 5 minutes.

Mr. MEEKS. Thank you, Madam Chairwoman. I like that—Madam Chairwoman.

Thank you all for your testimony today, and Mr. Gensler, of course, it is good to see you here today. You were with us in the depths of the financial crisis, and I suspect that you may agree with my earlier statement, in fact, in listening to your opening statement, that no large company sets out to willingly break the financial system. But through a combination of moral hazards and failure to incorporate negative externalities and regulatory loopholes, have allowed major systemic crises over the past decades.

So what I want to do is probably ask all of you some questions that I asked Mr. Marcus this morning, but before I do that, I want to point out an intellectual sleight-of-hand, if you will, that Mr. Marcus did in answering my questions, and those of many of my colleagues, many Members of Congress.

He states that they seek to build a system for money transfer. The comparison is consistently made to PayPal or Venmo or Western Union, but to the best of my knowledge, users don't hold wallets on those platforms, don't store money until it is used in a Western Union account. Rather, customer accounts, which are held at banks, are deducted when a payment is made.

Let me then ask a question, because I am worried about systemic risks, and I asked Mr. Marcus this morning, that if Facebook managed just 10 percent of its current user base to the Facebook Libra wallet, would you agree that they would be a systemically risky financial institution, and should they be designated as such by FSOC, and do the regulators even have the capacity to develop dedicated and enhanced oversight regimes for Facebook in such event?

I will start with Mr. Brummer, and then Mr. Gensler.

Mr. BRUMMER. That is an excellent question, and certainly if Facebook was managing those kinds of assets, given its customer base, I think it would be certainly be systemically important.

And the question about the expertise at the Federal Government level is precisely the fact that you have to think about coordinating, under FSOC, an appropriate response, not just in terms of the banking and financial stability level but also with all of those consumers and all of the frailties that we have been discussing all day long—how exactly do you protect everyday Americans from those particular risks? And I think that you would have to be elevated to a matter of prudential, systemic, and also just customer and investor protection.

Mr. GENSLER. I will give a bit of a technical answer, but quickly, having helped you all work through that Dodd-Frank bill. Title VIII of Dodd-Frank had two systemic provisions. One is as companies, and one is as payment infrastructures or clearinghouses. There was actually a third one, activities.

It depends on the size that this would get to, and even if it was 10 percent of their user base, if they only had small balances, I think Congress, rightly, made sure that the FSOC couldn't just designate anybody as systemic. If the balances were really small, it might be a little challenging for FSOC to designate them as systemic. If the balances were large, I think yes.

I think on the payment infrastructure side, is it a systemically important clearing and payment and settlement system? If it was 10 percent and it was embedded in the world that way, I think it is quite likely that the FSOC would be able to do it. But it would depend on the facts and circumstances.

Mr. MEEKS. Let me ask this question, because I don't know, given that when we were asking the questions, we were talking about if it was a security or a commodity. That is a question, and then who would be the regulator? What would be the appropriate regulatory authority?

Would you say that they should be listed so that all of the regulators, at some point, would be regulating them, or should Congress look at creating a new regulatory authority that just looked and specialized over cryptocurrency and Bitcoin, et cetera? Ms. Pistor or Mr. Gensler?

Mr. GENSLER. I will just say I don't think we need another regulation in Washington. I will just say that.

Mr. MEEKS. I agree.

Mr. GENSLER. But I think that if it impinges on investor protection, which this feels like—you know, a great Indiana poet, James Whitcomb Riley, said, "When I see a bird that walks like a duck and swims like a duck and quacks like a duck, I call that bird a duck." I mean, this thing looks like an exchange trade and I am just using common sense here. If Congress needs to fill a gap to make sure it is—

Ms. TLAIB. Thank you.

Mr. GENSLER. —under the securities laws, I would do that.

Ms. TLAIB. The gentleman from Ohio, Mr. Davidson, is recognized for 5 minutes.

Mr. DAVIDSON. Thank you, Madam Chairwoman. Thank you to our witnesses and to my colleagues who are here on this really important topic.

Mr. Gensler, you mentioned regulatory arbitrage, and certainly in this space we have seen a fair bit of it. The SEC has cracked down on some of the big fraudsters that essentially were just launching securities in violation of U.S. securities law.

However, that regulatory framework, as Ms. Demirors has pointed out, has driven a lot of companies to find certainty in places like

Switzerland or Singapore. Would a bright-line test that says if it meets this test right here, we know that it is a security, and if it falls on the other side of that, we know that it is not, provide the certainty the market needs?

Mr. GENSLER. I think that it could but it could also provide certainty for ways for good lawyers to cleverly work around it. I think whether it is the Supreme Court Howey test, or just in the last few weeks the SEC put out a lot of guidance in this area.

It has been slower than I think we want. I will agree with that. But I think they are slowly, under Chairman Clayton, trying to give some certainty to this area.

Mr. DAVIDSON. Right. Bill Hinman has provided a lot of that, and, unfortunately, that is not really—I appreciate their efforts but, frankly, it is Congress' job to provide that certainty. And if we just want to live with a court decision, *Howey,* and apply the Orange Grove test to things—you know, if you are swinging an orange grove hammer, a lot of things look like an orange grove.

Talking about one other principle that you talk about, we have provided that in a group of bipartisan folks, in the Token Taxonomy Act, and it lays out a four-part test that if it meets this, then you can know. You don't have to go on a case-by-case basis, and pre-clear your idea with the SEC, and maybe you talk to the right person and maybe you don't, and maybe you can spend as much on lawyers as Facebook did. Maybe you have 2 years before you need to launch, but maybe you don't.

And a lot of companies have just sat down and talked to me and said, "Look, no offense, but we don't trust you guys. We are going to launch this in Switzerland or Singapore."

So, we are trying to provide that certainty for the market.

I want to ask one question specific to Libra. Their association would be governed by a board. Their association has central control in its proposal, and those seats I think would be considered assets, right? They would be presumably fungible. They could be sold. They say they are going to be governed in a different way. The underlying proposal is not just a bundle of currencies but short-term securities. Under securities law right now, I think as you point out, you don't have to do arbitrage. You just have to apply existing law. That would be treated as a security, correct?

Mr. GENSLER. The members of the board would get something called a Libra Investment Token, and that is unambiguously a security, and I think even Facebook has agreed to that.

Mr. DAVIDSON. Okay. Thank you.

Ms. Demirors, you have highlighted a lot of background information about Bitcoin and about the immutable distributed ledger and the benefits of that, decentralization versus centralization. A lot of people in this space will use a phrase that you may be familiar with: "There is Bitcoin and then there is shitcoin." Are you familiar with that phrase and what people might mean by that?

Ms. DEMIRORS. I am.

Mr. DAVIDSON. Could you elaborate on how people would differentiate the two?

Ms. DEMIRORS. Absolutely. I think the idea here is Bitcoin has had a long track record. The network has been operating for 10 years. The Bitcoin network has been tested. The decentralized nature of the Bitcoin protocol has been tested. People have tried to co-opt control of Bitcoin source code and push it in certain directions that benefit their business models, and this network, and this protocol, and its open-source governance have withstood that test.

It is robust, it has been tested, and it has had the benefit, frankly, of spending its first 5 years, in its nascency, sort of operating in this environment of innovation and not having a lot of regulatory attention.

Mr. DAVIDSON. Is there a central authority that could dilute the value of Bitcoin?

Ms. DEMIRORS. No.

Mr. DAVIDSON. Is there a central authority that could filter transactions at Bitcoin?

Ms. DEMIRORS. No. That can only be done through the products and services that people utilize to access the network.

Mr. DAVIDSON. Like Coinbase, for example?

Ms. DEMIRORS. Absolutely. That is a U.S. company that is regulated based on the facts of what its business model is.

Mr. DAVIDSON. Right. And just like in the U.S., the Federal Reserve or the Treasury doesn't change the dollar. The people at the edges, the banks, generally do that. But with Bitcoin you can still engage in peer-to-peer transactions, like cash, correct?

Ms. DEMIRORS. Absolutely.

Mr. DAVIDSON. And because of open source code, you could have a wallet, correct?

Ms. DEMIRORS. Absolutely.

Mr. DAVIDSON. All of these features are different than many of the things that people call, colloquially, "shitcoin," because the value can be distorted by a central authority. So, people do really have their assets at risk.

We absolutely need the certainty that legislation can provide in this space. I hope we have a hearing specific to the Token Taxonomy Act soon. I appreciate my colleagues and the time, and I yield back.

Ms. TLAIB. The gentleman from Georgia, Mr. Scott, is recognized for 5 minutes.

Mr. SCOTT. Thank you, Madam Chairwoman.

First, let me say what an excellent panel we have, very knowledgeable. Thank you.

Mr. Gensler, it is great having you here, my good friend. We did a lot of yeoman's work with CFTC when you were Chairman, and me as Chairman of our committee on cross-border and on derivatives, swaps, the whole nine yards. It's good to see you again.

Let me tell you what I think is the Achilles heel in Libra right now. This morning, if you recall my testimony, I kept asking Mr. Marcus, and several of us on the committee kept referring to the White Paper and so I looked at this White Paper and I think we found an Achilles heel here, several, but here's one that we may have omitted.

In that White Paper, it states that globally, 1.7 billion adults remain outside of the financial system with no access to traditional banks, and I questioned him on that and he assured me that in order to obtain what he called a Calibra Wallet, there must be strong Know- Your-Customer requirements in place, including a government-issued ID, and this is particularly acute when you're dealing with online activity. When you're dealing online, one of the big reasons why many consumers are unable to access the financial services is due explicitly to a lack of identifiable proof of identification.

I want to ask you all, how do you see Libra expanding access to financial services to the unbanked and underbanked, 1.7 billion adults across the world, particularly on an online platform, when you can't simply hand over an ID card like you can to the bank teller, and while at the same time navigating the need to verify customers' identification who may not have a government-issued ID and are unable to get one? How do we mesh this with online?

I think that is an Achilles heel there. We're moving fast in technology but I don't think, if I take this, I can't give an ID card.

Go ahead, Mr. Gensler?

Mr. GENSLER. Three quick points. Sub-Saharan Africa, half is unbanked but half of the unbanked have mobile phones. That's the good news.

The sad news is you're absolutely right about government IDs. I think the Calibra Wallet they're promoting will be inside of these anti-money-laundering laws, but there are also going to be a lot of other wallet providers, and so my other two points is those other wallet providers will be in the lax jurisdictions that might not take the necessary precautions to get the government IDs.

The third point is it's absolutely true that this will have a lot of leakage, that there will be lots of Libra tokens, just like there are lots of Bitcoin tokens that are floating around outside of the Bank Secrecy Act and that's just going to happen.

Mr. MEEKS. Mr. Weissman?

Mr. WEISSMAN. Yes. I think you're exactly on point. I think it's an unsolvable conundrum.

If you look at what they've said, in addition to exactly what Mr. Gensler is saying, they want it to be that you can walk up to a convenience store anywhere in the world, hand them money, and get Libra. That's the vision. Okay. That's one hat.

They also say the Calibra Wallet will interconnect with other wallets. So even if Calibra does Know Your Customer, a different wallet that doesn't, you still put the money back into Libra.

I think the possibilities for sanctions and money laundering and tax evasion are unlimited and history tells us if the opportunity is there, it will absolutely be exploited.

Mr. MEEKS. Yes, thank you.

Ms. TLAIB. The gentleman from Tennessee, Mr. Rose, is recognized for 5 minutes.

Mr. ROSE. Thank you.

Many have expressed concern that Facebook could out-compete banks and non-depository financial institutions and become some sort of financial services monopoly. I understand Facebook has demonstrated a dominance in the social media space, but I want to better understand this financial services monopoly idea.

The Libra Association is made up of 28 founding members, with more to come, many of which have played in the payment processing space for a long time. Some of these firms are very large.

Visa and MasterCard have billions of cardholders and process trillions of dollars' worth of transactions.

Some have argued that this association is a thinly-veiled attempt of Facebook eventually attempting to create a bank. It may or may not be, but I am more reminded of another payment innovation that started in the 1950s and 1960s as associations of like-minded companies: the bank card payment networks.

Banks issued their own cards but banded together as regional bank card associations to create networks that worked for the consumers, merchants, and issuing banks. Eventually those associations were spun off as independent companies that we have and use today.

I'm not saying that Libra and bank card network innovation are the same thing, but it does strike me that there are similarities and it might be helpful to look at previous case studies to inform how we look at new innovations.

Ms. Demirors, if we were to think of Libra like a payment innovation, can you talk a little about the potential similarities between card payment in its early stages and what Libra is or eventually might be?

Ms. DEMIRORS. I don't think any of us are saying that Facebook doesn't have the right to innovate. After all, the U.S. is the birthplace of many innovations and we're seeing a wave of financial technology innovations in different areas.

I think what we are seeing here is that the ability to compete and to create innovative new financial products and services should be possible, regardless of an institution's size, balance sheet, or political power.

I think what Facebook is attempting to do is fundamentally different from creating a card payment network. Facebook is already in the hands of 2.7 billion users. It already is on everyone's phones, on everyone's laptops, and has committed repeated violations of these users' privacy, and what they are attempting to do is not to create a new payment network.

What they're attempting to do is pass off this idea as a cryptocurrency, which it is not. They're attempting to use regulatory cover to get away with doing something that would typically be regulated, which is asset management, fundamentally different.

Mr. ROSE. So, differentiate, go further and differentiate between the consumer protection concerns with what Libra is and what a true cryptocurrency is?

Ms. DEMIRORS. My fundamental concern is related to stability. If we think about the various types of risk that investors take when they custody their assets or purchase financial products from an institution—we experienced this in the United States 10 years ago—you are taking inherent risk.

When someone purchases a Libra, they're giving up their real world assets. They are giving up fiat, giving it to the Libra Association to receive tokens. These assets are placed in depository banks and institutions around the world. This is a core banking function. This presents risk from counterparties. It presents risk in consumers being able to retrieve the principal that they have used to obtain the Libra tokens, and it presents systemic risk in the context of the broader financial system.

Mr. ROSE. And why are permission-less blockchains better for consumers?

Ms. DEMIRORS. When you buy Bitcoin, when somebody makes a decision to purchase Bitcoin, they are not buying a pool of assets. They are not exchanging their principal for financial instruments. They're buying what is essentially a digital commodity that is backed by its own scarcity and the demand for it. It is not a pooled fund. There are no assets or banks that have to create an instrument that backs the value of Bitcoin. This is fundamentally different.

Mr. ROSE. As we move forward and we think about this independent association, there comes a time when one would surmise that the participants might want to monetize their interest in the association.

I'm curious, Mr. Gensler. You nodded your head. Paint that picture for me. How does that work?

Mr. GENSLER. I think particularly if the association is associated with the float, the interest that's coming off of this reserve, that would be very attractive. They're monetizing that really upfront called Libra Investment Token. There are two tokens here.

I think to your earlier question, if I could just say I don't know if Facebook will be successful. This is their fourth attempt in payments, but we do know in China, the two big companies, Alipay and WeChat Pay, dominate payments, over 90 percent of payments.

Ms. TLAIB. The gentleman's time has expired.

Mr. GENSLER. I think that's what they're going to do.

Mr. ROSE. I yield back.

Ms. TLAIB. The gentleman from Illinois, Mr. Foster, is recognized for 5 minutes.

Mr. FOSTER. Thank you, Madam Chairwoman, and thanks to our witnesses.

I'd like to talk a little bit about what the regulation requirements ought to be for not only Calibra but crypto exchanges in general.

Do you think, first off, that Calibra and other crypto wallets should be subject to custody and segregation requirements, Mr. Gensler or anyone else?

Mr. GENSLER. I would say yes, and I think that a custody at Coin Base and Kraken and Gemini and the exchanges has been a honey pot for theft and cybersecurity risk, and that if Congress could step in, maybe not this Congress but a future Congress, to give clear authority, whether it's the SEC or the CFTC, but clear authority to regulate even a Bitcoin exchange, which maybe could be put into this token.

Ms. DEMIRORS. I'd like to make a factual distinction. Libra is not a cryptocurrency. Cryptocurrencies are fundamentally different. The business of exchanging cryptocurrencies is a regulated activity and has been for the last 5 years in this country, and so I want to distinguish and draw a very clear line that Libra and cryptocurrency should not be—

Mr. FOSTER. But they don't differ in terms of the sort of frauds that can take place, frauds, theft of customer assets, everything bad that can happen if you don't have segregation requirements and so on.

Mr. BRUMMER. And could—

Mr. GENSLER. I think that's right and Calibra is going to control the Calibra Wallet funds because it's a custody fund.

Mr. BRUMMER. And ultimately, custody is a functional activity and even regardless as to what kind of sort of digital asset you're ultimately dealing with, you have to ask and tailor custodial rules to the nature of what you're trying to regulate.

Certain kinds of questions as to what happens to the custodial responsibilities of a bank when there's a fork in that cryptocurrency, those kinds of questions obviously have to be answered, and it's not at all clear as to what those answers in actuality will be.

Mr. FOSTER. Okay. And could you say a little bit about the sort of abuse of trading practices that are possible with current crypto exchanges and might be possible also with Libra, things like front-running, wash trades, all this sort of—

Mr. GENSLER. It's all possible.

Mr. FOSTER. Is it taking place?

Mr. GENSLER. It's a feeling. It's well-documented by a company called, I think it was Bitwise, but you might remember a filing at the SEC about fake trading, but most exchanges around the globe are not regulated, other than this custody issue and for money laundering, but it's rare that they're regulated for manipulative behavior.

Mr. FOSTER. Any anonymously held thing, is there any way to prevent things like wash trades even if they're anonymously held?

Mr. GENSLER. It's not even about the technology. Around the globe, the largest exchanges are not regulated by the SEC or similar securities regulators.

Ms. DEMIRORS. I have to point out, though, many exchanges are in fact regulated by the jurisdictional regulator where they operate and by the customers that they serve. There is a case that is now being tried, *New York* v. *DFS,* which is looking at a number of exchanges.

The second distinction I would make here is since 2016, all of the exchanges here in the United States that are under the purview of U.S. regulators, including the CFTC, have voluntarily joined the CFTC in creating a market oversight committee that looks at these practices and these accusations that have been leveled around wash trading and there is effort within the industry to self-regulate in absence of clear guidance, but I will say that this wash trading activity is not happening here in the United States because exchanges here are regulated as any other exchange would be.

Mr. GENSLER. I differ with my fellow witness at the table. The wash trading is absolutely happening here. They're not regulated for market manipulation; they're regulated for custody of the funds and anti-money-laundering.

Mr. FOSTER. It seems like if they are truly anonymous, it's very hard to even identify wash trading if you just don't know who's actually participating in it.

Mr. BRUMMER. And it's notable that in the governance rules, there are no explicit ways to determine potential conflicts of interest or any other kinds of activities. So even from a self-regulatory perspective, as it pertains to Libra, there are no obvious solutions to the problem.

Mr. FOSTER. Then, it relies on the anonymity or the pseudo-anonymity of it is in fact the fundamental design problem absent some way of going for the regulator to going through and finding out that the same person was on both sides, the beneficial owner on both sides of the trade. Unless there's a way to pull the mask off and look and see who's there, there is no way of even detecting it and that's sort of an unsolvable problem as far as I can tell.

Let's see. I have 8 seconds left. I want to thank you for your input on this very important subject. I yield back.

Ms. TLAIB. The gentleman from Kentucky, Mr. Barr, is recognized for 5 minutes.

Mr. BARR. Thank you, Madam Chairwoman. Witnesses, thank you for your testimony and your expertise today. You have been an excellent panel, and this is an interesting topic. We're all learning, and we still have a lot to learn about this.

As I was saying earlier to Mr. Marcus, I think the presumption should always be on the side of financial innovation, especially when there's the promise of greater financial inclusion, and reduction of transaction costs and friction.

So, I do hope that this will result in a very positive impact on our society, but I do think we should ask probing questions, and I appreciate the panel for offering some healthy skepticism on one point or another.

Let me just kind of start with the basics and I think I want to go back to Ms. Demirors. You made the comment that Libra is not the same thing as cryptocurrency. Can you elaborate and explain that to me?

Ms. DEMIRORS. Yes, there are three fundamental differences I would like to point out that are also recorded in my written testimony I submitted.

Number one is that cryptocurrencies like Bitcoin are decentralized. No one entity or individual can block or censor transactions. Libra, by contrast, has an entity of these 100 members that is able to block/censor transactions and manage the network.

Mr. BARR. But only for 5 years, right?

Ms. DEMIRORS. That is the claim. I do not know how they plan to decentralize this and they have offered no solid plans. "Decentralization" is a word that is used often, but it doesn't really have a tangible measure. It's fairly esoteric. I'm not sure how they will achieve it.

The second point I'll make is that Bitcoin is not backed by anything but the demand for it. It is its own asset. It's a digitally scarce asset and it can be likened to a digital commodity. It is a new type of asset which introduces challenges in trying to fit it into a box, but it isn't backed by anything. There's no bank that holds funds. There's no entity that holds funds that are at risk.

In contrast, Libra is the opposite. It is backed by a basket of currencies and other securities that are held by such—

Mr. BARR. Stable coin.

Ms. DEMIRORS. Yes, that is what they like to call it. Stability is relative, as we have learned through the history of financial crises, but Libra does hold a number of assets that substantiate the value of its token, and so the security of those assets in question are tantamount to securing the principal that users post to obtain Libra.

The last point I'll just make is the point of control. Anyone can build on top of the Bitcoin network or most cryptocurrency networks. Anyone can access these things. The code is open source. The network is open just like the internet. It could be considered a public good and people can compete and build businesses.

In contrast, I don't know how the Libra network will be open when it's controlled by 100 for-profit corporations that are closely affiliated with Facebook.

What I'm asking for here and what I'd like to just point out is that competitiveness and the ability to level the playing field for all types of organizations to be able to compete in the same market is important. Cryptocurrencies are an open market. Libra is proposing a closed controlled market.

Mr. BARR. Let me switch to the stable coin idea and the fact that Libra is tethered to this reserve. Isn't that a positive innovation to reduce volatility? Shouldn't we think that this is a positive development?

Ms. DEMIRORS. I am not commenting on whether Libra is positive or negative. I am commenting on the fact that Libra is not a cryptocurrency. Libra is an ECF or mutual fund that is backed by assets and I am not arguing that the unbanked don't deserve access. But it's not the body shield.

Mr. BARR. Mr. Gensler?

Mr. GENSLER. I think it's a very interesting innovation that has raised 5 to 10 really important public policy issues, but the idea that there might be a stable value coin backed by a basket of multi-currency risk in Sub-Saharan Africa or in Latin America or in Asia, there might be a demand for it. I wouldn't count it out.

Mr. BARR. What is the incentive, besides this unbanked, underbanked problem, what would be the incentive for a banked person or the holder of a fiat currency to exchange it for—

Mr. GENSLER. It's very simple. Just like in many countries, sometimes there's a lot of transactions in dollars, because they don't feel comfortable with their central bank, with their monetary authority. It could be countries in very real extreme, like Venezuela or like Ecuador adopted the dollar as an official policy, or it could just be that a lot of things happen.

Mr. BARR. Can someone address the risk of disruption to central banking and the disruption to traditional monetary policy?

Mr. GENSLER. It would definitely disrupt the central banking and monetary policy in these developing countries if they "Libra-ize" instead of "dollar-ize" and if it got very significant, it could start to influence the four or five or six currencies they have underneath it. So, the dollar is going to be half of this but if the association said it's only going to be 30 percent, you see. It's the transition.

Mr. BARR. Thank you all. I'll have lots more questions, I'm sure, as this develops. I yield back.

Chairwoman WATERS. The gentlewoman from California, Ms. Porter, is recognized for 5 minutes.

Ms. PORTER. I was told on my way in that coming to give praise to the panelists was not my style, but I'm really here to just thank you in part for your service and for being here and explaining things to the committee.

I wanted to pick up on something that Ms. Demirors said about the differences between Libra and cryptocurrency, and a lot of the concerns that I have about Libra, I do not have about crypto. There are issues with cryptocurrency and many of you have illuminated them, but I think your testimony is incredibly important.

I wanted to pick up on the point you made about Libra being "backed in a way that Bitcoin and traditional crypto is not," and I wanted to ask, we heard Mr. Marcus talk about how Libra is backed and so I wondered if any of you, Mr. Gensler or Professor Pistor, could talk about, what do you think he means by "backed" and how should we have confidence in that, and how is this kind of a backed stable coin different than something like M-Pesa in Kenya, for example?

Mr. GENSLER. I'm going to agree with my colleague here. This is very different than Bitcoin for the three reasons that she said and for other reasons, as well.

I think that it is very different than M-Pesa, but similar in this important way. The central banks and authorities in Kenya said anything in that fund, which was held by the phone company SafariCom, had to be in trust, could not be loaned, and 100 percent of it had to go into the Kenyan banking system as deposits, and similarly, in China, they made it even more restricted, 100 percent had to go to the central bank.

So, that's where the similarities are. It's different because this is multi-currency, and currently it's very different because they're saying don't treat us like a bank, don't treat us like a narrow bank and your exposition about the wildcat banking era of the 19th Century was very helpful.

Ms. PORTER. Others?

Ms. PISTOR. Yes, I think that can mean different things. It's not that the customers have a direct claim against the reserve but the idea is that the reserve will be held in safe assets and therefore will be able to provide liquidity.

Of course, the important point that I'm trying to make in my testimony is that the safety comes from public-backed stopping in the countries that provide these safe assets. So, it's ultimately a public service provided to a private company.

Ms. PORTER. Right. And when we talked with him about the corresponding purchase with the FDIC, for example, I asked Mr. Marcus, do you think that Libra would be subject to the FDIC, to some kind of insurance scheme, like what is the backstop, so that when you tell customers that this is backed, that they know what they're getting, what kind of backstop and security they have?

I wanted to ask—he didn't take me up on my offer to have the FDIC regulate Libra. I was happy to run through the alphabet soup. He can choose one of the weaker regulators, like the OCC, if he prefers. There's an alphabet soup here we could offer him.

I wonder if you all could comment and we can just go from right to left here quickly, which regulators, and it could be more than one, do you think are appropriate for Libra?

Mr. BRUMMER. One comment and observation that I recently had was whether or not Facebook, if it was to become a bank, would even satisfy the de novo review process from a banking regulator. It's entirely uncertain as to whether or not they would receive a license.

Certainly, the ambiguity with the term "backed" is played throughout the White Paper where, on the one hand, especially if you're describing yourself as a currency board, you're thinking about "backed" in a kind of a monetary sense, but what they're really doing and what you see in the structure of what they're doing is creating an ETF, and yet you're creating the ETF but you're using the language of a kind of monetary world and that kind of obfuscation is not at all helpful to a potential purchaser, but certainly at a base level infrastructure, regulatory infrastructure level, you're going to have to go with some securities level, securities regulatory oversight through the 1940 Act and then looking at what differentiates in terms of both the breadth and the other characteristics and the systemic, potentially systemic implications to ramp up from there.

Ms. PORTER. Yes. This is a Full Committee hearing. It isn't clear to me whether this is a problem for the Investor Protection Subcommittee or the Consumer Protection Subcommittee.

Ms. PISTOR. I think the problem is that many of our categories don't easily fit and part of financial innovation, of course, is to create something that does not fit existing structures. That's part of how we get the comparative advantage and I think they're using the language in a very smart and discriminate way and I think to avoid the kind of regulatory framework that we have.

Let me add one more thing, which is, of course, we're talking about a multi-jurisdictional regulatory approach that would be needed for a global currency. So even if you figure it out in the United States, you need to think about how complementary regulators are elsewhere.

Mr. GENSLER. SEC.

Ms. PORTER. My time has expired, but I would just welcome each of you to please follow up with me with your thoughts on this. I'm very interested.

Chairwoman WATERS. Thank you.

I will now recognize myself for 5 minutes, and let me thank the panel for being here. You have spent some long hours here, while all of our Members have taken the opportunity to ask questions of Mr. Marcus, but I certainly appreciate your participation here today, and I thank you all for helping to unfold and make transparent some of the information that we should have had access to that we didn't get in the White Paper.

Let me ask you this, because I've listened to many of the questions that you've been asked and you've covered an awful lot, but I've been thinking about the association and I've been thinking about the fact that the association includes about 27 or 28 companies, and Mr. Marcus said that they were targeting about 100.

But do you think that it's going to go well beyond that number because of what we are looking at? Are we looking at big companies with big databases that supply whatever goods and services and with the Libra, the Libra will be the currency that you have to have in order to get these goods and services, or am I just daydreaming about this? Mr. Brummer, what do you think?

Mr. BRUMMER. Certainly, they have not disclosed exactly what the selection criteria would be for ramping up even to 100 members. You have to expect that given the resources available to the existing members, that the entry point and the expectations of new members would be very large, and there's no clear path to reaching the kind of decentralization and decentralized infrastructure that Mr. Marcus is promising in terms of evolving into a Bitcoin-like infrastructure.

Like you, I do have doubts as to how quickly they would be able to ramp up, much less become a permission-less system.

Chairwoman WATERS. Do you think they are thinking beyond 100 members of this association? Because, remember what he said, "Well, there's going to be a smaller governing group that will be making these decisions, I guess, for everybody." So, could there possibly be thousands of companies in this association?

Mr. GENSLER. There's nothing that forbids it, and if it helps the distribution of a product, economic rationale would be to help distribute the Libra, so—

Ms. DEMIRORS. But if I may, Chairwoman Waters, I think what we've seen historically in attempts by multinational many-member consortia consisting of thousands of members to govern something that does involve profit and distribution of returns and we're speaking about the largest consumer base in the world, 2.7 billion users, that is going to quickly become contentious.

If we look at much smaller organizations, comprised of smaller membership, they have many governance challenges, and my concern is that in the Libra White Paper, this governance structure is not clearly laid out. It's not laid out where the balance of power will be or if there is any one overriding party or entity that makes decisions in the case that the parties that are members of the association do not agree.

Chairwoman WATERS. Has there been any discussion—yes, Mr. Weissman?

Mr. WEISSMAN. Yes. I think that the Facebook vision is clear actually. I think it's that they intend to have an oligopoly that they dominate. It is a cartel. Absolutely, they want to—

Chairwoman WATERS. A cartel—

Mr. WEISSMAN. Yes.

Chairwoman WATERS. —to dominate.

Mr. WEISSMAN. Past 100.

Chairwoman WATERS. Is it possible that all of these companies with big data could end up with all of this data being merged into a humongous amount of individuals in this database that they could be merchandizing to, they could be marketing to? Is that a part of what's going on here?

Ms. DEMIRORS. I think until there's more transparency on how the association intends to make money, the organizations that join have to have over a billion dollars in assets and contribute $10 million to join, not just anyone can join this association, and in fact, no one was able to ask to join. I was not invited. None of the firms I work with were invited, and so I think that's for me the fundamental question.

If Facebook aspires to create this open permission-less consortium that everyone can benefit from, then why is the selection process opaque and why does it only involve affiliates and associates of Facebook and its executives? That would be my question. That's not a criticism, but I think more transparency is certainly needed.

Chairwoman WATERS. That's my question, too, and I basically define this as, "the Billion Dollar Boys are taking over." Thank you very much.

Now, we are going to hear from the gentleman from California, Mr. Sherman. You're recognized for 5 minutes.

Mr. SHERMAN. Thank you.

We've heard from Facebook that they're absolutely dedicated to adhering to the anti-money-laundering and Know-Your-Customer rules. Mr. Brummer, if they were that dedicated, why would they hire as the head of the operation someone who was head of PayPal when they were fined $8 million for violating anti-money-laundering laws?

Mr. BRUMMER. I cannot answer that question.

Mr. SHERMAN. None of us can. And will our anti-money-laundering laws be binding on an institution headquartered in Switzerland and made up of international businesses, Mr. Brummer?

Mr. BRUMMER. Well, certainly U.S. rules would not apply.

Mr. SHERMAN. Those are the ones I'm talking about, yes.

Mr. BRUMMER. U.S. rules would not apply, and the bigger risk obviously lies with those jurisdictions that are so weakly regulated that they're falling outside of international agreements, like the ones that FATF has recently agreed to in June.

Certainly Swiss rules, particularly relating to both privacy and also relating to financial regulation, are not just different but have historically been considerably weaker, and real questions do arise as to the ability to enforce and to promote the kinds of norms and safeguards that we have here in the United States.

Mr. SHERMAN. Okay. The history of currency, and I see we've got a "Zuck Buck" behind you, the history of the dollar, first it was based on how much gold we had in reserves. And only when we had an ounce of gold, did we print $35. Then, we started printing more than we had in reserves. Then, we got to the point where we made it nonredeemable and now the dollar is valuable. Gold is an interesting thing. It's a nice thing to have, but nobody says, "I'm not interested in having U.S. dollars because they're not tied to gold."

If Zuckerberg can replicate that, then he can do what only the U.S. Government can do and that is print to reserve currency. They've promised that they won't do that but that it will always be one-to-one, but, Ms. Pistor, is that promise from Facebook binding on the Libra committee?

Ms. PISTOR. No, the association could, with a two-thirds majority, change that.

Mr. SHERMAN. And if they change that, that means they get to print money. That would be quite an incentive to change it.

Ms. PISTOR. Yes. I would think that a private organization has a problem with doing what the United States did in the 1970s because what they cannot do is unilaterally basically put the productivity of an entire country on the line, which is back—

Mr. SHERMAN. That's true.

Ms. PISTOR. But they could try.

Mr. SHERMAN. People are creatures of habit. If I can go on Amazon and buy a bunch of neat stuff for a thousand Libra or Zuck Bucks and then as long as I can do that, they're valuable things to have.

Why don't I address this to Mr. Gensler? We have a problem in that people in Los Angeles are sending money to their grandparents in Guatemala and they're being charged 7 or 8 percent sometimes to do that.

How is a Guatemalan grandmother supposed to buy a bag of food for a bunch of Zuck Bucks? We're told that if we don't buy into this wonderful new thing, that we're disadvantaging that grandmother, but is this cryptocurrency really a solution for her?

Mr. GENSLER. What we found is Bitcoin, for all it is really innovation, it is not being used that much in retail transactions for the exact reason you're mentioning.

Mr. SHERMAN. And certainly not in rural Guatemala.

Mr. GENSLER. What would have to happen is that some service provider would provide the technology so that behind the scenes the Libra or this Zuck Buck, as you referenced, would be traded for the local currency so that the store owner could get the local currency and there would be some crypto exchange or hedge fund—

Mr. SHERMAN. It sounds every bit as expensive as what's going on now. I yield back.

Chairwoman WATERS. Thank you.

The gentlewoman from Michigan, Ms. Tlaib, is recognized for 5 minutes.

Ms. TLAIB. Thank you, Madam Chairwoman. Thank you all so much for being here.

I have to tell you I'm learning a tremendous amount. The younger people on my team have been watching this closely and teaching me a lot, but the more I listen, and I was forced to stay here a little bit longer, which is okay, I was able to hear a lot more and learn more, but one of the things that comes to mind, and we'll talk about this, is this whole thing around systemically important financial institutions. I want to get there, but first, Mr. Brummer, how do you feel about a private company issuing currency? What ramifications do you all see? You all talked about it. Historically, have you ever seen outside—

Mr. BRUMMER. Right. We have. What a private company does with money—when you use other people's money, then you should normally expect that the government or some kind of regulatory regime is going to want to know what you're doing with it and have you rightfully accessed or received that money, and whether or not it be an example, wildcat banking where you're not just taking the money, you're not keeping it entirely in reserve, but you're lending it on to someone else, creating certain kinds of risks.

The challenge is when you have a private institution that's not just lending its own money but is lending with other people's money, and when they're trying to do that without offering the kinds of proper safeguards or disclosures to relevant stakeholders and investors, and that's when the red flags are raised.

Ms. TLAIB. Okay. This question goes to everyone on the panel. In thinking about how to protect the residents, my residents at home, they're going to see this and they are not going to fully understand it, just like I didn't before I came here, the possibility of the Libra Association's failure, and if anyone on this panel can explain the systemically important financial institution, if they get labeled as too-big-to-fail, how is this connected to what we're talking about now, that this could be a possibility?

Mr. GENSLER. Can I just mention one thing that's buried in their White Paper and documents? They're trying to negotiate with central banks around the globe to get accounts at central banks, and your residents in your community have accounts at commercial banks, but an account at the central bank is quite different. That means that you get access to the discount window, the lender of last resort.

I surely hope that Chairman Powell and others at the Federal Reserve would not give that to this association, but if it was very large, that would go to answer your question. At some point in time—

Ms. TLAIB. But isn't that possible?

Mr. GENSLER. —in 2008, there were decisions made by good men and women trying to stop this country from going into crisis and they made decisions that many of us even said, that wasn't the right thing, to bail something out, but the Libra Association is already negotiating with central banks to try to get access to central bank money or accounts and that's what would happen if it was systemic.

Ms. TLAIB. Did you have something, Mr. Weissman?

Mr. WEISSMAN. There's another element that I think we're not focusing on enough that relates to your constituents, and everyone's constituents.

What Facebook wants is that transactions that occur in Libra, wher3e people sell things, provide things, in Libra, using Calibra, whatever, but when you have a borderless privatized currency, you now have created this global market with no reasonable regulation. They're talking about payday lending. They're talking about providing financial services in Libra. So all of the problems we know now with abusive financial lending, orders of magnitude worse because you've got jurisdictional problems and secrecy problems that have no possible plausible answer.

Ms. DEMIRORS. I'll also add, if I may, the disclosure aspect is very important. As many of us on this panel have mentioned, Libra represents an investment product that would typically be regulated under the 1940 Act, and so it's very important that people who receive Libra who may not know what they're getting, are educated as to what they're receiving.

Financial education has been problematic across a number of different asset classes in this country's history and so the disclosure component, I think, is important in ensuring people understand the risk they're taking when they choose to take their dollars and turn them into Libra.

Ms. TLAIB. Thank you. And I'll put the questions into the record, Madam Chairwoman, if that's permitted, but I want you all to know, one of the things I told Mr. Marcus is about the monopoly, the small group of friends that is being created with—the fact that a member can vote in contrary to the position advocated for

Facebook, what would happen, what retaliation? There's this dynamic that's there, that I think needs to be fleshed out. We need another hearing for that. Thank you.

Chairwoman WATERS. Thank you.

The gentleman from Illinois, Mr. Garcia, is recognized for 5 minutes.

Mr. GARCIA OF ILLINOIS. Thank you, Madam Chairwoman. I'd like to thank the panel for bearing with us and all the questions.

I have a question on banking commerce for Mr. Weissman. In your written testimony, you mentioned that the Calibra Facebook arrangement, "may run afoul of the bank holding company requirement," which enshrined the historic separation between banking and commerce.

The regulatory framework in our country governing bank regulations established law between banking and commerce for a long time. The guiding principle of this separation, that banks should engage in impartial credit allocation, helps guard against market manipulation, conflicts of interest, and anti-competitive behavior.

When the lines are blurred, problems have emerged, such as during the gilded age when JPMorgan monopolized railroads and manipulated rates. More recently, in 2013, the New York Times revealed that Goldman Sachs had bought up more than a quarter of the aluminum market and had used this ownership of the aluminum warehouse to inflate prices of aluminum, costing consumers $5 billion.

Mr. Weissman, would you please share why this principle is so important and what implications does Libra have for the erosion of this principle?

Mr. WEISSMAN. Your question illustrates many of the key examples. The problem is that banks get a lot of money and they get a lot of information and they're incentivized to use their money in risky ways, capitalizing on special information that they have.

Now, you think about Facebook. If Facebook becomes both a social media oligopolist monopolist that it is and a major financial services provider, all of a sudden, let's just set aside their claim that they're going to respect privacy lines, assuming there's a firewall, all of a sudden now they can combine their financial information with their social media platform. They can advertise to you based on what you're buying. They can go into the business of providing goods and services and give you a discount in Libra. In fact, that's part of the plan, just not within for Facebook to be the provider but to be within the association.

So the possibility is both for unjust competition and squeezing out any rival who's not part of the Facebook ecosystem, part of the ability to manipulate and misuse information they get from the financial side and to the non-financial side, and there are problems that really don't lend themselves to regulatory solutions.

There's a reason we've had that wall. It's served us well. When we've breached it, as you say, we've paid the price. If we breach the principles here, I think we're certain to pay the price down the line.

Mr. GARCIA OF ILLINOIS. Switching gears, there have been reports that President Trump intends to nominate Judy Shelton to the Federal Reserve Board of Governors. She has come out in favor of private currencies. In a speech that she made last year, she proposed a new international monetary system, saying an approach, "that permits the issuance of virtual currencies in tandem with government-issued currencies adapting legal tender laws to permit healthy currency competition should be put forward."

If the Federal Reserve loses supremacy over control of the money supply, what challenges might that create?

Mr. WEISSMAN. I'll go first, and you can give the better answer.

They're endless. That means the Fed can't create—that we've lost control of monetary policies. We've lost control of public influence over the direction of the economy. We're also almost guaranteeing systemic risk in situations where you're going to have again massive bailouts because the private currency, when it fails, and it will, is going to need some massive bailout from whom? From the public.

Mr. GARCIA OF ILLINOIS. Any others?

Mr. GENSLER. I think that the crypto movement, Bitcoin and the crypto movement has performed one thing. It's a private form of money, even Bitcoin, and it's putting some competition on central banks around the globe to take their legacy payment systems and move them into the 21st Century more fully.

I actually say there's a balance. The Bitcoin and the crypto movement has created some competition for this public good, but then to the second part of the question, some central banks, like Sweden, are looking at issuing a central bank digital currency. It would still be government currency, but the public would have access directly to central bank reserves, and in Sweden you wouldn't just rely on the commercial bank. So, that would be competition from the commercial bank.

Mr. GARCIA OF ILLINOIS. Any final word on this, Ms. Pistor?

Ms. PISTOR. Exactly the point. I think that we should think about the form which could be crypto, but it could also be issued by a public agent, such as a central bank.

Mr. GARCIA OF ILLINOIS. Thank you. I yield back, Madam Chairwoman.

Chairwoman WATERS. Thank you very much.

Is there anyone else who seeks recognition?

[no response]

Chairwoman WATERS. I think not, and let me just say to the witnesses how grateful we are that you have come today and you've spent time and you've helped us to formulate questions in the way that you've shared information with us, and so we're very appreciative on both sides of the aisle, and while we normally do not do this, for the few of us who are here, I'm going to break another rule.

Can we give them a round of applause?

[applause]

Mr. GENSLER. Thank you.

Chairwoman WATERS. Thank you very much.

Prior to leaving, we're going to take another action we don't normally take, but I will yield 5 minutes to the ranking member for a closing statement.

Mr. MCHENRY. We're each getting 5 minutes for a close?

Chairwoman WATERS. Yes.

Mr. McHENRY. Okay. Just to be clear, the M1 supply of money in the United States is approximately $4 trillion, $3.8 to $4 trillion. We're talking about a private currency that has one to two billion users who could potentially use this product.

I don't know how history is going to judge this hearing. I fear not well, though. There's a breathlessness to the hyperventilation about Facebook. I get that. We've seen that. We've seen that because of their use of data, consumer data. We've seen that because of how they responded, as well, but there's something additional here, which is that people fear something they don't understand.

Facebook is using a language of cryptocurrency and digital currency. They're using the words of blockchain technology, but what they've created is actually perfectly not either. They're creating something different.

But there is this underlying fear among policymakers here on the Hill because they don't understand cryptocurrency and digital assets. That's my fear, is that this will not wear well historically, the concerns raised, the questions raised, and it's because politicians, when they don't understand innovation, they want to kill it. There's a reaction and a quick response to it.

We've even had folks at the hearing today who actually used the very quote that I was talking about, the hyperventilating nature of the headlines around Project Libra and actually more broadly about cryptocurrency. I opened with that, and we had a Member later use the exact same quote as a knock against Project Libra.

We also had a member of the committee speak of this as a terrorist act, as one of the worst moments in the history of the last generation, an attack on our country, and likened Project Libra to that. I don't think this is going to wear well.

There are legitimate concerns about this and I think of substance, I think that will wear well and including what this panel has said, but there are massive forces at play, massive skepticism of Facebook, that's clear. There are also massive anti-competitive forces at play.

If you want to lower the cost of payments domestically and globally, we need innovation. It is absurdly high for somebody to remit money back to their family at home, absurdly high. Now, we don't want terrorism financing. We want those important protections. We also want that immigrant to be able to send their money to their loved ones or for somebody to be able to move their money more readily and more cheaply. We want those innovations. So, we need a new framework to do that.

We have a technology here that is going to do that and it has this great opportunity to do that. We want to ensure people are protected, in particular consumers, but you can't knock every new innovation because it's a new idea and you cannot ban a new idea from even pursuing the regulatory framework to operate. That is absurd. It is wrong.

But what I think this hearing does, and I think the discussion by our government around Project Libra highlights the nature and the utility of cryptocurrency, digital currencies, in particular Bitcoin, and as I said earlier, due to the nature of the technology of Bitcoin, governments cannot kill it nor should they, and you can't kill digital currencies broadly.

They will be enduring. They will be strong. That is the new framework of the next generation of the internet. That is clear and in a generation, I hope that there's some statements here today that will still be pointed to as factual and correct about what we will live through in this iteration of financial technology, and I hope there won't be much that is laughed at in 30 years.

My fear is, however, that the reactionary element that was brought up here today in part will be dealt with, with great disdain, after the next generation of internet technology.

I do think, however, it was a really good hearing, because we now have before Congress a deeper understanding about these digital assets and the breathtaking speed at which the world is changing and how we have to catch up, and with that, thank you, Chairwoman Waters, for the opportunity to close, and thank you for hosting today's hearing.

Chairwoman WATERS. Thank you very much, Mr. McHenry.

Allow me to begin my close with the fact that our Members did an extraordinary job today. Both sides of the aisle came well-prepared to ask significant questions. As a matter of fact, I believe that we had Members on our committee today who went a lot deeper than many of those observing what took place today ever expected them to do.

I'm very pleased with the interest. I'm also very pleased that we had some of our Members saying that this was the most significant hearing we've had since the last election and this committee was reorganized, and so I'm very pleased about that.

Let me just say I'm so pleased about the panel who is here today. This is a panel that we absolutely needed to have here. We don't know what it is, and when I first saw the White Paper unveiled, I went into almost a state of shock. I could not believe what I was seeing, that this massive effort was underway and we didn't know what it was, where it was going, how it was organized, who owned it, all of that, and so I determined as the Chair of this committee that we were going to move on it right away, that we were going to hold a hearing, that we were going to get involved in this and not wait until destruction takes place.

As a matter of fact, you heard some of our Members today talk about—I think it was Mr. Meeks, he never envisioned what was to happen in 2008 with that subprime meltdown that we had with our financial institutions basically hitting the dust and leaving everybody hanging and all of the harm that was done to our constituents and communities where foreclosures took place and people had been involved and signing on the dotted line for mortgages that they didn't understand.

We don't intend for that to happen with this. We are going to put the time in on it and we are going to learn a lot more about where all of the money is, who makes all of the money, and how it is done.

When we say we don't know what it is, we don't know if it's a bank, if it's just a transmitter of payments, what it is, but we're going to find out. This representation that the association, I believe, is working as a nonprofit—no corporation this big and this powerful works as a nonprofit without making a lot of money, and while I am very appreciative for the fact that it has been represented that this is all about servicing the unbanked, that sounds good, but I'm very appreciative for the fact that somehow Libra is going to solve all of the problems of the dollar because the dollar is just not functional.

The last time I had money in my pocket, it worked very well, so I'm not only focused on it and our Members are vitally interested in it, I think we sent a message today. I think we sent a message that no matter how big and no matter how powerful Facebook and all those who are aligned with Facebook and this association think they are and how they have advanced in our society in ways that they've collected huge data and how they have been using that data and how they sell that data and how they plan perhaps to sell even more data, I think we sent a message to them today that we are focused. We're focused. We're watching. We're on it. We're involved in it. We're going to use all of our time learning everything we can about it, and for those who say that we don't have an appreciation for innovation, that's not true. We have an appreciation for innovation, but we don't have an appreciation for those who have something masked simply as innovation that is a global effort for control of a currency, of a cryptocurrency.

And so again, I thank the members of this committee on both sides of the aisle. I thank our panel, and I even thank Mr. Marcus for coming and attempting to answer the questions that we were asking him. He didn't answer my question about whether or not he would support a moratorium, and certainly he didn't answer the question about whether or not there should be a regulator of any kind, and certainly not FSOC, that could oversee them, so even though a lot of the questions were skirted, it has been suggested that certainly we should have more hearings and we should get Mr. Zuckerberg here himself. I'm on board with that.

Thank you very much for being here, and let me just say that we have some information that we have to share with you before you leave that's called adjournment information.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

And with that, this hearing is adjourned. Thank you.

[Whereupon, at 4:47 p.m., the hearing was adjourned.]

A P P E N D I X

July 17, 2019

GEORGETOWN LAW

Written Testimony of

Chris Brummer, Professor of Law, Georgetown University Law Center

Before the United States House Committee on Financial Services

Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System

"99 Problems"

Wednesday, July 17, 2018
10:00 am
2128 Rayburn House Office Building

Chairwoman Waters, Ranking Member McHenry, and Members of the Committee:

Thank you for inviting me to testify at this hearing. My name is Chris Brummer. I recently concluded my term as the Agnes N. Williams Research Professor of Law at Georgetown University Law Center, and serve as the Faculty Director of the Institute of International Economic Law, where I teach courses on securities law, cryptoassets and the law, and international financial regulation, among other topics.[1] I am here today solely in my academic capacity and am not testifying on behalf of any entity.

White papers have emerged as a common tool through which cryptocurrency firms and digital asset companies communicate with potential consumers and investors about new projects and ventures. However, as their importance has grown, white papers have faced mounting criticism—for their hyperbolic language, false promises, and omissions of material information consumers would need before purchasing a digital asset.[2]

---

[1] Georgetown's Institute of International Economic Law is the focal point for the study of law and international economic policy at Georgetown University, and hosts dialogues, lectures, conferences and executive training for senior government officials and private sector professionals on issues relating to fintech, financial regulation, trade, tax and monetary affairs.

[2] See Shaanan Cohney et al., *Coin-Operated Capitalism*, 119 COLUM. L. REV. (2019) (discussing problems of white paper disclosures); EY RESEARCH: INITIAL COIN OFFERINGS (Dec, 2017), https://www.ey.com/Publication/vwLUAssets/ey-research-initial-coin-offerings-icos/$File/ey-research-initial-coin-offerings-icos.pdf (noting that many white papers contain clichés that attract inexperienced investors, with no reasonable justification for blockchain use).

GEORGETOWN LAW

Indeed, the last time I was here to share my views before many members of this very committee, we discussed precisely that matter, and I suggested the need to rethink cryptocurrency regulation along the lines of just what kind of information everyday purchasers of utility tokens might need in order to make adequately informed decisions about how they spend their hard earned money.[3]

Today we have a twist. Until now, criticisms of white paper disclosures have focused largely on early stage, cash-strapped startups. Rarely have they been directed at multinational technology companies with the resources to marshal top flight legal as well as technological talent.

Yet this time is different.

The Libra White Paper ("White Paper") is peppered with big promises and few details, and the project even in this cursory outline involves risks to purchasers (and, at least potentially, the financial system) that are not disclosed.[4] As a matter of public policy, this is, at a minimum, disappointing. The White Paper is no mere public brainstorming exercise or technical exposition, but is instead intended to condition the market for the adoption of a product the sponsors wish to sell to billions of people around the world. And the lapses are all the more problematic given the the securities-like features of Libra coins, and the possible implication of U.S. securities laws.

Given the limited time available, I want to focus on some of the most problematic red flags:

- The Libra White Paper fails, most fundamentally, to inform potential holders in unambiguous terms that they can lose money, and that runs on the coin are possible.
- The White Paper fails to clearly disclose that Libra holders will be exposed to counterparty risk in the form of mismanagement of reserve investments.
- The White Paper fails to disclose governance risks, including the negative impact Libra Association decisions, and conflicts of interest, could have on the nature and value of Libra coins.

---

[3] *See* Chris Brummer, ***What Should Be in an ICO White Paper?,*** U.S. H. COMM. ON FIN. SERVS. (Mar. 14, 2018), https://financialservices.house.gov/uploadedfiles/03.14.2018_chris_brummer_testimony.pdf. See also, Brummer et. al, *What Should be Disclosed in initial Coin Offering in* CRYPTOASSETS: LEGAL AND MONETARY PERSPECTIVES (forthcoming, Oxford University Press, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3293311.

[4] One of the odd particularities of the White Paper is the website itself. There is what is alternatively described as the "Official White Paper" and (merely) "White Paper" document, with links in it that references a "technical paper" along with important "documents" that repeat and elaborate claims made in the White Paper. My testimony today, while citing the particular webpages, will refer them collectively as the White Paper.

GEORGETOWN LAW

- The White Paper fails to disclose how the decentralized application interfaces it is envisioning could compromise the "secure, scalable, and reliable blockchain" Facebook is promising, as well as AML compliance and cybersecurity.
- Depending on how the White Paper is interpreted, Libra potentially comprises a source of systemic risk.

I do want to emphasize that these concerns represent only the tip of a regulatory iceberg. There are additional, critical questions concerning banking, the transmission of monetary policy, privacy, cybersecurity and other issue areas that potential holders of Libra would want to know before purchasing coins.

The (Non-) Disclosure of Consumer and Systemic Risk

Libra describes itself as a "simple global currency and financial infrastructure that empowers billions of people."[5] Its goals: "Reinvent money. Transform the global economy. So people everywhere can live better lives."[6]

These are laudable and ambitious goals, and an upgrade of the payments system could truly improve the lives of millions of people around the world. But global currencies are no small ventures. Indeed, it usually takes hundreds of years in the case of national fiat currencies to establish themselves as practical, global payment options for everyday users of money. One of the reasons why is that currencies depend, ultimately, on rules and trust. People need to know that when they purchase currencies, those currencies will have utility as instruments of payment and savings and that they will maintain a steady value. And to help achieve this kind of trust, currency systems tend to have at least three basic features:

- A currency (as an instrument of payment and savings);
- A trusted backer of that currency (liquidity provider); and
- A rules-based messaging, value transmission, and clearing and settlement to enable money transfers to occur.

Libra's private ecosystem is intended in part to provide a private analogue to such currency system through:

- The issuance of a currency (Libra coins);
- "Backed" by a reserve of fiat currencies and government securities (that are presumably low risk); and

---

[5] *See Libra White Paper*, LIBRA, at 1, https://libra.org/en-US/wp-content/uploads/sites/23/2019/06/LibraWhitePaper_en_US-1.pdf (last visited July 13, 2019).

[6] *See Welcome to Libra*, LIBRA, https://libra.org/en-US/ (last visited July 13, 2019).

- Operating according to a blockchain infrastructure for value transmission designed at least initially by the Libra Association.

Facebook's apparent strategy is that in order to launch a global currency, it needs to generate trust in the system; and as a private actor, the best way to do this is to ensure that the currency is tied to not just one, but several existing, and presumably trusted, fiat currencies and government securities. [7] In this way, the White Paper argues, the coin can attain an "intrinsic" value.

The consequences of this design choice are not, however, without tradeoffs, something the White Paper neglects to mention. Instead, the White Paper consistently and deliberately gives the impression that because of its reserve backing, the Libra coin is relatively immune to the possibility of dropping in value:

> "To drive widespread adoption, Libra is designed to be a currency where any user will know that <u>the value of a Libra today will be close to its value tomorrow and in the future. Just as consumers in Europe know the number of Euros it takes them to buy a coffee today will be similar to the number of Euros it will take them tomorrow, holders of Libra, too, can be confident the value of their coins today will be relatively stable across time</u>.
>
> The reserve is the key mechanism for achieving value preservation. By fully backing each coin with a set of stable and liquid assets (described later) and by working with a competitive group of exchanges and other liquidity providers, users can have confidence that they will be able to sell any Libra coin at or close to the value of the reserve at any time. This gives the coin intrinsic value on day one and helps protect against the speculative swings of other cryptocurrencies."[8]

Throughout the White Paper, Facebook consistently plays on the word "value." And as seen above, **the White Paper routinely suggests and doubles down on the idea that the Libra will provide stability in terms of the *purchasing power* of the currency** (in this particular instance, with relation to coffee). But that's not really the case: the currency's actual goal is stability of Libra's value in terms of a basket of currencies which, due to its diverse holdings, Facebook expects will exhibits minimal price fluctuations.

The problem becomes all the more significant because while making such claims **the White Paper fails to ever disclose or explain in plain English that Libra comes with**

---

[7] *See* Claudio Borio, *On Money, Debt, Trust and Central Banking*, (Bank for Int'l Settlements, Working Paper No. 763, 2019), https://www.bis.org/publ/work763.pdf.

[8] *See The Libra Reserve*, LIBRA, at 1, https://libra.org/en-US/wp-content/uploads/sites/23/2019/06/TheLibraReserve_en_US.pdf (last visited July 13, 2019).

a notable downside, namely the fact that when purchasing the coins Libra holders take on foreign exchange and currency risk.

This risk could arise in various ways. Let's start with an obvious scenario first: If, for example, there is a run on one of the currencies in the basket, then Libra itself loses value. This could in turn then create incentives to liquidate Libra for the strongest currency in the basket (possibly upending relatively weaker ones in a fire sale). In theory, the risks of such a run should be minimal, especially if the assets in the basket are low-risk. However, the White Paper does not disclose specifically which currencies are in the basket. Moreover, whatever the initial allocation may be, the contents of the basket can change.[9] Because portfolio managers may be incentivized, or later instructed by the Libra Association, to realize high returns on their investments, they could incrementally steer the Reserve into ever riskier assets.[10]

Moreover, runs on the Libra could also be catalyzed for reasons that have nothing to do with the underlying basket. For example, runs on Libra could ensue if there are concerns with the economic stability of Facebook, or a key member of the Libra Association or an authorized reseller. Exogenous events could spark runs as well. A hack on the Calibra wallet or gateway Libra infrastructures, or failures to maintain proper data safeguards and separation between Facebook and Calibra, could spark a panic, prompting massive redemption requests.[11] Or operational blackouts or malware attacks targeting apps built on the platform could likewise drive large and unexpected redemption requests—an important issue given that apps are built on what is intended to be a "decentralized" platform not subject to any review process.[12]

In the case of a run, the key concern would be whether or not there are sufficient fiat currencies and government securities backing the Libra to support redemption requests. If there are not, and if the size of the Libra network was large enough[13]—a run could

[9] Eric Posner, *The Trouble Starts If Facebook's New Currency Succeeds*, THE ATLANTIC (June 25, 2019), https://www.theatlantic.com/ideas/archive/2019/06/dont-trust-libra-facebooks-new-cryptocurrency/592450/.

[10] *Id.* See also the following discussion on "Governance," below.

[11] *See also* Yogita Khatri, *Nearly $1 Billion Stolen In Crypto Hacks So Far This Year: Research*, COINDESK (Oct. 11, 2018), https://www.coindesk.com/nearly-1-billion-stolen-in-crypto-hacks-so-far-this-year-research.

[12] *See Libra White Paper*, *supra* note 5, at 4.

[13] There has been considerable debate about the likely size of the Libra network. Given the many open questions concerning the project, I think any guess at this point would be purely speculative. That said, it is clear that Facebook has the intent of scaling the program to billions of customers, and has the platform to do so, globally, in fairly short order. Additionally, I think it is worthwhile to consider from a regulatory and prudential standpoint just how large that network could quickly become if just several members of the Libra Association—say, Uber, Lyft and Facebook—all decided to require Libra tokens for services on their platforms, or provided steep discounts to customers that did.

conceivably have serious cross border, and possibly systemic consequences. [14] Holders of Libra could find themselves with "money" that has—despite the assurances saturating the document—significantly diluted purchasing power.

Governance

The broader operational vulnerability of the currency raises important questions about governance in the Libra ecosystem. For most investments, governance is a key aspect risk management, and is part and parcel of the information shared with potential investors. [15] Consequently, in U.S. corporate and securities law, mandatory disclosures routinely include those relating to key personnel, how the corporate entity is overseen, how the decisionmaking will take place, and conflicts of interest faced by key employees and management. [16]

The Libra Association

The White Paper, to its credit, makes some effort to spell out its basic management structure. It informs readers that the Libra Association is made up initially of 27 technology companies that each runs one of the validator nodes that form the network that operates the Libra Blockchain. Additionally, it informs the reader that Facebook is still largely in charge of the effort until Libra's launch in 2019, at which point in time "Facebook, and its affiliates, will have the same commitments, privileges, and financial obligations as any other Founding Member."[17]

The governing body of the Libra Association will be the Libra Association Council, which is comprised of a representative of each member of the association.[18] As in most corporate structures, the Libra Association Council will then delegate many of its executive powers to the association's management. However, the Council retains authority to override delegated decisions and keep key decisions to itself, with the most important ones requiring a greater than two-thirds supermajority. [19]

[14] *See Libra White Paper*, *supra* note 5, at 5.

[15] Luis A. Aguilar, *Looking at Corporate Governance from the Investor's Perspective*, HARV. L. SCH. F. ON CORP. GOVERNANCE AND FIN. REG. (Apr. 24, 2014), https://corpgov.law.harvard.edu/2014/04/24/looking-at-corporate-governance-from-the-investors-perspective/.

[16] Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 Va. L. Rev. 669 (1984).

[17] *See The Libra Association*, LIBRA, at 1, https://libra.org/en-US/wp-content/uploads/sites/23/2019/06/TheLibraAssociation_en_US-1.pdf (last visited July 13, 2019).

[18] *Id.*

[19] *Id.* at 3.

GEORGETOWN LAW

Finally, the White Paper discloses that the voting powers in the Council will be "proportional to stake (initially in the Libra Investment Token and, in the future, in Libra), which is a reflection of the level of commitment of the member (validator node) toward the network." [20] However, voting rights will be capped for any one Founding Member to avoid concentration of power." [21] Specifically, a single Founding Member can only be represented by the greater of one vote or 1 percent of the total votes in the council. [22]

This basic structural overview is helpful. But it's far from the kind of information needed to understand how it—and for that matter, the broader Libra ecosystem—will operate, and core governance questions abound. For one, if voting power is determined according to members' stake in Libra Investment Tokens, and ultimately Libra coins, **will there be disclosures of the largest stakes (or amount of coins and Libra Investment Tokens purchased by individual members) in order for users to be able to identify the primary decisionmaking entities on the network?**[23]

Moreover, **what, if any "commitments, privileges and financial obligations" do Libra Association members have beyond their initial buy-in?** Are members required to act in the best interest of the currency (and by extension the currency stakeholders) or are they permitted to put their financial interest first? **Are there any public policy or contractual commitments they have with respect to assisting in the maintenance of financial stability and financial integrity? How are members expected to balance their roles as profit-seeking businesses building applications on the network with the safety and soundness of the Libra system?**

Finally, the White Paper emphasizes that the number of association members is set to grow. But just how that process will play itself out the extent that new members join, little information is provided. **What will be the criteria for determining new members?** Will they be expected to have any particular level of technological expertise or an ability to ensure that they can support proper risk management and financial stability and be competent decisionmakers if a crisis arose? Will the views of users be represented? And again, how will any potential conflict of interest concerns be handled?

---

[20] *See The Libra Association*, *supra* note 17, at 3.

[21] *Id.*

[22] *Id.* at 4. The cap on voting rights does not apply to validator nodes that are not Founding Members, i.e. that join the network only through holding Libra in custody. *Id.*

[23] *See* Josh Constine, *We Still Don't Know How Much of Libra Facebook Owns,* TECHCRUNCH (July 6, 2019), https://techcrunch.com/2019/07/03/facebook-libra-cryptocurrency/.

GEORGETOWN LAW

The Libra Reserve

The description of the Libra reserve compounds the ambiguities abounding in the disclosures concerning the Libra Association by offering little, and at times conflicting, information about how the basket's portfolio will be managed.

The White Paper, notably, offers no information on the precise composition of the fund. Instead, readers are told that the "reserve will be invested in low-risk assets that will yield interest over time." Additionally, prospective purchasers are informed that the "reserve will be held by a geographically distributed network of custodians with investment-grade credit rating." [24]

The objectives of the fund are also muddled, and contradictory. **Although the White Paper repeatedly states that "the goal [of the reserve] will always be value preservation"** the flow of proceeds from earnings on the proceeds indicate a strong profit motive and incentive for Libra Members. According to the white paper, once money raised from interest earnings have paid for operating in expenses and to fund "investments in the growth and development of the ecosystem," **any "remaining returns will go to pay dividends to early investors in the Libra Investment Token for their initial contributions."**[25] Other parts of the White Paper add that the responsibility of Libra reserve managers is to "allocate funds...for distribution to nodes and investors per Libra Investment Token terms, Incentives Distribution Policy, and council funds."[26] Notably, there is no disclosure of what in such instances the relevant terms are for either the Libra Investment Tokens or the Distribution Policy.

Ambiguity as to the ultimate goals of the reserve are problematic for a number of reasons. To the extent that dividends influence the decisionmaking of Libra Association members, members will be incentivized to invest in high(er) yielding assets, which some may be risky. Furthermore, **even if value preservation is the ultimate "goal," management of a risk free float is not easy**.[27] This is especially case when, as is currently the case, interest rates are low[28] and thus the returns on basket assets may not be sufficient to exceed the basket's operational costs.[29]

---

[24] *See The Libra Reserve*, *supra* note 8, at 2.

[25] *Id.*

[26] *See The Libra Association*, *supra* note 17, at 10.

[27] Izabella Kaminska, *Why Dealing With Fintechs is a Bit Like Dealing With Pirates*, ALPHAVILLE (July 3, 2019), https://ftalphaville.ft.com/2019/07/03/1562126415000/Why-dealing-with-fintechs-is-a-bit-like-dealing-with-pirates/.

[28] Indeed, interest rates may go lower still. *See* Heather Long, *Federal Reserve Expresses Concern About U.S. Economy and Signals Interest Rate Cuts Are Likely*, THE WASH. POST (June 19, 2019),

GEORGETOWN LAW

Against this backdrop, **perhaps the most problematic aspect of the White Paper's disclosure is its failure to clearly disclose that holders of Libra are exposed to counterparty risk in the form of mismanagement of reserve investments**.

Authorized Resellers

Omissions also undermine readers' understanding of the Libra ecosystem. The White Paper informs readers that there will be "authorized resellers" that operate analogously to entities supporting Exchange Traded Funds. [30] According to the White Paper, they will be the only entities to transact large amounts of Libra in and out of the reserve, and will "integrate" with "exchanges" that buy and sell cryptocurrencies to users.[31] Presumably, their role will involve helping to keep market prices on exchanges close to the value of reserve portfolio.

That said, the White Paper does not outline what kinds of entities these market participants will be. The operation of U.S. securities law (assuming they are in United States) would likely require that they register as Broker-Dealers. But will they also be banks? **How will they be chosen to fulfill such critical functions?** Will they be subject to minimum capitalization or other requirements?

Equally important, **will authorized resellers have any specific duties, responsibilities or redemption obligations vis a vis holders of Libra coins**? Presumably, they will sell Libra coins on exchanges at a price reflecting the wholesale value of the coins, plus a fee in the form of a bid-ask spread and/or transaction fee. Additionally, they will be able to buy coins back at a slight discount to the wholesale value and/or charging a transaction fee. [32] But how such "integration" would work vis a vis coin holders, especially in the event of massive redemption requests, is neither disclosed or specified.

About those AML Promises

Libra's most laudable explicit objectives is that it aims to operate as a payment solution for the unbanked. [33] At the same time, Calibra has registered as a money services business, thereby becoming subject to anti-money laundering (AML) and know-your-

https://www.washingtonpost.com/business/2019/06/19/federal-reserve-expresses-concern-about-us-economy-signals-likely-interest-rate-cut-soon/?utm_term=.ecc0375f81e9.

[29] *See* Kaminska, *supra* note 27.

[30] *See The Libra Reserve*, *supra* note 8, at 2. See also the following discussion on Libra as an ETF.

[31] *Id.*

[32] Larry White, *Libra's Unresolved Puzzles*, ALT-M (July 2, 2019), https://www.alt-m.org/2019/07/02/libras-unresolved-puzzles/.

[33] *See Libra White Paper*, *supra* note 5, at 1.

GEORGETOWN LAW

customer (KYC) obligations, and the White Paper declares that "the network's main endpoints, in the form of exchanges and wallets, will need to follow applicable laws and regulations and collaborate with law enforcement."[34]

Facebook does not, however, specify whether or not participants will "need" to comply by function of law enforcement (which would be self-evident) or due to the internal policies of the Libra Association. Yet it is, in any event, almost certain that without rigorous oversight by the Libra Association, the Libra ecosystem will be an environment capable of facilitating money laundering, terrorism financing, and other financial crimes.

There are at least two reasons why. First, **the on and off ramps into the Libra system—especially exchanges and wallets—could operate or establish themselves in jurisdictions with lax AML and KYC rules, surveillance and enforcement of local market participants**. According to the blueprint sketched out in the White Paper, it appears customers could conceivably trade Libra for privacy coins and vice versa abroad, hold Libra in wallets located in an unregulated jurisdiction, and then send Libra coins to Calibra wallet users.[35]

These challenges are complicated further by the fact that **the Libra blockchain will allow clients to "hold one or more addresses that are not linked to their real world identity**."[36] Besides helping to enable illegal transactions, this may not square with the surveillance and reporting responsibilities of Calibra as a money services business under the Bank Secrecy Act. **By its terms, the Bank Secrecy Act's "travel rule" requires covered financial institutions (and Calibra would be one) to pass on certain customer information** financial institutions receiving funds from their accounts, **including the name and address of the transmittor**.[37]

It is of course possible that participants will "need" to comply with as-of-yet undisclosed Libra Association conduct policies. But this will require a purposeful, and explicit commitment to the task—and an outlay of resources. Financial intelligence units would likely be necessary, in multiple time zones, to investigate potential abuses and violations.[38] Additionally, AML vendor services will be needed for KYC and transaction monitoring—and evaluated for robustness, even among Libra Association members. **For anti-money laundering, as well as consumer protection and cybersecurity, the strength of the Libra ecosystem will lie in its weakest link. In order to make claims**

---

34 *See The Libra Reserve*, *supra* note 8, at 3.

35 Yaya J. Fanusie, *3 Ways Facebook Must Address Illicit Financing With Its New Cryptocurrency*, FOUND. FOR DEF. OF DEMOCRACIES (June 25, 2019), https://www.fdd.org/analysis/2019/06/25/3-ways-facebook-must-address-illicit-financing-with-its-new-cryptocurrency/.

36 *See Libra White Paper*, *supra* note 5, at 6.

37 31 CFR § 103.33(g) (2011).

38 Fanusie, *supra* note 35.

GEORGETOWN LAW

that Libra is safe,[39] relies on a "secure, scalable, and reliable blockchain"[40] and will be regulatorily compliant,[41] a well-considered, unified compliance program will be necessary. Otherwise, users of Libra coins could well find themselves answering questions by law enforcement officials in the wake of what they thought were ordinary Libra purchases. The White Paper fails to disclose this fact, much less how the product it is introducing would address it. And it is, in my view, particularly important at this early stage of the blockchain's development since once bad actors are in the system, purging their abuse may be especially difficult, if not impossible.

Are Libra Coins Subject to Securities Laws?

My intent thus far has not been to catalogue all of the challenging disclosures in the document, but to instead provide a sense of the kinds of shortcomings that seem to pepper the White Paper. I think it's now worth turning to the question as to whether as a matter of policy, these kinds of disclosures can create conundrums from the standpoint of investor protection.

The primary means by which digital assets are subject to the U.S. securities laws involves whether or not they are considered to be an "investment contract." This is a catchall category under section 2(a)(1) of the Securities Act of 1933 with origins in blue sky laws adopted in some of the states before the federal securities laws were enacted.[42] Notably, however, the term "investment contract" is not defined in the statute. Instead, the definition for purposes of U.S. securities law is laid out in the landmark 1946 Supreme Court case, *SEC v. Howey*."[43]

The Howey Test

The *Howey* case involved a scheme to induce out of state investors to pool their money and invest in an orange grove harvesting operation in Florida. These investors were offered a strip of land and an optional 10-year service contract whereby one the defendants—a company called Howey-in-the-Hills—would grow oranges. Investors would then receive a pro rata share of the profits earned from the sale of the oranges after they were harvested and pooled together. The SEC sued, seeking to enjoin the defendants from selling such arrangements arguing that the scheme comprised the sale of unregistered securities. The company, meanwhile, argued that the agricultural nature of

---

[39] *See Libra White Paper, supra* note 5, at 5. ("We decided to build a new blockchain based on these three requirements: Highly secure, to ensure safety of funds and financial data..")

[40] *Id.* at 3.

[41] *See* above discussion; *See also* White, *supra* note 32.

[42] Securities Act of 1933, 15 U.S.C. § 77b (2012).

[43] *S.E.C. v. W.J. Howey Co.*, 328 U.S. 293 (1946).

600 New Jersey Avenue, NW Washington, DC 20001-2075
www.law.georgetown.edu

GEORGETOWN LAW

the operation implicated no security, and that no stock or bonds were involved in the transaction.[44]

Reviewing the facts, the Supreme Court held that the combined land and services agreements consisted of an "investment contract" whose substance, if not form, had a number of essential characteristics that together comprised the kinds of risks inherent to securities. Specifically, the Court held that the engagement with investors consisted of:

(a) "an investment of money" (to purchase the land and operation contracts);
(b) "in a common enterprise" (the harvesting of the oranges);
(c) the expectation of profits (from the sale of the oranges);
(d) to be derived "solely from the efforts of others" (Howey-in-the-Hills).[45]

Collectively, these features rendered investors especially vulnerable to promoters of investments, necessitating the application of the 33 Act. And because the scheme comprised an investment contract, a registration should have been filed with the SEC prior to the offer and sale of the contracts.

Howey Test and Libra coins

To apply this case law to Libra, it's worth rehearsing the basic parameters of the venture. Libra is, according to the White Paper, a cryptocurrency "backed" by a basket of currencies. Users will exchange fiat (official government) currencies for Libra coins. [46] Fiat currencies received by Facebook will then be put in a bank account or invested in high quality securities. A new subsidiary, Calibra, will serve as a wallet for Libra. [47] Finally, Facebook has created the Libra Association, a non-profit based in Switzerland with the purpose of helping facilitate the launch of the coin. [48] Members of the Libra Association pay-in at least $10 million for which they receive Libra Investment Tokens. [49] Libra Investment Tokens entitle holders to dividends they earn from the interest generated by the assets in the reserve.

According to the facts available, it is virtually a certainty that **Libra Investment Tokens are securities**. Libra Association members make an investment of money to receive Libra Investment Tokens. There is an expectation of profit: Libra Investment Tokensholders receive pro rata dividend returns based off of the number of shares they own. There is a common enterprise, the Libra coin and blockchain. And association

---

[44] *Id.* at 295–97.
[45] *S.E.C. v. W.J. Howey Co.*, *supra* note 43, at 301.
[46] *See Libra White Paper*, *supra* note 5, at 7.
[47] *Id.* at 4.
[48] *Id.* at 8.
[49] *See The Libra Association*, *supra* note 17, at 4.

members rely primarily on one another and managers to operate and design the ecosystem.

Whether or not the Libra coins are securities under *Howey* is far less clear. We know a little more than that—but not much. So applying securities law with such limited information is like peeling back the layers of an onion blindfolded—and with one hand. But by usual standards, the Libra Association *does* appear to fulfill many of the standards of what might be considered an investment contract under *Howey*.

1) There is an investment of money (holders extend fiat currency for Libra);
2) In a Common Enterprise (the Libra payment system); and
3) Relying on the Efforts of Others (the Libra Association).

The key issue, of course, is whether or not there is an expectation of profit. Presumably, users wouldn't (or at least shouldn't—and this is an important distinction) be holding the Libra expecting to profit. Libra's price is intended to remain stable (though as we'll see below, it may not). Thus the plan might not run contrary to *Howey*.

However, it is worth noting that there *are* indeed some profit-seekers involved in the fundraise, namely the Libra Association and investors in the Libra Investment Token. And there are potentially open questions, especially given the SEC's ongoing enforcement action against *Kik*, as to whether, and if so when, the profit prong of *Howey* can be satisfied where other similar securities are offered in ways that could heighten speculative interest in Libra coins. [50]

The Reves Test and Libra Coins

The Howey test isn't the only way a financial instrument might be deemed a security. Another yardstick is found in the Supreme Court case Reves v. Ernst & Young.[51] The heart of the dispute in this case arose when the Farmer's Cooperative of Arkansas and Oklahoma offered high interest, unsecured, not of a fixed term demand notes to the public and to its members. When the Co-op went bankrupt, holders of the notes brought an action against the the Co-op's accountant, Ernst & Young for, among other things, violating antifraud provisions of the Securities Act of 1934 for failing to adhere to industry accounting standards. Ernst & Young countered, arguing that the 1934 Act did not list promissory notes as "securities" and thus that it was not applicable.

---

[50] For an interesting take on the similarities between the two offerings, see Darrell Etherington, see https://techcrunch.com/2019/06/18/how-facebooks-libra-is-similar-in-concept-and-motivation-to-kiks-kin-cryptocurrency/.

[51] *Reves v. Ernst & Young*, 494 U.S. 56 (1990).

GEORGETOWN LAW

The Supreme Court reviewed the facts and declared that the notes were indeed securities.[52] In doing so, the court upheld a Second Circuit standard holding that notes with a term of more than nine months are presumptively securities unless they bear a family resemblance to a certain subset of notes, tied generally to consumer finance, that courts have recognized are not securities.[53] The *Reves* court also provides factors to help to determine whether a financial product resembles the items in its list of non-security notes.

The key factors include:

1) The seller's and buyers' motives;
2) The plan of distribution (suggesting potential speculation by purchasers);
3) The reasonable expectations of the investing public; and
4) The availability of an alternative regulatory regime.[54]

Unlike *Howey*, however, the court never states that all factors have to be present to meet the test. Instead, *Reves* is generally applied in a more flexible (and less predictable) manner.

In the case of the Co-op, the court concluded that the notes were indeed a security:

1) The seller's and buyers' motives suggested a larger investment scheme: categories: the Co-Op sold the notes in an effort to raise capital for its general business operations, and purchasers bought them in order to earn an interest rate constantly revised to keep it slightly above the rate paid by local banks and savings and loans.
2) The plan of distribution was large: the Co-Op offered the notes over an extended period to its 23,000 members, as well as to nonmembers, and though the notes were not traded on an exchange, more than 1,600 people held notes when the Co-Op filed for bankruptcy.
3) The reasonable expectations of the investing public were that these were securities given the fact they were advertised as investments.
4) And finally (though the Court does not address it head on, there was presumably no alternative regulatory regime.

How would *Reves* apply to Libra coins? Well, arguably the coins could be considered "notes" insofar as the purchaser can be viewed as lending fiat to the reserve, and that fiat must be repaid upon demand by authorized resellers. Should the coins satisfy this basic conceptual question, *Reves* could present real challenges for Facebook. Its motives are

---

[52] *See Reves v. Ernst & Young*, *supra* note 51, at 58.

[53] *Id.* at 63.

[54] *Id.* at 63-64.

very much like those of the Co-op in *Reves*; it wants to raise capital for launching the blockchain and business operations for Libra. The prospective buyer's motives are different. As we saw in *Howey*, they are not seeking a profit. That said, they did purchase them in order to presumably enjoy lower rates for payment services than those charged by their local bans and savings and loans.

The plan of distribution is enormous, indeed unprecedented. A global marketing campaign was launched with this White Paper; and Facebook is aiming for billions of customers—with the coins to be traded on an exchange. Finally, there is no alternative exchange should the coins not be securities. At most, they would be considered commodities and their markets could be subject to CFTC oversight indirectly should they become the referenced assets of derivatives products.

Is Libra an Investment Company?

The Libra reserve, like the currency, is inspired by pre-existing facilities and infrastructures. Indeed, it is so much modeled after two kinds of entities—namely money market mutual funds and Exchange Traded Funds—that it is possible, and perhaps even likely, that it will qualify as an investment company and need to be registered as such under the Investment Company Act.

Money-market mutual funds are entities that hold only short-term government bonds and cash equivalents.[55] As with the assets Facebook has suggested will be in Libra Reserve, the assets held by money market mutual funds are all intended to pose little default risk, are supposed to be highly liquid, and low in duration risk.[56] Additionally, money-market mutual funds are open-ended, with the number of shares driven by the demand for them. As with Libra issuances, there is no numerical limit to how many shares an open-end fund can offer.[57]

Yet in contrast to many mutual funds, which sell shares directly to the public and allows investors to sell them back directly to the fund, Libra does not allow purchasers to interact directly with the reserve. Instead, only Authorized Resellers are permitted to interact directly with the Libra Reserve:

> "Libra is fully backed by a reserve of real assets. A basket of bank deposits and short-term government securities will be held in the Libra Reserve for every Libra that is created...."

---

[55] Justin Pritchard, *The Risks and Benefits of Money Market Funds*, THE BALANCE (Feb. 16, 2019), https://www.thebalance.com/money-market-funds-risks-and-benefits-315497.

[56] *Id.*

[57] *See* White, *supra* note 32.

> "Users will not directly interface with the reserve. Rather, to support higher efficiency, there will be authorized resellers who will be the only entities authorized by the association to transact large amounts of fiat and Libra in and out of the reserve. These authorized resellers will integrate with exchanges and other institutions that buy and sell cryptocurrencies to users, and will provide these entities with liquidity for users who wish to convert from cash to Libra and back again." [58]

This particular structure, too, has a clear (and indeed a transparent) institutional precedent: Exchange Traded Funds (ETFs). ETFs hold a comparatively more diverse array of assets than money market mutual funds (including stocks and bonds).[59] Moreover, in ETFs, funds do not sell shares directly to the public. Instead, a special kind of institutional investor, called an authorized participant, buys shares of the stocks that make up the index on which an ETF is based, and then sells or exchanges them for new ETF shares at an equal value.[60] In the process, new ETF shares are "created," and the authorized participant can then sell the ETF shares in the market for a profit. Conversely, an authorized participant can "redeem," or sell the relevant ETF shares back to the ETF in exchange for securities that the authorized participant can again sell on the open market.[61]

What then are the differences between ETFs and Libra? There do not appear to be many, and there may be none at all. Libra's basket could end up being comparatively less risky. And it may have fewer securities (and certainly more fiat currencies). But that's about it—that and, of course, the fact that Libra is assuming that its reserve will not be subject to regulation as an investment company. Whether or not that is the case depends largely on just how many securities are in the Libra reserve portfolio. In short, if the reserve invests in securities whose value exceeds forty percent of the value of the portfolio's total assets (exclusive of government securities and cash items) on an unconsolidated basis, registration may be mandatory under the Investment Company Act. [62]

In that case, the fund would be subject to all the disclosure obligations accompanying an ETF—and Libra coins would likely be treated synonymously to shares issued by ETFs.

---

[58] *See The Libra Reserve*, *supra* note 8, at 2.

[59] James Chen, *Exchange-Traded Fund - ETF*, INVESTOPEDIA (June 13, 2019), https://www.investopedia.com/terms/e/etf.asp.

[60] *Id.*

[61] *Id.*

[62] Investment Company Act, 15 U.S.C. § 80a-3 (2018).

GEORGETOWN LAW

"Allow Me to Reintroduce Myself"

Facebook's digital currency roll out was an attempt to do more than kick around ideas to the world to ask for input. It was an attempt to reintroduce itself as not only a tech company, but also a financial services firm behind a brand new product—the Libra coin.

Unfortunately, the white paper Facebook has relied upon to announce its plans is woefully deficient—in terms of the precision relating to its infrastructure, governance, and plans; in terms of the hyperbole obfuscating the possible risks to consumers and even the financial system; and in terms of the promises made to consumers about the technical features that will be available to them.

I think it's worth asking whether or not such communications should be encouraged, even if—and I think the jury is still out—the Libra coin in fact turns out not to be a security. After all, the White Paper was designed to condition the market, and it's done so, for better or worse.

Part of the frustrating aspects of conducting an analysis of the legal features and status of Facebook's Libra is that even if the coins aren't securities, it is clear that the Libra ecosystem, at a minimum, possess "securities-like" features:

1) Everyday consumers are ultimately putting their capital at risk in a common enterprise;
2) There are significant information asymmetries between them and a better informed sponsor, Facebook;
3) Libra coin holders will be dependent on the Libra Association for the operationalization and value-preservation of their coins;
4) There are some actors who are seeking profits from coin holder participation; and
5) Structurally, the transaction closely resembles pooled funds that are subject to securities rules and regulations.

These features are more than just a matter of technicality. They indicate varying ways in which potential Libra coin purchasers are far from fully informed, and are not on a level playing field vis a vis Libra's sponsors.

Indeed, as a matter of public policy, it would seem to me that a more rigorous set of disclosures should be expected of issuers in these circumstance, especially those with the resources and reach of Facebook. The company's approach is, to be sure, highly innovative and inventive. And the White Paper holds admirable objectives for the future of financial inclusion. But ultimately there are costs—and risks—that hard working people need to understand when being introduced to this product. This White Paper should have been an opportunity to take the time to tackle these issues head on.

CoinShares

Written Testimony Of

Meltem Demirors

Chief Strategy Officer

CoinShares

before

The United States House of Representatives
Committee on Financial Services

Hearing on

"Examining Facebook's Proposed
Cryptocurrency and Its Impact on Consumers,
Investors, and the American Financial System"

Good afternoon Chairwoman Waters, Ranking Member McHenry, and Members of the Committee,

Thank you for the opportunity to address this important topic of how policymakers should approach the evolving questions surrounding cryptocurrency and its potential impact on consumers. This hearing comes at a critical time for the industry.

My name is Meltem Demirors, and I am Chief Strategy Officer of CoinShares, [1] which is a digital asset management firm. CoinShares operates across four jurisdictions[2] – including the United States; is engaged with multiple regulators –including those in the United States and the European Union; and creates, issues, and manages investment products that serve thousands of investors, including institutional and accredited[3] investors. Our goal is to provide regulated, risk-managed investment products and services by which investors can participate in the growth of a new asset class, which also happens to be a new technology.

Today, we manage $800 million in assets on behalf of our investors. From our beginnings in 2013 to present day, we have collaborated closely with lawmakers, regulators, and innovators to pioneer these new products and services while also being a trusted partner and advisor to our clients.

I am here this afternoon to testify not only on behalf of CoinShares, but also as a long-standing member of the Bitcoin community and an investor who has been capitalizing and supporting this industry's growth. Over the last five years,

[1] CoinShares Group is a digital asset manager with $800 million in assets under management (as of July 16, 2019) across a suite of eight exchange traded products (ETPs) and a series of private investment funds. The group serves a global investor base seeking exposure to the emerging crypto asset markets with a family of products which offer exposure to bitcoin and other emerging digital assets. The CoinShares platform offers investors convenient exposure to Bitcoin, Ether, Litecoin and XRP via a suite of investment-grade ETPs, all of which represent first of their kind products. CoinShares is backed by a team with deep experience in Exchange-Traded Products, Hedge Funds, Commodities, FX, Market Making and both active and passive investment in frontier markets. More information at www.coinshares.co.uk.

[2] CoinShares operates in the Channel Islands, the UK, the United States, and Sweden.

[3] CoinShares refers to its investors as "sophisticated" which is a UK designation, and is most comparable to the US designation "accredited."

I have invested in, supported, and advised over 150 cryptocurrency focused projects and companies across 30 countries.[4]

I am pleased to have the opportunity to share my perspective and insight as an investor, advisor, advocate for, and user of cryptocurrencies. The views I present today are my own, and do not necessarily represent the views of CoinShares, my portfolio companies, or our investors.

My goals today are to:

1. Discuss the unique features of decentralized cryptocurrencies, mainly bitcoin;
2. Emphasize why bitcoin is very different from Libra; and
3. Outline what this means for the future of this important technology and the innovation already occurring here in the United States.

Why Bitcoin is Unique

I would like to begin by highlighting the features of bitcoin — the first, best-known, most valuable and most widely established cryptocurrency.

Bitcoin is three things:

- Bitcoin is a technology, as expressed by the bitcoin protocol which is the computer code that defines the rules and parameters of the Bitcoin network and its operation. The Bitcoin protocol is open-source, meaning anyone can read and review it, and anyone can run it. In addition, via a process known as a "Bitcoin Improvement Proposal" or "BIP," anyone can suggest changes to the protocol by means of a public review process that is informal and follows existing and widely known open-source

[4] From 2015 to early 2018, investments via Digital Currency Group, a digital currency and blockchain technology focused corporation making balance sheet investments, and based in New York City– more information at www.dcg.co, and from 2018 – 2019, via personal firm Shiny Pony LLC, where I advise corporations, investors, and companies and also invest in startups and digital currencies with my own capital. More information and disclaimers at www.meltemdemirors.com.

software development practices, similar to those used in the development of the Internet.[5]

- Bitcoin is a network that is formed by computers running this open-source code, which are called nodes. The Bitcoin network is supported by individuals, companies, and organizations that run the bitcoin code and maintain the Bitcoin blockchain, which is a ledger of all activity (i.e. transactions) that happened on the Bitcoin network.

- Lastly, bitcoin is a cryptocurrency. It is used as both a store of value and medium of exchange (in spite of its volatility) and has been likened by many to "digital gold."[6] There are thousands of companies that enable their users to exchange, store, and transfer bitcoin; and many more that enable their users to utilize bitcoin (the cryptocurrency) and the underlying Bitcoin network in a variety of ways that serve consumers, enterprises, and even governments.

Bitcoin as a technology is not regulated. Much like the Internet, the Bitcoin network can be considered a public good.[7]

However, it is very important to establish that the companies being built to provide products and services on top of Bitcoin are subject to applicable regulation in their respective jurisdictions; just as the companies building on the Internet to provide products and services to their customers are subject to the regulatory oversight and applicable laws of the United States. In the United States, Bitcoin companies interact primarily with the CFTC, the SEC, the IRS, OFAC, FINCEN, law enforcement, state banking regulators, and a host of other policy making bodies and enforcement agencies.

In my experience over the last five years, companies operating in the US or serving US customers continually spend millions of dollars - vast sums for early

[5] These practices, called Request for Comments, or RFCs, continue to be used. For further reference, please refer to the Internet Society's piece titles "Celebrating 50 Years of RFCs that Define How the Internet Works" which can be found at https://www.internetsociety.org/blog/2019/04/celebrating-50-years-of-the-rfcs-that-define-how-the-internet-works/

[6] See comments made by Federal Reserve Chairman Jerome Powell on July 10, 2019, as reported by CNBC at https://www.cnbc.com/2019/07/10/powell-says-facebooks-libra-cryptocurrency-raises-serious-concerns-such-as-money-laundering.html

[7] Public goods, in this usage, are defined as products or services that are non-excludable, nondepletable, and non-rivalrous. A good is non-excludable if one cannot exclude individuals from enjoying its benefits when the good is provided. A good is nondepletable if one individual's enjoyment of the good does not diminish the amount of the good available to others.

stage startups - on engaging regulators, obtaining the required licenses, and educating and engaging policymakers. For many companies, compliance and legal expenditures exceed any other budget line item, sometimes even exceeding that of engineering. The line between what is and is not considered regulated activity is often blurred. Note this is not due to any fault by the regulators nor companies themselves - but rather, due to the fact that this technology introduces new models for representing, exchanging, and transferring value that did not exist before. I commend the efforts of the CFTC and SEC, who have pro-actively engaged with the industry to discuss these topics, and am encouraged to see this hearing further exploring this important issue.

In the last five years, over $6.2 billion has been deployed into nearly 1,000 companies[8] building on top of cryptocurrency networks, primarily Bitcoin. While the Bitcoin network is global in nature, companies tend to be localized in specific jurisdictions.

In my five years as a venture capital investor in Bitcoin companies, nearly 70% of the companies I have invested in have been incorporated in, and operated from, the United States. The reason the bulk of the capital invested has gone to US companies is in large part due to the fact that the US enjoys a robust, well-developed venture capital and private equity market, and boasts a long track record as a place where innovators can build businesses. The 150 companies I have invested in and worked with now employ nearly 5,000 people in cities including San Francisco, New York, Boulder, Austin, Atlanta, but also London, Singapore, Hong Kong, and Berlin.[9]

In the last few years, we have seen the emergence of a confusing, if not concerning trend -- different countries do, and will, regulate cryptocurrency differently. For many cryptocurrency companies, the complexity of the regulatory environment has become unmanageable, prohibitively expensive, and highly politicized. The traditional approach of a 'regulatory perimeter'

[8] CoinShares Research conducted on venture investing activity, sourced from a variety of industry resources, public data sources, and private data. Please contact CoinShares for further information, via our website at www.coinshares.co.uk
[9] Number of employees is an estimate based on available proprietary data from portfolio companies, often provided via investor updates, and public data sources including news, LinkedIn, and other sources.

which historically has been used to apply jurisdiction to companies and users has become challenging to define in a digital world that is not constrained by the same physical boundaries.

In many parts of the world, a lack of clear regulation and lack of history of consistent enforcement of these regulations has led to a proliferation of companies and projects that are seeking refuge in jurisdictions known to have a traditionally 'lighter regulatory touch.' In addition, there are a number of countries (e.g. Switzerland) that are successfully seeking to attract companies with regulatory frameworks and legislation designed to provide certainty for cryptocurrency companies, as well as coordinated regulatory assessment of new business ventures. In this respect, I refer the committee to the Swiss Federal Counsel's legal framework for distributed ledger technology and blockchain, which has contributed to Switzerland's status as a place for cryptocurrency and blockchain technology entrepreneurs and companies to establish themselves.[10]

By contrast, I have seen companies who have chosen to build their core business in the US become ensnared in a lack of regulatory clarity and subsequently, some have chosen to focus their growth in other jurisdictions. In recent months, companies have shut down parts of their United States business due to delays in obtaining licenses or necessary regulatory status. Some companies have had to raise additional capital at unfavorable terms to pay for unexpected legal bills resulting from the complexity of navigating this uncertain landscape.

In addition, large corporations and enterprises with robust balance sheets and capital war-chests have begun to look at the bitcoin ecosystem and started replicating the business models of these startups — but with all of the advantages of their size and status behind them – an extension of the "Embrace, Extend, Extinguish" strategy Microsoft famously pioneered in the late 1990s.[11]

[10] See https://www.mme.ch/fileadmin/files/documents/Publikationen/2018/181207_Bericht_Bundesrat_Blockchain_Engl.pdf
[11] For further details, please see: https://web.archive.org/web/20180523190053/https://www.economist.com/node/298112

To this end, we are at the beginning of a new wave of interest in bitcoin and cryptocurrencies. The concept of cryptocurrency, which has been popularized and best implemented by Bitcoin, has inspired countless imitations which borrow some of the features of cryptocurrency, but are in fact not cryptocurrencies.

Imitation is the most sincere form of flattery, but it is important to distinguish that Libra is not a cryptocurrency. There is a clear line separating Libra, Facebook's self-styled "cryptocurrency" from bitcoin and other cryptocurrencies that share the features I articulate below.

Libra is not a Cryptocurrency

Anyone can create something and call it a cryptocurrency. In the context of Facebook's Libra project, the word cryptocurrency is being used very loosely, and it conflates two things which are fundamentally different. The difference in design between Bitcoin and Libra means they pose very different risks to the public, and these risks and merits should be assessed independently. Please note that the intent of my testimony is not intended to pass subjective judgment on Libra as "good" or "bad." Rather, I aim to highlight the core differences between bitcoin - a cryptocurrency - and Libra - Facebook's proposed digital token - and to outline why this distinction is critical to designing and implementing an effective regulatory framework.

Decentralized v Highly Centralized

- Bitcoin is decentralized, which is an esoteric metric, but in practice, it means no one entity or group of individuals has the ability to block or reverse transactions.
- In contrast, Libra is highly centralized. It is a project that was conceived, designed, and launched by the Facebook corporation and its employees - which proposes to keep a multi-billion dollar fund to back the currency, and to manage the code for the network and control access via a consortium that currently consists of 28 entities. Note that some of these entities in Libra's governing body are investors in other members of the

consortium, large owners of Facebook shares, or otherwise commercially affiliated with Facebook and its executives. In Libra's proposed design, this consortium will have the ability to block and censor transactions.

Asset v Asset Backed

- Bitcoin is its own asset. It is best characterized as a commodity backed by its own programmatic scarcity and demand for it. As bitcoin is not backed by other assets, there is no entity that holds any assets that give bitcoin its value. Furthermore, in bitcoin's design, everyone controls their own money. Some holders may choose to use third-party products and services such as custodial wallets, but bitcoin does not require third-party regulated entities such as banks to hold assets. In short, bitcoin is an asset that is nobody else's liability.

- In contrast, Libra is backed by assets – notably a pool of currencies and interest-bearing instruments that is managed by the Libra consortium. Asset management is an activity which has components that are typically regulated both here in the United States and abroad.

- Unlike Bitcoin, the Libra Association is an entity which produces revenue and may provide distributions or dividends as a result of managing a pool of assets (akin to a fund) which has two classes of shares - one class of shares that delivers the principal to Libra token holders, and one class of shares that delivers earned interest and fees to investors and consortium members.

- The assets backing Libra, which are proposed to be a mix of currencies and interest-bearing instruments, are assets which will be stored in bank accounts and which rely on third-party intermediaries for purchases, storage, and disposition, including banks or brokerage firms. This introduces multiple types of risk[12] to Libra holders, who must rely on these intermediaries and the Libra consortium's ability to maintain access to the funds backing their principal.

[12] Among the types of risk present are liquidity risk, settlement risk on releasing the underlying assets together; as well as counterparty risk posed by custodians and the issuer of any asset products

Permission-less v Permissioned

- Bitcoin is permission-less, meaning anyone has the ability to run nodes on the network; to participate in transaction validation; or to build products, services, and applications leveraging the protocol or the network. Anyone can enter and exit these networks without requiring permission, so long as they follow the rules set forth in the protocol.
- In contrast, Libra is permissioned. The consortium governing Libra will determine the code, the consortium will run the nodes in the network, and no other entity will be able to do so without approval from the consortium of members, which are proposed to number 100 to start. Furthermore, users can only enter and exit these networks by complying with the rules of the Libra platform.
- Bitcoin doesn't have custodial risk at the network level. Companies that provide products and services to bitcoin holders and users provide clear terms of service that comply with local regulation and set forth when and how funds may be frozen or seized.
- In contrast, the Libra network is controlled by a private group of members who will control who can access the network.
- Lastly, from a competitive perspective, the Bitcoin network now supports thousands of companies around the world, in similar manner as the internet served as a backbone for innovation over the last two decades. These companies are owned by entrepreneurs and investors, and in turn employ anywhere from less than a dozen to thousands of employees and provide services to millions of customers around the world. These companies form the backbone of the Bitcoin industry and contribute to economic growth and continued technology innovation within Bitcoin's open system. Bitcoin is driven by a culture of volunteerism, given its open-source development and open network.
- In contrast, Libra benefits only one entity, Facebook, and the companies that have been chosen, numbering 28 to date, to be a part of its Libra

consortium. Note this consortium is based in Switzerland—not the United States. In testimony delivered by Facebook, David Marcus, who is leading the Libra effort, clearly stated that "if [Libra] is successful, Facebook will benefit from more commerce across the family of apps."[13] While Libra may have aspirations to serve a broader, more altruistic purpose, its current implementation and design are seemingly designed and implemented benefit Facebook and a small group of Libra consortium members.

Why This Matters

I am not here to comment on the merits of Libra as a business endeavor of the Facebook corporation or its associates selected to participate in the consortium backing Libra. The Facebook corporation is in the business of delivering value to shareholders. It does so primarily by monetizing its portfolio of web applications to serve advertising to their users, and Facebook has every right to continue to expand and innovate on their business products and services as permitted under United States and other applicable laws.

Here is what I must comment on: while Libra may represent an exciting innovation for the Facebook platform and its ability to provide new products and services to its customers and that of its affiliates or associates in the Libra consortium; it simply cannot be compared to Bitcoin, due to large fundamental differences.

To be clear, Libra may have its own merits, but they should be viewed and evaluated in context of the facts, and independent of comparison to bitcoin and cryptocurrencies.

The concept of cryptocurrency, which has been best exemplified by bitcoin, has reached a point of inevitability. It is inevitable that Bitcoin's technology, the Bitcoin network, and the companies and applications supporting the bitcoin ecosystem will continue to grow. One need only look at the bitcoin community

[13] See testimony provided by David Marcus on July 16, 2019 in front of the Senate Banking, Housing, and Urban Affairs Committee SH-216.

to see the passion, energy, and capital being contributed to bitcoin's growth on a daily basis.

The opportunity before us is to rise to the challenges of making it work in a way that's responsible, instead of trying to put the proverbial 'toothpaste back in the tube.'

Just as the Internet is an open, 'permission-less' technology on which anyone can build and innovate, it is critical that Bitcoin innovation remain open, 'permission-less,' and accessible. Bitcoin companies in the United States serve tens of millions of customers, facilitate billions of dollars of regulated, legal commercial activity, and employ thousands of people both within their organizations and as professional service providers and consultants. The bitcoin community is global in nature, but the bitcoin economy requires 'on' and 'off-ramps' to thrive.

We should endeavor to do what is necessary to keep these on and off-ramps here in the United States, and regulated under United States law, where they benefit the American people and the American economy – not in a foreign jurisdiction, such as Switzerland.

To refer back to the analogy of the internet, the development of this new technology and global, open network helped level the playing field between large businesses and small, and to create tangible benefits for consumers. With the advent of cost-effective web-based services and the ability to reach a global audience, small companies around the world now compete with large multi-national corporations; and sometimes disrupt entire industries in the case of Amazon and countless others. Through a series of challenges, the internet has largely been preserved as a medium for free publishing and open innovation.

The internet has created a tremendous amount of economic value in the US economy and globally, and has fostered innovation, entrepreneurship, and productivity, and broken down barriers to entry across a variety of markets and industries, while also lowering the cost of access and expanding choice for consumers.

The internet is an economic powerhouse that drives US competitiveness and productivity. The digital economy,[14] powered by the internet, drives Gross Domestic Product (GDP) and also offers countless intangible benefits to small businesses, consumers, institutions, and governments. According to the Bureau of Economic Analysis, the digital economy has been a bright spot in context of the United States economy. The real value added to the US economy by the digital economy grew at an average annual rate of 9.9 percent per year from 1998 to 2017, compared to 2.3 percent growth in the overall economy. The digital economy accounted for 6.9 percent ($1,351 billion) of current-dollar gross domestic product (GDP) in 2017.[15]

Facebook is, arguably, the only platform in the world which can reach 2.5 billion users instantly. This gives Facebook tremendous power, but also tremendous opportunity and responsibility. I commend the efforts of the Facebook corporation and the aspirational goals set forth in its Libra effort.[16] However, the Facebook network is not a public good. Its network is closed, owned by the Facebook corporation, and built to capture value for Facebook and its shareholders - not its community members, not the general public, and certainly not small businesses and startups. These parties may ultimately benefits from Facebook's efforts, but it is unclear as to how Libra will enable this.

The internet brought with it the democratization of information. Bitcoin and cryptocurrency networks are a medium that could enable the democratization of value exchange and transaction - enabling small businesses and individuals to get access to a wide range of new financial products and services and to usher in new models for the exchanging of value. It shouldn't be only large firms, their investors and affiliates, and existing financial institutions that benefit from this technology. Small businesses and consumers should be able

---

[14] The United States Department of Commerce's Bureau of Economic Analysis is working to develop tools to better capture the effects of fast-changing technologies on the U.S. economy and on global supply chains. The project seeks to calculate the digital economy's contribution to U.S. GDP, improve measures of high-tech goods and services, and offer a more complete picture of international trade. Other goals are to advance research for digital goods and services, the sharing economy and free digital content, and to explore economic measures beyond GDP to better understand Americans' well-being. More at https://www.bea.gov/data/special-topics/digital-economy

[15] See the Bureau of Economic Analysis "Measuring the Digital Economy: An Update Incorporating Data from the 2018 Comprehensive Update of the Industry Economic Accounts" which can be found at https://www.bea.gov/system/files/2019 04/digital economy report-update-april-2019_1.pdf

[16] See the Libra whitepaper, which can be found at https://libra.org/en-US/white-paper/#introducing-libra

to participate, and should benefit from this new innovation, and participate in its development, growth, and evolution.

The decisions you are weighing now will undoubtedly determine the future of open, 'permission-less' technology innovation and capital formation here in the United States. That future is not five or ten years away; that future is here and now.

I urge policymakers and regulators alike to treat bitcoin and other cryptocurrencies as open, permission-less technologies that will support American growth, and to treat Libra in the context of the facts – as a private, for-profit effort led by a corporation in collaboration with a group of private operators and investors, and custodying potentially billions of dollars of the public's money. Libra may be the first of this privately-controlled business model, but I expect there will be many other corporations who attempt to seize on the popularity and benefits of Bitcoin to market, promote, and expand their offerings. I ask you to remember that these things are not Bitcoin and are not cryptocurrencies. To treat them as such would be a mistake. I urge the Members of this Committee to maintain this clear line now and in the future.

I thank you for your time, and in closing, as the Committee deliberates Libra and other digital assets which are not cryptocurrencies, I urge all members to consider:

- The benefits of bitcoin and decentralized, open, permission-less cryptocurrency networks that foster innovation, economic growth, and the development of new industries;
- That bitcoin is fundamentally different from Libra and other digitized assets issued by corporations and control companies; and that these other digital assets be treated in a manner consistent with what they are, not what they aim to someday be.
- To create a regulatory environment that will allow and encourage bitcoin and the innovation happening here in America to continue to flourish through a clear delineation between fact and marketing fiction.

As an American citizen and an investor and business operator in the United States, I am pleased to see the Committee focusing on these topics and separating cryptocurrencies like bitcoin from corporate efforts like Libra.

Your continued leadership encourages American entrepreneurs, companies, and investors to continue supporting the development of these new technologies, while at the same time providing the strong regulatory oversight and investor protections for which the United States is known, and what has made the United States the largest market for technology innovation.

I appreciate your time and very much look forward to your questions.

GARY GENSLER

Professor of the Practice, MIT Sloan School of Management
Senior Advisor to the Director, MIT Media Lab
Co-Director, MIT's Fintech@CSAIL

Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System

Financial Services Committee
United States House of Representatives
July 17, 2019

Good morning Chairwoman Waters, Ranking member McHenry and members of the committee. I thank you for inviting me to testify regarding Facebook's proposed Libra token and its effects on consumers, investors and the U.S. financial system.

On a personal note, it is good to be with you once again.

Since I was last before this Committee, I'm now honored to be at Massachusetts Institute of Technology, Sloan School of Management, where I am now a Professor of the Practice of Global Economics and Management. I also advise MIT Media Lab's Digital Currency Initiative and the Ethics and Governance of AI projects as well as co-direct MIT's Fintech@CSAIL. I'm honored to be engaged with many talented colleagues and students researching and teaching on blockchain technology, digital currencies, financial technology & public policy.

I formerly was Chairman of the U.S. Commodity Futures Trading Commission, Under Secretary of the Treasury for Domestic Finance, and Assistant Secretary of the Treasury. I also currently am a member of the New York Fed Fintech Advisory Group and was Chairman of the Maryland Financial Consumer Protection Commission from 2017 - 2019. The views expressed herein, though, are my personal views. I do not advise any financial, technology, blockchain or other companies, nor do I own any cryptocurrencies.

Summary of Policy Considerations

Facebook's proposal to enter the payment space with a digital token, Libra, is an ambitious plan that raises many public policy considerations. Federal Reserve Chairman Jay Powell indicated last week that Libra raises many concerns needing thorough evaluation before Facebook proceeds.

The Facebook Libra initiative, though, once it is fully living within established public policy frameworks, may help spur greater competition in payments, potentially enhancing access and reducing costs. As with any new financial technology, we must protect investors and consumers. We must ensure financial stability. We must guard against illicit activities, such as tax evasion, money laundering, terrorist financing and avoiding sanctions. We must protect individuals' privacy.

As currently proposed, the Libra Reserve, in essence, is a pooled investment vehicle that should at a minimum, be regulated by the Securities and Exchange Commission (SEC), with the Libra Association registering as an investment advisor. There is some basis, however, to also consider the Libra Reserve as a bank or to apply bank-like regulation to it. At a minimum, though, the Libra Reserve should be restricted in its investments prohibited from making loans.

The risks posed to the rest of the economy if the project were to fail (so-called 'systemic risk') and monetary policy implications largely would be dependent upon the success of the project. Given the sheer reach of Facebook along with Libra Association members, though, it would be imprudent to ignore macroprudential and economic considerations. As Chair Powell said last week "The size of Facebook's network means it could be, essentially, immediately systemically important." The resiliency, risk management and operating policies of both the Libra Reserve and Libra Blockchain will need to be reviewed keeping this admonition in mind.

Facebook's proposed involvement through its new subsidiary, Calibra; the offering of a custodial digital wallet, Calibra Wallet; and the recording of transactions on the Libra Blockchain distributed ledger all also raise important privacy and consumer protection considerations. Full compliance with Facebook's recently announced Federal Trade Commission (FTC) $5 billion settlement, as well as with the California Consumer Privacy Act (CCPA) and Europe's General Data Protection Regulation (GDPR) are a minimum, but more may be appropriate given the potential to commercialize private consumer financial transaction data along with data that is already amassed on Facebook's vast social and information networks.

Maintaining the new digital Libra token on the Libra Blockchain raises many challenges similar to those Bitcoin and other cryptocurrencies have presented authorities tasked with guarding against illicit activities, protecting investors and ensuring for tax compliance. Cryptocurrencies, though, have given bad actors new ways to conduct old crimes. The challenge of money laundering and tax evasion is still quite large against those using traditional fiat currencies. Plans for Libra trading on electronic exchanges, promotion of app development and competitive digital wallets run on top of the network add to these challenges. Calibra has registered with the U.S. Financial Crimes Enforcement Network (FinCEN), but full network compliance will be a challenge to achieve.

Lastly, while international coordination on policy will be sought, the history of financial innovation shows that regulatory arbitrage often occurs. This has particularly been true in the emerging field of cryptocurrency regulation. Regulatory arbitrage can also be a challenge within a single jurisdiction, particularly when activities arise outside of traditionally regulated entities. To avoid the possibilities of that happening here, it will be important, where possible, to look through to the underlying economics of the Libra activities and regulate them for what they are.

As Indiana poet James Whitcomb Riley wrote over 100 years ago: "When I see a bird that walks like a duck and swims like a duck and quacks like a duck, I call that bird a duck."

Context

In evaluating the economic and public policy implications of the Facebook proposals, I think that we should look at Libra in the context of:

- Trends in payments and fintech
- Cryptocurrency & blockchain technology

I will then discuss Facebook's Libra proposal's economics and finance.

After reviewing this context, my testimony will turn to a detailed review the many public policy considerations of Facebook's proposed Libra Reserve, Libra token, Libra Investment Token, Libra Association and Calibra digital wallet. Lastly, I will share brief thoughts on the discussion draft 'Keep Big Tech Out of Finance Act.'

Trends in payments and fintech

Though moving money electronically has been a feature of finance since the 19th century and the dawn of the telegraph, today the Internet, personal computers and mobile phones have completely transformed means of payments as well as the financial world more generally. We now live in the age of digital money, where the vast majority of commerce and government relies on electronic means to move and record money. We're now fully using digital forms of money with the vast majority of payroll, rents, mortgage payments, consumer credit payments, utility bills, online and retail purchases being conducted electronically. Physical cash and coins have rapidly declined in daily use.

In the U.S., banks, credit card companies, and other parts of big finance, along with the U.S. Federal Reserve dominate payments services. Big tech and fintech companies, around the world and here in the U.S., though, are competing with big finance in the payment space seeking as well to gain market share in the provision of credit, insurance and investment products. PayPal helped lead the way 20 years ago, trying to provide better services, greater access, and lower costs for payment and other financial services.

In this competition, though, big tech firms are set apart due to a collection of network advantages. As the Bank for International Settlements (BIS) wrote in its recent Annual Economic Report big tech's reach can allow them to establish a dominant position due to what the BIS calls the data-network-activities loop or "DNA" loop.

In China, big tech leapfrogged big finance in the provision of payment services. Alibaba Group created Alipay in 2004 for its e-commerce platform, Taobao. China's largest social media platform, Tencent, with its WeChat messaging launched WeChat Pay in 2013 and now has over 1 billion active users. Using their large networks and new technology, Alipay and WeChat Pay bypassed the traditional financial system and together now dominate the Chinese payment market. Their use of smartphones, digital wallets and QR codes for payments has transformed commerce and banking replacing the need for cards and card readers, significantly disintermediating Chinese banks from retail payments.

Some other countries have seen similar success by tech companies entering the payments markets. Most notably, in Kenya, Safaricom, the country's largest telecom company, launched M-Pesa in 2007 for mobile payments, wallets and microfinance. Nearly 50% of Kenya's GDP is processed over M-Pesa. Korea's largest Internet firm and mobile messaging platform, Kakao, operates KakaoPay and started an on-line bank in 2017 and now has over 10 million accounts with $15 billion in deposits and $9 billion in loans.

While the U.S. payment system is still dominated by banks and credit card networks, ever since PayPal launched in 1999 there have been numerous efforts by fintech startups and big tech to enter the payments markets. Amongst the hundreds of startups, some of the most successful have been PayPal, Square, Stripe, TransferWise, Venmo, and Zelle, though most of the current U.S. payment plays have not yet reached mass utilization.

Big tech has made numerous efforts as well. Amazon Pay was launched in 2007. Google Wallet was launched in 2011. Amazon Coin in 2013. Apple Pay in 2014. Starting this summer, partnering with Goldman Sachs and Mastercard, Apple is offering Apple Card, built into the Apple Wallet app on iPhones.

In 2009, Facebook introduced Facebook Credits, virtual currency available in 15 currencies for use in games and other applications, terminating the effort by 2013. Facebook subsequently introduced Facebook Messenger payments in 2015, rolling it out in the U.S., U.K. and France for peer-to-peer & charitable payments. Earlier this year, however, Facebook announced that Facebook Messenger payments would no longer be available (as of this month) for peer-to-peer payments in the U.K. or France. Facebook's WhatsApp messaging service introduced WhatsApp Pay as a pilot program in India in 2018 but is still awaiting approvals to expand the program further. It plans to offer the service in other countries in the future.

This context reminds us that Facebook's proposal is not its first effort by Facebook to be involved in the payment space and far from the first effort by big tech companies to be in payments.

Cryptocurrencies and Blockchain Technology

Money is but a social and economic construct built upon consensus having taken on many forms and technologies over the millennia. Africans used cowrie shells, and on the island of Yap, large disks known as Rai stones were money. The Chinese, Greeks and Romans minted money from bronze, silver and gold. Paper money was an innovation representing a store of value in a central repository. This led to privately issued bank notes and fiat currencies issued by governments. With the coming of the telegraph and Morse code, we had the first electronic money transfers. Today, the principal methods of payments and storage of money are electronic.

As the Internet became commercialized in the 1990s, a payments riddle emerged: could value move on the Internet peer-to-peer similar to how packets of data move without any trusted central intermediary?

Then, largely unnoticed at the nadir of the financial crisis, Satoshi Nakamoto released a nine-page paper on Halloween night, 2008, entitled "Bitcoin: A Peer-to-Peer Electronic Cash System."

What does this mean for money and finance?

Nakamoto's innovation, commonly referred to as blockchain technology, establishes a consensus protocol amongst multiple, possibly distrusting, participants on an open 'permissionless' network to build an immutable chain of blocks of data (a 'blockchain') forming an auditable database. In Bitcoin, that is a record of who owns which coins. This database is secured using cryptography, so every entry can be widely verified.

Regardless of whether Bitcoin and other cryptocurrencies adequately exhibit the three classic characteristics of money – a store of value, a medium of exchange and a unit of account – they do provide a means to move value and run computer code run on computers connected through the Internet without relying upon a central intermediary such as a bank.

Moving value on the Internet ties blockchain technology and cryptocurrencies directly to the essential plumbing of the financial sector, which at its core performs the role of efficiently moving and allocating money and risk within the economy. To date, the principal use of the technology supports a speculative asset class of Bitcoin and other cryptocurrencies. Though no other full scale blockchain applications truly yet exist, many companies, entrepreneurs and technologists are exploring projects in an effort to lower verification and networking costs borne by transacting parties relying on their counterparties or a trusted intermediary to honestly record completion of transactions.

Open permissionless blockchain applications such as Bitcoin where anyone can join the network to validate the transaction records or ledger have also inspired permissioned or private blockchains wherein only a closed set of authorized entities can join the network as validators. With increased competition and innovation in the financial system, blockchain technology – both permissionless and permissioned - offers a catalyst for change by incumbents or as an opportunity for entrepreneurial start-ups, potentially lowering costs, risks and economic rents in the financial sector.

Cryptocurrency tokens' nearly $300 billion market cap, though modest in comparison to global debt and equity markets of over $380 trillion, also has drawn attention from financial sector incumbents due to its volatility, wide margins and public interest. For instance, Intercontinental Exchange, the exchange operator which owns the New York Stock Exchange, is seeking regulatory approval to start a new cryptocurrency trading platform, Bakkt. The large asset manager, Fidelity Investments, has started Fidelity Digital Assets providing cryptocurrency custody and other services to institutional investors.

Many mobile messaging companies around the globe also have projects with cryptocurrencies and tokens as part of their offerings. Korea's Kakao has a blockchain platform, Klatyn and plans to integrate a crypto wallet into its KakaoPay. LINE, Japan's leading messaging app has a crypto token, Link, and has plans to start a crypto exchange (BitMax) for its customers to trade cryptocurrencies. Encrypted messaging app Signal's founder is working on a privacy preserving token, Mobilecoin designed to be used on Signal as well as Facebook messenger and WhatsApp. The other leading encrypted messaging app, Telegram, with an estimated 300 million users worldwide, raised $1.7 billion in early 2018 through an initial coin offering of its digital token, Gram and launched a crypto wallet in 2018 within its massaging app as well.

Facebook Libra Proposal – Economics and Finance

Facebook is now proposing to create a new token – Libra – to facilitate payments after having had limited success to date with its earlier payment offerings. The proposal comes within a context of big tech firms around the globe – messaging companies in particular – competing with payment solution and cryptocurrency related offerings.

Just as when an architect first shares blueprints for a new structure, particularly one as ambitious as this, many aspects of Facebook's proposal will be up for serious review and lively discussion. Facebook has made many financial, commercial, technical and legal design decisions in formulating its proposals.

I've organized my review which follows around the proposal's key elements:

- The Libra Reserve
- Libra
- The Libra Association
- The Libra Blockchain
- Calibra & the Calibra Wallet

Running throughout the review, I also will focus on the many key design decisions the architects at Facebook have made, though based upon global reactions there are likely to be many changes:

- Using a multicurrency backed digital token as a payment solution
- Promoting this new token as a global digital currency
- Paying no interest on transaction accounts
- Having 2 classes of participants split the economic returns on assets backing the token
- Promoting adoption by offering an investment token earning the float on customer funds
- Using Exchange Traded Fund mechanisms for the issuance and redemptions of tokens
- Recruiting 100 other global organizations to be part of the effort
- Setting up an association for those members' collaboration as a non-profit in Switzerland
- Using a permissioned distributed ledger for the accounting and operating ledgers

- Developing a new programming language to facilitate apps running on top of the network
- Offering a new digital custodial wallet app for storing, sending and receiving the tokens
- Setting up a wholly owned subsidiary to offer services and custody customer tokens

Libra Reserve, a Multicurrency Short-Term Bond Fund

Facebook has proposed pooling customer funds within a new entity, the Libra Reserve. It is anticipated that a special purpose vehicle will be set up solely to receive, hold and manage the Libra Reserve funds. Fiat money received would be converted into a multicurrency basket and invested in bank deposits and short-term government securities from multiple jurisdictions. Facebook has indicated that this would include investments in U.S. dollar, the British pound, the euro, and the Japanese yen. Economically and financially, the Libra Reserve would in essence be equivalent to a pooled investment vehicle focused on multicurrency short term government bond investing.

There are likely a number of commercial and technical reasons why Facebook may have chosen to use a multicurrency backed digital token as a payment solution. It appears that foremost they decided to have some form of stable value token backed by fiat currencies. If they wanted to limit their offering to only one token, the alternatives seem to have been either a U.S. dollar backed token, or one backed by a basket of currencies. As a global company with users in every country around the globe, Facebook may have chosen that a dollar backed token would not have sufficient customer appeal. Alternatively, they could have (or in the future may) proposed a suite of single fiat backed stable value tokens. The implications of the design choice are that consumers will bear currency and market risk when using the token, potentially limiting adoption.

Facebook has proposed at least two classes of participants in this short-term multicurrency government bond fund, in some ways not all that different, other than the zero-interest rate, than intermediate-term global bond funds offered by PIMCO, Templeton or Vanguard.

The first set of participants in the Libra Reserve will receive Libra Investment Tokens ('LIT'). Facebook proposes that holders of this first token – LIT – will be entitled to the stripped-off interest earnings of the fund (possibly up to a cap), net of operating costs of the Libra Reserve and the affiliated Libra Association.

The second set of participants in the Libra Reserve will receive the second token, Libra, in return for their investment of fiat funds. Facebook proposes that the Libra token be backed only by the principal of the underlying investments of the Libra Reserve not receiving any interest returns from these investments. Libra tokens could be redeemed and issued directly with the Libra Reserve through 'Authorized Resellers' of the fund. The proposed Authorized Resellers would perform a function through a mechanism very similar to that used by 'Authorized Participants' for U.S. exchange traded mutual funds (ETFs). Authorized Resellers – like Authorized Participants in ETFs – would be the only parties authorized to transact directly with the Libra Reserve, converting customers fiat currency to newly issued Libra or to facilitate redemption of Libra in exchange for fiat currencies. The Libra Association is in discussions with cryptocurrency trading firms (likely to be hedge funds and high frequency trading firms) and banks to become Authorized Resellers of Libra.

The public will also be able to purchase or sell Libra to other members of the public, either directly, through over-the-counter trading desks or on secondary exchanges. The Libra Association will encourage regulated electronic exchanges around the globe to list Libra. Regulations, supervision and enforcement of such electronic exchanges, though, will vary greatly depending upon jurisdictions, particularly if Libra is listed on crypto exchanges many of which are rife with fraud, manipulation, false volumes and scams.

Though designed to be a so-called 'stable value' token, Libra's value will clearly fluctuate with the multicurrency basket of deposits and securities underlying the Libra Reserve. The Libra holders also bear market, credit and interest rate risks with regard to the underlying bank deposits and government securities. Any market fluctuations in the prices of the underlying securities due to changes in spreads, yields or correlations of the various countries' securities are born by the Libra token holders. Any gains or losses on the trading of the securities – to meet redemption requirements or otherwise – would be that of the Libra holders. Further, if one of the banks (or governments) defaults, the Libra holders will bear that risk. Whether it be gains or losses due to defaults, currency, interest rate or other market moves, by design the Libra holders ultimately bear those valuation risks similar to a mutual fund holding. As Facebook discloses in its proposal 'Libra is not a "peg" to a single currency' and 'as the value of the underlying assets moves, the value of one Libra in any local currency may fluctuate.'

Essentially the holders of Libra tokens are a 2nd class of investors in the Libra Reserve.

There also may be in essence a 3rd class of participants in the Libra Reserve – the Libra Association and indirectly, its members. To the extent that LIT's share of the Libra Reserve's interest earnings are capped, the excess may go to the Libra Association.

Facebook has proposed that the Libra Reserve's assets be held by an internationally diverse group of custodians – commercial banks and possibly central banks – with at least investment grade credit ratings. Facebook has not yet proposed some other customary limitations on custodians – such as a ban on re-hypothecation or use of custodied assets in affiliate or third-party financing transactions.

Substantively and economically, the Libra Reserve is a pooled investment vehicle. It is offering two classes of participation in two different returns & risks: with one class - LIT holders – getting the returns and bearing the risks of net interest and the other class – Libra holders – getting the returns and bearing the risks of the principal investments. Libra holders certainly bear currency risks – and based upon the underlying markets for & investment management of the Libra Reserve – bear capital risk as well.

Furthermore, LIT and Libra holders participate jointly in a comingled multicurrency investment pool with each class' return dependent upon the returns of the other. Basic finance tells us that on average, the more principal risk that a bond portfolio takes, the higher the expected average interest returns. Thus, given the design – with the LIT holders participating in interest only returns and the Libra holders participating in principal only returns – there is an embedded and unavoidable financial conflict within the structure.

Libra Reserve, a Bank

In the 19th century, private actors were issuing private forms of money and using those funds to invest in loans and other assets. These private actors were called banks and the money was called banknotes. Federal chartering of banks occurred in the 1860's when we as a nation created the Office of the Comptroller of the Currency. The Libra Reserve – proposing to issue a private form of money, process payments, store value, and lend the proceeds to banks (as deposits) and governments (as debt securities) – has many similarities to banks, which create, process, store and lend money.

Thus, there is some basis to consider the Libra Reserve as a bank or to apply bank-like regulation to it. At a minimum there should be restrictions on Libra Reserve's investments and prohibition on its ability to lend or operate as a fractional bank.

Libra, Special Drawing Rights & Adoption

The design decision of Facebook to have a multicurrency backed token has parallels to the International Monetary Fund's Special Drawing Rights (SDRs). Originally priced in reference to gold, SDRs were redesigned after the collapse of the Bretton Woods system in 1973. The SDR references a basket of currencies, now including 5 – U.S. Dollar, the Euro, Chinese Yuan, Japanese Yen and the Pound Sterling. Although SDRs have no commercial or retail uses, an SDR is an international reserve asset.

While hard to predict adoption for the Libra token, there are many economic reasons why multijurisdictional currencies have failed to take hold in the past. The Libra token is designed to address gaps in domestic and cross border payment systems. In advanced economies, though, few merchants are likely to want to take unnecessary currency risks in their day-to-day business. In less developed or smaller economies, though, there may be more benefits to merchants and consumers to transact in a token not tied to the local economy. Many countries have experienced so-called 'dollarization' with the U.S. dollar (or other strong currency) is used in addition to or instead of the local fiat currency. If Libra were successful, it might see adoption in developing or emerging market countries that might otherwise move towards dollarization, in what may come to be known as 'Libralization.'

In advanced economies, though, for the Libra token to have economic viability, I think that merchants and the broader public will seek mechanisms to lower multicurrency risk. For merchants to say 'we accept Libra here' they will require software that converts Libra, almost instantaneously, to their local fiat currency. They will want to continue pricing their coffee in local fiat currency, with a customer's mobile phone accessing an app (with fees) behind the scenes seamlessly exchanging Libra in their digital wallet for whatever local currency is needed.

Otherwise, Facebook and the Libra Association may consider offering a suite of single currency backed stable value tokens in addition to (or instead of) Libra's multicurrency token. Though designed differently, Bitcoin and other cryptocurrencies have seen very little adoption for retail payments in the developed world.

Libra Association

The Libra Association has been set up as a non-profit entity in Switzerland. Per Facebook's proposal the Libra Association's role is to 'evolve and scale' the Libra network and Libra Reserve. According to Facebook's recent letter to Senate Banking Committee Chair Mike Crapo and Ranking Member Sherrod Brown "The Association will be responsible for setting rules for its members, operating the Libra Blockchain, issuing the digital currency, and managing the reserve that backs the digital currency."

It is proposed that Libra Association membership grow to 100 members, with no entity – including Facebook - controlling more than 1% of the voting governance. Though set up as a non-profit entity, Facebook's proposal refers to distributing Libra as incentives to qualifying members.

The Libra Association would have managerial responsibility for the Libra Reserve, setting investment allocations and guidelines. The initial currency allocations of the Libra Reserve will be announced next year before launch. Afterwards, it will take a supermajority 2/3 vote of the Libra Association council to revise the composition (asset allocation) of the basket of allowed jurisdictions and currencies for investments. While it may yet be but aspirational, Facebook also has described the Libra Association's approach to the management of the Libra Reserve as, "very similar to the way in which currency boards (e.g., of Hong Kong) have operated."

At a minimum, though, the Libra Association authorities will be to operate as an investment advisor to the Libra Reserve. At the maximum, the Libra Association would be making decisions akin to currency boards which may affect local economies, particularly in smaller or less developed economies around the globe. Depending upon the success and scale of the Libra Reserve, the Libra Association might influence individual countries government debt issuance, or monetary policies.

Many large international organizations will be founding members of the Libra Association – including payment companies, venture capital firms, retailers, ride sharing companies, telecommunications firms and blockchain related firms. Membership criteria are based various measures of size. For instance, for businesses, the evaluation criteria include measurements by market value, customer balances, scale, and brand leadership.

While Libra Association membership and LIT investment may overlap, it is not proposed that either be a condition of the other. It is anticipated that some Association members will not invest in LIT and that some holders of LIT will not be Association members.

Libra Blockchain

For recording Libra transactions and account balances, Facebook has proposed using a distributed database. Building upon recent developments in blockchain technology, Facebook has developed open source software called 'Libra Core' to operate what it calls the 'Libra Blockchain.' It would be maintained by a distributed network of authorized and permissioned validator nodes. Validator nodes will run a newly written consensus protocol 'LibraBFT' to execute and store transactions along with an updated state of the entire Libra database. Though the technical paper says that 'LibraBFT is designed as a proof-of-stake system, where participation privileges are granted to known members based on their financial involvement,' it appears that initially it might operate as a proof-of-authority system, where validator privileges are granted on identity.

Libra ownership and programmable resources on the database will be authenticated using asymmetric cryptography and private keys. Asymmetric cryptography, established in the 1970s will the help of MIT faculty, revolutionized encryption and has made possible much of what we now do daily on the Internet. In asymmetric cryptography, private keys are kept secret and are paired with public keys which help authenticate transactions or encrypt messages. Satoshi Nakamoto relied on asymmetric cryptography as one of the two essential cryptographic primitives used to secure a blockchain network. Facebook has also proposed a new custom-built programming language 'Move' for developers to create apps (using so-called 'smart contracts') that would run on top of the Libra Blockchain.

Given the actual design of the Libra Blockchain, there are some lively debates amongst crypto enthusiasts and computer scientists as to whether the software is truly blockchain technology and whether the Libra token is a cryptocurrency. While I will pose some of these questions for students at MIT this Fall, these questions are less relevant to the important public policy considerations raised by the Facebook proposals. Regardless of the vocabulary we use to describe the underlying technology, the Libra Blockchain will be a shared database system designed to record transactions and balances of Libra maintained amongst a closed group of permissioned large organizations. Economically, Libra will be a digitized representation of a unit interest in the Libra Reserve, a multicurrency bond fund.

Calibra & Calibra Wallet

Facebook has set up a wholly owned subsidiary, Calibra, to be a member of the Libra Association and to build and offer services in support of the Libra network to Facebook members and the broader public. Calibra's initial product offering is a digital wallet by the same name, Calibra. (For clarity, reference herein to the digital wallet will be 'Calibra Wallet' and to the company simply as 'Calibra.') The Calibra Wallet will be usable directly within both WhatsApp and Facebook Messenger. It also will be offered as a stand-alone app in Apple's App Store and Google Play.

Calibra Wallet will be a custodial wallet storing, sending and receiving Libra tokens. As a custody wallet, that means that the company, Calibra, would take control of all of the underlying Libra tokens and related private keys. A custody wallet has tradeoffs for customers. On the one hand, it enhances user experience in that they no longer have to worry about losing a private key. On the other hand, it subjects customers to the risk that the wallet operator may lose or misuse the customer funds. It also subjects customers to the counterparty risk of the wallet operator defaulting. Calibra has not yet indicated any restrictions on its custody of such customer Libra tokens.

To promote competition, encourage development on top of the Libra Blockchain and widen use of the Libra token, the Libra Blockchain also will allow so-called 'non-custodial' or 'self-custodial' digital wallets whereby individuals are responsible for their own private keys. For a variety of operational and security reasons, though, Facebook chose to design its Calibra Wallet as a custody wallet.

Calibra is registered as a money services business with the FinCEN. It has announced that all account users of the Calibra Wallet will be verified by a government-issued ID.

Policy Considerations

As with any new financial technology, we must still protect investors and consumers. We must ensure financial stability. We must guard against illicit activities, such as tax evasion, money laundering, terrorist financing and avoiding sanctions. We must protect individuals' privacy. I will now review in detail Facebook's proposal in light of these various public policy considerations.

Libra Reserve, Investor Protection and Systemic Risk

Substantively and economically, the proposed Libra Reserve will operate as a pooled investment vehicle. A reading of relevant U.S. law, the Investment Company Act of 1940 (the "40 Act') is consistent with the Libra Reserve being a unit investment trust or a mutual fund. If the SEC thought it unclear, though, I would recommend amending the law to clarify that an investment vehicle such as the Libra Reserve be appropriately covered under the law.

There are also valid reasons why some jurisdictions around the globe might choose to regulate the Libra Reserve as a bank. In the 19^{th} century, during the 'Free Banking' era, many private entities issued private forms of money in the U.S., using the proceeds to make loans and invest in other assets. Though the money was called bank notes, the issuers included states, private banks, railroads, stores and even some individuals. Such free banking existed in many other countries as well, often ending after one or a series of financial crises. Federal chartering of banks in the U.S. occurred in the 1860's when we created the Office of the Comptroller of the Currency.

Similarly, the Libra Reserve - proposing to issue a private form of money, process payments, store value, and lend the proceeds to banks (as deposits) and governments (as debt securities) - has many similarities to banks, which create, process, store and lend money.

Facebook anticipates that the Libra Association will be licensed or have similar authorizations around the globe as an issuer of digital currency. Many jurisdictions have adopted electronic money (e-money) licensing and regulatory regimes, to protect consumers while promoting competition in electronic payments. For instance, Europe adopted an E-money Directive (EMD) and subsequently the Payment Systems Directives (PSD and PSD2) setting rules for e-money institutions and payment services. In the U.S., while money transmission services must comply with FinCEN rules, they are largely regulated and supervised through state-level money transmission laws. Treating the Libra Reserve and Libra Association, though, with all their complexity and global reach through a patchwork of state money transmission laws, in the same manner as Western Union or MoneyGram is clearly unsatisfactory.

The systemic risk issues caused by U.S. money market funds in the midst of the 2008 financial crisis are a reminder to bear in mind when considering appropriate regulation for the Libra Reserve. Though it held different assets than proposed for the Libra Reserve, one $65 billion fund, The Reserve Primary Fund, nearly caused a run on money market funds when it broke the buck. Only an extraordinary Guarantee Program by the U.S. Treasury stemmed the tide. Decades old money market regulations had proved to be an Achilles heel to our economy at that critical moment.

Regardless of whether the Libra Reserve is regulated as a pooled investment vehicle or a bank, it's important that there are clear investment restrictions on how the underlying assets are managed. Facebook has indicated that there will be a set of investment restrictions set by the Libra Association, but it is important that there are federally mandated eligible investment limitations, liquidity requirements, a ban on lending or fractional banking and operating guidelines transparently set out in regulation.

Other countries have grappled with similar policy challenges.

In China, when big tech companies Alibaba and Tencent offered payment solutions, the Peoples Bank of China, the central bank, said that those companies had to register as financial companies, and placed certain restrictions on the investment of the underlying funds. Initially the tech companies could earn significant revenue, though, through investing funds in mutual funds, select loans and other wealth management products, after depositing funds (20% in 2017, 50% in 2018) in commercial banks as well. More recently, the People's Bank of China placed greater restrictions on the investments, clearing and custody of customer funds, cutting the profitability of the big tech companies. This year's changes now require that 100% of third-party payment providers' customer funds be placed in non-interest-bearing reserves with the central bank.

Kenya grappled with the same issues when Safaricom got into the payment space with M-Pesa. The banking authorities ultimately required Safaricom to place the funds in a dedicated trust and not be lent to anyone – operating as a 'narrow bank'. The regulators further required that 100% of the funds be deposited in the banking system in Kenya.

These narrow set of investment restrictions set in both China and Kenya are illustrative in how public officials have proceeded in similar circumstances of big tech entering the payments space and issuing a private form of money to protect consumers and guard against systemic risks. At a minimum, policy officials should consider for the Libra Reserve the investment, liquidity, transparency, auditing, governance, investor protection and other prudential criteria as set out in SEC rules for government money market funds. The potential scale and scope of the Libra Reserve, however, may dictate that the fund have more restrictive provisions than these.

Libra Blockchain, Payments Infrastructure & Systemic Risk

Federal Reserve Chairman Jay Powell said last week "The size of Facebook's network means it could be, essentially, immediately systemically important." On the same day, Bank of England Governor Mark Carney similarly said, "If it's successful, it becomes systemic because there are a large number of users."

Payment systems act as a critical public infrastructure, for which there are many interested parties well beyond the users and owners of a system. Thus, governance and regulations become important so that private actors best internalize the public good nature of the payment system. Thus, while there are real uncertainties about broad commercial or retail adoption of the multi-currency backed Libra token, given that the Libra Blockchain might in the future grow into a critical payments' infrastructure appropriate, prudential and operating standards are appropriate prior to its launch. The Federal Reserve oversees payment systems in the U.S. and international standards are set by the Committee on Payments and Market Infrastructures.

Libra Association, Libra Reserve, Monetary Policy & Governmental Debt Management

Facebook has described the Libra Association's approach to the management of the Libra Reserve as, "very similar to the way in which currency boards (e.g., of Hong Kong) have operated." While this may yet be but aspirational, depending upon adoption of Libra and eventual success of the overall project, the analogy is an important consideration. The Libra Association would be a private-sector actor making decisions which, depending upon scale, could possibly affect the execution of monetary policies and governmental debt management in countries.

Throughout the history of money, the world has seen many countries set up currency board regimes. Facebook's proposal, though, has no direct analogy as it would be run by an association or private-sector actors. To the extent some developing economies that might have dollarized instead turn to the Libra token, what I might call 'Libralized' or 'Libralization', these economies would be reliant in part on the Libra Association for its monetary policy.

Thus, the proposal raises many public policy issues around governance, transparency, and the relationship to central banks and finance ministries. Furthermore, it will be important to ensure that Libra Association members and management not be able to trade on or profit from the deliberations of the association regarding basket allocations and investment decisions.

In addition, Facebook has indicated that they will be working with central banks to set up direct reserve accounts in some countries. In the U.S., such access comes with many prudential restrictions and is limited to regulated banks and select systemically important payment and clearing organizations. In China big tech payment apps Alipay and WeChat Pay are mandated to keep their transaction balances in non-interest-bearing central bank accounts. Access to direct central bank reserves and accounts should not be considered lightly. Facebook's indication that it is working to achieve some direct accounts with central banks, also raises questions as to whether Facebook is also seeking access for the Libra Reserve to various central bank lending authorities, such as through the U.S. Federal Reserve's discount window. Such an approach in the U.S. would be an extraordinary departure from long-standing discount window policies.

Libra, Libra Investment Token & Investor Protections

There will be debates on whether Libra is a security under relevant U.S. law, including the '40 Act, the Supreme Court's 'Howey Test' and the Supreme Court's 'Reves family resemblance Test'. While those debates might technically be interesting, they are a bit of a red herring. It's unambiguous that LIT is a security as it will receive a net return based upon interest on the Libra Reserve. Looking through to the economics, the Libra token is part of the same pooled investment vehicle and bears multicurrency and market risk. Further, investor protection will be just as important for the proposed Libra token as it is for investors in international bond funds or in commodity ETFs such as gold, silver, or oil ETFs. I also believe that each Authorized Reseller of the Libra token would need to be a registered broker dealer.

Some might ask: what are the implications for other so-called 'stable value' tokens? While I think that might be an interesting question for some single currency backed tokens – like the US Dollar Coin (USDC) issued by Coinbase and Circle – that's not the circumstance here. While holders of USDC and other single currency backed tokens bear forms of operating and counterparty risks, holders of the proposed Libra token will rely on the reserve management guidelines of the Libra Association and asset management of others – even if set up like a passive fund - for the value of Libra tokens. In both the multicurrency case as proposed for the Libra Reserve and the single currency stable coins, though, there are similarities to investments made in money market funds – with just one exception: holders aren't being paid interest on the underlying investments. The debate about other stable value tokens, though, should not confuse what Libra is – a digitized (tokenized) interest in a multicurrency pooled investment vehicle.

Libra & Tax Compliance

For tax purposes, the Internal Revenue Service confirmed once earlier this year in guidance that virtual currencies, such as Bitcoin, are to be treated as property not as currency. Thus, someone who receives it for services must record as revenue the fair market value of the token. Taxpayers are also required to report gains or losses on any exchange or use of virtual currencies. Under earlier IRS and FinCEN guidance, Libra would be considered a virtual currency and similarly be treated as property, not as a currency.

The IRS might wish to update rules such that crypto exchanges and digital wallets, particularly custodial wallets such as Calibra Wallet include software to facilitate tax compliance and reporting of transactions over a certain size to users, such as brokerage forms 1099-Bs.

Libra Association, Calibra Wallet & Custody of Funds

As the Libra Association is the entity through which the Libra Reserves are managed, it is economically equivalent to an asset manager. It should be required to register as such under the '40 Act. The custody of funds for the Libra Reserve should also comply with the SEC custody rules, 'Custody of Funds or Securities of Clients by Investor Advisers'.

In addition, as Facebook envisions that the Calibra Wallet will be a custodial wallet, it is appropriate that rules be in place to guard against Calibra's use or potential abuse of such customer funds. Rules for segregation, against re-hypothecation and robust cybersecurity would be appropriate. The SEC's Customer Protection Rule (Rule 15c3-3) and recent staff statement on Broker-Dealer Custody of Digital Asset Securities would be relevant to these considerations.

Libra Network, Calibra Wallet & Guarding Against Illicit Activity

Calibra has announced that all account users of the Calibra Wallet will be verified by a government-issued ID. Facebook has also said that the Libra Association will encourage listing of Libra on regulated electronic exchanges throughout the world.

Guarding against illicit activity – keeping all Libra transactions within the perimeter of anti-money laundering (AML), counter terrorism finance (CTF) and know your customer (KYC) regulations – will be far more challenging than the two requirements alone will address.

The biggest technical challenge presented by blockchain technology is that tokens representing value can be moved digitally with the use of the related cryptographic private key. This ability to resist transactions being denied, delayed or deleted (so-called 'censorship resistance') is a key part of the economics and benefits of the technology. Thus, cryptocurrencies have given bad actors new ways to conduct old crimes. Dark markets conduct sales of illegal drugs and other contraband using cryptocurrencies. State actors, such as Venezuela and Russia, have used crypto finance to undermine U.S. policies. Cryptocurrencies also have added new challenges to global tax compliance.

For a host of commercial and technical reasons the Libra network design allows for the 'self-custody' of Libra token private keys. The Libra design also anticipates vibrant competition from companies creating applications run with so-called 'smart contracts' on top of the Libra Blockchain as well as creating digital wallets other than the Calibra Wallet.

Once someone owns Libra – even individuals who have cleared through various Bank Secrecy Act law provisions – they will be able to take custody and control the cryptographic private key for their Libra. While Facebook's digital wallet, Calibra, is a so-called 'custodial wallet', in which

Calibra will control users' private keys, competitive digital wallet will provide self-custody of Libra private keys. With this design, and the goal of competitive app development, it will be quite challenging to limit an individual's ability to move their digital token to someone who may not be within the 'AML perimeter.'

It's hard to maintain any digital token fully within an AML perimeter, when individuals can transact with numerous apps, crypto exchanges and OTC trading desks around the globe. It is simply unlikely that all of these transactions will stay within a perimeter in which everyone is properly cleared through a KYC check as well as not on a sanctions list. This is particularly challenging as there is a wide variation on how jurisdictions regulate and monitor exchanges, digital wallet providers and for money laundering.

There may be ways to lessen the leakage of Libra outside of a compliance perimeter – all of which, though, would have commercial or technical challenges. For instance, every authorized reseller could be required to register with FinCEN. All exchanges listing Libra could be required to agree to comply with U.S. Bank Secrecy Act requirements or comparable requirements. Far more challenging would be considering limiting app development to only those performing KYC and AML requirements within the app. Law enforcement agencies and regulators around the globe may find the Facebook proposal presents opportunities to set standards that go beyond this application to other cryptocurrency networks.

A more disruptive, but potentially tighter possibility might be to consider if the Libra Blockchain could be modified such that digital ID management could be handled centrally as a condition of transactions. This would be counter, however, to the spirit of decentralization Facebook seeks to harness in the creation of the Libra Blockchain.

Calibra, Libra Blockchain & Privacy

Facebook's Libra proposal comes in the midst of important public policy debates on how best to protect consumers and their data privacy in the face of rapidly advancing technologies and data analytics. Payment system providers and other financial services firms, such as Visa, Mastercard, and others use transaction data, machine learning, deep learning and other analytic methods to discern an increasingly nuanced picture of trends, from the macro market trends to the hyper-local, including detailed analysis of personal behavior for each one of us.

These issues are ever more relevant given Facebook's history of mishandling users' personal information as evidenced by its recent settlement and $5 billion fine with the FTC and the UK Information Commissioner Office (the UK Data Protection Authority). Calibra, as a 100% owned subsidiary of Facebook, might give Facebook an ever-greater reach into each of its customers' identifications. Combining the reach of a big tech firm such as Facebook, already with its extraordinary global information and social network – along with that of a broad new financial network of Libra could present significant commercial opportunities for Facebook, but also raise additional risks for consumers.

These data privacy issues will arise even though Calibra has indicated that "aside from limited cases, Calibra will not share account information or financial data with Facebook or third parties, without customer consent." We know that many of the most intrusive privacy practices of concern to privacy regulators have actually been subject to some form of consumer consent. So, it will be essential to conduct a more thorough analysis of what uses of Libra data should be allowed and which uses should be prohibited. How would such restrictions be monitored and enforced? What are the limited exceptions and might Calibra broadly seek customer consent in the form of standard user agreements? It would be likely that Calibra would want to commercialize this data. At a minimum, without sharing the raw transaction data from customers' Calibra Wallets, it would still likely analyze such data to earn money either through advertisements or by offering targeted services to wallet holders.

Calibra would need to comply with the recently passed CCPA and Europe's GDPR. Facebook has announced that the Libra Association "cannot, and will not, monetize data on the blockchain," and will be regulated by the Swiss Federal Data Protection and Information Commissioner for the purposes of data and privacy protections. In any regard, the Libra Blockchain as a distributed ledger for recording consumer financial transactions should seek to comply with GDPR, CCPA and any relevant Federal privacy standards.

Keep Big Tech Out of Finance Act

The Committee also asked for input on the discussion draft 'Keep Big Tech Out of Finance Act' which provides that large platform utilities would not be able to own financial institutions. Large platforms are defined as those with $25 billion in revenues and predominantly in the business of offering an online marketplace, an exchange, or a platform for connecting third parties. The draft appears, though, to allow large tech platforms to continue to innovate and compete with financial firms by contracting with un-affiliated financial institutions for the provision of financial services to their platform users.

As the BIS wrote in its recent Annual Economic Report, "the entry of large technology firms ("big techs") such as Alibaba, Amazon, Facebook, Google and Tencent into financial services, including payments, savings and credit, could make the sector more efficient and increase access to these services, but also introduces new risks."

The discussion draft's prohibition on big tech owning financial institutions is one alternative Congress and regulators might consider in balancing how best to promote competition in the provision of financial services while lowering the risks from big tech affiliations. The spirit of the discussion draft also is consistent with long standing U.S. policy separating banking and commerce. Further, history tells us that once any part of a complex financial institution fails, there is generally a run on the liabilities of all of its affiliated companies. A run on a financial institution might through contagion bring down an affiliated large tech platform and a failing large tech platform might bring down an affiliated financial institution. Prohibiting ownership affiliations between large tech platforms and financial institutions might lower potential systemic risk of such affiliations.

Conclusion

In conclusion, Facebook's ambitious proposal to enter the payment space with a digital token, Libra, raises many significant public policy considerations. These range from investor protection to privacy, systemic risk, guarding against illicit activity, monetary policy, government debt management, tax compliance and consumer protection. As Federal Reserve Chairman Powell said last week, issues "are going to need to be thoroughly and publicly assessed and evaluated before this proceeds." The Facebook Libra initiative, though, living fully within established public policy frameworks, may help spur greater competition in payments, potentially enhancing access and reducing costs.

Thank you again for inviting me today, and I look forward to your questions.

**HEARING BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON FINANCIAL SERVICES**

July 17, 2019

Testimony of David Marcus
Head of Calibra, Facebook

I. Introduction

Chairwoman Waters, Ranking Member McHenry, and members of the Committee, thank you for the opportunity to appear before you today. My name is David Marcus, and I am the Head of Calibra at Facebook. For most of my life, I have been an entrepreneur building products aimed at improving people's lives. Throughout my career, I have led businesses in regulated industries such as telecommunications and financial services. I became PayPal's President after it acquired my last startup, and I moved to Facebook about five years ago to run Messenger and more recently to lead our blockchain efforts.

I appreciate the opportunity to speak with you today about the vision for Libra. Libra is about developing a safe, secure, and low-cost way for people to move money efficiently around the world. We believe that Libra can make real progress toward building a more inclusive financial infrastructure. The journey to get there will be a long one, and we recognize that ours has just begun.

Chairman Powell has made clear that the process for reviewing Libra needs to be patient and thorough, rather than a sprint to implementation. We strongly agree. That was the spirit with which we published the white paper introducing the Libra project. The time between now and launch is designed to be an open process and subject to regulatory oversight and review. In fact, I expect that this will be the broadest, most extensive, and most careful pre-launch oversight by regulators and central banks in FinTech's history. We know we need to take the time to get this right. And I want to be clear: Facebook will not offer the Libra digital currency until we have fully addressed regulatory concerns and received appropriate approvals.

Before I go any further, I want to take a moment to acknowledge the twenty-seven other companies that have joined us on this journey—including companies in the payments, technology, telecommunications, blockchain, and venture capital industries, as well as non-profits. We are pleased to have each of these organizations as partners, and we look forward to working with them and others to make Libra a reality.

We approach all of these efforts with humility and a commitment to engage with experts in law, finance, economics, security, compliance, and blockchain technology, as well as with the regulators and policymakers who oversee the stability and security of our financial systems. But we also know how important it is that we begin this journey now. Since publishing our white paper on Libra, I have heard from people all around the world, excited by the possibilities that Libra offers. The status quo is not working for many; it is too expensive for people around the world to use and transfer their money. We believe Libra can offer a more efficient, low-cost, and secure alternative.

I am excited about the potential that Libra holds, and I am proud that Facebook has initiated this effort here in the United States. I believe that if America does not lead innovation in the digital currency and payments area, others will. If we fail to act, we could soon see a digital currency controlled by others whose values are dramatically different. I believe that Libra can drive positive change for the many people who would benefit from it. I also believe that it can provide an opportunity for leadership consistent with our shared values.

II. The Libra Reserve and The Libra Association

I first want to discuss the vision for Libra, the Libra Reserve, and the Libra Association, and why executing that vision, in collaboration with governments, multilateral organizations, and industry, can, in time, help deliver a giant leap forward toward a lower-cost, more accessible, and more connected global financial system.

Libra was established to be a digitally native currency that can be used around the world. Libra brings together attributes of the world's best currencies: stability, low inflation, wide usability, and fungibility. Technology innovations have given people tools to connect and communicate. But while people can send each other texts, videos, and photos, in many cases they cannot easily move value between one another. Economic empowerment is one of Facebook's core values, and the 90 million businesses communicating with their customers on the Facebook platform can attest to that. We have done a lot to democratize free, unlimited communications for billions of people. We want to help do the same for digital currency and financial services, but with one key difference: We will relinquish control over the network and currency we have helped create.

Libra is a payment tool, not an investment. People will not buy it to hold like they would a stock or a bond, expecting it to pay income or increase in value. Instead, Libra is like cash. People will use it to send money to family members in other countries, for example, or to make purchases.

The Libra Reserve

Unlike existing stablecoins—digital currencies designed to minimize volatility by being "pegged" to a single asset—Libra will not have a fixed value in any single real-world currency. Instead, Libra will be fully backed on a one-to-one basis through the Libra Reserve, which will hold a basket of currencies in safe assets such as cash bank deposits and highly liquid, short-term government securities. These currencies will include the U.S. dollar, the British pound, the euro, and the Japanese yen. This approach will minimize exposure to fluctuations from a single region, providing further stability for people around the world who could rely on Libra for their daily financial needs.

The assets in the Libra Reserve will be held by a geographically distributed network of regulated custodians with investment-grade credit ratings to provide high auditability, as well as transparency, security, and a decentralization of the assets. These custodians are well-versed in safekeeping billions and even trillions of dollars worth of assets. Because Libra will be backed by the Reserve, anyone using Libra should have a high degree of confidence that they will be able to sell it for local fiat currency based on an exchange rate, just like exchanging one currency for another when traveling.

The currencies represented in the Libra Reserve will be subject to their respective government's monetary policies—policies those governments will continue to control. The Libra Association, which will manage the Reserve, has no intention of competing with any sovereign currencies or entering the monetary policy arena. It will work with the Federal Reserve and other central banks to make sure Libra does not compete with sovereign currencies or interfere with monetary policy. Monetary policy is properly the province of central banks.

The Libra Association

Overseeing the Libra Blockchain and the Libra Reserve will be a significant undertaking and responsibility; no single organization can, or should, be solely responsible for it. We believe a cooperative approach is both warranted and necessary, and we are therefore working to develop the Libra Association: an independent membership-based organization.

The initial group of organizations that will work together on finalizing the association's charter and become "Founding Members" upon its completion are, by industry:

- Payments: Mastercard, Mercado Pago, PayPal, PayU (Naspers' FinTech arm), Stripe, Visa
- Technology and marketplaces: Booking Holdings, eBay, Facebook/Calibra, Farfetch, Lyft, Spotify, Uber
- Telecommunications: Iliad, Vodafone
- Blockchain services: Anchorage, Bison Trails, Coinbase, Xapo
- 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

Each of the Libra Association members—a diverse and global group of companies, not-for-profits, NGOs, multilateral organizations, and academic institutions—will be represented on the Libra Association Council. Through the Council, the Association will be responsible for the governance of the Libra Blockchain. It will oversee the evolution of the blockchain's protocol and network and will continue to evaluate new techniques that enhance privacy in the blockchain while taking into account concerns of practicality, scalability, and regulatory impact. It will also serve as the governing body through which the Libra Reserve is managed. All decisions will be made democratically and transparently. To ensure the Association includes a diverse membership, the Association will work to remove as many financial barriers as possible so that a significant number of nonprofit and multilateral organizations, social impact partners, and universities can join.

Facebook teams have led the creation of the Libra Association and the Libra Blockchain and will maintain a leadership role through 2019. Once the Libra network launches, however, Facebook and its affiliates will have the same privileges, commitments, and financial obligations as any other founding member of the Association. We hope to have approximately 100 such members before the Libra Blockchain launches. As one member among many, Facebook's role in governance of the Association will be equal to that of its peers. Facebook will have only one vote and will not be in a position to control the wholly independent organization.

III. The Libra Association's Implications for Consumers, Investors, Financial Market Integrity and Stability, and the Economy

The Libra Association is committed to working with policymakers and regulators to achieve a safe, transparent, and consumer-friendly implementation of Libra and to ensure that the proper regulatory oversight and other controls are in place to protect financial market integrity and stability, and the economy as a whole. The Association recognizes that blockchain is an emerging technology and that policymakers must determine how this technology will fit into the regulatory landscape.

The Role of Regulators and the Adequacy of Regulatory Protections

Regulatory frameworks for digital assets are beginning to emerge nationally and internationally. The Libra Association will continue to work with regulators and policymakers to ensure that it complies with all applicable legal and regulatory requirements.

Over the past year, federal regulators have repeatedly emphasized their commitment to fostering innovation. This is true as a general matter, as one can see with the Treasury Department's report on FinTech and Innovation. But it is also true in the use of novel technologies to support compliance with anti-money-laundering (AML), combating the financing of terrorism (CFT), and sanctions regulations. The U.S. Treasury Department's Financial Crimes Enforcement Network (FinCEN), the Federal Reserve, the Federal Deposit Insurance Corporation, and the National Credit Union Association have come together to emphasize the important role that new technologies can play in helping companies large and small meet their AML/CFT and sanctions compliance obligations. The Libra Association is committed to taking up this charge, and devoting its considerable technical expertise to this task.

To be clear, the Libra Association expects that it will be licensed, regulated, and subject to supervisory oversight. Because the Association is headquartered in Geneva, it will be supervised by the Swiss Financial Markets Supervisory Authority (FINMA). We have had preliminary discussions with FINMA and expect to engage with them on an appropriate regulatory framework for the Libra Association. The Association also intends to register with FinCEN as a money services business.

Law Enforcement and National Security

The Libra Association is similarly committed to supporting efforts by regulators, central banks, and lawmakers to ensure that Libra contributes to the fight against money laundering, terrorism financing, and more. A network that helps move more paper cash transactions—where many illicit activities happen—to a digital network that features regulated on- and off-ramps with proper know-your-customer (KYC) practices, combined with the ability for law enforcement and regulators to conduct their own analysis of on-chain activity, will present an opportunity to increase the efficacy of financial crimes monitoring and enforcement. The Libra Association will continue to engage proactively and openly with all relevant stakeholders on these key issues. Libra should improve detection and enforcement, not set them back.

The Libra Association will also maintain policies and procedures with respect to AML and the Bank Secrecy Act, combating the financing of terrorism, and other national security-related laws, with which its members will be required to comply if they choose to provide financial services on the Libra network.

Consumer Protection and Data Privacy and Security

Protecting consumers and ensuring people's privacy is one of the Libra Association's top priorities. The Association is committed to working with regulators as they explore the application of relevant laws to distributed ledger technology.

Privacy on the Libra Blockchain will be similar to existing blockchains; transactions include only the sender and receiver's public addresses, the transaction amount, and the timestamp. No other information will be visible. The Association will not separately hold any personal data on people who use the blockchain, no matter how it otherwise could be collected, and will not run any infrastructure. As a result, the Association cannot, and will not, monetize data on the blockchain. For the purposes of data and privacy protections, the Swiss Federal Data Protection and Information Commissioner (FDPIC) will be the Libra Association's privacy regulator.

IV. Calibra

Because the Libra Blockchain will exist as an open-source ecosystem, businesses and developers around the world are free to build competitive services on top of it. And Facebook intends to be one of the many businesses that will do so. To that end, we recently established Calibra, a Facebook subsidiary whose goal is to provide financial services using the Libra Blockchain. The first product Calibra intends to introduce is a digital wallet for Libra that will be available in Messenger, WhatsApp, and as a standalone app. The Calibra wallet will let users send Libra to almost anyone with a smartphone, similar to how they might send a text message, and at low-to-no cost. We expect that the Calibra wallet will ultimately be one of many services, and one of many digital wallets, available to consumers on the Libra network.

We do not expect Calibra to make money at the outset, and Calibra customers' account and financial information will not be shared with Facebook, Inc., and as a result cannot be used for ad targeting. Our first goal is to create utility and adoption, enabling people around the world—especially the unbanked and underbanked—to take part in the financial ecosystem.

But we expect that the Calibra wallet will be immediately beneficial to Facebook more broadly because it will allow many of the 90 million small- and medium-sized businesses that use the Facebook platform to transact more directly with Facebook's many users, which we hope will result in consumers and businesses using Facebook more. That increased usage is likely to yield greater advertising revenue for Facebook.

V. Calibra's Implications for Consumers, Investors, Financial Market Integrity and Stability, and the Economy

Companies offering services on the Libra Blockchain will need to be fully compliant with the laws and regulations in the jurisdictions in which they operate, and that includes the Calibra wallet. We want to ensure that Calibra operates with the appropriate level of regulatory oversight and controls to protect consumers, investors, financial market integrity and stability, and the economy as a whole.

The Role of Regulators and the Adequacy of Regulatory Protections

One of the reasons that Calibra was established as a Facebook subsidiary was because it will be providing financial services, and it will be regulated accordingly. The Calibra wallet will comply with FinCEN's rules for its AML/CFT program and the rules set by the Office of Foreign Assets Control (OFAC) with respect to financial sanctions. State financial regulators will regulate Calibra as a money transmitter, and the Federal Trade Commission and the Consumer Financial Protection Bureau will monitor for consumer protection and data privacy and security issues. Calibra has filed for state money transmitter licenses in the U.S. and it is also registered with FinCEN as a money services business.

Law Enforcement and National Security

Similarly, Calibra will comply with the Bank Secrecy Act and will incorporate KYC and AML/CFT methodologies used around the world, including those focused on customer identification and verification, and risk-based customer due diligence, while developing and applying technologies such as advanced machine learning to enhance transaction monitoring, and suspicious activity reporting. Calibra's efforts will be commensurate with its risk profile based on several factors, such as Calibra's product features, customer profiles, geographies, and transaction volumes.

Consumer Protection and Data Privacy and Security

Calibra is also being designed with a strong commitment to protecting customer privacy. Calibra believes that customers hold rights to their data and should have simple, understandable, and accessible data-management controls. Calibra will not share individual customer data with the Libra Association, no matter how it might be collected, nor will Calibra receive other personally identifiable user data from the Libra Association. And, except in limited circumstances, such as preventing fraud or criminal activity and complying with the law, Calibra will not share customers' account information or financial data with Facebook unless people agree to permit such sharing. Calibra customer account information and financial data will not be used to improve ad targeting on the Facebook, Inc. family of products.

VI. Legislation Barring Technology Companies from Digital Currency Businesses

We are aware that the House Financial Services Committee may consider a bill that would bar technology companies from engaging in digital currency activities. Before adopting such a prohibition, we think Congress should thoroughly explore the implications and unintended consequences of erecting statutory barriers between technology and digital currency activities as if they were two separate pursuits. Continual improvements in technology are central to the delivery of digital money transfer services today and will continue to be in the future. A barrier would simply take competitive pressure off of traditional payment system firms and decrease their incentive to innovate for the benefit of the U.S. consumer.

Imposing legislative barriers between technology firms and digital currency activities would further impair the ability of U.S. companies to compete on the world stage, where no such barriers exist. The U.S. technology industry has brought a wealth of convenience and cost-savings to consumers over the last fifty years; new legislation keeping technology companies permanently out of digital currency activities would lessen competition and stifle innovation in the U.S. payment system sector, making U.S. consumers worse off than consumers in other countries and making U.S. payment system companies less competitive with their peers overseas.

VII. Conclusion

The goal for Libra is straightforward: A digital currency built on a secure and stable open-source blockchain, backed by a reserve of real assets, and governed by an independent association. We want to create more access to better, cheaper, and open financial services—no matter who you are, where you live, what you do, or how much you have. We recognize that the road to reaching that goal will be long, and it will not be achieved in isolation. That is why we have begun publicizing the vision for Libra and why we have been discussing, and will continue to discuss, how best to achieve that goal with businesses, nonprofit and multilateral organizations, and academic institutions from around the world, as well as with policymakers, central banks, and regulators. We recognize the authority of financial regulators and support their oversight of this project.

Thank you for having me here today. I look forward to answering your questions.

Written Statement of Proposed Testimony

by

Katharina Pistor
Edwin B. Parker Professor of Comparative Law and
Director, Center on Global Legal Transformation
Columbia Law School

for the Hearing entitled
"Examining Facebook's Proposed Cryptocurrency and
Its Impact on Consumers, Investors, and the American Financial System"

before the Committee on Financial Services, U.S. House of Representatives

17 July 2019

Chairwoman Maxine Waters, Ranking Member Patrick McHenry, and other members of the Committee, thank you for the opportunity to participate in this Hearing to examine Facebook's proposed global cryptocurrency, Libra, and its impacts on consumers, investors, and the American financial system.

I am a professor at Columbia Law School, where I have taught for the past 18 years, mostly in the fields of corporate law; law and finance; comparative law; and law and development. I am also the director of the Law School's Center on Global Legal Transformation. I have researched the legal underpinnings of global money and finance with comparative and historical perspectives for more than a decade, and have multiple publications that speak directly to this issue. A CV with a full list of publications has been submitted to the Committee.

For the record, I have received a research award as well as grants for my center and that have funded doctoral students and postdoctoral scholars, as well as conferences and workshops related to the above topics from the Humboldt Foundation jointly with the Max Planck Society and the Institute for New Economic Thinking. I have also benefited from Columbia Law School's customary summer research funding for faculty.

Based on my own research, an analysis of the Libra White Paper and related documents that have been released so far, and a close reading of other comments and analyses of Libra, I have come to the following conclusions:

- Facebook's Libra is designed to become a "new global currency" that will complement existing fiat currencies. It is designed as a for-profit "currency of currencies."
- The Libra White Paper promises to create a seamless, global, safe, and inclusive payment system based on modern digital technologies. Libra is labeled a "stable coin"

and as such aims at delivering low volatility and high liquidity to its customers, the holders of Libra coins, who shall be able to exchange their Libras against (local) fiat currency on demand without suffering major haircuts.

- To this end, Libra is backed by a reserve composed of "safe" assets. The safe assets of choice are bank deposits and the liquid debt of reputable sovereigns. These assets owe their safety to *public* backstopping mechanisms in the form of deposit insurance and the "full faith and credit" of the issuing sovereign. In effect, the sponsors of Libra and its profit-earning beneficiaries will be free riding on a public safety net for which they are not paying.
- The main governance architecture of Libra resembles currency boards employed by some countries that use currency baskets to back their currencies, such as Singapore and Kuwait, with the important difference that Libra shall deliver profits for its beneficiaries. All interests and dividends will be allocated to the members of the Libra Association and or investors in Libra Tokens (which are distinct from Libra coins); none to its customers, the holders of Libra coins.
- The central node of what will become an ecology of financial intermediaries is the Libra Association, based in Geneva, Switzerland. It will exercise control over the admission of future members, manage the Libra Reserve, determine asset eligibility for the Reserve, decide whether to amend the protocol on which Libra runs, and determine if, when, and how Libra's architecture will evolve from a club-like or permissioned system to a permission-less system.
- This concentration of power is unmatched by any meaningful accountability to anyone. The choice of the legal structure means that the members of the Libra Association will be insulated from liability and accountable only to themselves. They will not be accountable to holders of Libra coins or to the citizens of countries that create the safe assets used to backstop Libra.
- Existing legal and regulatory frameworks in the United States and elsewhere are highly incomplete and leave ample room for legal as well as digital arbitrage. They were not designed to govern digital currencies. Regulators are currently using a case-by-case approach to extend their reach, which is no match for the fast-moving technological change.
- Libra's global reach exacerbates these problems. Many of the activities associated with managing Libra and its Reserve will be beyond the reach of regulators in the United States, or any other country for that matter. The current level of transnational regulatory cooperation does not match the versatility of a private actor, such as Facebook, to pick and choose from legal systems around the globe which laws and regulations best suit its needs.

Cryptocurrencies: A New Opportunity

We live in an age of rapid technological change. Recent advances in digital and crypto technologies have created an opportunity to transform financial systems, both domestically and globally, in ways that would have been unimaginable just a few years ago. They put the dream of an inclusive and efficient financial system within our reach.

Realizing this dream will, however, require great care. "This time is different" is a powerful argument that has been used time and again to advance a new financial technology, as Carmen Reinhart and Kenneth Rogoff have shown in their pathbreaking book (2014). Yet their analysis of 800 years of history of financial crises shows that history tends to repeat itself. This should not stop us from innovating. However, it should caution us before we plunge ourselves into yet another financial experiment, especially one that aspires to be both transformative and global.

In the aftermath of the 2008 crisis, regulators have required banks to make a "living will": a plan for how they might unwind themselves, should they face insolvency. We should require something similar from the sponsors of Libra and other financial innovations that are likely to exert systemic effects on both domestic and global money and financial systems. Legislatures and regulators should arguably do the same: They should scrutinize whether they have the regulatory and supervisory means in place to respond to a possible crisis scenario either alone or in collaboration with regulators from other countries. And if not, they should quickly put such rules in place to ensure effective crisis prevention.

A Private Currency Backed by Sovereign Assets

According to the White Paper, Libra aspires to become a global currency in the specific *form* of a cryptocurrency. It is not meant to replace existing state issued currencies (at least not yet). Instead, it will use select fiat currencies for determining its value (or unit of account) and will hold assets denominated in these currencies in its Reserve. In short, the Libra is designed as a currency of currencies.

A weakness of this design, as acknowledged in the White Paper, is that the exchange rate of Libra will fluctuate with the value of the underlying assets. This may deter customers who currently enjoy stable state-issued fiat currencies, like the U.S. Dollar or the British Pound (unless they can save on other costs, such as credit card charges), but will likely attract customers from countries with weak(er) or more volatile currencies.

The strength of the design, especially when compared with other cryptocurrencies, is that Libra is backed by "safe assets" that will be held in the Libra Reserve. The two examples for safe assets given in the White Paper are bank deposits and short-term, and thus liquid, debt of reputable sovereigns. The White Paper even refers to these assets as "real" assets having "intrinsic" value. It should, however, be noted that neither fiat currencies nor sovereign debt fit the classic definition of "real" assets, which is typically reserved for commodities, gold, or land.

Nonetheless, choosing government-issued and government-insured assets was a smart move, because only (some) sovereign states can ensure asset safety: States that have their own currency, issue most of their debt in their own currency and under their own laws, and oversee financial intermediaries that also issue most of their debt in the currency of their home regulator.

States ensure asset safety by putting the future productivity of their economies and tax-paying citizens on the line. They insure bank deposits (up to a ceiling) and they stand in for the sovereign debt they have issued. It follows that the safety of Libra depends on the backstopping prowess of select sovereign states, foremost among them the United States and a handful of other countries with a track record as stellar debtors and guarantors of a stable banking system.

The White Paper claims that Libra will be immune from external events because of the safe assets in the Libra Reserve. But it should be noted that safe assets are in high demand globally even today, over a decade after the crisis. In a crisis scenario, there tends to be a rush to safety, as indicated by the dollar scarcity during the 2008 crisis. In such a scenario, investors will pay for the ability to keep their assets safe. A repeat of such a crisis scenario at some point in the future can hardly be ruled out. This means that the global demand and supply of safe assets would affect the Libra Reserve, quite independent of its own operations. As a currency of currencies that reaches billions of households globally, it might well amplify movements in foreign exchange markets.

The White Paper emphasizes the supply of Libra will follow strictly supply and demand — for Libra that is. It does not say how the Libra Association might respond to a (sudden) scarcity of safe assets relative to Libra. While it is possible to change the composition of assets in the Reserve, this will require a two-thirds majority vote by members of the Libra Association, a time-consuming process in an emergency situation.

Furthermore, any substitution of assets would raise safety concerns. The financial sector might fill the void and create assets that meet Libra's demand and (revised) Reserve safety criteria. This should be reason for concern. Recall the massive expansion of "safe" assets that were created by way of legal securitization and *tranching* techniques in the run up to the 2008 crisis. This gave us a garden variety of "safe" assets, including super-senior tranches in asset-backed securities (ABS), collateralized debt obligations (CDOs), and their squared and cubed variants. Money market funds, pension funds, and other intermediaries with a high demand for "safe" assets used them to expand their portfolios. Yet, when house prices deteriorated and default rates increased, assets that seemed safe yesterday became "toxic" virtually overnight.

Financial crises spread through contagion. The transmission mechanisms vary depending on the structure of the financial system. In an era when banks dominated financial system, bank runs were common. They were highly visible and took the form of long lines of depositors trying to withdraw "their" money from the banks. In the 2008 crisis, we witnessed runs on entire asset markets, including fully collateralized ones. Interdependence of assets and counter-parties served as the transmission belt for relatively small price signals. It is not difficult to imagine a "run on cryptos" or a "run on Libras" — whether in response to a truly exogenous shock, to major operational problems, or to heightened safety concerns about assets held in the Reserve. In a hypothetical run on Libra, the transmission mechanism would most likely be a combination of price signals in critical asset markets and social media, which would put billions of Libra holders around the globe on notice.

All of this would matter less if Libra were just one of many other cryptocurrencies that have entered and exited, risen and fallen, over the past decade. Libra's ambition, however, is of a different kind. It wants to be a global currency and, if allowed to go forward, would be rolled out at breathtaking speed by Facebook, a company that currently has over 2.5 billion users worldwide.

Facebook has teamed up with other companies, some of which are already providing digital payment services through subsidiaries, such as Vodafone; others whose customers may opt for Libra to settle their accounts for car hiring and similar services; and yet others that may have seen the writing on the wall that their services as credit card providers, for example, might soon be substituted by Libra. Their customers might join the Libra ecology. In addition, Libra's sponsors want to reach out to the unbanked of this world, 1.7 billion people by the White Paper's account, some of whom but hardly all may already have a Facebook account.

In short, there can be little doubt about the intention of this project: the rapid scaling of a new global currency with billions of customers around the globe. The control over this currency will be vested in a single organization, the Libra Association. Only scale will ensure that Libra will become profitable and generate returns on the minimum investments of $10 million each, the Founding Members or Token investors are asked to make.

Technical and regulatory obstacles may slow down Libra's expansion. Perhaps there will not be enough takers, especially in developed markets with stable fiat currencies. Nonetheless, the Libra has the potential to transition in no time from "too small to care" to "too big to fail."[1]

Power Without Accountability

Libra has been advertised as a solution to the challenge of creating an inclusive global payment system that serves as a "public good" so that more people can "have access to financial services and to cheap capital" and realize their "inherent right to control the fruit of their labor." Little information is available at this point on how the interface between Libra and the cash economy of the unbanked will operate. Experience in Kenya, Mali, and the Fijis suggests that liability rules for the providers of digital services is critical to ensure effective

[1] Zetzsche, Buckley and Arner, "Regulating the Libra: The Transformative Potential of Facebook's Cryptocurrency and Possible Regulatory Responses," [2019] UNSWLRS 47.

monitoring of agents who directly interface with customers. It would be helpful to get more information from Facebook about its plans for Libra in this regard.

As currently structured, the governance architecture for Libra is designed to insulate the sponsors of Libra and the founding and possible future members of the Libra Association from liability and accountability.

Libra is sponsored by a consortium of private actors who will become members of an association (a *Verein*) under Swiss law that will shield them against liability. Initial membership is by cooptation. The Libra Reserve will most likely be held in a separate legal entity, such as a trust or corporation (commonly referred to as a special purpose vehicle, or SPV). This will ensure that the Reserve will be immune from any liabilities the Libra Association might incur. Conversely, the Libra Association will have no access to the assets held in the Reserve to meet any liabilities of its own. Since returns will be passed on to the Association's members (and Token holders), the Association may not have significant assets to cover any liabilities of its own.

The Libra Association will have the power, through its organs, to allocate returns on the assets held in the Libra Reserve. They will be used to cover the operational costs of the Libra Association, including the salaries for the Executive Team, returns for the members of the association, as well as dividends for Libra Token holders. In contrast, customers will not receive any returns for depositing fiat currency in exchange for Libras. The Libra White Paper bemoans that the poor are charged fees they cannot afford to access regular banking services, yet they would be denied any compensation for the time value of their money within the Libra framework.

The Libra Association, "an independent, Swiss not-for-profit organization" has been established in Geneva, Switzerland. Under the Swiss civil code (*Zivilgesetzbuch*) an association, or *Verein*, is designed as a legal person with a highly flexible governance structure to accommodate a range of "non-economic interests." Case law, however, has expanded the use of the *Verein* for economic interests.

Nonetheless, as a non-profit entity, the association itself would not be eligible to be licensed to offer financial services under Swiss law, nor be permitted to pay dividends to its members. Some commentators have speculated that a separate entity, "Libra Networks s.a.r.l.," which Facebook established as a limited liability company under Swiss law in April 2019, may serve as a kind of for-profit clone of the Libra Association that will be licensed and will have the power to pay dividends to Libra Token holders.[2] Founding Members of the Libra Association who receive Libra tokens for their investment might use these tokens to buy shares in this entity.

---

[2] The company is officially registered under the file number 08398/2019. See also Zetzsche et al., supra.

Given the incomplete disclosure about Libra Tokens and Libra Networks, it is impossible to say whether this conjecture is correct. More information is needed from Facebook about the overall governance architecture, the entities that have already been established and others that are expected to become part of the Libra ecology, their relation to one another, and to the regulatory frameworks in the countries in which they will be established or intend to operate.

The Libra Association shall be a member-based organization. It shall be governed by the Association's Council and the Association's Board. The day-to-day management would be carried out by an Executive Team under the leadership of a Managing Director to be elected by the Council for a three-year term than can be renewed indefinitely.

The membership of the association would be made of the "validator nodes of the Libra network," initially the "Libra founding members." To become a node, an entity "needs to make an investment of at least $10 million in the network through purchasing Libra Investment Tokens." It would be possible for investors to acquire tokens without assuming a role as validator node. Node validators would obtain one vote in the Libra Council per every $10 million investment subject to a voting cap of the greater of "one vote or one percent of the total votes in the Council." Investors who are not validators would not be subject to this cap – a possible strategy for resourceful investors to expand their control in the Association.

At the outset, there would be only a limited number — up to 100 — of validator nodes. Within five years, at least 20 percent of the voting power would be allocated by the quantity of Libra coins individuals or entities hold. However, the actual pace of transition would be controlled by the Council. I could not find anything in the documents made public so far that would prevent the Libra Association to slow down or abandon the process to a permission-less system.

Most of the fundamental powers associated with running the Libra Association would vest in the Council, which would elect the Board, appoint the Managing Director, approve the budget, upgrade or change the existing protocol for Libra, and determine by a two-third supermajority vote the eligibility criteria for Founding Members, the Reserve Management Policy, and the Incentive Distribution Policy.

The Council would meet only bi-annually. Except for votes that explicitly require a supermajority, votes would be taken by regular majority, defined as 50 percent of the votes taken provided that at least two-thirds of total votes are represented at the meeting, or 50 percent of *all* Council Members' votes.

The Board would be elected by the Council and would consist of at least five and at most 19 members. Board Members would have to be members of the Council; they would be elected for a one-year term, but they could be re-elected indefinitely. Board Members could be removed by the Council at any time.

The powers of the Council, combined with the fact that at least initially, all Founding Members would be Council Members, suggest a rather flat organizational structure, one that resembles a direct rather than a representative model. Ultimately, however, we should expect the real powers to be exercised not by the Council or the Board, but by the Managing Director and his or her Executive Team.

The Managing Director would be elected by the Council for a term of three years, but could be reelected indefinitely. The Managing Director would also a member of the Board. Notably, the first Managing Director would be elected as soon as at least *five* members signed up as Founding Members. These first movers, and Facebook is likely to be among them, would therefore put in place the Managing Director and the Executive Team for the critical start-up phase of the Libra.

The Managing Director's major tasks are described as including "Libra *network* management," a wording that hints at powers beyond running the Libra Association. The Managing Director is charged with defining the processes for managing the Libra protocol, for reviewing and accepting changes to its implementation. He or she would also manage (or oversee the management of) the Libra Reserve, including the process of "minting and burning Libra," to "ascertain that the value of assets in the reserve meets the policy criteria," to "invest reserve in low-risk assets," and to "allocate funds (...) generated from interests on the reserve to fund the association activities ... and for distribution to nodes of investors" according to the terms of Libra investment tokens, Incentives distribution policy, and Council decisions. The Managing Director would recruit an Executive Team for all the core functions for a complex business.

Selecting an association as the entity that will be running a global currency as a for-profit business is a peculiar choice. Like trusts and foundations, associations have the capacity to perpetuate themselves without effective accountability. The Founding Members would control key decisions of the Association, including the decisions about its future decentralization, any changes to the guidelines, the protocol, and the composition of assets in the Reserve. The first 28 prospective members of the association have been recruited by Facebook. Given Facebook's control over the start-up phase, it is reasonable to assume that most, if not all, 100 original Founding Members would be hand-picked by Facebook, as would be the first Managing Director and the Executive Team. Facebook, in other words, would be first among equals in the Libra Association for some time to come.

In sum, the Libra Association aspires to create a global payment system on a for-profit basis. To achieve this goal, Facebook has chosen a governance structure that is designed not to have effective accountability mechanisms to anyone except the Association's Founding Members. They would be able to perpetuate their control, if they so wished, and could use their powers to maximize their returns rather than advance the interests of the Libra customers.

If Libra were to achieve its ideal scale, the network effects of this infrastructure would impede competition for alternatives that might better achieve the laudable goals the Libra White Paper has spelled out.

Incomplete Regulatory Governance

Libra would operate as a global currency in a highly fragmented regulatory environment defined largely by national boundaries. Most domestic regulatory regimes already struggle with applying the rules that have co-evolved with financial institutions and markets prior to the rise of crypto technologies to these new forms of financial intermediation. The regulatory framework's incompleteness offers ample opportunity for both digital and legal arbitrage.

Existing experience with attempts to regulate cryptocurrencies suggests that regulating Libra with the tools currently available would not be easy and might even be impossible. Depending on the purpose for which crypto assets are used or designed, a host of different regulatory regimes may be applicable, from securities and banking to anti-money laundering and e-money regulation (in the European Union). With the exception of e-money regulations, none was developed with cryptocurrencies in mind.

In the United States, the Securities and Exchange Commission (SEC) and the Federal Reserve have led the way in trying to interpret existing rules and regulations to these new assets. At the state level, several attempts have been made to issue new rules. For the most part, regulators have been reactive rather than proactive. They have interpreted the rules after the fact; that is, after scandals, such as the premature demise of The DAO, had come to their attention.

In a more proactive mode, the Federal Reserve released a report on "distributed ledger technology" (DLT) in 2016.[3] However, the bulk of the report was devoted to the problem of banks moving into new technologies. For tech firms, such as Facebook, that are moving in the opposite direction, taking on traditional financial intermediary roles, the Federal Reserve had the following advice: they will "likely need to acquire some type of charter or license to provide services or conduct activities that involve the holding and transferring of assets and behalf of households and businesses."[4]

Private actors, however, have little incentive to seek out such licenses themselves. Some have paired up with existing regulated financial intermediaries to side step the issue. The only license that Facebook has obtained, through its subsidiary Calibra, is that of a "Money Services Business" under the Financial Crimes Enforcement Network (FinCEN). The plan to create wallets for customers to acquire and hold Libra in exchange for fiat money has not prompted Calibra to seek a banking license or regulation under the Securities Investment Protection Act.

---

[3] "Distributed Ledger Technology in Payments, Clearing, and Settlement", Finance and Economics Discussion Series, 2016-95.
[4] Ibid, p. 29.

The Federal Reserve clearly sensed the ambiguity of its own advice in the DLT report and sent a strong signal to legislatures and regulators to take charge. "The nature and form of such charters or licenses remains an open question as lawmakers and regulators may consider whether existing financial institution licenses are sufficient, or alternative licenses need to be developed."[5] After the publication of the Libra White Paper, Chairman Powell has reiterated the need for taking time and precaution.

The United States' regulatory reach is, in principle, bounded by its own territory. Facebook and Calibra, Facebook's subsidiary are U.S. companies. They therefore fall within the reach of U.S. laws and regulations, not however the Libra Association, Libra Networks and many other entities that would be part of the Libra ecology. To ensure effective supervision, the United States will therefore have to cooperate with other nations. Indeed, the forthcoming G-7 meeting will take up the issue of Libra.

By contrast, private parties can freely avail themselves of foreign law as Facebook has already demonstrated in choosing Swiss law for the Libra Association and for Libra Network, the limited liability company. We have not been told which law would govern the entity that will keep the Reserves. While one might suspect that at least one of the custodians who will manage the Reserves will be located in the United States, the White Paper has announced that they will be geographically and, by implication, jurisdictionally dispersed. U.S. law might still apply assets that traded on exchanges or otherwise connected to U.S. jurisdiction, but it will almost certainly not reach the entire Libra ecology.

Towards an Inclusive Global Payment System

The announcement of an imminent launch of a global payments system based on crypto technology indicates that we are on the cusp of a major transformation of money, payment systems, and finance. The new technology offers the potential for a low-cost, highly inclusive transnational, if not global, payment system that may well expand into other financial services.

Several experiments are already underway, including digital, phone-based payment systems in Africa and digital payment systems linked to trading platforms in China. The experience with these networks suggests that they can scale up fast. While the technical demands for scalability may have been met, important governance challenges remain. The preceding analysis of Libra's governance architecture raises the specter that private agents will put their interests in maximizing profits and insulate themselves from liability and accountability over the public interest in the creation and maintenance of a truly inclusive global payment system. It is therefore time for legislatures in the United States and elsewhere to assess how the goals for such a system might best be accomplished.

---

[5] Ibid.

Central bank-backed cryptocurrencies are one widely discussed alternative. So far, the central banks of most Western countries have hesitated to take this step. The reasons are telling and should be kept in mind when assessing Libra and similar ventures. Central bankers in the United States and Germany have voiced concerns about the transition costs associated with the introduction of central bank-based cryptocurrencies, not least the likely fallout for the existing banking system. In addition, they have highlighted the need for effective identity authentication to address money laundering issues and the like.

The introduction of a cryptocurrency may indeed have serious implications for retail banking beyond the payment system. Especially in countries with weak official currencies, a new cryptocurrency may soon become a substitute for retail banking deposits, depriving banks of resources for their credit operations. In short, a "run to digits" will have to be managed, and ultimately it will be the task of domestic regulators and central banks to do so, whether they introduce cryptocurrencies themselves or leave the task to private actors.

Facebook has already recognized the need for identify verification and announced that it would require government-issued identification cards. Indeed, if allowed to go forward, Facebook might become *the* provider of a global digital identity. The question before us is not whether such identities need to be created, but who shall do so: governments that are subject to democratic control, or private actors that can insulate themselves from any accountability.

Keep Big Tech Out of Finance Act Bill

I have also been asked to comment on a draft bill that aims to prohibit large platform utilities "from being a financial institution or being affiliated with a person that is a financial institution" (the Bill). In effect, the bill seeks to prevent Big Tech companies from controlling or being controlled by financial institutions. The list of such financial institutions is comprehensive and would include a branch or agency of a foreign bank.

The separation of deposit taking and payment systems from other financial activities, in particular investment banking, has a long history in the United States. The Bill would extend this separation to "large platform utilities" that operate an online market place or social network with an annual global revenue of $25 billion or more.

This Bill would require important changes in the current architecture of Libra. It might force Facebook to separate itself from Calibra, its subsidiary, which has been registered as a money services business. Having said this, the same structure could be largely reconfigured contractually. As such, the Bill would be a "game slower," not a "game stopper." It would, however, give Congress as well as regulators, possibly under the leadership of the Financial Stability Oversight Council, some breathing space to deliberate about the best governance structure for cryptocurrencies and global payment systems.

Conclusion

The publication of the Libra White Paper has accelerated a debate that has long been coming: a debate about how to harness the opportunities and meet the challenges associated with fast-moving innovations in technology, including crypto technology. These technological changes are advancing simultaneously in many sectors of the economy. Money and finance may be thought of as the nervous system of the economy. Whoever controls this system wields enormous powers. How this power will be exercised, whose interests it will serve, and how it can be held accountable is of fundamental importance not only for the future of money and finance, but also for democratic self-governance.

I appreciate the opportunity to share my thoughts about this today and I look forward to your questions.

Written Testimony of

Robert Weissman
President, Public Citizen

before the

The House Financial Services Committee

On

"Examining Facebook's Proposed Cryptocurrency and its Impact on Consumers, Investors, and the American Financial System"

July 17, 2019

Madam Chairwoman and Members of the Committee,

Thank you for the opportunity to testify today on regulatory policy issues. I am Robert Weissman, president of Public Citizen. Public Citizen is a national public interest organization with more than 500,000 members and supporters. For more than 45 years, we have advocated with some considerable success for consumer protections and more generally for government and corporate accountability.

The Committee is performing a vital service by examining Facebook's proposal to create a private, global currency; and I want to thank you, Madam Chairwoman, for immediately calling for a moratorium on Facebook's plan and now for prophylactic legislation to avoid the very serious risks posed by Facebook's scheme.

With dozens of other consumer, privacy, economic security and other organizations, we echoed your call for a moratorium in a July 2 letter which I have attached to this testimony. That letter included a long list of disturbing questions about Facebook's plans for Libra, its proposed currency, and Calibra, the company's proposed digital wallet by which consumers and businesses could transact using the Libra currency.

My testimony today builds on that letter but reflects only the views of Public Citizen.

We believe that Facebook should not be permitted to proceed with its plans to create a private, global currency.

To be sure, Facebook will have to overcome serious technological and business hurdles to launch Libra and take its new currency to scale. It is entirely possible, some believe likely, that the company will fail in the effort. But it is also possible that Facebook will succeed in taking the currency to scale; and, from a public policy point of view, we must consider what might happen if Facebook succeeds.

We believe the successful launch of a private, global currency tied to Facebook – the dominant firm in social media with more than two billion users -- portends grave risks for the global economy, financial stability, efforts to control illicit money flows, market competition and consumer well-being.

Some of the challenges that Facebook's proposal presents could potentially be addressed with very aggressive regulation, but there is little reason to believe regulators will be equipped to handle these problems once Libra launches. Other challenges seem inherent in the Libra proposal and appear unsolvable.

In my testimony today, I want to highlight the following points:

- The Libra proposal is overwhelmingly likely to extend and deepen Facebook's dominance in social media, improperly extend its social media dominance into the global payments market and potentially into the market for real goods as well, exclude and punish competitors, and rip off consumers and deny them the benefit of newly innovative products.

- At scale, Libra will become systemically important, but without the controls on financial institutions – such as deposit insurance – designed to protect against systemic risk.
- As a private, borderless currency, Libra will make it very difficult to ensure consumers are afforded appropriate disclosures, civil remedies, protection against usury, fair access to credit, defense against unfair and deceptive practices, and more. There is good reason to worry that the Libra world will be a welcoming home for hucksters and scam artists.
- No matter what Facebook now promises, Libra and Calibra threaten to make Facebook a corporate surveillance leviathan with no precedent outside the realm of science fiction, giving the company dramatically enhanced power over information flows and our economy, while also potentially worsening the already serious problem of algorithmic racial discrimination.
- The Libra proposal poses a fundamental threat to nations' ability to maintain their own monetary policy and to take measures to address currency crises.
- Tax cheats, organized criminal enterprises, money launderers and others will rush to take advantage of Libra, and it is not at all apparent how these abuses can be prevented.

I also want to underscore a crucial point that applies across the range of concerns with Libra and Calibra: Policymakers cannot and must not rely on Facebook's representations about how Libra and Calibra will operate.

Facebook aims to mollify many of the criticisms it anticipated with a series of claims about how its new system will work. For example, to satisfy worries that Facebook and its partners in the Libra Association might create fiat money, Facebook says that for every new Libra purchased, a comparable amount of money in stable currencies will be held in reserve. To dampen concerns about privacy, Facebook says that its Calibra subsidiary will not share data with Facebook (except with consumer consent). But these unilateral, voluntary statements are subject to change at any time. Even if Facebook is being truthful right now about its commitment to these practices, its interest might change in the future – and so too may these voluntary statements.

Of course, when it comes to assessing the durability and trustworthiness of its assertions, Facebook is not just any company. It has demonstrated that its policies and statements are snapshots in time rather than real, abiding commitments and guarantees to consumers and the public, most notably through its repeated modifications of its privacy policy to enable more and more data sharing with third parties.[1]

[1] The Electronic Frontier Foundation noted in 2010: "Facebook originally earned its core base of users by offering them simple and powerful controls over their personal information. As Facebook grew larger and became more important, it could have chosen to maintain or improve those controls. Instead, it's slowly but surely helped itself — and its advertising and business partners — to more and more of its users' information, while limiting the users' options to control their own information." Kurt Opsahl, "Facebook's Eroding Privacy Policy: A Timeline," Electronic Frontier Foundation, April 28. 2010, available at: https://www.eff.org/deeplinks/2010/04/facebook-timeline. Journalist Matthew Keys surveyed Facebook's evolving privacy policies and identified 11 changes in privacy policy or practices over the decade from 2008-2018. He concluded: "Users who became invested in Facebook as a lifeline may have complained about all of those changes, but almost all of them acquiesced. Facebook always came out on top." Matthew Keys, "A Brief History of Facebook's Ever-Changing Privacy Settings,"

Even with constantly changing privacy policies, Facebook has repeatedly failed to adhere to the voluntary commitments it has made. In 2011, the company entered into a consent decree with the Federal Trade Commission (FTC) to settle charges that the company repeatedly violated its privacy policy. As the FTC summarized its complaint:[2]

- In December 2009, Facebook changed its website so certain information that users may have designated as private – such as their Friends List – was made public. They didn't warn users that this change was coming, or get their approval in advance.
- Facebook represented that third-party apps that users' installed would have access only to user information that they needed to operate. In fact, the apps could access nearly all of users' personal data – data the apps didn't need.
- Facebook told users they could restrict sharing of data to limited audiences – for example with "Friends Only." In fact, selecting "Friends Only" did not prevent their information from being shared with third-party applications their friends used.
- Facebook had a "Verified Apps" program & claimed it certified the security of participating apps. It didn't.
- Facebook promised users that it would not share their personal information with advertisers. It did.
- Facebook claimed that when users deactivated or deleted their accounts, their photos and videos would be inaccessible. But Facebook allowed access to the content, even after users had deactivated or deleted their accounts.
- Facebook claimed that it complied with the U.S.- EU Safe Harbor Framework that governs data transfer between the U.S. and the European Union. It didn't.[3]

The FTC settlement imposed a number of specific privacy-protecting duties on Facebook.[4] The commitments Facebook undertook were famously violated in the Cambridge Analytica scandal, where Facebook allowed Cambridge Analytica to exploit the private data of 50 million Facebook users in its effort to influence voting.[5] Facebook also has admitted to failing to securely store passwords[6] and recently has been reported to have paid teenagers to download spyware.[7]

Medium, March 21, 2018, available at: https://medium.com/@matthewkeys/a-brief-history-of-facebooks-ever-changing-privacy-settings-8167dadd3bd0.

[2] Federal Trade Commission, In the Matter of Facebook, Inc., available at: https://www.ftc.gov/sites/default/files/documents/cases/2011/11/111129facebookcmpt.pdf

[3] Federal Trade Commission, "Facebook Settles FTC Charges That It Deceived Consumers By Failing To Keep Privacy Promises," November 29, 2011, available at: https://www.ftc.gov/news-events/press-releases/2011/11/facebook-settles-ftc-charges-it-deceived-consumers-failing-keep.

[4] Federal Trade Commission, In the Matter of Facebook, Inc., Agreement Containing Consent Order, November 29, 2011, available at: https://www.ftc.gov/sites/default/files/documents/cases/2011/11/111129facebookagree.pdf.

[5] Kevin Granville, "Facebook and Cambridge Analytica: What You Need to Know as Fallout Widens," New York Times, March 19, 2018, available at: https://www.nytimes.com/2019/02/14/technology/facebook-ftc-settlement.html.

[6] Zack Whittaker, "Facebook admits it stored 'hundreds of millions' of account passwords in plaintext," TechCrunch, July 2019, available at: https://techcrunch.com/2019/03/21/facebook-plaintext-passwords.

[7] Josh Constine, "Facebook pays teens to install VPN that spies on them," TechCrunch, July 1, 2019, available at: https://techcrunch.com/2019/01/29/facebook-project-atlas.

News reports now indicate that the FTC has entered into a $5 billion settlement with Facebook, more than 200 times the largest fine ever imposed for privacy violations. Notably, news reports indicate that the settlement involved a series of violations reaching far beyond those connected to Cambridge Analytica.[8]

In short, this is not a corporation that should get the benefit of the doubt. It is definitely not a corporation on whose promises the nation and world should gamble with global financial stability, consumer protection, anti-money-laundering efforts and more.

Competition Concerns: Libra/Calibra May Extend and Deepen Facebook's Dangerous Market Power

Facebook has sought to assuage concerns about how Libra might leverage and expand its market and economic power by establishing a Libra governance structure that shifts authority over Libra away from Facebook and to the Libra Association, a private governance society in which no member may possess more than a 1 percent voting share. That move does not resolve the competition concerns around Libra, however. The Libra proposal is overwhelmingly likely to extend and deepen Facebook's dominance in social media, improperly extend its social media dominance into the global payments market and potentially into the market for real goods as well, exclude and punish competitors, and rip off consumers and deny them the benefit of newly innovative products. The Libra Association is poised to function as a de facto oligopoly, with the power to disadvantage those outside of the club, bully countries and exert undue influence over the future of the global economy.

There is reason to question whether the Libra Association structure will be sufficient to prevent Facebook from controlling the Libra. As the originator of the concept, the developer of the technology, presumably the largest original funder and certainly the largest provider of Libra services, Facebook may exert effective control over the Libra Association and Libra.

But Facebook does not need to control Libra for the project to deepen Facebook's market power. Facebook intends to integrate Calibra, Facebook's Libra wallet, into Facebook Messenger, WhatsApp and likely other Facebook products.[9] Immediately, one-third of the world's population will have access to Libra through Facebook. It is unlikely that any other wallet will ever be able to compete, and uncertain if any will try, rather than seek niche opportunities. In short, Facebook is likely to exert market dominance in the Libra trade immediately and for the foreseeable future.

Facebook has long proved masterful at pulling users into a closed ecosystem and there is every reason to suspect it will do the same with Libra and Calibra. Competing social media platforms are not likely to be able to or even seek to compete with Calibra. They might conceivably

[8] Emily Glazer, Ryan Tracy and Jeff Horwitz, "FTC Approves Roughly $5 Billion Facebook Settlement, Wall Street Journal, July 12, 2019, available at: https://www.wsj.com/articles/ftc-approves-roughly-5-billion-facebook-settlement-11562960538. Cecilia Kang, "FTC Approves Facebook Fine of About $5 Billion," New York Times, July 12 2019, available at: https://www.nytimes.com/2019/07/12/technology/facebook-ftc-fine.html.

[9] Josh Constine, "Facebook Answers How Libra Taxes and Anti-Fraud Will Work," TechCrunch, July 12, 2019, available at: https://techcrunch.com/2019/07/12/facebook-libra-taxes-trump/.

develop their own private, global currencies, but competition among a tiny number of closed financial/market ecosystems would be more like a dystopian oligopolistic cage fight than anything Adam Smith might celebrate. Genuine competition across a broad range of products would be stifled, and consumers would be left at the mercy of a handful of corporate leviathans.

Facebook says that its Calibra subsidiary will not share information with Facebook. There is no reason to believe that Facebook will respect this promise, or that it won't simply alter the terms of use for Calibra in the future. But the risks are great even if the supposed firewall is maintained. The Calibra product integrated into Facebook will become a way for Facebook to perpetuate its dominance. Facebook itself will likely know when and how users make use of Calibra on its own (i.e., even if Calibra does not share its data with the rest of the company), meaning it can then gain competitive advantage and monetize that information with more targeted ads or even by selling products directly to consumers. One market analyst hypothesizes: "Facebook also could use its own currency to drive more people to make purchases from ads on its social media sites. … 'This is about fostering more sales within an ad to get more business from advertisers to make ads more interesting on Facebook.'"[10]

The United States continues to separate banking and commerce through the Bank Holding Company Act, for good reason. The Calibra/Facebook arrangement may not run afoul of the Bank Holding Company Act's requirements given the new technologies involved, but it surely conflicts with the spirit. The anti-competitive and anti-consumer risks are legion. "Imagine Facebook's subsidiary Calibra knowing your account balance and your spending, and offering to sell a retailer an algorithm that will maximize the price for what you can afford to pay for a product," the Open Markets Institute's Matt Stoller wrote in the New York Times. "Imagine this cartel having this kind of financial visibility into not only many consumers, but into businesses across the economy. Such conflicts of interest are why payments and banking are separated from the rest of the economy in the United States."[11]

The Bank Holding Company Act restated centuries-old principles about separating banking from commerce, but the proximate cause for this legislation involved the sale by banks of insurance. Imagine if Facebook/Calibra were to engage in alliances with firms that produce goods and services, and then promote them through Calibra and Facebook; that in fact does appear to be part of Facebook's vision for the future of Libra. Or, even more seriously, imagine if Facebook purchases goods or services producers, promotes them through social media and offers discounts and/or financing through Calibra. That is also a very likely scenario. In either of these cases, or countless permutations, the issue of restraint of trade would become acute – but not easily addressed once in place.

The Libra Association itself will have enormous power, with equally enormous possibility for abuse. As Facebook co-founder Chris Hughes notes, "Facebook and its partners will decide which banks, payment processors and distribution agents to work with, making or breaking

[10] Gartner analyst Avivah Litan quoted in Rachel Lerman, "Facebook Launching Its Own Cryptocurrency, Libra, for 2 Billion-Plus Users," Associated Press, June 18, 2019, available at: https://abc7news.com/business/facebook-launching-its-own-currency-for-2-billion-plus-users/5351232/.

[11] Matt Stoller, "Launching a Global Currency is a Bold, Bad Move for Facebook," New York Times, June 19, 2019, available at: https://www.nytimes.com/2019/06/19/opinion/facebook-currency-libra.html.

companies in some markets overnight. This will entrench existing players rather than creating a truly decentralized system."[12] Facebook says that "Libra partners will create incentives to get people and merchants to use the coin, with anticipated examples ranging from Uber discounts to a Libra bonus paid when users set up a Calibra wallet, although the companies haven't laid out specifics."[13] Refashioned, or perhaps just reconsidered, those exact same practices could change from "incentives" for users to take up Libra to the Libra cartel's method of advantaging partners at the expense of competitors.

At a large enough scale – again, the ambition of Facebook's proposal forces us to think at scale - - the Libra Association may gain the power to bully or exert undue influence over national governments. There may be meaningful consequences for governments if and when the Association decides to change or recalibrate the basket of currencies upon which the value of the Libra is valued, or when the Association decides to move reserves from one nation to another.

Systemic Risk: Libra Will Create New Threats to Financial System Stability

The potential scale and novelty of the Libra proposal create financial systemic risks, some of which may be familiar, others of which may be hard even to conceptualize.

The main worry is a classic "run on the bank" scenario, i.e., what happens if the Libra Association is unable to deliver on the promise to exchange Libra for a real currency of the user's choice. For example, if Europeans worried about the value of the euro decided en masse to purchase Libra and then demanded payment in dollars, it is entirely possible the Association would not be able to pay out. If the Libra Association decided in the future to change its one-to-one reserve policy, or decided to invest some portion of the reserves speculatively and suffered losses, it could find itself unable to pay out. Or, because of failures among Libra Association members, breaches or questions about the Libra technology, new regulatory impositions, a failure by a bank holding a significant portion of the reserve, unforeseen rumors or developments, there could be a run on the Libra and demand for payment in real currency beyond the capacity of the reserve. These scenarios are all speculative, but they are entirely plausible. What would not be plausible is to imagine that runs on Libra are impossible – the history of the world financial system teaches that lesson plainly.

If Libra achieves anything like the scale Facebook plainly seeks, Libra and the Libra Association will become too big to fail. That poses familiar problems – acutely evident in the 2008 financial crash. Regulators essentially would be left with two untenable options. First, let the currency collapse, draining savings from potentially hundreds of millions of people, impoverishing untold millions and risking contagion that could throw the global economy into recession or worse. Or, second, bail out the Libra on a scale that could easily match or exceed the Troubled Asset Relief Program, taking from taxpayers to prop up the financial system, bail out the Libra Association and create a moral hazard risking the whole problem being repeated.

---

[12] Chris Hughes, "Facebook Co-Founder: Libra Coin Would Shift Power into the Wrong Hands," Financial Times, June 21, 2019, available at: https://www.ft.com/content/aa97ad20-91a0-11e9-8ff4-699df1c62544.
[13] Rachel Lerman, "Facebook Launching Its Own Cryptocurrency, Libra, for 2 Billion-Plus Users," Associated Press, June 18, 2019, available at: https://abc7news.com/business/facebook-launching-its-own-currency-for-2-billion-plus-users/5351232/.

By some descriptions, Libra will operate similar to a money market mutual fund. Customers will use their local currency, such as the U.S. dollar, to purchase units of Libra. Libra will then use these funds to purchase securities. Money market mutual funds proved a victim and a vector in the 2008 financial crisis. Reserve Primary had invested in Lehman bonds. When that firm declared bankruptcy, the fund was unable to redeem on a one-to-one basis (it "broke the buck").[14] That example highlights the prospect of a comparable disaster with Libra – at vastly greater scale.

Too-big-to-fail, moral hazard, excessive financial interconnectedness and disguised risks are familiar problems in the banking sector, which is why rules are in place to prevent such risks: mandatory not voluntary capital requirements, the separation of banking and commerce, depository insurance, prudential regulation and inspection, and more. Facebook's alternative is a unilateral, nonbinding and in any case inadequate promise to maintain a one-to-one reserve.

Not incidentally, the lack of depository insurance, escape from banking-style regulatory restraints and externalization of risk would create an unfair competitive advantage for Libra as against traditional financial service providers. That advantage is itself a moral hazard, potentially enabling Libra to expand beyond what it would if risks were not externalized, and, in a dangerously reinforcing cycle, exacerbating the too-big-to-fail problem.

Consumer Protection: Libra Threatens to Shred Consumer Protections and Become a Haven for Hucksters

Facebook is loudly proclaiming that Libra will be a boon to consumers worldwide. Most or all of those claimed benefits are likely to prove illusory, or are available without creation of a privatized, global currency. Its exemplar case is the remittance market, which is inarguably in need of competition and new approaches. But that competition is now underway with a growing number of lower-cost, electronic transfer alternatives to Western Union; competition does not require a new, private, global currency with its attendant risks. Other Facebook examples don't seem to make any sense; there is no reason, for example, to assume that Libra or the purported magic of blockchain technology will do anything to reduce payday lending abuses.[15]

By contrast, the Libra proposal presents a series of real consumer protection challenges that have no easy solutions. There is good reason to worry that the Libra world will be a welcoming home for hucksters and scam artists; and that the Libra Association will fail to afford many of the guarantees and protections that consumers typically expect from financial service providers.

The rise of new financial instruments will pose serious consumer protection challenges. If non-bank institutions continue to provide a growing share of novel and traditional financial services, regulators will have a hard time keeping apace. This is true for new products that offer true consumer advantage, as well as those that do not. By now we know as a matter of certainty that not all financial "innovation" is for the better.

[14] Financial Crisis Inquiry Commission, The Financial Crisis Inquiry Report, January 2011, available at: http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf.
[15] Libra Association Members, "An Introduction to Libra: White Paper," available at: https://libra.org/en-US/wp-content/uploads/sites/23/2019/06/LibraWhitePaper_en_US.pdf.

As a private, borderless currency, Libra multiplies the difficulties inherent with new fintech on matters relating to required disclosures, civil remedies, usury rules, access to credit, unfair and deceptive practices, and more:

- Will consumer protection laws even apply to Libra? It appears many will not, absent federal and state legislative action. Significantly, Libra does not fit the Uniform Commercial Code definition of money: "'Money' means a medium of exchange currently authorized or adopted by a domestic or foreign government. The term includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more countries."[16]
- Where does a transaction occur between a U.S. consumer or borrower and a foreign seller or lender?
- What limits if any are there on the ability of a foreign seller or lender to specify choice of a foreign entity's law?
- What limits if any are there on the ability of a foreign seller or lender to specify the use of a foreign arbiter to resolve disputes, including foreign arbiters that do not adhere to U.S. standards of due process or are unreasonably biased toward their nationals or toward corporate interests?
- What will be the practical ability of law enforcement agencies to monitor global transactions that occur in Libra?
- What practical remedies will exist for consumers scammed by overseas operators dealing in Libra?
- Are Calibra and/or Facebook prepared to reimburse consumers for scams, defective products, misappropriated funds and mistakes?
- What practical remedies exist for consumers in poorer countries scammed by foreign operators in the Libra ecosystem?

There is significant reason to worry as well about how the Libra Association will treat and potentially disadvantage consumers. The plan for Libra makes explicit and implicit promises to consumers – such as the claim that its value will remain stable – but there is nothing to stop the Libra Association from changing policy in order to, for example, degrade the value of Libra. The Association could easily decide in the future to impose a microtax on every Libra transaction, potentially generating huge wealth at consumer expense if Libra reaches the scale intended by its founders. The systemic risk of a run on the currency is also a consumer protection issue on a grand scale: With no deposit insurance, consumers will be at risk for tremendous loss if there is a run on the Libra and its value collapses, if there is a major Libra data breach or if the currency loses value for some other reason.

Privacy and Digital Rights: A Corporate Surveillance Leviathan

Facebook offers strong assurances that Calibra will protect consumer privacy: "Calibra will not share account information or financial data with Facebook, Inc. or any third party without

[16] Uniform Commercial Code § 1-201(b)(24).

customer consent. For example, Calibra customers' account information and financial data will not be used to improve ad targeting on the Facebook, Inc. family of products."[17]

Exactly no one should be appeased by this promise.

First, to state the most obvious point, why should anyone afford credibility to Facebook's privacy promises, in light of the company's repeated violation of its own privacy policy, even after entering into a consent decree with the Federal Trade Commission recommitting to abide by its own privacy promises?

Second, to reiterate a key theme of this testimony: The pledges that Facebook makes now are voluntary, nonbinding and subject to change or simply being ignored.

Third, Calibra's core privacy commitment is much less robust than it originally appears. Calibra says it will not share data with Facebook or third parties – without customer consent. Calibra's statement appears to suggest that data sharing will occur only if consumers opt in, but the company doesn't actually state that. The company easily could make data-sharing the default. But even if it doesn't make data-sharing the default, it can easily obtain consent; Facebook and Big Tech, of course, are masterful at generating "consent" without consumers realizing consent has been granted or that they have any alternative.

Fourth, even if a firewall is maintained between Calibra and Facebook's social media platforms, Facebook will presumably know about Libra transactions on the platforms or through Facebook apps, even in the absence of data sharing between Calibra and Facebook.

Consumer privacy is an acute concern with the Libra proposal not just because of Facebook's atrocious record. The combination of detailed transactional data involving hundreds of millions of people with Facebook's already expansive data on billions of users' likes, personal preferences and intimate thoughts threatens to create a corporate surveillance leviathan with no precedent outside the realm of science fiction.

The result would not just be more and even creepier targeted advertising. Facebook would dramatically enhance its power to commercialize and monetize our lives; to shape what information, points of view and entertainment we see, learn and are exposed to through the prism of encouraging us to buy more; and to exclude and crush competitors, none of whom could match Facebook's comprehensive data on our daily lives and existence.

At risk would be a worsening of the algorithmic discriminatory practices that are now troublingly prevalent as a result of both the built-in implicit bias of their programmers and the wealth and income disparities that track race.

---

[17] Calibra, "Calibra: Customer Commitment," available at: https://scontent-iad3-1.xx.fbcdn.net/v/t39.2365-6/65083631_355528488499253_8415273665234468864_n.pdf?_nc_cat=106&_nc_oc=AQlUQ8Ts4xvNdtNMBzAX57O56oyChDTrg2Xe5LGJ_2V9e-uY5OKhXMKUBmTP1GN03F0&_nc_ht=scontent-iad3-1.xx&oh=9e29b04ea08750b9f3cfa88dbe571b24&oe=5DBFB7C3.

Monetary Policy: Libra Risks Enabling Currency Runs and Undermining Countries' Control of Their Money Supply

The Libra proposal poses a fundamental threat to nations' ability to maintain their own monetary policy and to take measures to address currency crises. These issues will be more severe for smaller and poorer countries with smaller economies, less stable currencies and weaker regulatory capacity, but even rich countries such as the United States are at risk.

Facebook says that the Libra Association will act as a currency board rather than central bank – i.e., it will create new Libra only in proportion to which investors and users buy in with real money.[18] The company specifically disclaims that the Libra Association will operate its own monetary policy.[19]

Even if the Libra Association abides by this nonbinding commitment, the threats to national currency control are obvious, severe and without evident cure. In a country experiencing high inflation or devaluation, or even facing the prospect of high inflation, the rational move for both individuals and businesses will be to convert their currency to Libra. The race away from national currency becomes dangerously self-perpetuating. And, as the world has seen repeatedly, including but not only with the Southeast Asian financial crash in the late 1990s, currency runs can become contagious and spread across borders, provoking global crises.

Currency runs are already a hazard in the global economy. Libra threatens to make the problem far worse – more likely to occur, more frequent and at bigger scale – to the extent it achieves its objective of "frictionless" conversion into Libra and out into currencies different than the original currency of purchase. National governments may be able to forestall currency runs through imposition of capital controls, a policy device that the International Monetary Fund now recognizes can help defend currencies from catastrophic devaluation. But governmental capacity to impose capital controls will, at minimum, be severely hindered by Libra, given Facebook's objective that conversion be as simple as posting a social media message.[20] Imposing capital controls would require completely shutting down Libra within a country, a very difficult undertaking once the system is established and becomes pervasive.

---

[18] "Whereas central banks can print money at their own discretion, currency boards typically only print local currency when there are sufficient foreign exchange assets to fully back a new minting of notes and coins. Two of the major reasons for implementing such a system are stability — as the underlying assets are selected for their lower volatility — and protection from future abuse (e.g., printing of additional coins in the absence of backing)." Libra, "Libra White Paper: The Reserve," available at: https://libra.org/en-US/about-currency-reserve/#the_reserve.

[19] "The association does not set monetary policy. It mints and burns coins only in response to demand from authorized resellers. Users do not need to worry about the association introducing inflation into the system or debasing the currency. For new coins to be minted, there must be a commensurate payment of fiat by resellers into the reserve. Through interaction with authorized resellers, the association automatically mints new coins when demand increases and destroys them when the demand contracts. Because the reserve will not be actively managed, any appreciation or depreciation in the value of the Libra will come solely as a result of FX market movements." Libra, "Libra White Paper: The Reserve," available at: https://libra.org/en-US/about-currency-reserve/#the_reserve.

[20] David Ingram, "Facebook to Launch Digital Currency, Libra, In Effort to Create new Global Payment System," NBCNews.com, June 18, 2019, available at: https://www.nbcnews.com/tech/tech-news/facebook-launch-digital-currency-libra-effort-create-new-payment-system-n1018576.

Explains Stephen Grenville, former deputy governor of the Reserve Bank of Australia:

> If the people of Argentina could switch from pesos to a basket of stable currencies with a single touch of their smartphones, wouldn't they then pour into that safe asset at the first hint of trouble in the domestic economy? … We don't really know what would happen if the general public suddenly had access to a low-cost, unregulated method of exchanging a volatile local currency for a basket of safe currencies. But the risks are obvious. Countries with a long record of devaluations, like Argentina, as well as any middle-size country with a floating exchange rate, would be highly vulnerable to capital flight.[21]

There is another major threat to monetary policy, which is that the Libra Association abandons its initial commitment to maintain a one-to-one match between new national currency paid in and the creation of new Libra. The currency board approach is central to Libra's brand, credibility and plan right now. But that could easily change over time, particularly if and when the new currency reaches scale. At that point, and especially if large amounts of money remain within the Libra ecosystem without being paid back out in national currency, the members of the Libra Association will have a self-interest in creating new fiat currency – and distributing it to themselves. Their collective interest would incentivize them to keep Libra functioning, yes, but if they could allocate billions of Libra to themselves, why wouldn't we expect them to do so? As Kaushik Basu, former World Bank chief economist, notes, Facebook and the Libra Association will "be tempted to issue extra Libra to earn seigniorage in the same way that central banks do on the national currencies they issue."[22] At scale, this could potentially be inflationary on a global scale. Perhaps more troubling is how it would wrest control of monetary policy from central banks and nation states, who would have to set national monetary policy against the backdrop of Libra's global monetary policy. It's hard even to conceptualize the complications this would create, let alone figure out how they might be managed.

Law Enforcement: Libra Appears Likely to Create New Problems with Money Laundering, Tax Evasion and Sanctions Evasion

Libra promises to provide simple consumer entry into the system, frictionless transfers, across or – more accurately – irrespective of national borders. It is not clear what anti-money laundering rules would apply, or how they could be enforced in the kind of system Facebook proposes to create.

Facebook's answer is: We will coordinate with law enforcement authorities and enforce all applicable laws.[23] But that's no answer at all. First, there will be major questions about whether

[21] Stephen Grenville, "The Coming Libra Panics," New Europe, July 1, 2019, available at: https://www.neweurope.eu/article/the-coming-libra-panics/.

[22] Kaushik Basu, "Why Policymakers Should Fear Libra," Project Syndicate, June 27, 2019, available at: https://www.project-syndicate.org/commentary/facebook-libra-inflation-control-problem-by-kaushik-basu-2019-06.

[23] Working with Law Enforcement: As with any currency or financial infrastructure, bad actors will try to exploit the Libra network. While the network is open and accessible to everyone with internet access, the network's main endpoints will need to follow applicable laws and regulations and collaborate with law enforcement. In addition, because transactions on the Libra Blockchain are pseudonymous, it is possible for third parties to do analysis to detect fraud and illegal activity. Libra, "Libra White Paper: Security and Privacy on the Libra Network," available at: https://libra.org/en-US/security-privacy/#overview.

and how know-your-customer and other anti-money laundering (AML) rules apply to the network endpoints, particularly those based outside of the United States. Second, compliance by the endpoints will not necessarily do anything to stop individuals, criminal organizations and businesses from using services transacting in Libra in order to circumvent AML rules. Will all wallet providers be required to adhere such rules? Facebook's position seems to be that Calibra will abide by know-your-customer rules – but other wallets will be on their own and will have to comply in ways that fit their business. Based on Facebook's vision, it's almost impossible to imagine storefronts offering entry into and exit from Libra following know-your-customer rules or anything remotely like them.[24] Calibra will accept payments from noncustodial wallets, which means that even if Calibra applies know-your-customer standards, it will be easy to move money into Calibra from non-filtered sources.[25] Additionally, will Calibra apply U.S. standards worldwide? If not, given the global nature of Libra, it may be possible even for U.S. persons to use Calibra and circumvent know-your-customer rules. Third, the pseudonymous nature of transactions will impose difficult and perhaps insuperable challenges for regulators to enforce AML rules, if they even apply. Consider this basic statement Facebook makes in its Libra white paper: "The Libra Blockchain is pseudonymous and allows users to hold one or more addresses that are not linked to their real-world identity."[26] Fourth, additional difficulties rise from the global and virtual elements of the currency. Libra may be transferred instantaneously across borders or to virtual recipients. Transferring funds across dozens of enterprises spread around the world could be done almost instantaneously and with minimal difficulty. The money trail would be practically impossible to trace, whether it was eventually pulled out into a national currency and kept in Libra. Altogether, the world would be looking at a system of the old Swiss banking secrecy rules or Cayman Island secrecy on steroids, with not just secret banks, but secret transactions across borders into secret banks, or into secret non-bank corporations that may exist only virtually.

Some have suggested that Facebook's answer is a global identity system. That would not necessarily address the tax avoidance and AML concerns. It would certainly raise privacy concerns that transcend anything yet encountered.

It's impossible to imagine that tax cheats, organized criminal enterprises, corporate tax evaders and others would not try to take advantage of this new system. Developing a robust AML protocol was difficult and the system remains imperfect. Cross-border tax evasion remains a massive problem involving both high-wealth individuals and giant corporations alike. Libra threatens to undo whatever progress has been made in cracking down on illegal money flows and

[24] Calibra's VP of product Kevin Weil: "Because Libra is an open ecosystem, any money exchange business or entrepreneur can begin supporting cash-in/cash-out without needing any permission from anyone associated with the Libra Association or member of the Libra Association. They can just do it. ... Second, we can augment that by working with local exchanges, convenience stores and other cash-in/cash-out providers to make it easy from within Calibra. You could imagine an experience in the Calibra app or within Messenger or WhatsApp, where if you want to cash in or cash out, you'll pop up a map that highlights physical locations around that allow you to do it. You select one that's nearby, you select an amount, and you get a QR code that you can take to them and complete the transaction." Josh Constine, "Facebook Answers How Libra Taxes and Anti-Fraud Will Work," TechCrunch, July 12, 2019, available at: https://techcrunch.com/2019/07/12/facebook-libra-taxes-trump/.

[25] Josh Constine, "Facebook Answers How Libra Taxes and Anti-Fraud Will Work," TechCrunch, July 12, 2019, available at: https://techcrunch.com/2019/07/12/facebook-libra-taxes-trump/.

[26] Libra, "Libra White Paper: The Libra Blockchain," available at: https://libra.org/en-US/white-paper/#the-libra-blockchain.

could easily make the problems far worse than they ever were. It is very hard to imagine regulatory cures for these problems, at least not regulatory cures that are compatible with Facebook's vision for Libra.

As the Committee well knows, tax avoidance and use of tax havens is no small matter. The cost to the U.S. Treasury and governments around the world is enormous, severely exacerbating wealth and income inequality. On the one hand, tax avoidance enables giant corporations and the wealthy to avoid paying their fair share of taxes and imposing extra burdens on everyone else. On the other, tax avoidance steals from governments the resources they need to address national, state and local challenges. The U.S. Senate Permanent Subcommittee on Investigations estimated a decade ago that the United States loses more than $100 billion in revenue due to offshore tax abuses.[27] The International Monetary Fund estimates governments worldwide lose more than $600 billion annually from corporate profit-shifting.[28] The IMF estimates $7 trillion in personal wealth is stored in off-shore tax havens.[29] Whatever the exact numbers, they are very large and could easily be made worse by Libra.

Similarly, money laundering is a gigantic and consequential business, underpinning criminal enterprises on a massive scale. "Criminals, especially drug traffickers, may have laundered around $1.6 trillion, or 2.7 percent of global GDP, in 2009. ... This figure is consistent with the 2 to 5 per cent range previously established by the International Monetary Fund to estimate the scale of money-laundering."[30] Libra seems almost designed to encourage money-laundering,[31] and would almost inevitably make the problem worse, with attendant issues of drug trafficking, sex trafficking and more.

In exactly the same way that Libra is likely to facilitate tax evasion and money laundering, it seems made-to-order for individuals, companies or countries aiming to circumvent economic sanctions. While there's no doubt that sanctions may be wrongly imposed, deployed properly they can be an effective tool to advance human rights and other considerations, as well as a vital alternative to war-making. Policymakers have also come to see the value of targeted sanctions in pressuring blameworthy leaders and sparing innocent civilians. It's hard to see why the U.S. government should tolerate the existence of a money transfer system that will make it much

[27] Permanent Subcommittee on Investigations, Dividend Tax Abuse: How Offshore Entities Dodge Taxes on U.S. Stock Dividends, September 11, 2008, available at: https://www.hsgac.senate.gov/imo/media/doc/REPORT - Dividend Tax Abuse (Sept 11 2008).pdf.

[28] International Monetary Fund, Corporate Taxation in the Global Economy, March 10, 2019, available at: https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/03/08/Corporate-Taxation-in-the-Global-Economy-46650.

[29] Jannick Damgaard, Thomas Elkjaer and Niels Johannesen, "Piercing the Veil," Finance and Development, International Monetary Fund, June 2018, available at: https://www.imf.org/external/pubs/ft/fandd/2018/06/inside-the-world-of-global-tax-havens-and-offshore-banking/damgaard.pdf.

[30] UN Office on Drugs and Crime, "Illicit Money: How Much is Out There?" October 25, 2011, available at: http://www.unodc.org/unodc/en/frontpage/2011/October/illicit-money_-how-much-is-out-there.html.

[31] Writes Nobel-winning economist Joseph Stiglitz: "There are two obvious answers to the question of the business model: one is that people who engage in nefarious activities are willing to pay a pretty penny to have their nefarious activities – corruption, tax avoidance, drug dealing, or terrorism – go undetected." Joseph Stiglitz, "Why Facebook's Libra Currency Gets the Thumbs Down," The Guardian, July 2, 2019, available at: https://www.theguardian.com/business/2019/jul/02/why-facebook-libra-currency-gets-the-thumbs-down.

harder to maintain effective sanctions, particularly sanctions against individuals (whose smaller money transfers could easily be routed through Libra without notice).

Conclusion: Libra is Far Too Dangerous to Be Allowed to Proceed

For better and worse, Facebook has operated since its founding with audacity and adherence to its informal motto to move fast and break things.

As a corporate goliath rather than a small start-up, however, the consequences of "breaking things" are orders of magnitude more serious.

Madam Chairwoman, this committee will be evaluating legislation, the Keep Big Tech Out of Finance Act, mandating that large platform companies such as Facebook be prohibited from maintaining an ownership affiliation with financial service providers. Public Citizen strongly endorses this approach, which draws on the wisdom of the Bank Holding Company Act's mandated separation of banking and commerce. We hope the discussion in this testimony effectively makes the case for preventing a dominant platform company such as Facebook from entering the financial services market.

We would favor as well a legislated prohibition or at least a lengthy moratorium on privatized, global currencies. Such a prohibition would permit the continued existence of Bitcoin and other cryptocurrencies, which function primarily as investment vehicles rather than a generalized medium of exchange. Such legislation would require careful definition of what constitutes a "currency," but that's a manageable challenge. Provision and management of the currency is a defining feature of the sovereign. If the people – not corporations – are to remain the sovereign, the control of the currency belongs under democratic not oligopolistic control.

Thank you for the opportunity to testify today, and we look forward to continuing to work with the committee to address the profound hazards posed by Libra, as well as to advance an affirmative agenda to hold corporations accountable and advance the economic prosperity and financial security of the American people.

APPENDIX: COALITION LETTER CALLING FOR A MORATORIUM ON LIBRA

Chairman Chuck Grassley, Ranking Member Ron Wyden
U.S. Senate Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

Chairwoman Maxine Waters, Ranking Member Patrick McHenry
U.S. House Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

Chairman Mike Crapo, Ranking Member Sherrod Brown
U.S. Senate Committee on Banking, Housing and Urban Affairs
534 Dirksen Senate Office Building
Washington, DC 20510

Chairman Frank Pallone Jr., Ranking Member Greg Walden
U.S. House Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Chairman Richard Neal, Ranking Member Kevin Brady
U.S. House Committee on Ways and Means
1102 Longworth House Office Building
Washington, DC 20515

Cc: U.S. Securities Exchange Commission; U.S. Federal Trade Commission; Office of the United States Trade Representative; U.S. Commodity Futures Trading Commission; Board of Governors of the Federal Reserve System; Financial Stability Oversight Council; Financial Crimes Enforcement Network; Calibra, c/o Facebook, Inc.

July 2, 2019

Dear Legislators, Regulators, and Facebook and Calibra employees:

The Facebook proposal to create a new cryptocurrency as part of its broader Libra project raises profound questions about national sovereignty, corporate power, consumer protection, competition policy, monetary policy, privacy and more. The U.S. regulatory system is not prepared to address these questions. Nor are the regulatory systems of other nations or international institutions.

We call on Congress and regulators to impose a moratorium on Facebook's Libra and related plans until the profound questions raised by the proposal are addressed.

We also urge Facebook to put its implementation of its plans for the new cryptocurrency, Libra, on hold until the Congress and regulators have an opportunity to assess and react to a far more detailed presentation than has yet been made public.

Some of us believe a careful assessment will show that the proposal is too dangerous to be permitted to proceed. Others of us believe it should be permitted if appropriate controls and rules are in place. Others of us are uncertain what we think in light of the long list of unanswered questions about Libra.

All of us believe the risks posed by Facebook's proposal are too great to allow the plan to proceed with so many unanswered questions.

Leaving aside important technical and technological questions about the new plan, some of which Facebook itself has highlighted, we see a very long list of questions that require answers before Facebook moves forward. We identify a small subset of them here, grouped in the following categories:

- Governance
- National sovereignty
- Law enforcement, including tax policy
- Consumer protection
- Privacy
- Competition and systemic risk

Governance

- What transparency standards will apply to the new association that Facebook proposes should govern Libra?

- In what ways will the public be able to affect decision making related to Libra?

- How will the Libra Association relate to national governments and intergovernmental organizations? Will it consider the impact of its decision on particular national interests? Should it? For example, a decision to adjust the basket of reference currencies could have a major effect on the real value of actual currencies.

- What protections will be in place to prevent collusive behavior among Libra Association members?

National sovereignty

- What impact might Libra have on monetary policy in smaller and developing countries?

- Facebook says that the Libra Association will act as a currency board rather than central bank – i.e., it will create new Libra only in proportion to which investors and users buy in with real money – but what is to stop the Libra Association from changing that policy in the future? How would that affect national monetary policy?

- The International Monetary Fund among other international authorities and experts now recognizes the value of currency and capital controls, at least in situations of economic instability. Could nations, especially smaller economies, successfully maintain capital controls if Libra develops at scale?

- What are the distributional and monetary control consequences of Libra's planned pegging of its value to a basket of currencies? As currencies fluctuate, then it seems it will become relatively cheaper for some countries and relatively more expensive for others. Within a country, using the Libra could become relatively more or less expensive compared to using the national currency. How will that impact domestic inequality and what are its implications for national government control of the money supply?

Law enforcement, including tax policy

- Wouldn't Libra provide an easy mechanism for money laundering?

- Would the Libra Association apply the anti-money laundering rules imposed by many nations? Would its technology even permit "know your customer" type standards? Will all wallet providers be required to adhere to such rules? Should a private association be in the business of applying such standards?

- Wouldn't Libra similarly facilitate tax evasion and tax fraud? What protections could be put in place to avoid the near certain use of Libra for this purpose? Will all wallet providers be required to adhere to such rules?

- Won't Libra be a tool to evade economic sanctions? Conversely, is it appropriate for an international private association to be a tool to enforce nationally imposed sanctions on sovereign nations?

Consumer Protection

- How will national consumer protection laws apply to, be enforced against and prevent misconduct by global sellers and lenders, on matters relating to required disclosures, civil remedies, usury rules, access to credit, unfair and deceptive practices and more?

- The plan for Libra makes explicit and implicit promises to consumers – such as the claim that value will remain stable – but what is to stop the Libra Association from changing policy in order to, for example, degrade the value of Libra or to impose a microtax on every Libra transaction?

- Will Facebook and other Libra validator nodes be able to accumulate data in order to price and product discriminate against consumers? Might Libra worsen the problem of algorithmic discrimination?

- How will consumers be protected if their Libra go missing? What are the risks of creating a new currency with no system of deposit insurance?

- Why should the Libra Association be able to earn interest on the real currency underlying Libra, while consumers earn nothing? What are the risks if the Association decides to change the investment strategy and invest the reserves in riskier assets?

Privacy

- What guarantees will there be that Facebook does not use Calibra to obtain access to the transactions across the Libra network? What protections does incorporation of a subsidiary offer? What is to prevent Facebook from unilaterally altering promises about a firewall between Calibra and Facebook?

- Even if a firewall is maintained, Facebook would presumably know about the transactions conducted through Facebook apps. What are the privacy implications? How might Facebook use that information for targeted advertisements? What protections will exist to prevent the data being used for discriminatory purposes?

- Similarly, even if the firewall is maintained and Calibra does not share personal data with other corporations, might it sell services that exploits that personal data in inappropriate ways – e.g., doing targeting on behalf of third-party clients?

- Given Facebook's record and stated views on privacy, why should anyone believe that claims and commitments about privacy made now will be maintained?

Competition and Systemic Risk

- Will Facebook be able to use Libra and Calibra to pull consumers into a closed Facebook ecosystem that will disadvantage competitors and consumers?

- What protections will prevent the Libra Association from disfavoring competitors, including by excluding them, offering discounts to Libra partners, punishing competitors using alternative private currencies?

- The United States continues to separate banking and commerce, for good reason. Banks may have unfair advantage in the commercial sector. Conversely, they may be overly aggressive in commercial investments, putting bank deposits at risk. Does the Calibra/Facebook arrangement run afoul of Bank Holding Company Act requirements for the separation of banking and commerce? Does it run afoul of the spirit and wisdom of those requirements?

- What systemic risk threats might a scaled-up Libra pose to the U.S. and global economies? What are the particular consequences of such risk without the backup of depository insurance? Does the externalization of those risks create an unfair competitive advantage for Libra?

- What happens if there is a run on the Libra? What if the Libra Association decides in the future to alter its reserve policy or does not adhere to what it now promises?

These are just a sampling of the serious questions posed by Facebook's proposal. It is not even clear which regulators would or should have jurisdiction over the new enterprise, nor how they should work individually and in coordination to analyze the Facebook proposal.

We have too much recent experience with insufficiently regulated financial markets spinning out of control to let this happen again. The Facebook proposal must be put on hold until these numerous and fundamental questions are resolved.

Sincerely,

American Family Voices
Americans for Financial Reform
Center for Digital Democracy
Center for International Policy
Consumer Action
Consumer Federation of America
Consumer Reports
Courage Campaign
Demand Progress Education Fund and Rootstrikers.org
Demos
Digital Intelligence Lab at Institute for the Future
Economic Policy Institute
Economic Strategy Institute
Electronic Privacy Information Center
Friends of the Earth-US
Global Witness
Institute for Agriculture and Trade Policy
Institute for Local Self-Reliance
Lake Research Partners
Media Alliance
National Association of Consumer Advocates
National Consumer Law Center (on behalf of its low-income clients)
Network for Environmental & Economic Responsibility of United Church of Christ
Oakland Privacy
Open MIC (Open Media and Information Companies Initiative)
Public Citizen
Revolving Door Project
RootsAction.org
Service Employees International Union
SumOfUs

The Open Markets Institute
U.S. PIRG
Woodstock Institute

Cc: U.S. Securities Exchange Commission
100 F Street NE
Washington, DC 20549

U.S. Federal Trade Commission
600 Pennsylvania Avenue NW
Washington, DC 20580

Office of the United States Trade Representative
600 17th Street NW
Washington, DC 20508

U.S. Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington, DC 20581

Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue NW
Washington, DC 20551

Financial Stability Oversight Council
Financial Crimes Enforcement Network
U.S. Treasury Department
1500 Pennsylvania Avenue NW
Washington, DC 20220

Mark Zuckerberg, CEO, Facebook, Inc.
1 Hacker Way
Menlo Park, CA 94025

CHAINALYSIS

July 12, 2018

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
United States House of Representatives
Washington, DC 20515

Re: Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System

To Whom It May Concern:

Facebook's move into cryptocurrency is an exciting development for the industry as the company could make cryptocurrencies available instantly to billions of users. However, the more pervasive use of cryptocurrency creates financial inclusion for both good and bad actors.

The risk of money laundering needs to be mitigated by all stakeholders, including business models that fall under obligations according to FinCEN's recent guidance issued in June 2019. While the regulatory requirements remain consistent, there is a need for regulators to issue frequent guidance on the application to different business models.

Further, because blockchains like Libra are immutable and permanent, they can empower law enforcement agencies to gain unprecedented visibility into financial transactions. Robust compliance offerings for anti-money laundering (AML) and combating the financing of terrorism (CFT), including transaction monitoring on these blockchains, will be essential to building and maintaining Libra's financial integrity, meeting the legal requirements of regulators, and assisting law enforcement around the world for victims of crime, under legal process.

As the original blockchain analysis company, Chainalysis has been at the forefront of the development of AML/CFT best practices related to cryptocurrency and privacy-protective risk analysis. We have helped both the private and public sectors leverage the transparency of blockchains' shared ledgers to form effective risk-based approaches and to investigate and mitigate financial crime, while maintaining important privacy protections and the low-cost, speed of transactions that are part of the fundamental advances of cryptocurrencies. Indeed, Chainalysis technology has helped track billions of dollars of stolen funds and illicit activity.

Based on our experience, we recommend the Libra Association should first take a risk-based approach in building out an effective compliance program, including a risk assessment of their organization and risks in the ecosystem. This compliance program should include customer due

CHAINALYSIS

diligence, the collection and storage of Know Your Customer (KYC) information (including sanctions screening), ongoing real-time transaction monitoring, and suspicious activity reporting to local regulators and law enforcement. Ideally, a universal system with minimum standards would be used by all of the Libra partner companies to ensure data integrity and consistency and prevent gaps in information.

To assist law enforcement and regulators in maintaining global financial integrity, they will need the resources to process and investigate the information in this ecosystem. We recommend Congress allocate more resources to FinCEN and other government agencies to support this mission. Critical risk information provided to government to address potential threats are only helpful if the agencies have the resources to effectively determine the credibility of the suspicious activity and take appropriate action swiftly.

Proper compliance from the Libra Association, combined with collaboration with properly resourced law enforcement agencies and regulators, could potentially provide better visibility and more effective mitigation in combating illicit financial activity than many traditional financial systems currently in place.

Sincerely,

Jonathan Levin,
Co-Founder and Chief Operating Officer
jonathan@chainalysis.com
(929) 416-1666

Jesse Spiro,
Head of Policy
jesse@chainalysis.com

ACCO

15 July 2019

To: Chairwoman Maxine Waters
Ranking Member Patrick McHenry
U.S. House of Representatives
Committee on Financial Services
2129 Rayburn House Office Building
Washington, D.C. 20515

Fr: Gretchen Peters and Professor Amr al-Azm
The Alliance to Counter Crime Online

Re: Concerns Facebook's Proposed Cryptocurrency Will Facilitate Crime and Terror

Dear Chairwoman Waters and Ranking Member McHenry,

As the House Committee on Financial Services prepares to question David Marcus, Calibra's Chief Executive Officer about Facebook's proposal to launch a cryptocurrency, we want to express our concern that Facebook's various platforms are infested by criminal syndicates and terror groups, and the firm has been grossly negligent both in monitoring and removing them, and in collaborating with law enforcement to counter these threats.

We want the committee to understand that the world's largest social media company does more than just connect people. One-third of the world's population logs onto Facebook platforms, benefitting from a digital space for shared ideas and a network for global activism. But those same platforms have also become ground zero for organized crime syndicates to connect with buyers, market their illegal goods, and move money, using the same ease of connectivity enjoyed by ordinary users.

Facebook and its family of platforms are also used by terrorist groups as a megaphone for propaganda, for recruiting new members, and even to fundraise. This illegal activity often occurs out in the open through Facebook groups and pages, two staple features of the platform.

Instead of acknowledging that their technology is being used for illegal purposes and fixing the problem, Facebook CEO Mark Zuckerberg has clung to immunities he claims to be provided by Section 230 of the Communications Decency Act of 1996, which courts have interpreted to mean that tech firms shouldn't be held liable for content posted by third-parties.

There is a huge problem with this approach. The algorithms Facebook has touted to connect the world have connected criminals and terrorists faster than Facebook's own beleaguered moderators can delete them. The impact of this illegal activity is affecting our communities, our cultures, and our environment, and it's happening in the same digital spaces where our children play, our families connect, and our companies advertise.

Facebook has contributed to sex trafficking, both inside the United States and abroad. A Texas woman who was lured into prostitution at age 16 by another Facebook user is currently suing the platform for allowing traffickers to "stalk, exploit, recruit, groom, recruit and extort children."

Rare and endangered species from tigers to reptiles are also widely trafficked on Facebook. More than 80% of the ape trade is now on social media, and multiple tons of elephant ivory are being sold monthly across Facebook.

The platform's black markets are not limited to crimes affecting the living, they also affect the dead. Groups trading in human remains on Facebook and Instagram exchange macabre items of questionable legality and origin ranging from ranging from Tibetan skull caps to babies in jars.

Archeologists investigating the illicit antiquities trade on Facebook have recorded tens of thousands of artifacts trafficked from conflict regions including Syria, Iraq and Yemen – a war crime. ATHAR Project is monitoring almost 2 million regular users who log onto a collective 95 groups serving as digital black markets for priceless artifacts plundered from across the Middle East and North Africa.

Investigators at the Global Health Policy Institute have tracked illegal drug sales – everything from prescription opioids like Oxycontin and Fentanyl-laced pills – that are widely available on Instagram and Facebook. Facebook itself admitted to finding and removing more than 1.5 million listings for illegal drugs sales, including heroin, cocaine and meth, within the past six months. The narcotics marketplace on Instagram is targeted to teenagers. Its scale remains unknown.

To put this scale perspective, the notorious dark web platform called the Silk Road never posted more than 250,000 ads at any given time; Facebook is hosting six times that much. In other words, Zuckerberg has succeeded in bringing the Silk Road to Main Street.

In light of all this, Zuckerberg's announcement that he plans to alter Facebook to focus on groups – and also launch a cryptocurrency – are downright alarming.

There's no reason to believe these changes will make user data any more secure. After all, Facebook hasn't changed its fundamental business model. But the changes will make it harder for authorities and civil society groups to track and counter illegal activity on the platform. Groups are already the epicenter of black-market activity on Facebook.

The firm's continued negligence in the moderation of criminal content makes clear that the time for self-regulation has passed.

The challenge is that federal laws take time, something that human trafficking victims, drug addicts and endangered species don't have. But there are other ways U.S.

regulators can address crime on social media. Facebook's IPO may hold the key to effective regulation.

When Facebook went public in 2012, the firm *voluntarily* entered into a strict regulatory regime that negates CDA 230 immunities in the context of Facebook's obligations under securities law. The firm's lack of internal controls and effective compliance programs implicate potentially serious securities law violations. Your committee can influence immediate action by asking the Securities and Exchange Commission (SEC) to utilize its existing regulatory power.

As a result of Facebook's failure to establish appropriate internal controls, criminal activity has accelerated on its platform and continues to grow. Now is not the time to let Facebook launch a cryptocurrency. *It's time to make social media a safer space for all.*

Chairwoman Waters and Ranking Member McHenry, we urge you to block Calibra from becoming a reality, and to press the SEC to act before it's too late.

Respectfully,

Gretchen Peters, *Executive Director of the Alliance to Counter Crime Online*.

Dr. Amr Al-Azm *co-founder of ACCO and Director of the Antiquities Trafficking and Heritage Anthropology Research (ATHAR) Project*.

ICBA
INDEPENDENT COMMUNITY
BANKERS *of* AMERICA®

Preston L. Kennedy, *Chairman*
Noah W. Wilcox, *Chairman-Elect*
Robert M. Fisher, *Vice Chairman*
Kathryn G. Underwood, *Treasurer*
Alice P. Frazier, *Secretary*
Timothy K. Zimmerman, *Immediate Past Chairman*
Rebeca Romero Rainey, *President and CEO*

July 16, 2019

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
Washington, D.C. 20515

The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
Washington, D.C. 20515

Dear Chairwoman Waters and Ranking Member McHenry:

On behalf of community banks across America, with more than 52,000 locations, I write to thank you for convening tomorrow's hearing on "Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System." The proposed creation of Libra, if allowed to proceed, would be a significant and irreversible development that would alter the global financial landscape. ICBA endorses the recent comments of Federal Reserve Chairman Jerome Powell who cited "many serious concerns regarding privacy, money laundering, consumer protection and financial stability." The stakes are too high to proceed without a thorough understanding of the risks and consequences, intended and unintended.

ICBA supports Chairwoman Waters' recent letter to the leadership of Facebook and Calibra calling for a moratorium on the implementation of Libra pending a comprehensive review by Congress and regulators of the serious concerns carried by this proposal. ICBA is currently reviewing the Chairwoman's draft "Keep Big Tech Out of Finance Act," which would ban large platform utilities from becoming financial institutions. We appreciate the Chairwoman's effort in drafting this legislation and strongly support its intent. The purpose of this letter is to express the community bank perspective on Libra.

Facebook's market power, influence, and data sharing jeopardize consumer privacy

With some two billion users worldwide and no true competitors, Facebook wields monopolistic power in social media. Facebook owns and manipulates a wealth of detailed user data, including profile information, browsing history on Facebook as well as linked apps, demographic data such as educational attainment, race and ethnicity, political and religious views, and other known and unknown information. Facebook shares this information with marketers and other third parties and is in fact in the business of extracting revenues from this data. This business model contains an inherent tradeoff between user privacy and revenue opportunities its investors count on. Facebook had profits of $22 billion in 2018. The company has a vested interest in meeting Wall Street's earnings expectations. Policymakers should be extremely cautious about allowing Facebook to expand its reach into users' financial data through the creation of Libra.

The Nation's Voice for Community Banks.®

WASHINGTON, DC
1615 L Street NW
Suite 900
Washington, DC 20036

SAUK CENTRE, MN
518 Lincoln Road
PO Box 267
Sauk Centre, MN 56378

866-843-4222
www.icba.org

Facebook has been fined an unprecedented $5 billion by the Federal Trade Commission for sharing user data with Cambridge Analytica for the purpose of creating targeted political messages and influencing American elections. This is far from the only documented case in which Facebook has given unauthorized access to user data to third parties.

In other cases, Facebook security weaknesses have exposed as many as 50 million users to hijackers. If Facebook were allowed to leverage their monopoly power in the digital payments arena, thereby obtaining users' income data and other financial data, users' exposure and privacy risk would reach hazardous levels. The integration of tech giants and consumer finance would result in an enormous concentration of financial and technological data and assets.

Privacy standards contained in the Gramm-Leach-Bliley Act, which ICBA supports, ensure consumers of financial institutions receive enhanced protection of their personal information. In addition, these institutions are required, through law and regulation, to provide privacy notices and disclosures to customers about the information they collect and share and the purposes for which it is used. ICBA believes that all entities that handle personal information, including the Libra Association and its partners and third parties that contract with these entities, should be required to safeguard personal financial information and provide consumer notices and disclosures in a manner comparable to financial institutions. These requirements should be enforced by agency supervision and examination.

Financial Stability

In addition to the serious privacy concerns noted above, Libra must be carefully regulated to ensure that it does not pose a threat to financial stability in the United States and abroad.

According to the Libra white paper, the value of a unit of Libra would be pegged to the value of a basket of government-issued currencies. The Libra Association would stand ready to redeem Libra for anyone of the currencies that make up the basket at the prevailing exchange rate.[1] To meet this obligation, they would hold reserves which would be invested in various assets. The return on these assets would be distributed among Libra investors, though not Libra users.

To be operated safely, the size of these reserves and the quality and liquidity of its investments would need to be carefully regulated. Any number of events – for example, a devaluation of one of the currencies that make up a basket or loss of confidence in Libra's reserve investments – could precipitate a run on Libra, with users demanding immediate redemptions on a mass scale. There would be nothing comparable to a deposit insurance system to reassure holders of Libra of its expected exchange value. Failure to liquidate its reserves to honor these redemptions could precipitate a global crisis.

In this sense Libra may be compared to an international money market fund that fixes the value of a share at $1 to guarantee its redemption value and give the appearance of cash, while investing in short term debt.[2] Money market funds were viewed as virtually riskless investments until the fall of 2008

[1] The Libra Association is an association of entities including Facebook and its 27 partners (to date) which would govern the cryptocurrency and its blockchain and asset reserves.

[2] The comparison of Libra to a money market fund was suggested by Jon Sindreu. See Sindreu, Jon. "Can Facebook's Libra Avoid Regulators? History Suggests Not." Wall Street Journal. July 4, 2019.

when, after the failure of Lehman Brothers, investors began to doubt the worth of their investments. A surge of redemption requests in the Primary Reserve Fund totaled $40 billion, causing it to "break the buck," and other money market funds in the U.S. and abroad followed suit. Ultimately a taxpayer-backed, government guarantee was needed to prevent the money market fund industry from being overwhelmed by redemption requests. It is worth noting that this turmoil in the money market fund industry occurred despite investor protection regulation as well as regulation of money market fund investments.

Without strong regulation, Libra would be vulnerable in the same way money market funds have been and would pose considerably more systemic risk if Libra's ambition for a world-wide crypto currency is realized.

A new avenue for money laundering

Unless Libra is subject to Anti-Money Laundering / Bank Secrecy Act (AML/BSA), it would create an avenue to money laundering that would undermine law enforcement. Libra would become the currency of choice for criminals as well as terrorists. Community banks are willing participants in the nation's mandated anti-money laundering programs. But the value of these programs would be significantly compromised if they do not include Libra.

Appropriate regulation of Libra

If implementation of Libra is authorized, appropriate regulation is needed to ensure public trust and to mitigate against the significant risks outlined above. This regime should be comparable to the multitude of regulations applicable to traditional, functionally similar payments products and services offered by the closely regulated banking system and should include requirements covering:

Capital adequacy and reserves	Activity restrictions
Due diligence	Information security
Business resiliency	Ownership and control
Anti-money laundering and anti-terrorist financing	Reporting & maintenance of books and records
Consumer protections	Privacy
Safeguarding customer information	Vendor and third-party management
Ongoing examination	

Without such a regime, there will be a dangerous, unprecedented level of risk to consumer privacy, digital commerce, and the global financial system.

ICBA thanks you again for raising the profile of this important issue. We look forward to offering ongoing input as you continue to study the risks of Libra and other digital currencies and devise an appropriate regulatory regime.

Sincerely,

/s/

Rebeca Romero Rainey
President & CEO

CC: Members of the House Financial Services Committee

NAFCU
3138 10th Street North
Arlington, VA 22201-2149
703.522.4770 | 800.336.4644
f: 703.524.1082
nafcu@nafcu.org | nafcu.org
National Association of Federally-Insured Credit Unions

July 16, 2019

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
United States House of Representatives
Washington, DC 20515

The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
United States House of Representatives
Washington, DC 20515

Re: Tomorrow's Hearing, "Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System"

Dear Chairwoman Waters and Ranking Member McHenry:

I write to you today on behalf of the National Association of Federally-Insured Credit Unions (NAFCU) ahead of tomorrow's hearing on "Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System." NAFCU advocates for all federally-insured not-for-profit credit unions that, in turn, serve over 117 million consumers with personal and small business financial service products. NAFCU and our members appreciate the continued attention the Committee has given the growing fintech sector, and we stand ready to work with you as you examine this important topic.

NAFCU supports the Committee looking at regulatory concerns before the launch of a cryptocurrency should occur, including compliance with *Bank Secrecy Act* (BSA) and Anti-Money Laundering (AML) regulations. Credit unions have long supported efforts to combat criminal activity in the financial system, and NAFCU has consistently recognized the importance of the Financial Crimes Enforcement Network (FinCEN) and BSA/AML regimes. These regulations and laws are essential to combatting terrorism financing and criminal activity and have only just begun to adapt to the realities of cryptocurrency-based exchange. Establishing a strong AML program does not happen overnight, and the culture of compliance that exists in an experienced financial institution, as opposed to any new player in the system, must not be overlooked.

NAFCU also appreciates the Committee examining consumer privacy. Any institution offering a cryptocurrency would need to collect and store detailed information of their wallet holders. While depository institutions have for decades complied with a national standard on data security since the passage of the *Gramm-Leach-Bliley Act*, other entities who handle consumer financial data do not have such a national standard. There is an urgent need for a national data security standard for entities that collect and store consumers' personal and financial information that are not already subject to the same stringent requirements as depository institutions. In addition, states have begun to adopt privacy laws that have the potential to create a patchwork of standards.

Thank you for your attention to this important issue. NAFCU is supportive of innovation in the marketplace, but we want to ensure that we maintain a strong and safe financial ecosystem. We look forward to the continued examination of this and other issues of importance to credit unions. Should you have any questions or require any additional information, please contact me at mvirkus@nafcu.org or 703-842-2261.

Sincerely,

Max Virkus

Max Virkus
Associate Director, Legislative Affairs

cc: Members of the House Committee on Financial Services

June 18, 2019

Coming in 2020: Calibra

A New Digital Wallet for a New Digital Currency

Today we're sharing plans for Calibra, a newly formed Facebook subsidiary whose goal is to provide financial services that will let people access and participate in the Libra network. The first product Calibra will introduce is a digital wallet for Libra, a new global currency powered by blockchain technology. The wallet will be available in Messenger, WhatsApp and as a standalone app — and we expect to launch in 2020.

If you have an internet connection today, you can access all kinds of useful services for little to no cost — whether you're trying to keep in touch with family and friends, learn new things or even start a business. But when it comes to saving, sending and spending money, it's not that simple.

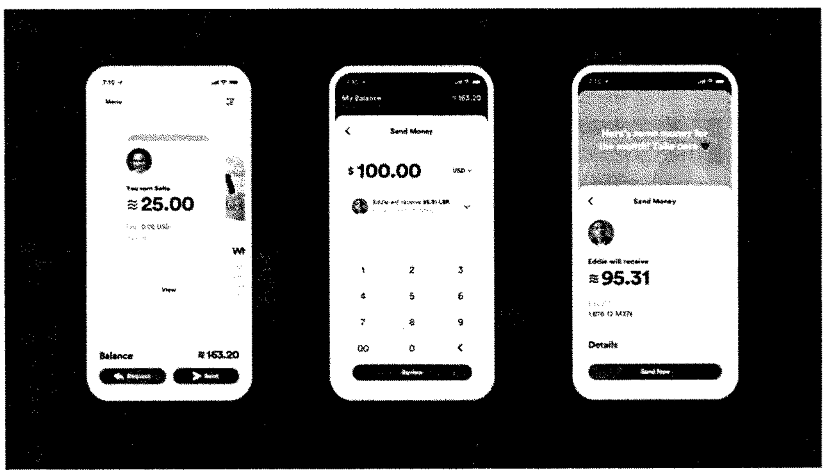
For many people around the world, even basic financial services are still out of reach: almost half of the adults in the world don't have an active bank account and those numbers are worse in developing countries and even worse for women. The cost of that exclusion is high —

approximately 70% of small businesses in developing countries lack access to credit and $25 billion is lost by migrants every year through remittance fees.

This is the challenge we're hoping to address with Calibra, a new digital wallet that you'll be able to use to save, send and spend Libra.

From the beginning, Calibra will let you send Libra to almost anyone with a smartphone, as easily and instantly as you might send a text message and at low to no cost. And, in time, we hope to offer additional services for people and businesses, like paying bills with the push of a button, buying a cup of coffee with the scan of a code or riding your local public transit without needing to carry cash or a metro pass.

Here's a sneak peek at what the experience of using Calibra will be like:



When it launches, Calibra will have strong protections in place to keep your money and your information safe. We'll be using all the same verification and anti-fraud processes that banks and credit cards use, and we'll have automated systems that will proactively monitor activity to detect and prevent fraudulent behavior. We'll also offer dedicated live support to help if you lose your phone or your password — and if someone fraudulently gains access to your account and you lose some Libra as a result, we'll offer you a refund.

We'll also take steps to protect your privacy. Aside from limited cases, Calibra will not share account information or financial data with Facebook or any third party without customer consent. This means Calibra customers' account information and financial data will not be used to improve ad targeting on the Facebook family of products. The limited cases where this data may be shared reflect our need to keep people safe, comply with the law and provide basic functionality to the people who use Calibra. Calibra will use Facebook data to comply with the law, secure customers' accounts, mitigate risk and prevent criminal activity. You can read more about our commitments to privacy and consumer protection here.

We're still early in the process of developing Calibra. Along the way we'll be consulting with a wide range of experts to make sure we can deliver a product that is safe, private and easy to use for everyone. But we're excited to share this early glimpse and we'll share updates along the way. In the meantime, if you'd like to be among the first to know when Calibra is available, you can sign up here.

This announcement contains forward-looking statements regarding our future product and business plans and expectations. These forward-looking statements may differ materially from actual results due to a variety of factors and uncertainties, many of which are beyond our control. Please note that the date of this announcement is June 18, 2019 and any forward-looking statements contained herein are based on assumptions that we believe to be reasonable as of this date. We undertake no obligation to update these statements as a result of new information or future events.

Americans for Financial Reform Education Fund

AFR Education Fund Submission to House Financial Services Committee - July 17, 2019

"Examining Facebook's Proposed Cryptocurrency"

Americans for Financial Reform Education Fund ("AFR Ed Fund") appreciates the opportunity to comment on today's hearing. AFR Ed Fund is a coalition of more than 200 national, state, and local groups who have come together to advocate for reform of the financial industry.[1]

This hearing is on Facebook's proposed Libra digital currency. Due to both the grandiose nature of the claims in Libra White Paper and the widespread distrust of Facebook as an unaccountable tech and media giant with a record of user privacy violations, this proposal has received a great deal of publicity and criticism. When an internet giant with a worldwide network of billions of users states that it intends to take the lead in creating a "global currency and financial infrastructure that empowers billions of people" this rightly draws a great deal of concern about its effects on the financial system. Our comment focuses mainly on the financial regulatory status of key elements of the Libra system, which are not the only issues raised by Libra.

As we discuss below, the heart of the proposed Libra system is the way in which the Libra tokens are designed as liabilities backed by the hard currency assets in the Libra Reserve. These kind of financial arrangements have a long history and are regulated under our U.S. system as banks or investment companies. It is crucial that these core elements of the Libra system be properly regulated as what they are. Establishing Libra governance through a kind of trans-national governmental body located in Switzerland must not exempt it from full U.S. regulation if it operates in the U.S., any more than the U.S. operations of Credit Suisse are exempted from such regulation.

Under the rubric of "fintech" numerous actors are introducing financial products that sit outside the core framework of financial regulation. Facebook's Libra is the most extensive effort so far to do this, and also the clearest demonstration that this pattern cannot be allowed to continue. Like so many other "fintech" products, key elements are in fact quite similar to many existing financial products that are tightly regulated. These existing products are regulated for good reason. If Libra is not subject to similar regulation the consequences will range from harm to users of the product, to competitive imbalances, to risks to the entire global financial system if Facebook is permitted to expand the Libra network to the extent envisioned in its White Paper.

[1] Members of AFR Ed Fund include consumer, civil rights, investor, retiree, community, labor, faith based, and business groups. A list of coalition members is available at http://realbankreform.org/about/our-coalition/

The usual justification for permitting fintech products to exist in a regulatory netherworld is that such permissiveness is necessary to encourage innovation and competition that bring extraordinary public benefits. These claims are wrong. Innovation – sometimes even to an excessive or irresponsible degree – already occurs regularly within the existing regulated financial system. Permitting the growth of a parallel unregulated system will only encourage false "innovations" that imitate existing products but lack key systemic and customer protections. As for competition, it is best served by a clear regulatory framework applied to everyone, and by a financial payments infrastructure accessible to all on an equal basis. It would certainly not be served by allowing a tech giant with enormous market power to launch a major new financial product without having to follow the same rules as its competitors.

Finally, there is all too often a confusion between benefits to the public and benefits to insiders who control key elements of financial technology. This confusion can be clearly seen in the Libra white paper, which claims to create "an inclusive financial network for the world", when it proposes to build a network that will be governed by tech and finance insiders. True inclusivity will require that we create genuinely public systems.

Facebook may not succeed in its ambition of creating a new global currency. Its previous attempt at a digital currency, Facebook Credits, failed and is already little remembered today. That payment system featured exorbitant fees and was eventually replaced by local currencies. Libra is a much more ambitious effort. However, if regulators and government permit it to expand to the size described in the White Paper, which calls for a system scalable to "billions of accounts", it would become the largest financial entity in the world, "too big to fail" on a global scale. The consequences of this could be dire. A combined currency system and global payments infrastructure of this scale would present a significant issue for national sovereignty and public control of the monetary system. A Libra system of this size would also place significant pressure on the liquidity and stability of the entire system of global currency markets, since, as discussed below, Libra is parasitic on national fiat currencies to deliver on its stable value promise.

A large Libra system would also offer numerous opportunities for insiders to the system to exploit users in various ways, both financially and through access to user data. While the White Paper promises that Libra "eventually transition to a fully open system", it is clear that at least in its initial phases it will be dominated and controlled by entities that are already major players in tech and payments, ranging from Facebook itself to Visa and Mastercard. The promised transition to an "open system" is vague and provides little reassurance concerning the long run control of the system, especially given the first mover advantages of Facebook and its pre-existing network.

The White Paper claims that there will be significant benefits to efficiency and financial inclusion through the creation of a much faster, lower cost system of global currency transactions. However, the White Paper offers no detail or commitments whatsoever on how the Libra system would actually lower the costs for the unbanked to participate in the financial system, either through operational efficiencies or redistribution from financial insiders to the unbanked. In theory, the cross-border nature of a large Libra system could lower the cost of international remittances, particularly for citizens of non-U.S. countries with underdeveloped banking systems. But within the U.S. and other countries with more developed financial systems Libra would simply introduce an additional layer of costs into financial transactions by requiring conversion from the local fiat currency to the Libra.

There is a better way to access the same kinds of efficiencies claimed for Libra. That path is through improving the efficiency and competitiveness of payment systems that are genuinely publically controlled. The Payments Systems Directives in the European Union and the Open Banking Initiative by the Bank of England envision opening up the current public payments infrastructure to use by regulated third party providers of financial services. Such providers would compete on an equal basis, would be tightly regulated for data security and consumer protection, and compete using common protocols for access to a public system.

There are of course many questions around the details of how to implement such access to the public payments infrastructure. In the U.S. context, there are important policy questions about how to accelerate the needed modernization of our current payments system and the degree of public vs private control of our payments system. The Federal Reserve has both the capacity and the responsibility to build a faster, more efficient, and more broadly accessible real time payments infrastructure, and should act more forcefully in this space. But approaching these issues from the standpoint of modernizing and improving access to a genuinely public payments system for existing currencies is a far better approach than facilitating the efforts of tech giants to create new currencies and payment systems.

To that end, legislators and regulators should not permit the establishment and growth of a Libra-type system, especially one that is unmoored from full and appropriate regulation of each of its elements. As discussed below, the Libra Reserve and token are quite similar to traditional, and regulated forms of finance, which makes any innovation benefits questionable and any exemption from regulation totally unjustified. Connecting these elements to a distributed ledger represents a newer approach but one that carries no clear benefits and many dangers when compared to simply improving our public payments system in a manner that provides accountability in governance and true competitive openness. Below, we expand briefly on these points, examining elements of the Libra product and their connection to financial regulation. This analysis is quite preliminary as many questions remain about the Libra product.

What Is Libra?

Based on the White Paper, Libra combines a fiat currency asset pool called the Libra Reserve with an arrangement by which tokens representing rights to this pool are held in a Facebook-controlled digital wallet and can be exchanged as payment through an internet-based distributed ledger. Decisions regarding management of the fund and associated payment network are to be made by a private governing association that is at least initially dominated by tech insiders.

The fact that the Libra arrangement is backed by fiat currency assets is central to its appeal and marketability. Unlike commodity-type cryptocurrencies like Bitcoin that fluctuate wildly in value, Libra promises a stable value. It can only do this because each unit of Libra represents ownership of fiat currency assets in the underlying Libra Reserve. So even though Libra presents itself as an alternative to sovereign currencies, it is dependent on the system of government fiat currencies in order to achieve a level of stability and value that will make it attractive to users.

The idea of issuing certificates from a private actor that are backed by a pool of trusted financial assets is of course an ancient one. Centuries ago these assets might have been gold; today they are fiat currency assets that are considered stable. In the case of banks the deposit accounts at a bank are backed by asset pools that are regulated for prudential safety and soundness, in supplemented by central bank liquidity support. In the case of investment companies, shares in registered funds are backed by pools of securities and cash. Investment companies face disclosure requirements and regulation of the nature quality of their assets. Such regulation is strongest for fund structures that promise liquidity and stable value such as money market funds.

We consider it critical that the core financial element of the Libra arrangement – the asset composition of the Libra Reserve fund and the process by which it is connected to redeemable Libra tokens – receive full and proper regulatory oversight within our existing regulatory system. The asset pool in the Libra Reserve and the Libra tokens they back must not be exempted from regulation simply because they are connected to a distributed ledger payment mechanism. There is nothing novel about issuing certificates that are backed by an underlying pool of assets. Such arrangements are routinely regulated as investment companies or as banking entities. Exempting Libra from such oversight would create serious risks to users of the arrangement and possibly to the global financial system if the Libra system becomes large enough. It would also create a competitive imbalance with other regulated entities.

In many ways, Libra resembles an investment company. There are many kinds of funds that promise stable value, most notably money market funds (MMFs) and fixed income Exchange Traded Funds (ETFs). Based on the current version of the White Paper, the Libra Reserve appears to function in a similar manner to a fixed income ETF. Like an ETF, its value is maintained by a select group of authorized participants (called "Authorized Resellers" in the White Paper) who are permitted to directly buy and sell units of the fund on regulated exchanges. Market arbitrage by authorized participants maintains the fund's value relative to the index or securities basket it tracks, as participants buy shares when units of the fund are undervalued and sell when units of the fund are overvalued. Users of the Libra monetary token will effectively be shareholders in a kind of Libra Reserve ETF, but unlike most ETF shareholders will not receive a return from the assets of the fund. Instead, they are simply promised the principal value of their share. Investment returns will accrue to large-scale insider investors in the overall Libra enterprise, who will hold "Libra Investment Tokens".

The White Paper specifies that the Libra Reserve will be invested in a liquid and stable basket of international currency assets, including both bank deposits and short term government securities. This implies a value linked to some weighted average of the world's currencies, as well as interest payments and risks associated with government securities. Holders of Libra tokens will therefore be exposed to fluctuations in relative currency valuations and to various types of political and interest rate risks as well.

In the absence of regulation and disclosure of Libra Reserve's asset holdings, the risks to ordinary Libra users due to the composition of underlying Libra Reserve assets could be considerable. This is especially so since the large scale investors holding Libra Investment Tokens, who receive all investment returns, may have an incentive to incur excessive risks in Libra Reserve holdings in order to maximize their investment returns. The complex Libra governance structure, which will initially be dominated by holders of Libra Investment Tokens and other insiders (but apparently transition to a more open but unspecified structure in the future) does not protect against this. Furthermore, if Libra attains the "billions of accounts" scale envisioned in the White Paper, its own growth will create enormous strain on the supply of foreign exchange assets that are genuinely liquid and low-risk, increasing pressure for the Libra Fund to move into higher-risk or illiquid assets. If the Libra Association which governs the fund is not regulated as an asset manager under U.S. securities laws that risk would be heightened.

The Libra arrangement could also be viewed as a banking arrangement, with holders of Libra Tokens as depositors in the bank, the Libra Reserve being the asset side of the bank's balance sheet, the Libra Association being the bank's board of directors, and the Libra Investment Token holders being somewhat akin to equity investors. The similarity to a bank would be heightened if the Libra arrangement operates on a fractional reserve basis, and issues tokens in excess of the redeemable value of the Libra Reserve. Fractional reserve issuance would allow Libra to expand much more quickly, but also heighten the risks to depositors and the financial system. The current version of the White Paper states that Libra intends to operate on a one to one reserving basis, but this policy could be changed in the future. If Libra did choose to operate on a fractional reserve basis it would be even more critical that it be regulated as a bank, with full prudential oversight and subject to the size and growth limitations in U.S. banking law.

Ordinary users of Libra will initially hold their shares in the Libra Reserve fund as payment tokens ("Libra") in a digital wallet established by the Facebook subsidiary Calibra. Both funds and banks offer users access to such on-line accounts already. Obviously on-line banking is offered by most major banks today, and online brokerage accounts today include numerous options for using money market fund shares as a payment mechanism through checks or bank wires, or for quickly and conveniently converting shares in funds into liquid cash.

The Calibra subsidiary has already registered with the Treasury as a money services business. But money services businesses do not hold securities and money services regulation is not designed to regulate securities investment or banking. Further, money services regulation is fragmented and mostly takes place at the state level. There is no mention in the White Paper of regulating Calibra at the Federal level as either a banking arrangement or a securities broker. In the absence of such regulation, users of the service will lack the customer protections provided to bank depositors and the protections afforded to brokerage clients under the SEC's Customer Protection Rule. Staff of the SEC and FINRA have recently issued a statement on custody of digital asset securities, which provides a thoughtful discussion of the issues around brokerage designation for holders of digital assets, including the significance of the Customer Protection Rule.[2] Many other crypto-currency firms have applied for brokerage licenses.

The final, most novel, and most technically complex element of the Libra arrangement is the distributed ledger system which will permit Libra tokens to be used as a payment mechanism with other participants in the network. It is at this point that Libra departs most clearly from long-established financial models. Like other stablecoin arrangements currently being created, it permits tokens backed by the Libra Reserve to be used as a form of currency on a private transnational network. There are further indicators in the White Paper that the distributed ledger will eventually be used for a greater range of transactions than simply payments.

The White Paper claims that the distributed ledger system will make possible instantaneous global value transfer through anonymous or pseudonymous accounts. Such a system clearly raises numerous issues concerning tax evasion and money laundering. Facebook has claimed that these issues can be addressed through national regulation of the digital wallet on-ramps to the system. But this would be enormously challenging if not impossible to implement on a global scale. A greatly increased risk of tax avoidance and criminal use of the banking system is inherent to a system of privatized trans-national currency. As discussed above, improving the efficiency and openness of sovereign national payment systems is a far superior alternative.

[2] *Joint Statement on Broker-Dealer Custody of Crypto Currency Assets*, Financial Industry Regulatory Authority and Securities and Exchange Commission, July 8, 2019. https://bit.ly/32yOiBR

Diversity in Blockchain's Initial Review of Facebook's Project Libra

June 24, 2019

Susan Joseph, Co-Founder and Executive Director
Anna Ashurov, Co-Founder and Director
Michelle Gitlitz, Co-Founder and Director
Shawnna Hoffman, Co-Founder and Director
Joshua Ashley Klayman, Co-Founder and Director

DIVERSITY
IN BLOCKCHAIN

DIVERSITY
IN BLOCKCHAIN

June 24, 2019

DIVERSITY IN BLOCKCHAIN'S INITIAL REVIEW OF FACEBOOK'S PROJECT LIBRA

Authors' Note

Diversity in Blockchain appreciates the opportunity to comment on Project Libra. Information on Project Libra in this paper is drawn exclusively from materials published about it by its participants as well as from public statements made by those speaking for it, in either case, available as of the date of this paper.

Who is Diversity in Blockchain, Inc.?

Diversity in Blockchain, Inc. www.diversityinblockchain.com (DiB) is a not-for profit organization committed to creating equal, open and inclusive opportunities in the blockchain industry. Our mission is to empower everyone from all walks of life to engage with blockchain technology in order to ensure equal participation and distribution. We believe that true innovation includes everyone. Through education, discussion, and engagement we can build a support network as revolutionary as the blockchain itself.

Why does Diversity and Inclusion in Blockchain Matter?

Blockchain is a foundational technology that provides a highly flexible set of tools that allow businesses, governments and others to re-examine their commercial relationships, bringing opportunities for greatly enhanced efficiency in a broad variety of settings. Inherent in this technology is an ability for diverse parties to cooperate in an environment in which trust is brought about through the use of computer-based consensus mechanisms.[1]

Because blockchain technology allows for a new way of value transfer across the internet and has created an entirely new value technology industry, now is the perfect time to incorporate all voices to shape from the outset this emerging sector of the global economy. DiB seeks to promote inclusive and positive behavior and avoid skewed results, imbalances, and outright discrimination that has previously occurred in technology and finance as these new systems are developed and used. We believe that diversity is to be promoted in the development of this technology because the widest perspectives will foster the most valuable and resilient innovations.

The lack of diversity and inclusion in both the technology and financial services industries are serious and well-known issues. They are even more so with an emerging technology[2] that combines the two industries. It is common knowledge that inclusive entities perform better.[3] With such a foundational technology that can reach the banked, underbanked and unbanked, it is necessary to have everyone at the table creating and using blockchain technology.

DiB recognizes that, due to blockchain technology's ability to serve as a trusted single source of data with a transparent and tamper-proof ledger, its reach is global and potentially extensive. Blockchain technology has increasingly been

[1] https://medium.com/@SusanJoseph1786/rating-innovation-an-innovators-take-3814344a852d

[2] https://medium.com/@corintxt/i-tried-to-gauge-what-percentage-of-cryptocurrency-developers-are-female-the-answer-not-enough-58e1d242f7b8

[3] https://www.mckinsey.com/business-functions/organization/our-insights/delivering-through-diversity

DIVERSITY IN BLOCKCHAIN

embraced and promoted by governments and market participants. Blockchain technology is starting to be incorporated by many industries including banking, technology, healthcare, supply chain and logistics, media and copyrights and more. Various social good groups use blockchain technology such as the World Food Program "Building Blocks," Heifer International, Bounties, and BanQu.

For an in-depth description of blockchain technology and related opportunities, please see Section 1 of the Appendix below.

What is Project Libra?[4]

Facebook is leading an initial private group of 28 entities -- including some of the world's most well-known brands -- to introduce a permissioned blockchain called the Libra blockchain, a cryptocurrency called Libra, and an independent governing association called the Libra Association "to enable a simple global currency and financial infrastructure that empowers billions of people."

"Facebook teams played a key role in the creation of the Libra Association and the Libra Blockchain, working with the other Founding Members. While final decision-making authority rests with the association, Facebook is expected to maintain a leadership role through 2019. Facebook created Calibra, a regulated subsidiary, to ensure separation between social and financial data and to build and operate services on its behalf on top of the Libra network."[5]

Functionally, Libra is a stablecoin backed by "a reserve of assets designed to give it intrinsic value" and the Libra Coin is issued by the Libra Association. Calibra is the wallet that is used to transact with the Libra Coin. Initial investors

---

[4] https://libra.org/en-US/white-paper/

[5] https://libra.org/en-US/white-paper/

as members of the Libra Association Council each hold one vote and act as a transaction validator (also known as operating a node) on the Libra permissioned blockchain.

The anticipated number of validator nodes is around 100. Additionally, the Association has said that one of its goals is to "develop and promote an open identity standard."

Project Libra proposes to offer a global cryptocurrency available to all and specifically says "The Libra currency is designed to help those with global needs, aiming to expand how money works for more people around the world." The whitepaper points to the fact that "1.7 billion adults globally remain outside of the financial system with no access to a traditional bank" and believes among other things that "we all have a responsibility to help advance financial inclusion, support ethical actors, and continuously uphold the integrity of the ecosystem."[6] DiB agrees that these are worthy goals. It is clear that other countries (i.e. China's WeChat https://tearsheet.co/future-of-investing/wechat-shows-messaging-is-the-future-of-financial-services-platforms/) are embarking to serve the world population's financial needs through various forms of non-blockchain technology. DiB welcomes blockchain innovation and the opportunities for wide scale adoption of blockchain technology to reach a global population and foster inclusion.

Beyond its stated goals, however, Project Libra presents an opportunity to promote -- and meaningfully move the needle on -- diversity and inclusion on a global scale, including in the technology and financial services workforces

---

[6] https://libra.org/en-US/white-paper/

themselves. Commitment to diversity -- not just with respect to users of Libra and Calibra -- but also with respect to management, employees and marketplace partners from the most junior to the most senior, must be planned and hardwired in at the Project Libra architecture stage and nurtured as Project Libra moves along. By contrast, given Project Libra's scale, failure to focus consciously from the outset on achieving diversity and inclusion metrics and performance goals could perpetuate and increase, perhaps exponentially, the income and workforce participation disparity that exists today in the technology and financial services industries as they move toward adoption of blockchain technology.

The Libra Association:[7]

The Libra Association is a Swiss foundation[8] that governs the Libra Blockchain and the Libra Reserve. The Association will be governed by the Libra Association Council which is made up "of one representative per validator node". The Libra Association will set up the Libra Reserve and will serve as the entity through which the Libra Reserve will be managed. The Libra Reserve will consist of a basket of "low volatility assets such as bank deposits and short-term government securities in currencies from stable and reputable central banks"[9] which back the Libra Coin. The Libra Coin is also known as a type of stablecoin. The Libra Association is the only party who can issue or burn the Libra Coin. The Libra Association also will: (i) work to recruit Founding Members, (ii) fundraise to jumpstart the ecosystem, (iii) create the design and implementation of incentive programs to propel Libra adoption, and (iv) establish the social impact grant-making program.

---

[7] https://libra.org/en-US/white-paper/#the-libra-association

[8] https://www.froriep.com/upload/prj/publication/Key-features-of-Swiss-Foundations-Julie-Wynne-Froriep-STEP_June2017.pdf

[9] https://libra.org/en-US/about-currency-reserve/#the_reserve

DIVERSITY

The Libra Reserve:[10]

"The reserve is the key mechanism for achieving value preservation. By fully backing each coin with a set of stable and liquid assets...and by working with a competitive group of exchanges and other liquidity providers, users can have confidence that they will be able to sell any Libra coin at or close to the value of the reserve at any time. This gives the coin intrinsic value on day one and helps protect against the speculative swings of other cryptocurrencies. The mechanics of the reserve and the various actors in the system are described later in this [whitepaper] section, but, at the outset, it is important to highlight why the reserve was created in the first place — to support stability and value preservation."

Libra Coin Issuance:[11]

"The association is the only party able to create (mint) and destroy (burn) Libra. Coins are only minted when authorized resellers have purchased those coins from the association with fiat assets to fully back the new coins. Coins are only burned when the authorized resellers sell Libra coin to the association in exchange for the underlying assets. Since authorized resellers will always be able to sell Libra coins to the reserve at a price equal to the value of the basket, the Libra Reserve acts as a "buyer of last resort." These activities of the association are governed and constrained by a Reserve Management Policy that can only be changed by a supermajority of the association members."

For a detailed explanation of stablecoins and how the Libra Reserve will operate, please see Section 2 Libra Reserve and Stablecoins in the Appendix below.

[10] https://libra.org/en-US/about-currency-reserve/#the_reserve
[11] https://libra.org/en-US/white-paper/#introduction

The Calibra Wallet[12]

The Calibra wallet (the "Wallet") will be provided through a subsidiary of Facebook. We do not have information yet as to how this will work. In general, a wallet is software that can store a user's private and public keys and allow a user to transact on a blockchain. Custodial wallets will contain data such as know-your-customer/anti-money laundering factors. In addition, they can contain different proprietary analytics. We imagine that ease of access to the Wallet, the user experience, and integration of the Wallet into the network will matter to adoption and circulation of the Libra cryptocurrency.

For additional information on wallets, data capture, and trustworthiness, please see Section 3 Calibra and Wallets in the Appendix below.

Governance appears in several aspects of the Libra Project. The Libra Association is a Consortium. As a Swiss foundation[13], the Libra Association is subject to Swiss law, and is the party that oversees the Reserve and the Libra Blockchain. As stated above, the Libra Association provides Validators for transactions on the Libra Blockchain. Validators engage in a form of governance of the Libra blockchain to approve transactions through a form of consensus that uses proof-of-stake to verify the transactions on the Libra blockchain network.

[12] https://www.calibra.com/

[13] https://www.froriep.com/upload/prj/publication/Key-features-of-Swiss-Foundations-Julie-Wynne-Froriep-STEP_June2017.pdf

What are the Pros and Cons of Consortium Arrangements?

Pros: A consortium can augment a single company's voice and market-making ability. It can enable all participants in the group easy market access and greater potential adoption of consortium based blockchain based solutions by virtue of the consortium membership in place as a ready, and likely interested audience. A consortium can share the costs of R&D and members can learn from each other. In general, consortia are also often in a position to set industry standards.

Cons: A large consortium may exclude smaller participants by the simple cost or market reach metric required to join that group. That large group may then be able to effectively dictate market terms. The consortium may be able to stifle innovation by maintaining the status quo disproportionately favorable to large market players or define and set new standards that are especially favorable to the organizations within the consortium, potentially leaving the rest of the world at a disadvantage. Governance of private players in a private consortium is not transparent. Members of the consortium and jurisdiction of the consortium matter to and inform how the consortium is governed. Potential Antitrust issues exist.

For a detailed look at the characteristics of a Swiss foundation, please see Section 4 of the Appendix below.

The Staking/Consensus Mechanism of the Libra Blockchain

Members of the Libra Association are those who are able to stake. Those staking determine who has a vote in the Association.[14] The stakers create the rules for the Libra blockchain. Non-diverse staking groups may have non-diverse operating rules either purposefully or as a result of unconscious bias. To date the question exists as to whether decentralized staking within blockchain/distributed

[14] https://libra.org/en-US/white-paper/#the-libra-blockchain

ledgers has been sufficiently tested on a large scale to be a system that works and is trustworthy.

Analysis: Diversity in Blockchain Themes and Questions to Consider

1. Create Full Diversity and Inclusion for the Voices of the Banked, Underbanked & Unbanked

- How is diversity and inclusion built into the Libra Association (consortium) for the banked, underbanked, and unbanked?
- How does oversight work with the consortium itself? Who is advising and participating? How transparent is the governance?
- Are the unbanked the only ones to be served? For instance, with whom will the unbanked transact? How does this serve the unbanked if the same know-your-customer/anti-money laundering restrictions that preclude inclusion today exist for the Libra network and Wallet?
- The Libra Association notes there are 1.7 billion unbanked adults in the world.[15] Of the 1.7 billion, almost half are concentrated in seven countries including China, India, and Pakistan. Most unbanked adults are women.[16] How does the Libra Association intend to serve this population?
- In the US, the unbanked are 7% of our population and the underbanked are 20%[17] How does the Libra Association intend to serve this population?
- Are the incentives to distribute the Libra token set to quickly create a functioning market economy regardless of whether it is the unbanked and underbanked who adopt it? Is diversity and inclusion structurally incorporated into the goal of quick adoption?
- The general population is close to 50/50 on gender.[18] Will the Libra Association composition reflect the general population composition?
- How many of the unbanked and underbanked are already served on social media by Facebook?

[15] https://techcrunch.com/2019/06/19/calibra-india-launch-whatsapp-pay/
[16] https://globalfindex.worldbank.org/
[17] https://globalfindex.worldbank.org/
[18] https://data.worldbank.org/indicator/sp.pop.totl.fe.zs

DIVERSITY

- How many of the banked are already served on social media by Facebook?

2. <u>Understand Who the Beneficiaries of Project Libra are</u>

<u>Association members:</u>

- What benefit does each party receive from Project Libra?
- Does the Libra Association earn interest from the reserves and fees to transact on the system?
- Do the wallets that are used to transact on the network charge an access fee?
- What types of incentives do the founding members create and receive from the Libra Association to propel adoption?
- Should wallet companies be members of the Libra Association? Is this an inherent conflict?
- Who other than the founding members can influence the policy for Libra Reserve?
- All nodes/members do not contribute monetarily. Will all 100 member nodes directly or indirectly receive interest and fees?
- Will the Libra Association become a market maker for the Libra Coin?
- Will any of the groups associated with this project (i.e. Facebook and others) be able to create a transactable global identity such that KYC / AML is standardized and trustworthy? Or will that identity standard act as an exclusionary barrier or one that is controlled by the few?
- Does the limit of 100 nodes create a power imbalance such that a small group of people manage a high percentage of the world's transactions? Could the 100 nodes eventually push competitors out and deter innovation?

<u>Libra Users:</u>

- Will the founding members and wallet providers be able to create advertising or target users based on data generated on the network?
- Will Facebook benefit from its new subsidiary Calibra, the wallet that will hold the Libra Coin, by being able to create advertising revenues targeted to the unbanked, underbanked and banked?
- How are the users of the Libra Coin benefitting?

- Is the Libra Coin more similar to currency? Can it be used as deposits? Is it a security? Is it a gift card? How is it insured under any of these characterizations to protect the user?
- Will payments turn into loans or micro-loans? How will loans be regulated?
- What disclosures are needed to understand the true cost of Libra (fees, control of data, loss of interest, etc.)

3. **Understand the Governance of Project Libra**

- How do you prevent undue influence within the Libra Association and throughout the entire Libra Project (the Libra Association, the Libra Coin the Libra Blockchain Network and Calibra, the Wallet) as it affects the greater world? For example, Andreesen Horowitz includes Marc Andreesen, who sits on the board of Facebook. Mark Zuckerberg sits on the Board of Breakthrough Initiatives. Peter Theil is the Founder of PayPal and on the Board of Facebook. Ben Horowitz is a founder of Andreesen Horowitz and on the Board of Lyft. Simply looking at a small sample of individuals, there appears to be "cross-pollination" on Facebook's Board and there are multiple close relationships across the Libra Association members.
- People who are on similar boards from similar backgrounds tend to think similarly which limits diversity of thought. Resiliency may be compromised.
- The Association's Members may vote similarly and have influence indirectly or directly. For example, if a Member votes in the manner contrary to a position advocated by Facebook / Calibra, what if Facebook retaliates? What if the threat of Facebook retaliation changes behavior?
- Each of the Libra Association companies have investors or shareholders to answer to. How are they going to put the best interest of the Libra Association above their own already-existing fiduciary obligations?
- Whereas our financial system is set up to be governed representatively by public servants who can be voted out of office, similarly can the Libra Association members be voted out of office by the people who use Libra?
- How does Libra Association's governance fit into antitrust regimes in the various jurisdictions in which they expect to operate? How do the expected activities of the Libra project fit into the antitrust regimes?
- How does the Libra Association intend to be open about identity standards? Should they be the ones to establish global identity standards?

DIVERSITY

4. Understand what Happens to the Interest Income from Libra Reserve, the Stability of a "Stablecoin", and the Cost to Transact

- Money is defined as "store of value", "medium of exchange" and "unit of account". What is the Libra Association's definition of money? What is its intended use of interest from Libra Reserve's investments? Will there be interest from the float?
- Interest income from the investments of the Libra Reserve will fund the operations of the Libra Association for grants to nonprofits and dividends to the initial investors. Why is there no interest income being paid to those who hold and use Libra? How does this really help the unbanked and underbanked or is this the price they are expected to pay to transact?[19]
- Libra is intended to be a stablecoin; therefore, assuming Libra Coin is backed by a currency basket which experiences FX risk, if a user purchases the equivalent of $500 of Libra Coin, how does the Libra Association guarantee the user receives $500? Low volatility does not mean no volatility.
- In terms of the cost to transact, with companies such as Western Union charging upwards of 10% fees, what will Libra charge to transact? Will there be a fee to use Calibra, or will Facebook make Calibra free in exchange for a user's data and privacy?
- Will all wallets be equally easily accessed, or will the founding members be creating a system where their wallets will be easier to use and integrated on the back end?
- The banked have a choice to protect their data, but will the unbanked and underbanked have to trade their data and privacy to transact?

5. Understand What it Means to use a Swiss Foundation to Create Money

- What are the consequences of using a Swiss foundation to create money? What are the tax implications, voting, rescission rights, code maintenance, upgrades, forks, etc.?

---

[19] https://www.marketwatch.com/story/facebooks-libra-coin-could-become-a-big-pain-in-the-wallet-for-consumers-2019-06-19

DIVERSITY

- Who will have input to the charter/governance documents for the public good's use? Shouldn't the public be able to meaningfully participate?
- If it is a public good, should the public be receiving the dividends or interest?
- What is the Government's role in regulating the public good?
- Is access to banking a public good?

6. Understand the Potential and Risks of Establishing a Global Data Pool

- Is the Association creating a global data pool for any government to surveil and tax? It is possible this may create the largest concentrated pool of data on cryptocurrency users in the world.
- What measures can Project Libra take to prevent any government from surveilling on the activities of the individuals using Libra and then taxing them?
- Ginni Rometty, IBM's Chairman, President and CEO, said: "Cybercrime is the greatest threat to every company in the world." We've recently seen breaches such as Cambridge Analytica and Equifax. What precautions will Project Libra take to protect what might become the most sought-after data in the world?
- What type of due diligence and auditing will Project Libra take to ensure that the exchanges using Libra are protecting customer's data?

7. Who Resolves a Human Error, Technical Malfunction, or Global Meltdown in the Libra Network? How are Users of Libra Protected?

- As this cryptocurrency may grow to be systemically important to the global financial system, who is liable for mistakes?
- Who decides whether there is inclusion and exclusion to the Libra network?
- Who decides who can enter and who can exit the network?
- Are these founding companies or their boards now making themselves more vulnerable to being manipulated and subject to ransom by being part of the Libra Association?
- What happens to the value of the underlying currencies if the Libra Association collapses?
- What rules and independence surround the custodians of the Libra Reserve?

- Are the current association member companies solvent and independent?
- Who has fiduciary obligations to whom?
- What happens if the member companies become insolvent or highly leveraged?
- What happens if the technology fails? If a cloud service fails? What implications exist if transactions just halt across the globe?

8. What is the Susceptibility to Fraud and Malpractice? Cautionary Tales

- Is a private consortium not specializing in technology an appropriate group to be coding and maintaining a large, potentially with systemic risk, financial network that could functionally control global monetary policy? Should other parties be involved to balance the distribution of power?
- How is the open source nature of the Libra blockchain being administered? For example, most technology / open source technology groups are uniquely resourced and equipped to be run by technology companies and foundations such as the Linux Foundation.
- Where are the checks, balances, testing and licensing of the Libra blockchain network and who administers these standards and audits?
- How will the Libra decentralized system and its related apps upgrade and coordinate in real time to prevent systemic failure?
- Merely allowing open source of code does not create coordination, transparency, meritocracy, early and often release encouragement, community growth, and keeping the network integrity maintained. How would all of these functions be created, supported, and audited? Who will be building and maintaining the Libra Network?
- In an open-source environment, code matters. A system that has checks and balances down to the code level to confirm non-bias is important. Who is verifying that this occurs and how is it being verified?

9. Could Libra Become Too Big to Fail and Who Would Bail Them Out?

- How is the Libra Association going to address any systemic risk?
- How is the user protected in the event of the Libra's Association's failure? Is the user (unbanked, underbanked or currently banked) shouldering the brunt of the risk? Libra Coin has the potential to become the largest currency in the world, making Facebook the largest financial institution in the world by default.

- Does the Libra Network immediately become a systemic risk upon launch due to potential market and adoption size? If it is a financial institution, who regulates it? How are consumers protected?
- How can it be insured? By contrast, public cryptocurrencies which are individually controlled are not regarded as a systemic risk. [20] [21]
- Should financial literacy training be required to use Libra? Who should conduct the training?
- Are we asking the average user to engage in fx because Libra is a low-volatility unit and not a no-volatility unit of payment? How sophisticated a participant would you have to be to understand and engage in that process?
- If a stable payment conversion rate is issued, who loses and gains when the stablecoin fluctuates? Who will be able to hedge and arbitrage and who is incentivized to take on that activity? What happens to the underlying currencies regarding arbitrage?
- How do you preserve the ability of the unbanked and underbanked to easy access to Libra or to easily access other types of payment if participants do not want to use Libra?

10. How True is the Data and Will It Be Co-Mingled?

- Data Integrity: All networks today are currently struggling with data integrity. How is a much larger network going to ensure data integrity?
- How do you know that it is real data? What protections will be in place?
- How will data integrity and data assurance be guaranteed?[22] If the data is in any way false, who is liable and how is that enforced? Does that disproportionately disadvantage the unbanked and underbanked?
- Who will be able to examine the processes that make up that guarantee?
- How will policies affecting data integrity and data assurance be implemented?

---

[20] https://www.crowdfundinsider.com/2018/03/130466-financial-stability-board-crypto-assets-do-not-pose-risks-to-global-financial-stability-at-this-time/

[21] http://cfmsurvey.org/surveys/bitcoin-and-city

[22] https://www.pwc.com/gx/en/services/audit-assurance/publications/halo-solution-for-cryptocurrency.html

- Data Commingling: Is there a risk of social ranking scoring within the payment system? Will this make it worse for the unbanked, underbanked, and banked?
- What if you are a group Facebook does not like? What if you post content that Facebook does not like? Will this prevent you from initiating a new Calibra wallet or opening an existing Calibra wallet?
- How would you prevent the introduction of an app to do this?
- What about discriminatory practices? Technological redlining?
- Once you have the data, how is it going to be encrypted? Who is going to have access to it? Will you encrypt payment spending history so it cannot be reported without consent?
- While financial institutions are required to incorporate robust privacy and data security frameworks, it is unclear how Facebook intends on interpreting and synthesizing existing legal protections for consumer financial transactions with its cryptocurrency.
- Even without sharing identifiable information, Calibra will give Facebook remarkable access to information globally about how much money people have, what they are buying, and what they are paying for with it, especially since Calibra is to be integrated with WhatsApp and Messenger services.
- Facebook will potentially share user account information and financial data with third parties if potential fraud or criminal activity is involved, for "legal compliance" and for "product performance," which likely includes vendors and payment processors to effectuate payments. But, could it also include advertisers to improve Wallet functionality?

11. How will the Libra Association Allow for Examination of the Underlying Computer Code, Including Software Development Kits, to Stay on Track to its Proposal in the Whitepaper?

Recommendations

1. Create a quick-moving, global independent taskforce that encourages innovation and can address diversity, inclusion, identity, financial services, and emerging technology.
2. Create and require meaningful diversity in the Libra Association representatives of the populations to be served.

3. Consumer protection in the new world of FinTech comes when there is fair access to banking, data integrity is assured and insured, identity is treated fairly, when the system is protected if it melts down, when users are able to pay a fair price that does not impinge upon their privacy and data, and when consumers have equally easy access to wallets to engage in transactions. These principles should be incorporated.

4. Hold Project Libra accountable through its lifecycle. Understand the code and implications from it. Does the implementing line-by-line code track the white paper and ensuing agreements? Create a multi-disciplinary team who can spot issues after having the code audited and explained. Coding is not going to stop. Nor do we want it to. The technology companies are not going away, and we want to foster innovation.

5. Create incentives for positive digital systems to be created (i.e. create a new business form that is entity friendly to the blockchain/crypto business to encourage business to form and be regulated in the USA). The point of accountability matters and may be best administered and enforced in how the services are accessed (the technology stack) rather than at code creation. For example, please see FATF recommending the travel rule apply to crypto exchanges[23] and FinCen Guidance that developers are not subject to payment transmitter rules in many circumstances.[24]

[23] https://static.coindesk.com/wp-content/uploads/2019/06/Embargo-Virtual-Asset-Guidance.pdf
[24] https://www.fincen.gov/sites/default/files/2019-05/FinCEN%20CVC%20Guidance%20FINAL.pdf-

Appendix:

Section 1: Blockchain: Further Information

Ledgers and Blockchain: An Introduction

Today, all businesses transact on centralized ledgers. Each business has their own ledger version which must be reconciled with the counterparty or middleman ledger, or both, to complete a transaction. This is a centralized method of transacting where typically the third party or intermediary helps the counterparties create a transaction. This age-old centralized system is fraught with errors and is slow, thus creating the desire by many individuals and businesses to seek different technologies to replace the current error-prone and slow centralized system.

Blockchain is seen as one of the answers to this age-old problem. Blockchain is a transaction database. It is created through a distributed and decentralized ledger of transactions. It uses blocks that store information about each transaction such as date, time and dollar amount. Blocks are chained together thus creating a blockchain.

Blockchain switches from the centralized method of transacting to a more direct, peer to peer system of transacting. The decentralization and architecture of blockchain solves the problem of the digital double spend. All parties can access the ledger without the need for a third party to oversee it. Synchronization and integrity of the ledger is enabled through a form of decentralized computing secured by cryptography. In short, everyone has a copy of the ledger, and changes to the ledger ONLY occur once a majority has come to consensus about that transaction. These changes are additive (append only) and mistakes can be fixed by creating a new entry to the ledger. The result is a tamper-proof, censorship resistant set of transaction records. All participants do not need to reconcile any of these records whether payment or smart contract code offerings. "You see what I see always" is the manner of operating.

Bitcoin the Network and Bitcoin the Cryptocurrency

One of the applications based on blockchain technology is bitcoin, the world's first cryptocurrency. Bitcoin was founded ten ("10") years ago by an unknown person or a group of people, called Satoshi Nakamoto. In the bitcoin whitepaper, Nakamoto came up with an idea of a digital payment system using digital currency called bitcoin. Nakamoto created the architecture for a decentralized, verified network that can be used for payment transmission between private parties without the use of intermediaries. Bitcoin transactions are recorded and transmitted via a decentralized public ledger, called Blockchain. Nodes (or "computers") are used to verify each transaction that is recorded in a transaction "chain" on the ledger.[25]

Types of Blockchains with Cryptocurrencies and Smart Contracts

Different types of public blockchains exist that emit cryptocurrencies. Examples of these types of cryptocurrencies include bitcoin and ether. The Bitcoin blockchain is geared to payment functions and the Ethereum blockchain is geared to contracting functions. Automated business processes embedded in these blockchains are computer protocols that are known as "Smart Contracts". Smart contracts are composed of computer code that carries out an if/then function in a determinative manner. Smart contracts may or may not be legal contracts depending on what the computer code represents.

[25] https://nakamotoinstitute.org/bitcoin/

Technical: Public Chains Emit Cryptocurrencies

On a more technical level, blockchains are synchronized decentralized transaction databases that are maintained by a distributed network of computers which rely on cryptographic puzzles that contain economic incentives to secure the network. The networks emit cryptocurrencies as the economic incentives to solve the puzzle and verify a transaction. The reward in the form of a cryptocurrency is given to the winner, and the integrity of the network is maintained by those solving the puzzle, also known as miners.

The cryptocurrency is made up of a public key (generally that anyone can see) and a private key (that functionally acts as a safe deposit box). The cryptocurrency can be moved when the private and public keys are put together. Access to the private key is the only way for someone to access the asset.

Private Blockchains and Distributed Ledger Technology

Private Chains are similar to public blockchains, but generally do not use emitted cryptocurrencies to ensure the integrity of the system. Private Chains use different consensus mechanisms to ensure the integrity of the system. Private chains are made up of decentralized transaction databases and are often referred to as distributed ledgers. Private chains are membership organizations. The parties running the chain are all known "members" operating under some sort of joint agreement. Private chains can be built and used by consortia, joint ventures and other entities to form networks. Enterprise is interested in this form of blockchain. While private chains do not emit cryptocurrencies to secure their networks, cryptocurrencies and digital assets can be created by private chains through coin offerings. One type of cryptocurrency that can be created by a coin offering is a stablecoin which is a cryptocurrency backed by assets.

Table 1. Blockchain Characteristics - A Comparison[26]

Blockchain characteristic comparison				
Characteristics	Bitcoin	Ethereum	Hyperledger	Libra (Proposed)
Restrictions	Permissionless	Permissionless	Permissioned	Permissioned
Restricted public access to data	Public	Public or Private	Private	Private
Consensus	Proof-of-Work	Proof-of-Work (in future, Proof-of-Stake)	Practical Byzantine Fault-Tolerance	Proof-of-Stake
Scalability	High node-scalability	High node-scalability	Low node-scalability	Unknown
Central regulation (governance)	Low: decentralized decision-making by community / miners	Medium: core developer group but Ethereum Improvement Proposal Process	Medium: open-governance model based on Linux model	High: Highly concentrated
Anonymity	Pseudonymity, no encryption of transaction data	Pseudonymity, no encryption of transaction data	Pseudonymity, yes encryption of transaction data	Unknown
Native Currency	Yes, bitcoin	Yes, ether	No	Stablecoin issued atop a decentralized network
Scripting	Limited possibility, stack-based scripting	High possibility, Turing-complete virtual machine high-level language support (Solidity)	High possibility, Turing-complete scripting of chaincode, high-level Go-language	Unknown, New Language proposed called MOVE
Compensation	Bitcoin Miners	Ethereum Miners	Can be consortia members or other private arrangement	Libra Reserve Founders
FIAT Assets Held in Reserve	None	None	None	Yes

[26] https://medium.com/blockchainspace/3-comparison-of-bitcoin-ethereum-and-hyperledger-fabric-cd48810e590c

DIVERSITY IN BLOCKCHAIN

A Technical View: What makes Blockchain Technology Different and Revolutionary and How can it be Useful?

The technological utility and breakthrough of this technology is decentralized linear ordering of a decentralized synchronized ledger. The added benefit of this ledger is that transactions embedded within the ledger can be deterministically programmed. While different components of this technology have all been around for years, the way they have been put together to create blockchain computing architecture is new and can be thought of as revolutionary for tracking and proving transactions, items, creating assets, registries, identity and the like.

Blockchain for Enterprise and for Social Good Applications

Blockchain in Enterprise:

Due to its ability to serve as a trusted single source of data with transparent and tamper resistant history / ledger, blockchain technology has been widely explored across most industries, including banking, insurance, technology, healthcare, supply chain and logistics, media and copyrights and more. Enterprise is seeking across verticals to adopt this technology and in a large part has created consortia to explore, build and work on this technology.

The Banking system is a clear example of where blockchain may be applied for both origination and back office / operations. For example, blockchain in origination has been used for money transmission, traditional banking and lending. Blockchain in the back office has been used to improve efficiency and save costs, as well as to simplify and strengthen certain traditional banking processes, such as Know Your Customer (KYC) and Anti-Money Laundering (AML).

Blockchain in Social Good:

1. Permissioned Chain: World Food Programme "Building Blocks" program in refugee camps in Jordan is a private permissioned blockchain integrated with UNHCR biometric iris scan technology to authenticate and register beneficiary transactions allowing for direct pay of groceries. Financial Institutions are not used as intermediaries. The World Food Program has a record of every transaction. The result is reduced transaction fees, better ability to serve refugees and track monies distributed, better ability to respond to emergencies, and better privacy and security for the refugees.[27]

2. Public Chain: Heifer International's goal is to build a blockchain network for agricultural development. They are seeking to address land registries for farmers. Their first initiative was to create a poultry supply chain tracing application on the public Ethereum blockchain in 2016. Heifer International also accepts donations in bitcoin and ether.[28]

3. Public Chain: Bounties is a startup that uses a public blockchain. It is an ethereum-based project that provides technology to create projects for decentralized economies/marketplaces. Participants collaborate and are paid for projects in cryptocurrency in any subject matter area. One successful project was the beach clean-up Manila Bay project in the Philippines where locals worked alongside technologists to pick up trash and were paid in cryptocurrency bounties

[27] https://innovation.wfp.org/project/building-blocks

[28] https://www.heifer.org/campaign/2018/blockchain-initiatives.html

DIVERSITY IN BLOCKCHAIN

in the form of ether (the cryptocurrency generated by the Ethereum public chain).[29]

4. Permissioned Chain: BanQu is a startup that records supply chain invoices on a private blockchain which then creates a record of transactions to support the creation of a digital identity which leads to becoming banked. It recently was funded by Anheuser-Busch in a series A funding.[30]

Growth of the Cryptocurrency Markets

The growth of the digital assets market, commonly referred to as the "cryptocurrency market," has been highly publicized both in the popular and trade media. On October 31, 2008, the mysterious Satoshi Nakamoto published his creation of bitcoin, and with it, created the first public blockchain. Cryptocurrencies are a benefit to society as they can be used for capital raises as well as payment mechanisms. Digital tokens issued in capital raises are called Initial Coin Offerings ("ICOs") and entered the mainstream vernacular in 2016 and 2017, raising billions of dollars' worth of digital assets with goals of funding product development, building user networks and, at times, perpetrating scams or frauds. Many interesting projects have been built. The market has had its faults as well. Despite the arguable transparency of public blockchains, in many ways, the digital asset trading market has been characterized by volatility, relatively thin trading, and lack of liquidity and opacity of information. Many ICOs arguably were engaged in unregistered sales of securities to U.S. "Main Street" purchasers, or otherwise may have run afoul of a variety of laws both in the U.S. and abroad. The second half of 2018 marked a slowdown in the ICO market,

[29] https://medium.com/bounties-network/bounties-for-the-oceans-incentives-to-change-the-world-8f3429fd01e9

[30] https://banqu.co/our-purpose/

DIVERSITY

which some refer to as "crypto winter," and prices for many so-called "digital currencies" and "alt-coins" fell dramatically.

As of the date hereof, the website www.coinmarketcap.com describes 2,279 cryptocurrencies, with an aggregate market cap of $328,355,270,948. **While $328 billion may sound significant, it is important to remember that, as of today, the market capitalization of Facebook alone is $545.61 billion.[31] This is without including any of the many initial participants in the Libra project, including Visa ($379.09 billion)[32], MasterCard ($270.16 billion)[33] and many others.**

Section 2: Libra Reserve in Detail

Facebook's Libra Reserve located in Switzerland can be seen as similar in nature to the Federal Reserve System located in Washington D.C. "Authorized Resellers" are akin to the financial institutions that have access to the Federal Reserve. Thus, it could be argued that since the Libra users do not interact directly with the Association, it is up to the Exchanges to do all the AML / KYC work (just as Bank of America, not the Federal Reserve, is responsible on the front lines for AML / KYC). With the recent FATF announcement involving the travel rule, it appears the Libra Association takes on no AML / KYC risk, and instead the exchanges offering Libra would be responsible.[34]

[31] https://ycharts.com/companies/FB/market_cap

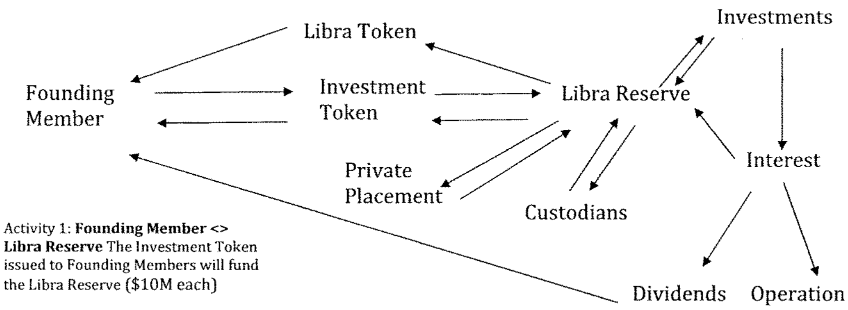
[32] https://finance.yahoo.com/quote/V?p=V&.tsrc=fin-srch

[33] https://finance.yahoo.com/quote/MA/

[34] https://static.coindesk.com/wp-content/uploads/2019/06/Embargo-Virtual-Asset-Guidance.pdf

DIVERSITY IN BLOCKCHAIN

Chart 1: Schematic of the Investment Token from Founding Member to the Reserve (Activities Sourced from the Libra Reserve Whitepaper)[35]



Activity 1: **Founding Member <> Libra Reserve** The Investment Token issued to Founding Members will fund the Libra Reserve ($10M each)

Activity 2: **Libra Reserve <> Founding Member** Libra Reserve will pay out incentives in Libra coin to Founding Members to encourage adoption by users, merchants, and developers.

Activity 3: **Private Placement <> Reserve**
The funds for the coins that will be distributed as incentives will come from a private placement to investors.

Activity 4: **Libra Reserve <> Custodians**
The reserve will be held by a geographically distributed network of custodians with investment-grade credit rating to limit counterparty risk. Safeguarding the reserve's assets, providing high auditability and transparency, avoiding the risks of a centralized reserve, and achieving operational efficiency are the key parameters in custody selection and design.

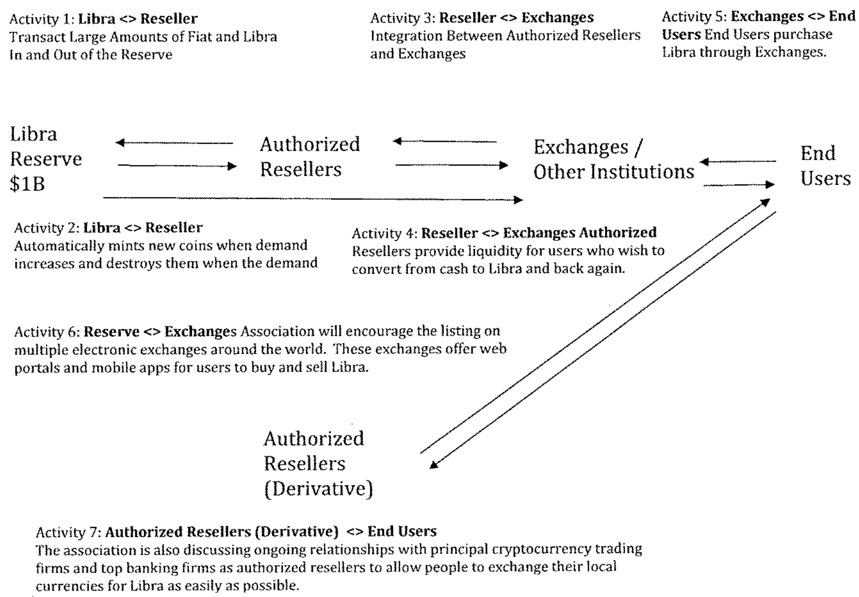
Activity 5: **Libra Reserve <> Investments**
The reserve will be invested in low-risk assets that will yield interest over time.

Activity 6: **Interest <> Operations**
The revenue from this interest will first go to support the operating expenses of the association — to fund investments in the growth and development of the ecosystem, grants to nonprofit and multilateral organizations, engineering research, etc.

Activity 7: **Interest <> Dividends** After Operations are covered, the remaining returns will go to pay dividends to early investors in the Libra Investment Token for their initial contributions.

[35] https://libra.org/en-US/white-paper/#the-libra-blockchain

Chart 2: Schematic of the Libra Token from the Reserve to End User (Activities Sourced from the Libra Reserve Whitepaper)[36]



[36] https://libra.org/en-US/white-paper/#the-libra-blockchain

Stablecoins

A Stablecoin is a cryptocurrency that is designed to serve as a more stable digital currency relative to the price of fiat or some other asset or a basket of assets. Stablecoins can be pegged individually or in combination against currencies, assets or commodities (for example, gold), and therefore can be more stable than a typical cryptocurrency (as it has a fixed value relative to the underlying asset). Given the extreme volatility of the cryptocurrency markets and recent ups and downs of bitcoin and other digital assets, having a more stable asset to trade is an important feature of mass adoption in digital currencies. The idea of a stablecoin attempts to solve exactly this issue - how can one bring crypto to main street.

There are four main types of stablecoins: fiat-backed, commodity-backed, cryptocurrency-backed and seigniorage-style. A fiat-based stablecoin is the most common type of a stablecoin and is fully backed by fiat money. $1 of stablecoins is equivalent to $1 of fiat money. This structure is the simplest but is also the most centralized. It is reliant upon higher degrees of trust and greater oversight and regulation.

Section 3: The Calibra Wallet and Facebook[37]

Project Libra's moneymaker for Facebook is Calibra, the messenger/wallet, with private currency embedded in a Facebook app. The leader of this Wallet effort, David Marcus, comes from PayPal. Calibra could be in control of the payment stack which may provide less visibility for the regulators. Calibra may have access to social information through WhatsApp and Messenger. Calibra has the potential for concentrated power and may be able to exacerbate existing

[37] www.calibra.com

discriminatory practices that can potentially box out people regardless of the context for reputation / credit score. For instance, what happens if Facebook suspends your account? Is your Wallet suspended as well?

Trust is what Facebook wants to recapture. How will Facebook be able to do this? Facebook's track record with data oversharing and privacy is a continuing bone of contention. Apps often use software development kits (SDKs) to integrate certain features and functions. The SDKs allow apps to understand user behavior which can be used to target advertising and the apps share the data with the maker of the SDK. As the article referenced below states:

"No smartphone is safe from Facebook's SDKs, as the social media giant has placed the analytics tool in thousands of apps."
https://medium.com/@cait.burchett/invasion-of-privacy-or-unintentional-oversharing-how-big-tech-companies-track-your-every-move-eeb85e40656e

Section 4: Swiss Foundation Law[38] and Project Libra

Although some lawmakers and market participants have cautioned that U.S. regulatory scrutiny could cause Facebook to take Project Libra outside of the U.S., this arguably may be a red herring. While Facebook itself, and many of the initial Project Libra members, may continue to operate from, or be headquartered in the U.S., Project Libra already has been intentionally structured to be "located" outside of the U.S. Indeed, Project Libra contemplates a Swiss foundation structure. As such, the Swiss foundation is subject to Swiss law, which differs in many ways from U.S. law.

[38] https://www.froriep.com/upload/prj/publication/Key-features-of-Swiss-Foundations-Julie-Wynne-Froriep-STEP_June2017.pdf

Among many other things, Swiss law differs from U.S. law concerning the legal classification of digital tokens. For instance, FINMA, the Swiss regulator, specifies three different types of digital assets, based on the characteristics of, and rights afforded by, the tokens themselves. This classification is very different from U.S. law's principle-based securities laws and the analysis by the SEC staff and others, of transactions involving such tokens. The famous (in the U.S.) Howey test, which asks whether there has been an (i) investment of money, (ii) in a common enterprise, (iii) with a reasonable expectation of profit, (iv) based solely or primarily on the managerial or entrepreneurial efforts of others -- and is used in the U.S. to determine whether an investment contract and, hence, a security, exists -- is irrelevant to Swiss law.

It is entirely possible that Project Libra could decide, given feedback from U.S. regulators and lawmakers, to exclude U.S. persons from access to the Libra and Calibra, but that would not mean that Project Libra itself would be stopped. As a Swiss foundation that, by definition, is not owned by Facebook, it may be able to limit its exposure to U.S. persons and U.S. laws. In the table on the next page are a few high-level observations on Swiss foundations.

Table 2: High-Level Observations about Swiss Foundations

Selected Pros	Selected Cons
Swiss foundation is a familiar structure in the digital token sale context	In some ways resembles an irrevocable trust. In Switzerland, as in the U.S., new businesses do not typically structure themselves in ways similar to irrevocable trusts. Ability to achieve impact may be limited by dependence on contributions and donations.
Some initial flexibility may be drafted into the Swiss foundation's governance.	Foundation's purpose must be valid and non-commercial. The purpose is difficult to change, once established.
There are no owners, members or shareholders.	Founders cannot control the Swiss foundation, which is quasi-governmental. The board must act in accordance with the foundation's purpose and governing documents and applicable law.
There may be ability to minimize exposure to certain U.S. laws, if desired (e.g., by excluding U.S. persons).	Generally difficult to force a Swiss foundation to take certain actions. Difficult for founders to remove property from Swiss foundation, including during dissolution. Difficult for founders to refund donations (whether fiat or digital currency or other property) to contributors.

AUTHORS

Susan Joseph, former B3i North American Representative, Blockchain Consultant

Susan Joseph is a Co-Founder and the Executive Director of Diversity in Blockchain, Inc. She has a JD/MBA and is a former General Counsel who consults in the blockchain industry specifically in the areas of consortia, insurance, identity, financial services, cryptocurrency, tokens, regulatory impact, real estate, supply chain, technology standards, and humanitarian concerns for enterprise and startups. She advises on projects to design and align token strategies and incentives regarding digital rights and is frequently consulted about regulatory and technological policy including the relationship between blockchain and artificial intelligence. Selected accomplishments include: former B3i North American Representative, Builder/Leader of Blockchain Working Group for a global insurer, and Core Member of World Economic Forum Consortia Project. Susan is a member of the Wall Street Blockchain Alliance legal working group and the Chamber of Digital Commerce. Previously, Susan was the first Executive Director of ID2020 and has consulted for IBM, positioning their blockchain identity practice. Susan advises many companies at their early stages and frequently travels around the world and guest lectures at universities and conferences alike.

Anna Ashurov, Senior Director of Strategy, Anheuser-Busch InBev

Anna Ashurov is a Co-Founder of Diversity in Blockchain and is also the Senior Director of Strategy at Anheuser-Busch InBev, where she is involved in commercial strategy, innovation and technological advancements in North America. Prior to ABInBev, Anna worked as a capital markets banker at Goldman Sachs ("GS") and served as a Business Unit Manager of the Capital Markets Division in 2017. Prior to GS, Anna worked in Restructuring Advisory at Barclays, helping restructure and reorganize credits during the credit crisis where Barclays had exposure. Anna holds a Bachelor's Degree from Baruch College and a JD from Brooklyn Law School, where she serves as a member of the Board of Trustees. Anna is Treasurer and a Board Member of the Diversity in Blockchain non-profit organization focused on driving inclusion, education and leadership for diverse people in blockchain and emerging technologies. Anna is also a member of the legal committee for the Wall Street Blockchain Alliance, an advocacy group for Wall Street in the distributed ledger age. Lastly, Anna sits on the Board of Directors at Mazel Day School, a private day school in Brooklyn. Anna is married, has four children and resides in Brooklyn.

Michelle Ann Gitlitz, Partner, Co-Chair of Blockchain and Digital Currencies Group, Blank Rome LLP

Michelle is a Co-Founder of Diversity in Blockchain. An experienced regulatory lawyer and litigator, Michelle's practice focuses on the legal and regulatory issues confronting companies and individuals who bring blockchain applications to market. Michelle's clients include emerging and established companies, broker-dealers, funds, and other participants in the Fintech space. Michelle guides her clients through the evolving regulatory and legal landscape that governs their business model. Her experience includes advising individuals and companies as they raise capital through coin/token issuances and security token offerings, form digital currency exchanges/platforms, establish new blockchains and nodes, establish digital currency mining operations, navigate through federal and state money transmission issues, and in connection with federal and state regulatory enforcement actions. Michelle was listed by the *National Law Journal* and *New York Law Journal* as a Trailblazer (2018) in Cryptocurrency, Blockchain and Fintech. Michelle also frequently collaborates with federal legislators on blockchain and digital currency issues. Michelle is a frequent writer and sought-after speaker on blockchain and cryptocurrency matters.

Shawnna Hoffman, IBM Cognitive Legal Co-Leader

Ms. Hoffman is a Co-Founder of Diversity in Blockchain and is also the Global Co-Leader of the IBM Cognitive Legal Practice. She is a sought after Blockchain Subject Matter Expert and recently spoke at the United Nations at the Blockchain for Impact Summit on "Diversity in Blockchain". In September 2018, she was appointed as Chair of the U.S. Commodity Futures Trading Commission's (CFTC) Distributed Ledger Technology and Market Infrastructure Subcommittee for the 2018 - 2020 term. In March 2019, she testified in front of the CFTC on "The Current State of Blockchain Adoption". She has one published patent for Detecting Clusters and Relationships in Large Data Sets (20180096047) and one pending for Method and System for Pattern-based Home Network Configuration (END820160894). As her give back to her local community, Ms. Hoffman co-founded and serves on the Board of Directors of the Community Hope Center of Osceola County which has helped over 30,000 homeless individuals since its inception.

Joshua Ashley Klayman, Founder & CEO, Klayman LLC & Inflection Point Blockchain Advisors, LLC

Joshua Ashley Klayman is a Co-Founder of Diversity in Blockchain. Josh is one of the best known Blockchain and Cryptocurrency lawyers in the world. Recognized by *Chambers and Partners* as one of only 3 "Band 1"-ranked U.S. Blockchain & Cryptocurrency lawyers for 2019, Josh is one of the original top 12 global lawyers ranked by *Chambers* in its inaugural 2018 list. She is Founder and CEO of Klayman LLC, a blockchain-focused law firm, and Inflection Point Blockchain Advisors, LLC. Previously, Josh co-founded and led a prestigious global law firm's Blockchain + Smart Contracts Group. She is a board member, and chairs the Legal Working Group, of the prominent Wall Street Blockchain Alliance. A recognized thought leader, Josh is a *Forbes* Contributor and a member of both Wharton's global Reg@Tech think tank and Collective Future. In 2019, *Modern Consensus* named her #89 of the "100 Most Influential People in Crypto." Josh collaborates with blockchain leaders worldwide, speaks frequently with regulators and was appointed by Delaware's Secretary of State to Delaware's Blockchain Strategy Committee. Josh has five children and one grandchild, leading some to nickname her "Mother of Blockchains."

Advisors

Jason Brett, Founder, Value Technology Foundation

Jason Brett is the Founder and Executive Director of the Value Technology Foundation, a non-profit focused on the research and development of blockchain technology in Washington D.C. Mr. Brett has almost 20 years of experience in Financial Services, and over four years of experience with blockchain technology. He has presented to a wide range of U.S. government agencies and regulatory bodies. Mr. Brett's previous experience includes working at the Federal Deposit Insurance Corporation (FDIC) Division of Finance and Capital Markets at the start of the global financial crisis, where he conducted research on financial and accounting issues, using Bloomberg to determine. Jason's experience in the Blockchain ecosystem includes a role as the Director of Policy Operations for the Chamber of Digital Commerce, a non-profit trade association in D.C., and as Policy Ambassador for ConsenSys, a venture production studio in Brooklyn focused on Ethereum. Jason lives in Rosslyn, VA.

Carlos Acevedo

Carlos Acevedo is a recognized teacher leader who has taught in schools both in the United States and Central America. He was featured in the Washington Post for his initial efforts to introduce cryptocurrency to high school students in the South Bronx. He is the founder of Crypto Community Project, a company dedicated to educating underserved communities in the practical use of cryptocurrencies and blockchain technology. He also produces content for Never Stop Marketing, exploring the effects of blockchain technology on marketing and advertising.

DIVERSITY
IN BLOCKCHAIN

DISCLAIMER: This paper (the "Paper") is intended for discussion purposes only. It may be reproduced solely for educational non-commercial purposes with the consent of authors. Nothing in this Paper constitutes legal advice or investment advice, and this Paper should not be relied upon by any person or entity. This Paper is based solely on the general blockchain industry knowledge and experiences of its authors, as well as the authors' understanding and "plain meaning" review of certain publicly available information, including concerning Project Libra. This Paper is not intended to provide an exhaustive issues list concerning, or explanation of, Project Libra. Moreover, this Paper is intended only to supplement, and not to substitute for or otherwise replace, publicly available materials (including white papers) for Project Libra, or for discussions with those involved directly with Project Libra. The views expressed in this Paper are those of the authors (listed at the end of this Paper) and may not necessarily reflect the views of their respective employers, clients or any other person or entity whatsoever. This Paper speaks only as of the date released, and Diversity in Blockchain, Inc. and the authors of this Paper disclaim all (if any) responsibility to update or supplement this Paper after such release. This Paper is intended for informational purposes only, and no attorney-client, fiduciary or other relationship whatsoever is formed by and between or among any persons or entities whatsoever by virtue of this Paper's existence, release, publication or distribution or otherwise. Without limiting the generality of any of the foregoing, with respect to all statements concerning Swiss foundations or Swiss law, guidance from Swiss lawyers must be sought, and this Paper is not to be relied upon. No part of this Paper may be used, redistributed, copied or reproduced, without the prior written consent of Diversity in Blockchain, Inc.

DIVERSITY
IN BLOCKCHAIN

epic.org

Electronic Privacy Information Center
1718 Connecticut Avenue NW, Suite 200
Washington, DC 20009, USA

+1 202 483 1140
+1 202 483 1248
@EPICPrivacy
https://epic.org

July 15, 2019

The Honorable Maxine Waters, Chair
The Honorable Patrick McHenry, Ranking Member
U.S. House Committee on Financial Services
2129 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairwoman Waters and Ranking Member McMorris McHenry:

We write to you regarding your hearing on "Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System."[1] EPIC appreciates your timely attention to the consumer impacts of Facebook's entry into the financial services market.

EPIC is a public-interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.[2] EPIC is a leading advocate for consumer privacy and has appeared before this Committee on several occasions.[3]

Facebook/WhatsApp: A History of Broken Privacy Promises

To fully understand why Facebook cannot be trusted to launch its own currency, we must look to promises Facebook has made in the past. In 2014, Facebook purchased WhatsApp, a text-messaging service that attracted users specifically because of strong commitments to privacy.[4] WhatsApp's founder stated in 2012 that, "[w]e have not, we do not and we will not ever sell your personal information to anyone."[5] EPIC and the Center for Digital Democracy urged the Federal Trade Commission to block the deal.[6] As we explained at the time:

---

[1] *Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System*, 116th Cong. (2019), H. Comm. on Financial Services (Jul. 17, 2019), https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=404001.
[2] EPIC, *About EPIC*, https://epic.org/epic/about.html.
[3] *See, e.g, Examining the Current Data Security and Breach Notification Regulatory Regime: Hearing Before the House Comm. on Financial Services, Subcomm. on Financial Institutions and Consumer Credit*, 115th Cong. (2018) (testimony of Marc Rotenberg, Exec. Dir., EPIC), https://epic.org/testimony/congress/EPIC-Testimony-HFS-2-14-18.pdf; *Cybersecurity and Data Protection in the Financial Sector: Hearing Before the House Comm. on Financial Services, Subcomm. Financial Institutions and Consumer Credit*, 112th Cong. (2011) (testimony of Marc Rotenberg, Exec. Dir., EPIC), https://financialservices.house.gov/uploadedfiles/091411rotenberg.pdf.
[4] EPIC, *In re: WhatsApp*, https://epic.org/privacy/internet/ftc/whatsapp/.
[5] WhatsApp, *Why We Don't Sell Ads* (June 18, 2012), https://blog.whatsapp.com/245/Why-we-dont-sell-ads.
[6] EPIC and Center for Digital Democracy, Complaint, Request for Investigation, Injunction, and Other Relief In the Matter of WhatsApp, Inc., (Mar. 6, 2014), https://epic.org/privacy/ftc/whatsapp/WhatsApp-Complaint.pdf.

> WhatsApp built a user base based on its commitment not to collect user data for advertising revenue. Acting in reliance on WhatsApp representations, internet users provided detailed personal information to the company including private text to close friends. Facebook routinely makes use of user information for advertising purposes and has made clear that it intends to incorporate the data of WhatsApp users into the user profiling business model. The proposed acquisition will therefore violate WhatsApp users' understanding of their exposure to online advertising and constitutes an unfair and deceptive trade practice, subject to investigation by the Federal Trade Commission.[7]

The FTC ultimately approved the merger after Facebook and WhatsApp promised not to make any changes to WhatsApp users' privacy settings.[8] However Facebook announced in 2016 that it would begin acquiring the personal information of WhatsApp users, including phone numbers, directly contradicting their previous promises to honor user privacy.[9] Following this, EPIC and CDD filed another complaint with the FTC in 2016, but the Commission has taken no further action.[10]

Facebook also said recently it would target WhatsApp users with ads, despite earlier statements to the contrary and opposition from WhatsApp's founders.[11] The disclosure is particularly troubling following recent reporting that Facebook relies on users' phone numbers for targeting.[12]

<u>Facebook's Failures to Protect User Data</u>

Facebook has a long history of failing to protect user data. In April 2018, Facebook admitted the unlawful transfer of 87 million user profiles to the data mining firm Cambridge Analytica, which harvested the data obtained without consent to influence the 2016 U.S. presidential election.[13] That

[7] *Id.* at 1.
[8] *See*, Letter from Jessica L. Rich, Dir., Bureau of Consumer Prot., Fed. Trade Comm'n, to Facebook and WhatsApp (Apr. 10, 2014), https://epic.org/privacy/internet/ftc/whatsapp/FTC-facebook-whatsapp-ltr.pdf (concerning the companies' pledge to honor WhatsApp's privacy promises).
[9] WhatsApp, *Looking Ahead for WhatsApp* (Aug. 25, 2016), https://blog.whatsapp.com/10000627/Looking-ahead-for-WhatsApp.
[10] EPIC and Center for Digital Democracy, Complaint, Request for Investigation, Injunction, and Other Relief In the Matter of WhatsApp, Inc. (Aug. 29, 2016), https://epic.org/privacy/ftc/whatsapp/EPIC-CDD-FTC-WhatsApp-Complaint-2016.pdf; Marc Rotenberg, *The Facebook-WhatsApp Lesson: Privacy Protection Necessary for Innovation*, Techonomy (May 4, 2018), https://techonomy.com/2018/05/facebook-whatsapp-lesson-privacy-protection-necessary-innovation.
[11] Anthony Cuthbertson, *WhatsApp to Start Filling Up with Ads Just Like Facebook*, Independent (Oct. 1, 2018), https://www.independent.co.uk/life-style/gadgets-and-tech/news/whatsapp-update-targeted-ads-status-facebook-brian-acton-a8563091.html.
[12] Liam Tung, *Facebook Is Using Your 2FA Phone Number to Target Ads at You*, ZDNet (Oct. 1, 2018), https://www.zdnet.com/article/facebook-is-using-your-2fa-phone-number-to-target-ads-at-you.
[13] Cecilia Kang and Sheera Frenkel, *Facebook Says Cambridge Analytica Harvested Data of Up to 87 Million Users*, N.Y. Times, (Apr. 4, 2018), https://www.nytimes.com/2018/04/04/technology/mark-zuckerberg-testify-congress.html.

breach of user privacy was considered one of the most significant in the history of Internet-based services, and led almost immediately to investigations around the world.[14]

Two months later, it was revealed that Facebook had disclosed user data to at least 60 device makers including Apple, Amazon, and Samsung over the last decade.[15] That number was later revised to disclosures to over 150 companies, who were requesting "the data of hundreds of millions of people a month."[16]

In October 2018, Facebook announced that about 30 million users had their highly sensitive data hacked, including location data, contacts, relationship status, and search queries.[17] In December, Facebook revealed that a "software bug" allowed third-party apps to erroneously access the photos of up to 6.8 million users, including images that users began uploading to Facebook but then did not post publicly.[18]

Those are just the privacy breaches over the span of nine months in 2018.

Facebook clearly cannot be trusted with consumers' financial data. The company has a long history of both failing to maintain adequate security safeguards and of lying to regulators.[19] Congress should take action to stop Facebook's cryptocurrency before it's too late.

We ask that this letter be entered in the hearing record. EPIC looks forward to working with the Committee on these issues.

Sincerely,

Marc Rotenberg	*Caitriona Fitzgerald*
Marc Rotenberg	Caitriona Fitzgerald
EPIC President	EPIC Policy Director

---

[14] Lauren Feiner, *Mark Zuckerberg's call for tougher Internet regulation won't save Facebook from these investigations*, CNBC (Mar. 31, 2019), https://www.cnbc.com/2019/03/31/facebook-federal-and-international-investigations-into-data-privacy.html.

[15] Gabriel J.X. Dance, Nicholas Confessore, and Michael LaForgia, *Facebook Gave Device Makers Deep Access to Data on Users and Friends* (Jun. 3, 2018), https://www.nytimes.com/interactive/2018/06/03/technology/facebook-device-partners-users-friends-data.html.

[16] Gabriel J.X. Dance, Michael LaForgia, and Nicholas Confessore, *As Facebook Raised a Privacy Wall, It Carved an Opening for Tech Giants* (Dec. 18, 2018), https://www.nytimes.com/2018/12/18/technology/facebook-privacy.html.

[17] Rob Price, *Hackers stole millions of Facebook users' highly sensitive data — and the FBI has asked it not to say who might be behind it* (Oct. 12, 2018), https://www.businessinsider.com/facebook-30-million-users-affected-hack-fbi-asked-not-to-reveal-source-2018-10.

[18] Tomer Bar, *Notifying our Developer Ecosystem about a Photo API Bug*, Facebook for Developers Blog (Dec. 14, 2018), https://developers.facebook.com/blog/post/2018/12/14/notifying-our-developer-ecosystem-about-a-photo-api-bug/.

[19] Mark Scott, *E.U. Fines Facebook $122 Million Over Disclosures in WhatsApp Deal*, N.Y. Times, May 18, 2017, https://www.nytimes.com/2017/05/18/technology/facebook-european-union-fine-whatsapp.html

Questions from Chairwoman Waters

Facebook's Power, Influence and Deficit of Trust

1. **Mr. Marcus, I don't trust you and I don't trust Facebook. Given its disregard for U.S. law and its massive scale, I think foreign countries would find it difficult to effectively regulate Facebook, Libra or Calibra. It isn't clear the Federal Reserve or other US regulators have the authority to regulate you, and yesterday the Swiss regulator you are saying would regulate you actually said that it has never been contacted by Facebook about this project.**

   a. **Mr. Marcus, you responded to a request by Members of this Committee for a moratorium on your activities by stating that you would continue to work with regulators before going forward, but if the regulators lack the authority to adequately oversee you, how can you work with them to resolve concerns? Will you stop dancing around the question and commit here in this Committee, before the duly elected representatives of the American people, to a moratorium until Congress enacts an appropriate legal framework to ensure that Libra and Calibra do what you claim it is intended to do, which is to serve the public good?**

We are fully committed to working with regulators here and around the world. The roll-out of Libra will be initiated not by Facebook but by a vote of the full membership of the Libra Association. Even when the Libra Association determines that it is feasible to launch Libra, the distribution of Libra in any particular country will take place not by the Libra Association but by the authorized resellers of Libra and other service providers such as cryptocurrency exchanges.

Illicit Financing

2. **General Sani Abacha, former dictator of Nigeria, and his family and friends fleeced the country for decades. Some of the illicit proceeds of their crimes, almost a billion dollars, were transferred through a U.S. megabank with the approval of subsequent, corrupt Nigerian authorities. This is only one example of a government run by corrupt politicians and of bankers who were more interested in profit than their customers' best interests. Yet you, Mr. Marcus, have said that responsibility for the financial-crimes compliance to gain access to and use your borderless Libra system is someone else's problem, that standards will be determined by whatever country is home to a Libra wallet or exchanger.**

   a. **No doubt, corruption and crime existed long before blockchains, but your comments suggest that Libra Association is naively or negligently building its utopia without regard to these bad actors. How is that lowest-common-denominator sufficient as a foundation for a global currency and financial platform, knowing that there are individuals, institutions, and governments that will seek to abuse your blockchain? Simply seeing the pseudonymous (SOO-DON-Y-MUS) transaction preserved in the blockchain is hardly enough to make up for the missing funds. And significantly, once those bad**

actors have accessed Libra and its blockchain through the most vulnerable entry points, how will you stop them from furthering their bad acts elsewhere in the Libra construct?

We recognize that blockchain is an emerging technology, and that policymakers must determine how this technology will fit into the regulatory landscape.

Facebook and the Libra Association are similarly committed to supporting efforts by regulators, central banks, and lawmakers to ensure that Libra contributes to the fight against money-laundering, terrorism financing, and more. A network that helps move more paper cash transactions—where many illicit activities happen—to a digital network that includes, for relevant parties, on- and off-ramps with proper know-your-customer practices, combined with the ability for law enforcement and regulators to conduct their own analysis of on-chain activity, will present an opportunity to increase the efficacy of financial crimes monitoring and enforcement. We understand the Libra Association plans to continue to engage proactively and openly with all relevant stakeholders on these key issues. Libra should improve detection and enforcement capabilities, not set them back.

Our understanding is that the Libra Association will develop monitoring programs, both through its own staff and working with vendors, to identify potentially illicit activity on the Libra Blockchain. Calibra and other Association members and service providers on the Libra Blockchain will have their own programs to prevent financial crime. The Association members include payment services and marketplaces that are already trusted today by millions of people to complete their transactions safely, and that have major investments in people and technology to fight fraud and prevent illicit activity. The Libra Association will also maintain guidelines with respect to anti-money-laundering, combating the financing of terrorism, and other applicable national security-related laws, with which we understand its members that provide financial services will be required to comply.

The Libra Association and Calibra are committed to working with law enforcement. In the event that illicit activity does take place on the Libra Blockchain or by Calibra's customers, law enforcement can subpoena details on accounts and transactions from specific wallet operators or other relevant service providers and, in appropriate circumstances, may be able to obtain court orders or administrative orders requiring a wallet operator to freeze or move Libra coins. Law enforcement agencies will also be able to access the Libra Blockchain ledger directly and conduct their own analysis.

Diversity & Inclusion

3. **Mr. Marcus, in its 2019 annual diversity report, Facebook acknowledged that its global and U.S. workforce is still mostly white and male, with its total workforce including only 5.2 percent Hispanics and 3.8% African Americans. The tech industry overall faces these similar challenges. Forbes noted that quote "We are in the midst of a digital revolution that is changing the variables of economic growth**

and disrupting industry after industry. Yet the tech industry fails to reflect the diversity of the world around us."

a. **What was notably absent from Facebook's materials about Libra and Calibra was any mention of the importance of diversity. Why has diversity been such a low priority and why have the planned results been so slow?**

Diversity is extremely important to Facebook and the Libra Association, and we recognize that we still have work to do. We value diversity because we understand that it leads to better decisions, better products, and better culture. It is also more reflective of our community on Facebook.

Over the last six years, Facebook has worked hard to make good on our commitment to diversity and inclusion. Our company has grown a lot. So has our approach. We are more focused than ever on creating a diverse workforce and supporting our people. They are the ones building better products and serving the communities on our platforms.

Today, there are more people of diverse backgrounds and experiences, more people of color, more women in both technical and business roles, and more underrepresented people in leadership at Facebook. Most notably, we have achieved higher representation of women in leadership by focusing on hiring and growing female leaders within the company. Over the last several years, the majority of new female leaders were internally promoted. Also, since 2014, we have increased the number of Black women at Facebook by 25 times and the number of Black men by 10 times. And importantly, even as we have grown, we have worked very hard on making Facebook a more welcoming, respectful workplace.

b. **In putting forth this plan for Libra and Calibra, it appears that the opportunities are mostly for white-owned, mega-sized corporations. Why has Facebook not given any real consideration to joint venture opportunities with or for qualified, well capitalized women and minority business partners or small businesses?**

While we believe that Libra can offer widespread utility, it will provide the most immediate value to people and merchants who regularly make or receive cross-border payments and people with limited or no access to financial services, such as the unbanked or the underbanked. We hope Libra will provide more people with more options for financial services than they may have access to today.

We understand that the Libra Association is still in the early stages of assembling members—both businesses and NGOs. As that process continues and the membership of the Association grows, we expect that the membership will reflect and represent the global, diverse population that the Association will serve. Indeed, the Libra Association expects to work with members that are nonprofits, multilaterals, social impact partners, and universities to allocate a meaningful percentage of capital raised toward social impact grant-making in support of financial inclusion. This would include a mechanism for funding costs related to running a node for such members to ensure that such organizations are also represented in the Association.

With respect to small businesses, we think Libra will be advantageous to small businesses—the businesses that are typically most affected by the high payment fees exacted by the current system—for several reasons.

- First, a global payment tool powered by blockchain technology offers specific advantages over traditional financial services, and an open-source blockchain will enable small businesses and developers around the world to build services that meet the needs of their communities. Approximately 70 percent of small businesses in developing countries lack access to credit.[1]

- Second, being able to use a global payment tool powered by blockchain technology will also allow these businesses to expand their reach by accepting payments from around the world.

- Third, Libra digital coins will be backed by a reserve of stable assets, so people can trust that their Libra coins will retain their value. Because blockchain technology reduces the number of intermediaries involved in a transaction, the hope is that this will help keep fees to a minimum. Several of the expected initial members of the Libra Association have grown through a core business strategy of providing merchant services to small- and medium-sized merchants. As such, we expect that at least some of the incentives offered by the Association will be passed on to these small businesses. Our vision is to create a level playing field so that people and small businesses around the world have equal access to a simple global currency and financial infrastructure.

c. **How do you plan to validate that cryptocurrency options create fair opportunities for financial inclusion for women and minorities who may already be excluded from financial industry banking and investment opportunities?**

If you have an internet connection today, you can access all kinds of useful services for little to no cost—whether you are trying to keep in touch with family and friends, learn new things, or even start a business. But when it comes to storing, sending, and spending money, it is not that simple.

For many people around the world, even basic financial services are still out of reach: almost half of the adults in the world do not have an active bank account[2] and those numbers are worse in developing countries and even worse for women.[3] The cost of that exclusion is high—approximately 70 percent of small businesses in developing countries lack access to credit and

[1] *Small and Medium Enterprises (SMES) Finance*, The World Bank, https://www.worldbank.org/en/topic/smefinance (last visited Sept. 13, 2019).

[2] *Global Findex*, The World Bank, https://globalfindex.worldbank.org/#data_sec_focus (last visited Sept. 13, 2019).

[3] *Financial Services for the Poor*, Gates Foundation, https://www.gatesfoundation.org/What-We-Do/Global-Growth-and-Opportunity/Financial-Services-for-the-Poor (last visited Sept. 13, 2019).

$25 billion is lost by migrants every year[4] through remittance fees. This is one of the main challenges the Libra project was designed to address. In fact, the Libra Association counts among its Initial Members social impact partners who are focused on using Libra to address issues of inclusion. These organizations include Women's World Banking, MercyCorps, and Kiva. Here is what each of these organizations said when the Association launched:

- "Kiva is focused on addressing the systemic barriers impeding access to financial services for 1.7 billion unbanked individuals around the world. We're proud to serve as a Founding Partner of the Libra Association and excited by the potential for new technologies to create a more inclusive financial system." - Neville Crawley, CEO, Kiva

- "More than 1.7 billion people today are financially cut off from the world, with no access to a bank account—a poverty trap that could deepen as the rest of the world becomes ever-more connected. A global digital currency has the potential to spark financial inclusion for the world's poorest and most vulnerable people, connecting them to the local, national, and global economy. Mercy Corps is committed to increasing financial access for the world's poorest and ensuring Libra fulfills its promise of providing financial inclusion for all, with no one left behind." - Neal Keny-Guyer, CEO, Mercy Corps

- "The Women's World Banking team is always striving to explore new and effective ways to ensure that all low-income women have the financial products and services they need to achieve both economic security and prosperity. This is why I'm pleased to share that Women's World Banking is working with other organizations to form the Libra Association, an innovative new initiative with the goal of increasing access to financial services and fostering financial inclusion around the world." - Mary Ellen Iskenderian, President, Women's World Banking

- "I am extremely proud to represent Women's World Banking as a Founding Partner in the Libra Association. Libra has the potential to level the playing field for the 1.7 billion people who remain unbanked and excluded from formal financial services—over half of whom are women! This may be the pivotal moment in time when we look back and recognize we had the key that unlocked the door for billions of people!" - Tom Jones, Executive Vice President & Chief Operating Officer, Women's World Banking

While we believe that Libra can offer widespread utility, we believe it will provide the most immediate value to people and merchants who regularly make or receive cross-border payments, and people with limited or no access to financial services, such as the unbanked or the underbanked. We hope Libra will provide more people with more options for financial services than they may have access to today. The Association will not interface with customers, instead Libra will be distributed by exchanges, wallet services, and other trading platforms. We

[4] *Global education monitoring report summary 2019*, UNESDOC, https://unesdoc.unesco.org/ark:/48223/pf0000265996 (last visited Sept. 13, 2019).

understand and expect that the Association will prioritize local partnerships in markets that are remittance corridors to further facilitate local adoption.

Investor Protection

1. **Facebook is advertising to consumers and investors that its planned global cryptocurrency, Libra, is 100% "backed" by a basket of "low-risk" currencies and government-backed securities. However, by not pegging the Libra to a single currency, Libra customers will be exposed to foreign exchange risk. As we've seen in the past decade alone, there is great potential for significant price fluctuations between even the most stable currencies.**

    a. **What steps is Facebook, Calibra, and the other members of the Libra Association taking to ensure that it will have the 100% backing that it claims in the event of a market downturn or disruption affecting the currencies or securities backing Libra? How will the Association protect against bank-like runs where investors seek to get their money back on a massive scale?**

In the unlikely event of significant changes in market conditions (e.g., an economic crisis in one of the represented regions), we understand the Libra Association will be able to change the Reserve composition to ensure it preserves value and responds to such significant changes. We expect such changes to be subject to regulatory controls.

With respect to the value of Libra coins, we understand that each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. At any point in time, the market value of the assets in the Reserve transparently defines what each Libra coin is worth, and there is no reason for a run on the Reserve since every coin—including the last one—is convertible into fiat by Designated Dealers at the market value of the underlying asset of the Currency Basket. Because of this, and because we expect that the Libra Association will encourage a diverse ecosystem of exchanges, individuals holding Libra coins can be assured that they can sell them for local fiat currency based on an exchange rate at a narrow spread below the value of the corresponding number of Currency Baskets, similar to exchanging one currency for another when traveling.

2. **Christian Catalini, the chief economist of the Libra Association, has said that the basket of currencies comprising Libra's reserve fund will not be actively managed. However, he also indicated that investments in the fund may change if financial**

markets or economics warrant it. This means that the fund, at least in some capacity, will be actively managed.

a. **Can you unequivocally tell us today if Libra's reserve fund will be actively managed and, if so, who will be managing it? How will the assets be safeguarded?**

To clarify, Christian Catalini is the Head Economist of Calibra, Facebook's digital wallet product.

The Libra Association will administer the Libra Reserve consistent with the Libra Association's Reserve Management Policy and Risk Management Policy and applicable regulatory requirements, including safety and soundness principles, which will govern and constrain the range of assets in which the Libra Association will be permitted to invest the Libra Reserve.

As mentioned in the previous response, we understand each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association.

In the unlikely event of significant changes in market conditions (e.g., an economic crisis in one of the represented regions), we understand the Libra Association will be able to change the Reserve composition to ensure it preserves value and responds to such significant changes. We expect such changes to be subject to regulatory controls; we expect FINMA and the G7 central banks to insist on a regulatory framework for the Libra Association that will impose controls on the investments in the Libra Reserve to prevent the Libra Reserve from being invested in risky assets. Additionally, we expect that the Libra Association will develop a policy that will forbid a degradation of the assets in the Reserve to the advantage of Association members or investors.

3. **Those using Facebook's digital wallet—storing potentially trillions of dollars without depository insurance—also may become unique targets for hackers. For example, during the first three quarters of 2018, hackers stole nearly $1 billion from cryptocurrency exchanges. The system could also provide an under-regulated platform for illicit activity and money laundering. How will Calibra protect investors who chose to store their Libra in its digital wallet against hacking risks?**

Calibra will provide stronger protections than many other cryptocurrency wallets today, including anti-money-laundering compliance, consumer and fraud protection, customer support, and password recovery. When using Calibra, automated tools will proactively monitor activity to detect fraudulent behavior. If fraudulent activity is suspected, Calibra will either deny the activity in real-time or ask for additional information before the activity can be completed. The Calibra wallet will include additional layers of authentication so users can trust their money will stay safe even if they lose their phone or password. And in the rare event of unauthorized transactions in a user's Calibra wallet, Calibra plans to give that user a refund. Calibra will also offer dedicated customer support, ensuring that people will receive timely assistance, whether it be answering questions related to their account, or responding to reports of illicit activity. Like other custodial wallets, Calibra will manage the public and private keys of its customers. This means that people will have recourse if they lose their password and will not have to worry about permanently losing access to their funds.

In terms of security, we are utilizing systems that have been certified under the credit card industry's PCI compliance system, and we are implementing security measures that are compliant with data protection regulations. We will take significant measures to keep people's Libra safe, including using offline "cold" storage of Libra coins in Calibra's custody, as well as a small percentage of coin in "hot" wallets for daily transactions. We will have physical security controls (including cameras, vaults, and biometrics), as well as cryptographic controls (such as multi-signatures requiring a quorum of approvers, and the use of hardware security modules (HSMs)) to prevent any malicious activity. Moving forward, we will continue to take active steps to ensure we are meeting expectations to secure both Libra coins and customers' traditional card or bank information, and will continuously evolve our security posture to meet an ever-changing threat landscape.

Data Privacy and Security

4. Earlier this year, Facebook's CEO, Mark Zuckerberg, stated Facebook was shifting to, "a Privacy-Focused Social Networking site." In your white paper, you state that financial and social data will be separated by a digital wall. How do you intend to keep users' personal and financial data encrypted and safe?

Protecting consumers and ensuring people's privacy is a top priority for Calibra.

Facebook created Calibra as a regulated subsidiary in part to ensure separation between Facebook's social and Calibra's financial data and to build and operate services on its behalf on top of the Libra Network. And, except in limited circumstances that are described below, Calibra will not share customers' account information or financial data with Facebook.

Those limited circumstances where data might be shared between Calibra and Facebook include when data sharing is used to prevent fraud or criminal activity, as well as when users choose to share their data. As a Facebook subsidiary, Calibra may be legally obligated to share certain data with Facebook so the company can meet its regulatory requirements. For example, this could consist of aggregated payment volumes for financial and tax reporting or information necessary to comply with the law.

We are utilizing systems that have been certified under the credit card industry's PCI compliance system, and we are implementing security measures that are compliant with data protection regulations. Moving forward, we will continue to take active steps to ensure we are meeting expectations to secure both Libra coins and traditional card and bank information. We will implement strong security measures and continuously review and evolve them to meet an ever-changing threat landscape. For Calibra itself, we are also going to be subject to a number of different regulatory frameworks, including some that impose specific cybersecurity requirements, and will aim for additional certifications.

As previously described, we will also take significant measures to keep people's Libra safe, including using offline "cold" storage of Libra coins in Calibra's custody, as well as a small percentage of coin in "hot" wallets for daily transactions. We will have physical security controls (including cameras, vaults, and biometrics) as well as cryptographic controls (such as multi-signatures requiring a quorum of approvers, and the use of hardware security modules (HSMs)) to guard against any malicious activity.

5. **As a "free service," Facebook's business model relies heavily on advertising and its effectiveness as a marketing platform to remain profitable. In 2017, ninety percent of Facebook's $40 billion in revenue came from digital advertisements. Nearly all of Facebook's revenue comes from targeted advertising and user data. Do you expect us to believe you are going to start collecting financial data and not share it because you promise you will not?**

    a. **Without the users, your company would not exist. Should your users be given a share of the $40 billion you made from them?**

Advertising is how we provide our services for free. And our advertising team works to make meaningful connections between businesses and people. But we want ads to be as relevant and useful to our users as the other posts they see. This is important for businesses too, because users are less likely to respond to ads that are irrelevant or annoying. If we do this effectively, people will see ads about products and services they care about, and advertising on Facebook can help businesses large and small increase their sales and hire more people.

That is why we start with people. Our auction system, which determines which ads get shown to a given user, prioritizes what is most relevant to that user, rather than how much money Facebook will make from any given ad.

The Calibra wallet has no plans to show ads, including in its standalone app, and Calibra will not make money to begin with. Our first goal is to create utility and adoption, and enable people around the world—especially the unbanked and underbanked—to take part in the financial ecosystem. This will be the first in a suite of financial products we hope to create on the Libra Blockchain. Once we drive adoption and scale, we will explore ways to monetize.

Except in limited circumstances, Calibra will not share customers' account information or financial data with Facebook. Those limited circumstances where data might be shared between Calibra and Facebook include when data sharing is used to prevent fraud or criminal activity, as well as when users choose to share their data. As a Facebook subsidiary, Calibra may be legally obligated to share certain data with Facebook so the company can meet its regulatory requirements. This could consist of aggregated payment numbers for financial and tax reporting or information necessary to comply with the law.

The user information that Calibra does collect and store will be subject to strong security and access controls. User payment credentials, such as a debit card number, will not be accessible by Facebook or its affiliates.

Systemic Risk

6. **During the 2008 financial crisis, many financial institutions across the globe faced silent bank runs as depositors, fearing the loss of their money if banks were to collapse, electronically withdrew their funds thus draining banks of their reserves and forcing several large institutions to the brink of collapse. One notable silent bank run at Wachovia caused the bank to lose $5 billion in withdrawals over the course of a single weekend before the FDIC stepped in to encourage its sale to Wells Fargo. To access Libra funds, users are required to transact with third-parties selected and approved by the Libra Association. Will funds be redeemable on demand or will there be any lag or delay? How will you ensure that Libra will be protected from bank-like runs, which may force it to liquidate and sell assets at fire-sale prices?**

    a. **In short, who is going to be the FDIC in this instance if Libra goes the way of Wachovia?**

As described previously, each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) although we understand that the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. The Libra Association will have a contractual obligation to repurchase all Libra coins tendered to it by any Designated Dealer in exchange for the then-current value of the assets (established by third-party price providers) held in the Libra Reserve corresponding to those Libra coins.

The Libra Reserve has been designed to limit the risk that the Libra Association will suffer losses as a result of being forced to sell assets to Designated Dealers at "fire-sale" prices. As discussed above, each Libra coin will be backed one-to-one by highly liquid assets. All of the assets needed to redeem all Libra coins for cash would consist of cash and very short-term government securities that are held through a global network of bank custodians. Such highly liquid assets would be readily convertible into cash. Under normal economic conditions, it should be possible for each Libra coin to be converted into cash without any loss to the Libra Association. If, during a financial crisis, the assets that make up the Libra Reserve were trading at a discount, the Libra Association could suffer losses in connection with purchasing Libra coins back from Designated Dealers, although we believe that the losses would be small. We understand the Libra Association is considering additional options to mitigate this risk.

One of the primary causes of "silent runs" against banks is a lack of transparency: many of the bank's assets are illiquid long-term loans and other long-term assets, book values of those assets are only published after the end of a quarter, and book values can deviate significantly from market values. We expect that the Association will periodically and frequently publish information about the assets in the Reserve and their current market value, so Libra coin holders, dealers, exchanges, and other interested parties can see for themselves the value of the liquid assets supporting their Libra coins.

While the end users of Libra coins will not have the right to purchase or sell Libra coins directly with the Libra Association, we understand the Libra Association expects that end users of Libra would purchase or sell Libra coins through third-party trading platforms, including exchanges and over-the-counter dealers, similar to intermediaries in existing foreign currency and digital-asset markets. Some of these third-party platforms could be members of the Libra Association, but we understand the Association will not require users to transact only with platforms selected and approved by the Association. These third-party platforms would purchase and sell Libra coins in transactions directly with the end user or would provide a mechanism for end users to transact directly with other counterparties, including Designated Dealers, to buy and sell Libra coins—depending on the particular services made available by the trading platform.

End users of Libra coins will not purchase those coins from, or otherwise directly interact with, the Libra Association. Holders of Libra coins will have no beneficial interest in the Libra Reserve or the Libra Association, and will have no contractual or other right of redemption for their Libra coins against the Libra Association.

Please see the response to Question 1 above for an explanation of how the Libra project has been designed to reduce the risk of a "run on the bank" situation.[5]

7. **Facebook's White Paper states that the basket of reserves backing Libra will serve to "build trust in its intrinsic value." Yet the technical paper on the Libra Reserve states that the reserves will be held by a "geographically distributed network of custodians with investment-grade credit rating... avoiding the risks of a centralized reserve." If Libra will be backed by fiat currency globally, why not create a coin for every jurisdiction?**

The Libra Association was established with the mission of creating a lower cost, more accessible payment tool built on the Libra Blockchain that will facilitate a more connected global payments system. For many, the current payments system is too expensive, too slow, or in some cases, completely inaccessible. If successful, Libra would help address some of these issues, costs, and barriers. The idea is to create a level playing field so that people and small- and micro-businesses around the world have equal access to a lower cost, global payment tool and financial infrastructure. To accomplish that goal, Libra will operate globally as a single payment tool, not a series of payment tools designed to be used only in individual jurisdictions.

8. **As stated in the technical paper, the Libra Association does not set monetary policy but mints and burns coins in response to demand from authorized resellers. As it**

[5] This response is referencing the second of the questions marked Question 1.

appears today, if there are more Canadian Libra users than U.S. users, will there be more Canadian dollars in the Libra Reserve to meet potential redemptions?

As discussed in the response to Question 1,[6] we understand each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. If a Canadian Libra user wants to use Canadian dollars to purchase a Libra coin, that user will have to tender the then current-value of a Currency Basket in Canadian dollars, plus a narrow spread, to an exchange or other third-party trading platform. On an aggregate basis, Designated Dealers will take those Canadian dollars, convert them into one or more of the currencies that make up the Currency Basket and use those funds to purchase Libra coins from the Association, resulting in cash in the Libra Reserve. The Libra Association will then use some or all of that cash to purchase very short-term government securities in the Libra Reserve. If a Canadian Libra user wishes to sell Libra, the user will sell it on a third-party trading platform, and it is that trading platform, not the Association, that will have to deliver Canadian Dollars to the user.

Retail holders of Libra coins will not purchase those digital coins from, or otherwise directly interact with, the Libra Association, and Libra coins will not be redeemed in any particular currency. We understand the Libra Association expects to select and contract directly with Designated Dealers. Only these Designated Dealers will have the right, pursuant to their contract with the Libra Association, to purchase Libra coins from, and sell Libra coins back to, the Libra Association. For a Designated Dealer, the price of a Libra coin, both for purchase and sale from the Libra Association, will be the then-current value of a Currency Basket.

The Libra Association expects that retail holders of Libra coins would purchase or sell Libra coins through third-party trading platforms, including exchanges and over-the-counter dealers, similar to intermediaries in existing foreign currency and digital asset markets. These third-party platforms would purchase and sell Libra coins in transactions directly with the end user or would provide a mechanism for end users to transact directly with other counterparties, including Designated Dealers, to buy and sell Libra coins—depending on the particular services made available by the trading platform. The currencies that third-party trading platforms accept for purchases and sales of Libra coins will not necessarily be limited to those that make up the Currency Basket. Transactions on such platforms will likely be denominated in a variety of currencies, depending on which currencies any given platform chooses to accept.

9. To economists, accountants, and everyday Americans, the term "backed" has a very different meaning. Yet the Libra white paper does not define "backed," rather it

[6] This response is referencing the second of the questions marked Question 1.

states that Libra will be "backed" by government currency and government securities. What does "backed" mean in this sense?

In this context, "backed" means that at any point in time each Libra coin will be matched by one Currency Basket in the Libra Reserve. As discussed, a Currency Basket means a pro rata share or unit in a fungible pool of cash and very short-term government securities expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%), held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. The Libra Association will administer the Libra Reserve consistent with the Libra Association's Reserve Management Policy and Risk Management Policy, which will govern and constrain the range of assets in which the Libra Association will be permitted to invest the Libra Reserve. And we expect the Libra Association will be subject to an appropriate regulatory framework, including direct oversight by FINMA and indirect oversight by various other regulatory bodies, including the Federal Reserve and the other G7 central banks.

Monetary Policy

10. **Because the word currency is in cryptocurrency, there is an assumption by many that this is a currency and can be a replacement for the dollar. Do you view cryptocurrency as a form of currency? Why or why not? Please be specific. If you do not, then what is a cryptocurrency and how would that definition inform regulation of it?**

We believe that Libra coins will function primarily as a medium of exchange. Libra is not designed to replace the US dollar or any other sovereign currency, but to extend the functionality of these currencies by allowing for cheaper and faster payments. Libra coins will be a complement to local fiat currencies, not a substitute for them. The Federal Reserve will maintain control over the US monetary system, including US interest rates, the supply of US dollars, and the other aspects of US monetary policy.

11. **Facebook is set to launch its own cryptocurrency, and while I have problems with a private company marred with data privacy concerns entering an unregulated space, I can't help but feel as though they are trying to fill a void that perhaps regulators like the Fed should be thinking about. Have you given thought to the Fed looking into using cryptocurrency as a means of innovation in payments or monetary policy? Is this even a good idea? What are the consequences of having the likes of Facebook or some other entity not regulated by the Fed with millions of users and data possibly competing with the central bank?**

To clarify, Facebook is not launching its own cryptocurrency. The Libra Association will be launching a new cryptocurrency—Libra—and the underlying Libra Blockchain has already been open-sourced. In the same way that Facebook and other companies have built applications and websites on the public Internet, we expect that many companies and developers will build applications on the Libra Blockchain. Facebook's wallet "Calibra" is but one example of this. While Facebook currently has a leadership role in the Libra Association, the Association is a separate organization from Facebook with its own executives.

As noted above in the response to Question 10, the Federal Reserve will maintain control over the US monetary system. Libra is not designed to replace or compete with the US dollar or any other sovereign currency, but to extend their functionality by allowing for cheaper and faster payments. It is designed to be a complement to local fiat currencies, not a substitute. It complements them by allowing for cross-border payments at a low cost. Facebook supports the idea of the Federal Reserve (or other central banks) looking into developing their own digital currencies, which we would expect to be positive for payments and the blockchain ecosystem.

Moreover, members of Libra's development team have met and continue to meet with central banks around the world, including the Federal Reserve. As discussed during those meetings, the currencies represented in the Libra Reserve will be subject to their respective governments' monetary policies. We understand the Libra Association, which will administer the Reserve, has no intention of competing with any sovereign currencies or entering the monetary policy arena. We expect it will work with the Federal Reserve and other central banks to make sure Libra does not compete with sovereign currencies or interfere with monetary policy. Monetary policy is properly the province of central banks.

National Security

12. **Tax evaders, holders of dirty money, corrupt dictators, and shady corporations have operated in Switzerland for decades due to its lax financial regulatory regime and banking secrecy laws. With as big of a potential impact as Libra may have for working families all across the United States, can you please explain why the Libra Association selected its headquarters to be in Switzerland?**

The Libra Association is an independent membership organization that will be headquartered in Geneva, Switzerland. Geneva was chosen for the Association's headquarters because it has a history of global neutrality and openness to blockchain technology, and the Association intends to be a neutral, international institution. Other neutral, international organizations have similarly chosen to headquarter in Switzerland, including the Bank for International Settlements, the World Health Organization, and the World Trade Organization. The Swiss regulatory regime is consistent with global regulatory standards, as demonstrated by Switzerland's membership in the Financial Stability Board, the Financial Action Task Force, and other international standard-setting organizations.

13. **Government authorities, private-sector watchdogs, and even Facebook itself have all confirmed that Facebook and its component parts have been consistently utilized by bad actors ranging from human and wildlife traffickers to drug dealers. Just last year, before this Committee's Oversight and Investigations subcommittee, one expert witness who leads an anti-human trafficking organization and a survivor of human trafficking herself, testified that 100 percent of [their sex trafficking]**

survivors were recruited and sold on social media platforms including Facebook, Instagram, and Tagged."

a. **By facilitating instantaneous purchases with a click to connect to one's digital wallet, Libra and Calibra would jointly make crimes and terrorist and other illicit financing easier, faster, and almost impossible to stop. What steps will Facebook and Calibra take to ensure that its services and platforms are not used to facilitate crime and terrorism? Can you please describe the internal controls, processes, and personnel that Libra will use to prevent this type of activity?**

Human and sex trafficking is abhorrent and has no place on our platform. Facebook is committed to making our platform a safe place, especially for individuals who may be vulnerable. We have a long history of working successfully with governments to address a wide variety of threats to our platform, including human trafficking.

For more information on Facebook's and the Libra Association's commitment to working with regulators and others to ensure that Libra contributes to the fight against money laundering, terrorism financing, and more, please see the response to Question 2 above.[7]

14. **Mr. Marcus, in a recent publication, you stated quote "As Libra is an open source platform, third party developers will be able to build on top of the Libra Blockchain, including by building digital wallets. It will be the responsibility of these providers to determine the type of information they may require from their customers and to comply with regulations and standards in the countries in which they operate." Unquote This sounds like Libra and Calibra passing the buck on responsibility for identity verification and authentication, reducing access to your blockchain to the lowest common denominator. If those doing the onboarding are in nations where there's less stringent security, anyone could access Libra and ultimately Calibra and the borderless, potentially permissionless universe that you're creating. Can you please explain your statement further? Who will ensure compliance with the Bank Secrecy Act and know your customer (KYC) requirements? Can you respond to our concern that by minimizing KYC responsibilities, you are facilitating channels through which any bad actor might travel?**

a. **How will you prevent bad actors, including those with synthetic identity, from gaining access to this Facebook universe?**

We understand the Libra Association expects that its revised Articles of Association, or other appropriate document(s) binding on the Libra Association members under Swiss law (such as the member agreement or bylaws), will include a commitment to compliance with applicable AML/CFT obligations. The Libra Association also expects to establish KYC/AML guidelines that govern its activities, those of Libra Association members that provide financial services, and those of Designated Dealers (well-capitalized institutions with expertise in the foreign exchange

[7] This response is referencing the first of the questions marked Question 2.

markets that will serve as authorized resellers of Libra coins), each with respect to their involvement with the Libra Blockchain, as appropriate. And we understand the Libra Association expects to evaluate what technical and/or contractual mechanisms to employ to ensure that custodial wallet providers operating on the Libra Network comply with such requirements.

The Libra Association further expects intermediaries operating on the Libra Network (such as custodial wallet providers) will comply with applicable KYC/AML obligations, including by collecting and retaining information on transactions involving their customers, as required under applicable local law. Information stored in the Libra Blockchain will be publicly available, such that anyone, including government authorities, will be able to conduct an analysis of Libra Blockchain activity, including monitoring transaction activity on the Libra Network (although that information will be available only based upon public blockchain address). We understand the Libra Association will explore what standards may otherwise be appropriate to implement KYC/AML requirements under applicable law.

Calibra, as one of the custodial wallet providers operating on the Libra Network, is building an AML/CFT compliance program to comply with applicable regulatory requirements, including screening the identity of all customers, not just those that exceed a certain threshold of activity. Potential customers who do not pass that screening will not be allowed to open a Calibra account, even if they are existing Facebook users. As expected of regulated service providers, Calibra will also maintain a program for Transaction Monitoring of customer activity to detect suspicious activity, and to file Suspicious Activity Reports as appropriate.

Both the Libra Association and Calibra will register or have registered as money services businesses with FinCEN and will therefore be subject to FinCEN oversight with respect to their compliance with the Bank Secrecy Act and KYC requirements.

15. **In politically sensitive contexts, does Calibra intend to cooperate with the law enforcement arms of authoritarian governments in disclosing payments made to opposition groups? How and to what extent? And on the opposite side, if Libra is used by domestic terrorist groups or drug and child traffickers to finance their activities, what will be the nature of information sharing between the Calibra and the U.S. government? What review can and will Facebook and its components be able or willing to do?**

    a. **For these issues and others, like Anti-Money Laundering compliance, how will Facebook and the Libra Association resolve conflict of laws issues?**

Please see the response to Question 2[8] above for a description of how the Libra Association and Calibra intend to comply with their regulatory obligations, including AML compliance, and how they intend to work with law enforcement.

[8] This response is referencing the first of the questions marked Question 2.

Questions from Representative Posey

- **Thank you, Madam Chair and Ranking Member for holding this hearing.**

- **Innovation has been a mainspring of our financial system, particularly as it has evolved mechanisms for spreading risk and expanding our acceptable choices.**

- **Today we welcome for discussion the subject of cryptocurrency and Facebook's bold plan for a stable digital coin.**

- **This is a daunting step, and Chairman Powell has counseled us to exercise patience and deliberation. He suggests that a large cryptocurrency initiative will threaten systemic stability.**

- **I believe we all want to see the United States at the cutting edge of innovation, but in this case, we want to be sure the "cutting edge" is beneficial. We want to get it right.**

Panel One Questions

1. **Mr. Marcus, one of the witnesses on the second panel – Professor Brummer of Georgetown Law – finds considerable fault with the Libra White Paper. Professor Brummer says:**

   "— The Libra White Paper fails, most fundamentally, to inform potential holders in unambiguous terms that they can lose money, and that runs on the coin are possible."

   Mr Marcus, what does Libra intend to do to improve transparency about the risks of holding Libra coin?

It is our understanding that the Libra Association recognizes that Libra coin users must be provided with clear and concise disclosures so that they can understand how the Libra Network works, including with respect to Libra coin holders' rights and accompanying risks. With respect to the Calibra digital wallet, Calibra will provide its customers with disclosures that describe how customers may purchase and sell Libra coins, including from exchanges through the Calibra wallet, and describe the risks associated with holding and using Libra coins, including the risk of a loss of value of Libra against the US dollar and other national currencies. We expect that other service providers in the broader Libra ecosystem will be subject to appropriate regulatory oversight by the jurisdictions in which they operate. And with respect to the rare event of unauthorized transactions in a Calibra wallet, Calibra plans to give the user a refund.

We understand each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. At any point in time, the market value of the assets in the Reserve transparently defines what each Libra coin is worth, and there is no reason for a run on the Reserve since every coin—including the last one—is convertible into fiat by Designated Dealers at the market value of the underlying assets in the Currency Basket. As a result, individuals holding Libra digital coins can be assured that they can sell their coins for local fiat currency based on an exchange rate at a narrow spread below the market value of the Reserve, similar to exchanging one currency for another when traveling. The assets in the Libra Reserve will be held by a geographically distributed network of bank custodians with investment-grade credit rating to provide both security and decentralization of the assets.

We understand the Association welcomes input from the general public and is committed to providing Libra users the opportunity to ask questions about and comment upon the Libra coin and the operations of the Libra Association. We expect the exact nature of these processes will be agreed among the members of the Libra Association.

2. **Mr. Marcus, Professor Brummer also says**

> **"— The White Paper fails to clearly disclose that Libra holders will be exposed to counterparty risk in the form of mismanagement of reserve investments and also the White Paper fails to disclose governance risks, including the negative impact Libra Association decisions, and conflicts of interest, could have on the nature and value of Libra coins."**
>
> **Mr. Marcus, what is the Libra organization doing or planning to do to improve transparency on these issues?**

As discussed, we understand the Libra Association recognizes that Libra coin users must be provided with clear and concise disclosures so that they can understand how the Libra Network works. We expect that the Libra Association will make decisions democratically and transparently in a manner to be agreed upon by the members of the Libra Association. We understand the Association will be governed by the Libra Association Council, which will be composed of a representative from each member of the Association. Together, they will make decisions on the governance of the Libra Blockchain and Reserve. We understand that operating and policy decisions of the Council will require various voting thresholds depending on the importance of the decision; major policy or technical decisions will require the supermajority consent of two-thirds of the votes. We understand that the voting process will be transparent. Ultimately, the governance of the Association will be determined by the members, and it is our expectation that the charter and bylaws of the Association will be public once finalized, and will continue to be public as they evolve.

Moreover, we expect the Libra Reserve to be subject to rigorous supervisory oversight, internal and external audits, and public reporting requirements. We anticipate that the composition of the assets in the Reserve, and the Reserve's current value denominated in major currencies, will be published on a website by the Association so all users, and the public at large, can easily determine the then-current value of the Reserve. We anticipate that the Libra

Association will be subject to an appropriate regulatory framework, including direct oversight by FINMA and indirect oversight by various other regulatory bodies, including the Federal Reserve and the other G7 central banks.

3. **Mr. Marcus, another of the second panel witnesses – Professor Gensler – points out the strong similarities between your Libra reserve fund and what we call banks. Historically, some banks used bank notes as reserves to loan money and create deposits and thus expanded credit and the larger money supply.**

Professor Gensler notes there will be a tendency to regulate something like the Libra fund as a bank. He thinks it's important to have a prohibition on its ability to lend or operate as a fractional bank.

One can imagine that someday the pressures will rise to view the assets of the fund as reserves in dollars, pounds, yen, etc,. and look to the profits inherent in making Libra loans and creating Libra deposits like a fractional reserve bank. That would certainly create a new shadow banking system.

Mr Marcus, does Libra support a prohibition of its ever becoming a fractional reserve bank?

It is our understanding that the Libra Association will not be organized or operate as a fractional reserve bank. Instead, we expect FINMA and the G7 central banks to insist on a regulatory framework for the Libra Association that will impose controls on the Libra Association and the Libra Reserve, including controls to prevent the Libra Association from engaging in fractional reserve banking. Indeed, we understand that each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association.

Moreover, in the event that the Libra Association seeks to engage in traditional banking activities at any point, we expect that it would be regulated under applicable banking regulations.

4. **Mr. Marcus, rather than focusing on private currency as a means to make financial services more inclusive for the 1.7 billion unserved, wouldn't it make more sense to use the existing network of central banks to provide technology-based payment services for those outside the system and preserve the unity of the payment system we have?**

We are helping to launch Libra in part because the unbanked lack access to affordable financial services. The Libra Association's vision is to create a simple digital currency and financial infrastructure that empowers people around the world. By creating a decentralized currency and an open platform for developers and businesses, large and small, to create accessible and inclusive financial services, this vision can become a reality. A digital currency powered by blockchain technology offers specific advantages over traditional financial services, and an open-source blockchain will enable businesses and developers around the world to build services that meet the needs of their communities. Payment mechanisms such as the Calibra wallet will give people an option to use Libra as a medium of exchange to send remittances and make payments more easily and at a lower cost than they can with existing payment systems and services. Libra is not designed to replace the US dollar or any other sovereign currency, but to extend their functionality by allowing for cheaper and faster payments. Indeed, the value of Libra depends on the continued value of currencies in the Reserve, and the goal is for Libra to exist alongside existing currencies.

Questions from Representative Wagner

1. **Who will be the authorized resellers of Libra and how will they be monitored?**

We understand the Libra Association expects to select, and contract directly with, well-capitalized institutions with expertise in the foreign exchange markets to serve as authorized resellers of Libra coins ("Designated Dealers"). Only these Designated Dealers will have the right, pursuant to their contract with the Libra Association, to purchase Libra coins from, and sell Libra coins back to, the Libra Association. For a Designated Dealer, the price of a Libra coin, both for purchase and sale from the Libra Association, will be the then-current value of a pro rata share of a fungible pool of cash in bank accounts and very short-term government securities, expected to be denominated in significant portion by US dollars plus euros, Japanese yen, British pounds sterling, and Singapore dollars, and held in the Libra Reserve (each pro rata share corresponding to a Libra coin, a "Currency Basket"). For each Libra coin in existence, there will be a corresponding Currency Basket in the Libra Reserve. We understand the Libra Association has not yet determined which institutions will act as Designated Dealers, and no Designated Dealers have yet been selected. Contractual arrangements with Designated Dealers, including specific arrangements for monitoring their activity, have not yet been drafted. Facebook also expects that Designated Dealers will be subject to supervision by regulators and law enforcement in the jurisdictions where the Designated Dealers are located and operate.

2. **You've discussed using government IDs to verify users and prevent sanctions evasion, trafficking, and money laundering.**

    a. **Given that there could be over a billion users of Libra with government IDs that don't meet U.S. standards and IDs that could easily be counterfeited or purchased illegally, how do you intend to vet identification and ensure that Libra won't become just another tool for anonymous, illicit finance?**

Facebook and the Libra Association are committed to working with policymakers and regulators to achieve a safe, transparent, and consumer-friendly implementation of Libra. We recognize that blockchain is an emerging technology, and that policymakers must determine how this technology will fit into the regulatory landscape.

Facebook and the Libra Association are similarly committed to supporting efforts by regulators, central banks, and lawmakers to ensure that Libra contributes to the fight against money-laundering, terrorism financing, and more. A network that helps move more paper cash transactions—where many illicit activities happen—to a digital network that includes, for relevant parties, on- and off-ramps with proper know-your-customer practices, combined with the ability for law enforcement and regulators to conduct their own analysis of on-chain activity, will present an opportunity to increase the efficacy of financial crimes monitoring and enforcement. We understand the Libra Association plans to continue to engage proactively and openly with all relevant stakeholders on these key issues. Libra should improve detection and enforcement capabilities, not set them back.

We understand that the Libra Association expects to establish KYC/AML standards pertaining to the on-boarding of Libra Association members and Designated Dealers that will act as authorized resellers of Libra coin.

We understand the Libra Association expects that its Articles of Association, or other appropriate document(s) binding on the Libra Association members under Swiss law (such as the member agreement or bylaws), will include a commitment to compliance with applicable AML/CFT obligations. The Libra Association also expects to establish AML/CFT guidelines that govern its activities and those of Libra Association members that provide financial services, each with respect to their involvement with the Libra Blockchain. Any member who wishes to build financial services for Libra will be bound by the AML/CFT laws in the jurisdictions in which they operate, in the same way financial service providers are subject to these laws today. The Libra Association expects to evaluate what technical and/or contractual mechanisms to employ to ensure that custodial wallet providers operating on the Libra Network comply with such requirements. And we understand that the Libra Association expects financial service providers operating on the Libra Network (such as custodial wallet providers) will comply with applicable AML/CFT obligations, including, for example, by collecting and retaining information on transactions involving their customers, as required under applicable local law. Information stored in the Libra Blockchain will be publicly available, such that anyone, including government authorities, will be able to conduct an analysis of Libra Blockchain activity, including monitoring transaction activity on the Libra Network (although that information will be available only based upon public blockchain addresses).

As for the Calibra wallet, Calibra will comply with KYC, AML, and other regulatory requirements applicable to it under US and other law. To sign up for a Calibra account, users will need to provide their phone number, first name, last name, date of birth, address, and a form of government-issued identification (e.g., a license, passport, or ID card) during registration. In using government IDs as part of KYC procedures, Calibra joins many national or global financial institutions today that offer online onboarding. Additionally, Calibra will invest ample resources to improve the detection of counterfeit or unacceptable IDs, leveraging the experience Facebook has in image processing, and complement government ID-based verification with many other mechanisms to identify risky and criminal activities, both on Calibra and on the Libra Blockchain.

The Libra Association and Calibra are also committed to working with law enforcement. In the event that illicit activity does take place on the Libra Blockchain or by Calibra's customers, law enforcement can subpoena details on accounts and transactions from specific wallet operators or other relevant service providers and, in appropriate circumstances, may be able to obtain court orders or administrative orders requiring a wallet operator to freeze or move Libra coins. Law enforcement agencies will also be able to access the Libra Blockchain ledger directly and conduct their own analysis.

3. How do you plan to comply with the regulations of the Office of Foreign Assets Control?

The Libra Association is committed to ensuring that the Libra Network complies with applicable laws and regulations, including applicable sanctions laws and regulations. To this end, we expect that the Libra Association and its members will explore what technical and contractual options are available and may be appropriate to ensure that appropriate measures are taken to comply with sanctions requirements, including blocking or restricting transactions to a blockchain address of a sanctioned individual.

Speaking for Calibra, Calibra will take steps at multiple levels to prevent and detect possible sanctions-related activity by scanning users of the Calibra wallet against issued sanctions lists and country and regional sanctions programs—including those administered by the US Department of the Treasury's Office of Foreign Assets Control ("OFAC")—and restricting or blocking prospective and current users when appropriate. Calibra will also implement automated geo-blocking controls to prevent users from accessing the Calibra wallet or transacting from specified locations.

Similarly, Calibra has registered with FinCEN as a money services business, and as such, will comply with relevant FinCEN regulations and guidance. Additionally, Calibra will incorporate know-your-customer and anti-money-laundering/combating-the-financing-of-terrorism methodologies used around the world, including those focused on customer identification and verification, as well as risk-based customer due diligence. Calibra will achieve this, in part, by developing and applying technologies such as advanced machine learning to enhance transaction monitoring and suspicious activity reporting. Calibra's efforts will be commensurate with the risks posed by several factors such as Calibra's product features, customer profiles, geographies, and transaction volumes.

Questions from Representative Hill

1. **Mr. Marcus, Thank you for attending the House Financial Services Committee hearing on July 17, 2019. I know it was a long hearing and appreciate your commitment to answering the Members' questions. After reviewing the hearing, I wanted to follow up on a question that was asked by several Members of the Committee related to the decision to headquarter the Libra Association in Switzerland. You mentioned repeatedly that the regulatory framework in the United States is not as clear as it is in Switzerland. My question is, then, what does the United States need to do clarify the regulatory framework? As policymakers, we appreciate your feedback as a digital currency company on ways to enhance our regulatory regime in order to retain these financial businesses domestically.**

We understand that US federal and state regulators may be considering whether and how to apply existing laws or develop new laws for cryptocurrency activities. As David Marcus testified, regulatory clarity was one factor considered when choosing Switzerland as the headquarters of the Libra Association. Indeed, the Libra Association recently announced that Switzerland's principle-based and technology-neutral regulatory framework and clarity on blockchain-based business models offers a pathway for responsible financial services innovation harmonized with global financial norms and strong oversight.[9] Under this framework, Switzerland recognizes the regulatory category of a "payment system." An operator of a payment system, such as the Libra Association, requires prior approval and is automatically subject to oversight by the Swiss Financial Market Supervisory Authority (FINMA), including under the Swiss Anti-Money Laundering Act. FINMA will also impose capital, risk management, and liquidity requirements on the Association.[10] Importantly, we do not seek a reduction in regulation, instead we support regulation tailored to the payments business.

We look forward to continuing to engage with regulators and policymakers to address these matters going forward.

2. **You also mentioned you are working with the G7, the Financial Stability Board and others to improve oversight – especially with regards to the reserve. Could you please provide an update as to how those conversations are going and the outcomes or next steps that have been discussed.**

We understand representatives from the Libra Association have met and will continue to meet with central banks around the world, including central banks in those countries where Libra may have the largest social impact. Additionally, we continue to engage with the G7 working group and look forward to an ongoing collaborative process. Globally, the conversations have been productive and are ongoing. Among other discussions, the Libra Association has announced that it will be applying for a payments system license in Switzerland from FINMA, which will impose AML, capital, risk management, and liquidity requirements on the Association, among

[9] *Libra Association Pursues Payment System License Under FINMA Lead Supervision*, Libra.org, https://libra.org/en-US/wp-content/uploads/sites/23/2019/09/Libra-Communique.pdf (Sept. 11, 2019).

[10] *FINMA publishes 'stable coin' guidelines*, FINMA, https://finma.ch/en/news/2019/09/20190911-mm-stable-coins/ (Sept. 11, 2019).

others. We understand the Libra Association is grateful for the feedback it has received and looks forward to continuing to engage with central banks and regulators around the world.

We are fully committed to working with regulators here and around the world. The roll-out of Libra will be initiated not by Facebook but by a vote of the full membership of the Libra Association. Even when the Libra Association determines that it is feasible to launch Libra, the distribution of Libra in any particular country will take place not by the Libra Association, but by the authorized resellers of Libra and other service providers such as cryptocurrency exchanges.

Questions from Representative Davidson

1. Are seats on the Libra Association assets? Could they be bought and sold?

We understand members of the Libra Association will be approved by existing members pursuant to a set of eligibility criteria. Memberships will be governed by their obligations under the Association's Articles of Association, the Member Agreement, policies of the Libra Association, and other contractual arrangements between members and the Libra Association, which are still being drafted. Facebook expects that these arrangements will not allow for the purchase or sale of membership in the Libra Association.

2. If Libra stays in control of a central authority, couldn't that central authority change the value of Libra?

- **By changing the mix of currencies?**
- **By changing the supply of Libra?**
- **By filtering transactions?**
- **By retaining PII?**

We expect FINMA and the G7 central banks (including the Federal Reserve) to insist on a regulatory framework for the Libra Association that will impose controls on the Libra Association's discretion with respect to changing the mix of currencies in which assets in the Libra Reserve are denominated, changing the supply of Libra, filtering transactions, and retaining PII, as well as other matters. In addition to applicable regulatory restrictions, we expect that any such decision would need to be agreed upon by a supermajority vote of the members of the Libra Association.

Facebook expects that regulatory controls under Swiss or other relevant laws will impose limits on the investments in the Libra Reserve, including by prohibiting investments in risky assets. In the unlikely event of significant changes in market conditions (e.g., an economic crisis in one of the represented regions), we understand the Libra Association will be able to change the Reserve composition to ensure it preserves value and responds to such significant changes. We expect such changes in Reserve composition to be subject to regulatory controls. Additionally, we expect that the Libra Reserve will develop a policy that will forbid a degradation of the assets in the Reserve to the advantage of Association members or investors.

Further, we understand the Libra Association expects to develop a detailed Risk Management Policy designed to address credit, market, liquidity, and other risks arising from the maintenance and operation of the Libra Reserve. The Risk Management Policy, together with a related Reserve Management Policy, is expected to include investment guidelines governing the assets to be held in the Libra Reserve on a day-to-day basis. While these investment guidelines may provide some limited degree of flexibility with respect to the precise mix of cash and very short-term government securities denominated in a given currency, we understand the Libra Association does not expect the Reserve will be permitted to hold other types of assets. Fundamental decisions with respect to the assets that may be held in the Libra Reserve are expected to be subject to approval by a supermajority of Libra Association members, and subject to oversight from applicable regulators.

With respect to the supply of Libra, we understand the Libra Association will only mint or burn Libra coins in response to buy or sell orders from authorized resellers, and the Association will not have targets for the number of coins that "should" be in circulation. And, regarding the Reserve itself, we understand that each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association.

As a general matter, we understand the Libra Association will not operate a node or validate transactions on the Libra Blockchain. Transaction information of Libra users will be visible on the Libra Blockchain, but no other identifying information will be visible. As a result, we understand the Libra Association will not be able to access identifying information of Libra users from the Libra Blockchain to use and/or share with Facebook or any other third party.

3. Given these factors, why isn't Libra viewed as a bank issuing a bank note in exchange for deposits (that can be viewed as the bank's treasury function)?

The Libra Association will not be a bank. It will not accept deposits, make loans, offer checking or ATMs, or otherwise offer banking services. In addition, the Libra Association will not engage in fractional reserve banking or maturity transformation.

We are helping to launch Libra in part because the unbanked lack access to banks. The vision of the Libra Association is to create a simple digital currency and financial infrastructure that empowers people around the world. By creating a decentralized currency and an open platform for developers and businesses—large and small (including banks)—to create accessible and inclusive financial services, this vision can become a reality. A digital currency powered by blockchain technology offers specific advantages over traditional financial services, and an open-source blockchain will enable businesses and developers around the world to build services that meet the needs of their communities. Payment mechanisms, such as the Calibra wallet, will give users an option to use Libra as a medium of exchange to send remittances and make payments more easily and at a lower cost than they can with existing payment systems and services.

As discussed, each Libra coin will be backed one-to-one by a share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata unit corresponding to a Libra coin, a "Currency Basket"). We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as among the members of the Libra Association. As such, we expect that the Libra

Association will encourage a diverse ecosystem of exchanges, so individuals holding Libra coins can have a high degree of assurance that they can sell Libra coins for local fiat currency based on an exchange rate at a narrow spread below the value of the Reserve, similar to exchanging one currency for another when traveling. The assets in the Libra Reserve will be held by a geographically distributed network of bank custodians with investment-grade credit rating to provide both security and decentralization of the assets.

4. Calibra is a regulated money service business subject to all US MSB regulations, correct?

Yes. Calibra has registered with FinCEN as a money services business, and as such, will comply with relevant FinCEN regulations and guidance. Calibra will incorporate know-your-customer and anti-money-laundering/combating-the-financing-of-terrorism (AML/CFT) methodologies used around the world, including those focused on customer identification and verification, as well as risk-based customer due diligence. Calibra will achieve this, in part, by developing and applying technologies, such as advanced machine learning, to enhance transaction monitoring and suspicious activity reporting. Calibra's efforts will be commensurate with the risks posed by several factors such as Calibra's product features, customer profiles, geographies, and transaction volumes.

5. Can anyone, even an individual, access the Libra code to create a wallet?

The Libra Blockchain will be an open ecosystem, which will allow businesses to create competitive services on the Libra Network. Both members and non-members of the Association will be able to build a wallet on the network. These wallets will provide choice and competition that will benefit consumers. The Calibra wallet will also be interoperable with other apps and financial service providers that offer complementary services such that, even if one end of a transaction uses the Calibra wallet, the other end does not need to do the same. We expect that wallet providers operating on the Libra Blockchain will be subject to applicable regulations in the jurisdictions in which they operate.

6. How would Libra mitigate currency risk for international transactions?

Libra coins have been designed to be a payment tool with relatively stable value. As discussed, we understand each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket") and held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association.

The Libra Association intends for Libra coins to be as safe and as stable a payment tool as the current means through which people and businesses conduct international transactions. We believe the Libra payment tool will be most useful where the benefits of lower costs and faster payments will outweigh potential currency risks for its users.

7. Could corporations use Libra as a hedge against currency risk?

Libra coins have been designed to serve as a payment tool, not as an instrument to be used by corporations as a hedge against currency risk. Libra coins would, at best, be an inefficient tool for a US corporation to use to hedge currency risk because US dollars are expected to make up half of each Currency Basket. Moreover, because each of the currencies in the Currency Basket have liquid foreign exchange markets, companies can readily design much more efficient and tailored methods to hedge exposures to those currencies through means other than holding Libra coins. These other means also can provide exposure to a greater variety of currencies than those in the Currency Basket.

8. Who has advocated for synthetic currencies? Is Libra a synthetic currency? Why/Why not?

The term "synthetic currency" does not have a standard definition, but is sometimes used to mean a token on a blockchain that is designed to match the performance of a specific asset such as US Dollars, gold, or Bitcoin. The Libra coin will not be a synthetic currency in this sense; it is intended to be a medium of exchange not tied to any one specific asset. We understand the Libra Association intends to create a new digital currency that can be transferred efficiently over the Libra Network. Again, we understand each Libra coin will be backed one-to-one by a pro rata share or unit of a fungible pool of cash and very short-term government securities that are expected to be denominated in US dollars (~50%), euros (~18%), Japanese yen (~14%), British pounds sterling (~11%), and Singapore dollars (~7%) (each such pro rata share corresponding to a Libra coin, a "Currency Basket"). This Libra Reserve will be held by a global network of well-capitalized bank custodians or other similarly secure custodial arrangements as agreed upon with applicable regulators. We understand the Libra Association is continuing to evaluate the specific percentages of assets in the Libra Reserve denominated in each currency, so these percentages are subject to change as agreed among the members of the Libra Association. We believe that Libra coins will function primarily as a medium of exchange, and that the various digital wallets and other payment mechanisms that will be built on top of the Libra Network will sharply reduce the cost of cross-border remittances and payments for local commercial transactions.