REGULATING LIBRA: THE TRANSFORMATIVE POTENTIAL OF FACEBOOK’S CRYPTOCURRENCY AND POSSIBLE REGULATORY RESPONSES

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Regulating LIBRA:
The Transformative Potential of Facebook’s Cryptocurrency and Possible Regulatory Responses

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ABSTRACT - Libra is the first private cryptocurrency with the potential to change the worldwide payment and monetary system landscape. Due to the scale and reach provided by its affiliation with Facebook, the question will be not whether, but how, to regulate it. This paper introduces the Libra project and analyses the potential responses open to regulators worldwide.


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INTRODUCTION

Libra – the cryptocurrency project for which social media giant Facebook released the concept paper on 18 June 2019 – has attracted global headlines. In less than two weeks many of the world’s most influential financial regulators, including the Financial Stability Board, U.S. Federal Reserve, Bank of England, Bundesbank and the Bank of France,\(^1\) issued statements that their respective institutions would carefully examine Libra, and apply tough regulatory standards to it. The Group of Seven (G7) nations immediately set up a high-level forum to examine the risks of digital currencies to the financial system led by the European Central Bank,\(^2\) while the U.S. House of Representatives’ Committee on Financial Services requested on 2 July 2019 that “Facebook and its partners immediately agree to a moratorium on any movement forward on Libra.”\(^3\) This very high level of regulatory attention is understandable. Facebook has over 2.3 billion active users globally.\(^4\) This scale and reach means that the question for regulators will be how, not whether, to regulate Libra.

Cryptocurrencies began with Bitcoin\(^5\) and the thousands of subsequent Bitcoin clones. Bitcoin is a truly decentralized currency with no central administering organization. Its supply is very tightly constrained, so its value varies wildly. The three indicia of money are that it is a medium of exchange, unit of account, and store of value.\(^6\) Bitcoin’s extreme price

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\(^2\) See Caroline Binham, Chris Giles, David Keohane, Facebook’s Libra currency draws instant response from regulators - G7 countries establish group to examine risk to financial system from ‘stable coins’, Financial Times, June 18, 2019.


volatility means it can only serve as a medium of exchange in instantaneous transactions, so it is currency, but not money.

Libra will be money. Its value will be tied to a basket of major government-issued currencies and for each Libra issued an equal value of such currency, or highly liquid government bonds, will be placed on deposit with a reliable repository.\(^7\) Libra will be a stablecoin – a cryptocurrency the value of which is tied to that of fiat currency. Libra is not the first stablecoin, but it will be the first stablecoin with such breathtaking global reach and utility.

Libra will be a game changer. It signals the beginning of data giants entering into finance in such a fundamental way as to have the potential, in poorer nations at least, to usurp many of the functions of the central bank, among others. Years ago, Mark Zuckerberg said, “In a lot of ways Facebook is more like a government than a traditional company”.\(^8\) Libra will be his biggest step yet into the realm of the sovereign for Libra will collect the seigniorage -- the financial benefit of issuing currency which usually accrues to a sovereign -- and in the case of Libra it will be the interest paid on the cash on deposit or on the liquid government bonds. While we predicted the acceleration of big data firms’ activities and their transformative move into finance,\(^9\) Libra is a wake-up call for all who have so far seen the data and financial economies as separate spheres.

This paper, as the first of its kind, analyses Libra from a regulatory perspective. We start with an outline of how Libra works and the organization behind it in Part I, continue with Libra’s business proposition in Part II, and consider regulatory responses in Part III. In Part IV we stress the importance for cross-border cooperation in supervising Libra, and lay out models that enable cooperation. Part V draws conclusions about what Libra may mean for the worldwide regulation of monetary systems.


\(^8\) See “Mark Zuckerberg on Facebook’s hardest year, and what comes next”, The Ezra Klein Show (Ezra Klein, 02 April 2017), <https://www.vox.com/ezra-klein-show-podcast>.

I. THE LIBRA ASSOCIATION AND CONSORTIUM

A. How Libra Works

Figure 1 depicts how we understand Libra based on its White Paper released on 18 June 2019 and Libra’s related disclosures. Libra holders will be most likely required to have a Libra account with a Libra custodian and/or authorized exchange. Authorized exchanges are the sole institutions able to interact with the Libra Association. Once a customer swaps fiat currency into Libra, the exchange will either meet the demand by selling its own Libra stock at market price (after fees), purchasing additional Libra from other Libra holders in return for fiat currency, or requesting new Libra from the Libra Association. The Libra Association is the sole issuer of Libra; only the Libra Association can “mint” (i.e. create) new Libra, or “burn” (destroy) existing coins. Hence, the Libra Association functions as “buyer of last resort” and as “issuer of last resort”. Any expenses, or proceeds, respectively, of that “last resort” activity will be taken from, or added to, respectively, the Libra Reserve, a pool of high-quality short-term government debt or bank deposits, which is designed to back all issued Libra.

12 See Libra Reserve, supra note 7, at 2.
13 See Libra White Paper, supra note 10, at 8.
Libra is a mobile money scheme – exactly like Kenya’s M-Pesa\textsuperscript{14} – albeit using a cryptocurrency as the e-money. The difference from M-Pesa lies in the initial scale and reach; M-Pesa needed to build a large customer base step by step, over more than a decade, responding to customer experience and complaints. Libra, however, will rely on Facebook’s distribution power and will seek to have scale and reach immediately.

**B. Consortium**

Unlike decentralized cryptocurrencies, in particular Bitcoin, Libra has a consortium underpinning its distribution and ensuring compliance with Libra’s mission as detailed in the White Paper, making it a permissioned system and hence different from that envisioned by cryptocurrency purists. Libra is not decentralized: at the time of writing, 29 leading institutions from around the world form part of the consortium, including from the payments sector Mastercard, Mercado Pago, PayPal, Napster’s PayU, Stripe and Visa, from technology and marketplaces Booking, eBay, Facebook/Calibra, Farfetch, Lyft, Spotify and Uber, from telecoms Iliad and Vodafone, from the Blockchain sector Anchorage, Bison Trails, Coinbase, and Xapo, from venture capital Andreessen Horowitz, Breakthrough Initiatives, Ribbit Capital, Thrive Capital and Union Square Venture, and

non-profit organizations Creative Destruction Lab, Kica, Mercy Corps and Women’s World Banking. The consortium is represented through Libra Association, an association under Swiss law, as well as Libra Networks s.a.r.l., a limited liability company headquartered in, and registered in the commercial register of, Geneva on 2 May 2019, with statutes dated 12 April 2019. Unfortunately, all Libra documentation is silent on the Libra Networks GmbH. However, an association cannot be licensed for financial services under Swiss law and association members cannot receive dividends, while the Libra White Paper reserves the right to pay dividends to members – hence we speculate that (at least) the Libra founding members will hold shares in Libra Networks.

The Libra White Paper refers to the Libra Association as a “non-profit organization”. However, in the White Paper the Association retains the right to pay fees and dividends (!) to Libra member firms – a highly unusual practice for a non-profit. And one much more similar to consortia like R3 or – in the public sector context – international organizations like the World Bank or state-owned utilities.

C. Governance

The Libra Association serves to distance Facebook from Libra: the final decision-making authority rests with the Association, not Facebook. The expressed goal is for there to be up to 100 members of the Libra Association at the time of launch. Each will pay at least USD 10 million into Libra’s capital, in return for certain decision-making rights indicated in Figure 2.

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16 See Libra White Paper, supra note 10, at 8.  
17 See Libra White Paper, supra note 10, at 1.  
18 See Libra White Paper, supra note 10, at 1.  
19 Ibid.  
20 See Libra Association, supra note 11, at 4.
Libra’s most striking feature, from a company law point of view, is the strong role of the council of members, when compared to U.S. (for instance: Delaware) companies. In line with the European concept of the limited liability company, all rights are assigned to the shareholders, and shareholders can override all board and management decisions. We speculate that Libra was set up this way to appear very democratic. There may be, however, a real test of this democratic approach with the cap on voting rights of 1% for each member, as this will lead to a disproportional distribution of influence and investment. The uneven distribution of voting rights could result in free-riding of the many shareholders with small investments in Libra on Facebook’s and some of the other Libra founders’ large investments, resulting in de facto control of Facebook and the founders’ club.

At the same time we may see opportunistic behaviour by some shareholders with small investment compared to others: the limited liability company which is the corporate form of the Libra Network GmbH is primarily designed for business with a few, perhaps a handful, of shareholders with very large investments, and the strong rights of individual shareholders may be explained this way. Assuming that at least the 100 founding members will be, or become, shareholders of the Libra Networks s.a.r.l., the direct influence from roughly 100 shareholders is something

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21 Own figure, based on Libra Association, supra note 11, at 4-9. We have not included the Social Impact Advisory Board (SIAB) in our figure since we believe the SIAB to entail social whitewashing of an otherwise financial enterprise.
rarely seen in this corporate form in Europe or Switzerland for that matter.

The Libra white paper characterizes Facebook’s role in governance of the association as “equal to that of its peers,”22 and being fully subject to the voting cap of 1%. In particular, “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.”23 However, during the launch stage “Facebook is expected to take a leadership role through 2019.”24 Given the extraordinary power of combining Facebook’s social media data with Calibra’s payments data, and given Facebook’s track record in the responsible management and use of data, a cynic could be forgiven for having doubts that in reality Facebook will only have such a tiny influence over the Association’s governance.

D. Blockchain and Technology

Obviously Libra will use very sophisticated cryptography,25 but there is nothing unique about this – all sophisticated financial institutions do this to protect accounts. Libra commits to open access to the blockchain, and open infrastructure, given that “open access ensures low barriers to entry and innovation and encourages healthy competition that benefits consumers.”

Libra will operate on a distributed ledger, but the initial processing and validating nodes will be the 29 members (later rising to up to 100 members) of the Libra Association.

Despite Libra’s establishment as a permissioned system, Facebook has declared full decentralisation of this blockchain will start in five years, with the nodes being assigned influence proportionate to their overall Libra share.26 Given the cautious language and soft commitment in the Libra materials on this point we believe these promises, for the time being, are more in the vein of announcement rhetoric, designed to appeal to those “techies” who love fully decentralized systems without a central governing body, and those who fear Facebook’s power. How serious Facebook is about this promise will be seen once the final constituent documents of Libra are made available to the public, but at the latest after 5 years.

For the time being Libra will be based on a permissioned blockchain. The White Paper states that “as of today we do not believe that there is a proven solution that can deliver the scale, stability, and security needed to support billions of people and transactions across the globe through a

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23 See Libra Association, supra note 10.
24 Ibid.
permission less network."27 We agree. Given the experience with hard forks and other exploitation of code deficiencies in permissionless blockchains we would suggest this model could well result in substantial liabilities to founders.28

E. Accountability?

The prominent role of the consortium of members in the Association seems to address a major deficiency we have identified for many cryptoassets in earlier research: the lack of accountability.29 Of course, accountability and liability ought not be confused: Libra, as a limited liability company, erects a barrier between any liability claim and the firms and organizations which are members of the Association. In the absence of a piercing of the corporate veil (which is limited to very few circumstances) and tort liability, we expect the members will be putting their reputation, but not their money (beyond their initial investment), on the line.

II. Libra’s Business Proposition

Libra’s mission is outlined in its 18 June 2019 White Paper.30 Libra aims at enabling “a simple global currency and financial infrastructure that empowers billions of people” through a “new decentralized blockchain, a low-volatility cryptocurrency, and a smart contract platform that together aim to create a new opportunity for responsible financial services innovation.”31 We have identified four elements that together characterize Libra.

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30 See Libra White Paper, supra note 8, at 1.
31 Ibid.
A. Financial Inclusion and Sustainability

First, Libra aims to empower billions of as yet unbanked people. While many hundreds of millions of people have received access to financial services in the last decade,\textsuperscript{32} as of 2018, some 1.7 billion adults still did not have access to financial services, and many more have access but do not know how to use it effectively or wisely.\textsuperscript{33} As we have shown in earlier work, access to financial services is a precondition for people acting with a long-term view,\textsuperscript{34} and financial exclusion makes life very inefficient – with days lost in doing what should be simple tasks like paying electricity bills and with large amount of government welfare payments disappearing in the “leakage” which is common in paper-based systems and largely illiterate populations.

Libra, seen from this perspective, is a bold move to further achievement of the Sustainable Development Goals (SDGs) through financial inclusion serving to assist the poor in countries around the world.

However, “We do not know how many people have Facebook accounts but no bank accounts”.\textsuperscript{35} Of the 1.7 billion people currently unbanked, over one-half of these come from just seven countries, and four of these (China, Pakistan, Indonesia and Bangladesh) have either permanently or temporarily banned Facebook at some point.\textsuperscript{36} Many of the unbanked will either not have smartphones or reliable internet access.

But putting aside the reliability of some of the arguments Facebook uses to promote Libra, which financial functions does Libra actually provide?

The most important function will be cash equivalence: Libra will be a means of payment: “Libra will need to be accepted in many places and easy to access for those who want to use it.”\textsuperscript{37}

As we stated above, Libra is a mobile money scheme, and some commentators have argued that Libra will lack the cash-in / cash-out functions provided by agents -- small general stores in poor countries that


\textsuperscript{33} See Libra White Paper, supra note 8, at 1.


\textsuperscript{36} Ibid.

\textsuperscript{37} See Libra White Paper, supra note 7, at 3.
typically sell phone airtime, mobile money, groceries and cigarettes. Yet we expect that cash-in will most likely come in government salary and welfare / transfer payments to citizens. Libra should provide poor country governments with a reliable, auditable means to get welfare payments to the intended recipients and as such will likely be adopted by many governments, as well as international organization like the UN, for instance in the context of refugees and displaced persons. Cash-out will follow as small business owners opt to receive Libra paid into their own Facebook accounts, in return for goods or services, as has already happened in China with AliPay and WeChatPay. Indeed, in many poor countries, Libra is likely to generate the sort of digital financial ecosystem that mobile money advocates have long sought, particularly combined with WhatsApp and relatively simple smartphones, both of which are becoming increasingly ubiquitous in an increasing range of countries, both developed and developing. Too often today, government payments are withdrawn once transferred into mobile money accounts and thereafter the recipients transact in cash. This is inefficient and causes considerable liquidity problems for agents who function merely as cash dispensers. Libra is far more likely to underpin a digital ecosystem in which e-money is widely used, and one therefore in which fees can be much lower than is currently the case.

B. Cost savings

In our view, the strongest initial demand for Libra is likely to arise in poor countries where the absence of financial services – particularly lack of large scale electronic payments systems and low risk savings tools, often combined with lack of a sovereign digital identification system – retards development and prosperity generally.

One prominent use case should prove to be remittances. Some of the most expensive remittance rates are from the United States to Africa, or from Australia and New Zealand to the Pacific Island nations, respectively – with rates of 5% to 10%; a Pacific Islander picking fruit in Australia today may have to spend between $25 and $50 to send home $500. With Libra that transfer should only cost cents. Libra has the potential to replace all of these expensive current money transfer methods. By doing so, Libra could deliver a major global social good.

In 2018, remittances exceeded aid to developing countries by a factor of about 3.5 times. The World Bank estimates remittances last year at about

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US$528 billion\textsuperscript{39}, compared to total official development assistance from the 30 members of the OECD’s Development Assistance Committee to such countries of some US$153 billion in 2018.\textsuperscript{40} Furthermore, remittances have further advantages over aid, in that remittances are more responsive than aid, i.e. they increase more rapidly in response to natural disasters and the like in recipient countries, and remittances inject money directly into local economies whereas much aid spending by rich countries in on consultants from those countries who then work in capacity building roles in the recipient countries.

Yet, at the moment, remittances are in effect subject to a tax – the cost of effectuating the remittance – for which the global average was about 7 percentage points in the first quarter of 2019.\textsuperscript{41} These costs are legacies from times long past when sending money around the world was difficult and expensive for financial institutions. But today it is nothing more than a profit gouge by the international banks, and one that Libra is set to utterly disrupt, including potentially for the many FinTechs (such as Ripple and Revolut) which are already seeking to disrupt the market themselves.

So remittances should inject very considerable amounts of Libra into local remittance dependent economies such as those of the Philippines, Nepal, Fiji, Samoa, Tonga and others. It would be surprising, given these injections of liquidity, if local merchants in these countries are not quick to begin accepting Libra in payment for goods and services. This will likely be particularly the case in those countries where Facebook and/or WhatsApp use is already very common, such as the Philippines, Bangladesh and India. Demand in developed countries is less easy to predict, but presumably this is why firms such as Uber, Lyft, Spotify, Amazon and E-bay have been invited to join the Association. Uber currently pays over US$800 million annually for credit card merchant fees. So we would expect generous discounts from Uber, Lyft, Amazon and others for paying in Libra. Such tech companies often engage in below-cost pricing for long periods seeking market dominance and long-term, rather than short-term, profitability. Discounts on payments in Libra would fit into this pattern of behaviour and


give rich country consumers a reason to adopt the currency.

C. ‘Stable Coin’

Initially customers will buy Libra by paying fiat currency. The Libra Association will then put this currency on deposit with a repository or use it to buy highly liquid government bonds and entrust them to the repository. Libra will function as a so-called stablecoin tied to major government currencies. Libra aims to ensure people’s “confidence that they can use Libra and that its value will remain relatively stable over time.”

It is apparent from this that, besides cash equivalence, Libra will also provide a currency hedge. Many currencies of developing countries are impossible to hedge, for lack of market liquidity: no one wants to hold them as a long position which is a necessity for the other side to go short. This has driven up hedging costs for many poorer countries like Cambodia, Samoa and Guatemala into the two digit percentage territory.

Given its potential liquidity and the ability to exchange both major and minor currencies for Libra at the net asset value of the basket of major currencies, Libra offers dramatic potential to provide both a low cost tool for hedging currency risk and also for directly reducing exchange costs for developing country currencies (which are generally traded against a major currency – usually the US dollar – in the centre of any developing country cross-currency exchange, thereby increasing costs as well as risks).

The potential for use in hedging depends on the currency the exchanges or the Libra Reserve accepts in return for Libra. Given the enormous scale, and potential world-wide exposures, hedging could become less expensive if the Libra Reserve engages in (very) skilled risk management. The hedging ability, of course, depends on the composition of the Reserve’s basket. At this point, there is very limited detail regarding the composition of the reserve: will it be along the lines of an SDR (IMF Special Drawing Rights, comprising the US dollar, Euro, Yen, Pound Sterling and RMB) or trade or otherwise weighted (to incorporate a wide range of currencies, potentially even a universal index)?

We note, however, that Libra will not be a panacea to all woes residents of developing countries face with regard to their local, in many cases scarcely traded (‘illiquid’), currency, characterized by supply in that currency constantly exceeding the demand in currency markets. From what we can see in the Libra White Paper, in return for minting Libra, the Libra Reserve will take in stable, liquid currency only. Illiquid currency will

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42 See Libra White Paper, supra note 10, at 3.
43 For instance, this could be achieved through authorized exchanges focusing on these countries, paired with certain gates and limits.
then remain with the Libra exchanges. However, since supply in those currencies typically exceed demand, the exchanges would not want to have such currency on their balance sheet; and so we would expect the exchanges to charge clients for the potential losses from accepting the illiquid currency in the first place, either directly as fees or indirectly via the exchange rate. These costs could be significant: currency exchanges accepting illiquid currency currently charge two-digit percentage costs to clients; and Libra exchanges are likely to do likewise.

**D. Disruptive Potential – why banks should be afraid**

The cost savings Libra offers come at someone else’s expense: and that someone will typically be the incumbent financial institutions as well as potentially new FinTech entrants. The transformative nature of Libra lies in Facebook’s reach. It is expected that Calibra, Facebook’s new digital wallet provider for Libra, would be available through Facebook Messenger and WhatsApp, the two Facebook applications through which it reaches billions of customers.44

Libra’s potential to disrupt incumbent banking in the developed world (!) is massive. Libra will propel Facebook to the top of the queue of data companies equipped to out-compete the banks. This will happen for two reasons.

First, Facebook will have better access to more data than incumbent banks. Historically, incumbent banks all over the world have had the best data on customers and have therefore been best placed to price credit and insurance. Facebook’s data advantages change all that. The cozy old world in which a banking license was an exorbitant privilege is coming to an end, and fast. Data-driven disruption is far more likely than people think: In China, Ant Financial, the financial services subsidiary of Alibaba, uses its vast store of data to be a leading consumer lender and financial services supplier. In America, two of the leading small business lenders are Amazon and Square, a payments app. Ant, Amazon and Square have better data than the banks – they have a real time feed on business income as it is paid by customers – so of course they are displacing incumbent banks as lenders. The combination of Facebook’s social media data with the payments data of Libra will be transformatively powerful.

Second, the Libra ecosystem will create self-reinforcing network effects: the more people use Libra, the more applications for Libra will be written, attracting even more users to Libra. A giant client base such as

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Facebook’s is an excellent starting point from which to create enormous network effects.

Libra may not win the cryptocurrency race, but it is a game changer. Radically new strategic thinking will be required of incumbent financial services firms to respond. Bankers will need to learn to dance with data. Data companies see the world differently and in ways that in finance are far more powerful and profitable than those perspectives from which traditional banks come. The question is whether our banks’ leaders will be up to the challenge. In datafied finance, the lender with the best data and data analytics wins. After next year, unless the regulators deliberately seek to thwart the growth of Libra (see infra, at III.), that will increasingly be Facebook, or some other data company that follows Facebook’s lead and offers its own cryptocurrency – Amazon coin or Google coin anyone?

In fact we suggest that one of the greatest impacts of Libra may well be that it will prove to be the first of a range of similar proposals, from a range of both private and public organizations. We suspect that these will include stablecoin offerings by other BigTechs as well as governments and possibly international organizations. Many governments have done extensive work preparing to issue a central bank digital currency, and yet no credible government has yet done so as a central bank digital currency means a reworking of the financial system in fundamental ways, the consequences of which are very difficult to predict.⁴⁵ It may be that if Libra becomes well established the best option governments have is to counter it with their own digital currency.⁴⁶

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III. REGULATORY CONCERNS

A plethora of regulatory concerns accompany the Libra project, and regulators around the world have already made clear they will require high regulatory standards, given Libra’s scale and reach. We expect regulators to act in the three standing regulatory paradigms when regulating Libra. These include consumer protection (also referred to as investor, customer, client, and/or depositor protection), the protection of financial stability and market functions (including systemic risk), and market integrity (particularly around potential for criminal use). These will be joined by macroeconomic, political and stakeholder concerns – and given the ability of Libra to substitute for fiat currency, political, monetary and financial stability concerns will be key in this regard.

A. Licensing

As a starting point, Facebook/Libra will almost certainly be required to obtain one or several licenses across a wide range of jurisdictions and comply with existing anti-money laundering (AML) and countering the financing of terrorism (CFT) regulations.47 Some of the potential license requirements are considered here, with more to follow, once more details about Libra are released. We delineate between two types of licenses: those that relate to Libra’s issuing services, and those that relate to the crypto asset itself.

1. Libra’s services

Licenses will likely be required for one or several of the services of Libra.

First, Libra will need licenses to provide payment services in a range of jurisdictions, as this is a traditionally regulated activity around the world, particularly when there are public interest concerns around consumer protection, financial stability and market integrity as are potentially evident in this case. We would expect the Libra Association to apply for licenses as a payment services provider in the EU and as a money transmitter in the US. These providers offer receiving entities (such as merchants or public institutions) services for accepting digital payments including through bank-based and online payments. Many jurisdictions have similar schemes which could, and in all likelihood would, be applied.

Second, some jurisdictions require licenses for e-money providers (in particular under EU financial legislation). E-money is often defined as a

47 See Libra White Paper, supra note 8, at 2.
digital alternative to cash, allowing users to make cashless payments over the internet, the alternative being a card or a phone. EU rules on e-money aim to facilitate the emergence of new, innovative and secure e-money services, and encourage effective competition between all market participants. The EU e-money license comes with a European passport, which is the right to issue e-money services across borders. A range of other jurisdictions around the world have similar requirements.

Third, Libra may require a banking or other financial services provider license in some jurisdictions. In many jurisdictions, payments services are still limited to banks and in the absence of alternative payment and/or e-money licenses schemes, Libra may have to acquire banking licenses in some jurisdictions in order to provide payment services.

Other type of licences depend on regulators’ interpretation of Libra’s services. For instance, regulators could characterise Libra’s set-up as a money market fund, and demand a licence for the fund and the fund’s management (under the UCITS Directive in the EU, or the Investment Company Act and the Investment Advisers’ Act in the U.S.). Qualification as an investment fund would be supported by the fact that Libra users’ confidence is supported by a reserve pool of high-quality investments, usually government bonds and bank deposits, and all Libra sold for fiat currency will entitle the holder thereof to a share in the pool. Compare this with money market funds that tend to invest in government debt and short-term deposits only, similar to Libra’s Reserve, and where holders are exposed to the returns of the asset pool; money market funds with cash-equivalent functions, ensured through a fixed NAV, were very successful in the U.S., until they experienced a crisis when the nominal value of one unit deviated from 1 USD (‘breaking the buck’).

In addition, as Libra’s services expand, it will have to acquire additional licenses around the world. For example, once the Libra organization offers running accounts while accepting deposits on behalf of clients it must obtain a license as bank or credit institution, potentially in every jurisdiction in which it seeks to provide such services.

Finally, in addition to these, it will require licenses for its custody and safekeeping systems which underlie the link between the basket of fiat currencies and Libra, with these potentially rising to the level of

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48 See Libra Reserve, supra note 11, at 2.

49 Details of the entitlement in the pool need to be determined, and will be relevant for the fund qualification of Libra.

50 See William Birdthistle, Breaking Bucks in Money Market Funds, 2010 WISCONSIN L. REV. 1155, 1159 (highlighting the conservative investment policy of money market funds).

51 Ibid, at 1176-1178 (describing the growth and crisis of US money market funds).
systemically important payment and settlement infrastructure in some jurisdictions.

2. **Coin characteristics: money, currency, securities, commodities and/or (financial) derivatives?**

We have laid out in previous work that crypto assets can be characterized as financial products of many different kinds. This is not the place to repeat the discussion. Suffice to say that any crypto asset could potentially be understood as money, currency, a payment instrument or system, a security, a commodity and/or financial derivative, or several, or even none, of the former.

If not qualified as a collective investment scheme (see infra, at III.A.1.), Libra could be qualified as comprising a commodity or a financial derivative, with each Libra coin representing cash flow rights in a basket of cash on deposit and highly liquid government bonds. The arrangement could be structured as flow-through (analogizing Libra to collective investment schemes or structured deposits) or as a securitization (rendering Libra a structured security).

The characterization as commodity, investment fund / collective investment scheme and/or financial derivative will also determine the licensing conditions for service providers such as the authorized exchanges that trade in Libra and custodians that offer Libra accounts. Certainly the major US and EU regulators have already indicated the necessity of discussions with Facebook about determining appropriate regulatory treatment. At a minimum, we would expect it to be necessary for the Libra Association to obtain, in addition to any license that covers payment services, a license as a Commodity Dealer in the U.S. and/or as a MiFID investment firm in the EU.

These regulations will be sorely needed for Libra as the crypto exchanges have proven to be the point of vulnerability for crypto asset investors. Nearly all the major losses in crypto assets have come through attacks on the exchanges, their operational deficiencies, or from their conflicts of interest arising from their acting simultaneously as exchanges and custodians. Fundamental to all these regulatory schemes are systems of custody of assets and segregation of accounts, as well as a range of requirements relating to market integrity such as AML/CFT customer due diligence (CDD). These aspects still appear to be grossly underdeveloped

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52 See Zetsche, Buckley, Arner & Föhr, supra note 29, at ___.
54 Ibid, at 2352-59 (discussing regulation of cryptoasset exchanges).
in the proposals at this stage.

Depending on the Libra Association’s scope of activities, Libra could also qualify as an issuer of a derivative and a trader in those assets which would subject the Association to the need to obtain a license as a Broker-Dealer or Commodity Dealer (U.S.) or as a MiFID investment firm (EU). Along with these regulatory requirements, will come, for instance, custody, segregation and compliance requirements.

3. Managing the Reserve Pool

It has not yet been disclosed how the Reserve Pool will be structured legally. There are two main alternatives. On the one hand, the Libra Association could become the owner of the Libra Reserve and manage its own assets. But this would subject the pool to all claims of creditors of the Libra Association, including, for instance, fines for antitrust, data protection, and foreign trade violations which could reach an enormous scale (especially in the EU), and Libra’s own tax liabilities. If structured in this way, Libra’s net asset value could be potentially severely impaired, and the current White Paper disclosure would be misleading. So we do not think this structure is at all likely.

Thus, we expect that the Reserve Pool will be managed on behalf of the Libra holders as beneficiaries, through a SPV earmarked for this purpose, or through a trust account arrangement. In this case, the Libra Association must obtain an asset manager license or employ an external asset manager for that purpose.

Finally, in addition to these, Libra will require licenses for its custody and safekeeping systems which underlie the link between the basket of fiat currencies and Libra, with these systems potentially rising to the level of systemically important payment and settlement infrastructure in some jurisdictions.

B. Risk Management

Libra is a stablecoin, but “stablecoin” is something of a misnomer as its stability will rest on a number of operational and financial preconditions which regulators will want to ensure through regulation.

1. Operational Risk

First, operating the Libra Reserve professionally and preventing Libra holders from generating operational risk is key. For instance, the distribution of the Libra reserve fiat currency should happen as instructed by the asset manager in charge, with appropriate protections in place to ensure no one can steal from the portfolio backing Libra, or err when
transferring fiat currency received from Libra users to the reserve account. The Libra Reserve’s Net Asset Value will need to be calculated several times daily, accurately, and with an eye to prevent market abuse and insider trading, in addition to fraud and theft. All of these concerns warrant extensive licensing requirements as either asset managers, investment advisors, or investment fund managers.

2. **Financial Risk**

Second, Libra promises stability.\(^5\) To achieve this, skilled asset managers must determine the portfolio composition of the Reserve Basket, and rebalance the portfolio on a daily basis.

Regardless of how stability is weighted in the asset manager’s composition, a stablecoin is never really stable, from the Libra holder’s perspective. Even where the basket is well diversified the value of the basket fluctuates in line with overall (global) market swings. How this fluctuation correlates with the Libra holder’s home currency depends on the holder’s home country. From the perspective of the Venezuelan Bolivar, Libra may be relatively stable, while from the perspective of the USD, EUR or CHF the fluctuation prompted by mixing additional currencies in the basket may be experienced as less stable than the holder’s home currency.

3. **Systemic Risk?**

Third, systemic risk is a concern under both the too-big-too-fail (TBTF) and too-connected-to-fail (TCTF) paradigms.

As to TBTF: We can only guess how many of Facebook’s clients will buy and use Libra and how many of the currently unbanked will buy and use Libra; and we have no reliable data on the funds a single client will swap into Libra. Estimates in the press suggest an overall Libra market volume equivalent to 100 to 500 billion USD\(^5\) – but these are pure guesses – and of course it could be much more if Libra becomes the coin of fashion among Facebook and WhatsApp users around the world, numbers in the trillions USD range are possible.

As to TCTF: The Libra Association will be at the heart of a new financial ecosystem on which millions of Libra holders and thousands of merchants and service providers will depend.

Hence, Libra raises forms of systemic risk and thus both microprudential and macroprudential concerns. We would expect and in fact encourage, within a very short time, that Libra – in its capacity as crucial payment system provider, or bank respectively – be brought within

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\(^5\) See Handelsblatt, 28 June 2019, citing Philip Sander, head of the Blockchain Centre in Frankfurt.
the global framework addressing globally systemically important financial institutions (G-SIFIs) and/or systemically important financial infrastructure, including a systemic risk surcharge, similar to that charged to existing G-SIFIs.

Libra is perhaps the ultimate example of something that is highly likely to move from “too small to care” to “too big to fail” in a very short period of time.\textsuperscript{57} The potential for Libra to become systemically significant within a few months or even days of launch in some markets prompts us to issue – again – a warning we have delivered with regard to data-driven finance in previous work:\textsuperscript{58} as for many Libra will not only be a currency, but the Libra ecosystem will be an important capital market infrastructure. In the big data age, financial regulators should consider market structure also as central to their function, rather than the exclusive domain of competition / antitrust regulators.\textsuperscript{59}

\textbf{C. Capital Requirements}

As to capital requirements we need to distinguish between two aspects. First, there is the capital required to back up the stable coin. If the capital pool is segregated, as we recommend, no additional capital must be put up for the liabilities resulting from the contractual obligations vis-à-vis Libra holders.

However, the Libra Association will need to provide for capital to ensure operational consistency. Given the enormous amounts of assets held in the Libra pool we would recommend a capital requirement analogous to that for investment firms and fund managers to be put for operational risk.

\textbf{D. Identity and AML}

In all countries, regulators will require Facebook to conduct AML / CFT / CDD checks on Libra users. The Libra plan includes a digital identity to meet these requirements.\textsuperscript{60} Once Facebook achieves this regulatory compliance, as it will with technology and its financial resources, it will have overcome a major barrier to the offering of financial services, and will start offering more of them. From our standpoint, this aspect of Libra – a


\textsuperscript{58} See Zetzsche, Buckley, Arner & Barberis, supra note 9, passim.


\textsuperscript{60} See Libra White Paper, supra note 8, at 9.
global digital identity solution – may well prove even more powerful than the cryptocurrency itself.

As we have examined in previous work, digital identification is crucial not only to financial inclusion but also to achieving the SDGs more broadly. And this factor has been stressed by the Libra White Paper in Libra’s commitment to digital identity. The Libra documents remain silent, however, about the real challenge here, which is how to achieve a digital identity for the 1.7 billion unbanked people, most of which hold neither a passport nor other identity document.

Libra offers all the opportunities for a scheme we have proposed in our earlier work to employ not only business identity (offered by Libra, among others) but also individual identification (e.g. through biometric means) in a way currently not politically imaginable in many countries to re-manufacture the official centralized identity of the unbanked. Regulators will want to cooperate with Libra and others to make use of this unique opportunity; and if they do not move swiftly the Libra ID may well become the de facto new identity not only for AML/CTF/CDD, but also for all other purposes without their involvement, as has happened to an extent in China with the digital identities created and conferred by AliPay and WeChatPay. Given Facebook’s history with customer data, however, this in some ways raises far bigger concerns about privacy and data protection than the Libra cryptocurrency.

**E. Monetary Policy**

If Libra succeeds in poor countries as we expect it will, as have M-Pesa in East Africa and AliPay and WeChatPay in China, it will pose fundamental challenges to governments, especially in poor countries with weak institutions and institutional environments, as it will in many cases will shift substantial control of monetary policy from governments to the Libra Association. Libra will insert a private company between national central banks and the citizens they are supposed to serve. Furthermore, once well established, Libra’s global nature will mean capital controls will no longer be a policy measure available to the government to prevent capital flight in times of severe economic uncertainty (as Malaysia did in 1998 or has China has done over the last several decades). Its impact on the

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63 See Arner, Zetzsche, Buckley & Barberis, Digital Identity, supra note 61, at ____.

64 Ross P. Buckley & Sarala M. Fitzgerald, *An Assessment of Malaysia’s Response*
monetary supply and consequently monetary policy of emerging markets nations is potentially very systemically destabilizing. Major policy tools for poor country governments may be denied them. The world’s major financial regulators need time to assess and regulate Libra – expect them to create it by slowing Libra’s growth in many ways – and if they do not – watch the global financial system become far more unstable.

Despite these very sizable risks, some potential outcomes are by no means negative from the standpoint of users: among the largest users of BitCoin are those living in poor countries with weak institutional environments, with Zimbabwe and Venezuela often the paradigmatic examples where BitCoin provides an alternative to problematic national currency and monetary systems. It is thus possible that Libra could in fact force governments to do better in managing their own economies and currencies, in the way that the gold standard did prior to World War I. If good money pushes out bad (per Gresham’s Law), there is certainly the possibility of the emergence of a better alternative in many cases through Libra. It does however raise particular concerns about the potential power of a private consortium underpinning global monetary arrangements – highlighting the potential value in a possible international approach.

One more feature of Libra is so striking it puts the acceptance of Libra by developing countries at risk. We can reasonably assume that most custodians holding the Libra Reserve will be located outside of developing countries. In turn, countries with large Libra acceptance will suffer from a fiat drainage.

In times where unilateralism becomes a newly accepted policy path, we may see the reserves from certain countries being held hostage in the name of foreign sovereign, or international commercial, policy: authorities could order exchanges to avoid transactions with Libra holders of any given country, in order to bring pressure to bear on that country’s government. In order to retain sovereignty, regulators could require local custody of Libra Reserve funds equivalent to the amount of Libra circulating in any given country, thereby putting the very business propositions of independence and stability independent of local circumstances at risk.

**F. Data Protection**

Facebook can leverage its client base to Libra only if it can use Facebook clients’ data at least for the initial contact. The Libra White Paper states that “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.” In short, Calibra is the entity charged with turning Libra into a business.

Transferring client data to Libra, or Calibra, Facebook’s digital wallet provider for Libra storage, would require the clients’ consent at least under EU and Australian data protection law, given that Facebook clients have consented to use their data for social media, rather than financial services. We have not found any clear language that ensures permanent data separation between Facebook and Calibra in Libra’s materials, and concerns that both data pools may be mixed with or without users’ consent are valid given Facebook’s history of constant data protection violations in the last decade. If both data pools were to be merged, Facebook would have unprecedented insight into and control over their users’ social and financial existence.

G. Tax

Finally, tax is a valid concern. For instance, regulators need to determine whether VAT is charged on transactions, and whether profits on the sale of Libra attract capital gains tax. Further attention is also warranted to the Libra Reserve’s proceeds, how they are generated, and if, and how, they are going to be taxed.

If a regulator in a given country wants to slow the take-up of Libra severely, declaring that profits on holding of Libra would be subject to capital gains tax may prove to be the policy option of choice. In poor countries, in particular, in which local currencies tend over time to devalue, such a resolution of the taxation authority would require holders of Libra to pay capital gains tax each time they use their Libra to make a purchase. This could render the currency functionally largely unusable provided the country has the means to enforce such a measure.

H. Disclosures

All of these issues we have outlined must be the subject of adequate analysis and disclosure. Similar to other ICO white papers we have analysed, there is currently very little financial detail in the Libra

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65 See Libra Association, supra note 11, at 1.
66 See Alvarez, supra note 47.
68 See Zetzsche, Buckley, Arner & Führ, supra note 29, at ___. 
documents, and too little information to allow consumers to assess whether purchasing Libra is for them a good idea.

To name but one example of incomplete disclosure, managing billions if not trillions of dollars, albeit on a low-risk stability basis and within a low interest environment, will yield considerable returns, and these returns are potentially very large when compared to the initial investments made by Libra founding members, given that the proceeds depend on the fiat currency contributed by Libra holders (in contrast to Libra members’ initial investment). The Libra White Paper is thin, in this regard. For instance, while Libra is dubbed a non-profit organization, its members are entitled to a dividend, and some profits from the Libra Reserve will be used to fund the Libra project expansion, while Libra holders never get a dividend. Reasonable Libra holders will expect more details under which conditions proceeds from the Libra Reserve are reinvested in the network, or retained in cash-equivalent, rather than being paid out to the Libra founding members.

IV. CROSS-BORDER SUPERVISION

Libra is a global project. It will fall under many different national and regional licensing and supervision regimes. Most regulators will have something to say on Libra and impose additional conditions reflecting the national perspective. This will result in a mixed and potentially fragmented regulatory framework which will limit some of Libra’s advantages. More importantly, a highly fragmented regulatory landscape will lead to inefficient regulation. So how to ensure effective cross-border supervision?

The obvious answer for financial lawyers is substituted compliance, or in European law terms: equivalence. Once Libra is licensed in one country, other countries recognize its supervision in the home country and reduce their own requirements, for instance on risk capital, risk management and IT infrastructure, under the condition that the financial legislation and supervision in the home country has substantially the same effects as the legislation and supervision in the host country, and the home

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69 Members of an association are not entitled to dividends under Swiss law; we speculate that at least the founding members of the Libra Association are, or will become, shareholders of the Libra Networks s.a.r.l.

70 See Libra White Paper, supra note 8, at 7.

country regulator commits to ensure protection of host country clients to the same extent as home country clients.

We foresee a number of issues when applying substituted compliance to Libra.

First, the most important regulators all seem to want to have their say on Libra, given that Libra clients in their own country will be subject to the risks Libra creates. As is well evidenced by the U.S./China trade conflict, multilateralism faces a crisis these days, with very important economies preferring a unilateral approach over trusting other countries. Even where central bankers are willing to adopt a multilateral framework to ensure global supervision, it is far from certain that any new cross-border joint supervision scheme will find support at home – while Facebook’s high profile and less than politically stellar track record ensures this will be a hot political issue in many countries.

Second, outside of the European Union where equivalence is established as principle in most types of financial services (yet very few countries have been approved under the equivalence test), the multilateral supervision framework is not strongly developed. In particular, outside of derivatives regulation, substituted compliance has found few friends in the U.S. which for obvious reasons will be one very important jurisdiction for Libra. European supervisors practice co-supervision of banks, on an ongoing basis led by a lead supervisor; however, U.S. banking supervisors do not recognize the European lead over European banks active in the U.S.

Third, the scope of substituted compliance is patchy at best, and expanding the scope will face major difficulties: while the EU has expanded the equivalence principle into the field of data protection, with the GDPR allowing data transfer into countries that have equivalent data protection regulations and enforcement as the EU, strong data protection regulations are largely absent in the U.S. and China, to name but two important jurisdictions.

In particular in banking, where related efforts have a long history dating back to the late 1960s, it is clear that outside of passporting in the EU (and some countries privileged under the European Commission’s equivalence assessment), home country regulation has largely fallen out of favour, with even the U.S. rarely now arguing for cross-border branch-based regulation. Rather, the trend has very much been towards subsidiarization, with separately regulated and capitalized subsidiaries albeit with cross-border cooperation and coordination through supervisory colleges of involved supervisors, chaired by the main supervisor of the institution’s home jurisdiction.

Certainly in the context of Facebook and Libra a similar sort of structure may be necessary.
V. CONCLUSION

Given Libra’s potential scale once Facebook links its massive client base via Messenger and WhatsApp to Libra, worldwide monetary and financial regulators will have no choice but to regulate Libra. This paper has outlined a number of regulatory concerns.

The key problem in regulating Libra will likely be that cross-border supervisory cooperation and co-supervision schemes are patchy, and little tested for financial services, beyond banking and derivatives. Establishing new multilateral systems, however, will take much longer than Libra will need to get operational and are unlikely in any given current geopolitical trends. Libra throws down the gauntlet to the major international regulators and challenges them to move with unprecedented speed and cooperation – we expect a genuine attempt to meet this challenge will be accompanied by some regulatory roadblocks to slow Libra’s development and buy the regulatory community some more time within which to respond comprehensively.

Looking forward, we suggest that in retrospect it is possible that the greatest impact of Libra will be to trigger a range of similar proposals from other BigTechs, which may be better than Libra. We also suggest that it is highly likely that this will force one or more of the major currency central banks / governments to move forward with a sovereign digital currency which could then be the basis of a range of BigTech payment systems and ecosystems (e.g. WhatsAppPay, rather than the Libra cryptocurrency), potentially extending their global reach and influence.

At the same time, Libra is the first real re-thinking of global monetary arrangements since the end of the link between the U.S. dollar and gold in the early 1970s and the beginning of the era of floating fiat currencies. An international treaty-based arrangement built on a global stablecoin could offer the advantages of Libra without many of the potentially negative aspects. And something like this is in fact possible under the International Monetary Fund (IMF)’s Articles of Agreement, specifically Article IV section 2(c), permitting the establishment of new general exchange arrangements.

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