## SUERF THE EUROPEAN MONEY AND FINANCE FORUM



# Libra: A new competitor among international currencies?

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JEL-codes: E02, E42, E50. Keywords: Money, Monetary theory, currency competition, legitimacy.

The recent publication of a "white paper" by a Facebook-initiated consortium to start a virtual currency called "Libra" has generated considerable public attention. Based on the limited amount of information currently available, we try to assess Libra's potential to become legitimate money, and its possible prospects to compete with existing official currencies.

#### What is "Libra"?

In June 2019, Facebook has presented its project to develop a digital currency called "Libra" by 2020. "Libra" is to be issued by an association of corporations from various platform-based business areas. <sup>1</sup> Its value is to be pegged to a basket of official currencies, and backed by bank deposits and government securities in official currencies.<sup>2</sup> According to information released by the initiators, Libra is intended to initially serve as a payment instrument in target markets with underdeveloped banking and payment infrastructure. Its future expansion in other fields of activity and geographic areas is envisaged.<sup>3</sup>

First reactions among national authorities were sceptical. Central bank officials have warned of the project creating systemic risk, parliamentary committees have raised consumer protection and even national security concerns, and some authorities stressed the need to address potential money laundering and privacy issues.<sup>4</sup>

While it is too early to determine precise regulatory measures in response to the project given the current lack of clarity about important design details, public attention and debate around the project can be considered a welcome opportunity to develop a more widespread and deeper understanding about the actual working of the current monetary and financial system and its future prospects.

#### Money needs legitimacy

The amount of comments that have been published in recent weeks on the Libra project and the strong views held by most commentators<sup>5</sup> highlight that money and its design involve issues that go way beyond the mere technical or economic dimension: Money is inseparable from legitimacy. To work properly, money requires legitimacy. Value is a social phenomenon. Acceptance of an economic instrument by market participants is a social phenomenon, too. The notion of legitimacy tries to capture the multi-dimensional issues involved that turn a (physical or digital) object into money.<sup>6</sup>

Introducing a new form of money into the economy requires ensuring a widespread perception among potential users that it is legitimate. Legitimacy of a means of payment involves two key dimensions<sup>7</sup>:

First, "input legitimacy" refers to the relation between issuer and user of a monetary instrument. Do users trust in the issuer, do they have a form of influence or control over its goals and behavior? Second, "output legitimacy" refers to the characteristics of the monetary instruments with respect to its economic performance. Does it conform to users' quality requirements?

In the following, we review key components behind a currency's claims to legitimacy along these two dimensions, and compare existing official currencies with the prospective features of a corporate currency like Libra.

<sup>1</sup>Libra (2019a) offers the following list: Payments (Mastercard, Mercado Pago, PayPal, PayU, Stripe, Visa), technologies and markets (Booking Holdings, eBay, Facebook/Calibra, Farfetch, Lyft, Spotify AB, Uber Technologies, Inc.), telecom (Iliad, Vodafone Group), Blockchain (Anchorage, Bison Trails, Coinbase, Inc., Xapo Holdings Limited), risk capital (Andreessen Horowitz, Breakthrough Initiatives, Ribbit Capital, Thrive Capital, Union Square Ventures), non profit, multilateral organizations and academic institutions (Creative Destruction Lab, Kiva, Mercy Corps, Women's World Banking).

<sup>2</sup>According to Libra (2019b), "the actual assets will be a collection of low-volatility assets, including bank deposits and government securities in currencies from stable and reputable central banks." The actual composition of the basket is yet unknown.

<sup>3</sup> See Libra 2019a and 2019b.

<sup>4</sup> FAZ 2019, FT 2019c and FT 2019d, Guardian 2019.

<sup>5</sup> See for example FT 2019c, Grygiel 2019, Guardian 2019, Morozov 2019, Stiglitz 2019, Wolf 2019.

<sup>6</sup>See Weber (2018) for a fuller presentation of the analytical framework and its application to the current monetary system. The following discussion draws on this text.

<sup>7</sup> Scharpf 2012.

#### **Input legitimacy**

All forms of money (banknotes and bank deposits) in the modern economic system have an issuer guaranteeing its value. Issuers back their guarantees with assets. Whereas money is an asset for its individual owners (e.g. those among us who have cash in their wallets), it represents a liability for its issuer, recorded in a balance sheet where liabilities must be matched by assets.

In the current monetary system in contemporary OECD countries, central banks and commercial banks serve as issuers of means of payment in each currency area. They entertain a hierarchical relationship where commercial bank deposits represent a claim on central bank money available on demand by customers. They are subject to a number of channels aimed at producing "input legitimacy", a trustful relationship between issuers and users of money.

In general, central banks are subject to a public mandate, many of which operate with some form of inflation target, some also include output targets. In most currency areas, legal provisions foresee independence of central banks with respect to employing instruments at their disposal in pursuit of their mandates without government interference (e.g. setting the terms of access to its balance sheet with respect to collateral accepted, interest rate required, duration etc.). In most currency areas, equity of central banks is held and guaranteed by the public sector, and governments appoint central bank management. Accountability towards parliaments and the general public typically takes the form of mandatory hearings, and transparency requirements (publications, minutes of key meetings etc.).

Commercial banks are subject to licensing requirements, public regulation and supervision, as well as market competition among banks, plus monitoring by their equity owners and creditors. Their demand liabilities are treated as means of payment among users as long as banks can uphold their guarantee to provide par value to cash and provide cash on demand against deposits. Arguably, the co-existence of public and private issuers in the contemporary monetary system in each currency area mirrors the co-existence of both sectors in the broader system of economic activity, where both the public sector and commercial activity by private property owners share responsibility.

In the case of Libra, there would be a single issuer only, the Libra Association, serving as the system's "an independent, central bank. Devised as not-for-profit membership organization headquartered in Geneva", its membership "will consist of geographically distributed and diverse businesses, nonprofit and multilateral organizations, and academic institutions".<sup>8</sup> Its main decision making forum is a council. Council membership requires an investment of USD 10 mn. in "Libra investment tokens" that fund the project and offer a share in the returns from reserve assets backing Libras in circulation. Major corporations from payments, digital platforms, telecommunications and venture capital industries have already subscribed. Extension of membership towards 100 members is envisaged.

While the White Paper suggests that the Libra system is "decentralized" because the association has many members beyond Facebook, and the system subcontracts distribution of funds on the retail level, at best this kind of decentralization is at par with those of existing central bank arrangements e.g. in the US (with its Federal Reserve Board and regional Fed members) and the Euro area (with its "Eurosystem" consisting of the ECB and National Central Banks of member states). In all three cases, decision-making is centralized in a committee structure involving system members.

But in contrast to the current monetary system, Libra is not based on a decentralization of issuers, and does not offer input legitimacy channels for the general public with regard to the system's governance. Unless some public regulation and supervision is established over the Association, its currency issuing activity would be mandated and held accountable by its profit-oriented members. Their reputation and motives may or may not be perceived as in line with users' expectations potential of legitimate governance. Most observers have expressed severe doubts about that.9

<sup>8</sup> Libra 2019a.

<sup>&</sup>lt;sup>9</sup> Morozov 2019, O'Dwyer 2019, Posner 2019

As a first indication, note that the Libra project's whitepaper has been published with a call for feedback from the engineering community on technical aspects of its proposed infrastructure. <sup>10</sup> Meanwhile, the main target group of users mentioned in the white paper are the group of "unbanked" people suffering from financial exclusion. The pictures used to illustrate the target group show young urban fashionistas from Africa. None of the latter two groups are called upon to give feedback on the Libra proposal. This is in line with established practice in social media platform business models, where the user serves as the product.<sup>11</sup> But it is very far away from entering a relationship that serves to provide any meaningful form of input legitimacy.<sup>12</sup>

#### **Output legitimacy**

Through public mandates for central banks and regulatory frameworks for commercial banks, the community of money users in a currency area communicate their quality requirements on money. These requirements can be understood as the "output" dimension of legitimacy. In general, users want money to be generally accepted in their respective currency area, they want purchasing power to remain stable over a reasonable time period, they want protection from financial crises, they want money to contribute to macroeconomic activity, and they expect convenient practical useability of monetary objects.

#### a) General acceptance

From a user's perspective, the attractiveness of a currency rises with the number of other users. In this respect, money has properties similar to language, digital social networks, computer software and other infrastructural phenomena. A greater currency network means greater choice of available goods priced in the same currency and a greater number of

15 Jeffries 2019

potential transaction partners accepting the currency as means of payment. Because more users of a currency mean greater benefits for each individual user, and because the parallel use of several different currencies involves costs, there is a tendency for the dominance of a single currency in any currency area.

The fact that national tax systems impose tax duties on domestic economic actors in domestic currencies as well as the costs and organizational difficulties involved in collective switching to a foreign currency keep users anchored in domestic currencies and prevent the spread of the network logic across national borders towards the evolution towards a single world currency. Nevertheless, if the perceived quality of a national currency departs too much from available alternatives, users can become prepared to overcome switching costs and adopt a foreign currency in domestic transactions (this is the experience of countries having undergone "Dollarization", " Euroization"etc.).

Stressing a focus on currently unbanked groups of people and statements like "Our goal is for Libra to exist alongside existing currencies" in the Libra Whitepaper suggest a complementary currency approach.<sup>13</sup> But severe doubts about the viability of a strategy based on this niche exist<sup>14</sup>, and even if it worked, the project is unlikely to refrain from attempts to expand into more profitable areas. This means currency competition, at least for some currency areas where users perceive weaknesses in the domestic monetary system's legitimacy. Both issuer's push and users' pull effects can be the driving force behind such developments.

Enthusiasts have been hoping for a decade that crypto coins would one day develop into competitors to official currencies.<sup>15</sup> That never happened. Lacking a responsible issuer guaranteeing the value of coins and backing them with assets, Bitcoin and altcoins never took up as means of payment beyond niches in which official currency was inapplicable.

<sup>&</sup>lt;sup>10</sup> https://github.com/libra/libra

<sup>&</sup>lt;sup>11</sup> Posner 2019

<sup>&</sup>lt;sup>12</sup> FT 2019b

<sup>&</sup>lt;sup>13</sup> Libra 2019b.

<sup>&</sup>lt;sup>14</sup> After all, Libra is unlikely to address two key problems behind "financial exclusion" outside industrialized countries: lack of funds and access to technical infrastructure like smartphones. See FT 2019a and 2019b.

Instead, their wild swings in value made them attractive as objects of speculative trading by users.

But private digital currencies did exist and manage to develop into competitive currencies before Bitcoin. In China, social media platform Tencent introduced its own digital currency Q-coin in 2002. In the context of an underdeveloped electronic payment market with respect to cards and other instruments, it was very successful. Initially, Tencent sold O-coin at a fixed exchange rates against official currency to users in order to enable the purchase of services offered by Tencent in games and other applications on their platform. Q-coins can also be earned for activity. Soon, users started to transfer O-coin among each other, and merchants and platforms outside the Tencent platform started to accept it as means of payment. Speculators started trading them against official currency. After trade using Q-coins reached several billions renminbi (around a tenth of the size of cash payments in China at the time), Chinese authorities outlawed payment with Q-coin outside the issuer's platform in 2009. Recently, Q-coin development has been more subdued, but it is still in use.16

In contrast to crypto coins, the consortium behind Libra has considerable tools at their disposal to encourage adoption of Libra among users. They build on an existing platform with billions of users serving as potential transaction partners for each other and for businesses partnering with the platform. If it fits their business model, corporations running the platform could use accumulated revenue from other business areas to offer incentives to users for using Libra as means of payment. They could start to denominate prices for existing products and services on their platform in Libra, absorbing the costs of exchange rate fluctuations and currency conversion involved in paying suppliers and tax authorities in various national currencies, resulting in Libra becoming a unit of account for economic activity on its platform, the key attribute of money. They could offer discounts for prices of products and services

offered when payment is made in Libra. They could offer products and services exclusively available against payment in Libra. They could distribute rewards to platform users in Libra in return for particular on-platform behavior (e.g. viewing ads or providing useful customer data, creation of usergenerated content on entertainment platforms etc.), thereby creating funds for future on-platform spending by users in Libra. They could use their market power to persuade other businesses to join and accept Libra payments, thereby continuously enlarge the platform and enhance its attraction.

If Libra's issuer made full use of the instruments at its disposal, this could turn the project into a potential competitor to (at least some) official currencies that could rival the strength of national currency networks supported by user habit, tax authority and switching costs. If mandated to defend the integrity of their domestic currency network, authorities would have to resort to regulatory measures reducing the attractiveness of Libra compared to domestic currency (e.g. subjecting the exchange of domestic currency against Libra to administrative capital controls, taxation or other regulatory requirements; using competition law to scrutinize user incentives offered by the Libra platform etc.)

#### b) Stable value

In an instable world, stability is always of a relative nature. Official currencies issued by central banks subject to a mandate involving price stability are stable over time in relation to major domestic prices in the currency area concerned.

Libra is generally referred to as a "stable coin". "Stable coins" are a particular class of crypto coins that depart from the design model behind projects like Bitcoin and Ethereum by being issued by an entity that promises stability of the coin's value. <sup>17</sup> Most "stable coins" define stability in relation to an official currency, e.g. the US Dollar. That makes them similar to commercial bank deposits in official

<sup>&</sup>lt;sup>16</sup> ECB 2012, Halburda and Sarvary 2016, Technode 2019. Facebook itself experimented with a currency called "Facebook Credit" from 2009 to 2012. Facebook Credit could be purchased for a fixed value of US Dollars (but not reconvertible), and could be used to purchase virtual goods in Facebook applications. In 2012, the project was stopped, and outstanding "Facebook credits" reconverted into local currency (ECB 2012). To my knowledge, no information about the motives behind the move has become public.

<sup>&</sup>lt;sup>17</sup> Bloomberg 2019, Brave New Coin 2018

currency, the major difference being that their issuers do not have a banking license with the associated regulatory and supervisory framework, resulting in major questions around the quantity and quality of the assets backing their stability claim.

Libra's version of stability refers to a basket of major official currencies yet to be defined. By implication, when issuing Libra in exchange for funds in official currency to users, Libra would invest funds received in liquid and safe assets that reflect the currency composition of the predefined basket.

The best known example for such a construction is the IMF's Special Drawing Rights which refers to a basket of member state currencies. Also, some national currencies have envisaged currency pegs in relation to a basket of foreign currency over time.

Whereas all prices of incomes, goods and services are denominated in national currencies and stable over time in stable currency areas, prices in Libra would be instable over time in line with fluctuations among currencies within the basket (unless some platform participants are prepared to absorb the resulting risks and costs and offer products and services denominated in stable Libra prices, making Libra their unit of account and pushing towards the establishment of a full currency network).

From the perspective of a user receiving current income, comparing prices, saving and making purchases in stable domestic currency, this would make switching to Libra unattractive in terms of stability.

For users having no access to digital forms of domestic currency, for users in instable currency areas, and for users faced with exchange rate risk in remittance transactions<sup>18</sup>, attractiveness of Libra could be greater, depending on terms and costs of access (all of which are yet to be defined or disclosed).

#### c) Financial stability

As users of financial services and products, as borrowers, as recipients of income in an economy dependent on a functioning circuit of money and credit, all economic subjects depend directly or indirectly on financial stability.

The Libra Whitepaper offers a number of hints that suggest lack of awareness of the financial stability risks involved in the construction of its would-be currency: "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. 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"<sup>19</sup>.

This sounds like a statement equating regular monetary policy by central banks with unilaterally forcing a money supply potentially in excess of money demand into the economy, thereby introducing inflation and depreciating the currency. Such an account may resonate with a popular narrative widespread among supporters of crypto coins, gold-backed currencies and other fantasies around money, but it is out of touch with institutional realities. A central bank willing to create money requires a counterparty willing and able to provide an asset in exchange for new money on the terms set by the central bank. There is no way to supply money that is not demanded, and no way to supply money without any backing received in exchange. But the mere fact that all money creation must cater to money demand and needs asset backing does not in itself guarantee money's stable purchasing power with respect to domestic prices. That is why central banks must undertake monetary policy to fulfill their mandate, which refers to stable prices in the economy.

<sup>&</sup>lt;sup>18</sup> FSB 2019.

<sup>&</sup>lt;sup>19</sup> Libra 2019.

If domestic prices are heavily influenced by developments abroad, it may make sense for the central bank concerned to have an exchange rate peg as its monetary policy strategy. In order to make it work, such a peg needs to be defended in view of potentially fluctuating market assessments of both assets and liabilities of the currency issuer. Some pegs are tested by sudden stops, where after a period of massive inflows of funds, a movement of massive outflows ensues, triggered by whatever influences capital owners behavior. The issuer may have assets backing its liabilities, but face challenges in liquidating its assets under fire sale conditions.<sup>20</sup>

If Libra were to become a success, its stock of reserves would be massive, creating systemic problems from the outset by intensifying the worldwide shortage in safe assets and becoming a systemic investor in many asset classes (e.g. government bills and bonds)<sup>21</sup>, and posing systemic risks by potentially destabilizing markets in the assets backing Libra whenever faced with significant outflows of funds. Absent deposit insurance for Libra holdings, Libra users could be very vulnerable to financial instability.

#### d) Macro effects

Money creation results from a swap of liabilities between an issuer and a counterparty. Banknotes issued by the central bank carry no interest, while deposits held by commercial banks at the central bank sometimes do (note that they can also be negative at times). When central banks acquire securities against issuing either banknotes or deposits, returns on these securities usually surpass interest paid to holders of banknotes and central bank deposits. The spread of income earned on central bank assets over income paid on their liabilities is called "monetary income". In general, monetary income is used to cover central banks expenses, the rest accruing to its shareholders (in most countries this is the public sector).

Based on a similar mechanism, "monetary income" created by issuing Libra accrues to shareholders in

its private "central bank", corporate members of the Libra association.

Concerning the macro effects of introducing a private world currency, potential effects on capital flows and relocation of (the occurrence or recording) of economic activity, or even the generation of additional economic activity, are possible but very hard to foresee at the current stage, given current lack of details and uncertainty about the ultimate size of the Libra network.

#### e) Practical useability aspects

A further dimension influencing user choice for a currency could be called "useability". This covers a number of features, some of which have a stronger economic dimension, some of which have a more practical dimension.

The use of digital monetary instruments requires an infrastructure on which to record their existence, ownership and transfer. Such infrastructures involve particular access requirements for users and can be equipped with a number of services related to storing and transfering users' funds. Digitalization of the economy may result in a shift of user needs and requirements with respect to access and associated services. Libra would require decision making on which kind of access criteria and services would be available to users.

We know that Libra holdings would not earn interest, and that payments in Libra are announced to have low fees and be quick, but beyond that there is no information yet on issues like fee levels and structure, nor of any upper or lower limits with regard to the amount of funds available to individual users, and the purposes on which Libra can be used for. Also, the range of account services is still unknown. The precise terms and methods of privacy protection are to be determined yet. It looks like most of these questions will be determined not on the issuing level, but on the level of wallets, which are required to hold and transfer Libra funds. Facebook is the first known provider of wallets for Libra,

<sup>&</sup>lt;sup>20</sup> Eichengreen 2019.

 $<sup>^{21}</sup>$  FAZ 2019.

Calibra. Calibra seems to be intended by its creators to serve as the link in the Libra value chain that submits itself to regulation with regard to anti money laundering and data protection requirements. <sup>22</sup> And it seems to serve as the main element on which Facebook intends to develop business ideas, e.g. by integrating it with various applications on its platform for communication, customer identification, micropayments, e-commerce etc. <sup>23</sup>

Inferring from Facebooks track record, expectations for Calibra useability are high in some aspects (e.g. user-friendly interface) and low in others (e.g. data protection).<sup>24</sup>

In setting the terms and functionalities offered, wallet providers will be influenced by their goals depending on their business models, by the terms offered by competitors, and by regulatory requirements. All of these aspects are heavily in flux.

#### Conclusions

At the current stage, Libra is just one among thousands of white papers proposing an electronic currency with a particular construction. Publishing a white paper, reaching out in the tech community to gather feedback, calling its register a "blockchain" although it does not record transactions in blocks, <sup>25</sup> presenting a business idea as a contribution to freedom of users: all these features are a strong nod towards the culture that evolved around Bitcoin and other crypto projects in the recent decade. Maybe Libra will add to the existing crypto white paper graveyard, maybe it will become another member of the "stable coin" club that serves as a kind of shadow banking system to the speculative crypto trading universe and similar niches.

But in contrast to most crypto projects, there is a powerful global corporate structure behind Libra, and its construction is in many aspects as close as possible to a traditional currency. That makes it unique among crypto projects in having a potential to grow beyond the crypto world and become something of relevance to the global monetary and financial system, echoing medieval private currency networks.<sup>26</sup>

Based on the limited amount of information available on Libra's design, it looks like its governance mechanisms fail to offer a meaningful channel for input legitimacy, and it faces severe questions over its ability to deliver output legitimacy. Nevertheless, market power behind the platforms supporting the project may be used to promote its spread, both complementing or rivaling existing networks, and triggering the emergence of rival corporate projects.

Those responsible for the monetary system's integrity now face the challenge to cooperate globally (and with authorities responsible for protecting competition<sup>27</sup>, privacy and other key issues) in a way that matches the cooperative ability of the corporate alliance behind the Libra project, in order to avoid the emergence of a shadow currency sector which fails to contribute to the public good – which would be a particular shame given that the latter goal is so strongly emphasized in the Libra proposal.

<sup>&</sup>lt;sup>22</sup> "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." (Libra 2019).

<sup>&</sup>lt;sup>23</sup> Halburda/Sarvary 2016, Music Business Worldwide 2018, O'Dwyer 2019, Wolf 2019.

<sup>&</sup>lt;sup>24</sup> Morozov 2019, Posner 2019, Wolf 2019.

<sup>&</sup>lt;sup>25</sup> Lopp 2019, O'Dwyer 2019

<sup>&</sup>lt;sup>26</sup> Jeffries 2019, Posner 2019.

<sup>&</sup>lt;sup>27</sup> Tirole 2018.

#### References

Bloomberg, 2019, "Things got weird for stablecoin Tether" https://www.bloomberg.com/opinion/articles/2019-04-26/things-got-weird-for-stablecoin-tether

Brave New Coin, 2018, "The stablecoin market is booming", https://bravenewcoin.com/insights/the-stablecoinmarket-is-booming

ECB – European Central Bank, 2012, "Virtual currency schemes", https://www.ecb.europa.eu/pub/pdf/other/ virtualcurrencyschemes201210en.pdf

Eichengreen, Barry, 2019, "Facebook's venture into cryptocurrency is a terrible idea", https://www.washingtonpost.com/opinions/2019/06/24/facebooks-venture-into-cryptocurrency-is-terrible-idea/?noredirect=on&utm\_term=.eb044f7f8197

FAZ – Frankfurter Allgemeine Zeitung, 2019, "Digitalwährung Libra: Facebook wird Großgläubiger der Staaten", https://www.faz.net/aktuell/finanzen/digital-bezahlen/bundesbank-vorstand-wuermeling-facebook-wird-grossglaeubiger-der-staaten-16249421.html

FSB – Financial Stability Board, 2019, "Remittance service providers' access to banking services", https://www.fsb.org/2019/05/remittance-service-providers-access-to-banking-services-monitoring-of-the-fsbs-recommendations/

FT - Financial Times, 2019a, "Libra will not help the unbanked", https:// ftalphaville.ft.com/2019/06/19/1560920406000/Facebook-s-Libra-will-not-help-the-unbanked/

FT - Financial Times, 2019b, "Why cryptocurrencies cannot fix financial exclusion", https://www.ft.com/content/34ba5a70-9732-11e9-8cfb-30c211dcd229

FT - Financial Times, 2019 c, "FCA regulator warns cryptocurrency groups to 'get it right'", https://www.ft.com/content/bf649c22-9cdb-11e9-b8ce-8b459ed04726

FT- Financial Times, 2019d, BIS: Central bank plans to create digital currencies receive backing, https://www.ft.com/content/428a0b20-99b0-11e9-9573-ee5cbb98ed36

Grygiel, Jennifer, 2019, "With cryptocurrency launch, Facebook sets its path toward becoming an independent nation", https://theconversation.com/with-cryptocurrency-launch-facebook-sets-its-path-toward-becoming-an-independent-nation-118987

Guardian, 2019, "Libra: US Congress asks Facebook to pause development", https://www.theguardian.com/technology/2019/jul/03/libra-us-congress-asks-facebook-pause-development-cryptocurrency

Halaburda, Hanna /Miklos Sarvary, 2016, "Beyond Bitcoin. The economics of digital currencies", Houndsmill Basingstoke/New York

Jeffries, Daniel, 2019, "Libra, a Cyberpunk Nightmare in the Midst of Crypto Spring", https://hackernoon.com/libra-a-cyberpunk-nightmare-in-the-midst-of-crypto-spring-5543b6f6e34b

Libra, 2019a, "Libra White Paper", https://libra.org/en-US/white-paper/

Libra, 2019b, "The Libra reserve", https://libra.org/en-US/about-currency-reserve/#the\_reserve

Lopp, Jameson, 2019, "Thoughts on Libra Blockchain", https://onezero.medium.com/thoughts-on-libra-blockchain-49b8f6c26372

Morozov, Evgeny, 2019, "Facebook's plan to break the global financial system", https://www.theguardian.com/ commentisfree/2019/jun/21/facebooks-plan-to-break-the-global-financial-system

Music Business Worldwide, 2018, "Tencent Music uses 'tipping' to rack up revenues. Why aren't Western music streaming platforms doing the same?" https://www.musicbusinessworldwide.com/tencent-music-uses-tipping-to-rack-up-revenues-why-arent-western-music-streaming-platforms-doing-the-same/

O'Dwyer, Rachel, 2019, "The Bank of Facebook", http://networkcultures.org/blog/2019/06/19/rachel-o-dwyer-the-bank-of-facebook/

Posner, Eric, 2019, "The Trouble Starts If Facebook's New Currency Succeeds", https://www.theatlantic.com/ ideas/archive/2019/06/dont-trust-libra-facebooks-new-cryptocurrency/592450/?utm\_source=feed

Scharpf, Fritz W., 2012, "Legitimacy intermediation in the multilevel European polity and its collapse in the euro crisis", Max Planck Institut für Gesellschaftsforschung Discussion Paper 12/6

Stiglitz, Joseph, 2019, "Why Facebook Libra Currency gets the thumbs down", https://www.theguardian.com/ business/2019/jul/02/why-facebook-libra-currency-gets-the-thumbs-down

Technode, 2019, "China tech talk: Libra lessons from WeChat and QQ", https://technode.com/2019/07/03/china -tech-talk-80-libra-lessons-from-wechat-and-qq/

Tirole, Jean, 2018, "Regulating the disrupters", Project Syndicate, January 9

Weber, Beat, 2018, "Democratizing Money? Debating Legitimacy in Monetary Reform Proposals", Cambridge

Wolf, Martin, 2019, "Facebook enters dangerous waters with Libra cryptocurrency", https://www.ft.com/content/07c05fba-b1c4-11e7-a398-73d59db9e399

	Responsible issuer?	How is value defined?	Mainly serves as
Official curren- cies	Central bank and com- mercial banks	In domestic prices, and exchange rate against other currencies	Money in domestic currency area
Bitcoin <sup>28</sup>	None	Exchange rate against official currencies	Speculative asset
Libra <sup>29</sup>	Libra Association	Basket of official curren- cies	Means of payment?
Special Drawing Rights (SDR) <sup>30</sup>	IMF members	Basket of USD, EUR, RMB, YEN, GBP	Reserve asset for IMF Members

#### Table: Overview of currency projects' main characteristics

<sup>28</sup> See Weber 2018, 101-135

 $^{\rm 29}$  Libra 2019 a and b.

<sup>30</sup> https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR

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