

CONSTRUCTIVE CRITICISM OF THE PRELIMINARY VERSION OF LIBRA AS A FRACTIONAL RESERVE DEVICE

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I

PRESENTATION OF THE NEW SCENARIO: RISKS AND OPPORTUNITIES

Hayek in *Denationalisation of money* said:

- “— Governments have at all times had a strong interest in persuading the public that the right to issue money belongs exclusively to them.
- [Government money] has the defects of all monopolies: one must use their product even if it is unsatisfactory, and, above all, it prevents the discovery of better methods of satisfying a need for which a monopolist has no incentive.
- If we are to contemplate abolishing the exclusive use within each national territory of a single national currency issued by the government, and to admit on equal footing the currencies issued by other governments, the question at once arises whether it would not be equally desirable to do away altogether with the monopoly of government supplying money and to allow private enterprise to supply the public with other media of exchange it may prefer” (Hayek 1978: 26-28)

Today, the new payment systems that seem available (Bitcoin and other cryptocurrencies, Facebook’s digital currency project “Libra”, etc.) has made people to realize that currencies could be decentralized (and de-monopolized), secret and without regulation of the

government (the vision of Hayek in *Denationalization of Money*), challenging the prevailing notions over what form money can take, who or what can issue it, and how payments can be settled and recorded (Brainard 2019).

Mark Zuckerberg (CEO of Facebook, Inc.) formally announced on June 18, 2019, the launchment of Libra in the first half of 2020 (Constine 2019), releasing its White Paper (Libra Association 2019a, 2019b). As it is still in a preparatory or preliminary phase, facing new emerging regulatory restrictions around the world (Brummer 2019; Brainard 2019; Nelson 2020), we cannot fully know how exactly it will be implemented, and correspondingly what its true nature will be (a private issuer of money or a mere payment platform?), but we can extract some clues guided by economic theory.

In order to go a step further at the micro level in the marginal-subjectivist theoretic approach, we have presented a very simple model for depositary activity which allows us to follow one by one, step by step, the concrete human interactions underlying the so-called business cycle (Bueso 2017). And we have found at the core of those unsustainable processes the actions of specific people (or organizations) erasing or blurring specific property boundaries on other people's economic goods (thereby control over property is severed from ownership [Shaffer 2009: 167-68, in chapter 6 "Control as Ownership"], for his own, or a third party, benefit), while covertly mutualizing or externalizing the risk or cost entailed. Then such processes appear at the aggregate or macro level as an increase in the money supply, leading to a lower interest rate and unsustainable overinvestment [Garrison 2001]).

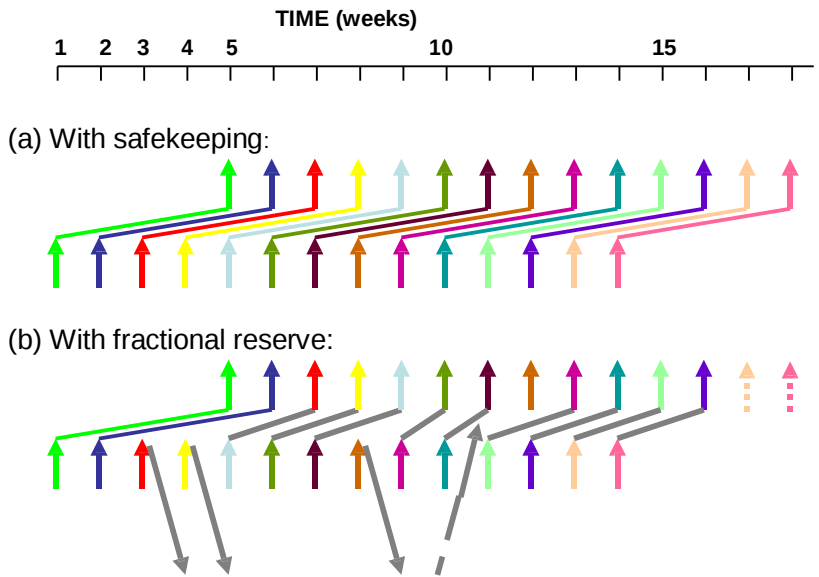
On such a basis, in order to know the risks and opportunities open before us, we'll study (following that model) the effects derived from depositaries practicing fractional reserve, we'll consider to what extent Libra will represent such a phenomenon, with its particularities, and we'll propose also a line for overcoming the externalization of costs entailed (that is, in order to improve the preliminary project).

II

STUDY OF THE EFFECTS PRODUCED
BY FRACTIONAL RESERVE

1. Introduction: a simple model of depositary activity (Figure 1)

Figure 1: DIAGRAM REPRESENTING THE TWO ALTERNATIVE PATTERNS OF ACTION FOLLOWED BY THE GOLDSMITH IN THAT MODEL (BUESO 2017: 293)



In order to study the effects of fractional reserve, a very simple model of depositary activity can be used (Bueso 2017). It consists of a goldsmith working in a (more or less isolated) village who receives every week a customer with a kilogram of metal in his workshop, and after one month (four weeks) he returns the metal transformed according to the order, charging the stipulated emoluments (Fig. 1a).

At one point, our goldsmith decides to sell two of the four kilograms of metal (deposited in his workshop) and, given the fungibility

(interchangeability) of metal from different sources, he proceeds to use thereafter, not the metal that each depositor delivered to him, but that of the person who comes two weeks later (that is, seen in aggregate, displaces the use of metal in two places within the chain of orders). In parallel he modifies the forging process, reducing the number of stages, so that the quality of the crafted jewel does not suffer too much.

Everything seems to be going well ("better" even than before, because a *boom* develops around the new capacity of exchange emerged for the goldsmith). He even risks selling another kilogram more, but given the uneasiness with which this fact forces him to work, he soon recovers it in order to leave the metal deficit in only two kilograms (Fig. 1b).

At a certain point in time, a young man intends to make his way also as a goldsmith in a neighboring town, fact which causes the entrance of clients in the old workshop to suffer (and then our goldsmith has a lot of troubles to be able to deliver the work in the agreed term).

Trying to recover the two kilograms of metal (returning to the previous work pattern) is hard, so he comes up with an alternative idea: he makes his friend, the mayor of the neighboring town, to demand guarantees and documentation to the new goldsmith. Faced with such additional difficulties, the young competitor leaves the field.¹

A hail storm arrives tearing apart the main crop in the area, causing depositors to stop entering. Also, two of the current depositors ask the goldsmith to return their metal, paying the agreed compensation. But the goldsmith's excuses cause a rumour holding that something is happening with the goldsmith. Such a rumour causes the scheme to collapse without remedy, tearing apart other activities connected. Unemployment in the town grows to levels never seen before. Two of the last depositors will never recover their metal (Figure 1b).

¹ Without such a (disguised) coercive intervention, free market forces would be pressuring to recover the traditional pattern with custody (100% reserve in kind). Then, such a (new) coercive intervention is helping to enlarge the bubble and burst it latter with worse consequences.

2. Effects within the depositary workshop (or activity)

- a) *The boundaries of what belongs to each person become blurred or misaligned, the final loss (implicit cost) being redistributed among all depositors, present and future*

By practicing fractional reserve, the “goldsmith” is disposing of each depositor’s property, without his knowledge. He is blurring the boundaries or signals of what belongs to each person, a circumstance that is at the base of the characteristic evolutionary order developed by human kind (Shaffer 2009: “*boundaries of order*”). Every depositor become thus damaged, since the risk of seeing “his” metal disappeared increases very significantly (there is, in fact, an error or defect in the representation of the true costs or risks associated with the contracted service, ground for voiding or annulling it [Huerta de Soto 1998: 156 t.1; Bueso 2017: 295]).

Although there are *two* (concrete) depositors whose metal has been displaced (disposed of), the realization of the risk (the probability of seeing it definitely lost) will be, on the one hand, delayed in time. And on the other hand, it will probably be distributed randomly among all current depositors in proportion to their number: from two to *four*. Such risk redistribution occurs both at the beginning, and into the successive future periods with the entry of new depositors (by means of a succession of redistributive zero-sum games).

- b) *The depositary’s purchasing power gets artificially increased*

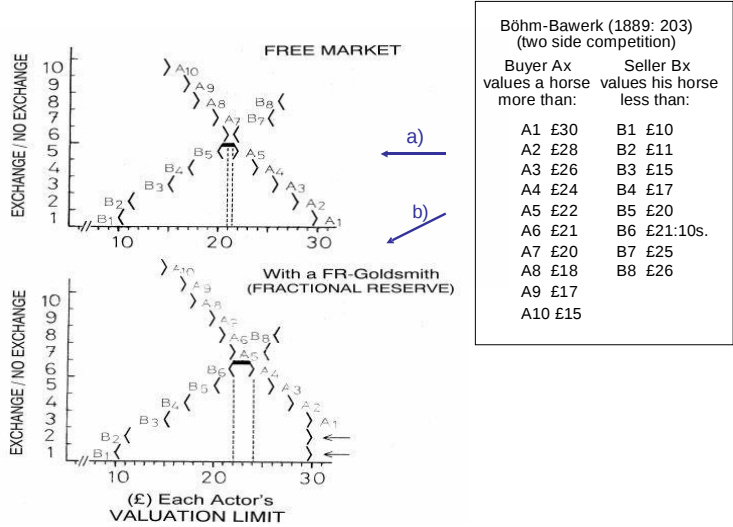
In addition, the new “practice” provides the goldsmith with an excess of exchange capacity (of which he rightfully lacks, unless understood as an extraordinary privilege), and such a capacity exerts an effect on the process of market price formation. Then, such effect becomes distributed (this time not among the community of depositors, but) among the entire society or market (as a zero-sum game, in which what some people gains comes to be equal to what other people lose, because increases in the money supply constitute a zero-sum game of functional nature [Menger 1909: 239; Mises 1912: 379; Bueso 2015: 160-161]). That is, the costs become socialized in a

parallel way to how the (in fact ‘coercive’, extra-market or extra-ordinary) benefits become privatized,⁹ especially in the person of the “goldsmith” (Shaffer 2009: 91-94; Hülsmann 2003: 418-419).

The goldsmith’s new practice works (at the margin) as if there were more money or metal eager to be exchanged (that is, it works in the opposite direction to that of the wish of its true owner, who has decided to withdraw such metal from circulation as a plate or sculpture). Those facts impact the market price formation process, distorting the main signals that guide agents (market prices), therefore distorting also economic calculation and intertemporal allocation of goods.

In Figure 2, with a novel graphical device for representing the market price formation process, we present the effect of the goldsmith’s intervention in a market by the demand side (that is, we are assuming that such a metal is exerting the function of money in that society).

Figure 2: EFFECT OF FRACTIONAL RESERVE ON THE PROCESS OF MARKET PRICE FORMATION



Following the classical example of the market for horses as exposed by Böhm-Bawerk (Bueso 2017: 298), we graphically

represent the last phase prior to the effective exchanges, *resulting* from the interaction process. The Table represents each actor's valuation limit (*maximum* for buyers, *minimum* for sellers, represented in both diagrams), below or above of which he would be willing to exchange. The graphical representations show:

- a) Under free market conditions, 5 horses would become exchanged (B1-B5 and A1-A5 will be included) at a market price in the range between £ 21 and £ 21:20s.
- b) When the "goldsmith" offers metallic money for two horses (the two arrows), 6 horses would become exchanged instead (B1-B6 and A1-A4 + 2 Goldsmith will be now included) at a more expensive price now, in the interval between £ 22-24 (higher price to be paid by all the six effective buyers). In addition, A5 (wanna-be buyer) will become excluded (displaced from his previous position as marginal buyer, he won't get any horse).

3. Effects outside the depositary workshop (or activity)

3.1. In the first instance: a generalized price increase

As a result of the new pattern (the goldsmith practicing fractional reserve), we see (Fig. 2b) that the market price for horses rises, all buyers paying it. Remarkably, in a differential way, the market price doesn't descend in any other market in a compensating way. That is, the new pattern produces a generalized price increase induced by the money side (remember that, due to its function, variations in the money supply constitute a zero-sum game redistributive).²

Also, some specific wanna-be buyers of horses (from those who, under free market conditions, get to exchange) become excluded.

² The increases of money supply can have two different natures: (a) what we could call 'natural' increases (e.g. new gold discoveries) would be frustrating some expectations but with no disruption of property boundaries; on the contrary, (b) 'artificial' increases (fractional reserve, or fiat money introduced) would be damaging all people since it would be disrupting property boundaries (Shaffer 2009: 167-68), for the benefit of those privileged few implementing it, along with other beneficiaries selected by them.

That is, with the exception of the “goldsmith”, every other potential horse buyer gets harmed (via price or via exclusion). More than that, all people become damaged except the goldsmith (and those concrete people closest to him).

3.2. In further instances:

a) *Periodic crises*

As we have seen in our model (Fig. 1b), the stability of fractional reserve has a tremendous dependence on the rate of entry of new depositors (it needs to be steady, or ever growing, in order to be sustainable), as opposed to the traditional pattern with safekeeping (Fig. 1a), which adapts itself to different circumstances and rates of entry. Then natural oscillations in the rate of entry of new depositors will reveal the fragility of such a scheme.

Also, the extraordinary gains will attract young people to such activity (goldsmith and assimilated), reducing by need the rate of entry of new depositors in the consolidated workshops, undermining the whole scheme (rather: revealing its unsustainable nature).

b) *When the scheme collapses, it appears a call for new coercive measures of two kinds: (1) Integrate more goods from third parties into the scheme; (2) Close the entrance to new depositaries (coercive monopoly).*

When the scheme collapses, it appears two urgencies (with “the goldsmith”, and also those who have been involved in the scheme, “pressing” to use coercive means in order to):

- To close or restrict competition in depositary activity, since it would open new alternatives or options to their potential customers (keep in mind that the possibility of achieving the same results by non-coercive means is very remote, since the sector, with high benefits now, has become especially attractive).
- To integrate more goods into the scheme by hook or by crook (from new depositors or any other people, in order to somehow satisfy the previous unfulfilled deposits or contracts).

4. Accounting

In the traditional goldsmiths trade, there are two different tasks (each one to be carried out separately): (a) a book or register with each depositor's name, quantity and the respective dates in which it was entrusted, and returned (which it is a relatively simple matter), on the one hand, and on the other hand, (b) an accounting book of the goldsmith's own business or activity. A traditional goldsmith would never have inscribed the metal entrusted to him in his own balance book, as belonging to him or his workshop.

On the contrary, our 'unscrupulous' goldsmith, however, as a way for concealing his very unorthodox behavior, would incorporate the goods deposited by customers in his own balance book, as *an additional asset by the one hand*, and as a credit that he must return in the future,³ by the other. By means of such an inscription the "goldsmith" gets its balance expanded. Note also that, depending on the percentage "the goldsmith" decides at any time to trespass to his own capacity of disposition (that is, his property: those 2/4 or 3/4 parts in our example), the estimated benefit of such activity not only does it increase significantly, but it will oscillate like an accordion.

III

TO WHAT EXTEND LIBRA WILL REPRESENT FRACTIONAL RESERVE

1. **Implicit peculiarities due to Facebook's network: opportunities and risks**

Facebook currently presents a communication network providing information exchange facilities for 2,500 million people who use it regularly. As long as this function would become extended to payments, with most transactions in which both parties are users of Libra network, so a substantial part of the money would not have to be materially transferred. Then, Libra organization, acting as a

³ But "the case is not one of a credit transaction" (Mises 1912: 300-302): no one has exchanged a present good or present service against a future good or future service.

“centralized” ledger, will only need to make an accounting note or inscription on the personal account of one and the other person or companies involved. Therefore, it would be setting aside, despite multiple transactions, a very large volume of money “freed” from users transactions, remaining “stored” (in fact *transferred into the hands of Libra organization*).

That is, the organization of Libra would become in fact a “personal” intermediary in payments *instead of material money* (which we remember its definition: “material” intermediary of generalized use in exchanges). Then in itself, such organization, Facebook-Libra-Association, would be replacing in a substantial part the function today money does (the intermediation function evolving from a ‘material reality’, such as that of commodity money, to a ‘personal reality’ centred on a single organization). Multiple synergies will appear, with multiple benefits also for various agents (note that such a fact would be mainly in accordance with institutional evolution as exposed by Menger [1909]: 239-240).

2. Primary duplication of the money supply related to the current preliminary plan

The proposed preliminary plan for Libra goes far beyond a mere payment intermediation.⁴ That plan involves a DUPLICATION of the means of payment, since for each unit of fiat money that users integrate into the scheme, Libra Association would be creating: (a) on the one hand, a new unit of Libra (digital currency, to be employed by the user in the purchase of goods and services) and (b) on the other hand, *at the same time*, Libra Association will be *buying* with those units of fiat money *in its own name* certificates of deposit or public debt from governments or companies considered solid (Libra Association 2019b).

⁴ Note that such a possibility is still open and available, with neither any “additional” reserve needed beyond the safekeeping of the units of fiat money deposited by usurers nor any new or “additional” digital currency being issued duplicated. And with a lot of fiat money being “saved” from circulation due to network gains (see below).

Libra will be working as an issuance of additional private money (digital currency) in fact, equivalent to what Mises (1912) characterized as “perfect monetary substitutes” or fiduciary media, since Libra will be fulfilling exactly the same function as money itself (via innovation: on-line payment intermediation among a network of users *coupled with a digital token issued*, working as a private money *different from certificates of deposit*), with most of the original units of fiat-money never being asked for redemption. And then, such fiat-money “stored” will be *employed at the same time, in a parallel way* (to that of the employment by the user of the new token-money issued, but) *under Libra Association’s own name*, for the purchase of stable and liquid assets. Libra organization will be *expanding* in such a way *Libra Association’s own Balance Sheet* and increasing also the—general—money supply.⁵

With the appearance of Libra as a private token money, the current monopolistic “producers” of money ⁶ will see endanger a part of the benefits resulting from their privileged status. Their responses have not been long in coming (Blount [2019], Brainard [2019]), compared to previous similar attempts (Dowd 2017: 7-37).

3. Secondary multiplication when coupled with FR banking

If, for the sake of argument, the (so-called) reserve were to be deposited in full in a banking system that effectively complied

⁵ It will be working as an additional exchange capacity (additional purchasing power) to that remaining in the hands of the user. Note that a true depositary receipt (*if Libra units had been issued as a certificate of deposit* and not as an additional currency), after a purchase through such digital net has been made, would mean that *ownership of such a depositary receipt*, of such fiat money units in fact, would have been *transferred* to the seller (with no duplication or doubling of any purchasing power).

Böhm-Bawerk (1881: 134-137) was the first author who pointed out such duplicating activity of the underlying elements in relation to commodity money, while Mises (1912: 298-300) explained it carefully. Compared to the ‘multiplication’ effect produced by commercial banks working under the privilege of fractional reserve, such activity of ‘doubling’ the units of fiat money (which become integrated into the Libra scheme) could be seen even as moderate.

⁶ Both in their type of fiat-money and in their type of fractional-reserve. That is: (a) commercial banks, granted by governments with the privilege of practicing fractional reserve, issuing *representative money* or fiduciary media; and (b) the government itself as the exclusive issuer of *fiat money* (with legal tender laws for nationals).

with the custody obligation (100% reserve in kind), the appearance of Libra would only entail such duplication of the monetary base (insofar as fiat-money inflows were higher than outflows, then accumulating itself into the scheme). But as a matter of fact, it will meet a banking system working under fractional reserve (as a privilege).

As far as the primary duplication due to Libra meets the multiplication effect due to the current fractional reserve (FR) banking, both multiplication effects would be interacting with each other: Libra's reserve "deposited" in FR banks will allow FR banks to multiply its means of payment (another kind of *representative tokens*); then, if those FR bank new means of payment are "deposited" in its turn in Libra Association they will allow Libra Association to duplicate its *utility tokens* in a new round. And so on...

But note also that as far as the money entering *ab initio* Libra scheme could be exiting from FR banks, also a "decreasing effect" (deflation) would be coupled. The result of both accumulated processes (inflationary and deflationary) is uncertain, with the aggregate money supply going up and down like an accordion.

Therefore, two kinds of 'externalization of cost' appear,⁷ one internal, another external. On the other hand, (a) Libra users (in their current configuration) will be taking a financial management risk which they do not perceive, as described by Rallo (2019).⁸ On the other hand, (b) the generality of people will be exposed to the consequent price inflation related to an increased quantity of money available.⁹

In fact, thanks to the fact that Facebook has presented a precise and clear plan of what they intend to do, such an scheme allows us

⁷ In such an account, the issuance of *private money*, challenging the monetary authorities, is not considered as a cost by itself.

⁸ Today, given the leadership and market share of Facebook, such a risk seems lower, but as the time goes by, with competition appearing and increasing, there will necessarily be bankruptcies of companies unable to face their obligations (by need, as explained with the goldsmith model above).

⁹ Depending on how the project would be implemented, such price inflation would be 'natural' or 'artificial'. Natural as far as property boundaries remain well defined (Shaffer 2009) with no externalization of costs. Artificial as far as fractional reserve (or other ways of blurring property boundaries) comes into play.

to realize more clearly the typical effects of fractional reserve, lifting the veil of such a controversial activity.¹⁰

IV

PROPOSAL TO OVERCOME THE TWO EXTERNALIZATIONS OF COSTS ENTAILED

As we have seen, at least two kinds (internal and external) of externalization of costs appear in Facebook's current project. Therefore, two kinds or phases of reform would also be necessary in order to overcome them, in my opinion.

1. **Internal: Proposal in order to realign the benefits and costs that in the current project get dissociated between shareholders and users**

According to the preliminary project, the internal costs will be subdivided between two different groups of people: by the one hand, the so-called "guardians" of the "reserve" (Facebook and associates, the sole shareholders), and by the other hand, the usuaries (present and future) themselves, who are taking also a financial management risk (Rallo 2019).

In order to solve such a line of problems,¹¹ our proposal goes in the direction of integrating, from the beginning, both those costs now unperceived (the financial risk that they are actually

¹⁰ The whole scheme has also a bias, or redistributive effect, from the poor to the governments of the developed countries, as perceived by Hügli (2019). Most of these problems would be, in my opinion, mainly solved (they would be adapted to the free market, aligning benefits and costs) by means of a reform along the lines indicated in the next section.

¹¹ Following Jesús Huerta de Soto (1998: chapter IX) and Dante Bayona (2019). In such a way, issuing *Libra-as-a-share* would avoid the serious criticisms of being "issuing another type of asset which is neither debt nor property-shares (pretending to be a deposit contract, in which the issuer doesn't feel obligated to tell to customers that they are assuming a managing risk)." And placed in front of the criticism of being expanding the money supply, one could contend that, yes indeed, it does, but *without any coercive monopoly at all*.

assuming) and benefits. That is, we propose to constitute Libra in fact into shares (shares of the pool or 'investment fund' in which "the reserve" will be materialized under the supervision—but then not the exclusive ownership—of the guardians), with users on equal foot with initial investors. In such a way, therefore, property would NOT be dissociated from their concrete owners, the users.¹²

The sources of risk borne by Libra holders, as currently projected, are not only those signalled by Rallo (2019): (1) a decrease in value of the assets backing Libra, be it a depreciation of the fiat currencies held or the credit risk of investments in liabilities, and (2) redenomination risk, in case Libra Association decides to change unilaterally the definition of what Libra is.¹³ There is also a third very important source of risk, related to the duplication of means of payment, with effects both *ad intra* and *ad extra* (origin of the boom and bust processes).

2. Proposal in order to diminish the (external) cost burden applied to third parties

Once internalized the risks and costs involved (with the exception of those related to that duplication of means of payment; see also note 12 in relation to the time factor) among all the people directly implied, as shareholders, it remains as a problem the nature of the economic good used as ultimate means of exchange (remember that fiat money enrich some people at the expense of many others

The modification reported in December 2019 related to the update of Libra's White Paper removing any reference relative to payment of dividends to early investors, i.e. Libra Association members, from profits generated by assets in the reserve (Brummer 2019) does not significantly change those problems.

¹² Note that most of those *extraordinary gains* available for shareholders would arise in a specific period of time: between the introduction and the consolidation of the new currency (period during which the *institutionalization of such intermediary function* occurs). That is, in a way parallel to that of the unorthodox goldsmith of our model between weeks 3 and 5, or 3 and 9 (see Fig. 1) or Bitcoin mining activities (Hasu et al 2019).

¹³ Note that most of those risks would be appearing also within a true depositary activity.

[Bueso 2015, 2017; Zhu 2019], and such circumstance would be aggravated by Libra). To such a problem a solution has been given by different authors (*always on the basis of 100 percent reserve*): private representative monies issued by different companies or institutions based on a basket of commodities (Hayek 1978) or assets (Libra Association 2019, Brainard 2019), a return to gold (Huerta de Soto 1998), or even Bitcoin (Castro 2019; and not explicitly Dowd 2017).¹⁴

In such a line, we think it could be a good idea *to integrate gold, silver and Bitcoin among the monies accepted* (and then when not employed *returned to their owner if requested*). Then, the competition process among different monies (or money candidates, including *Libra-as-a-share* working as a *token of utility*) would find a broader field with probably a better champion or champions coming out of it.

In such a two-way reform, in my opinion, Libra project would be then effectively implementing an institutional improvement: saving currency in the exchanges thanks to the magnificent Facebook's network (Menger 1909: 239-240), charging not too much additional costs to third parties, and with a strong (and probably lasting) competitive advantage for itself over many other possible competing alternatives. Provided that no coercive means were employed to close or restrain the free entry of new agents to imitate or compete with it, the service rendered by Libra Association would be then effectively providing financial inclusion, and giving people more tools to connect and communicate in the financial area also.

¹⁴ Or any other decentralized, limited in its supply, block-chain cryptocurrency, like that designed by pathfinder Satoshi Nakamoto, as long as such good could have reached the character of money in the market in fact.

Note that gold and Bitcoin both would be 'neutral' institutions (indifferent in front of different actors), while on the contrary Facebook's Libra would be a 'non neutral' private money (but in line with Hayek [1978] proposal), with different men holding different status in front of it. Thus, in order to be considered as not charging costs to third parties (such a point is highly controversial, see Huerta de Soto [1998: 738-739, n.36]), *it would be necessary a truly competitive environment with open access to each and every one person and firm* (emphasis needed).

V CONCLUDING REMARKS

The magnificent network of intercommunication between people that Facebook has been able to build can also serve as a basis for intermediating payments (in order to purchase and sale goods and services and transfer money), so that multiple synergies could be produced with increases in utility for different and various people.

The simplest way to do it, without any harm to anyone (that is, in a manner fully consistent with free market) would be through the *institution of deposit*, with the company having the obligation to always keep available to the depositor goods of the same quantity and quality as those received (Huerta de Soto 1998: 7), and charging a price or a margin for its intermediation service (in competition with other possible alternatives).

As long as both seller and buyer belong to the same network of exchanges, it is not necessary to physically move the money but simply to make annotations in their respective accounts. Therefore, a network that enjoys a leadership situation (with a large fraction of market participants among its customers, popular sense given to the word monopoly) would not only produce a significant “saving” in the use of physical money in transactions, but it would also cause huge amounts of it to remain “idle” in the hands of the company, with the consequent temptation to use it for its own benefit (case of the goldsmith in our model, or traditional banking evolving into fractional reserve banking).

Facebook, however, has projected a different way (different from the traditional institution of deposit), consisting of becoming a provider of tokens (artificial digital units) with a function of *private money* (or stable-coin [Libra Association 2019a,b; Huerta de Soto 1998: 157-58]) intended to circulate in parallel to fiat money and representative bank money (both currently in force through the corresponding national legislations). Linked to the prospect of becoming the general “personal” intermediary in most exchanges (linked to the market share that Facebook-Libra-Association could reach in a short time), expectations of profit for the company in the initial phase are huge, due to the process of “duplication” of the monetary base on which the project is built.

But note also that, with the emergence of competition, such “duplication” would become likewise “division” or halving (instead of multiplying “by two” the monetary mass in its favor, it would be divided “by two” against the company, with that fraction of the whole money supply related to Libra materially disappearing as if by magic); such a fact *would lead to a shock* out of necessity (at least, but not only, for the stakeholders —included users— of some of those companies exercising that new function in competition). Similarly to our goldsmith model, given the imminence of such a shock, a tumultuous “call” would appear seeking to close the entrance to competitors (along with other coercive measures) in order to avoid a systemic collapse (and if such measures are accessed, the scheme evolves materially into an effective —coercive— monopoly).

Even in the face of such challenges, with a number of reservations (mainly our first reform proposal along with maintaining a clear distinction between the material goods involved —and to whom do they belong— and the related promises or obligations subsequently agreed upon [Böhm-Bawerk 1881; Shaffer 2009]; but also related with prevention of the raising of new coercive barriers after shocks related with changes in the effective money supply), we think the ‘de-nationalization’ and ‘de-monopolization’ of money would be a step forward. It would be introducing a healthy competitive trend in order to reduce the implicit externalization of costs related to fiat money, leading probably to a full *return to free market, fulfilling (material) law: that is, the maintenance of 100% in deposits*, with the reappearance in the monetary base of some economic good or goods that the market would chose (metallic commodity or other). In such a way we have proposed in the text two reform measures to mitigate a substantial part of the externalization of costs linked to the preliminary project of Libra: (a) issuing Libra as a share of the “reserve”, and also (b) to integrate gold, silver and Bitcoin among the monies accepted. Then the daily market price of *Libra-as-a-share* would integrate the corresponding expectations of benefits and costs and risks of *that venture* including its monetary function (in so far as it remained in free competition with alternative ventures).

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