

Is Libra a Cryptocurrency of an Alternative Currency?

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Abstract. A cryptocurrency is a financial instrument which acts as a medium of exchange with recorded transactions, creation of new tokens of a cryptocurrency and verified transfer of ownership with the help of blockchain technology and rigid cryptography. This paper will delve into research on Libra, regulations imposed by different countries on cryptocurrencies with the help of quantitative research comparing Libra with other virtual currencies and a qualitative research particularly crisp-set Qualitative Comparative Analysis (csQCA) to analyse the difference in regulations among the countries included as a part of this study.

Keywords: Libra, Cryptocurrency, Blockchain.

1. Introduction

1.1. Background

Cryptocurrency is a virtual form of currency which acts as a medium of exchange through blockchain technology and carries out transactions which are decentralized and free of being affected by political anomalies. However, cryptocurrencies are not immune to cyberattacks. The ‘miners’ take part in the recording of transactions in a ledger of sorts. Miners work in nodes of a blockchain with the help of peer-to-peer strategy to avoid double spending. A cyberattack may temporarily disrupt the process and cause double spending or sometimes result in something much worse. Nevertheless, cryptocurrencies have found a keen audience across the globe. Bitcoin was the first prominent cryptocurrency which was launched after the 2008 financial crisis in a white paper published by a presumably pseudonymous developer Satoshi Nakamoto. As Bitcoin’s popularity began to rise, other cryptocurrencies emerged first ones being: Namecoin and Litecoin. Shortly after Bitcoin’s value rose to \$1000, it

declined sharply, and many holders of the currency suffered huge losses. Presently, Bitcoin continues to thrive.

Facebook introduced its own cryptocurrency named Libra. The White Paper for Libra however distinguishes the currency from its peers. Typically, as in the case of Bitcoin anyone can become a miner and facilitate the recording of transactions as well as record keeping. But the paper suggests that Libra will be primarily governed by the Libra Association, headquartered in Geneva, Switzerland and comprises of members and multinationals in association with Facebook.

On 15 October 2019, the Libra Association was formed with 21 founding members. Although, some eminent members of the association backed out. Additionally, Libra coins would be tied to a 'currency reserve basket' which would include several stable currencies from around the world. This would make Libra relatively more stable as compared to other cryptocurrencies. However, since Libra will be tied to fiat currencies, it will not be completely independent as in the case of other cryptocurrencies. It will also not leave any room for anonymity as it is governed by the Libra Association and Facebook has been subject to allegations of information breach. This paper contributes to understanding Libra, hurdles in its way and finally, whether it is a cryptocurrency at all.

1.2. Libra: The White Paper

The first white paper for Libra was made public in June 2019. The currency to be launched by Facebook aims at designing a platform where anyone can participate in an open, interoperable system prioritizing scalability, security, efficiency in storage and throughout, and future adaptability. A unit of the currency will be called "Libra". Libra will be stabilized by a basket of real assets by the creation of Libra Reserve unlike other cryptocurrencies. The reserve will constitute of short-term government securities like bonds and bank deposits building a foundation of trust in its value. The Libra reserve will be administrated by the Libra Association, a not-for-profit membership organization headquartered in Geneva, Switzerland. In addition to the Libra Association, Libra reserve and the Libra blockchain, Facebook created Calibra (now Novi), a regulated subsidiary to ensure separation between social and financial data and to provide additional financial services.

There are four main features of Libra which differentiate it from other cryptocurrencies.

a. The Libra Association

There are 21 founding members which were announced very early on in the proposal of Libra. These members include a variety of organisations and multinationals which can help provide Libra a leverage over a variety of markets. The Association will be joined by new members as Libra gains momentum.

b. StableCoin

Libra has been proposed to be tied to a basket of currencies. Libra will be fiat backed that is, it will be backed by bank deposits and short-term government securities worth stable fiat currencies. It will assert low volatility and stability to its own value.

c. Libra Blockchain

Libra is designed with a blockchain like any other cryptocurrency with a Byzantine Fault Tolerance approach. However, Libra does not allow anyone to node off it except for its founding members of the Libra Association. Therefore, it is not truly decentralised like other cryptocurrencies. Facebook has indicated that Libra plans to start out as permissioned blockchain and slowly transition to a permission less blockchain.

d. Association with Facebook

Facebook has suggested that it will not have any special privilege in the decision-making process over the other co-members of the Libra Association.

On being asked about if Libra will get a push from the COVID 19 crisis similar to the momentum that Bitcoin gained after the 2008 crisis, Mr. Girish Joshi over an interview stated:

No, the issue is related to any cryptocurrency's practical utility and general acceptability. Facebook is already facing controversies in terms of manipulating data privacy, indirectly interfering in politics of countries and with the proposal to list each libra coin locally, it's likely to face resistance. There may be initial euphoria, but it may not last long.

1.3. Need and Objective of the Study

This paper aims to discuss Facebook's proposal for launching Libra and the existing and proposed regulatory frameworks by governments of various nations. Analysis pertaining to the plausible regulatory challenges faced by Libra internationally. The paper concludes on a note focusing on whether Libra is a cryptocurrency or an alternative currency.

2. Challenges faced by Libra

a. It has been stated that users will not be offered any interest on tokens of Libra. Cryptocurrencies like Bitcoin and Ethereum offer interest on tokens deposited of the said currencies. Therefore, it is bound to make the potential user base for Libra think.

b. The instability of cryptocurrencies has given rise to a need of deposit insurance on them. While cryptocurrencies thefts have happened in the past, the volatility of the cryptocurrencies in general make it necessary. The New York based M.Y. Safra Bank is set to offer its traders deposit accounts backed by the Federal Deposit Insurance Corp., a first for crypto trading.

c. Although cryptocurrency is characterized by anonymity, the Cambridge Analytica scandal which exposed the egregious missteps by Facebook hasn't been forgotten by

the users. However, too much privacy would mean difficulty on part of regulators raising concerns regarding money laundering and tax avoidance.

d. Facebook indicates that Libra will comply with KYC requirements. In developing countries, Libra will have to not only target a potential user base of those who do not have access to banking but also be wary of the country specific regulations. In developed countries, those who do not have access to banking are often who do not meet the KYC requirements at all.

e. The Libra reserve will constitute deposits and government securities which include bonds. If Libra is successful, the Libra Association could turn out to be one of the largest money market funds. This could trigger an increase in demand for short-term bonds by the Libra Association which would in turn inflate the respective asset prices and depress bond yields specially if short term bond markets are getting thinner.

f. Even though Libra has been proposed to avoid any systematic risks and avoid interference with global money markets. If there is a substantial refinancing of banks via Libra currency in the future, there is a high possibility of monetary policy actions being jeopardized.

g. Backing Libra with currency basket will not make it immune to exchange rate fluctuations. As soon as capital gains happen, countries will impose taxes. While regulatory policies internationally differ, it is hardly possible to keep of track of cryptocurrency. Hence, taxation policies will need to be updated.

2. Research Method

2.1. Research Design

The research is based on secondary data from the literature reviewed and literature in a qualitative manner. It will make use of both qualitative and quantitative methods of research. The qualitative tool used is a crisp-set Qualitative Comparative Analysis (csQCA). Additionally, a personal interview via mail was conducted with Mr. Girish Joshi who has experience in business analytics and financial market, an expert in the field, to have a more defined perspective towards the research.

2.2. Limitations of the Study

a. The study focusses primarily on Libra and therefore does not compare other cryptocurrencies with alternative currency in the concluding debate.

b. Since Libra is yet to be launched and is still in the proposal and acceptance stage, a complete analysis of Libra with statistical information can only be done once it enters the market.

2.3. Qualitative Comparative Analysis

On the basis of the discussion about plausible regulations which are to be faced by Libra, a crisp-set qualitative comparative analysis (csQCA) can be drawn which will be used to assess the countries in a binary manner i.e., allotting 0 or 1 to the factors that have been recognised based on the research.

Table 1: Countries included in the comparative analysis

Asia and Oceania	Europe	Africa	North America
Hong Kong	Germany	South Africa	USA
Singapore	UK		
India	Russia		
UAE			
Australia			

The aim of this study was to compare the approach towards which the countries mentioned are inclined. The defined approach could be liberal, conservative or neutral. To accomplish this, we take into account 6 factors which could determine the approach each country has towards the launch of Libra.

Following are the factors which would influence our analysis:

- (1) Government non-interference (GNI): The extent to which the country tries to intervene in the circulation of cryptocurrencies affects its availability in the economy.
- (2) Fulfilment of traditional banking regulations (FBR): While many countries are starting to warm up to the idea of cryptocurrencies, the regulatory framework for traditional banking is already in place and is strongly adhered to.
- (3) Launch of Central Bank Digital Currency (CDBC): CDBC's are blockchain based payment instruments and are backed by the government. They could in effect be a substitute for cryptocurrencies once launched. Several countries are in a bid to research more about them. This factor would prove to be true if a country is in advanced stages of the development of CDBC.
- (4) Association of state (AOS): The association of government of a country entails relaxation of regulatory measures as there is an affiliation to regulatory authorities.
- (5) Legal acceptance (LA): The degree of support by the government determines whether the cryptocurrency will be banned or freely traded in the country's economy.
- (6) Already initiated policy change (AIPC): Policies addressing regulation of cryptocurrency need to be evolved while still taking into account the policies concerning traditional banking.

3. Data Analysis and Results

3.1. Shortening the factors

To accomplish the desired objective of the study, it was necessary to select the most relevant factors which would directly affect the launch of Libra.

(1) Fulfilment of traditional banking regulations (FBR): It is a sufficient condition to achieve the outcome.

(2) Legal Acceptance (LA): It is a necessary condition to achieve the outcome.

(3) Already initiated policy change (AIPC): It is a sufficient condition to achieve the outcome.

A successful outcome would be the launch of Libra. For the purpose of this exercise, a case = one country. The core element of the crisp-set QCA entails construction of a ‘truth table’, a data matrix which contains all values of the causal factors and outcomes. All conditions are strictly assessed in a binary fashion i.e. either absent/false (0) or present/true (1). All the factors have been allocated acronyms for easier computing.

Table 2: Truth table, crisp-set QCA

Country	Condition/Factors			Outcome
	FBR	LA	AIPC	
Hong Kong	1	1	0	1
Singapore	0	1	0	0
India	1	0	0	0
UAE	0	1	1	1
Australia	1	1	1	1
Germany	1	0	1	0
UK	1	0	0	0
Russia	0	0	1	0
South Africa	0	1	1	1
USA	1	1	0	1

The formula of the final configuration is achieved with the help of Boolean algebra, where ‘+’ means ‘or’ and ‘*’ means ‘and’. The function that is used in this study is:

$$FBR*LA+LA*AIPC= Outcome$$

Therefore, the outcome would be 1 if the necessary condition i.e. legal acceptance is present and one of the sufficient conditions is present i.e. either there is fulfilment of traditional banking regulations or a policy change has already been initiated.

Here, the outcome for the following countries is positive (implying that the launch of Libra is possible at this point in time):

- Hong Kong
- UAE
- Australia
- South Africa
- USA

3.2. Why are governments so stern?

(1) On a smaller scale, cryptocurrencies can co-exist within the monetary system but with a wide enough scale, cryptocurrencies could have a negative externality or a spill over effect. Cryptocurrencies could affect the central bank's response to a financial crisis. As a counter argument, this could apply to any other asset like gold. However, the difference between cryptocurrencies and other assets like gold is that cryptocurrency may be easier to procure for people of all economic backgrounds. This property provides an effective argument against cryptocurrencies potentially providing people with access to financial services specially in developing countries. The cryptocurrency could possibly limit the magnitude of the effect of monetary policies by a government in times of crisis as people would try to store their wealth in cryptocurrencies which are typically not centralised.

(2) Most regulators and authorities across the globe are very stringent when it comes to financial regulations and provisions to be followed so as to protect the interest of the its people, the economy and sovereignty of its currency. There are regulations based on money laundering, KYC, anti-theft among others being in best interest of the state. However, cryptocurrency giants such as, Bitcoin are permission less blockchain systems which are decentralised. Therefore, imposing strict regulations on them such as those on traditional banking is difficult.

(3) Cryptocurrencies are still under the scanner on whether they intend to replace fiat currencies. Some of the virtual currencies are stable coins, meaning they derive their value from another asset or a currency.

(4) As crypto enthusiasts are drawn to cryptocurrencies primarily due to their anonymous and decentralised nature, regulatory authorities find it difficult to track cryptocurrency tokens and impose taxes on them. However, an anonymous feature could provide people with a way to indulge in money laundering and other illegal activities.

On being asked about whether the reason behind governments restricting the use of cryptocurrencies lies in the fact that a cryptocurrency can potentially undermine the control exercised by the government, Mr. Girish Joshi over an interview stated:

Yes, and it will be definitely banned. If some crypto come forward to disclose the actual number of coins during ICOs and ready to accept government restrictions, it becomes no more cryptocurrency.

4. Discussion and Conclusion

4.1. Libra 2.0

A new Association white paper was published in April 2020 which proposed revised and updated plans of the Libra Association with respect to the launch of Libra. The new white paper answered some of the concerns which were raised.

(1) A key concern that was raised was that Libra coin might interfere with monetary sovereignty and impact monetary policies of various countries whose fiat currency is a part of the Libra reserve. Hence, it was proposed that Libra would no longer be a single type of coin tied to a basket of currencies. Instead, there would be a series of Libra coins each tied to a different currency. It will allow people and businesses in the regions whose local currencies have single currency stable coins on the Libra network to directly access a stable coin in their currency.

(2) Libra has incorporated feedback from various national regulators and proposes to integrate stronger standards for Anti-Money Laundering (AML), Combating the Financing of Terrorism (CFT), sanctions compliance and prevention of other illicit activities.

(3) In response to the criticism that Libra in its original white paper would threaten monetary policies and the sovereignty of currencies, the new white paper states that there will be a 1:1 backing of each coin by minting and burning the single currency stable coin in response to the market demand for that coin.

(4) Libra in its original white paper had proposed to transition from permissioned to permission less system in a few years post launch. However, several regulators in a number of jurisdictions including the Swiss Financial Market Supervisory Authority (FINMA) raised concerns about how Libra would continue to meet a high degree of protocol as it transitions to a permission less system.

4.2. Alternative currency versus Cryptocurrency

Alternative currency is a medium of exchange which is primarily a supplement to fiat currencies. Cryptocurrency on the other hand is characterized by being an internet based medium of exchange which uses cryptographic functions to conduct financial transactions between two willing parties.

The main objective behind this paper is to identify whether Libra is an alternative currency or a cryptocurrency. The key highlights of the features of Libra which coincide with that of alternative currencies and cryptocurrencies:

(1) Libra is backed by the Libra reserve which constitutes a basket of currencies worth of government securities and deposits. Therefore, Libra can never be an alternative to fiat currencies.

(2) While other cryptocurrencies attract users on the basis of their decentralisation and very few regulations imposed on them, Libra will be governed by the Libra

Association. It plans to be permissioned upon launch and therefore, differs from other cryptocurrencies.

(3) Although there are many clear distinctions between Libra and its peers such as Bitcoin, Libra still proposes to make use of blockchain technology like other cryptocurrencies.

On being asked if alternative currencies can make the economy resilient to shocks as they give people a chance to diversify their wealth and focus on local economic development, Mr. Girish Joshi in an interview stated:

No. To some extent they can be a small part of wealth portfolio as alternate investments like art etc, but they can't be option to local currencies as the countries may collapse without proper currency and fiscal management systems.

4.3. Conclusion

Despite facing criticism, Libra could prove to be useful as well. Many people across the globe face difficulty in gaining access to financial services and financial resources. In this day and age where internet has reached almost all parts of the world, digital currencies could also reach the nooks and corners where traditional banks and their services do not reach. Also, inflation is a phenomenon which affects sovereign fiat currency. But since Libra will not be tied to once currency alone, it could provide refuge against inflation. Another question that arises is that how would the launch of Libra affect Bitcoin. Some supporters of Libra say that since Libra is relatively more stable, the, it could attract consumers and investors alike. But the critics rage that Libra could make people become more interested in cryptocurrencies and make people wrap their head around Bitcoin as well. Accordingly, Libra could serve as a compliment to Bitcoin.

We can conclude that although prior to the publication of the original white paper, Libra was touted as a cryptocurrency, it does not confine itself to the definition of a cryptocurrency. As discussed in this paper, Libra also possesses some features alike that of alternative currency. Libra can therefore, be termed as an innovation in the world of cryptocurrency. Since Libra is yet to be launched and has still not received affirmative nods, the magnitude of success or failure that it might face is uncertain. The suggestions in the revised white paper giving birth to Libra 2.0 have answered some questions but centralised governments and banks are still figuring out how to accommodate Libra.

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