

LIBRA AS A DIGITAL CURRENCY AND ITS IMPACTS ON THE THAI ECONOMY

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Abstract: This qualitative research aims to study the acceptance of Libra and its impacts for financial industry. Ten financial experts were interviewed. The questions used to measure the expert opinion can be categorized into three groups: benefit, risk and impact. The index of item-objective congruence was then used for content validation and Cronbach's alpha was used for a reliability test. The findings show that experts are concerned about whether Libra can be used to purchase goods and services like other real currencies at a high level agreement, while they have less worry about personal information leaks and Libra being a channel for money laundering and financial crimes. Moreover, the experts are unsure whether Libra can increase access to financial transactions among people who have limitations cannot access the branch of the bank, leading to a decrease in inequality. Financial experts consider that financial institutions will lose income from money transfer and service fees; however, deposit and loan services might not be affected. Moreover, experts' opinions show that financial institutions need to offer quicker and user-friendly services via smartphone applications, should adjust interest rate and service fees in accordance with the Libra system, and make joint investments with Libra. The study suggests that public sectors can create legislation and amend laws to be able to deal with digital currency: hence the problems caused by Libra will be minimized. In addition, financial institutions need to develop a mobile banking system, and services, interest rates and service fees need to be taken into account.

Keywords: Libra, Facebook, Cryptocurrency, Digital Currency

1. INTRODUCTION

Cryptocurrency is a digital currency which uses cryptography to prevent copies and changes of completed financial transactions and uses a consensus mechanism to verify each transaction (Barrdear & Kumhof, 2016). Cryptocurrency is an innovation designed for use under distributed ledger technology or blockchain: hence central authorities such as central banks and commercial banks are not required for cryptocurrency exchanges (Meunjak et al., 2018). There are approximately 1,700 cryptocurrencies, and the growth of cryptocurrency is increasing significantly. The most well-known and highest value cryptocurrency is Bitcoin. This was the first cryptocurrency, and its market capitalization value in March 2018 was around 130 billion US dollars, accounting for 45 percent of cryptocurrency market capitalization. Ether is the second highest value cryptocurrency with a market capitalization value of 46 billion US dollars, amounting to 15 percent of cryptocurrency market capitalization (CoinMarketCap, 2018). Ether was developed for use on the Ethereum platform, an open source computing system allowing anyone to conduct financial transactions without central authorities. The smart contract is a feature used on the Ethereum platform to create automatic business contracts (Buterin, 2014). Litecoin is another cryptocurrency, with a market capitalization value of 7.6 billion US dollars (CoinMarketCap, 2018). Its blockchain is similar to the Bitcoin blockchain; however, its operation time for each transaction is quicker, around 2.5 minutes for each block, while Bitcoin blockchain uses ten minutes for each block (Narayanan et al., 2016). Libra is a

global cryptocurrency built on blockchain to promote financial inclusion proposed by the American social media company Facebook, Inc.

1.1 Objectives

1. To study the expert opinion of Libra.
2. To study the impacts of Libra on financial industry.

1.2 Scope of Study

This qualitative research explores the opinion of expert on perceptions of Libra's benefits, Libra's applications, the risks of Libra, trust in Libra, and the impacts of Libra. In this study, ten experts in finance sector, including Bitcoin traders, foreign exchange investors, bank loan officer and fund managers, were interviewed.

2. LITERATURE REVIEW

Facebook is the largest online community and the most well-known of social media. It can connect billions of people worldwide successfully. In 2019, Facebook offered a service in which it is a medium for global payments by creating a new cryptocurrency called Libra, aiming to be a global currency. Libra is expected to offer a complete service in 2020. It is designed to break the limitations of conducting financial transactions, leading to better conduct of financial transactions, a cashless society, ease of payment, and increased access to financial transactions. It could be said that Libra will literally be a global currency. Libra's value will be based on real currencies, and it will be fully backed by a reserve of real assets such as global currencies and government bonds (Abent, 2019). Moreover, a non-profit organization called the Libra Association has been founded to govern Libra, including a number of organizations in a wide range of industries such as venture capital firms, blockchain companies, technology and innovation companies, and financial companies. The initial members of the Libra Association comprise 28 organizations. Libra has to be used via an application called Calibra as its digital wallet; however, Calibra could be integrated into some chat applications such as Messenger and WhatsApp. Libra users can change real money into Libra, and then Libra can be spent or sent as easily as sending a message to someone. Facebook has promised that Libra fees will be minimal or free (Fisher, 2019). The Libra Association has developed an operation system called Libra Blockchain, and its reserves to handle any possible problems, ensuring that Libra's value will be its stable value. Bank deposits and government short-term deposits are eligible as reserves for Libra.

Even though Libra offers many advantages, experts in digital currency see that Facebook might use its power through the Libra Association to control all global currencies. In addition, there are concerns about Facebook regarding users' privacy and security since it was sued for a leak of personal information and use of leaked data in advertising. In the view of traditional financial institutions like banks, Libra will be a critical barrier to their businesses, because the role of these institutions as powerful financial services will be decreased (Schroeder, 2019). Therefore, Libra has to overcome these obstacles to be accepted by governments worldwide. If Libra cannot be accepted by the governments of many countries, or if it is opposed by some countries, the goal of Libra to become a global currency cannot be accomplished (Wachananon, 2019).

3. METHODOLOGY

In-depth interviews are used in this study, because this method offers thorough answers on a specific topic; hence accurate information would be received in order to meet the research objectives. In-depth interviews rely on respondents' trust, and the interviewer does not give any opinions during the interview in order to establish true answers. These answers are used to

create and group questions; experts then validate these questions in terms of whether each question is in accordance with the objectives, using index of item-objective congruence (IOC). After that, questions for this study will be created therefore are tested reliability.

4. RESULTS AND DISCUSSION

4.1 Results

According to the in-depth interviews with ten financial experts, questions can be grouped into three categories.

1. **Benefits of Libra:** Libra is a digital currency created by Facebook. It will be governed by the Libra Association, comprising the 28 original founders. Libra will be a global currency which can be used on Facebook and other online platforms. Libra will be created when it is backed by other real global currencies and gold; hence Libra's value will rarely fluctuate and it could be stable.

Libra offers ease of payment. It offers a simple method to purchase any goods and services online, so users can use Libra as easily as sending messages to someone.

Money exchange will not be necessary when Libra is a global currency. Libra can be used in any country and cash will not be needed.

Taxation, in which statements from financial institutions are required, will be more complicated when Libra is available. Libra users will have more bargaining power; therefore, commercial banks will have to develop financial transaction systems and services that meet customers' needs.

2. **Risks of Libra:** Libra will need to be accepted by governments worldwide. If Libra fails in this or there is opposition in any country, Libra cannot be a global currency. Libra will be a business disruption for financial institutions, because the roles of these institutions, such as commercial banks, will reduce. There are no opinions from government and related regulator as to whether or not Libra could be allowed in the country. The processes involved in accepting Libra are complicated, since regulations and laws regarding digital currency need to be amended. If Libra is allowed in Thailand, there would be fluctuation in stock markets initially, because Libra is still new and has low reliability. In addition, the effects of Libra on the Thai baht need to be taken into account.

3. **Impacts of Libra:** Libra will affect commercial banks. The founding members of the Libra Association include many reputable organizations such as MasterCard, Visa and Uber; therefore, if Libra is available, these products and services will accept Libra, thus offering ease of payment for Libra users.

Furthermore, Libra could be accessed by people who face difficulties conducting financial transactions involving financial institutions. International money transfer will be easier and fees will be lower.

Libra will affect financial structures. If Libra becomes a global currency, real currencies will be meaningless and money exchanges will be unnecessary. This will affect the global economy and financial structure, because Libra will be fed into the money system affecting exchange rates, interest rates and fees.

Value stability might be worse due to Libra. For example, if the majority of people buy Libra, the Thai baht will be unable to circulate in the existing money system because people are not going to deposit money in banks. When there are no deposits, a bank cannot process loans; hence the income from bank loans will disappear.

Financial institutions will lose income from money transfers and service fees because Facebook claims that transfer and service fees for Libra will be minimal or free. For example, financial institutions could lose income earned from conducting online transactions overseas. In addition, if international enterprises accept payment via Libra, banks will lose profits from foreign money exchange for international travel. Moreover, they might lose younger customers, because this group of clients prefers ordering goods online, where Libra can offer quicker and easier services.

Deposits and loan services might not be affected, because large depositors still trust savings in banks rather than Facebook, and loan agreements are still required for bank loans. Interest from savings still attracts people to deposit money in banks; however, if Libra offers interest to Libra users, people might tend to deposit savings via Facebook. As a result, there might be competition between banks and Facebook on interest rates. Moreover, fixed deposits are not affected, since Libra does not offer interest for users. Banks use these deposits for loans, and loan rates are commonly higher than deposit rates; therefore, this is the main incomes of banks. Furthermore, promissory notes used for money loans require legal tender, and Libra cannot achieve this function.

Table 1: Scores from Experts in IOC (Agree = 1, Unsure = 0, Disagree = -1)

Topic	Statement	Libra	
		Description	IOC
		Total	score
Benefits	Purchase products via smartphones; no need to open a new bank account	10	1
	Free or lower fees for cross-border payments	7	0.7
	Become a global currency; no need for money exchange	2	0.2
	Easy service access, available to everyone	2	0.2
	Reduce costs of all financial transactions	7	0.7
	Taxation that is monitored by government will be more complicated	1	0.1
	Fewer steps for payment and money transfer between two states	8	0.8
Risks	Libra needs to overcome the barrier regarding worldwide acceptance	6	0.6
	Failure to achieve goal as a global currency	3	0.3
	It is trustworthy due to being backed by a reserve of real assets	7	0.7
	No comment from government on allowing Libra services	4	0.4
	Legislation and amending laws for cryptocurrency	4	0.4
	Stock market volatility	7	0.7
	Affects local currency, such as the Thai baht	7	0.7
Impacts	Global economy and financial structure will be affected	9	0.9
	Adjustment of financial institutions in digital era	9	0.9
	Affects commercial banks and overall economy	9	0.9
	Worse value stability, especially bank loans	6	0.6
	More challenging for governments to check taxation	6	0.6

According to the results from Table 1, statements scoring less than 0.5 (highlighted in red) cannot be used; hence there are only four remaining questions about Libra’s benefits, four remaining questions about the risks of Libra, and five remaining questions about the impacts of Libra.

Subsequently, the reliability was tested. Commonly, this test uses at least three experts. In this study, ten experts were interviewed in depth; therefore, the questions covered all the objectives of this research. Cronbach's alpha in this study is equal to 0.897; hence the questions can be used as a measurement in validity and reliability. The questions were modified based on comments of the experts and a research advisor. The results are shown in Table 2.

Table 2: Comments of Ten Financial Experts regarding Libra

Variable	Mean	Std. Deviation
Used to purchase goods and services like other real currencies	3.4390	1.07352
Reduces the steps in opening bank accounts, which waste time and costs	3.6098	1.06953
Using Libra is as easy as sending messages, so it becomes popular	3.5366	1.05113
Cross-region and cross-border payment fees are cheaper	3.6829	1.10542
Total benefits	3.5671	0.95855
Leaks of personal information leading to threats to privacy, sovereignty and security	2.2927	1.05461
Libra offers a real-time person validation during registration to prevent fraud at the same standard of banks	3.8049	0.98029
Could be a channel for money laundering and financial crimes on a personal and national level	2.4878	1.00304
It is trustworthy due to being backed by a reserve of real assets	3.4390	1.04997
Total risks	3.6159	0.72045
Affecting value stability because local currency will be withdrawn from the system	3.6585	1.01513
Increased access to financial transactions for people who have limitations such as earning low incomes and living in remote areas, leading to decreased inequality	3.4878	0.89783
Since Libra is not controlled by governments, central banks are concerned about its management and checking	3.6829	0.87861
Expanding international e-commerce, particularly small businesses, reducing the exchange costs of local currency	3.7805	0.96209
Total impacts	3.6524	0.73714

The mean of total benefits equals 3.5671, showing that financial experts perceive Libra’s benefits at a high level (more than 3.5), while they have concerns about whether Libra can be used to purchase goods and services like other real currencies, with a mean of 3.4390.

The mean of total risks is 3.6159. These risks concern leaks of personal information leading to threats to privacy, sovereignty and security, with a mean of 2.2927, and being a channel for money laundering and financial crimes on a personal and national level, with a mean of 2.4878. Since these two variables are negative sentences, the measurement scale was reversed; therefore, a low value mean means less concern and a higher value one means more concern. It can be seen that the means of these two variables are lower than 3.5, indicating that experts have less concern about these two issues.

The mean of total impacts is 3.6524. Experts are unsure about increased access to financial transactions among people who have limitations such as earning low incomes and living in remote areas, leading to a decrease in inequality, with a mean of 3.4878, which is not over 3.5.

Interpretations based on the results from Table 2 were used in the interviews regarding impacts on financial institution. Ten experts revealed their opinions, discussed in the next section.

Adaptation of Financial Institutions: Banks need to offer quicker and more user-friendly services via smartphone applications. Many commercial banks have developed deposit and transfer services through mobile banking; however, loan services have only been introduced in recent years and they need proper development. Banks need to implement Artificial Intelligent or AI for financial advisory services; hence clients will not use these services offered by other banks and non-banks. In the future, all bank services might be completed on online platforms, so physical bank branches are not needed (for example, SoftBank in Japan).

The issue regarding whether Libra can replace local currencies depends on the decisions made by the Thai government and central bank. From experts' point of view, they believe that Libra will be used in small trades and transfers only; therefore, large trades, transfers and depositors will still rely on bank services for the long term.

Banks should adjust their interest rates and service fees in accordance with Libra's system. For example, when a customer deposit security in a financial institution, this institution has to act as a medium to ensure the securities of its customer and Libra system can do the same on behalf of customer. Hence a customer will experience convenience and operations will be simpler. Service charges will be adjusted to suit individual customers and organizations which served by Libra service fee level.

Banks might make joint investments with Libra or other applications which are used by a wide range of clients, such as Grab, Food Panda and Uber. This strategy can gain a number of clients among Facebook users. However, if banks cannot follow this strategy, they should reduce service fees such as cross-border payment fees and offer simpler service operation steps. Initially, customers might be worried about Libra's services and they perceive a lack of reliability in these services. Hence banks should create new campaigns to retain loyal and former customers. For example, some banks might introduce their own social media application without prior opening new bank accounts. If the clients are familiar with this application, they might become bank customers finally.

4.2 Discussion

According to the experts' concerns in this study regarding whether Libra can act like a currency to purchase goods and services like other fiat currencies, this function depends on the definition of a currency. The studies by Wuermeling (2018), Seiter, Sandner, and Gross (2019) show that Libra cannot be a currency when currency means legal tender; however, if currencies are all forms of money in an economic system, Libra could act as a currency. The study by Gross and Landes (2019) also concludes that the function of payment might be fulfilled by Libra to a certain extent. Libra can fulfil other money functions, including a unit of account and store of value if Libra is stable. This means that if Libra can achieve these three functions of money—being a means of payment, being a store of value, and being a unit of account—Libra could be a form of money.

The goal of Libra, stated in the Libra White Paper, is to become a simple global currency and financial infrastructure empowering billions of people worldwide (Libra Association, 2019). Therefore, Facebook aims to increase access to financial transactions for people who have limitations such as earning low incomes and living in remote areas, leading to a decrease in inequality. The Libra Association states that there are a number of people who earn low incomes but they have to pay more for financial service fees such as remittances, ATM charges

and overdraft fees. These fees might cost around \$30 for a \$100.4 loan, and annual interest rates for payday loan fees could exceed 400 per cent. Moreover, there are around 1.7 billion adults worldwide outside the financial system, so they cannot access a traditional bank, despite one billion people having a mobile phone and half of these being able to access the internet. The study by Senarathne (2019) found that Libra and other digital currencies increase opportunities for billions of unbanked people to access financial services at an acceptable cost via online platforms. According to the digital currency investors' perspective, Libra tends to offer another path for portfolio (Cryptocurrency) diversification.

Financial experts in this study perceive a low risk of Libra leaking personal information or being a channel for money laundering and financial crimes. However, there are many studies on the risks of Libra, since Facebook states uncertain policies. According to the Libra White Paper statement 2019, Calibra, a regulated subsidiary of Facebook, was created to ensure that Facebook users' information is separate from financial data, and it can build and operate Libra services on its behalf through Libra blockchain. The study by Zetzsche, Buckley, and Arner (2019) reveals that transferring social media users' data to Libra or Calibra requires the consent of Facebook users, at least under European Union and Australian data protection law. Users consent to the use of personal data for social media rather than financial services. However, the Libra White Paper does not offer a clear statement regarding the separation of data concerning the Facebook user and the Calibra user. Therefore, Zetzsche and colleagues are concerned that the two data pools might be merged with or without users' consent. In this case, Facebook would face data protection violation of their users' social media and financial existence.

If Libra is launched into an economic system, there could be impacts for global financial institutions. The study by Fiedler et al., (2019) notes the impacts of Central Bank Digital Currency (CBDC), and this study can describe the impacts of Libra for financial institutions. Commercial banks might not be affected by the introduction of CBDC due to its attractiveness for deposit accounts. Firstly, there is the ease of the payment infrastructure; secondly, the banks can bundle deposit accounts with essential financial services; and thirdly, higher interest rates are offered. However, the financial sector may be affected when there is a sudden transfer of bank deposits to CBDC accounts. In addition, the traditional business model of commercial banks could be disrupted by CBDC.

5. CONCLUSION AND SUGGESTIONS

The opinion can be grouped into three categories: the benefits of Libra, the risks of Libra, and the impacts of Libra. According to experts' interviews, they are highly concerned about whether Libra can be used to purchase goods and services like other real currencies, while they have less worry about the risks of Libra, particularly leaks of personal information and being a channel for money laundering and financial crimes. Moreover, they are unsure whether Libra can increase access to financial transactions for people who have limitations such as earning low incomes and living in remote areas, leading to a decrease in inequality. Financial experts' comment that when Libra is launched in the market, financial institutions will lose income from money transfers and service fees; however, deposit and loan services might not be affected. Further interviews also show that financial institutions need to offer quicker and uncomplicated services via mobile banking, and interest rates and service fees need to be adjusted in accordance with the Libra system. In addition, commercial banks might make joint investments with Libra to expand their customer base.

The study suggests that governments and banks should prepare for Libra services in order to handle its impact on the overall economy in Thailand. The public sector can create legislation and amend laws to be able to deal with digital currency: hence the problems caused by this destructive innovation will be minimized. For example, Libra and other cryptocurrencies

should be limited for each investor; this way, local currencies such as the Thai baht can remain in circulation in the money system, and value stability can be normal. Financial institutions are another section which is concerned about the effect of Facebook's Libra; therefore, they need to adjust their services to suit the digital era and compete with the many digital currencies. Commercial banks need to develop mobile banking systems and services in order to serve more customers, and these services have to come with ease of use. The banks might consider interest rates and service fees. An increase in interest rates and a reduction in transfer fees might attract more clients and expand the customer base. However, it might affect overall incomes and profits, and so the banks need to adjust interest rates and service fees properly.

REFERENCES

- Abent, E. (2019). *Facebook Libra cryptocurrency revealed with Calibra digital wallet to manage it*. Retrieved from <https://www.slashgear.com/facebook-libra-cryptocurrency-revealed-with-calibra-digital-wallet-to-manage-it-18580875/>
- Barrdear, J., & M. Kumhof. (2016). *The macroeconomics of central bank issued digital currencies* (Bank of England working paper No.605). London: Bank of England.
- Buterin, V. (2014). *A next generation smart contract and decentralized application, Ethereum White Paper*. Retrieved from http://blockchainlab.com/pdf/Ethereum_white_papera_next_generation_smart_contract_and_decentralized_application_platform-vitalik-buterin.pdf
- CoinMarketCap. (2018). *Top 100 Cryptocurrencies by Market Capitalization*. Retrieved from <https://coinmarketcap.com/>
- Fiedler, S., Gern, K., Stolzenburg, U., Gerba, E., & Rubio, M. (2019). *The future of money. European Union*. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/642364/IPOL_STU\(2019\)642364_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/642364/IPOL_STU(2019)642364_EN.pdf)
- Fisher, C. (2019). *Facebook's Libra currency gets backing from MasterCard, Visa, PayPal and more*. Retrieved from <https://www.engadget.com/2019/06/18/libra-association-facebook-cryptocurrency/>
- Gross, J., & Landes, L. (2019). *Libra: insights into its expected stability*. Retrieved from https://epub.uni-bayreuth.de/4548/1/Gross%2C%20Landes_2019_Libra.pdf
- Libra Association. (2019). *Libra White Paper*. Retrieved from <https://libra.org/en-US/white-paper/>
- Meunjak, T., Wongsaroj, R., Tansa-ngun, K., & Santayodom, K. (2018). FAQ focus and quick. *Digital Currency Series*, 2(126), 1-13.
- Narayanan, A. Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and cryptocurrency technologies: A Comprehensive Introduction*. Retrieved from <https://press.princeton.edu/books/hardcover/9780691171692/bitcoin-and-cryptocurrency-technologies>.
- Schroeder, P. (2019). *U.S. lawmaker calls for Facebook to pause cryptocurrency project*. Retrieved from <https://www.reuters.com/article/us-facebook-crypto-congress/u-s-lawmakers-joins-global-chorus-of-concern-over-facebooks-cryptocurrency-idUSKCN1TJ2SJ>
- Seiter, S., Sandner, P., & Gross, J. (2019). *Money, Currency or Crypto Currency: What Exactly is Libra? An Economic Classification*. Retrieved from <https://medium.com/@jonas.ku1994/money-currency-or-crypto-currency-what-exactly-is-libra-an-economic-classification-227f6f157238>
- Senarathne, C. W. (2019). Possible Impact of Facebook's Libra on Volatility of Bitcoin: Evidence from Initial Coin Offer Funding Data. *Sciendo*, 81(1). 87-100.
- Wachananon, C. (2019). *Worldwide reactions after Facebook announced digital currency, Libra: Two sides of the same coin*. Retrieved from <https://www.beartai.com/news/itnews/336835>

- Wuermeling, J. (2018). *Auswirkungen virtueller Währungen auf die Finanzmärkte*. Retrieved from <https://www.bundesbank.de/de/presse/reden/auswirkungen-virtueller-waehrungen-auf-die-finanzmaerkte-711074>
- Zetsche, D. A., Buckley, R. P., & Arner, D. W. (2019). *Regulating LIBRA: the transformative potential of Facebook's cryptocurrency and possible regulatory responses*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3414401