

Bachelor's Thesis in Information Systems

Libra – An analysis of design choices and public discourse

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ABSTRACT

With the invention of the Blockchain, the creation of Blockchain-based cryptocurrencies became widely available. Cryptocurrencies often offer cheaper and more efficient transactions over traditional banking systems, especially for cross-border payments.

The well-known social media company Facebook has founded the Libra Association together with other global companies. Under this organization, such a cryptocurrency called Libra is supposed to function as a global means of payment. Some parties do not like the fact that Facebook wants to launch a type of private issued money on the world market as a competing product to central bank-controlled money. Therefore, banks and governments are fighting Libra. They are discussing regulatory measures and some countries are taking steps to prevent the introduction of Libra. This is reflected in the statements found in newspaper articles between May and December 2019. 68.30% of the statements from public discourse were negative towards Libra most of which came from people holding positions in the government. This is mainly due to the potential threat that Libra could pose to the world's financial systems and the sovereignty of the states, as well as to the privacy of the users of its platform.

ZUSAMMENFASSUNG

Mit der Erfindung der Blockchain wurde die Schaffung von Blockchain basierten Kryptowährungen weitgehend verfügbar. Kryptowährungen bieten oft billigere und effizientere Transaktionen als traditionelle Banksysteme, insbesondere für grenzüberschreitende Zahlungen.

Das bekannte Social-Media-Unternehmen Facebook hat zusammen mit anderen globalen Unternehmen die Libra Association gegründet. Unter dieser Organisation soll eine solche Krypto-Währung namens Libra als globales Zahlungsmittel dienen. Einigen Parteien missfällt die Tatsache, dass Facebook eine Art privat ausgegebenes Geld auf dem Weltmarkt als Konkurrenzprodukt zu zentralbankgesteuertem Geld lancieren will. Deshalb kämpfen Banken und Regierungen gegen Libra. Sie diskutieren über Regulierungsmassnahmen und einige Länder unternehmen Schritte, um die Einführung von Libra zu verhindern. Dies spiegelt sich in den Aussagen wider, die zwischen Mai und Dezember 2019 in Zeitungsartikeln zu finden sind. 68,30% der Aussagen aus dem öffentlichen Diskurs waren negativ gegenüber Libra, wovon die meisten von Menschen stammten, die Positionen in der Regierung innehaben. Dies ist vor allem auf die potenzielle Bedrohung zurückzuführen, die Libra für die weltweiten Finanzsysteme und die Souveränität der Staaten sowie für die Privatsphäre der Nutzer ihrer Plattform darstellen könnte.

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1. INTRODUCTION

In the first chapter, the motivation and relevance underlying the investigation of Libra's design choices and public discourse are stated. In the second chapter the research questions and the objectives of the thesis are mentioned. Then the rough outline of the dissertation is presented.

1.1. Motivation & relevance

The history of cryptocurrencies, which are cryptographically encrypted payment systems, began in 2009 with the first Blockchain created by Satoshi Nakamoto. Since then, companies have worked persistently on innovative developments for Blockchain technology. All new technologies that use the Blockchain are struggling with the so-called trilemma. The trilemma describes a problem where a Blockchain always must abandon one of the three criteria: scalability, security and decentralization. All new Blockchain technologies suffer from this limitation. This also applies to the newly announced cryptocurrency Libra (Rose, 2019).

The social media giant Facebook founded the subsidiary Calibra which will launch its own global cryptocurrency Libra. It's designed to process fast payments for a low fee through its own wallet or either the Facebook or the WhatsApp messenger. According to Facebook there are more than 1.7 billion potential customers among their own user base without a satisfying payment solution. However, the new payment system will not only be limited to this group. Hence Libra is a direct threat to the classic banking business (Kari, 2019). Compared to most other cryptocurrencies, Libra is meant to become a stable coin which means that its value will be pegged to a global currency such as the USD or other assets and unlike other cryptocurrencies it is planned to start off as a semi-centralized currency. Until the first half of 2020 Facebook has planned to convince more than 100 companies to join the Libra Association for a fee of \$10 Million each. Every member of the Libra Association will host a node that will be used to control the transactions on their Blockchain (Biser, 2019). Facebook has announced to make their Blockchain fully decentralized at later stages of the project.

The Libra cryptocurrency has been widely discussed in the media recently. One reason for this is that Facebook is a company that has gained a bad reputation because of privacy related issues. Contrary to the accusations about privacy violations, Facebook has stated that they wouldn't use user data for ad-targeting purposes. Other reasons that have led to increased media attention are most likely the participation of large and well-known companies in the project, the fact that the word 'cryptocurrency' itself is a very trending topic and the public discussion about what Libra promises and to what extent it's a cryptocurrency. A main reason

for Libra's media publicity is their offensive communication that the traditional banking business wouldn't be needed if enough large corporations unite to join the Libra Association, which implicates consequences for involved parties within this ecosystem.

Therefore, it's important to have a look at what Libra promises, to compare the concept with other financial systems and to analyze what the public discourse in newspapers looks like. Following thesis will evaluate the public discourse through the analysis of selected newspaper articles. The focus will be on what statements in favor or against Libra are made by whom and to what extent potential fears or opportunities are perceived, especially since the Libra currency benefits of Facebook's user base.

1.2. Research questions and goals

The thesis answers one main question that can be broken down to sub questions and will help to focus on the main topic:

⇒ How are the design choices of the Libra cryptocurrency compared to other payment systems and what's the public discourse in newspaper articles about the characterization of Libra?

The main question can be split into different parts:

- What is a payment system and how can it be characterized by various criteria (stakeholder, governance, distribution...)?
- How can different payment systems (barter, fiat currencies, stable coins, bitcoin...) be described according to those characteristics?
- How can Libra be described according to mentioned characteristics?
- How does the media judge Libra according to those characteristics?
- Who expresses which statement, which speaks in favor of the use of Libra?
- What are the consequences of these statements?
- Who expresses which statement that opposes the use of Libra? E.g. prohibitions of cryptocurrencies in general, and the reason for them?
- What statements about potential barriers to the development of Libra are made by whom?
- What are the implications on the ecosystem?

The main purpose of this thesis is to provide an overview of the groups of people who evaluate the different characteristics of the cryptocurrency Libra. It can be found out on which characteristics the focus of positive and negative statements lies. In addition, the main proponents and opponents of the Libra cryptocurrency can be identified. Further it should be found out, why Libra is criticized in particular, since there are already some known stable cryptocurrencies. With this information it should be possible to make recommendations for actions for Libra opponents and for Libra itself.

1.3. Thesis outline

The thesis has two tasks. On the one hand it is about creating a framework that represents common payment systems and their characteristics by means of related works and inductive identification. On the other hand, online newspaper articles published from March 2019 until the end of December 2019 are to be collected. With these collected newspaper articles about Libra the characteristics of the framework will be classified and evaluated based on the statements made.

The second chapter deals with related works in which information about Blockchain technology in connection with Libra is collected. Details such as structure and governance of Libra are also discussed further. Furthermore, the common payment systems are presented. The characteristics of the payment systems are identified and recorded in a table. In the last part of the related work, the governance of payment systems is discussed in order to clarify the differences between centralized and decentralized payment systems.

The third chapter describes the methods used to create this thesis. It explains how the literature research for the payment systems framework and the creation of the keyword list for the corpus building was carried out. Furthermore, the steps needed to create the corpus and to analyze the collected data are described. This includes the creation of the codes for the codebook and the analysis of the statements, as well as the determination of the results.

The fourth chapter presents the results of the thesis. Here the collected data of the statements from the newspaper articles are evaluated and partly also graphically presented. In a first part the metadata are presented. These include the evaluation of the number of relevant articles per month, as well as other relevant information from the outlets, the regions and the executives mentioned. Subsequently, the categories Persons, Regions & Organizations and the characteristics of the payment systems are identified. Here it is explained when which codes are used, and the most important or most frequently used codes are explained in detail. It is interesting to see which codes were used most often. This is also shown in the Code Cloud in the next step. Afterwards, it is shown and explained how public opinion towards Libra has developed during the months from May 2019 to December 2019 and which groups mainly

have different views. The main concerns about Libra and other relevant statements are dealt with in the last part.

The fifth chapter contains the discussion of the results from chapter four in relation to the related work from chapter two. Here the research questions are answered.

The sixth chapter concludes this thesis with the summary, limitations and possibilities for future research in this topic area.

2. RELATED WORK

In this part, related work on Blockchain technology in connection with the cryptocurrency Libra, as well as characteristics of different payment systems and their governance are researched. For this purpose, a framework for the classification of payment systems according to their characteristics was created and filled out for common payment systems and Libra.

2.1. Blockchain technology

Here the underlying technology for Libra is explained. These points are described in more detail and explained in the next part in relation to Libra.

2.1.1 Blockchain

Blockchain is according to Dywer (2015) the technology on which Bitcoin works and is considered a major innovation in distributed computing. It is an asset database and is used via a peer-to-peer network. In this network, each new node, when it joins, takes a complete copy of the Blockchain and is responsible for documenting and verifying transactions. In the Blockchain network, each user has private and public keys, with the public keys serving as the receiving address. A private key is used to sign transactions that belong to a public address (Zheng et al., 2017).

2.1.2 Blockchain trilemma

The Blockchain trilemma describes according to Dong Ku (2018) the technical problem of cryptocurrencies to be sufficiently strong in all three areas: scalability, security and decentralization. Scalability is the main technical challenge for fully decentralized and secure systems like Bitcoin. Such a system should be able to process a large number of transactions in a short period of time. However, a certain amount of scalability has been abandoned in favor of security. Block chain technology creates a decentralized environment. The decentralized system does not have a central party to make and update changes.

2.1.3 Types of Blockchain systems

Following are the four categories that explain the different types of accessibility for Blockchain systems.

Public:

A very important feature of the public is according to Zheng et al. (2017) Blockchain is that all records are visible to the public. Every Internet user thus has access to participate in the consensus process. Anyone can read, write or participate with a public Blockchain. Through decentralization, no one has full control over the network. Security is ensured by the fact that the data cannot be changed after validation on the Blockchain.

Consortium:

Several companies decide who may participate in the system. This means that only a group of pre-selected nodes is able to participate in the consensus process. In a private Blockchain, only nodes coming from a specific organization are allowed to participate (Zheng et al., 2017; Okada et al., 2017; Walport, 2016).

A consortium is for example a joint project with several different representatives from different sectors (Oliveira, Zavolokina, Bauer & Schwabe, 2018).

Hybrid:

Hybrid Blockchain is a payment system that combines features of two systems. In this case, it is the combination of the public and private Blockchain and combines the advantages of both systems and the user of the platform decides himself in any way who may validate (Rambure & Nacamuli, 2008).

Private:

In a private Blockchain, only nodes originating from a particular organization may participate in the consensus process. It is therefore a single entity responsible for validating transactions and deciding who can participate in the system (Zheng et al., 2017; Okada et al., 2017; Walport, 2016).

2.1.4 Consensus algorithms

Proof of work:

The proof-of-work is according to Grevais et al. (2016) the most widely used consensus mechanism of Blockchain. This mechanism ensures unanimity in the network. The aim is to achieve consensus and agree on an identical version in the network of the Blockchain. PoW is complex to create, but it is easy for peers to check it.

Proof of stake:

In the case of proof to stake, in order to validate the transaction, the node must prove that it owns a certain share of this network's tokens. The participants choose who generates and validates the blocks (Zheng et al. 2017; Pilkington 2015). To add a new block, the participant must have a certain amount of currency or reputation. This is lost if the block is not accepted by consensus (Sharples & Domingue, 2016).

Byzantine fault tolerance:

The byzantine fault tolerance approach is semi-centralized because a few nodes have control over the entire system. (Baliga, 2017) With byzantine fault tolerance, the system should work even if nodes are omitted or wrong instructions are given. It signs and encrypts messages sent between replicas and clients. It also reduces the size of these messages. This makes the system work in the face of byzantine errors.

2.1.5 Nodes

There are two types of nodes. (Ehmke, Blum & Gruhn, 2019) The first is an observing node or an examiner's node. These only observe what happens on the Blockchain and do not write on the Blockchain. The second is the validation node. This node participates in the consensus by determining which transactions may be stored in the Blockchain. The Blockchain is therefore relevant to the way the system functions.

2.1.6 Mining

The process of "mining" describes according to Selgin (2013) nodes that receive a certain number of Bitcoins. The first node that can solve a hash gets the money and can validate the transaction. A hash is generated by converting a digital value into a standardized value using a hash function. This value cannot simply be converted back, which is the reason why hashes are also used as part of cybersecurity.

2.1.7 Wallets & private keys

The private key consists of a sequence of alphanumeric characters. The length of the characters can vary. The private key refers to the address to which the coin was last sent, and the sender therefore has the right to freely dispose of the resources of this address. (Halaburda & Sarvary, 2016) The private key can be used to sign a message and the sender's key is the only thing needed to create a valid signature, which in turn means that the private key is the only thing that can be used. So, if this private key is lost, the resources of its associated public address can no longer be used. This problem is solved by a wallet. The wallet links a private key to an

identifiable account, usually password protected, so that the resources can be used from that account (Rambure & Nacamuli, 2008).

2.1.8 Value retention

Stablecoins belong to the cryptocurrencies. (Mita, M., Ito, K., Ohsawa, S., & Tanaka, H., 2019) They have price stabilization mechanisms by linking themselves to certain assets, such as other currencies. The stablecoins are therefore supposed to have a lower volatility. The value retention is about how to stabilize the value of a stablecoin.

For example, a stabilization mechanism can control the exchange rate between crypto and fiat currency. Several platform providers, some of which were cryptocurrency exchange platforms, have introduced stabilization mechanisms by issuing stablecoins.

Hassani et al. (2018) examined Blockchains from the banker's perspective. They describe the stablecoin as a digital token with low price volatility. This lower volatility is due to its link to an underlying fiat currency. It can therefore be used, for example, as a medium of exchange, a store of value and a settlement unit for Blockchain payment.

2.2. Libra

Libra is based on Blockchain technology (Nakamoto 2008). As technological backend Libra has a closed consortium Blockchain which is operated by the members of the Libra Association.

According to Hanl (2019), Libra differs in some areas from the classic cryptocurrencies. It has for example no block concept in the Libra Protocol. So, it is rather a distributed database than a Blockchain. The data is stored based on accounts. Libra protocol accounts should be linked to real identities and each of these accounts can have resources such as Libra tokens. Clients collect transactions executed. These are made available in the validators. One of them then takes on the role of the "leader", who proposes a series of transactions to the validation instances. If a block receives the approval of the majority of the validators, it obtains a "Quorum Certificate" (QC) from the leader, which is a confirmation of the block.

According to Hanl & Michaelis (2017) Libra sees itself as a cryptocurrency. However, there are some differences to traditional cryptocurrencies like Bitcoin. The high volatility creates an incentive for Bitcoin to keep the cryptocurrency long-term and not to use it as a medium of exchange. Libra sees itself as a "stablecoin", which can also be used as a stable medium of exchange due to its low volatility. Whereby they share the following similarities:

- 1) no external regulation
- 2) peer-to-peer functionality
- 3) use of public infrastructures
- 4) implementation of private public key cryptography
- 2.2.1 Consensus algorithms

Libra uses according to Brühl (2020) a variant of the HotStuff consensus protocol, this is called "LibraBFT". The letters stand for: Byzantine Fault Tolerant Consensus Protocol. This ensures security by having all validators match in commits and execution. Because commits are produced continuously, the consensus protocol is alive. LibraBFT works in such a way that it runs in rounds. In each round a node is determined. This node then takes the lead when it comes to reaching a consensus with other nodes. It is also responsible for validating and executing the transaction. LibraBFT is a distributed computer system, but it's supposed to work without problems even if some components of the system fail.

2.2.2 Wallets

According to Mai (2019), it is planned that Libra coins will be bought via Libra-Wallet. To make such a purchase, the interested parties must have a digital identity. Calibra-Wallet will be available on the different platforms: Facebook Messenger, WhatsApp. In addition, Calibra-Wallet will also be available as a separate app.

2.2.3 Value retention

Libra functions as a stable coin. It is linked to the major government currencies and assets, which should increase confidence in Libra. Libra also offers currency hedging (Zetzsche, Buckley & Arner, 2019).

2.2.4 Accessibility

According to Brühl (2020) Libra should allow people in emerging markets to have access to banking or other financial services. To achieve this, the Libra Association wants to develop a new ecosystem. This ecosystem is intended to enable global transactions, at almost zero marginal cost, in a stable digital currency.

2.2.5 Consortium

Libra is according to Zetzsche et al. (2019) not one of the decentralized cryptocurrencies. It is managed semi-centrally by a consortium of up to 100 companies. At the time of the announcement this consortium consisted of 29 leading institutions from all over the world. As we have read in some articles of the time, the original founding members come from different branches of the economy. From the field of payments are Mastercard, PayPal, PayU, Stripe, Visa. From the field of technology and marketplaces: Booking Holdings, eBay, Farfetch, Lyft, Mercado Pago, Spotify, Uber. Iliad and Vodafone Group from the telecommunications sector. From the Blockchain sector: Anchorage, Bison Trails, Coinbase, Xapo. From the field of venture capital: Andreessen Horowitz, Breakthrough Initiatives, Ribbit Capital, Thrive Capital, Union Square Ventures. And from the field of non-profit and multilateral organizations and academic institutions: Creative Destruction Lab, Kiva, Mercy Corps, Women's World Banking. Some of these founding members have already withdrawn their participation in the project. (TELWOR0020191006)

2.2.6 Governance

The Libra Association confirmed that Libra is not determined by Facebook alone, but that Facebook only has a leading role. (Zetzsche et al., 2019) The Libra Association makes the final decision and not Facebook. At the time of the introduction of Libra, the Libra Association should have 100 members. The members must pay at least 10 million USD into the capital of Libra. In return they are given certain decision-making rights. The members have strong rights. Shareholders have the right to overrule all board and management decisions.

2.3. Payment systems

In this section the different payment systems including Libra are explained and their characteristics are presented in a framework. This framework was created to classify the payment systems. The compiled characteristics were included in the codebook and used for coding the newspaper articles, which will be covered in a later part.

2.3.1. Currency financial systems

According to Rambure & Nacamuli (2008), payment systems are necessary to reach agreement when purchasing goods or services. It does not matter whether it is fiduciary money or scriptural money. Fiduciary money describes bank notes and coins and scriptural money is money that is in writing in a bank account. An exception to the necessity of money is the barter economy, in which goods are exchanged for goods. Rambure & Nacamuli (2008, p.69) describe in their work that the payment systems have the role "to ensure the convertibility of liabilities on commercial banks, otherwise known as commercial bank money, embodied by the balances (or credit lines) customers hold on their bank accounts." The security of a payment system is therefore a crucial component.

But the security of a payment system is not everything. According to Halaburda & Sarvary (2016), there are many important characteristics that have to be considered. In order to present these characteristics, the following tried, and tested payment systems were included in this paper: barter/ commodity and money transactions. Both payment systems have their advantages and disadvantages. Barter works well, as long as the exchange partners ever have something the other party wants and want to exchange these goods for each other. Money transactions work when both parties are convinced of the value and viability of the money. Most fiat currencies have similar governance aspects and capabilities. Therefore, not a single currency like the USD is considered, but fiat currencies in general (Taskinsoy, J., 2019).

Cryptocurrencies form a further payment system and can be distinguished from each other by Blockchain types. In the framework, the public Blockchain, hierarchical Blockchain and permissioned/private Blockchain come before the public Blockchain, hierarchical Blockchain and permissioned/private Blockchain (Schulze, T., Seebacher, S. & Hunke, F., 2020).

Cryptocurrencies often have very different types of governance and different capabilities, which is why not cryptocurrencies in general are considered, but only Bitcoin, as the bestknown cryptocurrency to date. (Taskinsoy, J., 2019) It has emerged from some newspaper articles that some states want to create Blockchain cryptocurrencies that can be used nationally and globally. These are also examined in the framework. last but not least, Libra must not be missing in the framework, because this way it can be well compared to the other payment systems.

2.3.2. Characteristics of payment systems

Below, in Table 1, is the framework for characteristics of different payment systems. This framework was used for coding the collected newspaper articles. The categories and characteristics are mostly taken from already published papers. The characteristics used for the framework have been compiled from four different sources.

Table 2 from the work of Oliveira, Zavolokina, Ingrid & Schwabe (2018) was integrated unchanged into this work, as it already contained all token-based classifications. The categories of this table, including its characteristics were 'purpose parameters', 'governance parameters',

'functional parameters' and 'technical parameters'. The classes 'functional parameters' and 'governance parameters' were supplemented by additional characteristics from other sources (Rambure & Nacamuli, 2008). In addition, the categories 'user related ecosystem parameters' and 'environment related ecosystem parameters' and all options for the characteristics were collected from different sources. (Abrazhevich, D. 2001; Rambure & Nacamuli, 2008; Schulze, T., Seebacher, S. & Hunke, F., 2020; Oliveira, Zavolokina, Ingrid & Schwabe, 2018)

Table 1: Payment systems classification. Adapted from Abrazhevich, D. 2001; Rambure & Nacamuli, 2008; Schulze, T., Seebacher, S. & Hunke, F., 2020; Oliveira, Zavolokina, Ingrid & Schwabe, 2018

Payment system		Barter/ Money		Cryptoo		currencies		
	,	Commodity	Commodity transactions		Public		chical	Permissioned/
				Blockcha	in	Blockc	hain	private Blockchain
Characteristic								DIOCKCHAIT
Ecosystem	Blockchain	Positive influer	nce	Influencele	s		Negative	influence
(environment related)	development aid							
Parameters	Currency competition	Competitive		Competitve	-neutral		Anticom	petitive
	Deflation of traditional currencies	Deflation-indu	cing	Deflation n	eutral		Deflatior	n-inhibiting
	Financial stability	Stabilizing			Loos	ening	1	
	Global currency	Local		National	I		Global	
	Illicit transactions	Fraud preventing			Fraud enabling			
	Legal and Regulated regulatory		Unre	Unregulated				
	Money laundering	Money launder	ring preventing	g	Mon	ey laund	laundering enabling	
	Payment instruments	Face to face		Central ban	ks, State	es	Public lee	dger
	Price stability	Stable			Volat	tile	1	
	Private money	Privatized State-c		State-contr	ate-controlled		Public	
	Sovereignty	State Sovereig promoting	nty	State Sover	eignty ne	eutral	State Sov impendir	vereignty ng
Ecosystem (user related) Parameters	Ability to transact across borders	Transferable		Limited			Non-Tra	nsferable
	Convertibility	Exchangeable		Limited			Noninter	changeable
	Debasement protection	Owned			Supe	rvised	·	
	Ease of use (usability)	Easily applicab	le		Diffio	cult to ap	oply	
	Efficiency and transaction costs	Microtransacti	onal		Non-	Microtra	ansactional	

	Payment and settlement speeds	Promptly			Time-consuming				
	Protection and security	Cryptographically secured Insured			Unpro	otected			
	Reliability	Reliable				Unreliable	I		
	Traceability	Anonymous,	No histo	ory	Pseudonymo history	us, Public	ldenti histor	fied, No Y	on-public
	Trust	Trustworthy			L	Untrustworth	iy		
Functional Parameters	nctional Burnability Burnable		Non-Burnable	е					
	Divisibility	Divisible				Non-Divisible	è		
	Expirability	Expirable				Non-Expirabl	e		
	Fungibility	Fungible				Non-Fungible	2		
	Scalability	Scalable				Non-Scalable	1		
	Spendability	Spendable				Non-Spendable			
	Tradability	Tradable			Non-Trac		ole		
Governance Parameters	Accountabilities	Single entity			Consortium		Public		
	Authorization type/ Access	Public			Private		Variable		
	Control structure / Decision rights	Hierarchical		Federated		Decer	ntralized	1	
	Incentive system	To Enter Platform		To Use Platfo	orm	To Sta	ay Long	-Term	
	Money/Medium of exchange	Gold, goods or services		Fiat currency		Record			
	Participants/Stake holders	Notes & Coins		Goods & Services		Token			
	Pegging	Material of va	alue	State	Promise	Composition securities	of	Crypt proto	ographic col
	Representation	Digital			Physical		Legal		
	Supply	Fixed			L	Variable			
Purpose Parameters	Class	Coin/Cryptoc	urrency	/	Utility Token		Toker	nised Se	curity
	Function	Asset-Based	Token		Usage Token		Work Token		
	Role	Right	Value Excha	inge	Toll	Reward	Curre	ncy	Earnings
Technical Parameters	Chain	New Chain, n Code	ew	New 0 Code	Chain, forked	Forked Chain forked Code	,	Issued proto	l on top of a col
	Layer	Blockchain (N	lative)	1	Protocol (No	n-Native)	Applio	cation (c	lApp)

In table 2 all characteristics of the payment systems are classified. These characteristics can be compared with the results of the coding and reviewed in the discussion.

Schulze, T., Seebacher, S. & Hunke, F. (2020) have done a large part of the classification for Libra. Other classifications have also been made in other papers (Oliveira, Zavolokina, Ingrid & Schwabe, 2018; Rambure & Nacamuli, 2008). The remaining characteristics within this framework were inductively applied, based on my personal knowledge of cryptocurrencies and the gathered information from the newspaper articles.

Table 2: Classification of payment system cases. Adapted from Abrazhevich, D. 2001; Rambure & Nacamuli, 2008;Schulze, T., Seebacher, S. & Hunke, F., 2020; Oliveira, Zavolokina, Ingrid & Schwabe, 2018

Payment system		Barter	Money	Cryptocurrencies		
			Fiat	Bitcoin	State cryptocurrencies	Libra
Characteristic						
Ecosystem (environment related)	Blockchain development aid	Influenceless	Influenceless	Positive influence	Positive influence	Positive influence
Parameters	Currency competition	Competitve- neutral	Competitive	Competitve- neutral	Competitive	Anticompetitiv e
	Deflation of traditional currencies	Deflation neutral	Deflation- inhibiting	Deflation neutral	Deflation- inhibiting	Deflation- inducing
	Financial stability	Loosening	Stabilizing	Loosening	Stabilizing	Loosening
	Global currency	Local	National	Global	National	Global
	Illicit transactions	Fraud enabling	Fraud preventing	Fraud enabling	Fraud preventing	Fraud enabling
	Legal and regulatory concerns	Unregulated	Regulated	Unregulated	Regulated	Unregulated
	Money laundering	Money laundering enabling	Money laundering preventing	Money laundering enabling	Money laundering preventing	Money laundering enabling
	Payment instruments	Face to face	Central banks, States	Public ledger	Central banks, States	Public ledger
	Price stability	Volatile	Stable	Volatile	Stable	Stable
	Private money	Public	State- controlled	Public	State-controlled	Privatized
	Sovereignty	State Sovereignty neutral	State Sovereignty promoting	State Sovereignty neutral	State Sovereignty promoting	State Sovereignty impending
Ecosystem (user related) Parameters	Ability to transact across borders	Non- Transferable	Limited	Transferable	Limited	Transferable

	Convertibility	Limited	Exchangeabl e	Limited	Exchangeable	Limited
	Debasement protection	Owned	Supervised	Owned	Supervised	Supervised
	Ease of use (usability)	Easily applicable	Easily applicable	Difficult to apply	Easily applicable	Easily applicable
	Efficiency and transaction costs	Non- Microtransac tional	Microtransac tional	Non- Microtransacti onal	Microtransactional	Microtransacti onal
	Payment and settlement speeds	Time- consuming	Time- consuming	Time- consuming	Promptly	Promptly
	Protection and security	Unprotected	Insured	Cryptographic ally secured	Insured	Cryptographic ally secured
	Reliability	Reliable	Reliable	Unreliable	Reliable	Unreliable
	Traceability	Pseudonymo us, Public history	Identified, Non-public history	Pseudonymou s, Public history	Identified, Non- public history	Identified, Non-public history
	Trust	Untrustwort hy	Trustworthy	Trustworthy	Trustworthy	Untrustworthy
Functional Parameters	Burnability	Burnable	Non- Burnable	Burnable	Burnable	Burnable
	Divisibility	Divisible	Divisible	Divisible	Divisible	Divisible
	Expirability	Expirable	Expirable	Non-Expirable	Non-Expirable	Non-Expirable
	Fungibility	Fungible	Fungible	Fungible	Fungible	Fungible
	Scalability	Non-Scalable	Scalable	Non-Scalable	Scalable	Scalable
	Spendability	Non- Spendable	Spendable	Non- Spendable	Spendable	Non- Spendable
	Tradability	Tradable	Non- Tradable	Non-Tradable	Tradable	Non-Tradable
Governance Parameters	Accountabilities	Public	Single entity	Public	Single entity	Consortium
	Authorization type	Public	Variable	Public	Private	Public
	Control structure / Decision rights	Hierarchical	Federated	Decentralized	Federated	Federated
	Incentive system	To Use Platform	To Use Platform	To Stay Long- Term	To Use Platform	To Enter Platform
	Money/Medium of exchange	Gold, goods or services	Fiat currency	Record	Record	Record
	Participants/Stake holders	Goods & Services	Notes & Coins	Token	Token	Token
	Pegging	Material of value	State Promise	Cryptographic protocol	State Promise	Composition of securities
	Representation	Physical	Legal	Digital	Legal	Digital
	Supply	Variable	Variable	Fixed	Variable	Variable
Purpose Parameters	Class	-	-	Coin/Cryptocu rrency	Tokenised Security	Tokenised Security

	Function	-	-	Work Token	Asset-Based Token	Asset-Based Token
	Role	Earnings	Earnings	Reward	Currency	Value Exchange
Technical Parameters	Chain	-	-	New Chain, new Code	New Chain, new Code	New Chain, new Code
	Layer	-	-	Blockchain (Native)	Protocol (Non- Native)	Application (dApp)

These characteristics were included in the codebook to code the newspaper articles.

To determine the metadata, the classes 'Organization', 'Person' and 'Region' have been included 1:1 in the codebook too which is in the appendix and contains descriptions and examples of each code. (Zavolokina, L., Dolata, M. & Schwabe, G., 2016).

3. METHODOLOGY

In this chapter the procedure for the bachelor thesis at hand is presented. It describes how the tasks shown in Figure 1 were performed. The structure was divided into five phases. First the framework was developed. Then the relevant ones were selected from all possible online newspaper articles to form the corpus. Then metadata of these newspaper articles were collected and analyzed. Further on the qualitative analysis took place and finally the public discourse analysis. Thus, the necessary information for this thesis could be collected to answer the research questions and to bring new insights.



Figure 1: Work sequence. Own representation.

The goals are to identify the characteristics of the Libra cryptocurrency so that they can be compared with the characteristics of other payment systems and to get an overview of the public discourse of newspaper articles about the promises that Libra made about their characteristics. For this thesis a qualitative research approach is chosen, because it offers a very open procedure in the case of newspaper articles, which makes it possible to extend the framework during the analysis and it will help to compare coded characteristics of different payment systems like fiat currencies, Bitcoin, stable coins and PayPal.

3.1. Phase 1: Framework development

The first step was a literature review to develop a framework that can map the characteristics of the Libra cryptocurrency and other payment systems. This literature research helped to find a set of keywords suitable to find newspaper articles containing information about the cryptocurrency Libra. The objectives were achieved, namely, to create a framework for the comparison of Libra and other payment systems, which can be expanded, and to create the keyword list for the article search.

3.1.1. Payment system grid development

Secondary data analysis helped with collecting relevant data about other payment systems (Johnston, 2013) which were helpful to complete the information about the payments systems.

3.1.2. Deductive codes from literature

The literature review lead to a basic understanding of how payment systems can be characterized and compared. During this phase, the framework to collect data about Libra and other payment systems was developed. Following sources were a guidance on how to do literature reviews to collect deductive codes (Okoli and Schabram, 2010; Vom Brocke, Simons, Riemer, Niehaves, Plattfaut and Cleven, 2015; Vom Brocke, Simons, Niehaves, Riemer, Plattfaut and Cleven, 2009; Schryen, 2015).

3.1.2.1. Persons, Regions, Organizations

Zavolokina, Dolata & Schwabe (2016) have already defined the classes "organization", "person" and "region" in their work. These have been included in the codebook, which can be found in the appendix. In the category "person", the code government official was inductively inserted to code the many high government officials. In the category "organization" the code publisher was added inductively to code statements made by the authors of the outlets.

3.1.2.2. Characteristics

The characteristics have been divided into categories and come from different sources that have already done similar work. The reason why not one of these frameworks was enough was because the whole spectrum had to be covered by payment systems, as well as tokens. (Abrazhevich, D. 2001; Rambure & Nacamuli, 2008; Schulze, T., Seebacher, S. & Hunke, F., 2020; Oliveira, Zavolokina, Ingrid & Schwabe, 2018)

3.1.3. Evaluation of Libras characteristics

From the options surveyed, the appropriate characteristics were used to clearly classify the payment systems. Libras characteristics were also filled in. Some of these characteristics have already been classified by Schulze, Seebacher & Hunke (2020). Further classifications have also

been made in other papers (Oliveira, Zavolokina, Ingrid & Schwabe, 2018; Rambure & Nacamuli, 2008).

3.2. Phase 2: Corpus building

The second step was to collect newspaper articles that discussed Libra. These newspaper articles were checked for relevance and compiled into a corpus. The goal was to create a set of newspaper articles that met the specific criteria.

Literature review was performed on discourse analysis to understand how other researchers developed strategies on how to find suitable keywords for an article search (Saldaña, 2015; Creswell, 2009; Flick, 2009; Ritchie and Lewis, 2003; Cassell and Symon, 2004; Rädiker and Kuckartz, 2019). After the literature review on discourse analysis a list of relevant keywords and other criteria for the newspaper article search were created.

To find matching newspaper articles the global news database Factiva was used. Only newspaper articles that were available in paper- and online-form and written in German or English were considered. Matching newspaper articles were found by using the keywords that were evaluated in step one.

Duplicate articles from different publishers were not counted more than once. If an article contained an opinion or a statement, the article was included, which means that articles containing only facts were not coded. In order for a newspaper article to be considered relevant, it had to be written either in German or English, a quarter of the article had to refer specifically to Libra, be published from 2 May 2019 onwards and have a minimum word count of 150.

About keywords:

The selector "atleastN" could be used to find articles in which the words "facebook" and "libra" are mentioned at least n times.

It should be possible to find about 1000 articles with the selected keyword. Some rules were defined for the keyword. It must contain keywords to include the English and German newspaper articles.

It must distinguish between the Libra cryptocurrency, the zodiac sign Libra and the Roman currency Libra. These parts were not included in the final search term: "not horoscope, not zodiac sign" because the number of excluded articles was less than twenty for each keyword. Does not include "Calibra" because the articles that mention Calibra also mention Libra. Will

not include the word "Calibra" because there are only 37 hits and many articles are short or discuss the similarity of their logo to the logo of another company. No companies could be included or excluded from the filter, as many of them were members of the Libra Association.

In tables 3 & 4 there is a list of possible search terms that have been considered for use in the work. There is a short description and the number of items found.

Search term	Description/Reason # of Articles found	
Libra same Facebook and	To find the most articles that	9'946
(crypto or cryptocurrency or	mention the cryptocurrency Libra in	
cryptocurrencies or blockchain	the same paragraph as Facebook.	
or Kryptowährung) and wc>200	Word count > 200.	
Atleast2 Libra and atleast2	To find the most articles that	6'921
Facebook and (crypto or	mention the cryptocurrency Libra in	
cryptocurrency or	the same article as Facebook.	
cryptocurrencies or blockchain	Facebook and Libra are each	
or Kryptowährung) and wc>200	mentioned twice at least. Word	
	count > 200	
Libra same Facebook and	To find the most articles that	7'858
(crypto or cryptocurrency or	mention the cryptocurrency Libra in	
cryptocurrencies or blockchain	the same paragraph as Facebook.	
or Kryptowährung) and wc>500	Word count > 500.	
Libra and atleast2 Facebook	To find the most articles that	6'526
and (crypto or cryptocurrency	mention the cryptocurrency Libra in	
or cryptocurrencies or	the same article as Facebook.	
blockchain or Kryptowährung)	Facebook is mentioned twice at	
and wc>500	least. Word count > 500	
Atleast2 Libra and atleast2	To find the most articles that	5'567
Facebook and (crypto or	mention the cryptocurrency Libra in	
cryptocurrency or	the same article as Facebook.	
cryptocurrencies or blockchain	Facebook and Libra are each	
or Kryptowährung) and wc>500	mentioned twice at least. Word	
	count > 500	
Atleast3 Libra and atleast3	To find the most articles that	4'455
Facebook and (crypto or	mention the cryptocurrency Libra in	
cryptocurrency or	the same article as Facebook.	
cryptocurrencies or blockchain	Facebook and Libra are each	
or Kryptowährung) and wc>500	mentioned three times at least.	
	Word count > 500	
Atleast4 Libra and atleast3	To find the most articles that	814
Facebook and (crypto or	mention the cryptocurrency Libra in	
cryptocurrency or	the same article as Facebook.	
cryptocurrencies or blockchain	Facebook is mentioned thrice at	
or Kryptowährung) and	least, and Libra is mentioned four	
wc>1200	times at least. Word count > 1200	
Atleast4 Libra and atleast3	To find the most articles that	640
Facebook and (crypto or	mention the cryptocurrency Libra in	
cryptocurrency or	the same article as Facebook.	

Table 3: Search terms. Own representation.

cryptocurrencies or blockchain	Facebook is mentioned thrice at	
or Kryptowährung) and	least and Libra is mentioned four	
wc>1200	times at least. Word count > 1200	

With a 'headline and lead paragraph only' search, 4'276 articles were displayed for the first search term. 791 articles are found for the first search term if it had to match the headline of the article.

Table 4: Search term only in headline and lead paragraph. Own representation.

Search term	Description/Reason	# of Articles found
Libra same Facebook and	To find the most articles that	4'276
(crypto or cryptocurrency or	mention the cryptocurrency Libra in	
cryptocurrencies or blockchain	the same paragraph as Facebook.	
or Kryptowährung)		

Operators like 'atleastN' (a word needs to be in the text at least N times) and 'wc' (word count) are not usable when searching in headlines and lead paragraphs only - there was a syntax error.

The final keyword should have been: "Libra same Facebook and (crypto or cryptocurrency or cryptocurrencies or blockchain or Kryptowährung) and wc>200".

However, because the word count operator cannot be used in the headline and lead paragraph search, the articles were subsequently sorted out manually.

Out of 4381 results, 2479 were duplicates. Out of the 1902 articles, 371 were manually sorted out with texts that had less than 150 words. 1531 articles were examined, and relevant ones were coded. 1531 files (minus manually sorted duplicates) were created in MaxQDA. The final number of articles included in the set is 1487.

My task was to go through all the articles on Factiva and select those that had a word count of more than 150. This was necessary because the filter 'headline and lead paragraph only' was used and therefore the wordcount could not be considered. The RTF's were downloaded, and the word files were imported into MaxQDA.

3.3. Phase 3: Metadata

The third part was to collect metadata on these articles and enter them into an Excel spreadsheet. Analyzing the data on the corpus of newspaper articles brought the result of an Excel table with collected metadata to Libra.

The relevant metadata were those from which interesting facts could be read. The goal was to collect key figures of relevant newspaper articles. Since the articles were entered in MaxQDA, they could be divided into sets by months and thus easily counted. The outlets were exported via MaxQDA export function into an Excel file and sorted there, so that the number of articles per outlet could be recorded.

The important metadata were 'relevant articles per month' and 'relevant articles by outlet'. To filter out the 'most mentioned regions', the 'language distribution' and the 'most mentioned executives', Factiva was able to output this information directly as a graphic. These graphics were analyzed and evaluated according to special features and significant deviations.

3.4. Phase 4: Qualitative analysis

The fourth part was the qualitative analysis of the corpus using the software MaxQDA. In this part the statements in the collected newspaper articles were found and coded according to the created codes. The goal was to obtain a versatile and clear table of coded data that would help to describe the public discourse regarding Libra.

3.4.1. Codes: Codebook development

In the first part, the previously developed payment systems framework was used as the basis for deductive coding to form the codebook. In addition, the framework was extended by inductively developing own codes and subcodes to encode the items comprehensively (Saldaña, 2015). The results were used to complete the framework, comparing the characteristics of Libra with those of other payment systems such as Fiat currencies, Bitcoin, stablecoins and PayPal.

3.4.2. Framework: Analysis of payment systems classification

The payment systems were classified accordingly. In the results, the Libra characteristics were then compared with those of other payment systems. The design choices of Libra became visible through the step-by-step examination of the individual characteristics.

3.5. Phase 5: Public discourse analysis

In the fifth part, the statements in the newspaper articles about the characteristics of Libra were evaluated. The promises of Libra made in the white paper are compared with the views expressed in the newspaper articles, and the public discourse is discussed in relation to other payment systems, including a comparison of the characteristics of Libra and the other payment

systems. The implications for the ecosystem were discussed with the interests of the stakeholders to determine the underlying reasons for the parties' behavior.

3.5.1. Qualitative analysis & metadata analysis consolidation

The results of the qualitative analysis and the metadata were consolidated and interpreted in a comparison between the characteristics of Libra and the other payment systems. For each of the categories, the characteristics and their number of codes were presented. Conclusions were drawn and discoveries were interpreted. The result was a text comparing the promises of Libra and the views expressed in newspaper articles, and a text interpreting the public discourse on Libra in relation to the other payment systems.

3.5.2. Characteristics

The comments in the newspaper articles assigned to the characteristics were evaluated. This made it possible to write texts that compare the features of Libra with the features of other payment systems. Thus, information from the comments in the newspaper articles could be assigned to the characteristics of Libra and be analyzed.

3.5.3. Statement analysis

In this part it was analyzed who made which statements on the following topics and the reasons for this: statements for and against Libra, including the consequences of these statements and whether they apply to cryptocurrencies in general or only to Libra. Further topics are barriers that impede the development of Libra and the opportunities and threats that Libra brings with it. Every statement must be evaluated, who it comes from and what consequences it has. These contents were not conclusive and were supplemented within the framework of the qualitative analysis.

4. RESULTS

The collected data of the newspaper article analysis are presented and evaluated here. In the following, the metadata trends are illustrated in order to provide an overview from the perspective of public discourse. The findings are then presented according to the dimension categories (persons, regions, organizations, and characteristics) of the payment systems classification. Further information can be taken from the codebook, which is attached. With a focus on the stance of certain groups towards Libra, characteristics are then examined and motivation as well as underlying reasons will be questioned. All that follows now are insights gained from the analysis of the newspaper articles that were collected and coded during this thesis.

4.1. Metadata trends

With the help of the metadata, it is possible to examine the trend and correlation of the public discourse. Therefore, in this step the course of the monthly frequency of articles and the distribution of stances towards Libra during these months are considered. In order to gain clarity about which groups have a certain attitude towards Libra, the distribution is illustrated.

4.1.1. Relevant articles per month



Figure 2 shows the number of codes and the number of articles per month that belong to the corpus.

Figure 2: Frequency of articles and codes for the months from May to December 2019. Own representation.

During these months the following numbers of relevant articles were coded for the corpus: May, 5 articles & 25 codes; June, 141 articles & 1000 codes; July, 128 articles & 920 codes; August, 49 articles & 375 codes; September, 88 articles & 695 codes; October, 126 articles & 850 codes; November, 34 articles & 245 codes and December, 17 articles & 100 codes.

In June 2019 Facebook released the white paper and testnet for Libra. (Libra, June 2019) This and next month's number of articles were the highest as Facebook made headlines with this announcement.

In September 2019, Libra has felt strong headwinds from politicians, bankers and regulators. Statements by senior government officials raised the voice that Facebook could be dangerous, leading to more newspaper articles being written about it. (VNCS190916)

In October 2019, the first partners of the Libra Association withdrew. The first one was PayPal. Later, Visa, Mastercard, eBay, Booking and Stripe followed. (BIZINS191017)



Document Distribution By Date

4,386 documents From 05/01/2019 to 12/31/2019

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Figure 3: Document distribution by date. Adapted from Factiva, 2020.

Figure 3 shows the number of articles that were released in the months from May 1, 2019 until December 31, 2019. This graph correlates start with figure 2, which indicates that the number of relevant statements remained constant and moved linearly with the number of articles.

4.1.2. Relevant Articles by outlet

In this part the absolute numbers of relevant newspaper articles from different outlets are presented and discussed.

The number of different outlets that published at least one relevant newspaper article for this thesis are 216. Figure 4 shows the number of articles that were written per outlet.



Figure 4: Frequency and distribution of the number of relevant articles per outlet. Own representation.

The distribution of the number of different outlets is relevant to check that not a few outlets shape a certain picture about Libra. The numbers indicate that such a distortion does not occur. The highest number of relevant newspaper articles was published by "The Cointelegraph" with 38 out of 588 articles. This is about 6.46% of the total number. Among the three most published outlets are also "Reuters News" and "CoinDesk.com" with 31 and 30 articles respectively. These three together account for about 16.84% with 99 of 588 articles. Among the top 5 most-

published outlets are also "CE NoticiasFinancieras" and "Blick Online" with 28 and 22 articles. With 149 of 588 articles, the top 5 account for a share of approx. 25.34%.

The outlets "The Cointelegraph" and "CoinDesk.com" have published many of the statements about Libra. The reason for this is probably the fact that these two outlets specialize in cryptocurrencies and Blockchain topics. The fact that Facebook and other big players are behind the cryptocurrency Libra helps. Another interesting outlet is "Blick Online". Although this outlet is a Swiss national magazine, it is one of the top 5 outlets that has published the most statements about Libra. One reason is certainly that the main center of Libra in Geneva is located in Switzerland. Another reason is that Ueli Maurer, a member of the Swiss Federal Council, has made a statement to Libra which is very negative and was quoted

"Facebook's cryptocurrency project in this form, has thus failed. [...] I don't think (Libra has a chance in its current form), because central banks will not accept the basket of currencies underpinning it." (RVESEN191228, Pos. 10)

4.1.3. Most mentioned regions

Here it is shown from which regions most of the statements about Libra originate. Figure 5 shows the number of regions that were mentioned in the articles.


Most Mentioned Regions

Figure 5: Number of mentioned regions. Adapted from Factiva, 2020.

This was clearly foreseeable, since the selected languages are German and English, and in the United States and the United Kingdom people speak mainly English. In Germany and Switzerland German is spoken. In addition, the headquarters of the Libra Association is located in Geneva, Switzerland. China has surprisingly many entries. This could be because they themselves want to launch a government stable coin on the market (FBCOM191112). France is often mentioned, as the French Finance Minister has been mentioned very often because of his harsh statements towards Libra (BLOKN190926).

4.1.4. Most mentioned executives

Here it is presented which executives make the most statements regarding the cryptocurrency Libra. Figure 6 shows the amount the most mentioned executives.

David A Marcus	843
Mark Elliot Zuckerberg	520
	000
Jerome H Bowell	
Seloment Fowell	215
Maxine Waters	202
	202
Donald John Trump	
Bonaid Sonn Hump	188
Steven Terner Mnuchin	170
Mark Joseph Carney	400
	133
Sharrad Campball Brawn	
	107
Benoit Coeure	47
	47
Sheryl Kara Sandberg MBA	
on organization of the borg more	47
4,386 documents From 05/01/2019 to 12/31/2019	
	0000 E - K - AU - AU - I - AU

Most Mentioned Executives

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Figure 6: Numbers of most mentioned executives. Adapted from Factiva, 2020.

David A. Marcus is the Facebook person responsible for the Libra project (HNDZT190926) Since he is the leader, it is not surprising that he was mentioned most. Mark Elliot Zuckerberg is the Facebook CEO and is the person who started the Libra Project. His person is rather controversial due to the data scandals around Facebook (RHEPO190619). Jerome Powell has repeatedly expressed great concern about the Libra Project. He has the most doubts about data security and financial stability (NFINCE190902). As the U.S. Federal Reserve, his opinion is sought. Many of the other executives named are politicians and senior government officials.

4.1.5. Language distribution

Here it is presented how the number of articles is distributed between German and English language. Figure 7 shows the language distribution between German and English articles.



Most Mentioned Languages

Figure 7: Language distribution (English/German). Adapted from Factiva, 2020.

That the number of English articles predominates is probably due to the fact that the topic of Libra has been discussed worldwide and English is spoken much more often.

4.2. Persons

In order to determine whether opinions about Libra differ between different groups, groups of people were formed who differ in the position of their professional field. Most of the statements were made by government officials and most of them were negative towards Libra. The code government official has been assigned a total of 493 times. The codes of the category Person were used for each statement. The code 'Author' was assigned 87 times, once more often than the code 'Facebook' that was assigned 86 times. Figure 8 shows the number of encodings of characteristics of the category person.



Figure 8: Frequency and distribution of codes for category Person. Own representation.

With these codes, the type of person who made the statement about the cryptocurrency Libra was recorded.

4.2.1.1. Facebook

The code 'Facebook' was given to all employees of Facebook. This code includes Mark Zuckerberg, who also talked about the vision to develop a payment system that allows people to send money as easily and cheaply as text messages (DAMONL191023). The statements of the responsible Facebook manager David Marcus were coded very often, because he is considered to be the mouthpiece for Libra. He said that especially in the early days Libra was used for transfers between different currencies and that Libra would compete with services like Western Union or MoneyGram. But the main objective is to make Libra a fully-fledged means of payment that can be used everywhere (RHEPO190619).

4.2.1.2. Government official

The only code in the category 'Person' that was assigned more often than the code *facebook* was 'Government official', which is assigned to all government officials, including presidents. This code has been assigned 493 times. This is probably due in part to the fact that statements made by presidents and senior government officials are more widely used and quoted in newspapers. Well-known statements come from the French Finance Minister Bruno Le Maire, the president of America, Donald Trump, and a member of the Swiss Federal Council, Ueli Maurer. All of them say that the Libra Project must not take place in this way. The main reason they cite is a lack of regulation. Le Maire speaks here of a danger to the sovereignty of states and their payment systems. More about this, however, is explained in the characteristics section (APRS190618, BRACOI190731-1, IIND190713, CONTEL191229).

4.2.1.3. Author

For example, if the statement was made by the author who wrote the newspaper article, the code 'Author' was assigned. In this case the author himself has implied: "What a combination Libra offers: convenience and currency stability." (FBCOM191112). The authors' statements were often rather neutral, as they wanted to report on events objectively.

4.2.1.4. Additional codes

The other codes in the category are Banker (23 codes), CXO which was used for CEOs, CFOs and other Chief titles (zero codes), Head of company (69 codes), Investor (zero codes), Lawyer (seven codes), Libra Association member (13 codes), Politician (21 codes) & Researcher (42

codes). Some of the people would have fit several codes, like Facebook CEO Mark Zuckerberg. These were then assigned to a more enterprise level code when uncertain.

4.3. Regions

In order to be able to trace where most of the statements about the cryptocurrency Libra came from, codes were assigned for the region. It must be considered that only English and German language newspaper articles were relevant for the corpus. Accordingly, statements from other regions might not be considered if they were not also published in German or English. The codes of the category Region were used for each statement. Figure 9 shows the number of encodings of characteristics of the category region.



Figure 9: Frequency and distribution of codes for category Region. Own representation.

Accordingly, statements in North America (427) and Europe (358) have been identified. 49 statements originate from Asia.

4.3.1.1. North America

Why the vast majority of the relevant articles originate from North America and Europe cannot be explained in detail. Because the languages English and German were chosen and English is spoken in North America, most articles come from there. The many articles that originate from North America can possibly be attributed to the fact that the company Facebook has its headquarters in the USA (SILBJO190617). Therefore, the American authorities in particular could be interested in regulating the new currency (AMB191116). Another possibility could be that many of the large companies of the Libra Association are based in the USA. In any case, it is remarkable that the topic of Libra has been discussed so much that even the American President Donald Trump has made a statement to Libra (BRACOI191228).

4.3.1.2. Europe

Many of these statements also originate from Europe. In Europe the issue of Libra has been raised by various people. Well-known speakers were the French Finance Minister Bruno Le Maire and Ueli Maurer, a member of the Swiss Federal Council (J190619).

But they are not the only ones who have made statements on Libra. The European parliamentarian Markus Ferber has also made critical comments on Libra. He called Facebook a "data kraken" and said that one should be careful that Facebook does not become a shadow bank (AFPDE190618). Libra has apparently been addressed and discussed by governments in Europe. In September, even France and Germany declared that Libra's development should be blocked. The two countries have stated in a joint letter: "no private entity can claim monetary power, which is inherent to the sovereignty of nations". (AUSTLN191009).

4.3.1.3. Asia

In a newspaper article from Asia, it was said that Facebook was practically forcing the Chinese central bank to intervene in the introduction of the cryptocurrency Libra. They now want to do this with a specially announced digital cryptocurrency, as People's Bank of China (PBOC) official reported. (SCMP190708)

4.3.1.4. Additional codes

The other codes in the category Region are Africa (two codes), Australia (six codes), Middle East (one code) and South America (zero codes).

4.4. Organizations

Libra is a topic that occupies many people. Therefore, the spectrum of different organizations through which statements were promoted was very mixed. The codes of the category Organization were used for each statement. Figure 10 shows the number of encodings of characteristics of the category organization.



Figure 10: Frequency and distribution of codes for category Organization. Own representation.

The most used code of the category organization was 'Governmental organization'. This code was assigned 441 times. Other notable codes in the Organizations category were Financial Institution with 108 codes and Facebook with 86 codes.

4.4.1.1. Governmental organization

This code was given when the person who made a statement was a government official, such as the French Minister of Finance Le Maire, or a collection of government representatives, such as the G20, which is made up of the financial leaders of the world's largest nations. (RVESEN191031, BLOKN191025)

The task of governmental organizations is to ensure law and order. This makes them rather critical of Libra, because Libra could pose a threat to the financial system and the data collection practices of Facebook are questioned.

4.4.1.2. Financial institution

The code Financial institutions mainly includes banks and central banks. They see financial stability as being at risk and the possibility that a disadvantage could arise for people who would not use the cryptocurrency Libra. This would lead to anti-competitive competition between currencies. Mario Draghi, President of the European Central Bank, expressed concerns and called for caution. (BLOKN191002) The main characteristics complained of here are currency competition and financial stability.

4.4.1.3. Facebook

An often-used code was Facebook. This code was given to employees and the owner of Facebook. The CEO & founder Mark Zuckerberg and the head of the Libra project and former PayPal executive David Markus were quoted most of all. (SILBJO190617) Their goals were to present the Libra Project in a positive light. Therefore, they especially pointed out the possibility of giving people who do not have a bank account the possibility to make transactions with Libra. (NEWVEN190618)

Attention was drawn to the simplicity of sending the money (DAMONL191023) The company Facebook has also announced that it wants to cooperate with money laundering laws and other regulations. This is to be done by unencrypting the Blockchain so that third parties can also make an analysis and track fraud (COINDSK190618).

4.4.1.4. Libra Association member

The Libra Association members have not reported themselves very often. A possible reason for this could be an agreement within the Association or also because the issue is very sensitive and is not perceived as positive by governments and authorities. However, people from the Libra Association have come forward, for example Dante Disparte, who is the head of politics and communication of the Libra Association. His main message was that the Association is working to maintain good communication with regulators and policy makers; to fight money laundering and terrorist financing; and to discuss other hurdles ahead of time. (RTDJGE191002)

4.4.1.5. Additional codes

Originally, 13 codes were deductively assigned to the category Organization. The code 'Publisher' was determined inductively, because statements of authors of newspaper articles could not be classified well so far.

The other codes in the Organization category are Accelerator (three codes), Consulting company (13 codes), Educational institution (28 codes), IT company (32 codes), Property company (zero codes), Regulator (25 codes), Retailer (zero codes), Startup (zero codes) and Telecommunication company (three codes).

4.5. Characteristics

The characteristics form the core of the thesis. Most of them were deductively determined from various papers and were divided into six categories which will be discussed in more detail in the following chapters.

One characteristic was coded for each statement. There were a total of 39 characteristics, which were classified into the six categories. The most used category, with 540 codes, is that of environment related ecosystem parameters. The codes of this category were used to describe the impact Libra has had on organizations and structures.

The second most assigned category was that of user related ecosystem parameters. This category was used when a statement focused on the effects of person- or society-related impacts of Libra. Codes in this category were coded 223 times.

The third most awarded category was that of governance parameters, which were used for statements regarding the construction and leadership of Libra. This category was used when, for example, a statement was made about the authorization type or the control structure of Libra. The codes in this category were coded a cumulated 59 times. Figure 11 shows the number of codes for characteristics in the six characteristic categories.



Figure 11: Frequency and distribution of codes for category Characteristics. Own representation.

The codes of the other three categories were not assigned very times. Functional parameters were coded 12 times. These codes were used when dealing with the characteristics of Libra's functionalities, such as burnability or scalability.

Purpose parameters were only coded eight times. These were assigned when the statement referred to the class, function, or role.

Technical parameters were not coded once.

4.5.1. Environment related ecosystem parameters

In the category of environment related ecosystem parameters, the three most frequently used codes were used almost equally often. These three were also often used simultaneously. With 119 codes, legal and regulation was the most used of all characteristics. Shortly after that, with 118 codes, the characteristic money laundering. With 100 encodings also the topic sovereignty made it into the top three. Figure 12 shows the number of codes in this category for each characteristic.





The codes of the category of environment related ecosystem parameters were used when someone made a statement about the impact Libra has had on organizations and structures. Here, the effects on the financial system and the economy of the countries were particularly mentioned. Many articles mentioned German Finance Minister Olaf Scholz and French Minister Le Maire who had said that private companies cannot claim monetary powers. Facebook was badly regarded for this, because they wanted to bring a kind of private money into the market (AFPDE191018). From this it is clear that Libra is classified as a special danger, because they could exercise a lot of power with a private currency.

4.5.1.1. Legal and regulation

The code legal and regulation was used when reference was made to the regulatory measures that still had to be taken. These statements were often mentioned by different people. Facebook has also commented on this and said that it is working with the regulators (CONGDP191122).

However, at the Libra hearing, according to cryptologist Thomas Heilmann, questions were answered in a professionally vague manner. Libra representatives were particularly evasive in their responses to questions about securing financial stability (HNDBLT191024). This suggests that Facebook's strategy is to announce full corporate capability to the outside world but not to offer transparency in important discussions. This has a correspondingly negative effect on opinion of the project and makes many of those involved sit up and take notice. Libra thus makes itself a direct target for the authorities.

The French Finance Minister Bruno Le Maire was often mentioned in connection with regulatory demands. One concern he shared was that Facebook could collect millions of data and therefore the project would have to be regulated (HRETZ190619). From this it is clear that regulation must take place. Many reasons have now been given why the Libra project should be regulated. It is remarkable that most of them speak of regulations instead of prohibitions. This in turn means that the project could actually take place under certain circumstances.

Especially the companies that are members of the Libra Association felt great pressure due to the announced regulatory measures. Some of these companies later left the Libra Association, possibly due to regulatory pressure. (BUSIND190828, TELUK191008)

4.5.1.2. Money laundering

David Marcus, the manager of the Libra project, also commented on the money laundering problem at the start of the project, but only said that anti-money laundering measures would be introduced at wallet level (RHEPO190619). Facebook has not made any further comments on this matter, which in turn has raised questions. As a result, questions from the authorities followed and the whole issue was examined very closely, as the Money Laundering Act is taken seriously and there seems to be a high risk that a cryptocurrency like Libra could be affected by money laundering.

In order to minimize the money laundering potential of Libra, a G7 task force was established to ensure how central banks apply the Money Laundering Act to Libra (LBA190621-1). The issue of money laundering is thus being addressed internationally and measures are already being taken to ensure this.

The fact that the code money laundering has been used 118 times shows the relevance of this issue. The fact that the states are already using task forces shows that the topic is not only being talked about, but that it is also very serious and needs to be dealt with as quickly as possible.

4.5.1.3. Sovereignty

The issue of sovereignty was also raised worldwide. It was repeatedly associated with regulatory conditions. Here too, Facebook has expressed its views.

Facebook said that they want to work with some central banks to make sure that they won't compete with sovereign currencies (LBA190905-2). Interestingly, Facebook has commented on all relevant topics and would like to address them. But what is striking is that Facebook often argues that they are in contact with authorities. However, there are no concrete suggestions as to how these problems could be solved. This in turn prompts the authorities to ask further questions and question the intentions of Facebook.

It was sometimes even mentioned that the French Finance Minister Bruno Le Maire spoke of a possible ban on Libra in Europe (DIEP191019). The decisive factor for this point was the threat to state sovereignty posed by Libra.

However, Le Maire said that he would agree that the Libra cryptocurrency should be used for transactions. He made it clear, however, that Libra must not become a sovereign currency (HRAZI190619, pos. 36).

4.5.1.4. Additional codes

Of the 12 codes, three were mentioned particularly often.

The other codes in the category of environment related ecosystem parameters are Blockchain development (13 Codes), Currency competition (32 Codes), Deflation of traditional currencies (zero codes), Financial stability (68 Codes), Global currency (11 Codes), Illicit transactions (15 Codes), Payment instruments (3 Codes), Price stability (20 Codes) and Private money (41 Codes).

The Code Financial stability was also very often mentioned in connection with regulations. Financial experts called for caution, because Libra could become a kind of monopoly currency if it were used widely enough (WORLD190930). So, what is at stake here is the potential danger that Libra could become a more powerful currency than other government currencies.

4.5.2. User related ecosystem parameters

The category of user related ecosystem parameters includes seven codes. Codes in this category have been assigned when the statement has an impact on potential users of the Libra platform. This is mainly about the protection of the users and what they think of Libra, or why they would be inclined to use the cryptocurrency Libra for transactions. Figure 13 shows the number of codes in this category for each characteristic.

The most used code is *protection & security* with a number of 76 encodings. The codes *trust and traceability* are almost equally represented. The code trust was encoded 54 times and traceability was encoded 52 times.



Figure 13: Frequency and distribution of codes for user related ecosystem parameters. Own representation.

4.5.2.1. Protection & security

The Code *protection & security* was used especially often. It was used when it came to potential security risks for Libra users and especially the necessary protective measures.

It was mentioned that there was a great danger that Facebook would collect the transaction data. Facebook itself has said that the transactions that users make can be openly tracked in the Blockchain. They therefore offer to keep the transaction data anonymous via the Calibra wallet. However, the transaction data would then be available to Facebook and the Libra Association members, which in turn would raise security concerns. (APRS190618)

I assume that Facebook would like to get its hands on the transaction data of users via the Calibra wallet. Since the code *protection & security* has been most often used when it comes to the relationship between Libra and the users, it is clear that the public's concerns are clearly about user security and data privacy.

Facebook has also not been a company that has strictly adhered to consumer data protection (HTMINA190705, BBPUB191105). It can be concluded from this that Facebook's intention could indeed be to get hold of consumer data in order to use it for its own purposes, profitably and without regard for the consumer. And this brings us to the next topic.

4.5.2.2. Trust

The trust in the company Facebook is very weak. Facebook has been severely criticized because of the Cambridge Analytica scandal, in which millions of Facebook data were misused. Especially the trust in Facebook's data protection suffers from this (HNIANS190621). Although Facebook still enjoys many users on its social media platform, the privacy scandal still remains in the memory. This can be seen above all in the high number of mentions in newspaper articles.

Facebook said that they still had a "reasonable amount of trust among its users" (DJDN190626).

4.5.2.3. Traceability

Facebook has made several comments regarding the traceability of transactions on the Blockchain. Their goal is to protect account information and financial data by anonymizing them with the Calibra wallet so that they can no longer be identified on the Blockchain. They also said that this data will not be shared with any third party (including Facebook) (WIRONL190618). It is therefore also clear to Facebook that the traceability of transactions should not be made publicly available. They also agree that the company Facebook must also not be allowed to access the data in order to use it for its business model.

A major problem that was often raised was the dilemma that if traceability was to be contained, it would have to provide for the anonymity and security of the users itself. Authorities would not be entirely sure of this and would not trust Facebook in this respect. (LBA190625-3) The

problem described can only be solved badly with Libra if there is no trust in the Libra Association. Traceability will either be publicly available or can be done by the Libra Association.

4.5.2.4. Additional codes

In addition to these three codes, another four codes belong to the user related ecosystem parameters.

The other codes in the category of user related ecosystem parameters are *convertibility* (zero codes), *ease of use/usability* (13 codes), *efficiency* (27 codes) and *reliability* (one code).

4.5.3. Functional parameters

The category of functional parameters includes particularly technical capabilities or conditions of the technology on which Libra is built. The main capability, which has been mentioned particularly often, is that of scalability. With seven mentions, this was mentioned most often within this category. This was followed by tradability with three mentions.



Figure 14 shows the number of codes in this category for each characteristic.

Figure 14: Frequency and distribution of codes for functional parameters. Own representation.

4.5.3.1. Scalability

Christoph Obereder has spoken positively about Libras scalability. He is well known in the crypto world and believes that Libra enables instant money transfer with 1000 transactions per

second. He compares this number with the number of transactions Bitcoin allows, which is 7 transactions per second (BUSIND190623). The number of possible transactions must be sufficiently high if many users want to use the payment system. The Libra Association will make sure that the system can reach such a number.

Regulators are particularly concerned about scalability in terms of the number of accessible users that Facebook could target. Facebook has already proven that they can establish a new system worldwide (BIZINS191022). The regulators are less concerned about the technical scalability of Libra using the Blockchain than about the possibility of getting a large number of people to use Libra as a payment system. The members of the Libra Association would also play a major role in this, as the number of their customers and users is considerable. This has not escaped the attention of the authorities and is taken seriously, as Libra could very quickly become very large and thus more difficult to control.

The scalability was sometimes positively and sometimes negatively addressed. The fact is that a completely decentralized system does not provide the necessary scalability and Libra would like to remedy this with a centralized system.

4.5.3.2. Tradability

The possibility for people in poorer countries to have a stable medium of exchange is seen very positively. People in developing countries are thus granted the opportunity to trade with Libra. (HNDBLT190626-2) This is a positive point because it can increase welfare.

One question that has not yet been clarified is whether Libra can be exchanged back into the national currency of a country.

According to the Libra Association, people will not be able to exchange Libra directly with the money that is in reserve. But Libra can be exchanged with other currencies at "authorized dealers". (HNDONL190729, LBA191023) The Libra Association does not want to profit from currency exchange but wants to keep the deposited funds in its account. This is to be seen rather negatively, since once deposited money cannot be reclaimed. Furthermore, there is no guarantee that the exchange into all currencies will be possible. So, if you want to exchange your Libra into the currency of a country, you may have to do this in a detour.

4.5.3.3. Additional codes

Of the 7 codes, two were mentioned more often.

The other codes in the category of functional parameters are Burnability (one code), Divisibility (zero codes), Expirability (zero codes), Fungibility (one code) and Spendability (zero codes). These characteristics of Libra may have been less addressed because of its technical origin. However, they may also not have been considered very relevant.

4.5.4. Governance parameters

The category of governance parameters includes eight codes. Codes in this category have been assigned when the statement referred to the type of construction or the structure and order of the Libra platform. This is mainly about who would be allowed to use the platform for Libra as a means of payment, how these people could even create access to it and why people would be inclined to do so. It is also about who controls Libra and how decisions are made. Another issue here is also how to ensure that Libra retains its value.

The most used code is *authorization type* with a number of 31 encodings. The code *pegging* and the code *control structure* are almost equally represented. The code *pegging* was encoded ten times and *traceability* was encoded eight times. Figure 15 shows the number of codes in this category for each characteristic.



Figure 15: Frequency and distribution of codes for governance parameters. Own representation.

4.5.4.1. Authorization type

Unlike Bitcoin, Libra is not a completely decentralized Blockchain. The Libra Blockchain is managed and controlled by the Libra Association. In addition, not everyone can participate in

the system, but must establish a control. Only authorized accounts will be able to make transactions on the Libra Blockchain (BUSIDA190807). This shows that the Libra Association attaches great importance to being able to identify in some way the persons of the active Calibra wallets. Otherwise this would be a big problem, because otherwise people could create anonymous accounts and thus have the possibility to hide their money in front of everyone.

According to Facebook, a focus is on helping people who have no way to get a bank account (HRETZ190619, BLTENE190618). This could be a great advantage, especially for people who cannot create accounts at banks. One problem, however, is the identification of the persons. Facebook has not reported much in this regard, but it is clear that this is a problem that has to be solved.

No negative statements were found for the authorization type code. All statements about this code were positive or neutral. These statements were mainly made by Facebook itself and some individuals. Whether the authorities or regulators and other groups of people have not yet thought about this, or whether the topic of authorization type does not have great relevance for them cannot be determined exactly. It is possible that further, previous problems may have to be solved first.

4.5.4.2. Pegging

An important issue for building Libras financial system is pegging. In order for the cryptocurrency to be financially stable, it must contain some kind of value. Bertrand Perez, director general of the Geneva-based non-profit association, said Libra will be backed by a basket of currency assets and short-term government bonds to avoid the wild swings seen with bitcoin and other cryptocurrencies. (J190614, DAMONL191003) The Libra Association therefore wants Libra to have a value that is not highly volatile.

The analysts of S&P Global Ratings have said that the value of Libra cannot be kept quite stable as pegged assets also fluctuate (TRADAR190626). A complete stability is therefore excluded. Accordingly, however, Libra should also undergo corresponding value adjustments in the event of inflation and deflation of some pegged currencies.

Only one source has expressed a negative opinion about pegging Libra. It said that it was an illusion that Libra could keep the value stable since neither Facebook, nor any other party involved has unlimited resources over the pegged currencies. (DSTAR190621) This statement was made only once. It may be a misconception, as the hypothesis that Libra can only be kept stable with unlimited resources of the pegged currencies is not clearly proven. However, this

aspect is very interesting, as it would jeopardize Libra's basic goal of being perceived and used as stablecoin.

4.5.4.3. Control structure

The Libra Association has its headquarters in Switzerland. The non-profit organization is managed on several levels. One of them is a council, in which each of the Libra Association members has a representative. With a two-thirds majority of these representatives all decisions can be changed (COINDSK190618, ONDGD190801). Adam Grimsley, an American investor explains that Libra is accordingly centralized and permissioned (LONFIN190626).

It was planned that the Libra Association would grow to up to 100 members. The cryptocurrency expert Christopher Obereder therefore speaks of a decentralized organization, as the 100 companies each have the same number of voting rights (BUSIND190623). The question of decentralization is therefore not entirely clear. It is clear that not only one company is behind Libra, but also that decisions are not made by all users of the platform, but only by the Libra Association members. According to the Japanese businessman Matsumoto (CONTEL190929), one criticism of this control structure is that a majority decision could prevent the implementation of monetary policies in developing countries.

4.5.4.4. Additional codes

In addition to these three codes, another five codes belong to the governance parameters.

The other codes in the category of governance parameters are Accountabilities (one code), Decision rights (one code), Incentive system (four codes), Representation (three codes) and Supply (one code).

4.5.5. Purpose and technical parameters

Codes of the categories purpose parameter and technical parameter were very rarely used. For the technical parameters null codes were used. Here the codes would have been chain and layer. One possibility why they were not used might be that they are too technical or not relevant enough. The construction of a Blockchain was discussed, but it was never about the technical parameters.

The codes of the purpose parameters were the code class with 0 encodings, function with four encodings and role with four encodings.

A main topic of the codes function was interoperability. Facebook said that the Libra wallet Calibra could be used on all platforms. Interoperability is about communicating with other systems and making transactions accordingly (CONTEL191105). A report by the Bill and Melinda Gates Foundation addressed the need for financial innovation in Africa. Here too, attention was drawn to the problem of interoperability. One specific question, for example, was whether customers of a mobile network operator could only send money to other customers of the same mobile network operator (HNDBLT190717). By addressing this problem through the Libra Association with the help of a plausible solution, this issue was no longer often addressed. Libra should be able to send Libra through the Calibra wallet through digital devices with online access as easily as e-mails. This would enable Libra to overcome this problem.

4.6. Code cloud

Figure 16 shows the code cloud, on which the frequently used codes are displayed in larger font size.

The code cloud also clearly shows which are the main codes. This also roughly reflects the tendency of public opinion. What is particularly striking is that the attitude is rather negative and that government officials from governmental organizations in Europe and North America were mentioned most often.



Figure 16: Code cloud of used codes. Adapted from MaxQDA, 2020.

4.7. Stance distribution

With stance distribution, it is again a matter of seeing what the attitude of public opinion towards Libra is and how it has changed over the months since the announcement.

4.7.1. Stance distribution per month

Figure 17 shows the stance distribution per month in absolute numbers. Based on these graphics one should be able to recognize, when and how many articles with opinions about Libra were written. Here you can also see what attitude the public has towards Libra. In this case, you can see that the opinion in all months is predominantly negative.



You can also see the ratio of the number of articles over the months.

Figure 17: Absolute stance distribution per month. Own representation.

In June and July, the most evaluative statements were made. The largest number (47) of positive statements was made in June. This may have something to do with the fact that the project was being pushed and anticipated. Facebook also participated during this time with some of these statements that contributed to the large number of positive comments. (PBDBR190621)

The largest number (137) of negative statements was made in July. This may have to do with the fact that prominent politicians have spoken out against Libra and reacted to dangerous statements from Facebook. (LBA190702)

Figure 18 shows the stance distribution per month relative to each other. The relative distribution of public opinion compared to Libra is interesting because it does not take into

account the absolute amount of newspaper articles, but only the articles in the individual months. This shows when most positive, negative and neutral statements were actually made about Libra.



Figure 18: Relative stance distribution per month. Own representation.

Relative to the other months, more negative statements were made in September. This month, many parties have spoken out against the dangers posed by Libra. (FMETMA190917)

In November, more positive statements were made relative to the other months. It is not possible to say exactly why this month the statements were more positive than in the other months. One possibility, however, is that the announcement of Chinese stable coins has improved the view on Libra (FBCOM191112). This month's statements regarding the banks were striking. Some were fined for money laundering. Libra was protected because they were supposed to solve a problem that had not yet been solved even by the banks (CCARDM191112, FTCOM191106).

Figure 19 shows the total number of the stance distribution. This shows the absolute number of positive, negative and neutral statements towards Libra over all months. Thus, the attitude towards Libra is represented without taking into account the issue of time.



Figure 19: Total stance distribution. Own representation.

In total 842 statements were coded. The distribution tends to be negative. 575 out of 842 statements towards Libra have a negative attitude towards Libra. That is 68.30%. There were a similar number of positive and neutral statements. The number of neutral statements is 120 out of 842, which means that 14.25% of the statements are neutral. The number of positive statements is 147 out of 842 articles, which is 14.45%.

4.7.2. Stance distribution across groups

Most negative statements come from government officials (432/575). This is about 75% of all negative statements. The origin of these groups is in North America and Europe.

More than half of the positive statements (77/147) were mainly made by Facebook itself, or Facebook affiliates. This is about 52% of all positive statements.

4.8. Opposing groups

Many of the characteristics were evaluated very one-sidedly, which means that they were evaluated rather predominantly positive or negative. However, two of the characteristics are controversial. They are counted among these controversial ones, as they were mentioned at least 10 times positively and 10 times negatively.

These two include the code currency competition and the code money laundering. Currency competition was mentioned 17 times negatively and 10 times positively.

The main issue here was that the cryptocurrency Libra could weaken national currencies. Facebook's alliance with other global companies, whose reach is huge, could help Libra to be offered on a variety of platforms. Should Libra become a global currency, it would be less controllable and could further harm national currencies. (RVESEN191031)

After these statements, Facebook manager David Marcus replied that Libra should not be created as a competition to traditional currencies. They don't want Libra to interfere in monetary policy. (MMONLN190716) It is interesting to note that Facebook has also responded to this statement without giving clear definitions or measures.

The crypto expert and inventor of the cryptocurrency Ethereum, Vitalik Buterin, has also expressed himself in this regard. He said that the action of the Libra Association could be a wake-up call for central banks to launch their own stable coins as cryptocurrencies. (AIWIBA190916) These statements have sometimes strengthened the view that countries could also launch their own cryptocurrencies in order to minimize potential competition from Libra.

Money laundering was much more often mentioned negatively than positively. However, there were ten positive statements about Libra. On the other hand, there were 94 negative statements. The positive statements are exclusively from Facebook members and are very vague. It was only said that the problem is being addressed by using the Calibra wallet. (RHEPO190619)

The problem of money laundering has been strongly focused by authorities. The problem here is that the Calibra wallet is not supposed to make transactions on the Blockchain traceable. This is intolerable for the authorities and will be addressed accordingly. (LBA190621-1)

It can be seen here that most of the characteristics have clear opinions and there's not simply a general attempt to make everything look nice or bad. This way the really relevant issues can be addressed, and one can try to overcome the hurdles.

4.9. Main concerns of governmental organizations towards Libra

In this section the main concerns of governmental organizations towards Libra are explained. This section is interesting because the governmental organizations are the largest group of the category organizations that have spoken out against Libra. Thus, we can investigate which characteristics of Libra are mainly criticized by these organizations. In the next section we will describe the characteristics that were most often mentioned by governmental organizations. Afterwards, the motivation and possible underlying reasons are discussed. Governmental organizations were mentioned with 395 negative statements, 36 neutral statements and ten positive statements. A total of 575 negative statements were made in the relevant newspaper articles. With a share of 68.7%, they thus made the largest number of negative statements.

Reasons for this are that particularly high-ranking government officials have often been quoted and that governments of many countries have addressed the issue of the cryptocurrency Libra.

4.9.1. Characteristics

The main concerns of governmental organizations all belong to the environment related ecosystem parameters and the user related ecosystem parameters.

With 83 mentions, the sovereignty issue was most frequently addressed by governmental organizations. 81 times of these mentions were negative.

One of the main critics was the French Minister of Finance Bruno Le Maire, who sees the sovereignty of states in particular as being in danger (J190619). This leads to the conclusion that the dangers for states are often discussed, especially when a senior member of the government makes a statement.

The topic of money laundering was addressed with 73 mentions. Of these, 67 of the comments from governmental organizations were negative.

In particular, it was criticized that the cryptocurrency Libra, similar to Bitcoin, could be used for money laundering (PARALL190717). The importance of this was especially mentioned by American senators (UWIR190718). It is clear from the number of statements on the subject that the danger of money laundering is considered to be high. A big problem is that no clear plan has been worked out so far how to fight this problem, so that the Libra Association and especially the governmental organizations agree.

The issue of legal and regulatory concerns has been raised 67 times by governmental organizations. 54 of these were negative.

Even the President of the United States of America, Donald Trump, has commented on this issue. He and other senior members of the US government have clearly stated that Libra must be subject to government regulation (INVDAI190716, GMBN191023). The fact that Democratic and Republican senators have been critical of this shows a certain seriousness of the government's approach to this issue.

The topic of protection & security was addressed 52 times by governmental organizations. 45 of these were negative.

Several security issues were raised here. In particular, national security and user safety, as well as cybersecurity and trading risk concerns were raised more often (CONTEL190624, BBPUB191105). These risks are not only related to the states but also to the users. As there are many different dangers lurking and have often been discussed, the Libra Association will have to take precautions in this area.

The topic of financial stability was mentioned 44 times by governmental organizations. 43 of these were negative.

Due to the dangers for the financial stability of countries, this problem was considered so great that Russia already announced that the cryptocurrency Libra would not be allowed in its country (CONTEL190701). Jay Powell, the chairman of the US Federal Reserve, said it was necessary to ensure that Libra did not threaten financial stability before proceeding with development (FTCOM190712). Since central banks are responsible for a country's financial stability, great care is taken to ensure that there are no potential threats to that stability.

4.9.2. Motivation/ underlying reasons

Without a doubt, it can be said that governments around the world want to identify and contain potential dangers early on. A loss of power or control could have a negative impact on states and their finances, which should be prevented. This is not only about protecting state sovereignty, but also about protecting the individual population, where data protection in particular is taken seriously.

One concern is that Facebook and the other global corporations could influence the financial world with their own sovereign currency. This could happen if they had vast amounts of liquid assets and did not have to use them to buy back Libra at any time.

4.10. Positive mentions of Facebook members

Facebook has made it its goal to introduce the cryptocurrency Libra, together with other large companies. To help Libra launch they have named the advantages that Libra would bring.

In the next section we will describe the characteristics that were most often mentioned by Facebook members. Afterwards, the motivation and possible underlying reasons are discussed.

Facebook members were mentioned with 77 positive statements and 9 neutral statements. A total of 147 positive statements were made in the relevant newspaper articles. With a share of 52.4%, they thus made the largest number of positive statements.

Facebook employees and the Libra project managers, like David Markus, are naturally motivated to clearly explain the advantages of the cryptocurrency Libra. It is therefore not surprising that they are responsible for the largest number of positive statements.

Libra Association members are not included here. They have only made 10 positive statements in total.

4.10.1. Characteristics

The most frequently cited characteristics come from the categories user related ecosystem parameters and governance parameters. The authorization type of Facebook members was mentioned most often, 22 times. Of these, 21 of the comments were positive.

The Libra Association head of policy and communications, Dante Disparte, said that Libra has the potential to provide access to a payment system for over one billion people (NEWVEN190618). This is seen as one of the main reasons for launching Libra, as can be seen from the number of mentions.

The topic of efficiency was mentioned 12 times by Facebook members and all 12 comments were positive.

According to David Marcus, an early target of Libra is to be used for international money transfers. These should be processed quickly and cheaply, which can be understood as efficient (RHEPO190619). Compared to traditional methods of international transfers, you will not have to pay huge fees for transfers with Libra (DHLD190630). These increases in efficiency in terms of fees and speed are possible thanks to the Blockchain technology, which will be applied in a more centralized way.

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4.10.2. Motivation/ underlying reasons

Facebook employees and the Libra project managers, like David Markus, are naturally motivated to clearly explain the advantages of the cryptocurrency Libra. It is therefore not surprising that they are responsible for the largest number of positive statements.

4.11. Neutral stance of authors and their publishers

In order to attribute the objective, non-judgmental opinions to a grouping, we look at the relative number of neutral statements compared to the total statements of that grouping.

In the next section we will describe the characteristics that were most often mentioned by the authors that wrote their own newspaper articles that were published. Afterwards, the motivation and possible underlying reasons are discussed.

Publishers of newspaper articles made a total of 36 negative statements, 28 neutral statements and 23 positive statements. With a share of 32.2%, they have thus expressed the highest relative proportion of neutral statements.

Publishers must also be able to report objectively and that could account for this large proportion.

4.11.1. Characteristics

The statements refer mainly to environment and user related ecosystem parameters. The two most frequently mentioned were the characteristics price stability and money laundering. Both were neutrally coded three times each.

This author has reported that Libra tries to remain stable as a currency (CASHSC190725). In further articles the problems and possibilities of preventing money laundering with Libra are discussed. In addition, the clear identification of users of the platform is also discussed (CASHSC190725).

4.11.2. Motivation/ underlying reasons

Newspapers and authors want to publish professional and valuable articles with objective facts and statements. They also address topics that have already been mentioned by many others. The topics money laundering and price stability have already been discussed by many people and published in newspapers. So, authors can also see what is current, in order to react to it.

4.12. Common features of the most mentioned negative characteristics

The cryptocurrency Libra does not have an easy start. Even before the launch of the cryptocurrency developed by the Libra Association, various characteristics were criticized.

In order to get a clearer overview of the criticized aspects of Libra, in this section the most frequently mentioned negative characteristics are mentioned and compared to find commonalities.

Almost as often negatively mentioned were money laundering with 94 codes, sovereignty with 92 codes and legal and regulation with 91 codes. The peculiarity of these codes was that they often appeared in the same articles.

Financial stability was mentioned the fourth most with 63 codes. This was followed by protection and security with 56 codes, trust with 45 codes, traceability with 44 codes and private money with 38 codes.

These characteristics were also expressed by the governmental organizations almost in the same order of frequency.

All characteristics mentioned here belong to the ecosystem parameters. The four most frequently mentioned characteristics are all environment related ecosystem parameters. The next three characteristics are user related and the last one is environment related.

What can be concluded from this list is that the preservation and protection of these characteristics is in the interest of the government. These characteristics mainly entail risks for the power and financial control of states, as well as data protection risks for the users of the Libra payment system.

5. DISCUSSION

In this chapter, the information from the field of related work is compared with the new insights gained from the results in order to identify new findings and to answer the research questions.

5.1. Design choices and public discourse of Libra

Facebook's announcement of Libra caused a big sensation. The announcement even caused such a stir that the President of the United States of America commented on it. And that even though Libra hasn't even been launched yet.

What Facebook's project provided so much to talk about, which design choices Facebook chose for Libra, and what the public discourse of Libra is like, is answered by the research question of this thesis:

What are the design choices of the Libra cryptocurrency compared to other payment systems and what's the public discourse in newspaper articles about the characterization of Libra?

Facebook probably left nothing to chance and planned everything. Especially the design choices for Libra are very interesting. With the choice of the consensus algorithm and the Blockchain type, the possibility has arisen that the many large companies can be involved. That fits because that way strong network effects can be created. With the wallet Calibra, the users should be clearly identified, which above all enables the monitoring of transactions. For example, illegal transactions can be tracked or even reversed. But through this control the user behavior can be spied out because the users are supposed to log in with their Facebook accounts. This plays into the hands of the huge ad company. Accessibility is intended to provide further control when it comes to keeping unwanted users away from this payment system. But it also enables a lot of people all over the world to access a payment system that should allow transactions across national borders.

The user related and environment related characteristics were clearly the most frequently used. These relate to the users, whose privacy must be protected and the security of the financial system. The public discourse on both topics is rather negative, as Facebook is already associated with bad deeds and is therefore not trusted.

The three categories, which were not coded very often (functional, technical and purpose parameters), nevertheless represent an interesting sight. Two of these categories are more technical in nature. These technical codes have been used very rarely, which may be related to the fact that the people who made a statement about Libra considered the other characteristics

much more important. But it could also mean that people either didn't bother with it at all, or it was not sufficiently understood.

The research question was divided into several sub-questions in order to provide more concrete answers. These questions were discussed in the following chapters.

5.1.1. Payment system

What is a payment system and how can it be characterized by various criteria?

A payment system gives people the opportunity to trade, even across national borders. Advantages are cost efficiency and the divisibility of the medium of exchange. The system must be trusted. One must also be able to trust that the value of the medium of exchange remains stable and usable.

How can different payment systems (barter, fiat currencies, stable coins, bitcoin...) be described according to those characteristics?

Barter was operated more often in the past. It works if the medium of exchange has a calculable value. Barter can only be used when two parties want to give something and want to get something from the other. Fiat currencies are the most common and are used for trading worldwide.

Cryptocurrencies have not yet become so widely accepted, although they could be used to increase efficiency. Especially cross-border transactions would be cheaper.

How can Libra be described according to mentioned characteristics?

Libra is a crypto currency, which is to be distributed worldwide and should be used everywhere cheaply.

5.1.2. Governance

To get Facebook off to a good start with Libra, it had to be made clear how Libra should be governed. In doing so, they had to make sure that they did not appear in a negative light in front of the public. It is also important that the Blockchain Trilemma is overcome. For Facebook, the security of the system and the scalability to enable millions of people to use Libra safely are particularly important. Which raises the question:

What were the underlying reasons to choose this governance design?

Facebook was clear that they had to launch the Libra project in constellation with other large companies. This decision was not made because Libra would have financial difficulties with it, but rather for costing reasons and to create network effects:

1. many of the companies are very reputable, which can have a positive influence on public opinion.

2. the companies can offer payment with Libra on their platforms, which increases Libra's reach.

3. Facebook did not have to pay for the development and marketing costs alone.

Facebook chose to use the byzantine fault tolerance approach. This is intended to achieve a distibution so that Libra can still be priced as a cryptocurrency. It also solves the trilemma that by distributing the consensus process to selected nodes, decentralization is limited because not all users of the platform can participate in the consensus process, but security and scalability can be achieved.

Facebook has announced to make their Blockchain fully decentralized at later stages of the project.

5.1.3. Public discourse

How does the media judge Libra according to those characteristics?

The Libra cryptocurrency has been widely discussed in the media recently. One reason for this is that Facebook is a company that has gained a bad reputation because of privacy related issues.

A main reason for Libra's media publicity is their offensive communication that the traditional banking business wouldn't be needed if enough large corporations unite to join the Libra Association, which implicates consequences for involved parties within this ecosystem.

Who expresses which statement, which speaks in favor of the use of Libra?

Especially members of Facebook itself, but also individual people from other groups, such as politicians or bankers also say positive things about Libra. Mainly the positive characteristics of digital coins are mentioned. It can save money and it is faster and more efficient.

Who expresses which statement that opposes the use of Libra? E.g. prohibitions of cryptocurrencies in general, and the reason for them?

The main negative groups are the government representatives and bankers, as Facebook could endanger the financial stability and users of the platform. In particular, the companies that are members of the Libra Association felt strongly pressured by the announced regulatory measures. Some of these companies may have resigned for these reasons (NFINCE191022) (BUSIND190828).

What statements about potential barriers to the development of Libra are made by whom?

There are many building blocks, especially in regulatory terms. One major problem is that there is not yet a precise plan for preventing money laundering. Another problem is the privacy of the users, as the Libra Association members have access to the transaction data.

What are the implications on the ecosystem?

China has already said that due to the announcement of Facebook, they will launch a stablecoin themselves. This means that this could follow in other countries as well, as there may not be confidence that the large companies that are members of the Libra Association are acting in a trustworthy manner.

Common fears due to Libra?

The main fear about Libra is the loss of control because Libra with enough power and financial resources could declare some kind of sovereignty for the Libra Association.

6. CONCLUSION

6.1. Summary

With the project Libra, the well-known social media company Facebook has recognized new great opportunities and potential. Together with other global companies, the Libra Association was to be founded and a strong payment system was to be launched as competition to the banks. Some groups, especially the governmental organizations and financial companies, disliked the fact that a payment system from companies should be launched on the market. For this reason, the Libra project should be regulated. To make this clear, even the participating Libra Association members were threatened with regulatory measures. Even high-ranking politicians such as the US President Donald Trump or the French Finance Minister Bruno Le Maire have expressed their concerns about the Libra project, which has sometimes led to a rather negative public discourse for Libra.

This is mainly due to the potential threat that Libra may pose to the global financial systems and the sovereignty of states as well as to the privacy of the users of its platform, which is why unity and rigour are required. The Libra Association, for example, would have the option of keeping some shares free for member states. If the majority of the shares belong to different countries, regulations can be enforced more clearly. Because cooperation with Facebook has been made more difficult by vague statements from Facebook, such a solution is not in sight. The states could then propose a proposal for regulation which could be adopted by other states. In addition, the countries have the option of developing their own stablecoins, which would eliminate the need for third parties.

6.2. Limitations

It must be considered that only English and German language newspaper articles were relevant for the corpus. Accordingly, statements from other regions might not be considered if they were not also published in German or English.

Factiva replication of the search query is not possible because the operator 'same' can no longer be used in combination with the 'headlines and lead paragraphs only' search. Alternatively, the operator 'and' can be used for the operator 'same'. Figure 3, figure 5, figure 6 and figure 7 are affected by this limitation, as they were only exported by Factiva after this change.

6.3. Future work

In a future work it could be investigated how the public discourse looks like with regard to a state stablecoin. For example, it would be possible to analyze newspaper articles on the new stablecoin of the Chinese government.

It could also be examined how expert opinions on Libra differ from the statements examined here.

The development shows that the Blockchain is being used more and more often. That is why it is also important to inform people about it. In a future paper, the characteristics of such a payment system could be sorted by priority.

REFERENCES

- Abrazhevich, Dennis, (2001). Classification and Characteristics of Electronic Payment Systems In: Bauknecht K., Madria S.K., Pernul G. (eds) Electronic Commerce and Web Technologies. https://doi.org/10.1007/3-540-44700-8_8
- Baliga, Arati. (2017). "Understanding Blockchain Consensus Models." Tech. rep., Persistent Systems Ltd, Tech. Rep.
- Biser, D. (2019, June). Enterprise Blockchain is redefined by Facebook Libra. Retrieved from https://www.forbes.com/sites/biserdimitrov/2019/06/26/enterprise-blockchainredefined-facebook-libra/#60b6d64c104f
- Brühl, V. (2020). Libra A Differentiated View on Facebook's Virtual Currency Project. Intereconomics, 55(1), 54–61. https://doi.org/10.1007/s10272-020-0869-1
- Cassell, C., & Symon, G. (2004). Essential Guide to Qualitative Methods in Organizational Research. London: Sage Publications.
- Creswell, John W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Los Angeles: SAGE.
- Dong Ku, D. l. (2018). The blockchain trilemma: The technology trade-offs among the security, decentralization and scalability of blockchain.
- Dwyer, G. P. (2015). The economics of bitcoin and similar private digital currencies. Journal of Financial Stability, 17, 81–91. https://doi.org/10.1016/j.jfs.2014.11.006
- Ehmke, C., Blum, F., & Gruhn, V. (2019). Properties of Decentralized Consensus Technology --Why not every Blockchain is a Blockchain. Advance online publication. https://doi.org/10.13140/RG.2.2.35506.45765
- Fachmedien Wiesbaden. Retrieved from https://doi.org/10.1007/978-3-658-22095-2
 Ritchie, J., and Lewis, J. (2003). Qualitative Research Practice: A Guide for Social Science
 Students and Researchers, Thousand Oaks, CA: Sage Publications Ltd.
- Factiva, (2020). Factiva. Retrieved from https://global.factiva.com
- Flick, Uwe. (2009). An introduction to qualitative research (4th ed.). Los Angeles: SAGE. Libra. (2019). How to become a member. Retrieved from: https://libra.org/en-US/becoming-founding-member/#member_evaluation_criteria
- Gervais, A., Karame, G. O., Wüst, K., Glykantzis, V., Ritzdorf, H., & Capkun, S. (2016). On the Security and Performance of Proof of Work Blockchains. In E. Weippl, S. Katzenbeisser, C.
Kruegel, A. Myers, & S. Halevi (Eds.), Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security - CCS'16 (pp. 3–16). New York, New York, USA: ACM Press. https://doi.org/10.1145/2976749.2978341

- Halaburda, H., & Sarvary, M. (2016). Beyond Bitcoin: The Economics of Digital Currencies. New York: Palgrave Macmillan US. Retrieved from http://gbv.eblib.com/patron/FullRecord.aspx?p=4188451
- Hanl, A. (2019). Währungswettbewerber Facebook: Ökonomische Implikationen der Corporate Cryptocurrency Libra. Retrieved from https://www.unimarburg.de/fb02/makro/forschung/magkspapers/paper_2019/30-2019_hanl.pdf
- Hanl, A. & Jochen M. (2017). Kryptowährungen ein Problem für die Geld-politik? Wirtschaftsdienst, 97 (5): 363–370.
- Hassani, H., Huang, X., & Silva, E. (2018). Banking with blockchain-ed big data. Journal of Management Analytics, 5(4), 256–275. https://doi.org/10.1080/23270012.2018.1528900
- Johnston, M. (2014). Secondary Data Analysis: A Method of which the Time Has Come. Retrieved from http://www.qqml.net/papers/September_2014_Issue/336QQML_Journal_2014_Johnston _Sept_619-626.pdf
- Kari, P. (2019, June). What is Libra? All you need to know about Facebook's new cryptocurrency. Retrieved from https://www.theguardian.com/technology/2019/jun/18/what-is-libra-facebook-new-cryptocurrency
- Libra. (2019). Official Page. Retrieved from https://www.Libra.org
- Libra. (2019, June). Whitepaper. Retrieved from https://developers.libra.org/docs/assets/papers/the-libra-blockchain.pdf
- Mai, H. (2019). Libra eine globale Herausforderung im Zahlungsverkehr und für Zentralbanken? Retrieved from http://zbw.eu/econisarchiv/bitstream/handle/11159/4260/Libra_%E2%80%93_eine_globale_Herausforderung _im_Zahlungsve.pdf?sequence=1&isAllowed=y
- Medium. (2019). Whitepaper Summary. Retrieved from https://onezero.medium.com/thoughts-on-libra-blockchain-49b8f6c26372

- Mita, M., Ito, K., Ohsawa, S., & Tanaka, H. (2019, June 14). What is Stablecoin?: A Survey on Price Stabilization Mechanisms for Decentralized Payment Systems. Retrieved from http://arxiv.org/pdf/1906.06037v1
- Nakamoto, S. (2008). "Bitcoin: A Peer-to-Peer Electronic Cash System," https://bitcoin.org/bitcoin.pdf
- Okada, H., Yamasaki, S., & Bracamonte, V. (2017, February 2017, February). Proposed classification of blockchains based on authority and incentive dimensions. In 2017 19th International Conference on Advanced Communication Technology (ICACT) (pp. 593–597). IEEE. https://doi.org/10.23919/ICACT.2017.7890159
- Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. /Working Papers on Information Systems/, /10/(26), 1–51. Retrieved from https://doi.org/10.2139/ssrn.1954824
- Oliveira, L., Zavolokina, L., Bauer, I., & Schwabe, G. (2018). To Token or not to Token: Tools for Understanding Blockchain Tokens. https://doi.org/10.5167/uzh-157908
- Pilkington, Marc. (2015). "Blockchain Technology: Principles and Applications."
- Rädiker, S., and Kuckartz, U. (2019). Analyse Qualitativer Daten Mit MAXQDA. Wiesbaden: Springer
- Rambure, D., & Nacamuli, A. (2008). Payment Systems. London: Palgrave Macmillan UK. https://doi.org/10.1057/9780230227217
- Rose, D. (2019, June). Cryptocurrency won't catch on in Aust. Sydney: AAP.
- Saldaña, J. (2015). The Coding Manual for Qualitative Researchers (3rd ed.). London: SAGE Publications Ltd.
- Schryen, G. (2015). Writing qualitative IS literature reviews Guidelines for synthesis, interpretation, and guidance of research. /Communications of the Association for Information Systems/, /37/, 286–325.
- Schulze, T., Seebacher, S. & Hunke, F. (2020). Conceptualizing the Role of Blockchain Technology in Digital Platform Business. https://doi.org/10.1007/978-3-030-38724-2_11
- Selgin, G. (2013). Synthetic Commodity Money, http://ssrn.com/abstract=2000118 [date last accessed: 9 July 2013]
- Sharples, M., & Domingue, J. (2016). The Blockchain and Kudos: A Distributed System for Educational Record, Reputation and Reward. In K. Verbert, M. Sharples, & T. Klobučar

(Eds.), Lecture Notes in Computer Science. Adaptive and Adaptable Learning (Vol. 9891, pp. 490–496). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-45153-4_48

- Taskinsoy, John, Facebook's Project Libra: Will Libra Sputter Out or Spur Central Banks to Introduce Their Own Unique Cryptocurrency Projects? (July 20, 2019). http://dx.doi.org/10.2139/ssrn.3423453
- UZH. (2013). New license for Factiva. Retrieved from https://www.uzh.ch/blog/hbz/2013/08/08/neue-lizenz-factiva/
- Vom Brocke, J., Simons, A., Riemer, K., Niehaves, B., Plattfaut, R., & Cleven, A. (2015). Standing on the shoulders of giants: Challenges and recommendations of literature search in information systems research. /Communications of the Association for Information Systems/, 37/(1), 205–224.
- Vom Brocke, J., Simons, A., Niehaves, B., Riemer, K., Plattfaut, R., & Cleven, A. (2009). Reconstructing the giant: On the importance of rigour in documenting the literature search process. In /ECIS 2009 Proceedings/ (p. Paper 161). Retrieved from http://aisel.aisnet.org/ecis2009/161
- Walport, MGCSA. (2016). "Distributed Ledger Technology: Beyond Blockchain." UK Government Office for Science.
- Zavolokina, L., Dolata, M., & Schwabe, G. (2016). FinTech What's in a Name? Retrieved from https://www.zora.uzh.ch/id/eprint/126806/1/FinTech_Research_Paper_revised.pdf https://doi.org/10.5167/UZH-126806
- Zetzsche, D. A., Buckley, R. P., & Arner, D. A. (2019). Regulating LIBRA: The transformative potential of facebook's vryptocurrency and possible regulatory responses. Retrieved from https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=3414401
- Zheng, Z., Xie, S., Dai, H., Chen, X., & Wang, H. (2017, June 2017, June). An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends. In 2017 IEEE International Congress on Big Data (BigData Congress) (pp. 557–564). IEEE. https://doi.org/10.1109/BigDataCongress.2017.85

APPENDICES

6.4. Appendix A: Codebook

Code	Subcode	Sub-	Definition	Example
		subcode		
Characteristic				
	Ecosystem			
	(environment			
	related)			
	Parameters			
		Blockchain	The statement	Even if Libra flops, it should spur
		development	focuses on the	innovation in banks such as
		aid	influence of	Deutsche. Indeed, JPMorgan has
			Blockchain	already unveiled plans for a JPM
			technology	Coin and Goldman Sachs's boss
			development.	David Solomon said last week
				that it was considering a similar
				move. (FTFT190704)
		Currency	The statement	Bloomberg uncovered internal
		competition	focuses on an	documents last month showing
			improvement	that European Union antitrust
			in competition	regulators are "currently
			between	investigating potential anti-
			currencies.	competitive behaviour" linked to
				the Libra project. (UWIR190920)
		Deflation of	The statement	-
		traditional	focuses on	
		currencies	deflation of	
			traditional	
			currencies.	
		Financial	The statement	In Deutschland hatte sich
		stability	focuses on the	Finanzminister Olaf Scholz (SPD)
			financial	bereits klar gegen digitale

		stability in	Währungen positioniert. Aus
		economies.	seiner Sicht könnten diese die
			Finanzstabilität gefährden.
			Zudem sollten Währungen
			Aufgabe des Staates bleiben.
			(ZEITON191205)
	Global	The statement	At least under the current
	currency	focuses on	circumstances, a "global
		Libra creating	currency" that is not subject to
		a global	regulation by various
		network of	governments is unlikely to be
		users.	popularized around the world.
			Looking into the future, assuming
			that virtual currency is indeed a
			major trend in the future, then
			the premise for a globally-
			recognized "global currency"
			must be an established
			supervision system for global
			payment and liquidation.
			(GLOTNE190704)
	Illicit	The statement	Many people are of the opinion
	transactions	focuses on	that making transactions easier
		illegal trades	with Libra also means making
		that could be	funding of illegal acts such as
		committed.	drug dealing and terrorism easier,
			a claim Reitz dismissed as a
			misconception" about
			cryptocurrencies.
			(VENAF190625)
	Legal and	The statement	Libra coin has been criticised by
	regulatory	focuses on	the US president Donald Trump,
	concerns	legal and	who has tweeted: "If Facebook
		regulatory	and other companies want to
		concerns.	become a bank they must seek a
		Includes	new banking charter and become
		Taxation	subject to all banking regulations,

			just like other banks, both national and international." (SUNDTI190713)
	<i>Money</i> <i>laundering</i>	The statement focuses on possible money laundering risks.	Fed Chairman Jerome Powell on Wednesday said the central bank has "significant input into the payments system," the e- commerce network that Facebook is seeking to disrupt with its Libra currency. Banking regulators also can enforce anti- money-laundering controls on such businesses, Mr. Powell told reporters. (DJDN190619-2)
	Payment instruments	The statement focuses on the payment instruments.	He commented that it was not easy for Libra to replace local currencies in the countries where people trusted local currencies and there were efficient payment systems. "If the systems of banks are efficient and the costs of transactions are low, why should money be transferred to e- wallets? Where will it be in the world? Who will manage it? And how will it be managed? Are their back offices reliable? It would cause difficulties because we must transfer money from our accounts," Mr Veerathai said. (TNA) (OANA190719)
	Price stability	The statement focuses on price stability.	Der grösste Unterschied der beiden Währungen liegt wohl in deren Wertbildung. Während sich der Preis für einen Bitcoin

			frei am Markt entwickelt, soll der Libra an sogenannte Fiat- Währungen gekoppelt werden, also etwa dem Dollar oder Euro. Dadurch soll die Volatilität eingeschränkt werden. Das ist wichtig, damit Libra seinen Hauptzweck erfüllen kann, nämlich den Einsatz als grenzüberschreitendes Zahlungsmittel.
			(CASHSC190725)
	<i>Private</i> <i>money</i>	The statement focuses on risks of money being privatized instead of being in control by a state.	What is at stake is the old balance between public and private money. The former is made up of cash and the banking system's reserves parked at the central bank; the latter of bank deposits. A Libra-like system does not need banks. And it has the potential to undercut central banks' control over their own currencies, because big networks cross borders. If billions of people use Facebook's currencies, billions more will have to join. (LONFIN190628)
	Sovereignty	The statement focuses on risks in the sovereignty of states.	France's economy and finance minister Bruno Le Maire warned that under current circumstances Libra posed a threat to the "monetary sovereignty" of governments and could not be authorised in Europe. (AFPR190926)
<i>Ecosystem (user related) Parameters</i>			
	Convertibility	The statement focuses on the	-

	convertibility	
	of Libra.	
Ease of use	The statement	The vision is here is to make it so
(usability)	focuses on the	people can send money to each
	usability of	other as easily and securely and
	Libra.	cheaply as it is to send a text
		message' (DAMONL191023)
Efficiency	The statement	Libra aims to promote financial
and	focuses on the	inclusion through a safe, low-cost
transaction	efficiency and	and efficient way to send and
costs	transaction	receive payments worldwide.
COSIS	costs of Libra.	(NFINCE191023-2)
Protection &	The statement	"Regulators should see this as a
Security	focuses on	wake-up call to get serious about
	consumer	the privacy and national security
	protection and	concerns, cybersecurity risks, and
	security/cyber	trading risks that are posed by
	security.	cryptocurrencies," Ms. Waters
		said. (RTNW190620)
Reliability	The statement	It has been agreed that online
	focuses on the	payment arrangements need to
	reliability of	be improved in many areas of the
	Libra.	world, including using
		stablecoins, but they need to
		demonstrate their reliability.
		They must be supervised and
		monitored, a solid legal basis
		created in all jurisdictions, the
		risks managed and the underlying
		assets_real currency denosits_
		checked (ABENENI190725)
		checked. (ADEINEINI70723)
Traceability	The statement	Every person who uses Calibra
	focuses on the	will have to go through a "know
	traceability in	your customer" process, which
	Libra.	verifies user identities to prevent

			That means anyone who signs up must share a government ID and other personal information. (LBA190618-2)
	Trust	The statement	"Frankly, I don't trust it,"
		trust of Libra	Conzolez of Obio told
			Zuckerberg about Eacebook
			being part of the project, giving a
			flavor of the bipartisan
			committee skepticism about the
			Libra project and Facebook
			generally. The company has also
			been widely criticized for its use
			of customer data and its role in
			Russia's alleged meddling in 2016
			elections. (RLCL191106)
Functional			
Parameters			
	Burnability	The statement	Here's how it's supposed to
		focuses on	work. You cash in your hard-
		whether	earned pounds, euros, dollars etc
		tokens can be	into the Libra reserve, which then
		erased.	"mints" an equivalent amount of
			Libras (at the prevailing exchange
			rate). If you decide to cash out by
			returning your Libras, they are
			"burned" and you get the
			equivalent back in pounds, euros,
			dollars, etc. (OB190623)
	Divisibility	The statement	-
		focuses on	
		possibility to	
		token/modium	
		of exchange	
		of cherialise	

		into multiple	
		pieces.	
	Expirability	The statement	-
		focuses on	
		whether	
		tokens can	
		expire or are	
		permanently	
		valid.	
	Fungibility	The statement	According to Paypal, which is
		focuses on	partnering with Facebook to
		whether	launch Libra, this ecosystem will
		tokens are	be enhanced by the new
		fungible.	blockchain that is being built
			from the ground-up and Libra
			Reserve, a reserve of real assets
			that will back the Libra currency.
			This will provide enhanced
			stability, low inflation, wide
			global acceptance, and
			fungibility. (HNTM190624)
	Scalability	The statement	The company's ability to scale
	-	focuses on the	quickly is exactly what has
		scalability of	regulators and lawmakers
		Libra.	concerned about Libra, even
			though Facebook won't be the
			one governing the network. But
			given Facebook's role in
			developing the idea for the Libra
			network and holding a leadership
			position as it prepares for launch
			it could be difficult to convince
			regulators and lawmakers to view
			Facebook as just another
			member of the association
			(BIZINS191022)
	Spendahility	The statement	
	σρετιαασιπεγ	focuses on	

		whether	
		tokens are	
		spendable.	
	Tradability	The statement	Ein weiterer Punkt ist kritisch: Es
		focuses on the	ist nicht eindeutig geregelt, ob
		medium of	die Nutzer der neuen Währung
		exchange and	ihre Libra jederzeit wieder in ihre
		if it could be	lokale Währung eintauschen
		traded with	können. Die Organisatoren selbst
		another	schreiben davon, dass die Nutzer
		medium of	'nicht direkt mit der Reserve
		exchange.	interagieren'. sondern
		0	ausschließlich über 'autorisierte
			Wiederverkäufer'. Damit bleibt
			die Libra hinsichtlich der Rechte
			ihrer Nutzer hinter den
			Notenbanken des 19
			labrhunderts zurück bei denen
			auf Wunsch iede Banknote in
			Edelmetall eingetauscht werden
			mussta (UNDONI 190729)
6			
Governance			
Parameters			
	Accountabiliti	The statement	The cryptocurrency network will
	es	focuses on	be governed by Facebook and
		whether the	more than two dozen founding
		accountability	partners as part of a nonprofit
		lies with a	consortium the company hopes
		single entity, a	to grow further. (PRN190619)
		consortium or	
		with the	
		public.	
	Authorization	The statement	"Banking the unbanked" wird als
	type	focuses on	Ziel von Libra kommuniziert. Das
	iype	whether	heisst, Menschen auf unserem
		access to Libra	Planeten, die his dato kein
		is public or	Bankkonto beziehungsweise
		nrivate or	Zuigang zu Finanzdienstleistung
		Privace Or	Lagang zu i manzuiensueistulig

		whether it	haben, genau diesen Anschluss
		depends on	an das Finanzsystem zu
		several factors.	ermöglichen. Nach Schätzungen
			von Facebook sind momentan
			rund 1,7 Milliarden Menschen
			vom Finanzsystem
			ausgeschlossen, wovon zwei
			Drittel jedoch ein Mobiletelefon
			mit Internet besitzen, welches für
			Banking geeignet wäre.
			(NETZON190919)
	Control	The statement	Klar ist: Facebook ist nicht die
	structure	focuses on	Firma hinter Libra. Libra ist eine
		Libra being	Non-Profit Organisation mit Sitz
		centralized and	in der Schweiz und Facebooks
		permissioned.	Tochtergesellschaft Calibra ist
			eines von 28 Mitgliedern dieser
			Organisation. Die Organisation
			ist zudem relativ "dezentral"
			aufgestellt, was bedeutet, es soll
			insgesamt 100 Mitglieder geben,
			mit jeweils gleichem Stimmrecht.
			Es ist ein Verbund der
			mächtigsten Firmen der Welt
			unter anderem auch mit Paypal,
			Mastercard, Visa, Ebay, Uber,
			Lyft und vielen mehr. Jedes
			dieser Mitglieder zahlt zehn
			Millionen US-Dollar an die
			Organisation, um Teil davon zu
			sein und muss weiterhin noch
			einige Bedingungen erfüllen, um
			teilnehmen zu dürfen.
			(BUSIND190623)
	Decision	The statement	Vodafone has called for the rapid
	rights	focuses on	appointment of an independent
	1161163	decision rights	chief executive of Libra to fully
		within the	separate it from Facebook. as it
		Libra network.	reiterated its support vesterday

			for the troubled crypto-currency
			project. (TELUK191008)
	Incentive	The statement	The key will be incentives. Fiat
	System	focuses on the	currencies work for a simple
		incentive	reason: Governments decree that
		system to run	their citizens must use and accept
		a Libra node or	them. Digital currencies such as
		to participate	bitcoin and Libra without ready-
		in the system.	made communities have to give
			consumers a reason to use them.
			(WSJO190626)
	Pegging	The statement	In a letter to German politician
		focuses on the	Fabio de Masi, Facebook said
		basket of	that half of the Libra
		assets that	cryptocurrency would be backed
		underlie Libra.	by reserves of US dollars, while
			the euro, Japanese yen, British
			pound and Singapore dollar
			would also provide support.
			(INDOP190923)
	Representati	The statement	It will take considerable
	on	focuses on the	diplomatic finesse and political
		representation	skill for Libra to formally clear all
		of Libra.	the obstacles it faces, which is a
			shame, because something like
			Libra is eventually going to
			happen, and it would be nice if
			the creator were an American
			company. As Zuckerberg said in
			his prepared testimony, "While
			we debate these issues, the rest
			of the world isn't waiting. China is
			moving quickly to launch similar
			ideas in the coming months. Libra
			will extend America's financial
			leadership as well as our
			leadership as well as our democratic values and oversight
			leadership as well as our democratic values and oversight around the world of America

			doesn't innovate, our financial
			leadership is not guaranteed."
			(FBCOM191112)
	Supply	The statement	Hier liegt die Gefahr: Wer stellt
		focuses on the	sicher, dass die Deckung auch in
		supply of Libra.	Zukunft 100 Prozent beträgt?
			Die Versuchung auf Seiten der
			Mitglieder dürfte groß sein,
			Schritt für Schritt die Deckung zu
			reduzieren, indem Teile der
			Reserven in nicht-liquide und
			risikoreicheren Vermögenstiteln
			angelegt werden, um auf diese
			Weise die Gewinne zu erhöhen.
			Nicht umsonst kam bei der
			Anhörung vor dem US-Kongress
			der Vorwurf auf, dass das, was
			sich als dezentralisierte
			Blockchain mit einer begrenzten
			Anzahl von Mitgliedern darstellt,
			in Wirklichkeit als Kartell
			angesehen werden könnte.
			Offensichtlich bedarf es hier
			einer strikten Regulierung, bei
			der eine Koordination der großen
			Wirtschaftsräume USA, EU und
			Japan viel Sinn ergeben würde.
			(MMONLN190823)
Purpose			
Parameters			
			
	Class	The statement	-
		focuses on the	
		class of Libra.	
	Function	The statement	Eine wichtige Voraussetzung für
		Tocuses on the	algitales Geld: Regierungen und
		function of	Zentralbanken müssen mit an
		Libra.	Bord sein. In ihrer Studie
			untersucht die Gates-Stiftung die

			Including	Voraussetzungen und Wirkung
			Interoperabilit	von digitalem Geld, um der
			y – siehe gates	ärmeren Bevölkerung zu helfen
			artikel.	und Frauen mehr Mitwirkung zu
				ermöglichen. Ein gravierendes
				Problem ist dabei das der
				"Interoperabilität". Dahinter
				steckt die Frage, ob Kunden eines
				bestimmten Mobilnetzbetreibers
				Geld nur untereinander
				austauschen können oder auch
				mit den Kunden anderer
				Betreiber (HNDBLT190717)
		Role	The statement	The Libra project has ruffled
			focuses on the	some feathers in Congress, as
			role of Libra.	well. US lawmakers sent an open
				letter to the company seeking
				clarification on the currency's
				purpose and implications.
				(COINDSK190517)
	Technical			
	Parameters			
		Chain	The statement	-
			focuses on the	
			chain of Libra.	
		Layer	The statement	-
			focuses on the	
			layer of Libra.	
Organization				
				A (1) 11 1 1 1 1
	Accelerator		ine	At its core, libra is an excellent
			organization is	idea. Currently, 1.7bn adults in
			an accelerator.	the world don't have access to a
				bank account. However, the
				percentage which doesn't have
				access to social media or a
				smartphone is dramatically lower.

(CITYMO191111)

 ,		
Consulting	The	Facebook's proposed digital
Company	organization is	currency, Libra, will cause
	a consulting	immediate tax problems for users
	company.	in Europe that will hamper its
		mainstream adoption, according
		to leading tax lawyers.
		(FTFT190701)
 Educational	The	Und dennoch: Allein die
institution	organization is	technischen Voraussetzungen zu
	an educational	erfüllen reiche nicht aus, sagt
	institution.	Vöpel. Ohne Vertrauen der
		Menschen in die neue Währung
		ginge es nicht. (WESKU191024)
Facebook	The	Libra, which is Mark Zuckerberg's
	organization is	foray into the burgeoning
	Facebook.	cryptocurrency market, seeks to
		empower the so-called
		'unbanked', identifying over a
		billion of them around the world
		(14 Million only in the US).
		(ADDISS191213)
Financial	The	Libra was "a wake-up call",
institution	organization is	European Central Bank (ECB)
	a financial	board member Benoit Coeure
	institution.	told a news conference in
		Helsinki after a meeting of euro
		zone finance ministers.
		(IDGCWA190916)
Covernmenta	The	Federal Reserve Chairman

Governmenta	The	Federal	Reserve	Chairman
l organization	organization is	Jerome P	owell calls fo	or a halt to
	state-run.	Facebook	's Libra	project
		speaking	at a House	e Financial
		Services (Committee o	on July 10,
		2019. Po	well stated	that Libra
		raised "se	rious concer	ns" around
		privacy, co	onsumer pro	tection and
		money la	aundering, a	ıs well as
		more ger	neral financia	al stability.
		(TABB190	0725)	

IT Company	The	In India, too, Paytm and PhonePe
	organization is	cumulatively account for a little
	an IT company.	over 80% share of all digital
		wallet accounts in the country.
		Libra, thus, will not have a first
		mover's advantage. Second,
		Facebook is anything but the
		poster boy of consumer data
		privacy protection.
		(HTMINA190705)
Libra	The	The Libra Association is set to
Association	organization is	expand, as over 100 companies
Member	a member of	and organizations have
	the Libra	expressed an interest in joining,
	Association.	Perez said. (AFPR191002)
Property	The	-
company	organization is	
	a property	
	company.	
Publisher	The	But in reality, without Facebook,
	organization is	Libra will go nowhere.
	a publisher.	(FB191113)
Regulator	The	US-Gesetzgeber, einschließlich
	organization is	Mitglieder des House Committee
	a regulator.	on Financial Services, haben
		ebenfalls Bedenken geäußert,
		dass Libra Geldwäsche oder
		andere schändliche Aktivitäten
		ermöglichen könnte. Kurz
		nachdem Libra im Juni
		angekündigt wurde, schrieb das
		Komitee an Facebook -CEO Mark
		Zuckerberg und forderte ihn auf,
		" die Umsetzungspläne
		einzustellen , bis
		Regulierungsbehörden und
		Kongress die Gelegenheit hatten,
		die Themen zu untersuchen" und

			Maßnahmen zu ergreifen.
			(CMPONL191017)
	Retailer	The	-
		organization is	
		a retailer	
		company.	
	Startup	The	-
		organization is	
		a startup	
		company.	
	Telecommuni	The	Ein Sprecher des
	cation	organization is	Telekommunikationsfirma
	company	а	Vodafone bekräftigte die Mission
		telecommunica	des Projekts und sagte:
		tion company.	"Vodafone glaubt fest an die
			finanzielle Integration, und
			deshalb bleiben wir der Libra
			Association verpflichtet, um ihr
			zu helfen, die Anliegen von
			Gesetzgebern und
			Regulierungsbehörden
			umfassend zu berücksichtigen."
			(BUSIND190828)
Person			
	Author	The pundit is	But in reality, without Facebook,
		mainly an	Libra will go nowhere.
		author.	(FB191113)
	Banker	The pundit is a	Ähnliche Ablehnung gab es auch
		banker.	bei der US-Notenbank Fed und
			bei der EZB. Da weder Facebook
			noch die Libra Association so
			streng wie eine Bank reguliert
			sind, fürchten die Aufseher eine
			Reihe von Problemen mit
			Vorschriften rund um
			Geldwäsche und Anti-
		1	
			Terrorismus-Finanzierung.

СХО	The pundit is	-
	either a CEO, a	
	CFO or in	
	another chief	
	position.	
Facebook	The pundit is a	Facebook has recently
	member of	announced Libra, a
	Facebook.	cryptocurrency for financial
		inclusion of the unbanked
		population globally.
		(ATBEMI190621)
 Government	The pundit	Meanwhile, in France, Bloomberg
official	holds a	reports finance minister Bruno Le
	position in a	Maire is strongly against the
	government.	Libra. He's reported to have said
		that "the Libra can't and must not
		happen. It is out of the question"
		for the cryptocurrency to
		"become a sovereign currency."
		(BRACOI190731-1)
Head of a	The pundit is	Apple CEO Tim Cook said that he
company	the head of a	is not comfortable with private
	company.	companies creating their own
		cryptocurrencies. Therefore, he
		ruled out plans of Apple releasing
		its own currency token. Though
		Facebook has announced plans
		to launch the Libra stablecoin, it
		is facing a lot of regulatory
		hurdles. Due to this, a few early
		backers of the project are
		reportedly planning to drop out,
		prominent among them being
		PayPal. (CONTEL191004)
Investor	The pundit is	-
	an investor.	
Lawyer	The pundit is a	Oliver Woodhouse, a regulatory
	lawyer.	lawyer at Capital Law looks at the
		concerns, benefits and

Libra SEVERAL lawmakers have expressed concerns that Libra The pundit is a Association member of the Libra Jorn Lambert, Mastercard's executive vice president of digital solutions, said he wasn't association. Member Libra Association member of the Libra Jorn Lambert, Mastercard's executive vice president of digital solutions, said he wasn't concerned that free transactions threatened the payment card business. "It's something inplace of what we do. It's not a zero-sum game. Currently, 85 percent of transactions are made in cash."It is unclear whether Libra will avoid all the major barriers to take off, will get the favor of regulators like the US Securities and Exchange Commission (SEC), and whether the financial services industry will accept it or resist firmly. Central banks are already questioning the impact of cryptocurrency created by companies on financial stability. (NFINCE190619-1) Politician The pundit is a politician. Swiss finance minister and outgoing president Uell Maurer believes that one of the most ambitious crypto projects of the stablecoin, will not be accepted by regulators in its current form. Though Libra has not seen the light of the day, it has forced a number of certal banks to take of the day in the stored by coreal banks to take of the day in the stored by regulators in its current form. Though Libra has not seen the light of the day, it has forced a number of certal banks to take of the day in the stored by regulators in its current form. Though Libra has not seen the light of the day, it has forced and the store will be thereal banks to take the day in the store willawase to the light of			drawbacks of the cryptocurrency
Libra Expressed concerns that Libra The pundit is a Association member of the Member Libra Association Sourcereighty. (WESMAI191023) Member The pundit is a Jorn Lambert, Mastecard's executive vice president of digital solutions, said he wasn't Association concerned that free transactions threatened the payment card business. "It's something inplace of what we do. Libra Association. Currently, 85 percent of transactions are made in cash."It is unclear whether Libra will avoid all the major barriers to take off, will get the favor or regulators like the US Securities and Exchange Commission (SEC), and whether the financial services industry will accept it or resist firmly. Central banks are already questioning the impact of cryptocurrency created by companies on financial stability. (NFINCE190619-1) Politician The pundit is a politician. Politician The pundit is a politician.			SEVERAL lawmakers have
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Libra The pundit is a Jorn Lambert, Mastercard's Member Member Solutions, said he wasn't concerned that free transactions Member Association. Concerned that free transactions threatened the payment card Solutions, said he wasn't concerned that free transactions threatened the payment card Just solutions, solutins, solutins, solutins, solutions, solutins, solutions, solutions,			sovereignty. (WESMAI191023)
Association member of the executive vice president of digital Member Libra solutions, said he wasn't Association. concerned that free transactions threatened the payment card business. "It's something that adds up to what we do, it's not something inplace of what we do. It's not a zero-sum game. Currently, 85 percent of currently, 85 percent of transactions are made in cash."It us out all the major barriers to take off, will get the favor of regulators like the US Securities and Exchange Commission (SEC), and whether the financial services industry will accept it or resist firmly. Central banks are already questioning the impact of cryptocurrency created by companies on financial stability. (NFINCE120619-1) Marrer Politician The pundit is a politician. Swiss finance minister and outgoing president Ueli Maurer believes that one of the most ambitious crypto projects of 2019, Facebook's Libra stablecoin, will not be accepted by regulators in sto steen the hight of the day, it has forced a number of crentral banks to take	 Libra	 The pundit is a	Jorn Lambert, Mastercard's
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Politician business. "It's something that adds up to what we do, it's not something inplace of what we do. It's not a zero-sum game. Currently, 85 percent of transactions are made in cash."It is unclear whether Libra will avoid all the major barriers to take off, will get the favor of regulators like the US Securities and Exchange Commission (SEC), and whether the financial services industry will accept it or resist firmly. Central banks are already questioning the impact of cryptocurrency created by companies on financial stability. (NFINCE190619-1) Politician The pundit is a politician. Swiss finance minister and outgoing president Ueli Maurer believes that one of the most ambitious crypto projects of 2019, Facebook's Libra stablecoin, will not be accepted by regulators in its current form. Though Libra has not seen the light of the day, it has forced a number of central banks to take			threatened the payment card
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stablecoin, will not be accepted by regulators in its current form. Though Libra has not seen the light of the day, it has forced a number of central banks to take			2019, Facebook's Libra
by regulators in its current form. Though Libra has not seen the light of the day, it has forced a number of central banks to take			stablecoin, will not be accepted
Though Libra has not seen the light of the day, it has forced a number of central banks to take			by regulators in its current form.
light of the day, it has forced a number of central banks to take			Though Libra has not seen the
number of central banks to take			light of the day, it has forced a
			number of central banks to take

(CONTEL 191229)	seriously.
ResearcherThe pundit is aThum und Eichler seh	en in Libra
researcher. eine Chance	für
Entwicklungsländer	mit
schwacher Finanzin	frastruktur
und weicher	Währung.
(FINWON190919-1)	
Region	
Africa The "In Kenya, consumer	trust and
pundit/organiz confidence are the o	only things
ation comes that drive adoption of	of financial
from Africa. services." (ABCNEW1)	90626)
Asia The In July, Wang Xin, dire	ctor of the
pundit/organiz PBoC Research Burea	u, said that,
ation comes with the developme	nt of the
from Asia. Libra cryptocurrency p	project, the
People's Bank of Ch	ina should
accelerate the growth	of its own
digital currency, wh	ich it has
been working on over	r the past
few years. Wang be	lieves that
the risks Libra bear	s for the
traditional financial s	ystem will
force regulators to de	vote many
more resources and	forces to
	101005 10
develop its digital	currency.
develop its digital Wang asked: (CONTE	currency.
Australia Australia develop its digital Wang asked: (CONTER	currency. L190810)
Australia The Dr George Tian, a sen pundit/organiz and blockchain	currency. 190810) for lecturer regulation
Australia The Dr George Tian, a sent pundit/organiz and blockchain ation comes specialist at the Un	currency. L190810) for lecturer regulation iversity of
Australia The Dr George Tian, a sen pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney,	currency. 190810) ior lecturer regulation iversity of said while
Australia The Dr George Tian, a sen pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wr	currency. 190810) ior lecturer regulation iversity of said while estled with
Australia The Dr George Tian, a sent Australia The Dr George Tian, a sent pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wr regulating cryptocur	currency. 190810) ior lecturer regulation iversity of said while estled with rencies in
Australia The Dr George Tian, a sent Australia The Dr George Tian, a sent pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wr regulating cryptocur the past, the scale of	currency. 190810) ior lecturer regulation iversity of said while estled with rencies in f Libra has
Australia The Dr George Tian, a sen pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wr regulating cryptocur the past, the scale of left them particularly	currency. 190810) for lecturer regulation iversity of said while estled with rencies in f Libra has concerned.
Australia The Dr George Tian, a sen pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wr regulating cryptocur the past, the scale of left them particularly (AGEE191106) Image: Comparison	currency. 190810) for lecturer regulation iversity of said while estled with rencies in f Libra has concerned.
Australia The Dr George Tian, a sen Australia The Dr George Tian, a sen pundit/organiz and blockchain ation comes specialist at the Un from Australia. Technology Sydney, governments have wrr regulating cryptocurr the past, the scale of left them particularly (AGEE191106) The "Schwere Bedenken	currency. _190810) for lecturer regulation iversity of said while estled with rencies in f Libra has concerned.

		ation comes	die Finanzminister der G7-
		from Europe.	Länder. "Kartellähnlich" sei Libra,
			sagte der EZB-Direktor Yves
			Mersch. (ZEITON190921)
	Middle East	The	GENOA, November 28 (Sputnik),
		pundit/organiz	Anastasia Levchenko - The
		ation comes	possible launch of Facebook's
		from the	Libra cryptocurrency may
		Middle East.	inadvertently boost trade in
			looted antiquities from conflict
			zones, like Syria, through the
			social media platform, Amr al-
			Azm, co-director of the
			Antiquities Trafficking and
			Heritage Anthropology Research
			(ATHAR) Project, told Sputnik in
			an interview. (RVESEN191128)
	North	The	Federal Reserve Chairman
	America	pundit/organiz	Jerome Powell calls for a halt to
		ation comes	Facebook's Libra project
		from North	speaking at a House Financial
		America.	Services Committee on July 10,
			2019. Powell stated that Libra
			raised "serious concerns" around
			privacy, consumer protection and
			money laundering, as well as
			more general financial stability.
			(TABB190725)
	South	The	-
	America	pundit/organiz	
		ation comes	
		from South	
		America.	
Stance			
	Negative	The stance of	Datur ist in jedem Land eine
		the statement	entsprechende Banklizenz notig,
		towards Libra	sonst ist der Betrieb illegal."
		is negative.	Durch die Anonymität von Libra

		seien "die Risiken der
		Geldwäsche erhöht".
		(HNDBLT190626-2)
Neutral	The stance of	Und dennoch: Allein die
	the statement	technischen Voraussetzungen zu
	towards Libra	erfüllen reiche nicht aus, sagt
	is neutral.	Vöpel. Ohne Vertrauen der
		Menschen in die neue Währung
		ginge es nicht. (WESKU191024)
Positive	The stance of	What a combination Libra offers:
	the statement	convenience and currency
	towards Libra	stability. (FBCOM191112)
	is positive.	

6.5. Appendix B: Corpus: Directory of newspaper articles

Directory of Newsp	paper Articles (Corpus)		
		D 1 H 1 H	
ID	Outlet	Publishing	Nr. of
		Date	Codes
CONTEL190509	The Cointelegraph	09.05.2019	5
COINDSK190510	CoinDesk.com	10.05.2019	5
ECTIM190513	The Economic Times	13.05.2019	5
COINDSK190517	CoinDesk.com	17.05.2019	5
DAMONL190607	Mail Online	07.06.2019	5
DAMONL190614	Mail Online	14.06.2019	10
J190614	The Wall Street Journal	14.06.2019	5
SILBJO190617	Silicon Valley/San Jose Business Journal	17.06.2019	5
	Online		
AFPDE190618	Agence France Presse	18.06.2019	10
APRS190618	Associated Press Newswires	18.06.2019	25
BLTENE190618	Blockchain Tech News	18.06.2019	5
COINDSK190618	CoinDesk.com	18.06.2019	10
DAITEL190618	Daily Telegraph	18.06.2019	5
DPAFX190618-2	dpa-AFX ProFeed	18.06.2019	5
DPAFX190618-1	dpa-AFX ProFeed	18.06.2019	5
GRDN190618	The Guardian	18.06.2019	5
HNTM190618	Hindustan Times	18.06.2019	5
INDOP190618-2	Independent Online	18.06.2019	20
INDOP190618-1	Independent Online	18.06.2019	5
LBA190618-2	Reuters News	18.06.2019	10
LBA190618-1	Reuters News	18.06.2019	5
NEWVEN190618	New Vision	18.06.2019	5
RVESEN190618	Sputnik News Service	18.06.2019	5
TELUK190618	The Telegraph Online	18.06.2019	5
WIRONL190618	WirtschaftsWoche Online	18.06.2019	5
YP190618	Yorkshire Post	18.06.2019	5
COINDSK190619	CoinDesk.com	19.06.2019	5
AFNR190619	The Australian Financial Review	19.06.2019	5
BLOKN190619	Blick Online	19.06.2019	15

DJDN190619-4	Dow Jones Institutional News	19.06.2019	5
DJDN190619-3	Dow Jones Institutional News	19.06.2019	5
DJDN190619-2	Dow Jones Institutional News	19.06.2019	15
DJDN190619-1	Dow Jones Institutional News	19.06.2019	15
DT190619	The Daily Telegraph	19.06.2019	10
EJINST190619	EJ Insight	19.06.2019	5
GRDN190619	The Guardian	19.06.2019	5
HMSP190619	The Hamilton Spectator	19.06.2019	5
HRAZI190619	The Herald Zimbabwe	19.06.2019	5
HRETZ190619	Haaretz	19.06.2019	15
IND190619	The Independent	19.06.2019	10
J190619	The Wall Street Journal	19.06.2019	5
LXWORD190619	Luxemburger Wort	19.06.2019	5
MPC190619	MediaPost.com	19.06.2019	5
NFINCE190619-2	CE NoticiasFinancieras	19.06.2019	5
NFINCE190619-1	CE NoticiasFinancieras	19.06.2019	5
PBDBR190619	Palm Beach Daily Business Review	19.06.2019	5
PRN190619	PR Newswire	19.06.2019	5
RHEPO190619	Rheinische Post Hilden	19.06.2019	10
TOR190619	The Toronto Star	19.06.2019	10
TRADAR190619	TradeArabia	19.06.2019	10
WIRONL190619	WirtschaftsWoche Online	19.06.2019	5
WSJO190619	The Wall Street Journal Online	19.06.2019	5
CALH190620	Calgary Herald	20.06.2019	5
CONTEL190620	The Cointelegraph	20.06.2019	5
EJINST190620	EJ Insight	20.06.2019	10
GRDN190620-2	The Guardian	20.06.2019	5
GRDN190620-1	The Guardian	20.06.2019	10
HNTM190620	Hindustan Times	20.06.2019	5
NFINCE190620	CE NoticiasFinancieras	20.06.2019	5
NYTFEED190620	NYTimes.com Feed	20.06.2019	5
NZZINT190620	NZZ International	20.06.2019	5
RTNW190620	Dow Jones Newswires Chinese (English)	20.06.2019	10
SUDZEIT190620	Süddeutsche Zeitung Online	20.06.2019	5
TAGANZ190620	Tages Anzeiger Online	20.06.2019	5

TIMEUK190620	thetimes.co.uk	20.06.2019	5
WESKU190620	Weser Kurier	20.06.2019	5
LBA190621-2	Reuters News	21.06.2019	15
AFNR190621	The Australian Financial Review	21.06.2019	5
AMB190621	American Banker	21.06.2019	10
ATBEMI190621	Best Media Info	21.06.2019	5
AUSTLN190621	The Australian	21.06.2019	5
CONTEL190621	The Cointelegraph	21.06.2019	10
DSTAR190621	The Daily Star	21.06.2019	10
ECTBAN190621	The Economic Times - Bangalore Edition	21.06.2019	5
HNIANS190621	Indo-Asian News Service	21.06.2019	5
LBA190621-1	Reuters News	21.06.2019	10
NEWVEN190621	New Vision	21.06.2019	10
NFINCE190621-3	CE NoticiasFinancieras	21.06.2019	5
NFINCE190621-2	CE NoticiasFinancieras	21.06.2019	5
NFINCE190621-1	CE NoticiasFinancieras	21.06.2019	5
PBDBR190621	Palm Beach Daily Business Review	21.06.2019	5
T190621	The Times	21.06.2019	5
CNEWSN190622	CNET News.com	22.06.2019	5
KORTIM190622	Korea Times	22.06.2019	5
LEBZEG190622	Lebensmittel Zeitung LZ/Net News	22.06.2019	20
T190622	The Times	22.06.2019	5
WELTON190622	WELT online	22.06.2019	5
WP190622	The Washington Post	22.06.2019	5
BUSIND190623	Business Daily	23.06.2019	20
DHLD190623	Daily Herald	23.06.2019	15
OB190623	The Observer	23.06.2019	15
ST190623	The Sunday Times	23.06.2019	5
TAGBLA190623	Tageblatt	23.06.2019	5
BDBR190624	Broward Daily Business Review	24.06.2019	5
CONTEL190624	The Cointelegraph	24.06.2019	10
FTFT190624	Financial Times	24.06.2019	5
HNTM190624	Hindustan Times	24.06.2019	10
BLOKN190625	Blick Online	25.06.2019	5
CNNWR190625	CNN Wire	25.06.2019	5

COINDSK190625	CoinDesk.com	25.06.2019	15
EFD190625	SNL European Financials Daily	25.06.2019	5
LBA190625-3	Reuters News	25.06.2019	10
LBA190625-2	Reuters News	25.06.2019	5
LBA190625-1	Reuters News	25.06.2019	5
NEWEU190625	New Europe	25.06.2019	10
SILCUK190625	Silicon.co.uk	25.06.2019	5
VENAF190625	Ventures Africa	25.06.2019	5
ABCNEW190626	Australian Broadcasting Corporation	26.06.2019	10
	News		
APAEC190626	APA Economic News Service	26.06.2019	5
COINDSK190626	CoinDesk.com	26.06.2019	5
DJDN190626	Dow Jones Institutional News	26.06.2019	5
DPAFX190626	dpa-AFX ProFeed	26.06.2019	5
FDG190626	Reuters - Nachrichten auf Deutsch	26.06.2019	5
FOCUSO190626	Focus Online	26.06.2019	5
HNDBLT190626-	Handelsblatt	26.06.2019	5
1			
HNDBLT190626-	Handelsblatt	26.06.2019	15
2			
HTCOLM190626	HT Columnists	26.06.2019	5
IDGCWA190626	Computerworld Australia	26.06.2019	5
IRISEX190626	The Irish Examiner	26.06.2019	5
LONFIN190626	Financial News	26.06.2019	5
NYTF190626	The New York Times	26.06.2019	10
TABB190626	Tabb Forum	26.06.2019	5
TELUK190626	The Telegraph Online	26.06.2019	10
TRADAR190626	TradeArabia	26.06.2019	5
WSJO190626	The Wall Street Journal Online	26.06.2019	5
AMB190627	American Banker	27.06.2019	5
FINP190627	National Post	27.06.2019	5
GOTONL190627	Göttinger Tageblatt / Eichsfelder	27.06.2019	5
	Tageblatt Online		
IRISEX190627	The Irish Examiner	27.06.2019	5
J190627	The Wall Street Journal	27.06.2019	5

NEWEU190627	New Europe	27.06.2019	10
SDDZ190627	Süddeutsche Zeitung	27.06.2019	10
BUSIND190628	Business Daily	28.06.2019	5
CONTEL190628-	The Cointelegraph	28.06.2019	5
1			
CONTEL190628-	The Cointelegraph	28.06.2019	5
2			
HNDZT190628	Handelszeitung Online	28.06.2019	10
LONFIN190628	Financial News	28.06.2019	5
USATONL19062	USA Today Online	28.06.2019	5
8			
DJDN190629	Dow Jones Institutional News	29.06.2019	5
GLOB190629	The Globe and Mail	29.06.2019	5
HNMINT190629	Mint	29.06.2019	5
BUSIND190630	Business Daily	30.06.2019	10
CASHSC190630	Cash	30.06.2019	5
DHLD190630	Daily Herald	30.06.2019	5
CONTEL190701	The Cointelegraph	01.07.2019	5
FTFT190701	Financial Times	01.07.2019	5
TELUK190701	The Telegraph Online	01.07.2019	10
BKNA190702	The Banker	02.07.2019	5
BSTN190702	Business Standard	02.07.2019	5
CITYMO190702	City AM	02.07.2019	5
CMPONL190702	Computerwelt Online	02.07.2019	10
CNEWSN190702	CNET News.com	02.07.2019	5
COINDSK190702	CoinDesk.com	02.07.2019	5
KMCR190702	SNL Kagan Media & Communications	02.07.2019	5
	Report		
LBA190702	Reuters News	02.07.2019	5
CNEWSN190703	CNET News.com	03.07.2019	5
COINDSK190703	CoinDesk.com	03.07.2019	15
GRDN190703	The Guardian	03.07.2019	5
MRKWC190703	MarketWatch	03.07.2019	10
NFINCE190703	CE NoticiasFinancieras	03.07.2019	5
FTFT190704	Financial Times	04.07.2019	5

GLOTNE190704	Global Times	04.07.2019	10
KHALEJ190704	Khaleej Times	04.07.2019	5
UWIR190704	U-Wire	04.07.2019	5
WIRWOC190704	Wirtschaftswoche	04.07.2019	5
BLOKN190705	Blick Online	05.07.2019	5
BUSIND190705	Business Daily	05.07.2019	15
HTMINA190705	MintAsia	05.07.2019	5
KMCR190705	SNL Kagan Media & Communications	05.07.2019	5
	Report		
SHND190705	Shanghai Daily	05.07.2019	5
COINDSK190707	CoinDesk.com	07.07.2019	5
COMME190708	Interfax: Russia & CIS IT & Telecom	08.07.2019	5
	Weekly		
CONTEL190708	The Cointelegraph	08.07.2019	5
HTMEDN190708	MediaNama	08.07.2019	5
SCMP190708	South China Morning Post	08.07.2019	10
BLOKN190709	Blick Online	09.07.2019	5
CNEWSN190709	CNET News.com	09.07.2019	10
ENPNEW190709	ENP Newswire	09.07.2019	10
SILCUK190709	Silicon.co.uk	09.07.2019	15
YICAIG190709	Yicai Global	09.07.2019	5
COINDSK190710	CoinDesk.com	10.07.2019	5
BTRIB190712	DT News	12.07.2019	15
FTCOM190712	Financial Times (FT.Com)	12.07.2019	10
WINSTR190712	Windsor Star	12.07.2019	5
IIND190713	The Independent	13.07.2019	10
SUNDTI190713	sundaytimes.co.uk	13.07.2019	5
HNDONL190714	Handelsblatt Online	14.07.2019	5
BTRIB190715	DT News	15.07.2019	15
COINDSK190715	CoinDesk.com	15.07.2019	5
DJDN190715	Dow Jones Institutional News	15.07.2019	15
INFOM190715	Information Management	15.07.2019	5
INVDAI190715	Investor's Business Daily	15.07.2019	5
J190715	The Wall Street Journal	15.07.2019	5
LBA190715	Reuters News	15.07.2019	5

MOBILPT190715	Mobile Payments Today	15.07.2019	5
NANIG190715	News Agency of Nigeria	15.07.2019	5
NFINCE190715	CE NoticiasFinancieras	15.07.2019	5
TIMEUK190715	thetimes.co.uk	15.07.2019	10
CASHSC190716	Cash	16.07.2019	5
CNNWR190716	CNN Wire	16.07.2019	5
DEUTRK190716	Deutschlandfunk Transkripte	16.07.2019	5
FDG190716	Reuters - Nachrichten auf Deutsch	16.07.2019	5
FOCUSO190716	Focus Online	16.07.2019	5
INVDAI190716	Investor's Business Daily	16.07.2019	5
MMONLN19071	manager magazin Online	16.07.2019	10
6			
NFINCE190716	CE NoticiasFinancieras	16.07.2019	5
NYTF190716	The New York Times	16.07.2019	5
SNLFE190716	SNL Financial Extra	16.07.2019	5
DEUEN190717	Deutsche Welle	17.07.2019	5
HNDBLT190717	Handelsblatt	17.07.2019	15
LBA190717	Reuters News	17.07.2019	5
NFINCE190717	CE NoticiasFinancieras	17.07.2019	15
PARALL190717	ForeignAffairs.co.nz	17.07.2019	10
WSJO190717	The Wall Street Journal Online	17.07.2019	5
BKPOST190718	Bangkok Post	18.07.2019	5
CASHSC190718-	Cash	18.07.2019	5
1			
CASHSC190718-	Cash	18.07.2019	5
2			
COINDSK190718	CoinDesk.com	18.07.2019	10
CONTEL190718	The Cointelegraph	18.07.2019	10
EDMNTN190718	The Edmonton Sun	18.07.2019	10
FTCOM190718	Financial Times (FT.Com)	18.07.2019	5
KYODO190718	Kyodo News	18.07.2019	10
LBSMTL190718	Lebensmittel Zeitung	18.07.2019	5
NFINCE190718	CE NoticiasFinancieras	18.07.2019	5
OTTSUN190718	The Ottawa Sun	18.07.2019	10
SDA190718	SDA - Schweizerische Depeschenagentur	18.07.2019	10

STBT190718	Business Times Singapore	18.07.2019	5
UWIR190718	U-Wire	18.07.2019	15
WSJO190718	The Wall Street Journal Online	18.07.2019	5
AMB190719	American Banker	19.07.2019	5
BIZINS190719	Business Insider	19.07.2019	5
FBCOM190719	Forbes.com	19.07.2019	10
FTFT190719-1	Financial Times	19.07.2019	30
FTFT190719-2	Financial Times	19.07.2019	5
INDFED190719	US Fed News	19.07.2019	5
J190719	The Wall Street Journal	19.07.2019	5
KMCR190719	SNL Kagan Media & Communications	19.07.2019	5
	Report		
OANA190719	Organisation of Asia-Pacific News	19.07.2019	5
	Agencies		
TELWOR190719	Telecompaper World	19.07.2019	10
UNIBAG190719	United News of Bangladesh	19.07.2019	10
VTC190719	Victoria Times Colonist	19.07.2019	5
J190720	The Wall Street Journal	20.07.2019	10
BALDAI190722	Baltic Business Daily	22.07.2019	5
COINDSK190722	CoinDesk.com	22.07.2019	15
CONTEL190722-	The Cointelegraph	22.07.2019	15
2			
CONTEL190722-	The Cointelegraph	22.07.2019	5
1			
PRESSA190722	Press Association National Newswire	22.07.2019	5
TELAFR190722	Telecompaper Africa	22.07.2019	5
BON190723	Barron's Online	23.07.2019	5
HNDONL190723	Handelsblatt Online	23.07.2019	5
LBA190723	Reuters News	23.07.2019	5
WPCOM190723	Washington Post.com	23.07.2019	5
BORSZT190724	Börsen-Zeitung	24.07.2019	5
CETTEN190724	CE Think Tank Newswire	24.07.2019	5
ABENEN190725	AboutEnergy.com	25.07.2019	15
AFPDE190725	Agence France Presse	25.07.2019	5
CASHSC190725	Cash	25.07.2019	5

CMPBLD190725	Computer Bild	25.07.2019	10
CONTEL190725	The Cointelegraph	25.07.2019	5
TABB190725	Tabb Forum	25.07.2019	15
HNDBLT190728	Handelsblatt	28.07.2019	15
AMB190729	American Banker	29.07.2019	5
BLOKN190729	Blick Online	29.07.2019	5
CDGLED190729	China Daily-Global Edition	29.07.2019	5
GLOTNE190729	Global Times	29.07.2019	5
HNDONL190729	Handelsblatt Online	29.07.2019	5
AMB190730	American Banker	30.07.2019	5
COINDSK190730	CoinDesk.com	30.07.2019	5
CONTEL190730	The Cointelegraph	30.07.2019	5
BBPUB190731	Mondaq Business Briefing	31.07.2019	5
BRACOI190731-	Brave New Coin	31.07.2019	5
1			
BRACOI190731-	Brave New Coin	31.07.2019	5
2			
CONTEL190731	The Cointelegraph	31.07.2019	5
DJDN190731	Dow Jones Institutional News	31.07.2019	5
BONDGD190801	bondguide online	01.08.2019	20
LXWORD190801	Luxemburger Wort	01.08.2019	5
-2			
LXWORD190801	Luxemburger Wort	01.08.2019	10
-1			
ATDOMB190802	Domain-B	02.08.2019	5
COMD190802	Communications Daily	02.08.2019	5
EXCO190802	express.co.uk	02.08.2019	5
KPCM190802	Kiplinger.com	02.08.2019	15
LBA190802	Reuters News	02.08.2019	10
NLADLW190802	The Advertiser - Online	02.08.2019	5
CONTEL190804	The Cointelegraph	04.08.2019	10
WIRONL190804	WirtschaftsWoche Online	04.08.2019	5
BLOKN190805	Blick Online	05.08.2019	20
BUNDT190805	Bündner Tagblatt	05.08.2019	5
EJINST190805	EJ Insight	05.08.2019	5

	Financial Times (FT.Com)	05.08.2019	5
NFINCE190805	CE NoticiasFinancieras	05.08.2019	5
BUSIDA190807	Business Daily	07.08.2019	15
BBPUB190808	Mondaq Business Briefing	08.08.2019	5
CONTEL190810	The Cointelegraph	10.08.2019	10
NFINCE190811	CE NoticiasFinancieras	11.08.2019	5
BLTENE190812	Blockchain Tech News	12.08.2019	15
CONTEL190818	The Cointelegraph	18.08.2019	5
BIZINS190820	Business Insider	20.08.2019	5
MOBILPT190820	Mobile Payments Today	20.08.2019	10
DEUEN190821	Deutsche Welle	21.08.2019	10
AGEU190822	Bulletin Quotidien Europe	22.08.2019	5
BUSIND190822	Business Daily	22.08.2019	5
EURACOM19082	EurActiv.com	22.08.2019	10
2			
INVR190822	Investors Chronicle - Magazine and Web	22.08.2019	5
	Content		
MMONLN19082	manager magazin Online	22.08.2019	5
2			
SNLFE190822	SNL Financial Extra	22.08.2019	5
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ZURZEIT190822	Zurichsee-Zeitung	22.08.2019	5
ZURZEIT190822 CONTEL190823	The Cointelegraph	22.08.2019 23.08.2019	5 5
ZURZEIT190822 CONTEL190823 DJDN190823	The Cointelegraph Dow Jones Institutional News	22.08.2019 23.08.2019 23.08.2019	5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal	22.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 5 25
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 5 25
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online Neue Zürcher Zeitung	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online Neue Zürcher Zeitung Neue Zürcher Zeitung	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190824	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online Neue Zürcher Zeitung Neue Zürcher Zeitung Neue Zürcher Zeitung Neue Zürcher Zeitung	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5 5 10
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190824 NFINCE190823	Zurichsee-Zeitung The Cointelegraph Dow Jones Institutional News The Wall Street Journal manager magazin Online Neue Zürcher Zeitung Neue Zürcher Zeitung Neue Zürcher Zeitung CE NoticiasFinancieras	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5 5 10 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190824 NFINCE190823 RTNW190823	Zurichsee-ZeitungThe CointelegraphDow Jones Institutional NewsThe Wall Street Journalmanager magazin OnlineNeue Zürcher ZeitungNeue Zürcher ZeitungNeue Zürcher ZeitungCE NoticiasFinancierasDow Jones Newswires Chinese (English)	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5 5 10 5 5 5 5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190824 NFINCE190823 RTNW190823 NZZINT190824	Zurichsee-ZeitungThe CointelegraphDow Jones Institutional NewsThe Wall Street Journalmanager magazin OnlineNeue Zürcher ZeitungNeue Zürcher ZeitungNeue Zürcher ZeitungCE NoticiasFinancierasDow Jones Newswires Chinese (English)NZZ International	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019	5 5 5 25 5 5 5 10 5 5 5 5 5 5 5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190823 NEUZZ190823 RTNW190823 RTNW190823 NZZINT190824 BRACOI190825	Zurichsee-ZeitungThe CointelegraphDow Jones Institutional NewsThe Wall Street Journalmanager magazin OnlineNeue Zürcher ZeitungNeue Zürcher ZeitungNeue Zürcher ZeitungCE NoticiasFinancierasDow Jones Newswires Chinese (English)NZZ InternationalBrave New Coin	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 24.08.2019 25.08.2019	5 5 5 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190823-2 NEUZZ190823 RTNW190823 RTNW190823 NZZINT190824 BRACOI190825 AFNR190826	Zurichsee-ZeitungThe CointelegraphDow Jones Institutional NewsThe Wall Street Journalmanager magazin OnlineNeue Zürcher ZeitungNeue Zürcher ZeitungNeue Zürcher ZeitungCE NoticiasFinancierasDow Jones Newswires Chinese (English)NZZ InternationalBrave New CoinThe Australian Financial Review	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 24.08.2019 25.08.2019 26.08.2019	5 5 5 25 5
ZURZEIT190822 CONTEL190823 DJDN190823 J190823 MMONLN19082 3 NEUZZ190823-1 NEUZZ190823-2 NEUZZ190823-2 NEUZZ190823 NEUZZ190824 NFINCE190823 RTNW190823 NZZINT190824 BRACOI190825 AFNR190826 BIZINS190826	Zurichsee-ZeitungThe CointelegraphDow Jones Institutional NewsThe Wall Street Journalmanager magazin OnlineNeue Zürcher ZeitungNeue Zürcher ZeitungNeue Zürcher ZeitungCE NoticiasFinancierasDow Jones Newswires Chinese (English)NZZ InternationalBrave New CoinThe Australian Financial ReviewBusiness Insider	22.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 23.08.2019 24.08.2019 25.08.2019 26.08.2019	5 5 5 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

NZZINT190826	NZZ International	26.08.2019	5
FMETMA190827	ETMAG.com	27.08.2019	10
BUSIND190828	Business Daily	28.08.2019	10
INDOP190904	Independent Online	04.09.2019	10
NFINCE190902	CE NoticiasFinancieras	02.09.2019	5
BTRIB190903	DT News	03.09.2019	5
LONFIN190903	Financial News	03.09.2019	5
ARBUS190904	ArabianBusiness.com	04.09.2019	5
CYMAIL190905	Cyprus Mail	05.09.2019	5
HNDBLT190905	Handelsblatt	05.09.2019	10
LBA190905-1	Reuters News	05.09.2019	5
LBA190905-2	Reuters News	05.09.2019	10
SDA190905	SDA - Schweizerische Depeschenagentur	05.09.2019	10
CASHSC190906	Cash	06.09.2019	10
BLKON190907	Blick Online	07.09.2019	5
STUNAC190907	Stuttgarter Nachrichten	07.09.2019	5
BLOKN190909	Blick Online	09.09.2019	5
LBA190910-2	Reuters News	10.09.2019	10
LBA190910-1	Reuters News	10.09.2019	5
NFINCE190910	CE NoticiasFinancieras	10.09.2019	5
RTNW190910	Dow Jones Newswires Chinese (English)	10.09.2019	10
BLOKN190911	Blick Online	11.09.2019	5
LBA190911	Reuters News	11.09.2019	5
CONTEL190912	The Cointelegraph	12.09.2019	5
CONTEL190912	The Cointelegraph	12.09.2019	10
FTCOM190912	Financial Times (FT.Com)	12.09.2019	15
LBA190912-2	Reuters News	12.09.2019	5
LBA190912-1	Reuters News	12.09.2019	10
NFINCE190912-2	CE NoticiasFinancieras	12.09.2019	5
NFINCE190912-1	CE NoticiasFinancieras	12.09.2019	10
PLATBR190912	Platow Brief	12.09.2019	5
RVESEN190912	Sputnik News Service	12.09.2019	5
TELWOR190912	Telecompaper World	12.09.2019	5
THESUK190912	thesun.co.uk	12.09.2019	10
XNEWS190912	Xinhua News Agency	12.09.2019	5

COINDSK190913 CoinDesk.com 13.09.2019 10 DT190913 The Daily Telegraph 13.09.2019 5 IND190913 The Independent 13.09.2019 5 AFNR190916 The Australian Financial Review 16.09.2019 10 AIWIBA190916 Israel Business Arena 16.09.2019 10 COINDSK190916 CoinDesk.com 16.09.2019 10 IDGCWA190916 Computerworld Australia 16.09.2019 10 IDGCWA190916 Silicon.co.uk 16.09.2019 10 SILCUK190916 Silicon.co.uk 16.09.2019 10 VNCS190916 Vancouver Sun 16.09.2019 10 LBA190917-1 Reuters News 17.09.2019 10 BLOKN190917 Blick Online 17.09.2019 5 17 FMETMA190917 ETMAG.com 17.09.2019 15
DT190913 The Daily Telegraph 13.09.2019 5 IND190913 The Independent 13.09.2019 5 AFNR190916 The Australian Financial Review 16.09.2019 10 AIWIBA190916 Israel Business Arena 16.09.2019 15 COINDSK190916 CoinDesk.com 16.09.2019 10 IDGCWA190916 Computerworld Australia 16.09.2019 10 SILCUK190916 Silicon.co.uk 16.09.2019 10 VNCS190916 Silicon.co.uk 16.09.2019 10 LBA190917-1 Reuters News 17.09.2019 10 BLOKN190917 Blick Online 17.09.2019 5 TV FMETMA190917 ETMAG.com 17.09.2019 15
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BLOKN190917 Blick Online 17.09.2019 5 EUSERCOM1909 EUobserver.com 17.09.2019 5 17 FMETMA190917 ETMAG.com 17.09.2019 15
EUSERCOM1909 EUobserver.com 17.09.2019 5 17 FMETMA190917 ETMAG.com 17.09.2019 15 ENVEN400017 Local 10 10
17 FMETMA190917 ETMAG.com 17.09.2019 15
FMETMA190917 ETMAG.com 17.09.2019 15 NN/EN400017 L
INVEN190917 Investing.com 17.09.2019 10
LBA190917-3 Reuters News 17.09.2019 5
LBA190917-2 Reuters News 17.09.2019 5
NDTVIN190917 NDTV 17.09.2019 5
BNZNGA190918 Benzinga.com 18.09.2019 10
COINDSK190918 CoinDesk.com 18.09.2019 5
CONTEL190918 The Cointelegraph 18.09.2019 10
FDG190918Reuters - Nachrichten auf Deutsch18.09.20195
LBA190918 Reuters News 18.09.2019 10
WELTON190918 WELT online 18.09.2019 10
COINDSK190919 CoinDesk.com 19.09.2019 5
FINWON190919-Finanz und Wirtschaft Online19.09.201910
1
FINWON190919-Finanz und Wirtschaft Online19.09.20195
2
GERCOL190919 German Collection 19.09.2019 5
NETZON190919 Netzwoche Online 19.09.2019 20
SDDZ190919 Süddeutsche Zeitung 19.09.2019 5
SNLFE190919 SNL Financial Extra 19.09.2019 5
COINDSK190920 CoinDesk.com 20.09.2019 10

FDG190920	Reuters - Nachrichten auf Deutsch	20.09.2019	5
FTEFN190920	FinTech Futures News	20.09.2019	15
RHEINPO190920	Rheinische Post Online	20.09.2019	5
SPGLO190920	Spiegel Online	20.09.2019	10
UWIR190920	U-Wire	20.09.2019	15
ZEITON190921	ZEIT online	21.09.2019	5
BLOKN190923	Blick Online	23.09.2019	5
EXCO190923	express.co.uk	23.09.2019	10
INDOP190923	Independent Online	23.09.2019	15
BLOKN190924	Blick Online	24.09.2019	5
NFINCE190924	CE NoticiasFinancieras	24.09.2019	10
NYLJ190924	New York Law Journal	24.09.2019	5
OMDLOB190925	Oman Daily Observer	25.09.2019	5
AFPR190926	Agence France Presse	26.09.2019	5
BLOKN190926	Blick Online	26.09.2019	10
COINDSK190926	CoinDesk.com	26.09.2019	5
FOCUSO190926	Focus Online	26.09.2019	15
HNDZT190926	Handelszeitung Online	26.09.2019	5
COINDSK190927	CoinDesk.com	27.09.2019	10
CONTEL190927	The Cointelegraph	27.09.2019	15
CONTEL190929	The Cointelegraph	29.09.2019	10
SCMP190930	South China Morning Post	30.09.2019	5
WELTON190930	WELT online	30.09.2019	5
ACWIRE191001	ACCESSWIRE	01.10.2019	5
CONTEL191001	The Cointelegraph	01.10.2019	5
ISOAG190901	NZZ am Sonntag	01.09.2019	5
LBA191001	Reuters News	01.10.2019	5
WSJO191001	The Wall Street Journal Online	01.10.2019	5
AFPR191002	Agence France Presse	02.10.2019	25
BLOKN191002	Blick Online	02.10.2019	10
CONTEL191002	The Cointelegraph	02.10.2019	5
INDOP191002	Independent Online	02.10.2019	5
RTDJGE191002	Dow Jones Newswires German	02.10.2019	10
SOCIABL191002-	The Sociable	02.10.2019	5
1			
SOCIABL191002-	The Sociable	02.10.2019	5
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2			
DAMONL191003	Mail Online	03.10.2019	15
FDG191003	Reuters - Nachrichten auf Deutsch	03.10.2019	5
HNDONL191003	Handelsblatt Online	03.10.2019	5
SILBJO191003	Silicon Valley/San Jose Business Journal	03.10.2019	10
	Online		
CNNWR191004	CNN Wire	04.10.2019	5
CNNWR191004	CNN Wire	04.10.2019	5
COINDSK191004	CoinDesk.com	04.10.2019	5
CONTEL191004	The Cointelegraph	04.10.2019	5
INVDAI191004	Investor's Business Daily	04.10.2019	5
WPCOM191004	Washington Post.com	04.10.2019	10
BERCOM191005	Berliner Morgenpost Online	05.10.2019	5
BLKON191005	Blick Online	05.10.2019	5
DJDN191005	Dow Jones Institutional News	05.10.2019	5
MMONLN19100	manager magazin Online	05.10.2019	5
5			
NFINCE191005	CE NoticiasFinancieras	05.10.2019	5
SDA191005	SDA - Schweizerische Depeschenagentur	05.10.2019	5
ZEITON191005	ZEIT online	05.10.2019	5
AFPDE191006	Agence France Presse	06.10.2019	10
HNDBLT191006	Handelsblatt	06.10.2019	5
ORANG191006	Oranienburger Generalanzeiger	06.10.2019	5
CFOCOM191007	CFO.com	07.10.2019	5
DT191007	The Daily Telegraph	07.10.2019	5
STUGTR191007	Stuttgarter Zeitung	07.10.2019	5
FINWON191008	Finanz und Wirtschaft Online	08.10.2019	5
KURRIA191008	Kurier	08.10.2019	5
NANIG191008	News Agency of Nigeria	08.10.2019	5
TELUK191008	The Telegraph Online	08.10.2019	20
AMB191009	American Banker	09.10.2019	15
AUSTLN191009	The Australian	09.10.2019	20
BIZINS191009	Business Insider	09.10.2019	5

COINDSK191009	CoinDesk.com	09.10.2019	5
-1			
COINDSK191009	CoinDesk.com	09.10.2019	5
-2			
CONTEL191009-	The Cointelegraph	09.10.2019	5
1			
CONTEL191009-	The Cointelegraph	09.10.2019	10
2			
DJDN191009	Dow Jones Institutional News	09.10.2019	5
SDA191009	SDA - Schweizerische Depeschenagentur	09.10.2019	10
WPCOM191009	Washington Post.com	09.10.2019	5
WSJO191009	The Wall Street Journal Online	09.10.2019	5
BLOKN191010	Blick Online	10.10.2019	5
COINDSK191010	CoinDesk.com	10.10.2019	5
DAIBN191010	Interfax: Russia & CIS Business and	10.10.2019	5
	Financial Newswire		
J191010	The Wall Street Journal	10.10.2019	5
NFINCE191010	CE NoticiasFinancieras	10.10.2019	5
AMB191016	American Banker	16.10.2019	10
SDDZ191016	Süddeutsche Zeitung	16.10.2019	5
SOLOZ191016	Solothurner Zeitung	16.10.2019	5
AFNR191017	The Australian Financial Review	17.10.2019	5
BIZINS191017	Business Insider	17.10.2019	10
CMPONL191017	Computerwelt Online	17.10.2019	5
CONTEL191017	The Cointelegraph	17.10.2019	5
LBA191017	Reuters News	17.10.2019	5
AFPDE191018	Agence France Presse	18.10.2019	10
AMB191018	American Banker	18.10.2019	5
BLOKN191018	Blick Online	18.10.2019	5
CONTEL191018	The Cointelegraph	18.10.2019	5
LBA191018-2	Reuters News	18.10.2019	5
LBA191018-1	Reuters News	18.10.2019	5
NFINCE191018	CE NoticiasFinancieras	18.10.2019	5
STTEN191018	STT	18.10.2019	5
TELUK191018	The Telegraph Online	18.10.2019	5

AGEU191019	Bulletin Quotidien Europe	19.10.2019	10
DIEP191019	Die Presse	19.10.2019	5
IRTI191019	The Irish Times	19.10.2019	5
JIJI191019	Jiji Press English News Service	19.10.2019	5
NYTF191019	The New York Times	19.10.2019	5
CONTEL191020-	The Cointelegraph	20.10.2019	5
2			
CONTEL191020-	The Cointelegraph	20.10.2019	10
1			
KHALEJ191020	Khaleej Times	20.10.2019	5
UWIR191020	U-Wire	20.10.2019	10
BLOKN191021	Blick Online	21.10.2019	5
FTCOM191021	Financial Times (FT.Com)	21.10.2019	5
FTCOM191022	Financial Times (FT.Com)	22.10.2019	10
BIZINS191022	Business Insider	22.10.2019	5
BLOKN191022	Blick Online	22.10.2019	5
CITYMO191022	City AM	22.10.2019	5
COINDSK191022	CoinDesk.com	22.10.2019	5
ENPNEW191022	ENP Newswire	22.10.2019	5
FMETMA191022	ETMAG.com	22.10.2019	5
NFINCE191022	CE NoticiasFinancieras	22.10.2019	5
PARALL191022	ForeignAffairs.co.nz	22.10.2019	5
WIRONL191022	WirtschaftsWoche Online	22.10.2019	5
BLOKN191023	Blick Online	23.10.2019	5
BWOG191023	Business World Ghana	23.10.2019	5
COINDSK191023	CoinDesk.com	23.10.2019	5
DAMONL191023	Mail Online	23.10.2019	5
GMBN191023	The Globe and Mail (Breaking News)	23.10.2019	5
IRTI191023	The Irish Times	23.10.2019	5
LBA191023	Reuters News	23.10.2019	10
MRKWC191023	MarketWatch	23.10.2019	10
NFINCE191023-2	CE NoticiasFinancieras	23.10.2019	10
NFINCE191023-1	CE NoticiasFinancieras	23.10.2019	5
THESCOT191023	thescottishsun.co.uk	23.10.2019	5
WESMAI191023	The Western Mail	23.10.2019	20

AUSTLN191024	The Australian	24.10.2019	10
BTRIB191024	DT News	24.10.2019	5
DJDN191024	Dow Jones Institutional News	24.10.2019	5
HNDBLT191024	Handelsblatt	24.10.2019	10
HNDONL191024	Handelsblatt Online	24.10.2019	5
NYPO191024	New York Post	24.10.2019	5
RTNW191024	Dow Jones Newswires Chinese (English)	24.10.2019	5
STA191024	STA	24.10.2019	5
WESKU191024	Weser Kurier	24.10.2019	10
SCMP191025	South China Morning Post	25.10.2019	5
AGEU191025	Bulletin Quotidien Europe	25.10.2019	5
BLOKN191025	Blick Online	25.10.2019	10
COINDSK191025	CoinDesk.com	25.10.2019	5
CONTEL191025	The Cointelegraph	25.10.2019	5
SCMP191027	South China Morning Post	27.10.2019	5
BTRIB191028	DT News	28.10.2019	5
NWSTIM191028	The New Times	28.10.2019	5
PEODEN191029	People's Daily Online	29.10.2019	5
QATRIB191029	Qatar Tribune	29.10.2019	10
WPCOM191029	Washington Post.com	29.10.2019	5
RVESEN191031	Sputnik News Service	31.10.2019	20
CONTEL191101	The Cointelegraph	01.11.2019	5
NEWVEN191104	New Vision	04.11.2019	5
AUSTLN191105	The Australian	05.11.2019	5
AUSTOL191105	The Australian - Online	05.11.2019	5
BBPUB191105	Mondaq Business Briefing	05.11.2019	40
CONTEL191105	The Cointelegraph	05.11.2019	5
FDG191105	Reuters - Nachrichten auf Deutsch	05.11.2019	5
HNDONL191105	Handelsblatt Online	05.11.2019	5
LBA191105	Reuters News	05.11.2019	5
MMONLN19110	manager magazin Online	05.11.2019	5
5			
NFINCE191105	CE NoticiasFinancieras	05.11.2019	5
NLNEWW19110	news.com.au	05.11.2019	5
5			

AGEE191106	The Age	06.11.2019	10
ASEXPO191106	Enterprise	06.11.2019	5
CONTEL191106	The Cointelegraph	06.11.2019	5
FTCOM191106	Financial Times (FT.Com)	06.11.2019	5
RLCL191106	Roll Call	06.11.2019	15
COINDSK191107	CoinDesk.com	07.11.2019	5
AGEU191108	Bulletin Quotidien Europe	08.11.2019	5
CITYMO191111	City AM	11.11.2019	10
NFINCE191111	CE NoticiasFinancieras	11.11.2019	10
CCARDM191112	PaymentsSource	12.11.2019	5
FBCOM191112	Forbes.com	12.11.2019	20
CONTEL191113	The Cointelegraph	13.11.2019	5
FB191113	Forbes	13.11.2019	5
BERCOM191114	Berliner Morgenpost Online	14.11.2019	5
AMB191116	American Banker	16.11.2019	5
LONFIN191118	Financial News	18.11.2019	5
BNZNGA191121	Benzinga.com	21.11.2019	5
CONGDP191122	Congressional Documents and	22.11.2019	5
	Publications		
CASHSC191125	Cash	25.11.2019	5
KORTIM191125	Korea Times	25.11.2019	5
SDA191126	SDA - Schweizerische Depeschenagentur	26.11.2019	5
RVESEN191128	Sputnik News Service	28.11.2019	5
SCBJ191129	Fairfield County Business Journal	29.11.2019	15
ADNWAU19120	AdNews	04.12.2019	5
4			
FTFT191205	Financial Times	05.12.2019	5
ZEITON191205	ZEIT online	05.12.2019	5
COINDSK191206	CoinDesk.com	06.12.2019	5
HANONL191206	Hannoversche Allgemeine Zeitung Online	06.12.2019	5
RVESEN191206	Sputnik News Service	06.12.2019	5
BLOKN191211	Blick Online	11.12.2019	5
ADDISS191213	Addis Standard	13.12.2019	5
CCARDM191218	PaymentsSource	18.12.2019	5
LBA191218	Reuters News	18.12.2019	10
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LBA191219	Reuters News	19.12.2019	5
NANIG191219	News Agency of Nigeria	19.12.2019	5
AFPR191227	Agence France Presse	27.12.2019	10
BRACOI191228	Brave New Coin	28.12.2019	5
RVESEN191228	Sputnik News Service	28.12.2019	5
CONTEL191229	The Cointelegraph	29.12.2019	5
NFINCE191229	CE NoticiasFinancieras	29.12.2019	5
SILCUK191230	Silicon.co.uk	30.12.2019	10

6.6. Appendix C: Statutory Declaration

I hereby declare that the thesis with title

"Libra - An analysis of design choices and public discourse"

has been composed by myself autonomously and that no means other than those declared were used. In every single case, I have indicated parts that were taken out of published or unpublished work, either verbatim or in a paraphrased manner, as such through a quotation.

This thesis has not been handed in or published before in the same or similar form.

Zürich, 30.04.2020

Daniel Jachter

(Daniel Gächter - digital signature)