

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Languages**



**Bachelor Thesis**

**Principles of Cryptocurrency and Cryptocurrency  
Investing Strategies by Comparing Two  
Cryptocurrencies – PLCU and Bitcoin**

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# **BACHELOR THESIS ASSIGNMENT**

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Business Administration

Thesis title

**Principles of cryptocurrency and cryptocurrency investing strategies by comparing two cryptocurrencies – PLCU and Bitcoin**

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## **Objectives of thesis**

The main aim of the bachelor thesis is to evaluate the technologies on which the Bitcoin and PLCU cryptocurrencies are created and determine how profitable and safe it is to invest in the new PLCU cryptocurrency.

## **Methodology**

The work consists of two parts – theoretical and practical. The theoretical part will be based on the study of secondary sources. The empirical part will be compiled on the basis of outputs from quantitative/qualitative research.

## The proposed extent of the thesis

30 – 40 pages

## Keywords

cryptocurrencies, investing, investing strategies, Bitcoin, PLCU, comparison, cryptocurrency market, digital currency, transactions

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## Recommended information sources

- ABRAHAM, K. *Cryptocurrency: Mining, Investing and Trading in Blockchain, including Bitcoin, Ethereum, Litecoin, Ripple, Dash, Dogecoin, Emercoin, Putincoin, Auroracoin and others.* [elektronický zdroj] /. CreateSpace Independent Publishing Platform, 2017. ISBN 9781979003261
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## **Declaration**

I declare that I have worked on my bachelor thesis titled " Principles of Cryptocurrency and Cryptocurrency Investing Strategies by Comparing Two Cryptocurrencies – PLCU and Bitcoin " by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2023

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# **Principles of Cryptocurrency and Cryptocurrency Investing Strategies by Comparing Two Cryptocurrencies – PLCU and Bitcoin**

## **Abstract**

The main aim of the bachelor thesis is to evaluate the technologies on which the Bitcoin and PLCU cryptocurrencies are created and determine how profitable and safe it is to invest in the new PLCU cryptocurrency.

The work consists of two parts - theoretical and practical. The theoretical part is based on the study of secondary sources. The empirical part is compiled on the basis of outputs from quantitative qualitative research.

To conclude, it is possible to say that investing into PLCU or any other crypto assets, regardless of the fact if it is Bitcoin or any other altcoin is extremely risky due to the fact that the market is in its bearish stage that was brought upon all crypto assets after the series of misfortunate events, such as the crash of Luna and the crash of FTX. In addition to that, investing into crypto assets and evidently into PLCU is not a good idea for a reason that the currency has a significant negative correlation with the US dollar, which is currently returning a very impressive and strong performance over the course of the last year.

**Keywords:** cryptocurrencies, investing, investing strategies, Bitcoin, PLCU, comparison, cryptocurrency market, digital currency, transactions

# Investiční strategie porovnáním dvou kryptoměn- PLCU a Bitcoin

## Abstrakt

Hlavním cílem bakalářské práce je zhodnotit technologie, na kterých jsou kryptoměny Bitcoin a PLCU vytvářeny, a určit, jak výnosné a bezpečné je investovat do nové kryptoměny PLCU.

Práce se skládá ze dvou částí-teoretické a praktické. Teoretická část je založena na studiu sekundárních zdrojů. Empirická část je sestavena na základě výstupů z kvantitativního kvalitativního výzkumu.

Na závěr lze říci, že investice do PLCU nebo jiných krypto aktiv, bez ohledu na to, zda se jedná o Bitcoin nebo jakýkoli jiný altcoin, je extrémně riskantní vzhledem k tomu, že trh je ve své medvědí fázi, která byla přivedena na všechna krypto aktiva po sérii neštěstí, jako je havárie Lunny a havárie FTX. Kromě toho investice do krypto aktiv a evidentně do PLCU není dobrý nápad z toho důvodu, že měna má významnou negativní korelaci s americkým dolarem, který v současné době vrací velmi působivý a silný výkon v průběhu posledního roku.

**Klíčová slova:** kryptoměny, investování, investiční strategie, Bitcoin, PLCU, srovnání, trh s kryptoměnami, Digitální měna, transakce

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# 1 Introduction

Digital currencies, often known as cryptocurrencies, have emerged in recent years, bringing about profound changes in the financial sector. With the introduction of Bitcoin in 2008-2009, the first and most widely used cryptocurrency, the usage and acceptability of cryptocurrencies as a whole have increased dramatically. The widespread adoption of cryptocurrencies has been heralded as a potential game-changer in the financial industry, since they pose a threat to centralized authorities while also enabling the development of decentralized networks for financial operations.

This bachelor thesis was inspired by the desire to investigate the cryptocurrency phenomena from a scholarly point of view and to be more specific, to analyze the development of two coins really popular nowadays – PLCU and Bitcoin. Understanding the effects of cryptocurrencies on the global economy, the financial system, and society as a whole demands a deep dive into this multifaceted and convoluted topic.

In recent years, cryptocurrency usage and value have skyrocketed. This has sparked a lot of curiosity among investors and regular people. Yet, cryptocurrencies are a highly speculative commodity with a lot of room for price swings, and there are numerous open questions and debates around their usage and regulation. This thesis intends to do two things: address these concerns and present a balanced assessment of the risks and rewards of cryptocurrency. The thesis will get out with a brief backgrounder on the origins and development of cryptocurrencies, with special emphasis on Bitcoin's meteoric rise and its consequences for the global financial system, as well as on PLCU. Ultimately, the thesis comes up with a conclusion of the best investment option out of the two.

## **2 Objectives and Methodology**

### **2.1 Objectives**

The main aim of the bachelor thesis is to evaluate the technologies on which the Bitcoin and PLCU cryptocurrencies are created and determine how profitable and safe it is to invest in the new PLCU cryptocurrency.

In addition to the original goal, the thesis is also focused on understanding if PLCU is a good alternative to investing in Bitcoin, which is evidently the most powerful and best-performing crypto securities. In contrast, performances of both PLCU and Bitcoin are compared with the performance of the US dollar index.

### **2.2 Methodology**

The work consists of two parts - theoretical and practical. The theoretical part is based on the study of secondary sources. The empirical part is compiled on the basis of outputs from quantitative qualitative research.

To be more specific, there are various techniques that are used for the financial comparative analysis of securities, such as correlation analysis and trend analysis, which offer a perfect overview of the background behind given securities considered for potential investment.

## **3 Literature Review**

### **3.1 Cryptocurrency**

#### **3.1.1 History**

This chapter of the bachelor thesis offers an overview of the history behind the most well-known cryptocurrencies and the current status of crypto currencies in the financial world, according to the words of prominent academists and experts from the domain.

In the span of approximately a decade, cryptocurrency has been able to transform itself from an obscure concept originating on the internet into a market that is today projected to be worth approximately three trillion dollars. It is reasonable to think that cryptocurrencies gradually expanded their relevance and impact over time; however, in reality, their development became a direct result of what is occurring in the context of challenging times. But in order to really grasp what bitcoin is now, it is necessary to first have a solid understanding of what it formerly was.

The 21st century is characterized by a proliferation of advanced technology and inventions, and all aspects of society are undergoing change, transformation, and further transformation. The use of information and communication technology is becoming increasingly widespread and pervasive across all spheres of public life. The economy is not an exception to this rule, and as a result, the alterations got connected to cash, namely the emergence of a new digital currency. People now live in a market system, which is one in which demand is the driving force behind supply. It seems to reason that the current information society would call for the development of a fresh method of monetary exchange that is more forward-thinking than traditional forms of currency. This method of payment has evolved into its own form of digital currency, which is known as cryptocurrency (Gans, 2015).

At the close of the 20th century, the groundwork that would later serve as the basis for the development of this kind of finance began to take shape. In 1983, there were published the idea of employing electronic money. The creators of this concept were Stefan Brands and David Chaum. This idea laid the groundwork for the sector of the economy in which

bitcoin is used directly and where it first came into existence. “DigiCash” was the first company to build and begin utilizing a cryptographic system in order to provide a form of unknown and anonymous financial transactions (Chaum, 1997). Adam Buck is credited for developing the fundamentals of the block system and the whole blockchain chain in 1997 (Wright, 2015). This foundation has made a significant advance in the development of cryptocurrencies by taking this step. Niko Sab and Wei Dai outlined a type of "fathers of bitcoin" in their notion in 1998 (Cheon, 2016). They pioneered the notion of presenting a description of the first cryptographic finance and were the first to do so.

The year 2008 is the first time that bitcoin is mentioned in print. Then, a very small group of upcoming and well-known IT professionals began to consider the possibility of developing a brand-new digital currency. Ideas would have stayed as dreams if Satoshi Nakamoto had not, in his paper, outlined the notion of generating monetary units based on cryptography, also known as the so-called "crypto money concept. This person or group of people, as it is still uncertain whether the same Satoshi Nakamoto truly exists and his personality continues to be a mystery to this day, but it is he who is acknowledged to be the progenitor of cryptocurrency and Bitcoin, in particular (Lemieux, 2013). A year later, the first cryptocurrency network, which is now often referred to as the Bitcoin network, was founded. Subsequently, electronic wallets came into existence. However, the mere idea of "cryptocurrency" didn't come into existence until 2011, with the publishing of an article in Forbes magazine titled "Crypto currency" that discussed the Bitcoin payment mechanism (Azgad-Tromer, 2018).

A cryptocurrency is a form of decentralized virtual (or electronic) currency that is represented by its own individual cryptographic code. A blockchain is a cryptographic code, and each block in the blockchain represents a transaction in the blockchain (cells). Each cell is responsible for storing data pertaining to transactions, or activities that were carried out in the cryptocurrency network using a particular coin. Transactions are defined as actions that were carried out using a certain coin. Because of this, each block includes data pertaining to a single coin, but the blockchain, which is a collection of blocks, keeps information pertaining to all currencies. It is essential to keep in mind that a one-of-a-kind cryptographic code does not physically exist; in other words, the cryptocurrency does not have a physical counterpart (Singhal, 2018).

Because of its unique characteristics, Bitcoin is a notion that is both immensely intriguing and perplexing for many nations. As a result, the mentality of various nations regarding the concept of virtual finance differs. Some nations have acknowledged cryptocurrencies as a legitimate form of currency and accorded them legal status as a result. Others, like as the Russian Federation, were confronted with the challenge of attempting to legally regulate this kind of currency. The United States of America is often regarded as one of the most user-friendly nations for digital currencies. The market in the United States is one of the most convenient venues for the implementation of crypto projects, including the implementation of virtual finance. Both as a method of payment (in the sense that it functions as an analogue of monetary units) and as a tool of trade, this form of money is prevalent in this region. This data substantiates the widespread availability of ATMs that are specifically designed to handle bitcoin transactions. On the other hand, the geographical and state organization of the United States presents a number of challenges when it comes to the legal control of various segments of society and finances. On a regular basis, this sort of money is subject to legislative regulation that varies significantly between the federal level and the state level. It is essential to be aware that all transactions involving crypto currency are subject to taxation, and the frequency of these transactions is growing rapidly. There are whole businesses in the United States whose primary focus is on cryptocurrencies and associated activities (Mullan, 2016).

Additionally, cryptocurrency has gained significant traction in the Canadian market. The governing bodies of this nation have shown a lot of support for the virtual financial sector. This particular currency functions both as a monetary unit and an instrument of exchange within this context. However, it is important to pay particular attention to the technologies that are already available as well as the rate at which law is being developed in a particular jurisdiction. Already in 2014, a regulation was enacted to regulate the operations of bitcoin exchanges after they had been operating for some time (De Filippi, 2014).

In addition, the creation of a digital version of the Canadian dollar that is based on cryptocurrencies is now in an active stage of development. The fact that Canada is the best place for mining cryptocurrency is another noteworthy fact about the country. These measures are referred to by the state as one of the prospective vectors for the development

of the business community. The fact that the cost of power is very inexpensive in Canada is another positive feature of the country. The Chinese are the industry leaders in mining, and in light of the harsh and restrictive stance that their government takes against cryptocurrencies within their own nation, as well as the aforementioned factors, the Chinese are aggressively investing in Canada. In particular, the phrase "industrial mining" was coined in this nation, and an increasing number of enormous cryptocurrency farms are now being established.

Satoshi Nakamoto, the creator of cryptocurrencies in general and Bitcoin in particular, has his origins in Japan, one might make the argument that this country is the birthplace of bitcoin. This information is based on evidence that is not officially recognized. Japan is often regarded as the world's most innovative and technologically advanced country. It should come as no surprise that this region is seeing a surge in the growth of cryptocurrencies, which has resulted in the creation of an entire sector. The cryptocurrency industry is headquartered in Japan. Even Japan's own native cryptocurrencies, which are gaining a lot of traction in this nation, have been developed there. It was in 2014, when one of the main cryptocurrency exchanges in Japan went bankrupt, providing that it was a de facto monopolist in the nation, that cryptocurrency was finally given the green light to become legally traded (Decker, 2014). After it, the possibility of states regulating virtual financial systems emerged. The Japan Digital Assets Commission is in charge of regulating cryptocurrencies at the present time. 2016 was the year when the operations of exchanges on sensitive topics involving virtual money were settled. The taxation system, which works according to the general laws for Japan, also holds a lot of promise. When discussing Europe, it is important to note that several nations in Europe have passed laws that regulate cryptocurrencies and establish its status. Despite this, the European Union has not yet enacted any specialized regulations to govern the activity around cryptocurrencies. The taxation of cryptocurrencies is performed in line with the national legislation of the Member States.

### **3.1.2 Concept**

The rapidly developing field of crypto currency is built on cryptography, often known as the science of encrypting and decrypting information, is referred to as crypto. Cryptography has been around for decades, but because of the growing significance of

digital security in today's world, it has just lately become more well-known and is currently the subject of increased academic interest. The requirement for encryption that is both robust and foolproof is becoming increasingly pressing as the world grows more dependent on the internet and other forms of digital technology (Kessler, 2003).

Cryptography may be broken down into its most elementary form, which is the application of mathematical procedures to the process of encoding information in a way that is difficult to interpret without a specific key or password (Diffie, 2022). An algorithm is used in the process of encryption, which entails taking plaintext, or the information as it was originally written, and transforming it into ciphertext, or the information as it has been encrypted. After then, the ciphertext may be sent via an unsecured channel without the risk of it being read or understood by anyone who do not have permission to see it. The recipient must have a key or password in order to decode the ciphertext and get the plaintext that was originally sent. This involves reversing the encryption process.

The efficacy of the encryption method is among the most crucial factors of data security when it comes to cryptography. If an algorithm is robust, it should be nearly hard to crack using brute force techniques, such as testing every conceivable key combination until the right one is discovered. The strength of the underlying algorithm is just one component in establishing the level of total security provided by a cryptographic system; key size and complexity also play a significant role in this determination. The level of total security that is offered by a cryptographic system is determined by a number of different aspects, such as the robustness of the cryptographic algorithms that lie beneath it, the size of the cryptographic keys that are employed, the caliber of the random number generators that are put into play, and the safety of the procedures that are utilized for key management and distribution (Wu, 2019).

The level of security provided by a cryptographic system may often be evaluated based on how challenging it is to crack either the encryption or decryption procedures used by the system. The quantity of computational power and amount of time necessary to effectively crack the encryption is often used to quantify this difficulty (Smart, 2003).

A cryptographic system that provides a high level of security against attacks from both eavesdroppers and attackers trying to break the encryption through brute-force methods can provide this level of security if the algorithms it uses are strong and have been thoroughly tested, if the cryptographic keys are long, and if the random number generators are of a high quality.

However, the level of security offered by even the most robust cryptographic system is contingent on the key management and distribution procedures that are put into place to safeguard the cryptographic keys. If an adversary is successful in acquiring the key that is used to encrypt or decrypt data, the integrity of the security of the entire system may be put at risk.

In today's culture, the use of cryptography may be used for a wide variety of productive purposes. During the transmission of sensitive information via the internet, for instance, such as financial data and personal information, it may be utilized to secure the data and information. Additionally, it is used to the field of e-commerce to guarantee the safety and dependability of financial dealings conducted online. The use of cryptography by governments and military groups to safeguard sensitive information is another application of the technology. The advent of cryptocurrencies like Bitcoin over the past few years has been one of the most exciting and important developments in cryptography. A cryptocurrency is a digital asset that is designed to function as a medium of exchange and that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. One definition of cryptocurrency is "digital asset designed to work as a medium of exchange." Blockchain is the name given to the underlying technology that allows the use of cryptocurrencies feasible (Di Pierro, 2017). Blockchain is a distributed digital ledger system that may be used to store accurate and transparent records without any central authority. While Bitcoin and other cryptocurrencies may be the most well-known users, the technology's potential applications are far broader.

Essentially, a blockchain is a distributed database or ledger that resides on a network of computers. New transactions or data entries are added to the database in blocks that are linked together in a chronological chain, and each computer in the network (a node) has a copy of the whole database. This makes it such that all data and transactions on the



blockchain can never be altered or deleted (Golosova, 2018). Data integrity is protected by a cryptographic protocol in blockchain technology, which is one of its most important aspects. A digital signature or hash is created for each block in the chain using the information in that block and the hash of the block before it. Thus, a chain of blocks is created that cannot be broken without compromising the digital signatures of all following blocks. A consensus process is used to confirm the legitimacy of a newly proposed block before it is put to the blockchain. The consensus procedure used to determine whether or not a newly created block is genuine before it is added to the chain might vary depending on the blockchain technology in use. There is no central authority over the blockchain or its data, thus its transparency and security are guaranteed by this decentralized verification process. To sum up, blockchain technology is a potent instrument for generating trustworthy, open, and tamper-evident data stores and record-keeping mechanisms due to its mix of cryptographic security and decentralized verification. It might be used in many fields, from banking and supply chain management to medicine and beyond.

Cryptocurrencies such as Bitcoin rely on intricate cryptographic methods to guarantee the data, they store is both secure and accurate. The blockchain is the ledger that these currencies utilize to keep track of all of their transactions. Because the blockchain is stored on so many distinct computers, it is extremely difficult, if not impossible, for a single person or organization to falsify transactions or change the data contained in the blockchain (Golosova, 2018). The decentralized nature of cryptocurrencies is another fascinating facet of digital currencies. Cryptocurrencies, on the other hand, are decentralized and not associated with any one institution or government like traditional currencies are. Traditional currencies are managed by central banks and governments. This implies that they may be used as a form of money in any region of the world, without the need for a mediator or the participation of the government in each transaction that takes place using them.

In general, the idea of crypto is a fascinating and quickly developing topic that is altering the manner in which the world thinks about the flow of information and the maintenance of security. The need of having encryption that is both robust and secure will only continue to increase as the world continues to become more dependent on digital technology and gets more linked. In the wake of the development of cryptocurrencies and blockchain technology, people are witnessing the emergence of novel possibilities for the safe and decentralized

exchange of information that were previously inconceivable. It will be quite interesting to observe how this technology develops and how it affects the future of the world economy and society on a global scale.

### **3.1.3 Application**

Cryptocurrencies are a form of digital currency that employs cryptographic methods to ensure the confidentiality of financial transactions and to exercise control over the generation of new units. In recent years, they have achieved widespread acceptance and adoption, and the ways in which they may be used in the real world are becoming an increasingly diversified range of applications. One usage of cryptocurrency in the academic sector is the deployment of blockchain technology, which may be used to generate academic records that are both safe and impossible to alter (Halpin, 2017). This can be especially handy in situations in which traditional paper-based documents are prone to being misplaced, destroyed, or altered. Students and potential employers alike will have the ability to verify the legitimacy and precision of academic data that are stored on blockchain technology.

The usage of voting systems that are based on blockchain technology is another use of cryptocurrency in the academic world. Votes may be recorded in a manner that is both safe and open with the use of blockchain technology. This can help reduce the likelihood of voter fraud and boost confidence in the electoral process. It is also possible to utilize this technology to conduct polls and surveys online, which makes it much simpler to gather data and do analyses (Kshetri, 2018). Students, particularly those in underdeveloped countries where traditional banking systems may be unstable or unavailable, may also benefit financially from the adoption of cryptocurrency as a means of providing financial support. Because they can be transferred and received so quickly and simply, cryptocurrencies are an excellent option for students who are looking for financial assistance.

In fact, crypto can be utilized to assist in the advancement of academic study. Researchers have the ability to build decentralized platforms with which they may share data and collaborate with others with the assistance of the blockchain technology. This has the potential to both quicken the speed of research and lower the hurdles that stand in the way of collaboration.

In general, the applications of cryptocurrency in the globe are expanding into a wider variety of domains, and this trend is expected to continue in the years to come. As more people get familiar with this technology, there is a good chance that new and inventive uses will develop in a variety of sectors, including academic research. In today's society, incorporating crypto may be done in a variety of different methods. Here are several examples:

- Payment and money transfer: Cryptocurrencies may be used as a mode of payment and money transfer, making it possible to conduct transactions that are both quick and safe without the need for middlemen like banks;
- Speculative investments can be made in cryptocurrencies, which provide the opportunity for huge profits if the investment is successful. As a form of long-term investment, buying and holding cryptocurrencies is done by a lot of individuals.
- Remittances: Cryptocurrencies may be used for remittances, which eliminates the need for third-party middlemen and enables users to move money across borders in a rapid and inexpensive manner;
- Decentralized finance (DeFi): DeFi apps that are built on blockchain technology make it possible for lending, borrowing, and trading of cryptocurrencies and other digital assets to take place in a decentralized manner, which results in a financial system that is more open and transparent (Jensen, 2021);
- c, often known as NFTs, are digital assets that represent ownership of one-of-a-kind goods like works of art, musical compositions, or virtual properties. Cryptocurrencies may be used to buy, sell, and trade non-traditional financial instruments (NFTs)(Wang, 2021);
- Identity and data management: Cryptocurrencies and blockchain technology can be used to create secure and decentralized identity and data management systems, which can help protect personal data and prevent identity theft. These systems can also be used to create identity tokens, which can be used to purchase goods and services online;
- Management of supply chains Blockchain technology has the potential to be utilized to develop supply chain management systems that are both transparent and secure. This would allow supply networks to operate more efficiently and reveal more information.

These are just some of the ways that crypto may be utilized in the modern world. There are many more. It may probably be possible to anticipate the appearance of a great deal more cutting-edge applications as the underlying technology continues to advance. The influence that cryptocurrency has had and will continue to have on today's society is varied and far-reaching. The following is a list of some of the most important ways that crypto has touched society:

- **Decentralization:** Cryptocurrencies are not controlled by any central authority, such as a government or a bank, due to their decentralized nature, which may be summed up as "decentralization." Because of this, people and communities now have greater financial liberty, and there is the possibility for a more democratic financial system as a result;
- Cryptocurrencies have the ability to provide financial services to those who are excluded from traditional banking systems, particularly in developing countries. This is a particularly important use case for cryptocurrencies in the context of financial inclusion;
- Cryptocurrencies employ sophisticated cryptographic algorithms to safeguard transactions, making them resistant to hacking and fraud. This enables users to keep their financial transactions private. In comparison to more conventional banking systems, they also provide an increased level of confidentiality;
- Cryptocurrencies have had a significant influence on the economy, notably in the areas of investing, trade, and mining. These new opportunities have arisen as a direct result. The expansion of the cryptocurrency business has also contributed to the development of jobs and the expansion of economies in some areas;
- Cryptocurrencies and blockchain technology have sparked a surge of innovation across a variety of industries, including banking, supply chain management, and identity management, amongst others;
- **Impact on society:** Through the utilization of blockchain-based philanthropic platforms, cryptocurrencies have made it possible for individuals, communities, and even entire nations to fund social causes and activities;
- Regulation and legal concerns have been brought to light as a result of the growth of cryptocurrencies. These questions include how to strike a balance between the

need for innovation and the protection of consumers and the stability of the financial system (Mohsin, 2021).

In general, the effects that cryptography has had on today's society may be described as being complicated and multi-faceted. This technology may have a great number of potential benefits; nevertheless, there are also a number of problems and hazards that need to be handled in order to ensure that its growth and development will continue unabated. There are a number of problems and hazards that need to be examined before adopting blockchain technology and cryptocurrencies, despite the fact that there are a large number of potential benefits associated with doing so. The following is a list of some of the most significant difficulties and dangers associated with using cryptocurrencies and adopting them in today's society:

- Because of their high level of volatility, cryptocurrencies carry a significant level of risk when used both as an investment and as a store of wealth. The value of cryptocurrencies is prone to significant swings, which puts investors at risk of suffering financial losses;
- Even though the blockchain technology is supposed to be safe, there is still a possibility that it may be hacked or used fraudulently. Both cryptocurrencies and digital wallets are susceptible to being hacked, which can result in the loss of assets for the user;
- Because cryptocurrencies are generally unregulated, this lack of regulation can result in problems with consumer protection, money laundering, and tax evasion. Uncertainty is created for both investors and enterprises when there is a lack of clear legal and regulatory frameworks;
- Energy consumption: Mining digital currencies like bitcoin and ether demands a substantial amount of energy, which can have a detrimental effect on the natural environment. In addition, smaller competitors find it difficult to enter the market since mining processes need a significant amount of energy;
- Accessibility: Despite the fact that cryptocurrencies have the potential to increase financial inclusion, the widespread use of cryptocurrencies is currently hindered by barriers such as a lack of financial knowledge, access to technology, and faith in the underlying technology;

- **Illicit activities:** The use of cryptocurrencies has been linked to a number of illicit activities, including drug trafficking, money laundering, and ransomware attacks. Criminal conduct has been drawn to cryptocurrencies due to their anonymous and decentralized character, despite the fact that cryptocurrencies themselves do not intrinsically violate any laws;
- **Scalability:** Blockchain technology faces challenges in terms of scalability and speed, which can limit its potential use in high-volume applications such as payment processing and supply chain management. **Speed:** Blockchain technology faces challenges in terms of speed, which can limit its potential use in high-volume applications (Chohan, 2018).

These are some of the most significant difficulties and dangers associated with the use and adoption of cryptocurrencies in modern culture. Finding solutions to these problems will be very necessary in order to ensure the continuous expansion and development of blockchain technology and cryptocurrencies.

## **3.2 Bitcoin**

In October of 2008, a whitepaper titled "Satoshi Nakamoto's Introduction to Bitcoin," which was written by an anonymous individual or group using the pseudonym "Satoshi Nakamoto," was the first time the decentralized digital currency known as bitcoin was publicly discussed. The notion of a decentralized digital currency, first proposed in Satoshi Nakamoto's white paper, eliminates the need for centralized institutions like banks in transactions between individuals. In the years since its introduction, blockchain technology has seen widespread adoption for use in areas beyond finance, including smart contracts, supply chain management, and more (Nakamoto, 2008).

**Figure 1: Bitcoin logo on a real coin**



Source: Yahoo Finance, 2023

The true identity of Satoshi Nakamoto is a mystery, but the influence of Bitcoin and the blockchain technology that supports it has been felt well beyond the financial and technological sectors.

In the not-too-distant past, 2007, "Satoshi Nakamoto" started working on the concept of a new kind of digital money. This was the same year that his or their earlier work on cryptographic systems and distributed computing was completed. In October of 2008, the concept of a decentralized digital currency that makes use of cryptography to safeguard transactions and control the money supply was laid out in full in a white paper that was distributed for the first time. After another six months had passed, the Bitcoin software was made available to the general public for the very first time. This made it possible for anybody to begin using cryptocurrency as a form of payment. In addition, the creation of the first block of bitcoins, which is often referred to as the genesis block, takes place during the process of mining.

In May of 2009, the very first transaction involving bitcoins occurred. A computer programmer by the name of Hal Finney received ten bitcoins from Satoshi Nakamoto. Finney placed those bitcoins toward the purchase of a fresh piece of software. The next year

saw the creation of BitcoinMarket.com, the world's first bitcoin exchange. This platform gave users the ability to purchase and sell bitcoins in return for traditional currencies (Yermack, 2015).

A new age of digital money has begun, and the beginning of it was marked by the release of Litecoin and other "altcoins. At this moment, Bitcoin was initially shown to the general public for the first time, and it quickly gained widespread adoption among retailers and industry leaders after gaining coverage on major news websites. It is important to note that many people believe that the article that was published by Forbes in 2011 was the spark that ignited the popularity of bitcoin. This year was the one in which all of the events that were discussed before took occurred. The number of bitcoins that may be mined as a reward for creating new blocks will be cut in half, from 50 to 25 in the year 2012. This feature is essential to the Bitcoin system since it helps to control inflation and ensures that the currency exchange market remains stable.

The year 2013 saw a new all-time high for the value of one bitcoin, as it became the first year that its price surpassed the \$1,000 mark (Malik, 2016). The attention from the media and the excitement of potential investors are two crucial forces behind this development. Mt. Gox, one of the major cryptocurrency exchanges, went bankrupt, which brought attention to the underlying flaws and risks that are associated with the Bitcoin system. This was another very significant occurrence. During that period, Mt.Gox was one of the most important trading platforms. Because of the occurrence, many government authorities and other agencies decided to conduct additional investigations. After the hack at Mt.Gox in 2014, the price of one bitcoin ranged from \$200 to \$500 during the subsequent two years, which is indicative of a time of relative stability and consolidation of the cryptocurrency. The next year, the price of bitcoin continued its meteoric rise, reaching over \$20,000 and establishing a new record in the process. This is due to the convergence of a number of different elements, the most important of which are widespread adoption, attention from the media, and conjecture. It was anticipated that the value of Bitcoin would drop by more than 80 percent during the course of 2018 and 2019. This was due to the fact that the cryptocurrency sector went through a significant correction in 2018 and 2019. Authorities and governments all around the world are ramping up their monitoring of the usage and trade of cryptocurrencies, and some nations have even gone so far as to outright



outlaw the activity. The price of Bitcoin has gone up in 2021, and the number of organizations and companies that are willing to use it has expanded beginning in 2020 and continuing into the current day. During this time, there has been an uptick in the amount of institutional and commercial backing for bitcoin. Bitcoin as a form of payment has only very recently started to gain widespread use, and early adopters of cryptocurrency include well-known companies like Tesla, PayPal, and Square. Bitcoin has been subject to several adjustments and enhancements during the course of its life. Because the software that underpins Bitcoin is continuously being updated, the Bitcoin protocol has seen a number of enhancements and additions in recent times.

The thesis would also like to cite some of the major turning points in the development of Bitcoin. The first Bitcoin mining pool was established in 2010, and it enabled individuals to combine their computer resources in order to mine Bitcoin blocks in a more time-effective manner. After this, the Bitcoin community was given access to the Bitcoin Improvement Proposal, or BIP, mechanism. This is a system that enables any contributor to Bitcoin to submit improvements to the Bitcoin program. The next year saw the launch of the world's first automated teller machine (ATM) specifically designed to deal in bitcoins. Users were given the opportunity to purchase and sell bitcoins using a physical terminal. In 2015, a layer two scaling solution called the Lightning Network was made available to the public with the intention of increasing the throughput of Bitcoin transactions (Antonopoulos, 2017).

Later on, the Bitcoin network received an upgrade known as the Segregated Witness (SegWit) upgrade, which boosts its throughput and improves its resistance to assaults. When the futures market for bitcoin launches in 2019, institutional investors will have access to a regulated alternative to trading bitcoin. Until then, trading bitcoin has been unregulated. Because many nations, including China, Egypt, Vietnam, and others, still view cryptocurrencies with not a small amount of skepticism, it is rather difficult to say what will happen to Bitcoin and cryptocurrencies in general at this point in time.

### **3.3 PLCU**

Over a million people from 120 different countries are part of the PLC Ultima community. This coin's rapid rise in popularity and value at such a tender age suggests the

PLCU team is employing strategies that rivals in the cryptocurrency space aren't taking advantage of. Open source software first developed in 2011 as a fork of the Bitcoin blockchain serves as the basis for the PLCU blockchain.

**Figure 2: PLCU Ultima logo**



Source: PLCU, 2023

In contrast, the PLCU benefits from the robust network stability, full transparency, and reasonable transaction speed provided by the blockchain technology. PLC Ultima's engineers have added features and broadened the network's reach after the company's founders exercised great caution in selecting the blockchain the network would use. Our is among the primary reasons why so many people from the PLC Ultima community have joined this effort. In contrast to mining, this coin is produced using a minting process. Minting, as contrast to mine, does not need access to a large number of computer processors or a substantial quantity of power. Minting fresh PLCU coins requires nothing more than a smartphone and the company's apps, "Ultimate Farm" and "Ultima Wallet."

The minting technique that PLC Ultima has created is its own, and it is both open and simple to use. Users may start making money instantly after purchasing an Ultima Minter digital certificate. To get started with Ultima Farm, users simply to download and install the app and enter their wallet addresses into a smart contract with the firm.

The minting process is simplified with the help of Ultima Farm, a revolutionary new product. The smart contract's specifics may be viewed by everyone on the blockchain, making this procedure totally open and transparent. New coins are created and the user is rewarded automatically when the allotted period has passed. The method of coinage production developed by PLC Ultima is radically novel. Minting is preferable to mining since it is more environmentally friendly, requires less effort, does not necessitate costly equipment, and does not lead to prohibitive energy costs. Recent events throughout the world have caused these expenses to soar, making minting a more appealing alternative.

Several coin-related items are available from PLC Ultima. The company's mission is to improve the quality of life in the community through the distribution of useful goods including Ultima Minter, Ultima Wallet, and Ultima Farm. The ultimate goal of PLC Ultima is to have the greatest user base of any cryptocurrency. Everyone and everybody would utilize the PLCU for all of their regular shopping and corporate dealings. Developers at the firm took this one basic notion and came up with a wide variety of innovative goods to fill this niche.

The PLC Card functions as a physical debit card, accepted anywhere Visa is accepted (online, at stores, at the pump, at the table, etc.). As an added bonus, the card's vast dashboard includes not just all major fiat currencies, but also a separate area for cryptocurrencies like Bitcoin, Ether, USDT, and PLCU. Because of this innovation, PLC Ultima is now a frontrunner in the crypto industry.

Platin Hero is another one of the company's innovative offerings; it's a platform that lets people contribute to and discuss projects without worrying about losing money. It's a website where people may promote their own initiatives and donate to those of others. When people or groups need money for a project, initiative, or cause, they can turn to crowdfunding platforms, which serve as a meeting place for those people and groups, as well as the many individuals who are prepared to give small sums of money to support the endeavor. The majority of crowdfunding sites use a commission structure, charging a fixed charge in exchange for a share of the total cash raised. All of Platin Hero's transactions and financial data are safely saved in a blockchain-based digital wallet. The minting procedure will be approved and initiated upon completion of the project. Another easy-to-implement plan that

benefits the development of society as a whole. The company's culture is the driving force behind the success of the currency. Due in large part to this guiding principle, the project's user base is expanding. The organization has implemented many procedures and initiatives to make its goals transparent. For instance, the monthly delivery of new PLCU coins is limited, and around 35% of the coins are locked away in cold storage, making them unavailable to farms. The circulation of almost 60% of coins is halted for a whole year. To avoid competing with the community for liquidity, the corporation burns all of its coins and destroys one percent of each transaction it performs (PLCUltima, 2023).

## 4 Practical Part

This part is focused on the empirical analysis, where the analysis based on the results of which the conclusions are drawn is made.

In the practical part, the empirical methods are primarily exercised and notably, trend analysis and correlation analysis, where the first kind of analysis implemented into the bachelor thesis reflects the development of 2 selected coins over time. In addition to that, the thesis also analyses the development of the United States Dollar index since the very last variable is believed to be determinants of fluctuations in Bitcoin and almost all altcoins, since cryptocurrencies and the US dollar are direct substitutes, so the assumption a negative correlation between the pairs of bitcoin and US dollar index, and PLCU and US dollar index is made.

As for the trend analysis, the thesis is focused on the analysis of weekly time series covering the time period between 07.02.2022 and 01.02.2023 (almost a year) with 53 observations included into the dataset in total. The trend analysis is based on the creation of three trends, each related to one selected variable, where the ordinary least squares (OLS) method will be applied, and the following linear trend will be created:

$$y = a + bt + \varepsilon_i \quad (1)$$

Where:

- Y is the dependent variable representing the weekly level of price of selected variable.
- a and b are parameters estimated using the ordinary least squares method in excel.
- $E_i$  is a stochastic element or an error term.

In addition to the trend estimation, the application of a correlation analysis was already mentioned, where the correlation coefficient will be computed based on the following formula:

$$r = \frac{\sum(Xi-X \text{ mean})(Yi-Y \text{ mean})}{\sqrt{\sum(Xi-X \text{ mean})^2 \sum(Yi-Y \text{ mean})^2}} \quad (2)$$

After calculating correlation coefficients for three pairs, the narrative proceeds to the calculation of a relevant t value, whose calculation is based on the following formula:

$$t \text{ ratio } (R \ xy) = \frac{r(xy)\sqrt{n-2}}{\sqrt{1-r^2(xy)}} \quad (3)$$

Consequently, a hypothesis testing to identify if there is a statistically significant correlation between the variables will be conducted.

Finally, the third method which will be included into the author's analysis is related to volatility analysis, where the analysis considers the measure of standard deviation, which is computed according to the following formula:

$$\text{Standard Deviation} = \sqrt{\frac{\sum(X \text{ observed}-X \text{ mean})^2}{n}} \quad (4)$$

After calculating the measure of standard deviation that will help to quantify volatility in monetary terms, the narrative will proceed to the calculation of a coefficient of variation that will express the same measure but in percentage terms:

$$\text{Coefficient of Variation (in \%)} = \frac{\text{Standard Deviation}}{\text{Mean}} * 100 \quad (5)$$

Following chapters present detailed analysis of the selected investing options. The analysis is conducted with the help of the following dataset with data collected from Yahoo Finance:

**Table 1: Dataset from Yahoo Finance**

Date	PLCU Close, 1 coin per thousand USD	Bitcoin close, 1 coin per thousand USD	Dollar index, points
07.02.2022	19.68493555	42.19751563	96.080002
14.02.2022	19.45720313	38.43137891	96.040001
21.02.2022	24.45684766	37.70978516	96.620003
28.02.2022	27.15264063	38.41998438	98.650002

07.03.2022	35.35279297	37.84966406	99.120003
14.03.2022	45.55561328	41.24782422	98.230003
21.03.2022	47.87397656	46.82049219	98.809998
28.03.2022	68.11167969	46.45356641	98.629997
04.04.2022	90.13723438	42.20767188	99.800003
11.04.2022	88.7999375	39.71695313	100.5
18.04.2022	77.56835156	39.46929297	101.220001
25.04.2022	76.19151563	38.46909375	102.959999
02.05.2022	64.28088281	34.05926563	103.660004
09.05.2022	58.34735938	31.30511328	104.559998
16.05.2022	33.48311719	30.32372266	103.150002
23.05.2022	35.3298125	29.44595703	101.669998
30.05.2022	19.09019922	29.90666211	102.139999
06.06.2022	29.56969141	26.76264844	104.150002
13.06.2022	23.63726172	20.55327148	104.699997
20.06.2022	19.42074609	21.02729492	104.190002
27.06.2022	14.08796973	19.29707617	105.139999
04.07.2022	7.998833008	20.86044922	107.010002
11.07.2022	7.316548828	20.77934375	108.059998
18.07.2022	7.591976563	22.60916406	106.730003
25.07.2022	6.253350586	23.33689648	105.900002
01.08.2022	7.147347656	23.17589063	106.620003
08.08.2022	12.31391797	24.31933398	105.629997
15.08.2022	6.939556641	21.53412109	108.169998
22.08.2022	7.864641602	19.61681445	108.800003
29.08.2022	5.633436523	19.98671289	109.529999
05.09.2022	4.128171387	21.76925586	109
12.09.2022	3.80594873	19.41950586	109.760002
19.09.2022	2.847579346	18.80209766	113.190002
26.09.2022	2.794149414	19.04410742	112.120003
03.10.2022	1.132036987	19.44642578	112.800003
10.10.2022	1.95902002	19.26809375	113.309998
17.10.2022	1.767215454	19.56700781	112.010002
24.10.2022	1.633635254	20.63560352	110.669998
31.10.2022	1.104470581	20.92648633	110.879997
07.11.2022	1.131579712	16.35336523	106.290001
14.11.2022	1.03455188	16.29183203	106.93
21.11.2022	1.29367395	16.44462695	105.959999
28.11.2022	1.314071655	17.13048633	104.550003
05.12.2022	1.099168213	17.10419336	104.809998
12.12.2022	1.191264404	16.75797656	104.699997

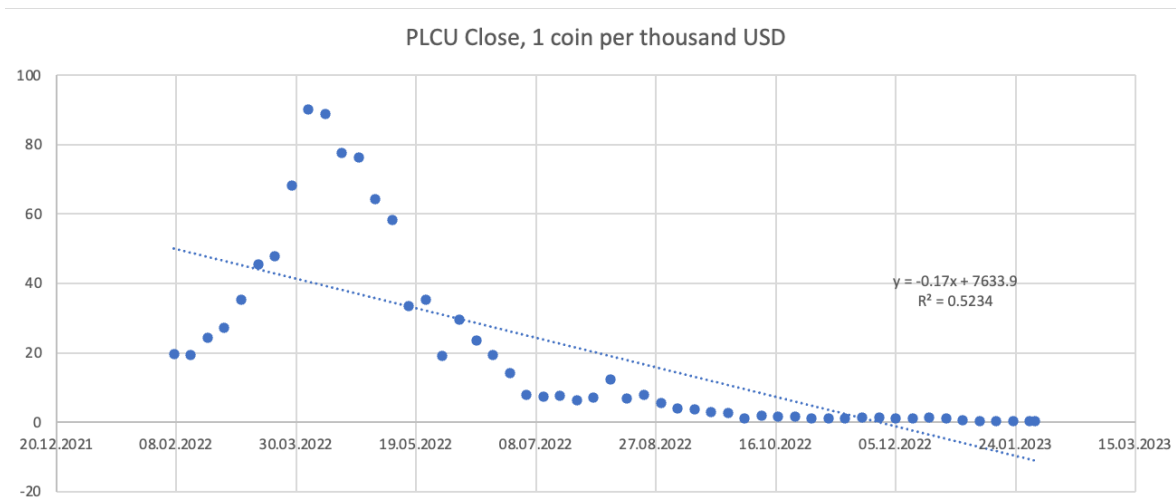
19.12.2022	1.373270264	16.84198633	104.309998
26.12.2022	1.078636353	16.62508008	103.519997
02.01.2023	0.611800171	17.09114453	103.879997
09.01.2023	0.412602081	20.88079883	102.199997
16.01.2023	0.42176236	22.72041602	102.010002
23.01.2023	0.409101288	23.77456641	101.93
30.01.2023	0.407256134	22.84013867	102.279999
01.02.2023	0.412417023	23.03161328	101.880997

Source: Yahoo Finance, 2023

## 4.1 Trend analysis

First, the chapter focuses on creating a trend that will depict the development of the price of PLCU over the course of the selected time period:

**Figure 3: PLCU trend**



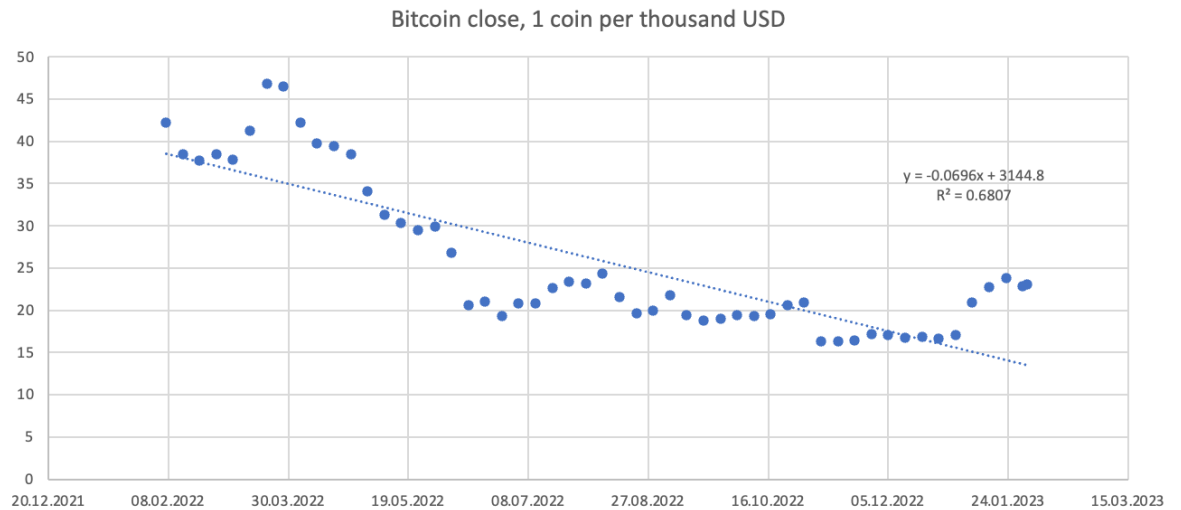
Source: own processing

Clearly, the tendency of the development is not at all optimistic, as it is visible that the price of the coin has rapidly deteriorated over the course of the last year. According to the trend that has the following characteristics:  $y = -0.17t + 7633.9$ , it is possible to say that there was on average a weekly decrease in the price of the coin equal to 0.17 thousand dollars per one coin or a depreciation of 170 US dollars, which is not good at all. This suggests that the currency is surely enough experiencing one of the hardest times in its history with the all-time low reached in 2023.



Then, the analysis continues with the trend analysis for the second cryptocurrency selected for the comparative advantage – Bitcoin. Below, the chart for the development of the variable is presented:

**Figure 4: Trend for Bitcoin**

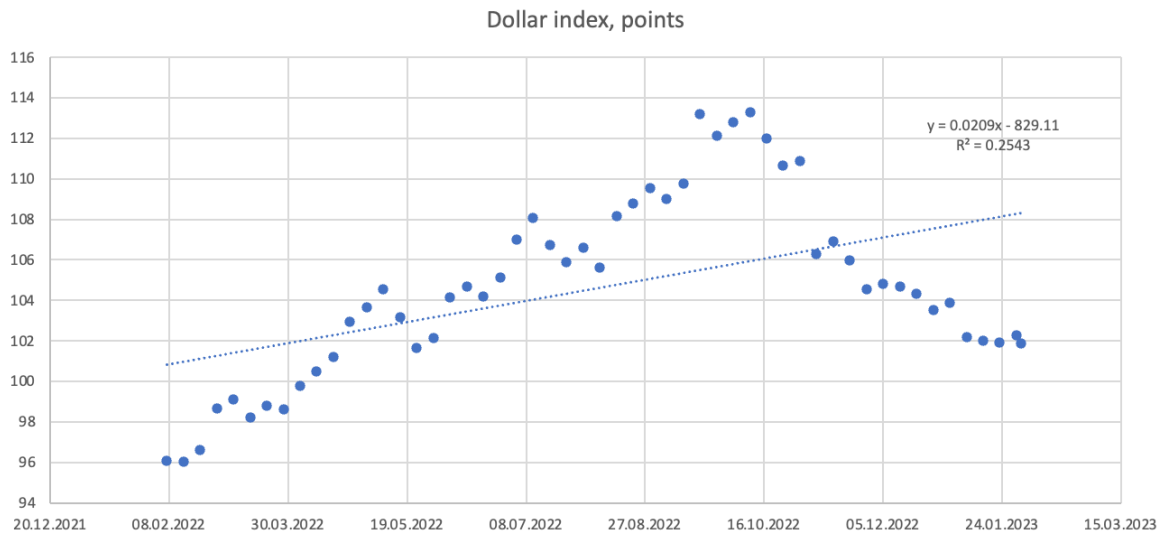


Source: own processing

The nature of the development of the second coin – Bitcoin is somewhat identical to the development of the first variable analyzed with one exception – the slump in the value of Bitcoin was serious, but not that radical and the coin seems to be returning to the bull tendency with a slight increase in the first quarter of 2023. According to the following trend  $y = -0.0696t + 3144.8$ , it can be concluded that there was a weekly average decrease of 0.069 thousand USD or 69\$ per week, which is not good but when being compared to the first currency, it is a good result.

Finally, in order to compare the development of two cryptocurrencies with something more real and conservative, the analysis proceeds to the creation of a trend for the dollar index, which can be found below:

**Figure 5: Trend for dollar index**



Source: own processing

Contrary to the first two trends, the situation with the dollar index and dollar in general is different, as according to the trend  $y = 0.0209t - 829.11$ , it can be concluded that there is an average weekly increment, thus the dollar was appreciating over the course of the last year.

Based on the trend analysis, it can be concluded that in 2022-2023, physical and more traditional currencies and investments are gaining strengths, while crypto assets started to lose their positions under rather troubled circumstances and complex situation in financial markets. In the next chapter, the thesis proceeds to the correlation analysis based on formulas mentioned in the foreword to the practical part.

## 4.2 Correlation analysis

It is the time to present the overview of correlation coefficients computed for three pairs in the table below:

**Table 2: Correlation analysis**

	Correlation coefficient	t ratio	Result
<i>PLCU and Bitcoin</i>	<b>0.820804327</b>	10.2619366	<i>Significant</i>
<i>PLCU and Dollar</i>	<b>-0.514190156</b>	-4.2392145	<i>Significant</i>
<i>Bitcoin and Dollar</i>	<b>-0.736553489</b>	-7.6227561	<i>Significant</i>

Source: own processing

Based on the correlation analysis and computed correlation coefficients, it can be concluded that the correlation between PLCU and Bitcoin is high, which is pretty evident given the fact that Bitcoin and all changes in the price of the first crypto asset are driving forces behind all fluctuations in the prices of almost all altcoins. High correlation practically means that all ups and downs in the price of Bitcoin are met with the same nature of changes in the price of PLCU.

Then, continuing to the second pair – PLCU and dollar index, it can be concluded that there is a negative correlation between the two, which is also statistically significant, according to the testing result. This is pretty logical due to the fact that these two assets are alternatives to each other, so there should always be a negative correlation between them. Yet, the correlation is not that high.

Finally, when it comes to the third pair, the correlation between the price of Bitcoin and the dollar index is a negative high one, which practically suggests that whenever one asset increases, the other one returns an opposite change. The correlation is higher than the correlation between PLCU and dollar index, which proves the point that these two are more related and dependent on each other, which is expected due to the fact that Bitcoin is the main existing alternative to the American dollar.

Bellow, the overview of the hypothesis testing procedure that was conducted for all 3 pairs is presented:

**Table 3: Hypothesis testing**

Ho: there is no correlation between PLCU and Bitcoin Ha: there is a correlation between PLCU and Bitcoin	Ho: there is no correlation between PLCU and dollar index Ha: there is a correlation between PLCU and dollar index	Ho: there is no correlation between dollar index and Bitcoin Ha: there is a correlation between dollar index and Bitcoin
Ta = 2.006 T = 10.26	Ta = 2.006 T = 4.23	Ta = 2.006 T = 7.62

10.26 > 2.006 => Ho is rejected. Ha is assumed. There is a strong correlation between variables.	4.23 > 2.006 => Ho is rejected. Ha is assumed. There is a strong correlation between variables.	7.62 > 2.006 => Ho is rejected. Ha is assumed. There is a strong correlation between variables.
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Source: own processing

Based on the analysis, it can be concluded that all variables are highly correlated with each other, as the correlation was characterized as significant.

### 4.3 Volatility Analysis

The final part consists of the volatility analysis that will help to understand the amount of risk involved when investing in PLCU, Bitcoin or Dollar. Below, the thesis presents the table containing results for the analysis for all variables at the same time based on formulas mentioned in the preamble of the practical part:

**Table 4: Volatility analysis**

	PLCU Close, 1 coin per thousand USD	Bitcoin close, 1 coin per thousand USD	Dollar index, points
<i>Standard Deviation</i>	25.36998044	9.112254888	4.462918318
<i>Coefficient of Variation</i>	132%	35%	4%

Source: own processing

According to the outcome of the analysis, it can be concluded that the riskiest asset out of all three is PLCU, where the volatility in percentage terms is equal to 132%, which is incredibly high. The second riskiest asset is Bitcoin, where the volatility in percentual terms is equal to 35%. The least riskiest asset out of all three is dollar with the volatility of just 4%, which is actually primarily explained by an upward movement, i.e., dollar significantly improved its position over the course of the last year. The situation with high volatility for crypto assets can be regarded as a rather anticipated one since those assets are not at all underpinned by any real asset that will make sure that their price cannot fall below a certain level, compared to the US dollar which is directly underpinned by the figure of the United States.

All in all, there will be a further elaboration on the findings in the results and discussion chapter, where her findings will be compared with findings of other relevant researchers, academists and scientists.

## **5 Results and Discussion**

### **5.1 Perspectivity of PLCU Investment**

This chapter of the bachelor thesis is focused on a detailed elaboration on the results of the practical part and the comparison of the results with the results of other relevant academists.

To begin with, it is first wise to say that it was possible to conclude that two cryptocurrencies analyzed – Bitcoin and PLCU are surely enough not going through the best period in their history as the situation of both can be classified as a bearish one, which in other words can be categorized as a recession in the price of assets. Contrary to those two cryptocurrencies, dollar actually undergoes through a very strong period with the overall appreciation of the international currency used almost everywhere. To be precise, it is wise to say that the same tendency of the bearish market persists not only in relation to the two selected cryptocurrencies, but it is somewhat common in 2022-2023 for all cryptocurrencies, both bitcoins and all altcoins with just a few outliers who experience gains. The situation is explained by the series of unfavorable circumstances that shaped the cryptocurrency world during the most recent period. Notably, two major events – Luna crash and eventual abandon of the currency by all crypto marketplaces and the crash of FTX exchange platform led to one of the most devastating drops in the capitalization of the crypto market.

Consequently, as analysts and academists such as Fu, 2022 believe, this will increase the degree of uncertainty for people venturing into the crypto market and it will potentially prevent some investors from investing into the market at all, thus leading to the ultimate diminishment of the market capitalization due to net withdrawal of money from platforms rather than net inflow of cash into platforms given all-time lows. It is possible to believe that the prejudice that had been finally defeated in 2020 that lead to incredibly high inflow of cash into the crypto market and slow realization that crypto assets are not pure speculation slowly starts to return as people interested in investing their savings are less likely to venture into the market under the suspicion that all those assets and exchanges are pure speculation with all assets to be just an enormous bubble that is about to burst. Clearly, this macro situation and unpleasant environment hit all coins, but altcoins suffer more from external

shocks due to the fact that Bitcoin to some extent is a widely used mean of exchange being accepted in some places.

Also, given the development of dollar and strong stance of the currency, it is not as of the beginning of 2023 likely that altcoins will be able to recover, since for reaching their previous heights, it is essential for bitcoin to gain its position and also for US dollar not to appreciate so fast, as the currency is regarded as a direct substitute to crypto currencies. In addition to everything that was said earlier, it is still vital to understand that the American Federal Reserve pursues a strategy of finally bringing cryptocurrencies to their knees and centralizing them, which is noted by Aboura, 2022.

For this purpose, the conclusion is that investing into PLCU and all other cryptocurrencies, including Bitcoin as of the beginning of 2023 is not a good idea for risk-averse people and people wanting to invest their last savings, since it is not at all even possible to imagine what is about to happen next, so the author's recommendation would be investing into something more stable during the times of great uncertainty and economic recession, such as gold or government bonds, which is also suggested by Anggara, 2022 who stresses the importance of investing into gold in the times of big financial and global crises.

## **5.2 Future Development**

As for the future development of the crypto market, it necessarily depends on a few things. Given the situation with Luna and FTX, it is expected that another major crush of any cryptocurrency from the upper list of coins classified according to their market capitalization, or any crash of another major exchange platform will lead to even more horrible events or even complete extinction of the overwhelming majority of cryptocurrencies.

Yet, it is fair to believe that there is a way of preventing horrible events that might occur in 2023 and also decrease the degree of uncertainty and risk related to venturing into the crypto market. Despite the belief that centralization will not do any good to cryptocurrencies and that decentralization is the future, some degree of control or centralization will help cryptocurrencies to regain their power and completely turn the tide. Upon imposing some degree of centralization, this will prompt more and more investors to consider returning to

crypto assets since they will be sure about their assets being protected from dubious schemes and people misusing funds invested, such as the case with the FTX collapse, which is categorized as a Ponzi scheme by some academists among which there is Fu, 2022.

## 6 Conclusion

To conclude, it is possible to say that investing into PLCU or any other crypto assets, regardless of the fact if it is Bitcoin or any other altcoin is extremely risky due to the fact that the market is in its bearish stage that was brought upon all crypto assets after the series of misfortunate events, such as the crash of Luna and the crash of FTX. In addition to that, investing into crypto assets and evidently into PLCU is not a good idea for a reason that the currency has a significant negative correlation with the US dollar, which is currently returning a very impressive and strong performance over the course of the last year.

However, it can be believed that the situation can be changed for good if there will eventually be at least some degree of centralization applied since it will attract investors to crypto assets again, thus the price of Bitcoin will increase triggering an increase in the price of other altcoins due to the fact that they are significantly positively correlated with Bitcoin, such is the case of PLCU, where the thesis has managed to prove an existence of a strong statistically significant correlation between the two.

All in all, high volatility and risk always suggest that there might potentially be higher returns for investors, but it is wise to believe that the current state of affairs with the crypto market can be categorized as simply tragic with the market being on the verge of collapse following decrease in demand and the fact that investors started to switch to safer assets, which is also explained by the fact that the world economy is currently being in a serious recession caused by the repercussions of the pandemic and the Invasion of Ukraine by the Russian Federation.



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### 8.3 List of abbreviations

<b>USD</b>	United States Dollar
<b>BTC</b>	Bitcoin
<b>PLCU</b>	PLC Ultima