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v Českých Budějovicích
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BACHELOR THESIS

Dark Web and Cryptocurrency

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České Budějovice

2023

1. Introduction

Over the past two decades, the Internet has become an integral part of human life and a new (convenient and efficient) communication tool in society. Without a doubt, in the digital age, much of the economic, political and cultural life takes place on the Internet. The Darknet, or the Dark web, is one of the levels of the Internet.

The first level of the Internet includes a collection of indexed sites, the users of which can be identified based on the IP address. The second level, the Deep Internet, or the Deep web, is a collection of non-indexed Internet pages that cannot be found by search engines, but whose users can be identified. A distinctive feature of the Darknet is that its users, thanks to the browser and the encryption system, retain their anonymity and cannot be identified.

This technology of preserving the privacy of users is in itself neutral, but it can be used both for the benefit - for the development of creative forms of communication, and for socially dangerous acts - drug trafficking, posting pornographic content, selling weapons, searching for hitmen for hire, violation of rights for intellectual property, virtual currency, etc.

The 21st century, which, according to a number of prominent authors (Hausman 2012), was to become a "golden age" for the world economy and for economic science itself, brought severe tests to society and posed new difficult questions for scientists. Financial globalization has not met expectations. The growth of cash flows from rich countries to poor countries did not lead to an improvement in the welfare of the latter, but only to a change in the owners of their national property in exchange for fictitious capital. The global crisis provokes the acceleration of the centralization of world capital and the growth of social stratification, as well as the loss of trust in the global financial system from the perspective of population. A peculiar feature of these sentiments was summed up in the last report of the Club of Rome, the authors of which directly called for a revision of the existing economic paradigm and a change in the vector of development of society (Von Weizsäcker & Wijkman 2018).

New hopes are associated with the explosive development of digital technologies and their penetration into all spheres of public life (so-called digitalization), including the economy. Research on artificial intelligence and big data technologies, blockchain and cryptocurrencies is especially relevant today, as they are seen as the forerunners of a new economic formation, which is called the digital, or virtual, economy.

Against the background of crisis processes and loss of confidence in traditional economic institutions, interest in cryptocurrencies is growing; this topic is especially popular today both among the scientific community and the general public. Sometimes they even see them as "digital gold", the latest stage in the digital evolution of money, a miniature model of a "virtual" economy (Swan 2015).

A large amount of literature is published on the topic of blockchain and cryptocurrencies, but most of it is not directly scientific in nature and is published in open access in the form of essays or quasi-scientific notes by representatives of the digital elite - the digerati. Using this example, one can trace the change in the process of producing scientific knowledge in the areas related to new digital technologies of the 21st century. Nevertheless, I would like to note the works of N. Popper (2015), D. Tapscott and A. Tapscott (2016), which investigate the changes that cryptocurrencies and blockchain will bring to the economy and society as a whole. In other works, for example by A. Antonopoulos (2014), the technical side of the issue is revealed.

The aim of this thesis is to understand the principle of the interdependence and mutual influence of the Dark web and cryptocurrency. In order to do this, it is important to first provide a brief description of cryptocurrencies and the underlying blockchain technology, as well as analyze their evolution and the reasons why they managed to gain a foothold in the modern financial system in one way or another.

2. Aim

Understand the principle of the interdependence and mutual influence of the Dark web and cryptocurrency.

3. Objectives and Methodology

This thesis focuses on establishing a connection between the existence of the Dark web and the demand on cryptocurrencies.

The main objective:

Understand how cryptocurrencies and the Dark web exist in symbiosis.

To achieve the main objective, the following methodology has been set:

- 1) *Study of scientific literature*
- 2) *Definitions of cryptocurrency and the Dark web*
- 3) *Classification of cryptocurrency*
- 4) *Establishing a connection between cryptocurrencies and the Dark web*
- 5) *Connection analysis*
- 6) *Conclusion*

This work consists of two parts: theory and analysis. In the theoretical part, the history of the Internet, the definitions of cryptocurrency and the Dark web are given. Moreover, types of cryptocurrencies, their advantages and disadvantages are discussed. Furthermore, the principles and work mechanism of the Dark web are explained.

In the analysis part, all the information from the theoretical part is analyzed and used to establish a connection between cryptocurrencies and the Dark web. It explains how cryptocurrencies allow the Dark web to exist for their anonymity and impunity, while the Dark web guarantees demand on cryptocurrencies, thus existing in symbiosis.

4. Results and Conclusion

The analysis of literature shows that there is a direct connection between the Dark web and cryptocurrencies. Cryptocurrencies are the main method of payment for goods and services in the Dark web, which allows the users to [almost] safely conduct their activities with impunity due to cryptocurrencies' anonymity.

To conclude this research, it would not be an exaggeration to say that the intelligence services of the leading countries of the world are closely watching the developing cryptocurrency market. As a result, even with the observance of all methods of conspiracy, it is most often not possible to hide transfers of huge amounts in cryptocurrency. Suspicious transactions can cause close interest of special services in one person or another. As a result, the issue of privacy and its significance for each person has reached a new, previously inaccessible level.

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Additional bibliographic information

Type of thesis: bachelor

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Academic Year: 2022/2023

Department: Department of Applied Mathematics and Informatics, Faculty of Economics, University of South Bohemia in Ceske Budejovice, Czech Republic

Thesis supervisor: PhDr. Marek Šulista, Ph.D.

Number of pages: 40

Language of thesis: ENG

Title of Thesis: Dark Web and Cryptocurrency

Key words: currency, cryptocurrency, the Internet, the Dark web, anonymity, illegal