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CRYPTOCURRENCIES – ILLITERACY OR CONFUSION OF MEANINGS**J. Seitz¹⁾, M. Maciejasz-Świątkiewicz²⁾, R. Poskart³⁾, D. Hummel⁴⁾***¹⁾ Doctor of Economics, Professor, Head of Business Information Systems Department of the Baden-Wuerttemberg Cooperative State University, Heidenheim, Germany**²⁾ Doctor of Economics, Professor, Director of the Institute of Economics and Finance of the University of Opole, Poland**³⁾ Doctor of Economics, Professor, Vice Director of the Institute of Economics and Finance of the University of Opole, Poland**⁴⁾ Doctor of Economics, Honorary Professor at the Faculty of Economics and Social Sciences of the University of Potsdam, Germany, Professor of the Institute of Economics and Finance of the University of Opole, Poland*

The term «cryptocurrency» is widely used nowadays. Nevertheless, there are many very different definitions. People are often talking about cryptocurrencies without knowing that they use different definitions. However, even with a certain definition in the background, people do not know the characteristics, because basic knowledge about cryptography is not available. There is often something mysterious about cryptography. With this research project, we want to find out facts influencing the confusion, but also the level and national specifics of financial literacy.

Keywords: Cryptocurrencies; virtual currencies; digital money; illiteracy; confusion of meanings.

КРИПТОВАЛЮТЫ – НЕГРАМОТНОСТЬ ИЛИ ПУТАНИЦА В СМЫСЛАХ**Ю. Зайтц¹⁾, М. Мацейяс-Свѣнткевич²⁾, Р. Поскарт³⁾, Д. Хаммель⁴⁾***¹⁾ Доктор экономических наук, профессор, заведующий кафедрой информационных систем для бизнеса Кооперативного государственного университета земли Баден-Вюртемберг, Хайденхайм, Германия**²⁾ Доктор экономических наук, профессор, директор Института экономики и финансов Опольского университета, Польша**³⁾ Доктор экономических наук, профессор, заместитель директора Института экономики и финансов Опольского университета, Польша**⁴⁾ Доктор наук, заслуженный профессор факультета экономики и социальных наук Потсдамского университета, Германия, профессор Института экономики и финансов Опольского университета, Польша*

Термин «криптовалюта» широко используется в наши дни. Тем не менее существует множество очень разных определений. Люди часто говорят о криптовалютах, не зная, что они используют разные определения. Однако даже при наличии определенной дефиниции люди не знают характеристик, потому что базовые знания о криптографии недоступны. В криптографии часто есть что-то загадочное. С помощью этого исследовательского проекта мы хотим выяснить факты, влияющие на путаницу, а также уровень и национальные особенности финансовой грамотности.

Ключевые слова: криптовалюты; виртуальные валюты; цифровые деньги; безграмотность; путаница значений.

Introduction

The term «cryptocurrency» is widely used nowadays. The term was used for the first time in the context of the development of Bitcoin, which was created by Satoshi Nakamoto in

2009 as a decentralized cryptocurrency [1]. At the beginning of 2018 Lansky came up with a more technical definition of cryptocurrencies [2]. In March 2018, the word «cryptocurrency» was added to the Merriam-Webster Dictionary [3]. Mid of 2018, a report of the European Parliament, which discusses and summarizes the subject of cryptocurrencies as it has been scrutinized by several policy makers like the European Central Bank, the International Monetary Fund, the Bank for International Settlements or the European Banking Authority. In China, it is forbidden to Chinese financial institutions to deal and fund with cryptocurrencies [4, 5]. The Indian government plans to ban all private cryptocurrencies [6].

Usually in news, there is no definition of a term, as we know from academic papers, before it is used. This means, it is often hard to understand, what is meant, or it leads to a misunderstanding of the audience. As there is by definition, a definition neither right nor false, we want to know, what do young people at the beginning of their career know about cryptocurrencies and the fundamental technologies. As they have their knowledge from the news, social media and their social environment, the research question is «Do they think about the meaning of the term before using it?», «Do they use the term consistently?» and «Which emotions do they have related to this term?» We do not want to check their knowledge after a lecture. We have developed a questionnaire and tested it in several rounds with students from different countries. With the latest version of the questionnaire, we have started to collect data in different countries for some weeks already.

Literature Review

Bitcoin is often named as the first cryptocurrency. When Satoshi Nakamoto describe the concept of Bitcoin in a whitepaper, he didn't use the term. He described the problems of existing central bank issued currencies and the concept of a digital currency that uses cryptographic algorithms and blockchain technology to eliminate non-trustworthy intermediaries [1]. According to Lansky, a cryptocurrency fulfils the following conditions: There is no central authority, like a central bank needed, because of a consensus mechanism. The system itself is consistent and has an overview of all cryptocurrency units and their owners. The system defines the process and the conditions of creating new cryptocurrency units. The ownership of cryptocurrency units can solely be proved using cryptographic algorithms. The system allows transactions. A transaction means that the ownership of a cryptocurrency unit is changed. Therefore, the current ownership has to be proved. If there are two different transactions initiated at the same time concerning a single cryptocurrency unit, the system performs only one of them [2]. The European Central Bank has classified cryptocurrencies as a subset of virtual currencies and defines it «as a form of unregulated digital money, usually issued and controlled by its developers, and used and accepted among the members of a specific virtual community» [7, p. 13]. Cryptocurrencies can be bought using traditional money as well as sold against traditional money. They can be used for buying digital and real goods and services [7]. The International Monetary Fund categorizes cryptocurrencies like the European Central Bank as a subset of virtual currencies [8]. The Bank for International Settlements has classified cryptocurrencies as digital currencies or digital currency schemes, which neither need intermediaries, nor are operated by specific individuals or institutions [9]. This means that cryptocurrencies can be issued by central banks, too, as it is shown in Figure 1.

Like the Bank for International Settlements, the World Bank has classified cryptocurrencies as digital currencies. However, contrarily to other policy makers they say that digital currencies rely on cryptography to achieve consensus. This means that there is no central authority needed [11].

Research Method and Data Collection

At first, we want to collect data from business students in undergraduate programs around the world. We are asking business students, because they should have at least basic

knowledge about economics and the finance industry. We are asking young people because they have often a higher affinity and a higher adoption rate of new technologies, e. g., smartphone banking. In 2019, 63 % of people in Germany in the age between 16 and 29 are smartphone banking users, but only 29 % of people, who are 65 and older [12]. We are asking students from countries with different regulations, but also countries with similar regulations.

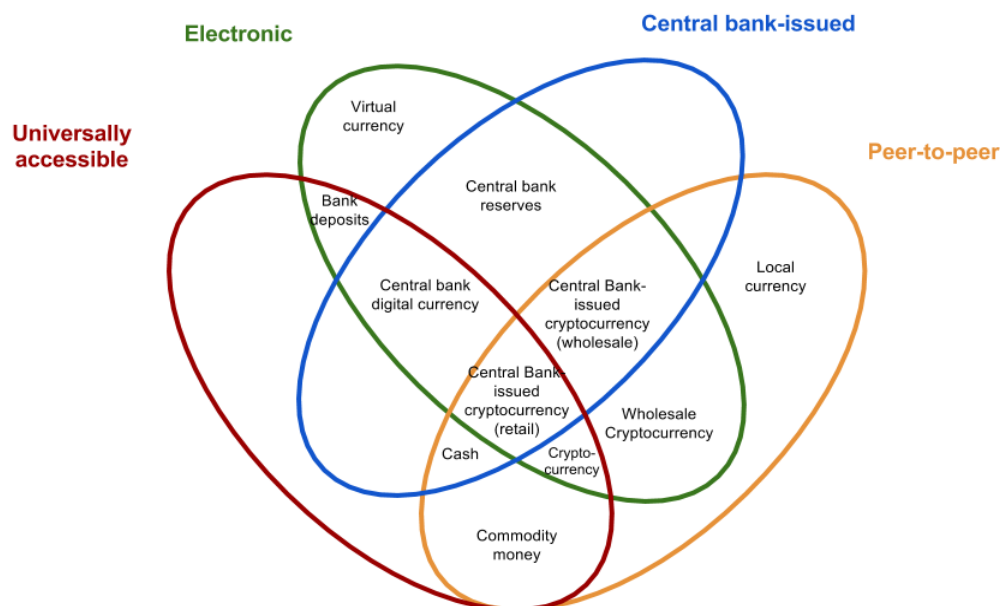


Figure 1 – Money Flower

Note – Source: Adapted from [10, p. 60].

So far, we have answers from 236 students. Because of winter holidays or exams, we cannot collect data everywhere at the same time. At the moment, we have answers from students from nine countries. Round about two third of the students are female, one third are male. Round about 90 % of the students are between 16 and 24 years old.

Analysis and Conclusion

We can already see some interesting aspects in the collected data. We have different levels of adoption and interest in this topic. However, we also see some uncertainty. We can also find out that some students use the term without thinking about the meaning. They mix the different definitions, but do not know the characteristics. We expect that we have a mix of illiteracy and confusion of meanings.

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PROSPECTS OF ENVIRONMENTAL FINANCING THROUGH GREEN BONDS

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Green bond is a new type of financing tool emerging in the financial market. Its innovation isn't reflected in the transaction structure and financing model, but in the use of raised funds. Green bond issuers raise funds through this type of debt financing instruments to invest in existing or newly established green projects with sustainable environmental benefits. In the past few years, Green bond is getting more and more attention as the primary means of environmental financing and transition to a low-carbon economy. The global green bond market is also developing rapidly. The following we will analyze the global market conditions and the development prospects of green bonds.

Keywords: Environment; Financing tools; Financial market; Green Bond; Sustainable development.

ПЕРСПЕКТИВЫ ЭКОЛОГИЧЕСКОГО ФИНАНСИРОВАНИЯ ЧЕРЕЗ ЗЕЛЕННЫЕ ОБЛИГАЦИИ

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