



Perception of Cryptocurrencies by Young Financial
Market Participants in Times of Military Conflict.
Example of Romania, Poland and Ukraine

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Perception of cryptocurrencies by young financial market participants in times of military conflict. Example of Romania, Poland and Ukraine.

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Abstract:

Money is not only an economic tool but also a subject of various emotions and psychological perceptions. The emergence of cryptocurrencies, led by Bitcoin, has introduced a new and exciting dimension to the concept of money. The functioning of cryptocurrencies and their impact on the global financial markets raise important questions about the future of the financial system and the potential replacement of fiat money. This article aims to explore the differences in perception and attitude towards traditional monetary systems and cryptocurrencies among young financial market participants in Romania, Poland, and Ukraine.

The study, conducted in May 2023, surveyed 291 respondents, including 148 from Poland, 83 from Romania, and 60 from Ukraine. The questionnaire consisted of 26 questions related to virtual money and demographics. The participants were chosen based on their presumed openness to innovative technologies, their knowledge of finance and economics, and their potential willingness to adopt new forms of money.

The findings revealed that respondents from all three countries generally had a medium to high level of trust in the traditional financial system. However, there were noticeable differences in attitudes towards cryptocurrencies. Ukrainians, affected by the ongoing war, exhibited a more positive perception of cryptocurrencies due to their decentralized nature and resilience to attacks. Respondents from Poland and Romania expressed more skepticism towards cryptocurrencies but displayed a considerable interest in their potential use.

The results also highlighted a preference for internationally recognized currencies like the euro and the US dollar among the respondents. Furthermore, the study confirmed that the war in Ukraine had an impact on the perception and trust levels in traditional fiat money, the banking system, and cryptocurrencies.

The study's implications extend beyond the financial and investment sectors. Changes in the perception of money and financial systems can influence savings and investment decisions, potentially affecting future market behavior. The findings emphasize the need for continued research to understand the evolving dynamics of money, the financial system, and the social trust required for its effective functioning. Ultimately, this study contributes to enhancing economic and financial literacy and guiding individuals towards informed decision-making in the realm of cryptocurrencies.

Key words: Perception of cryptocurrencies, Fiat money, Financial system, Trust in financial institutions, Alternative to fiat money, Military conflict

JEL classification: G15, E41, D12, P37, O17

Introduction

Money is not a neutral transaction tool, but an object of various emotions (Tang, 1992). Thus money and people's attitude towards money is not only an economic but also a psychological problem. Perception of money is a very individual matter and differs because of various factors. Some of them are connected with individual experience, culture or history of a country.

Last years showed that money becomes even more complicated and more exciting. That's because of the emergence of a completely new, hitherto unknown to the world phenomenon, which was the first global, private and completely decentralized digital currency - Bitcoin. Along with bitcoin and its growing popularity and spectacularly increasing valuation, newer and newer varieties of cryptocurrencies began to appear. Cryptocurrencies as a phenomenon and their functioning on global financial markets raise a number of important questions and concerns, primarily related to the future of the modern financial system, money and its further evolution. The most important general question which stems from this situation is whether

cryptocurrencies can replace the currently used fiduciary money? Further questions are connected with the perception of money among people and their willing, preparedness and ability to use cryptocurrencies as a means of payment and exchange.

This article is an attempt to answer the question, whether respondents from various countries differ in perception and attitude towards the traditional monetary system and cryptocurrencies (Q1) and how do they perceive cryptocurrencies as an alternative to currently functioning fiat money (Q2).

1. Money perception as an phenomenon

Starting with a definition of money it can be understood as "a commodity accepted by general consensus as a means of economic exchange. It is a medium in which prices and values are expressed; as a currency it circulates anonymously from person to person and from one country to another, thus facilitating trade, it is also a basic measure of wealth" (Encyclopedia Britannica). Money faced a long way evolution and currently it seems that virtual money is entering the scene. It is described as "a type of non-regulated digital money that is issued and usually controlled by its creators and used and accepted by members of a specific virtual community" (Virtual Currency Schemes– ECB). While cryptocurrencies are described as currencies that use cryptography for security and operate on decentralized networks called blockchains.

Like it was mentioned before people usually don't treat money as neutral means. Perception of money is a very individual matter. Every person feels the need to have money in different ways and on a different scale (Goldberg and Lewis, 2000). Although in economics money is treated as a tool to meet needs, it seems that nowadays it sometimes becomes an aim itself. In this approach, the need for money can be placed even before biological needs, which are perceived as basic ones. In order to be able to satisfy them, a person must have adequate resources. This approach explains the commonly observed "rush to money".

People associate money with several emotions, usually positive. It was proved that people who earn more often feel positive emotions, assess their competences higher and are more optimistic (Argyle, 2001). Also the utility of money in making people happy is high at the beginning, but each subsequent unit makes less and less happy. It turns out that more money means more fear of losing it, stress, worse social relations, worse family relationships etc. And as shown by a study by Brickman et al. (1978) conducted among the winners of large amounts on lotteries, these people were just a little happier than other people (4.0 vs. 3.8 on a 5-point scale). Also Smith and Razzell (1975) stated that people who became rich and quit their jobs, broke off social relations, had a sense of social exclusion and were under severe pressure because family and friends expected them to share money (Frey and Stutzer, 2002).

Elements shaping attitudes towards money are numerous and can be connected with (Tang, 1995; Tang, Tang and Luna-Arocas, 2005):

- an emotional approach in which money perception depends on highly subjective beliefs, experiences, traditions or habits;
- an active approach, in which having money is the result of actions taken by people;
- functional approach, under which having money is associated with the privilege of performing specific functions in society, both in a formal and informal sense.

This supports the idea stated at the beginning that perception towards money is very individual matter and can strongly fluctuate within groups, communities and societies. It also prompts that people from different countries, with different history and different experiences, also these painful, difficult and traumatic, can have various perception of money, its utility, and evolution perspectives.

2. Cryptocurrencies and their development

Since the beginning of the global financial crisis in 2008, cryptocurrencies have become an almost common phenomenon in the world of global finance. The rapid increase in both popularity and valuation of the entire cryptocurrency market is manifested, among others, in a constant increase in the number of digital currencies, of which there are almost 23.000, which, compared to 162 national currencies, means that there are over 140 digital currencies per national currency. The relatively large capitalization of the digital currency market is also significant, currently exceeding USD 1.64 trillion

(June 2023) and in the past reaching even USD 2.83 trillion (November 2021). On the one hand, this may indicate a certain potential of this market (Kyriazis 2019) and its constantly growing importance in the previously, as a rule, conservative world of finance. However, considering this phenomenon from a different point of view, one can come to the conclusion that it may also be associated with a decrease in trust in centralized financial markets, system regulators and current supervisory institutions. These processes are simultaneously connected with the phenomenon of the so-called "un-anchoring" of inflation fears in the economy and, as a logical consequence, the willingness of savings (capital) holders to escape from the negative real interest rates present in almost all the world's leading economies, which have been systematically eroding the savings of the "middle class" around the world for many years.

Completely private digital money is noticed in studies devoted to comprehensive considerations conducted in terms of both the evolution of money and the stability of the financial system and its future architecture (Allen and Bryant (2019)). It seems, however, that the universe of cryptocurrencies still requires systematic and in-depth scientific research. First of all, there are no studies based on research of the participants of the financial system, which would treat users - current and potential - as entities important for the functioning of the financial system, which is always based on universal acceptance and trust in money being its emanation. In particular, there is a lack of comparative and international studies, especially those that would be conducted simultaneously in several countries by the same research team or research consortium (Khan et al. 2020, Maciejasz-Świątkiewicz, Poskart 2020). There are also (or perhaps above all) no international comparative studies showing how military conflict at the Ukraine has changed the perception and status of modern fiat money and cryptocurrencies.

3. Survey

This study is a part of wider study which was and still is realized in several countries (Germany, China, the Russian Federation, China, Germany, Czech Republic) from 2019. The described one was conducted in May 2023 in Poland, Romania and Ukraine.

At the very beginning, it's necessary to consider the differences in economic development between the countries covered by the study. There is a significant gap between the GDP of Poland, Romania and Ukraine. Polish economy (USD 679 bln) is three times larger than that of Romania (USD 284 bln) and six times larger than that of Ukraine (USD 200 bln) (www.theglobaleconomy.com) (Figure 1-2).

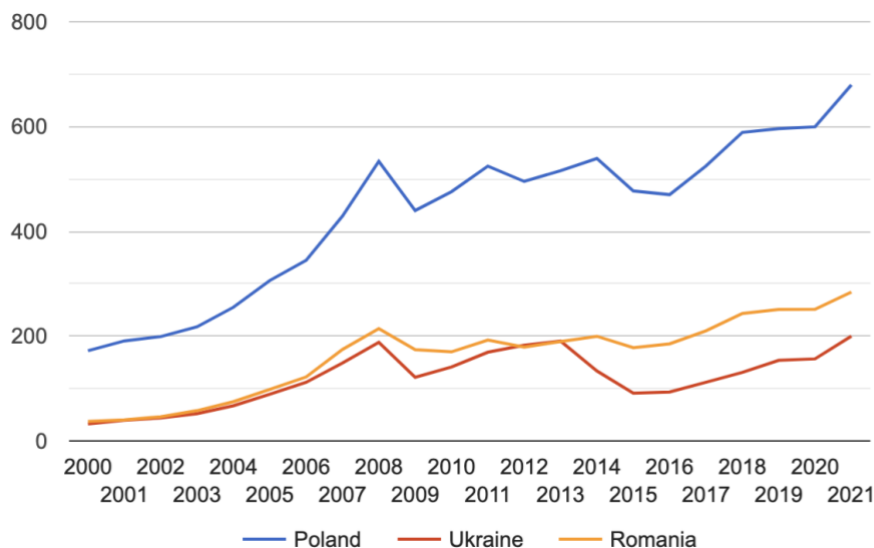


Figure 1. Gross Domestic Product: Poland, Ukraine, Romania (billions of U.S. dollars)
Source: The World Bank

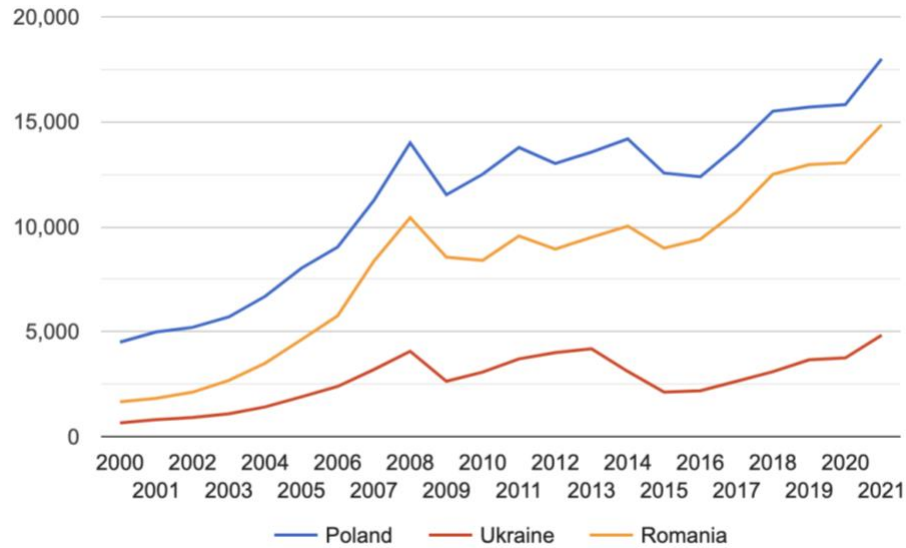


Figure 2. GDP per capita, current U.S. dollars
Source: The World Bank

In general 291 respondents took part: 148 from Poland, 83 from Romania and 60 from Ukraine. The paper questionnaire used in the study consisted of 26 questions related to the issues of virtual money and five questions of a demographic nature. The study was in the form of an auditorium survey. This group of respondents was selected for several reasons. Firstly, it is believed that young people are more open to the absorption of new, innovative technologies, and thus more willing to use virtual money. Secondly, students of economics and finance should be more predisposed than other groups to use new forms of money. Thirdly, it was supposed to be a group with some experience and knowledge in the field of finance, which would make it easier to understand the questions asked in the survey.

Structure of the respondents is presented on figures 3-6.

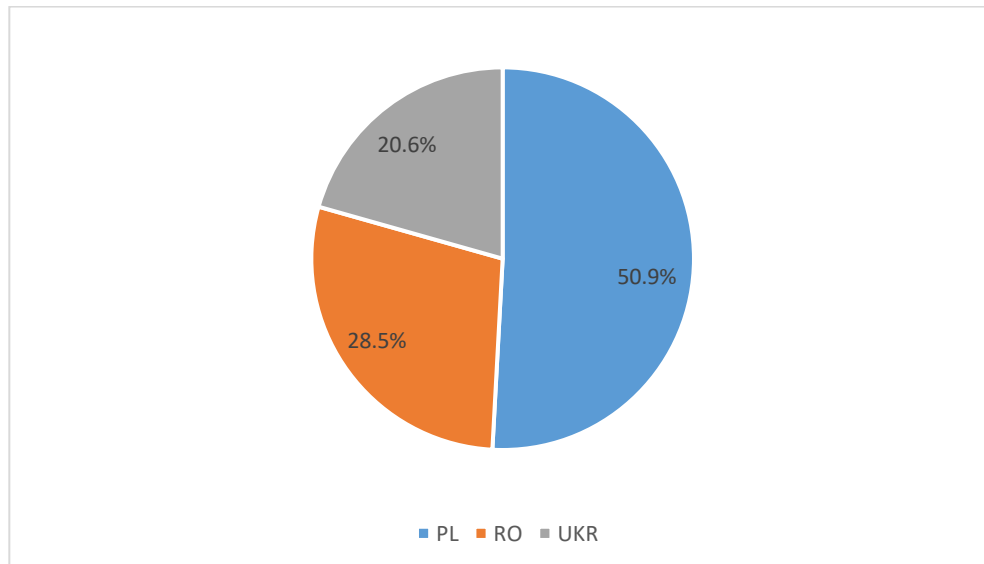


Figure 3. Structure of the respondents (nationality)
Source: own elaboration based on the conducted surveys

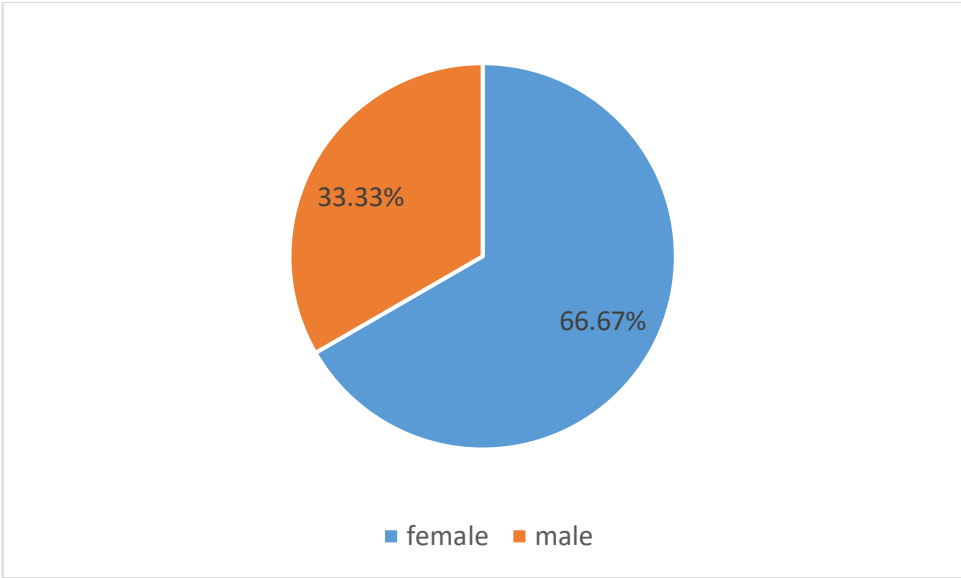


Figure 4. Structure of the respondents (gender)
 Source: own elaboration based on the conducted surveys

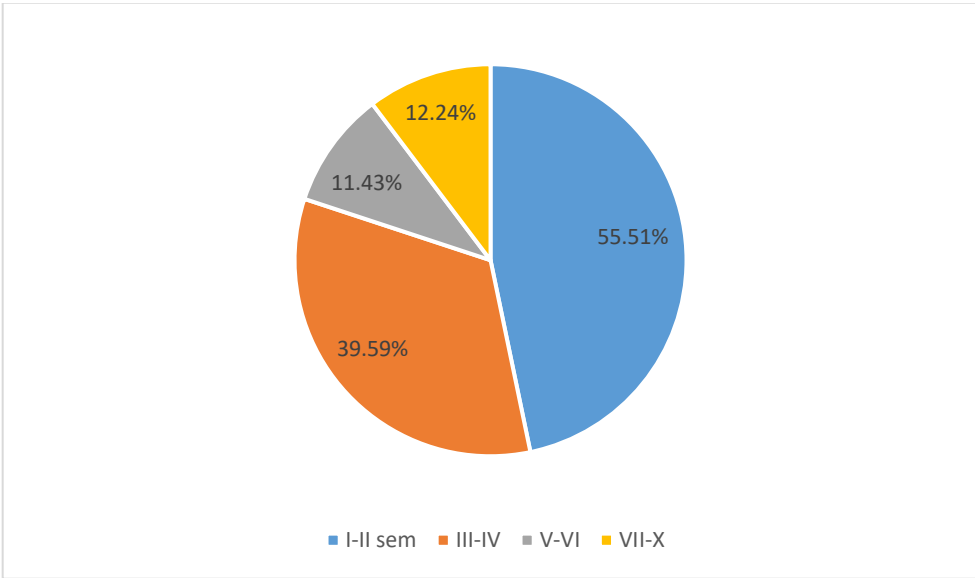


Figure 5. structure of respondents (semester of study)
 Source: own elaboration based on the conducted surveys

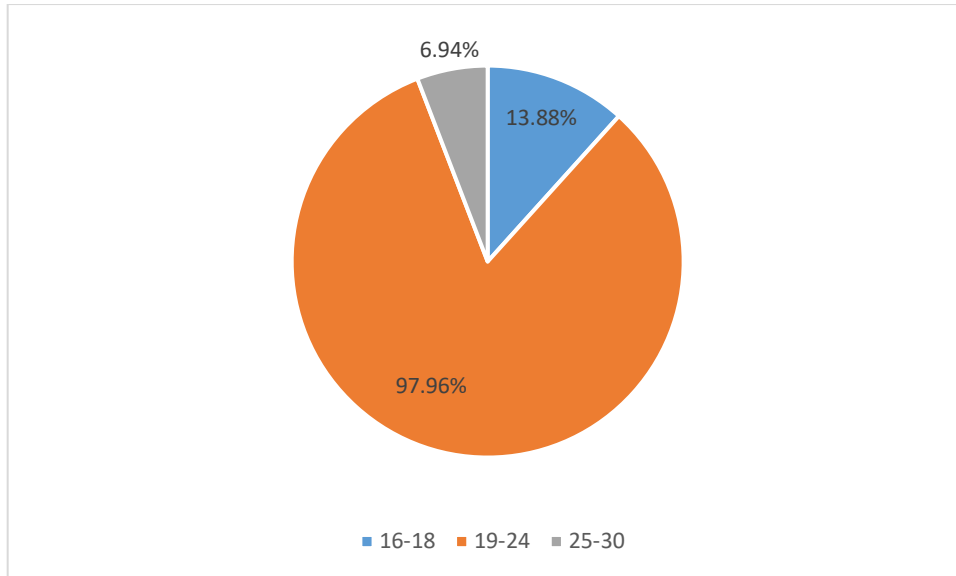


Figure 6. Structure of respondents (age)
 Source: own elaboration based on the conducted surveys

At the beginning of the survey three questions were stated:

Q1: Are there any differences between countries concerning perception and use of cryptocurrencies?

Q2: What are the differences in using cryptocurrencies by respondents from different countries?

Q3: Is the war in Ukraine changing perceptions and levels of trust in traditional fiat money, the banking system and cryptocurrencies?

Potential answers to such questions could be:

H1: There are differences between countries in perception and use of virtual money.

H2: There are differences in the level of knowledge about cryptocurrencies between different countries.

H3: War significantly changes the perception and level of trust in money, and monetary system based on fiat currency.

The first group of questions concerned trust to financial system. Respondents were asked, what is their trust to the traditional financial system (Figure 7).

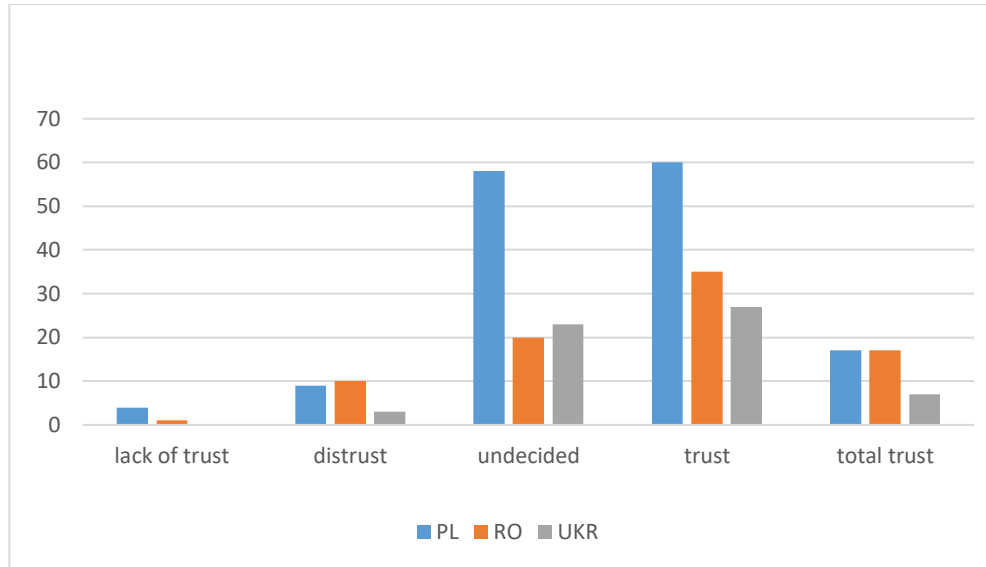


Figure 7. What is your confidence level to the traditional financial system?

Source: own elaboration based on the conducted surveys

In this case within all respondents (PL, RO, UKR) there is a medium and high level of trust in the traditional financial system, and a dozen or so respondents (but mostly from PL and RO) even opted for total trust in the financial system – this was not visible in the case of respondents from UKR (is it war?). Several people from all countries covered by the study lack of trust in the system. It’s very well visible that significant group of respondents can’t easily declare trust or distrust – they stay undecided. Ukrainians the most probably expect what will happen after the end of the war. Whether the current financial system will cope with the consequences of war? Respondents from Poland also show a large dose of uncertainty in this area, which in turn may result from market expectations regarding inflation and its effects. Romanians seem to have the most positive attitude towards traditional financial system.

Next question was connected with functions of traditional, fiduciary money (Figure 8).

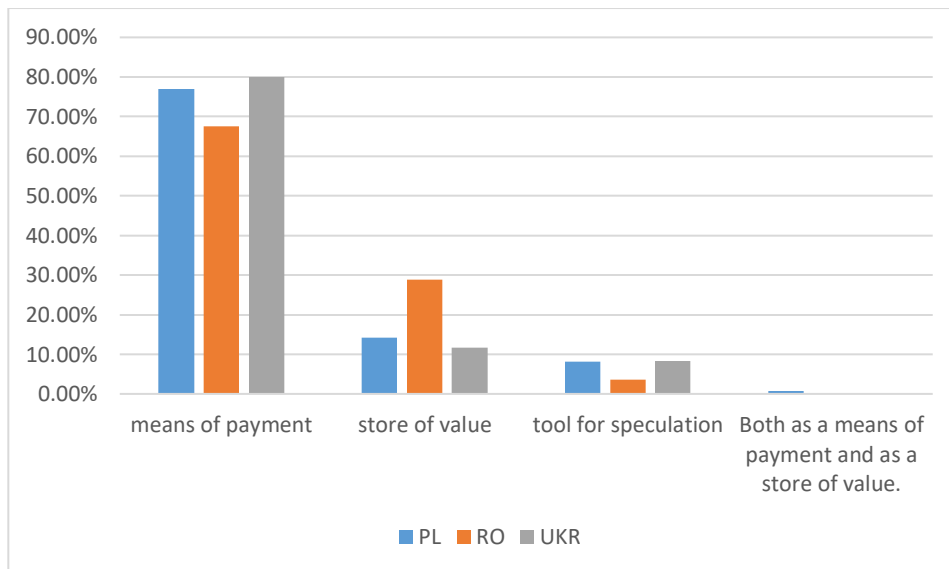


Figure 8. How do you treat traditional money issued by the central bank? (in %)

Source: own elaboration based on the conducted surveys

It seems that majority of young users of money from the three countries surveyed treat it mainly as a means of payment and then as a medium (means) of storing value. Such a low share of respondents who consider money as a means of speculation is most likely due to persistent inflation in all countries covered by the survey and maybe due to the fact that the word „speculation” has pejorative meaning. At the time of the survey, inflation was decreasing, but it was still high and amounted to 14.7% in Poland, 11.23% in Romania and 17.9% in Ukraine (tradingeconomics.com).

Second group of questions concerned money trust. Respondents were asked which traditional currency issued by the central bank do they trust the most (Figure 9).

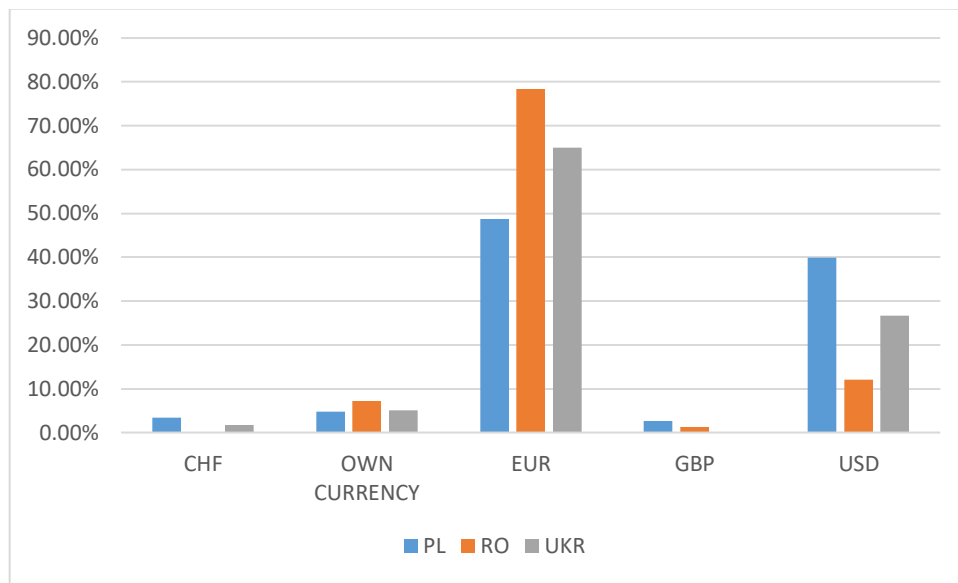


Figure 9. What traditional currency issued by the central bank do you trust the most? (in %) Source: own elaboration based on the conducted surveys

Results showed that the most trustworthy currency in the opinion of respondents from Poland and Romania is the EUR, because it is geographically closer. In second place is the USD, the world’s reserve currency, which is particularly evident among respondents from all countries. This is due to the fact that in Poland, Ukraine and Rumiania the american dollar (USD) has in the past played the role of a private reserve currency, used in larger transactions (real estate, cars, etc.) It is also a good idea that the respondents only put their own national currency in third place. This is most likely related to the high inflation present in Europe and the recently strengthening US dollar, but also to the fact that all countries are part of former Soviet block and are aware how easily political relations can spoil national economy.

The last group of questions concerned cryptocurrencies. Firstly, respondents were asked about assessing their knowledge about cryptocurrencies (Figure 10).

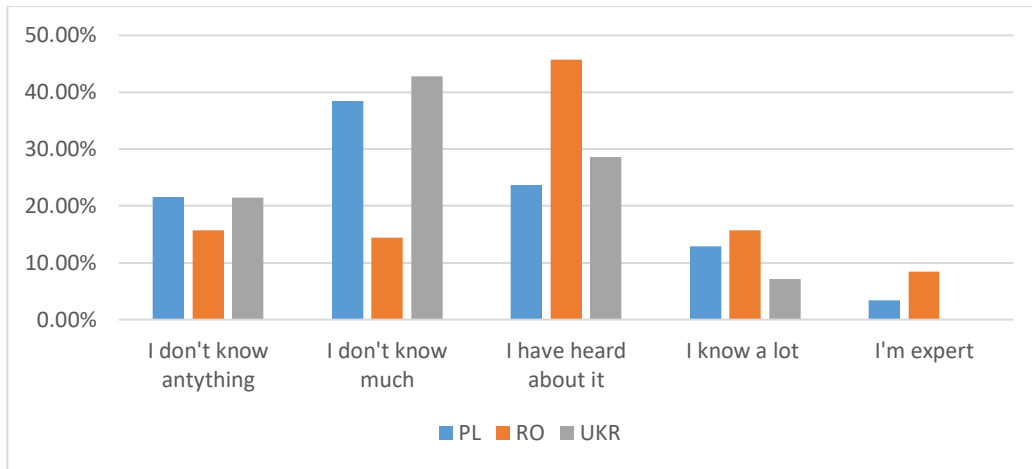


Figure 10. How do you assess your knowledge about cryptocurrencies? (in %)
 Source: own elaboration based on the conducted surveys

In general Romanians seem to be the best informed about cryptocurrencies, they feel quite confident in this area. Majority of them at least have heard something about crypto. Majority of Polish respondents declare that they don't know much or just have heard something (62,16%). Ukrainians seem to be the least confident in this area.

Then, they were asked to declare whether in their opinion cryptocurrencies are worth as much as traditional money (Figure 11).

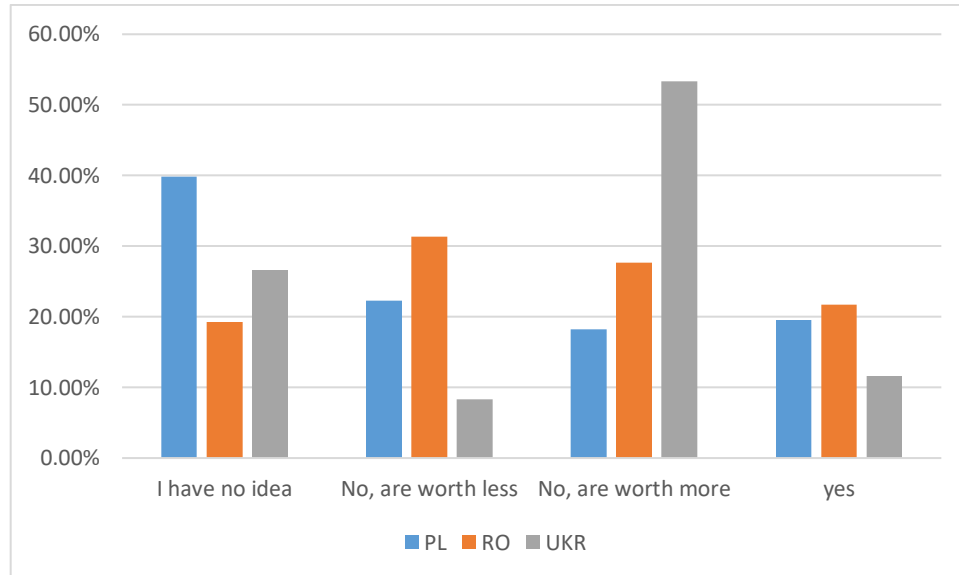


Figure 11. Do you agree with the opinion that cryptocurrencies are worth as much as traditional money? (in %)
 Source: own elaboration based on the conducted surveys

Considering statements of the respondents in percentage terms, it can be seen that apart from people undecided in their judgments (from all three countries), there is a group of respondents who believe that cryptocurrencies are worth less. However, in addition to this, there is also a group of respondents who believe that cryptocurrencies are worth as much as

traditional money, and it can also be seen that there is a group of people claiming that they are worth more. It is particularly visible in the case of respondents from Ukraine. This may be due to the consequences of the war in Ukraine and the associated problems in the banking system and the interbank infrastructure system, which gives an advantage to cryptocurrencies, whose transactions are exclusively online, thanks to blockchain technology they are decentralised.

And finally, respondents were asked about their opinion if cryptocurrencies can replace traditional money issued by the central bank (Figure 12).

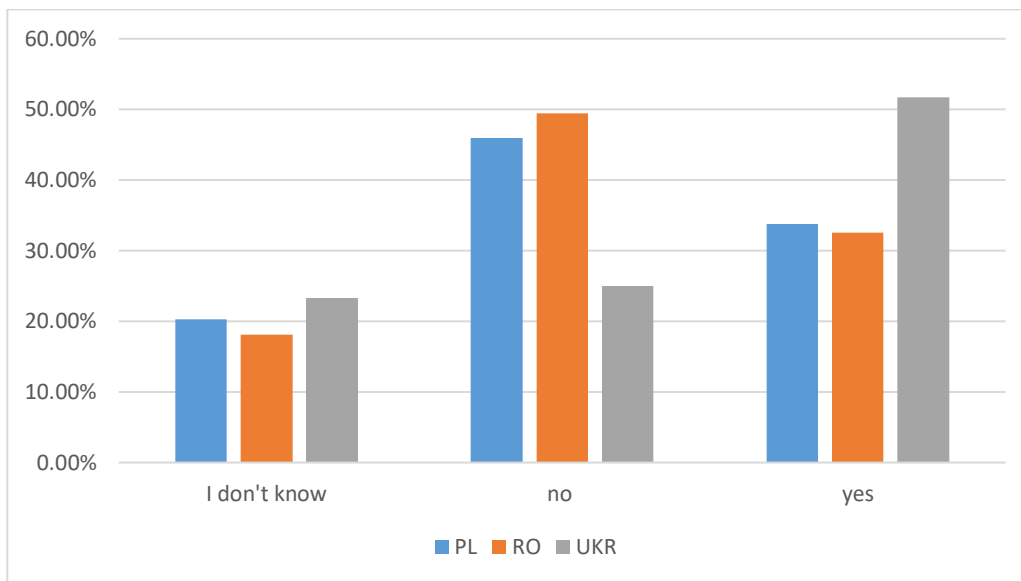


Figure 12. Do you agree with the opinion that cryptocurrencies could replace traditional money issued by central bank in the future? (in %)

Source: own elaboration based on the conducted surveys

In response to this question, there is a significant polarization of views. Almost half of respondents from Poland and Romania think that cryptocurrencies couldn't replace traditional money. However, more than 30% from both countries answered positively. About 20% from both countries were hesitating. An interesting attitude is presented by respondents from Ukraine, who think quite opposite. Respondents from Ukraine appeared to be the biggest enthusiasts of cryptocurrencies and blockchain technology, which appears to be a consequence of the war in that country, which is destroying critical infrastructure, including that responsible for the proper functioning of banks. Decentralised ledger technology is showing its natural advantage here related to its high resilience to attacks. This leads to the conclusion that Ukraine may become a future leader in the application of digital technology to the financial system.

4. Conclusions

Money is constantly developing and attitudes towards it and its perception is evolving too. Based on the results of the survey first and second hypotheses were confirmed because several contrasts were seen between respondents from the chosen countries. These discrepancies can have cultural or historical background. However, there is scepticism towards cryptocurrencies, which are treated as the distant future of the financial system, which does not pose a significant systemic threat to it at the moment. Participants in the survey show a relatively high level of confidence in the current shape of the financial system, both domestic and international, and in their own currency and other world currencies.

The third hypothesis was confirmed. There appear to be differences in perceptions of traditional money and cryptocurrencies by Ukrainians. War instantly changes the perception of many things, particularly those of fundamental

importance. One of these is money, the financial system, confidence in it and the like. The chaos that prevails during war makes people more susceptible to change many things that would be difficult to accept under normal circumstances. One of these is the sphere related to money and all that is associated with it.

This results can be explained by the fact that the independence of cryptocurrencies from central banks and geographical conditions as well as the ease of using them thanks to blockchain technology mean that in the eyes of respondents they can be an important alternative to fiat money, dependent on the state, central banks and the banking system. This is because cryptocurrencies eliminate the shortcomings of the modern monetary system.

The practical usefulness of the whole study is that gathered information will permit to examine the economic and financial literacy of the respondents and their preferences for the use of innovative financial instruments. Thus, it can help to protect people from serious mistakes and their consequences in using cryptocurrencies.

The obtained results thus allowed to answer the second question and confirm the hypothesis put forward at the beginning that the SARS-CoV-2 virus pandemic has changed the perception of cryptocurrencies as an alternative to the currently functioning fiat money.

Summing up the considerations contained in this study, it can be unequivocally stated that there are some changes between selected countries. The conclusions of the analysis are important not only for the financial and investment sector. Changes in the perception of money and financial systems may influence savings and investment decisions and thus also the behaviour of financial markets in the future. The COVID-19 pandemic and war on Ukraine has shown that the financial sector is vulnerable to external influences and may require rapid adaptation to increasingly changing environmental conditions. These issues still require systematic and in-depth scientific research to capture the changes taking place in the sphere of money, the financial system and the social trust (acceptance) necessary for its functioning.

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