

## Romanian Students’ Perception of Cryptocurrency

Vlăduț Faraonel  
Alexandra Raluca Jelea  
Mara Matcu

“Alexandru Ioan Cuza” University of Iași, Doctoral School of Economics and Business  
Administration, Romania  
[vladut.faraonel@feaa.uaic.ro](mailto:vladut.faraonel@feaa.uaic.ro)  
[jelea.alexandra@feaa.uaic.ro](mailto:jelea.alexandra@feaa.uaic.ro)  
[maramatcu@feaa.uaic.ro](mailto:maramatcu@feaa.uaic.ro)

### Abstract

*This paper aims to find out about the perception Romanian students have concerning cryptocurrencies. Our main focus was on students from faculties of economics, but we have also gathered responses from students enrolled in other faculties, given the fact that this research is an empirical one. The method used in this research is qualitative. We have conducted semi-structured interviews which included the top of mind and Chinese Portrait method techniques. Thus, we have collected information about how students perceive cryptocurrencies (and with what they associate them), the most well-known cryptocurrencies among students, how much students are willing to invest in cryptocurrencies and from where they get their information on this topic. Our results align with results from past research, showing that attitudes concerning cryptocurrencies are in extremes, with some people being optimistic due to the facilities blockchain brings, but with others still being suspicious because of this new phenomenon.*

**Key words:** cryptocurrency, media, perceptions, social media

**J.E.L. classification:** G41, G53, M31

### 1. Introduction

New technologies can eliminate some types of jobs, change the skills requirement within other occupations and create new employment opportunities (OECD, 2017). They can also cause radical changes and innovations which generate new markets and growth (Pham, 2011 *apud*. McMorrow & Seyed Esfahani, 2021). The cryptocurrency market has been considered one of these new, revolutionary markets due to the constant technological evolution and innovation that blockchain technology provides (McMorrow & Seyed Esfahani, 2021). But attitudes towards cryptocurrencies have been “in extremes” for the past decade (Knežević, Babić & Musa, 2020). Some researchers and lay people have a very positive attitude towards them due to the new opportunities that blockchain technology brings, but others state that this is an unexplored technology and thus, an unstable market which can be used as a tool for criminal activities or for skipping social responsibilities such as tax avoidance and corruption (Knežević, Babić & Musa, 2020).

Among these contradictory opinions, we consider that it is important to know and analyze the opinions of our future generation – students. Students’ opinions, perceptions and attitudes towards this new phenomenon (cryptocurrencies) should be a point of interest for researchers in fields like sociology, anthropology, economics, business administration, human resources management and many others. Thus, studies on this topic have been applied on students and youth from Pakistan (Hasan, Ayub, Ellahi & Saleem, 2022), Croatia (Knežević, Babić & Musa, 2020), South Africa (Mazambani & Mutambara, 2020), Russia (Gagarina, Nestik & Drobysheva, 2019) and others.

Our paper aimed to complete the scientific literature by analyzing Romanian students’ perceptions of cryptocurrencies. We have found some articles related to this topic (Chivu, Popa, Orzan M., Marinescu, Florescu, Orzan A., 2022; Duma & Gligor, 2018; Chivu, Niculescu-Ciocan, Orzan &

Mitrică, 2018), but their focus was on Bitcoin, its notoriety (Chivu, Niculescu-Ciocan, Orzan & Mitrică, 2018), payment methods preferences of students (Duma & Gligor, 2018) and their perceptions of the technological integration of blockchain in the learning process (Chivu, Popa, Orzan, Marinescu, Florescu, Orzan, 2022). Also, from a methodological point of view, these studies we have found opted for a quantitative approach.

Thus, we consider that there is still a need for research on this topic. Taking this into consideration, our study goal was to do an interpretive study regarding students' perceptions about cryptocurrencies. We have conducted semi-structured interviews in order to obtain associations students make when thinking about cryptocurrencies, but also other information like their willingness to invest in cryptocurrencies and how they get information about this topic. The interviews included questions based on the top of mind and Chinese Portrait techniques. Hence, students were asked things like *If cryptocurrencies were a gender, then what gender would they be?*, *If cryptocurrencies were an occupation, then what occupation would they be?*, *If cryptocurrencies were a nationality, then what nationality would they be?* and others.

## 2. Literature review

Cryptocurrencies have a short history, starting slightly after the economic crisis in 2008. This is the reason a lot of people think or might think cryptocurrencies were invented as an answer to the physical money that were starting to depreciate and inflate then. But some experts say that the inception of cryptocurrencies was not a reaction to the economic crisis, but "a solution to the fundamental issue of financial sovereignty" (Acheson, 2021). As stated in the Bitcoin white paper, "the root problem with conventional currency is all the trust that's required to make it work. The central bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of that trust" (*apud*. Acheson, 2021).

Since the inventor of cryptocurrencies is not really known (he/she/they just goes by the fictive name of Satoshi Nakamoto), we cannot truly know what his/her/their intentions were when this entity invented the first cryptocurrency. But we can say that regardless the economic crisis, it seemed (at least by reading the posts on the <https://satoshi.nakamotoinstitute.org/> website) that the main purpose of this first cryptocurrency was to give people a sort of freedom: doing payments without the intervention of a third-party system (which is, in general, represented by the banks).

Anyway, like many other information about cryptocurrencies, the discussion about the reason they appeared is still under the sign of uncertainty, because people in general and also scientists are just starting now to develop their understanding about this new phenomenon. Thus, there are not so many scientific articles on this topic, but researchers covered research areas like technology behind cryptocurrencies (blockchain) and the way they work (Nakamoto, 2008; Härdle, Harvey & Reule, 2018; Berentsen & Schär, 2018), impact of cryptocurrencies on global economy and politics (Perkins, 2020), the acceptance of this new technology (Dudukalov, Geroeva, Shtepa & Ushakov, 2021), motivations people have for investing/not investing in cryptocurrencies (Smutny, Sulc & Lansky, 2021), risks related to cryptocurrencies (Chan, Chu, Nadarajah & Osterrieder, 2017) and people's perception and sentiments regarding them (Knežević, Babić & Musa, 2020; McMorrow & Seyed Esfahani, 2021).

As mentioned in the introduction section, this last topic was our area of interest, because people's perceptions and opinions about this new trend can dictate how it will go in the future. By its definition, perception is the process by which people select, organize, and interpret sensations. In other words, it is what people add to raw sensations in order to give them a meaning (Madichie, N., 2012). Thus, we wanted to see what meaning students give to the concept of cryptocurrency. In order to find out about this, we have introduced in our interviews questions regarding sources of information about cryptocurrencies, as there are indirect effects of social media on attitude formation and intention towards engaging in cryptocurrency through the processes of social influence (Wokke & Rodenrijs 2018). It is stated that heavy social media users are more likely to engage in online trading but are largely affected by online herding behavior, and are four times more likely to blindly follow other traders (Bizzi & Labban, 2019). Bloggers, influencers, social network contacts, and social media news shape these users' online trading behaviors.

### 3. Research methodology

The research problem is that we don't have hard evidence about how cryptocurrencies are perceived by students, especially students in Romania. The purpose of this research is to find out the cryptocurrency associations formed in students' minds and interpret them.

The main objectives of this research are:

- O1. To identify cryptocurrency associations between students.
- O2. To identify how willing are students to invest their money in cryptocurrencies.
- O3. To identify how cryptocurrencies are perceived by students.
- O4. To identify from what media sources students are taking their cryptocurrencies information.

The method used in this research is qualitative research and the tool used is a semi-structured interview. The semi-structured interview about cryptocurrencies can be found in Annex 1. This was the tool that helped gather the information needed in order to conduct our research and we learned more about the respondent's perceptions, feelings, emotions, about their behavior and personal experience. The semi-structured interview consisted of 23 questions and was distributed online in groups on the most known social media platform, Facebook. Since our target population consists of Romanian students, the groups we chose were official groups that represent the Universities of Romania, with a focus on groups that represent Faculties of Economics.

The sample considered consists of 98 respondents (66 females, 31 males and one person who did not want to disclose this information. The respondents come from 11 different universities in Romania, and they are from more than 18 different specializations. The majority of them fall into the 21-27 age category.

### 4. Findings

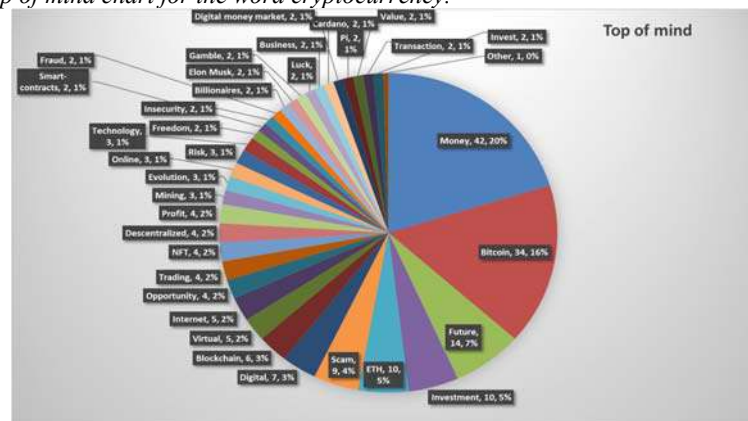
We divided our findings based on the objectives set for this research.

#### 4.1 Objective 1. To identify cryptocurrency associations between students.

In order to accomplish the first objective, we dedicated a couple of questions in our interviews. The first question refers to the associations formed in the students' mind. They were asked to name the first three words that came into their mind when thinking about cryptocurrencies.

Table 1 shows the top-of-mind associations that we got for the word "cryptocurrency", and based on it we created the chart below. However, the last position is occupied by "other" meaning that we have got several other responses that only showed up one time. Due to space restrictions, we restricted the table to only what you may see here. Other valuable responses that were found in the top-of-mind test are money laundering, volatile, dreams, Tesla, influencer, knowledge, power, salvation etc.

Figure 1: Top of mind chart for the word cryptocurrency.



Source: own processing

As we can observe in Figure 1, there are many associations students have formed in their minds regarding cryptocurrencies. As expected, the most frequent word mentioned by our respondents was *money* (42,2% of our respondents mentioned it). The second most mentioned word was *Bitcoin* (34,16%), which was again, an expected word between the answers to this question, being done that this was the first cryptocurrency ever created (Antonopoulos, 2017) and it is considered the "leader of cryptocurrencies" (Chan, Chu, Nadarajah & Osterrieder, 2017). Another popular cryptocurrency that students mentioned in their answers was *Etherum*, which was the fifth most mentioned word (10,5%). Students also associated cryptocurrencies with *future* (14,7%), *investment* (10,5%) and *scam* (9,4%). Here, it is worth mentioning that the association between cryptocurrencies and scams is not surprising, especially because cryptocurrencies frauds have become a growing global concern (Trozzie et al., 2022).

#### **4.2 Objective 2.** To identify how willing are students to invest their money in cryptocurrencies.

In order to see whether students are willing to invest into cryptocurrencies in the future, we asked them if they had invested already. We calculated their responses and got the following results: the majority, 59,2% said they did not, and this could be happening because students do not have an income in general. The other 40,8% said they had invested and if we further analyze them, we notice that they are not willing to invest anymore at the moment.

Surprisingly, most of the respondents (34%) said that they were not willing to invest in cryptocurrency at the moment of the interview. It is a surprise because most respondents found cryptocurrencies reliable, secure, and trustworthy. Therefore, we expected that a more significant number of respondents answered that they are actively implicated in cryptocurrencies via investing. One of the reasons may be the lower incomes as they are still students and focused more on studying than making money.

After gathering our information about whether they want to invest or not, we asked them how much they would be willing to invest and only 24.5% would want to invest in cryptocurrencies less than 100 RON (aprox. 20 EUR), 15.1% would invest between 101 and 500 RON (aprox. 21 - 101 EUR), 13.2% would invest between 501 and 1000 RON (aprox. 101 - 202 EUR) and, finally 13.2% of the respondents would invest more than 1000 RON (aprox. 200+ EUR)

Next on our semi-structured interview was to ask them if they would invest their scholarship from the University. This could have eliminated the risk of the "I don't have money to invest" reason. We assume that the students from Romania have a high aversion to risk, because over 70% of the respondents said that they would not invest all the money from the scholarship. Interestingly, a small percent of almost 4% would invest a portion of the scholarship in cryptocurrencies.

We also asked the respondents which cryptocurrencies they know best and Bitcoin and Ethereum are the most known cryptocurrencies right now. Bitcoin, on the one hand, has the largest market cap (around 880 \$ Billions in April 2022, via coinmarketcap.com). On the other hand, Ethereum is the number one contestant of Bitcoin. With lots of application you can make on its blockchain, Ethereum is the second largest market cap in the cryptocurrency's world (around 420 \$ Billions) and over 75% of respondents have heard of it. Dogecoin is the third most known cryptocurrency among Romanian students. This coin is the 12th largest cryptocurrency by market cap and the world knows about this coin because it is a highly "memeable" coin that marketed itself via meme marketing.

In correlation with the previous question, the overwhelming majority would invest in Bitcoin, the oldest and the most popular cryptocurrency. However, 28.6% are not willing to invest in cryptocurrencies at the moment.

#### **4.3 Objective 3.** To identify how cryptocurrencies are perceived by students.

In order to conduct a precise and worthy research we asked our respondents whether they had heard about cryptocurrencies before the day they responded to our semi-structured interview. From a total of 106 responses, 103 respondents have heard about cryptocurrencies and 3 didn't. Another question was whether our respondents are students or not, since we base our study on students that have heard about cryptocurrencies before. From this question we saw that only 98 are students.

After the eliminatory questions, we started our interviews with the Chinese Portrait Technique (CTP), meaning firstly, we asked our respondents if cryptocurrencies were to be a currency, which currency would they be? The other questions from the CPT were referring to gender, age, occupation and nationality.

Most of the people associated cryptocurrencies with Bitcoin which was the most associated currency. It's a good sign meaning that the respondents know a lot about cryptocurrencies since they mentioned a few like ETH, Doge coin, Shiba inu. On a second position we have the association "euro" which symbolizes the fact that cryptocurrencies are viewed as a strong currency.

Our next question made the respondent's a little bit confused, giving the fact that we asked them to associate cryptocurrency with a gender. Most of them associated cryptocurrencies with being a male. This might bring out the fact that they view cryptocurrencies as a strong currency, that can have a say between other currencies. A few people mentioned that cryptocurrencies are neutral or gender fluid and this can highlight that crypto is a volatile currency that can change fast over periods of time.

From our question which we asked in which age category they see cryptocurrencies, we divided the answers into age intervals. The age interval that had the most responses is 18-25, a lot of people answered that cryptocurrencies are like late teenagers because as their age, they change a lot, or they are volatile. Some of the responses were not numbers and we want to highlight them. One person said young and futuristic and this can be interpreted as even though cryptocurrencies are pretty young on the market they might have a bright future just like any 18 year old.

Coming in second place is the age category which is below 17. This might get a lot of answers because cryptocurrencies are also at less than 17 years on the market.

After asking our respondents about their perceptions, we wanted to know how reliable, secure and trustworthy they find cryptocurrencies. When asked about how reliable cryptocurrencies are, most of them gave a strong 6 on a scale from 1 to 10 (where 1 means least reliable and 10 is very reliable), which means that people rely on cryptocurrencies but not that much. Probably they rely on other currencies better. However, most people gave numbers higher than 6, so overall cryptocurrencies are perceived as a reliable currency.

When asked about how secure cryptocurrencies seem, most of them also gave a strong 6 on a scale from 1 to 10, which means that people find cryptocurrencies as being pretty secure. Most people gave numbers higher than 6, so overall cryptocurrencies are perceived as a secure currency. A worth mentionable thing is that 7 people gave only 1 on the security scale, so some of them don't find cryptocurrency secure at all.

When asked about how trustworthy students find cryptocurrencies, most of them gave a strong 8 on a scale from 1 to 10. This is a very good sign of how they are perceived. However, 12 people gave 1 on the trustworthy scale, which means this is a phenomenon to further investigate, because it revealed the negative perceptions. This phenomenon might have happened because of the cryptocurrency falling back in a short time, when it was announced by Elon Musk. Even though we have a high number of people giving just 1, the majority falls into the half after 6, so overall cryptocurrencies are perceived as a trustworthy currency.

#### **4.4 Objective 4.** To identify from what media sources students are taking their cryptocurrencies information

We continued our semi-structured interview with a question where the participants could choose one or more options from where they get their information about cryptocurrencies because we assumed that one can and should take information from multiple sources, especially in this field. Therefore, Youtube is the predominant channel for gathering cryptocurrencies information. Friends and family come second on this behalf. We can see that *Social Media* has a cumulative majority of the responses. That indicates a higher use of the social platforms for gathering cryptocurrencies information. This is also an indicator for further research on this matter. We also assumed that the respondents follow crypto influencers and asked this question. The results are in the following paragraph.

We analyzed the influencers the respondents watch the most and we saw that over 50% of the respondents chose Elon Musk, the wealthiest person alive at the moment as the main cryptocurrency influencers. The second chosen influencer is George Buhnici. The curious thing here is that neither George Buhnici nor Elon Musk is a cryptocurrencies influencer. Buhnici is a tech journalist, and Musk is a tech mogul. Both have affinities related to cryptocurrencies and promote various projects in this field.

Another aspect worth mentioning is that Romanian students prefer to follow local influencers specialized in cryptocurrencies to the detriment of international ones, and some of the students do not follow influencers or consider that they do not follow influencers (if we assume that anyone you follow on social media can be, in a way, an influencer for you).

## 5. Conclusions

In conclusion, this research shows that cryptocurrencies are known between students. The majority of them would like to invest into cryptocurrencies, but not their whole scholarship, if they are getting one. As for the way cryptocurrencies are perceived, we can conclude that most people think of Bitcoin and money when it comes to cryptocurrencies. But beside the positive associations we also encountered some negative ones like scam, money laundering and insecure.

## 6. References

- Acheson, N., 2021. *Crypto Long & Short: No, Bitcoin Was Not a Response to the Financial Crisis*, [online], available at: <https://www.coindesk.com/markets/2021/01/24/crypto-long-short-no-bitcoin-was-not-a-response-to-the-financial-crisis/> [last updated 14 Sep 2021].
- Anser MK, Zaigham GHK, Imran Rasheed M, Pitafi AH, Iqbal J, Luqman A., 2020. Social media usage and individuals' intentions toward adopting Bitcoin: The role of the theory of planned behavior and perceived risk. *Int J Commun Syst.* e4590. [online], available at: <https://doi.org/10.1002/dac.4590>
- Antonopoulos, A., 2017. *Mastering Bitcoin. Second edition*. O'Reilly Media. ISBN: 9781491954386.
- Berentsen, A. & Schär, F., 2018. A Short Introduction to the World of Cryptocurrencies. *Federal Reserve Bank of St. Louis Review*, First Quarter 2018, 100(1), pp. 1-16, [online], available at: <https://doi.org/10.20955/r.2018.1-16>.
- Chan, S., Chu, J., Nadarajah, S. & Osterrieder, J., 2017. A Statistical Analysis of Cryptocurrencies. *Journal of Risk and Financial Management* 10, 12. DOI: doi:10.3390/jrfm10020012.
- Chivu, R. G., Niculescu-Ciocan, C., Orzan, M., Mitrică, M. C., 2018. Students' perception regarding Bitcoin and its influence on the Romanian digital economy. *Theoretical and Applied Economics*. Special Issue, Vol. XXV, pp. 33-40.
- Chivu, R. G., Popa, I., Orzan, M., Marinescu, C., Florescu, M. & Orzan, A., 2022. The Role of Blockchain Technologies in the Sustainable Development of Students' Learning Process. *Sustainability* 14(3):1406. [online], available at: <https://doi.org/10.3390/su14031406>.
- Dudukalov, E., Geroeva, Y., Shtepa, M. & Ushakov, D., 2021. *The crypto currency as money of digital economy*, E3S Web of Conferences 244, 10021, [online], available at: <https://doi.org/10.1051/e3sconf/202124410021>.
- Duma, F. S. & Gligor, D., 2018. Study regarding Romanian students' perception and behaviour concerning the fintech area with a focus on cryptocurrencies and online payments. *Online Journal Modelling the New Europe* 27:86-106.
- Gagarina, M., Nestik, T., & Drobysheva, T., 2019. Social and Psychological Predictors of Youths' Attitudes to Cryptocurrency. *Behavioral sciences* 9(12), 118. [online], available at: <https://doi.org/10.3390/bs9120118>.
- Härdle, W. K., Harvey, C. & Reule, R., 2018. *Understanding Cryptocurrencies*. IRTG 1792 Discussion Paper 2018-44.
- Hasan, S. Z., Ayub, H., Ellahi, A., Saleem, M., 2022. A Moderated Mediation Model of Factors Influencing Intention to Adopt Cryptocurrency among University Students. *Human Behavior and Emerging Technologies*, vol. 2022, Article ID 9718920, 14 pages, 2022. [online], available at: <https://doi.org/10.1155/2022/9718920>.

- Knežević, A., Babić, T., Musa, Z., 2020. *Cryptocurrency as the currency of the future: a case study among Algebra University College students*, 2020 43rd International Convention on Information, Communication and Electronic Technology (MIPRO), pp. 867-872, DOI: 10.23919/MIPRO48935.2020.9245265.
- Bizzi, L. & Labban, A., 2019. The double-edged impact of social media on online trading: Opportunities, threats, and recommendations for organizations, *Business Horizons*, 500-519, [online], available at: <https://doi.org/10.1016/j.bushor.2019.03.003>.
- Madichie, N., 2012. *Consumer Perception*. Consumer Behaviour: Text & Cases. Tata McGraw Hill.
- Mazambani, L. and Mutambara, E., 2020. Predicting FinTech innovation adoption in South Africa: the case of cryptocurrency. *African Journal of Economic and Management Studies*, Vol. 11, No. 1, pp. 30-50. [online], available at: <https://doi.org/10.1108/AJEMS-04-2019-0152>.
- McMorrow, J. & Seyed Esfahani, M., 2021. An exploration into people's perception and intention on using cryptocurrencies. *Holistica Journal of Business and Public Administration*, Vol. 12, Iss. 2, pp.109-144.
- Nakamoto, S., 2008. *Bitcoin: A Peer-to-Peer Electronic Cash System*, [online], available at: <https://nakamotoinstitute.org/bitcoin/> [31 October 2008].
- OECD, 2017. *In-Depth Analysis of the Labour Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report*, Enhancing Higher Education System Performance, OECD, Paris.
- Perkins, D., 2020. *Cryptocurrency: The Economics of Money and Selected Policy Issues*. Congressional Research Service, [online], available at: <https://crsreports.congress.gov/R45427>.
- Smutny, Z., Sulc, Z., Lansky, J., 2021. Motivations, Barriers and Risk-Taking When Investing in Cryptocurrencies. *Mathematics* 9, 1655. [online], available at: <https://doi.org/10.3390/math9141655>.
- Trozzie, A., 2022. Cryptocurrencies and future financial crime. *Crime Science*, 11:1, [online], available at: <https://doi.org/10.1186/s40163-021-00163-8>.
- Wokke, J., & Rodenrijs, N., 2018. *Will social media make or break the acceptance in new technology? A quantitative study of consumer acceptance in Cryptocurrency*. Jönköping University.