

## TRADITIONAL INVESTING VS NEW TRENDS: A REVIEW OF THE INVESTMENT LANDSCAPE IN TRANSITION TOWARDS INDUSTRY 4.0

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### ABSTRACT

*The aim for the current paper is to provide an overview analysis on the main financial markets. As a result, the study will investigate the topic of mutual funds, stock market or cryptocurrency investments. Consequently, this article provides evidence that in the European Union, one out of five individuals has at least one investment source. In effect, the research shows that if there is demand, it will also be a supply, both factors ensuring the existence of the stock market. Unlike most of the previous studies it has a double approach. First of all, this study critically examines the framework of the main investment sources starting from the traditional ones – like mutual funds, to the new ones – cryptocurrency market. Additionally, this paper develops investigations in the field of quantitative analysis presenting the respondents' opinions regarding the future of cryptocurrencies as well as their reliability compared to mutual funds. These findings can serve as the foundation of a potential investment strategy for any consumer with medium- and long-term financial objectives.*

**KEYWORDS:** *4.0 Industry, cryptocurrencies, financial markets, investments.*

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### 1. INTRODUCTION

The increasing interest in the topic of financial markets and net-wealth has heightened the need for extensive research in this area.

Of particular interest and complexity is the First Industrial Revolution, which is considered a pivotal point in the economic history of humankind. In the first place because its innovative technologies boosted the economic growth at an unprecedented scale, coupled with the fact that the Industrial Revolution signaled the start of a long period of wealth accumulation. For instance, this new era of exciting accomplishments for the human society, which McCloskey (2016) named "The Great Enrichment", based in the beginning on mechanization of production, gave birth to Capitalist system.

There is consensus amongst economists, that within about 100 years after the onset of industrialization, rates of return on capital doubled, further stimulating economic growth by reinvesting profits in new technologies (Allen, 2009). Thus, it can be considered the historic moment of the release of the economy from the straps of Malthusian logic and the beginning of a "virtuous circle" of welfare.

Despite its acknowledged importance, the issue of technological innovations and mechanization of industrial production remains only half of the success ingredient of the welfare recipe. The other essential one, without which the Capitalism would not have achieved global dominance, is the investment ecosystem that developed hand in hand with technology and industry and evolved

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together with them. All major economic schools of thought, regardless of their antagonistic views over some aspects of the economic phenomenon, studied capital accumulation and its diffusion across industries and sectors, in the form of investments, as the main driver of economic growth.

Some scholars even argue that investment system is always a step ahead of the times, and sets the tone of the economy, by directing resources to different strategic, long-term objectives that society need to accomplish.

Furthermore, with each wave of investments directed towards innovations, new Industrial Revolutions were triggered, increasing the technological complexity and the efficiency of the overall economic system. Over time, the relationship between capital markets, investment policies and economic growth became so intertwined that nowadays any analysis of long-term growth projections has at its core the financial dimension and investment strategies.

World Bank (1989), unequivocally stated in their World Development Report that countries with a higher investments/ GDP ratio, register more robust and sustained growth, and are overall more resilient to negative evolutions in the global economy.

Today we are witnesses of a technological revolution which surpasses by a few orders of magnitude all the past centuries evolutions, bringing fundamental transformations at all levels of the socio-economic system, and igniting growth and productivity gains. This new era, having digitalization as its core constituent, rests on a constellation of innovative technologies, which lead economists to baptize it "The Fourth Industrial Revolution", or "The Digital Economy".

This new paradigm brings also a new economic system, the Sharing Economy, which takes advantage of the new information technologies to create vast networks of peers, completely unknown to each other, that generate and distribute value in a much more efficient way.

The arenas of development of this new type of economy are the collaborative platforms, which facilitate the coordination and distribution of goods, services, and money through global scale communities of peers, dramatically increasing the network effects and reducing marginal costs.

The current research has tended to focus on the capital and investment ecosystem, which is setting the tone and guiding the trajectory of the new movement. Our focus for the present paper is to describe the ways in which capital markets both adapt to and influence the collaborative economy, in this complex transition towards the Fourth Industrial Revolution.

In response, this study will depict the best practices of crowd-funding investment platforms and make a parallel in terms of risks and returns with the traditional ways of investing, like mutual funds and brokers.

## **2. LITERATURE REVIEW**

### **2.1 Blockchain technology, cryptocurrencies, and Initial Coin Offerings (ICO)**

A large and growing body of literature has investigated the new topic of blockchain and how it can be used to increase the financial wealth of individuals.

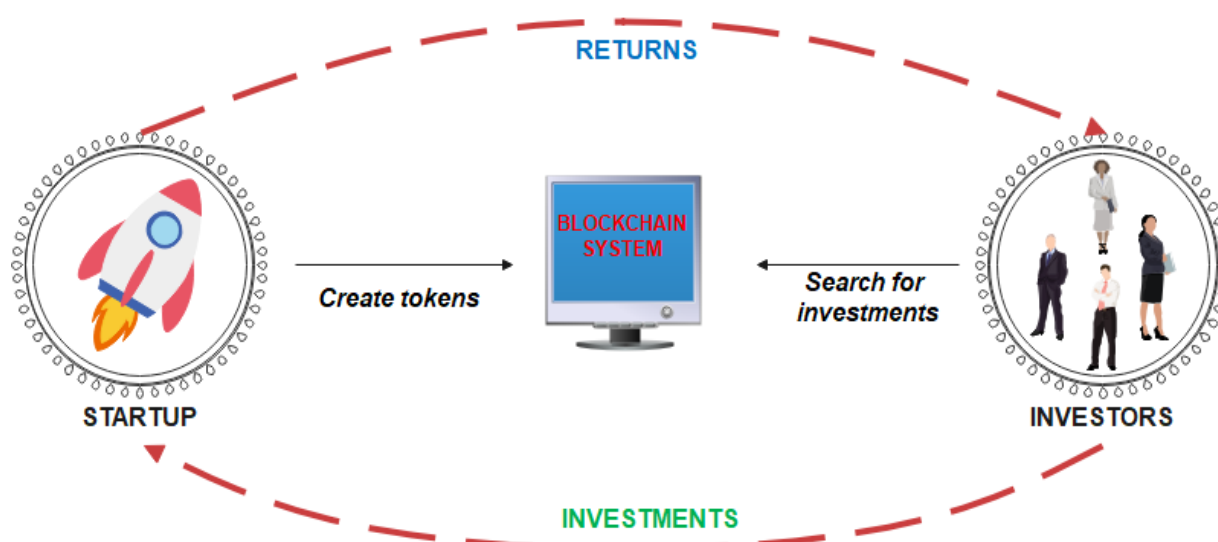
Generally speaking, the blockchain is a relatively new technological breakthrough, categorized by many authors as one of the core technologies of the Fourth Industrial Revolution. Being promoted and researched as a huge potential technology in diverse fields, starting from supply chain management (Dietrich, Ge, Turgut, Louw, & Palm, 2021), healthcare (Tariq, Qamar, Asim, & Khan, 2020), smart logistics (Issaoui et. al., 2019) or energy trading (Andoni, et al., 2019), all the way to smart contracts (Macrinici et. al., 2018), financial services (Chang et. al, 2020) and technology-based crowdfunding (Nguyen, et al., 2021), blockchain represents for sure a game-changer. Having a deep impact on the way business, production and financial ecosystems are organized and coordinated, blockchain enables a better and more equitable value creation and distribution between various stakeholders in the value chain.

One of the most interesting and impactful features of blockchain technology is the capability of issuing cryptocurrencies, which enables ecosystem actors, together with the feature of smart

contracts, to develop new and complex applications, that leverage the social and economic interactions in the network, to revolutionize business and create value in ways that were unimaginable just a decade ago (Lee, 2019).

Thus, cryptocurrency creation and diffusion across value networks, which is a radical innovation, enables value creation and exchange between completely unknown actors, who coordinate themselves without the need of a value capturing intermediary. Another innovative feature that blockchain technology brings, is the ability to raise money from individual investors, circumventing the traditional institutional investors or banks, through a process called Initial Coin Offering (ICO). Through a form of an investment contract called Simple Agreement for Future Tokens (SAFT), any individual can invest money in new blockchain-based startups, in exchange for tokens that will be used in the future for value exchange inside the newly created ecosystem. Once the investor receives his tokens, he has the option of keeping them for a long-term gain or exchange them for a short-term profit on crypto exchanges.

Cryptocurrencies and ICOs, offer significantly bigger opportunities for gains, but also present serious risks due to the unregulated aspect of the crypto market, which expose the investors to possible frauds, loss of value and big volatility.



**Figure 1. Initial Coin Offering (ICO)**

*Source: The Authors*

## 2.2 Collaborative economy and equity crowdfunding

The collaborative or sharing economy is not in itself a new concept, as the human society from its inception, was based on mutual help and value exchange between people, as the main drivers for societal construction. The novelty of the new economic system is the exponential scalability and geographical span supported by the new information and communication technologies, which enables vast number of virtually unknown people to coordinate their actions in real time, on a reciprocity based model, inside sharing economy aggregating platforms (Davlembayeva, Papagiannidis, & Alamanos, 2021). This platforms enable people to work together towards common goals, achieving vast network effects, for superior efficiency in resource use and better productivity of time, labor, capital or energy (Dabbous & Tarhini, 2021).

For hundreds of years, since the start of the First Industrial Revolution, Capitalism was permanently nourished by financial investments, which generated a virtuous cycle, that mutually reinforced

growth, both of economies and of capital monopolies in investments, represented by big banks and investment funds.

Now, together with a change of paradigm in the economy, and in the logic behind organizing production and distribution systems, it comes naturally to witness the advent of new investment ecosystems and ways of structuring financial activity to fit the new and dynamic business climate.

In recent years, equity crowdfunding is increasingly gaining traction and affirms itself as a medium to support innovation and promote promising new ideas (Yasar, 2021), while democratizing equity investments, making it available for people without professional investment experience (McKenny et. al., 2017).

On one hand, crowdfunding offers normal people, without prior technical experience or knowledge in investments, a safe environment to participate in the investments and business ecosystem, by spreading the risk among hundreds or thousands of small contributors. On the other hand, eliminating the centralized approach of the banks and big investment funds, focused exclusively on profit making, this new paradigm opens the door to financing for diverse projects which might bring enormous value for society, but not necessarily fit the narrow profile banks take into consideration when selecting investment opportunities. Thus, under this new paradigm, other types of values, like social or environmental benefits, are gaining visibility and priority over monetary value.

### 3. BRIEF ANALYSIS OF VARIOUS MUTUAL FUNDS

In the following tables there have been summarized different mutual funds with high, medium, and low risk level.

**Table 1. Mutual funds denominated in Euro with high risk level.  
 Stock investment percentage: 35%-70% of the total fund**

Fund name	Last 12-month return (%)	Risk level
<u>BT Index Austria ATX</u>	51.84	6
<u>BT Energy</u>	41.67	6
<u>BRD Actiuni Clasa E</u>	39.96	5
<u>BT Technology</u>	39.63	6
<u>OTP AvantisRO - Clasa E</u>	33.34	5
<u>BT Agro</u>	23.64	6
<u>BT Real Estate</u>	21.83	6
<u>OTP Global Mix - Clasa E</u>	21.13	4
<u>OTP Premium Return - Clasa E</u>	16.52	4
<u>OTP Real Estate &amp; Construction - Clasa E</u>	13.31	5

*Source:* Authors' computations

In table 1, the funds with the highest risk level, but at the same time, with the highest percentage rate of the last 12-month return, are: BT Index Austria ATX, BT Energy, BT Technology, BT Agro and BT Real Estate.

Their graphic representation is presented in figure 2:



**Figure 2. Last 12 month return for funds with high risk level**

Source: Authors' representation

The next table, respectively table number 2, presents the mutual funds denominated in Euro with medium-high risk level. For these, the stock investment percentage is less than 35% of the total fund.

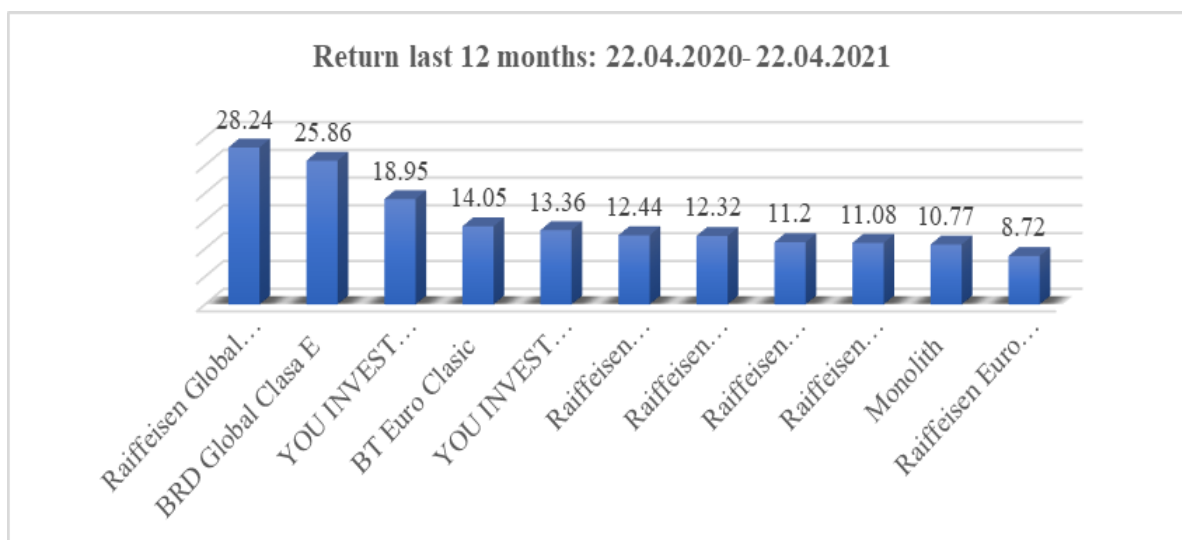
**Table 2. Mutual funds denominated in Euro with medium-high risk level.  
 Stock investment percentage: <35% of the total fund**

Fund name	Last 12-month return (%)	Risk level
<u>Raiffeisen Global Equity</u>	28,24	5
<u>BRD Global Clasa E</u>	25,86	4
<u>YOU INVEST Active EUR</u>	18,95	3
<u>BT Euro Clasic</u>	14,05	3
<u>YOU INVEST Balanced EUR</u>	13,36	3
<u>Raiffeisen Moderat EURO FWR A</u>	12,44	3
<u>Raiffeisen Moderat EURO PREMIUM</u>	12,32	3
<u>Raiffeisen Conservator EURO FWR A</u>	11,20	3
<u>Raiffeisen Conservator EURO PREMIUM</u>	11,08	3
<u>Monolith</u>	10,77	3
<u>Raiffeisen Euro Obligatiuni</u>	8,72	3

Source: Authors' computations

In this case, only one mutual fund has the highest medium-high risk level, respectively *Raiffeisen Global Equity*. Similarly, the fund with the highest risk level, has also the highest percentage of the last 12-month return, in this case it has 28.24%.

The graphic representation is presented in Figure 3.



**Figure 3. Last 12 month return for funds with medium-high risk level**  
 Source: Authors' analysis based on own data

The last table, table number 3, presents the mutual funds denominated in euro with low risk level. For these funds, the investments in bonds and deposits should be more than 70% of the total fund.

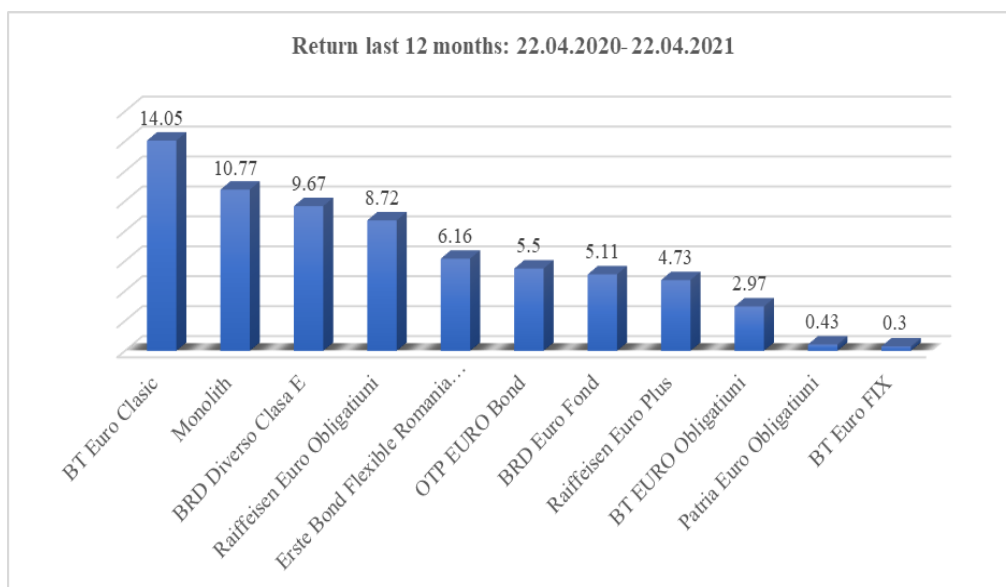
**Table 3. Mutual funds denominated in Euro with low risk level.**  
**Investments in bonds and deposits: >70% of the total fund**

Fund name	Last 12-month return (%)	Risk level
<u>BT Euro Clasic</u>	14,05	3
<u>Monolith</u>	10,77	3
<u>BRD DiversoClasa E</u>	9,67	4
<u>Raiffeisen Euro Obligatiuni</u>	8,72	3
<u>Erste Bond Flexible Romania EUR</u>	6,16	2
<u>OTP EURO Bond</u>	5,50	3
<u>BRD Euro Fond</u>	5,11	2
<u>Raiffeisen Euro Plus</u>	4,73	2
<u>BT EURO Obligatiuni</u>	2,97	2
<u>Patria Euro Obligatiuni</u>	0,43	3
<u>BT Euro FIX</u>	0,30	1

Source: Authors' computations

In this last table, the fund with the lowest risk level, as well the lowest last 12-month return, is *BT Euro FIX*.

The graphic representation is presented in Figure 4.



**Figure 4. Last 12 month return for funds with low risk level**

Source: Authors' analysis based on own data

Regarding the cryptocurrency market, the most well-known coin is Bitcoin. Thus, the yearly return of this coin is presented in table 4:

**Table 4. Bitcoin yearly return**

Year	Price 01.01 (dollars)	Price 12.03 (dollars)	Change %
2016	425	962	+125
2017	962	13762	+1320
2018	13762	3827	-72
2019	3827	7204	+87
2020	7204	28985	+302

Source: The Authors

It can be easily observed the positive evolution and rapidly increase of Bitcoin from one year to another. In 2020, its price reached its peak of \$28.985.

Now, in July 2021, one Bitcoin values \$ 39.109, which means an increase with over 25%.

### 3.1 Advantages and disadvantages of cryptocurrencies and ICOs

As any other mean of payment, cryptocurrencies and ICOs have a set of advantages, but also a series of disadvantages, and the most common are resumed in the table 5.

**Table 5. Advantages and disadvantages of cryptocurrencies and ICOs**

	Advantages	Disadvantages
Cryptocurrencies	<ul style="list-style-type: none"> <li>Decreased risk of currency</li> <li>Expanded range of domestic and international users with more accessible business transactions;</li> <li>Prevention of bank's and regulators' transaction fees;</li> </ul>	<ul style="list-style-type: none"> <li>The absence of a central authority which results in a lack of protection means for the user;</li> <li>Absence of accountability – nobody controls the system;</li> <li>Identity risks – if the password is lost, customers may lose their funds;</li> </ul>

	Advantages	Disadvantages
	<ul style="list-style-type: none"> <li>The possibility of offering a more secure currency to areas with insecure regional currencies.</li> </ul>	<ul style="list-style-type: none"> <li>High risk of task evasion – cryptocurrencies happen outside the well-known banking system.</li> <li>The ease of illicit activities (like money laundering).</li> </ul>
ICOs	<ul style="list-style-type: none"> <li>Funds can be quickly increased (ICOs allows an enterprise to increase funds faster than a conventional source);</li> <li>Lower costs (since there are no intermediaries in ICOs, the costs are cheaper than in conventional funding sources);</li> <li>Ease of process (the entire process is easy and there is limited number of entry barriers);</li> <li>Rapidly liquid investment (investments in ICOs become liquid the moment a token is listed on an exchange platform).</li> </ul>	<ul style="list-style-type: none"> <li>Lack of standards for white papers (information might be omitted, etc);</li> <li>No transparency and anonymity (ICOs might become targets for terrorist financing and money laundering);</li> <li>Risk of fraud and cybersecurity (Ponzi schemes).</li> </ul>

Source: The Authors

#### 4. RESEARCH METHODOLOGY

The research used for this study tends to be more a quantitative one, rather than qualitative, considering the answers provided by the respondents.

The data analyzed in this study was collected using an online survey, administered through Facebook groups (which, of course, had as main subject the cryptocurrencies, blockchain, mutual funds) and implemented for 1 month, from June 2021 until July 2021.

It is considered that the survey approach is seen as one of the most suitable actions for testing theories when it comes to validating the quantified perceptions of the users (Merriam, 2015).

Thus, our sample consisted of 147 answers and the descriptive statistics of the population's background was the following (table 6).

**Table 6. Population of the study**

Population's background		Frequency	Percentage
Gender	Male	98	67%
	Female	49	33%
Age interval	18-25	10	7%
	26-35	64	44%
	36-50	38	26%
	>51	35	24%
Education level	High school	9	6%
	Bachelor	88	60%
	Master	47	32%
	PhD	3	2%
Employment status	Employed	102	69%
	Unemployed	45	31%
<b>TOTAL</b>		147	



From table 6, we can observe that most of our participants were males (67%), the main age interval was between 26 years old and 35 years old, most of them had their bachelor's degree (60%) and the majority was currently employed (69%).

The survey consisted of the following 5 questions (besides the demographic questions related to the age, gender, etc):

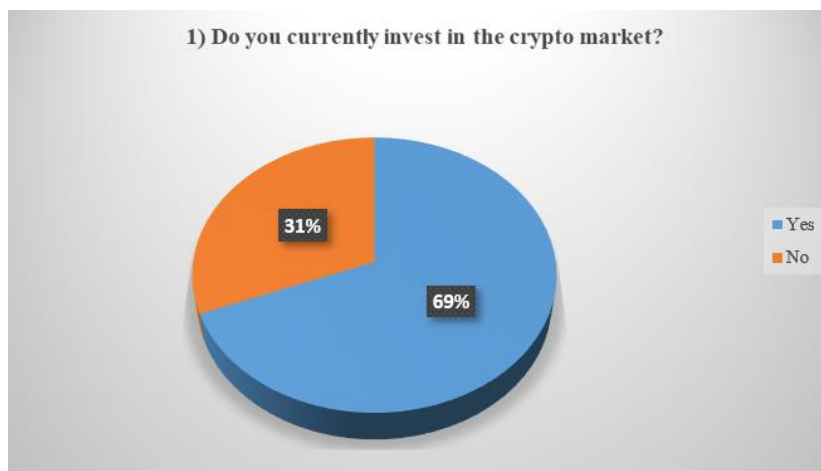
- Q1: Do you currently invest in the crypto market?
- Q2: Do you currently have active mutual funds?
- Q3: Do you think cryptocurrencies are a secure investment?
- Q4: In your opinion, which action is riskier: investing in stock market or investing in cryptocurrency?
- Q5: In 5 years from now, do you expect cryptocurrency to worth more or less than today?

Based on the answers received from the participants to our study, we were able to interpret in a certain manner, the Romanian investor's behavior.

## 5. RESULTS

The answers received were different, some of the respondents having a strong confidence in the future of cryptocurrencies, while others were more skeptical about it. However, the main conclusion was that the people still invest their funds in different trading systems, even if we talk about mutual funds or cryptocurrencies.

The answers were summarized as follows:



**Figure 5. Percentage of respondents investing in crypto market**

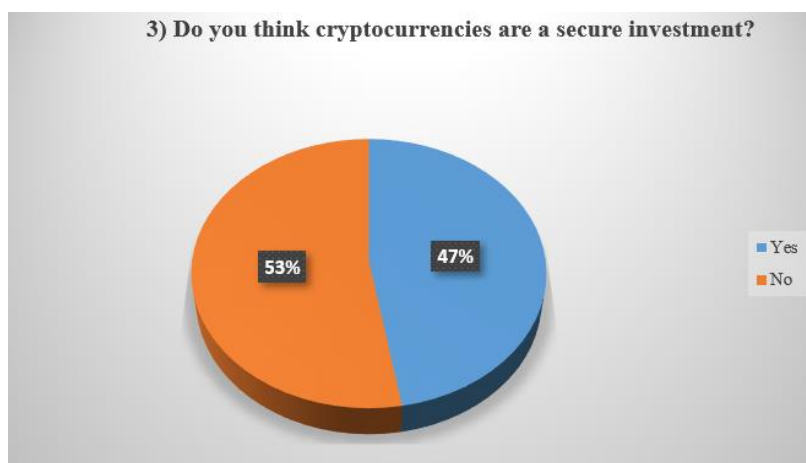
*Source: Authors' analysis*

Judging from the answers received, for the moment, the crypto market is still an active process for most of our respondents, with 69% actively engaged in investing funds in different cryptocurrencies. Most of our respondents were aged between 26 and 35 years old, fact that may influence the chosen investing strategy.



**Figure 6. Percentage of respondents having active mutual funds**  
*Source: Authors' analysis*

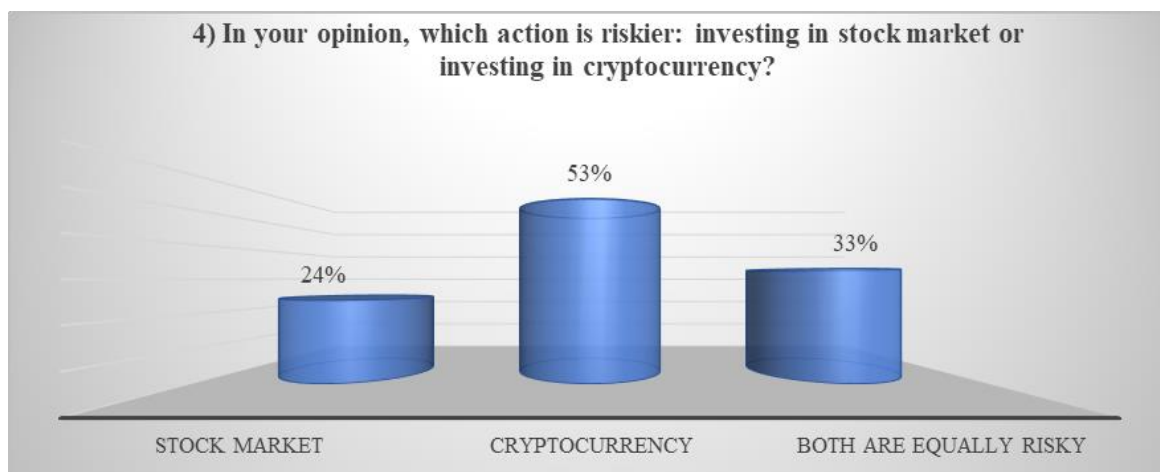
At the second question, our respondents were more reticent, with only 26% of them affirming that they have active mutual funds. The high percentage of those who do not own mutual funds might be because they are not used to mutual funds' strategies or simply, do not understand the process.



**Figure 7. Percentage of respondents considering cryptocurrencies as a secure investment**  
*Source: Authors' analysis*

For the third question, the answers were slightly contradictory. Even if 69% of the respondents stated that they currently invest in cryptocurrencies, while we talk about the security of this investment, the respondents are reticent. Here, the balance tilts to the insecure part, meaning that 53% of the respondents consider that cryptocurrency market is not a secure investment for the future.

This answer, however, cannot be condemned, if we think about the high degree of volatility that each cryptocurrency has.

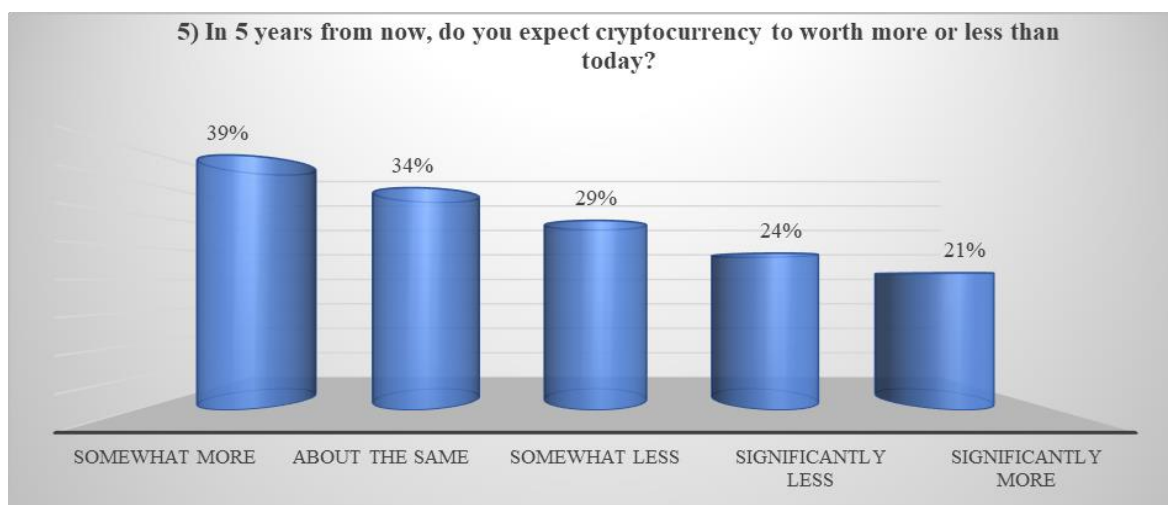


**Figure 8. Risks between stock market and cryptocurrency**

*Source: Authors' analysis*

Question number 4 leads us to a comparison regarding the risk level between stock market and cryptocurrency. As probably expected, 53% of our respondents agreed that cryptocurrency is riskier than stock market (with only 24% of the answers), while 33% of the respondents said that both markets are equally riskier.

Of course, risks exist for both parts. However, the cryptocurrency market is somehow riskier than the stock market because of its volatility, relatively new period of appearance, high level of fluctuations, the need to be accepted as payment, etc.



**Figure 9. Cryptocurrency worth**

*Source: Authors' analysis*

The last question analyzes the evolution of the worth value regarding the cryptocurrency market. In this case, the opinions are similar, even if a slightly higher number of the respondents answered that the cryptocurrency market will worth more in 5 years from now (39%).

The immediate next answer, with 34% of the respondents, expressed that the value of the cryptocurrency will remain about the same as in present, maybe with some minor changes.

Only 21% of the respondents assume that the cryptocurrency market will increase significantly more by 2026.

Nevertheless, these are all assumptions and predictions which might be rapidly changed by various political events.

## 6. CONCLUSIONS AND PROPOSALS

These findings suggest that in general, cryptocurrencies and ICOs, although much riskier investments than mutual funds, attract more attention and interest, especially from younger investors. This phenomenon can have two main explanations. One of them is the staggering profits offered by some cryptocurrencies and ICOs, which coupled with a higher risk appetite characteristic to the age segment of the investors, offset the high volatility of these markets and somehow downplay the risk of loss. Although the majority of the responding investors consider the crypto world to be much more exposed to risk of loss than the traditional investment markets, estimating the risk to be more than double compared to the stock markets, the prospect of triple or even quadruple digits yearly profits tilt the balance more and more in favor of these new investment instruments. The second reason might be the aggressive promotion of these instruments in the online medium, through organized groups and forums, creating a substantial network effect among investors, compared to a much more conservative approach from financial institutions that offer mutual funds' investments opportunities.

The present study represents an ongoing research, and there is still an important need of understanding the various ways the risk is managed, in both crypto markets and crowdfunding investments, although both represent novel ways of investing, the risk mix might be substantially different, and thus the risk mitigation strategies should differ. A further study in this direction is imperatively needed, as a complete as possible risk understanding is critical for a financial instrument to achieve wide acceptance among the retail public.

At the same time, a study aimed at revealing the ways in which the measures taken by different states to regulate crypto and ICO investment influenced the expansion of this market and the volatility. It is still unclear whether tougher regulation from the states would inhibit this emerging phenomenon by lowering the volatility and discouraging the speculative capitals from pouring in, or on the contrary, would help the overall industry by encouraging big institutional players to invest, on a climate of predictability and improved safety.

As a result, the analysis has tended to focus on risks and rewards of different financial instrument, ranging from the more traditional ones like investment funds or stocks, to the newest trends brought by the emerging technologies of the Fourth Industrial Revolution. Moreover, in our study we tried to emphasize the ways in which the new investments coexist with the incumbent ones, and how different groups of investors put in balance profits and volatility to favor one type of investments or the other.

## REFERENCES

- Allen, R. (2009). Engels' pause: technical change, capital accumulation, and inequality in the British industrial revolution. *Explorations in Economic History* , 46, 418–435.
- Andoni, M., Robu, V., Flynn, D., Abram, S., Geach, D., Jenkins, D. et al. (2019). Blockchain technology in the energy sector: A systematic review of challenges and opportunities. *Renewable and Sustainable Energy Reviews* , 100, 143-174.
- Bank, W. (1989). *World Development Report 1989 : Financial Systems and Development*. New York: Oxford University Press.
- Chang, V., Baudier, P., Zhang, H., Xua, Q., Zhang, J. & Arami, M. (2020). How Blockchain can impact financial services – The overview, challenges and recommendations from expert interviewees. *Technological Forecasting and Social Change* , 158.
- Dabbous, A. & Tarhini, A. (2021). Does sharing economy promote sustainable economic development and energy efficiency? Evidence from OECD countries. *Journal of Innovation & Knowledge* , 6 (1), 58-68.

- Davlembayeva, D., Papagiannidis, S. & Alamanos, E. (2021). Sharing economy platforms: An equity theory perspective on reciprocity and commitment. *Journal of Business Research* , 127, 151-166.
- Dietrich, F., Ge, Y., Turgut, A., Louw, L. & Palm, D. (2021). Review and analysis of blockchain projects in supply chain management. *Procedia Computer Science* , 180, 724-733.
- Issaoui, Y., Khiat, A., Bahnasse, A. & Ouajjia, H. (2019). Smart logistics: Study of the application of blockchain technology. *Procedia Computer Science* , 160, 266-271.
- Lee, J. (2019). A decentralized token economy: How blockchain and cryptocurrency can revolutionize business. *Business Horizons* , 62 (6), 773-784.
- Macrinici, D., Cartofeanu, C. & Gao, S. (2018). Smart contract applications within blockchain technology: A systematic mapping study. *Telematics and Informatics* , 35 (8), 2337-2354.
- McCloskey, D. (2016). *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World*. Chicago: University of Chicago Press.
- McKenny, A., Allison, T., Ketchen, D., Short, J. & Ireland, R. (2017). How should crowdfunding research evolve? A survey of the entrepreneurship theory and practice editorial board. *Entrepreneurship: Theory and Practice* , 41 (2), 291-304.
- Merriam, S., B. & Tisdell, E., J. (2015). *Qualitative Research: A Guide to Design and Implementation*. Wiley, Hoboken.
- Nguyen, L., Hoang, T., Do, L., Ngo, X., Nguyen, P., Nguyen, G. et al. (2021). The role of blockchain technology-based social crowdfunding in advancing social value creation. *Technological Forecasting and Social Change* , 170.
- Tariq, N., Qamar, A., Asim, M. & Khan, F. (2020). Blockchain and Smart Healthcare Security: A Survey. *Procedia Computer Science* , 175, 615-620.
- Yasar, B. (2021). The new investment landscape: Equity crowdfunding. *Central Bank Review*, 21 (1), 1-16.