

The Level of Awareness of Non-fungible Tokens as an Investment Tool in the Czech Republic*

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Abstract

Non-fungible tokens are transferable rights to digital assets such as artwork, videos, in-game items, collectibles or music. Non-fungible tokens relate only to a specific unique item and carry information about the owner. The non-fungible token market has received widespread attention and has grown enormously since the beginning of 2021. Despite significant growth in the market, there needs to be more surveys, especially in the context of the Czech Republic. This article, therefore, aims to evaluate the level of awareness of non-fungible tokens in the Czech Republic. The paper presents the basics of the non-fungible token market, its potential and uncertainty, and the interdisciplinary nature of non-fungible token research. First, the characteristics of non-fungible tokens are described based on a literature review. The methodological part outlines an empirical analysis based on a quantitative survey in which 103 respondents in the Czech Republic took part. Based on the research results, it was found out that in the Czech Republic, there is low level of awareness of non-fungible tokens and also low level of trust in digital assets in general. In conclusion, it is possible to say that this article provides an overall understanding of the phenomenon of non-fungible tokens in the Czech Republic.

Keywords: non-fungible tokens, intangible assets, awareness, investment tool

JEL Classification: G11, G14, G23, G41

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Introduction

Non-fungible tokens (NFTs) are still in the early stage of development, offering enormous potential but also uncertainty. Therefore, there are currently not enough relevant materials and data for research that would support a higher number of professional studies. There is also the fact that NFTs include several areas that every researcher should be aware of. These are computer science, economics, finance, and law (Yue et al., 2021). Many studies have been done on various aspects of commonly known cryptocurrencies. In contrast, there are relatively few studies on NFTs despite the need to understand the price dynamics of NFT assets for policy formulation and trading.

The value of NTFs does not come from their use in financial transactions, but from the fact that they are connected to specific assets, whether digital or real (Dong et al., 2022). NFTs are a special class of cryptographic assets representing various intangible digital entities, artworks, images, videos, game items, special tweets, etc. (Nadini et al., 2021). Their irreplaceability makes them a unique asset. NFT sales reached approximately US\$2.5 billion in the first two quarters of 2021, while in 2020 the value was just about US\$95 million (Howcroft, 2021). The NFT market clearly experienced a significant growth phase in 2021 but with continuous decline in 2022. NFTs thus represent a potential driving force in areas of digital ownership. Even the COVID-19 pandemic supported a significant growth in intangible assets sales' volumes, as well as an aggressive growth in the price of cryptocurrencies, especially BTC, when it became interesting for investors in extraordinary market conditions (Živanović et al., 2022).

The aim of this paper is to evaluate the level of awareness in the field of non-fungible tokens in the Czech Republic based on the theoretical and quantitative research. Whether the general public has any idea what these assets represent and how they evaluate the overall situation in the Czech Republic in the area of trade with NFTs. Given that it is a relatively new investment instrument traded only in the digital environment, and the fact that there are almost no studies dealing with NFT trading in the Czech Republic, this topic is relevant and suitable for further investigation.

1. Non-fungible Tokens Characteristics

NFTs were first introduced to the public in 2014 by their creator, Kevin McCoy. In the field of NFT art, the first ever NFT was called Quantum (Binance, 2023).

NFT is the technology on which “cryptocurrency” is based. It represents an irreplaceable token that serves as a means of proving ownership of a digital or physical item. Ownership information is captured in the NFT's metadata and stored on the blockchain, preventing it from

being tampered with (Mühlfeit, 2022). The typical properties of NFTs include unambiguous determination of the owner of items on the Internet; they ensure the originality and value of items; they have simple transferability of ownership; they have a speculative character; and they significantly shape a new artistic trend (Dong, Jiang, Liu, and Zhu, 2022).

NFTs are tokens just like Dogecoin or Litecoins. However, they are not cryptocurrencies because they have a unique property. Their value does not come from their use in financial transactions, but from being linked to specific online or physical assets. Most NFTs can be easily purchased using cryptocurrencies (Kriptomat, 2023). Therefore, unlike cryptocurrencies, each NFT token is unique, so that it cannot be exchanged for another. NFTs can be associated with any digital content: images, videos, music tracks, tweets or articles (Kod'ousková, 2023).

The most popular cases include art, collectible, financial, gaming, music, real-asset, and logistics NFTs (Binance, 2023). Due to their originality, the price of an NFT can reach up to millions of dollars, just like if it was an original underlying asset (Mareš, 2022). The proof of ownership is stored in the blockchain. Blockchain is a decentralized digital ledger of transactions and contains a detailed history of each user's sales. All transactions are non-refundable. The most common blockchains are Ethereum, Solana, Klaytn, Flow, Polygon or BNB Smart Chain (Kod'ousková, 2023).

The NFT principle is based on smart contracts located in the blockchain. Smart contracts allocate ownership of an NFT and determine its transferability to another owner (Kod'ousková, 2023). It is a computer program or transaction protocol that is set to automatically perform a specific operation if predetermined conditions are met. A subset of smart contracts are Token Standards, which represent a set of rules that enable the development of cryptocurrency tokens. Token standards determine how new tokens can be created, issued and deployed within the blockchain (Kaliský). NFT transfers are paid for with ETH and their purchases are made using a marketplace (e.g. OpenSea or Rarble), (Kod'ousková, 2023).

Among the biggest advantages of NFTs is the ability to clearly prove the ownership of a given product. Crypto wallet and blockchain ensure this feature. Another advantage is the easy transferability of ownership through blockchain transactions. Other benefits include higher authenticity and verification of the authenticity of a given NFT from the transaction history (Nadini et al., 2021). Disadvantages of NFTs include high entry costs and market volatility, as the value of non-fungible tokens can be subject to high changes, especially in speculative markets. The disadvantages of NFTs include also fake listings, phishing attempts and fraud. Like any digital asset, they are vulnerable to hackers and security breaches (Yue et al., 2021).

In the Czech Republic, there is still a lack of professional studies and statistical surveys investigating NFT. However, since these assets are traded through cryptocurrencies, it is possible

to give at least a brief description of the current situation about the cryptocurrencies in the Czech Republic, which are closely related to NFTs. The research agency STEM/MARK conducted a survey in 2022 in which 1,006 people aged 15 to 60 participated. The results of the research were compared with the results of the same research that took place in 2021 (487 people participated) and in 2018 (531 people) (Klupal, 2022).

From the research, it can be noted that the number of people investing in cryptocurrencies is increasing during the reviewed period. However, the increase is not large. There are several reasons why there were not more investors in cryptocurrencies among the Czechs over the last year. Among the most frequently cited reasons for low investment are finance (70%) and information (28%). There is quite a lot of information about cryptocurrencies in the media. However, little of it is focused on investment behavior and often lacks an educational approach that would help people with less investment experience. The research also shows that there is an increase in the number of people who have at least heard of cryptocurrencies and a decrease in the number of people who do not know the concept of cryptocurrency (Klupal, 2022). The most popular cryptocurrency in the world is Bitcoin, which is used by 210 million people. At the same time, more than 40,000 of them have bought this cryptocurrency for more than a million dollars (Fišer, 2023). There are only six billionaires among the Bitcoin holders. The second most famous cryptocurrency is Ethereum, which is more affordable than Bitcoin. Additionally, Ethereum is the most used cryptocurrency for NFT trading. Ethereum was launched in 2014 and sold for just \$0.311 with its initial offering. Macroeconomic factors (Russia–Ukraine war, inflation, collapse of various cryptocurrency companies) caused the price to drop below \$1,000 in mid-2022 (Rech et al., 2022). In 2023, the price of ETH rose steadily. Between January and June, it rose as much as 77%, reaching a high of \$2,100. It since declined and was trading at around \$1,600 in the end of 2023 (Jay, 2023).

The survey also shows that 77% of respondents have not yet noticed the term NFT (Klupal, 2022). In 2022–2023, unlike in 2021, the NFT market is rather in the recession. It is a young trend, for which it is common to experience fluctuations at first. Trading with these tokens has become very popular, especially among collectors – whether of art objects, or game characters or game virtual accessories.

2. Methodology and Data

The empirical analysis is based on data obtained from a quantitative survey of 103 randomly selected respondents who answered survey questions about awareness and investment intentions in NFT areas. The respondents were residents of the Czech Republic from the total of 14 regions according to CZ NUTS 3 – regions (administrative units). The questionnaire survey was

divided into 4 parts. The first part was to find out whether the respondent was aware of what the acronym NFT means in the field of finance, whether he or she could explain the meaning of these assets to others and whether he or she currently invests in NFT assets or is thinking about it. The second part was designed to obtain information about whether the respondent is currently investing and into which assets, and what is the respondent's view of the position of intangible assets as an investment instrument in the market conditions of the Czech Republic. Whether these assets represent a mere short-term boom, whether there is rather a lack of trust in intangible assets in the Czech Republic, what is the level of the ability to handle intangible assets through the virtual world, what amount of money would the respondent be willing to invest in NFT in the current situation, and what factor primarily influences the respondent in making investment decisions. The third part was dedicated to the collection of individual recommendations in the field of NFT investments in the Czech Republic, i.e. what factors could increase the volume of investments (e.g. increasing awareness of NFT, better geopolitical situation, higher trust or higher proficiency in the online environment). The last part was obtaining classification data about the respondents.

Quantitative research was prepared by authors of the paper using questionnaire software. The questionnaire was distributed online in electronic form within the Czech Republic. Contact information of respondents was obtained from internal database sources to which access was granted. For the selection of respondents, a multi-stage random selection was used, where the goal was to ensure that responses were obtained proportionally from each of the 14 regions of the Czech Republic according to NUTS 3. After dividing the respondents by region, they were further selected based on a probability selection by numeric generator software from the available contact database. The survey was sent to a total of 310 potential respondents by mass email.

Out of the total of 310 distributed questionnaires, 103 responses were obtained, which indicates a low response rate of only 34.2%. Also, the distribution of responses according to the 14 regions of the Czech Republic was not proportionally balanced, as there is even a lack of responses from the Vysočina region. The quality of the obtained data is not in line with the planned result, as the low response rate caused the investigated statistical set to be insufficiently representative to fully reflect the possible situation of NFT in the Czech Republic. However, the 103 responses were used for statistical research, on the basis of which it is not possible to fully generalize the observed behavioral tendencies. Nevertheless, it is an examination of certain signals in the field of non-fungible tokens that the Czech public may be heading towards at the moment. Moreover, due to the absence of any other research of a similar type that focuses on the issue of NFT in the Czech Republic, the obtained statements were considered relevant for further investigation.

Low response rates may indicate the potential for bias in the results, but they do not necessarily mean that bias exists. When bias occurs, there are substantial differences between the responses coming from those who responded to the survey and the way nonresponders would have responded if they had taken part in the survey.

The data collected from the quantitative research was subjected to statistical analysis and the answers to the following set research questions (RQ) and the hypotheses were ascertained. All with the aim to discover level of awareness in the field of NFTs in the Czech Republic.

RQ1: How were the individual aspects of NFT in the Czech Republic evaluated in relation to how their improvement could potentially increase the volume of investments in NFT?

For the first research question, a graphical representation of the answer was used to ensure the clarity of the individual aspects to which the respondents attributed weight. This means that the first research question deals with the main results of the survey that stand for understanding the awareness in the field of NFTs in the Czech Republic.

RQ2: Did those respondents who stated that they know what the acronym NFT means in the field of finance evaluate the awareness and the situation around these assets in the Czech Republic better than the respondents who did not know the term?

H_0 : Both groups of respondents rated the same.

H_1 : Non H_0

To find the answer to the research question 2, it was first necessary to verify the normality of the analyzed data using the Kolmogorov-Smirnov test, when the following hypothesis was examined at the 5% level of significance.

H_0 : Values have a normal distribution.

H_1 : Non H_0

Furthermore, Levene's test was performed on the homogeneity of variances of the investigated variables, on the basis of which the two-sample t-test was used to determine the homogeneity of the mean values of the selected sets at the significance level of 5% and to determine the significance of the test. Formula 1 is the formal notation of the test statistic related to the two-sample t-test, which tells how likely the measured data are if the null hypothesis is not rejected.

$$T = \frac{\bar{X} - \bar{Y}}{s} \sqrt{\frac{n_x n_y}{n_x + n_y}}, \quad (1)$$

where \bar{X} stands for the sample mean of the values of the first random sample, \bar{Y} is the sample mean of the values of the second random sample, and s^2 is a common variances estimate counted as a weighted average of the sample variances from both samples. All this based on T distribution with $(n_x + n_y - 2)$ degrees of freedom.

RQ3: Does all the assessment have a connection with the level of education of the respondents?

The third research question was answered using the ANOVA test, which operates on the basis of the following assumptions:

- observations are independent of each other,
- actual values and errors are independent of each other,
- selections come from a normal distribution,
- selections are mutually independent, i.e. they have an empty intersection, and
- there are equal variances in the groups.

Data were subjected to the normality test and Levene's test for the agreement of variances within groups. Subsequently, the ANOVA test was performed. The ANOVA test works on following hypothesis:

H₀: All represented levels of education of the respondents showed the same assessment of the situation surrounding NFTs in the Czech Republic.

H₁: Non H₀.

ANOVA is a statistical technique developed to test the existence of a significant relationship between two variables in two or more groups. Specifically, it is used when we want to determine whether the explanatory variable (in our examples, the level of education) influences the dependent variable (overall assessment of NFT situation in the Czech Republic). The explanatory variable is a categorical variable, meaning it contains values that represent a quality or characteristic that is not quantifiable. On the other hand, the target variable is a quantitative variable, which can be expressed as a numerical value.

The null hypothesis for ANOVA is that there is no significant difference among the groups. The alternative hypothesis assumes that there is at least one significant difference among the groups. After cleaning the data, there must be tested the assumptions of ANOVA and then calculated the F-ratio and the associated probability value (p-value). In general, if the p-value associated with the F-ratio is smaller than 0.05, then the null hypothesis is rejected and the alternative hypothesis is supported. If the null hypothesis is rejected, one concludes that the means of all the groups are not equal.

3. Results of the Research

Of the 103 respondents, 53 were women and 50 were men, the age category 26–32 being the most prevalent. Table 1 indicates the structure of the sample according to the level of education of the respondents, which is important in order to answer RQ3.

Table 1: Basic characteristics of respondents according to level of education

Level of education	Absolute Count	Relative Count
High School	39	37.9%
Higher Vocational School	5	4.9%
Undergraduate Degree	27	26.2%
Master's Degree	31	30.1%
Doctoral Degree	1	1%
Total	103	100%

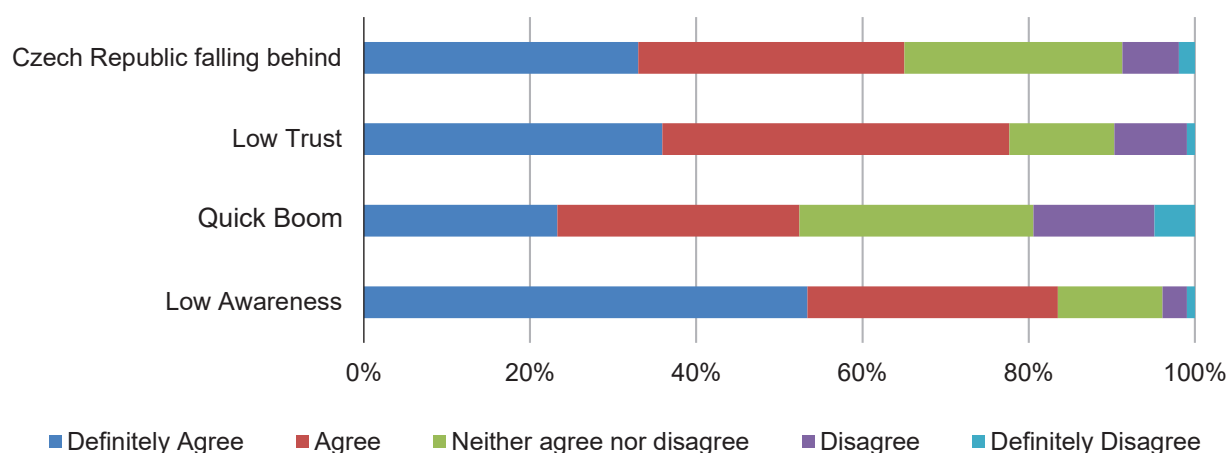
Source: own processing

A major part of respondents were people with a university degree (56.4%) and 37.9% were respondents with high school education. The last part of the 4.9% relative count were respondents with a degree from a higher vocational school which are also included in tertiary education in the Czech education system. Furthermore, 59.2% of respondents were included in the group with a monthly income in the range of 20 to 50 thousand CZK, 14.6% have a monthly income of up to 20 thousand CZK, 13.6% are in the range of 50 to 100 thousand CZK per month and the rest applies to respondents without own income or dependent on state support. Two-thirds of the respondents were full-time or part-time employees, and the remaining one-third were students or entrepreneurs.

From the obtained data, it can be observed that 61 out of 103 respondents stated that they are aware of what the abbreviation NFT means in the field of finance, which represents 59.2% of the total respondents. In contrast, however, only 27.2% of respondents could explain this term on request, namely 28 respondents. Likewise, only 7.8% of respondents (8 respondents) use NFTs as an investment tool, while 68.9% (71 respondents) did not even consider this option. The rest had already considered this option. Although the majority of respondents know what the acronym NFT represents, they do not have any other information that would expand their knowledge in this area, nor do they show any interest in improving their knowledge in this area.

The situation in the field of NFTs in the Czech Republic was examined using interviews with respondents to determine what possibilities could lead to a potential increase in investments in these assets. Respondents chose on the scale of 1–5 the importance of the selected aspects, which included “Low trust in intangible assets”, “Low awareness”, “NFTs represent only a rapid boom with a failed future”, and “The Czech Republic lags behind other countries in the field of digital assets”. The scale 1 represented the strongest rating, i.e. total agreement with the statement, while the scale 5 represented the weakest rating, i.e., total disagreement. The individual statements were converted into a stacked bar graph with a relative expression of values for a possible comparison of the investigated aspects of non-fungible tokens. Individual statements were evaluated separately, i.e. 103 votes were casted among each of them.

Figure 1: Evaluation of NFT from the perspective of the situation in the Czech Republic



Source: own processing

Figure 1 shows that the largest representation of the assessment of the situation surrounding NFTs in the Czech Republic was in complete agreement with the statement that there is very low awareness of these assets in the Czech Republic. This assessment was expressed in total by 55 respondents (53.40%), and there was also a very high weight with the scale of 1 attributed to a general low trust in digital assets, namely 37 respondents (35.92%). The third place with the strongest rating was the statement that the Czech Republic lags behind other countries in terms of investments in digital assets. Specifically, 34 respondents (33.01%) did think so.

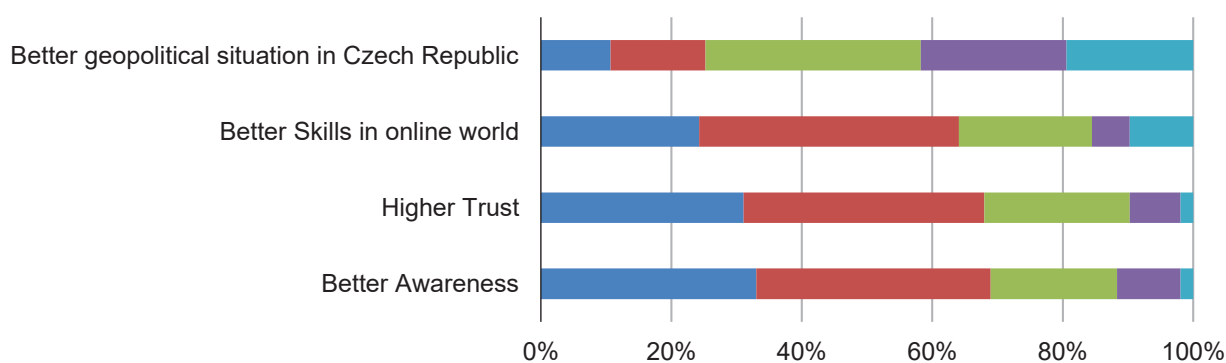
If there was a sum of the affirmative statements, i.e. the scales 1 and 2, it would be concluded that again most respondents give weight to the low level of awareness about non-fungible

tokens in the Czech Republic, namely 86 respondents, further 80 respondents give weight to the low trust in intangible assets, 67 respondents believe that the Czech Republic is lagging behind other countries in the area of investments in digital assets, and finally 54 respondents believe that NFTs are only a quick boom with a failed future.

On the contrary, from the perspective of the sum of disagreements with the given statements, the conclusion follows that most respondents believe that it is not true that NFTs are only a quick boom without a longer-term future, namely 20 respondents. Furthermore, 10 respondents believe that there is no distrust of intangible assets in the Czech Republic, 9 respondents do not consider the Czech Republic lagging behind other countries in the area of digital assets, and only 4 respondents believe that the level of awareness of NFTs is not low in the Czech Republic. The differences between agreeing and disagreeing statements are thus significant.

In the second part of the evaluation answers, the respondents were invited, on the contrary, to evaluate whether improvements in specified, individual aspects would in the Czech Republic help to increase the volume of investments in NFT. These individual aspects were “Improved trust”, “Higher level of awareness”, “Better skills in the online environment” and “Better geopolitical situation in the Czech Republic”. The evaluation was also carried out on the scales of 1–5, where the scale 1 represented complete agreement, while the scale 5 represented complete disagreement. Figure 2 captures the results.

Figure 2: Recommendations in the field of NFT in the Czech Republic from the perspective of a potential increase in the volume of investments



Source: own processing

Figure 2 shows that the majority of respondents believe that the greatest benefit for the potential growth of the volume of investments in NFTs in the Czech Republic would be a situation where there is an improvement in the level of awareness of non-fungible tokens in the Czech Republic – 71 respondents agreed with this statement. The second aspect that could best positively

stimulate the NFT market in the Czech Republic is the overall improvement of trust in intangible assets, as stated by up to 70 respondents. The third aspect, mentioned by 66 respondents, was the improvement of skills in the online environment, i.e. handling information technology, navigating online markets, the ability to set up and manage a crypto wallet, monitor the development of values and being able to make transactions via online platforms. On the contrary, the aspect of a better geopolitical situation in the Czech Republic received the smallest representation, namely only 16 affirmative statements, which means that none of the respondents connects the possible increase in the volume of investments in NFTs with the current geopolitical situation in the Czech Republic.

The research question 1 aimed to find out *“How were the individual aspects of NFT in the Czech Republic evaluated in relation to how their improvement could potentially increase the volume of investments in NFT?”* The answer is that most respondents consider the low level of awareness of these assets (78.64% of respondents) and low trust in intangible assets in general (77.67% of respondents) to be the main problem in the field of NFTs in the Czech Republic. On the contrary, 52.43% of the respondents indicated that a possible problem in the field of NFT is definitely not the statement that it is only a quick “boom” without a successful future. As for what aspects could positively stimulate the increase in the volume of investments in NFTs, the respondents attributed the highest weight to the improvement of the overall level of awareness of these assets (68.93%) and the improvement of trust in intangible assets (67.96%). On the other hand, respondents considered the improvement of the geopolitical situation in the Czech Republic to be the least important stimulus, as stated by 41.75% of respondents. The result is that the respondents consider it important that there is a higher and better provision of information about NFTs in the Czech Republic, about which they still do not know much. Likewise, improving confidence in intangible assets, which can often be seen as an undesirable asset with high volatility, is also a key factor, which in this case could be correlated to a lack of awareness and poor knowledge in this area.

To answer research question 2, the variable “Average assessment” was created from the individual evaluated aspects of the NFT situation in the Czech Republic (described in RQ1), which was subjected to a statistical investigation. The normal distribution of the data was confirmed using the Kolmogorov-Smirnov test and histogram.

Furthermore, a two-sample t-test was performed, which examines the equality of mean values in two groups for two independent samples. The groups were made up of respondents who knew the term NFT and further evaluated the situation in the Czech Republic, and respondents who did not know the term and evaluated the situation regarding NFT intangible assets in the Czech Republic according to their opinion. Table 2 shows the results.

Table 2: Two-sample t-test results

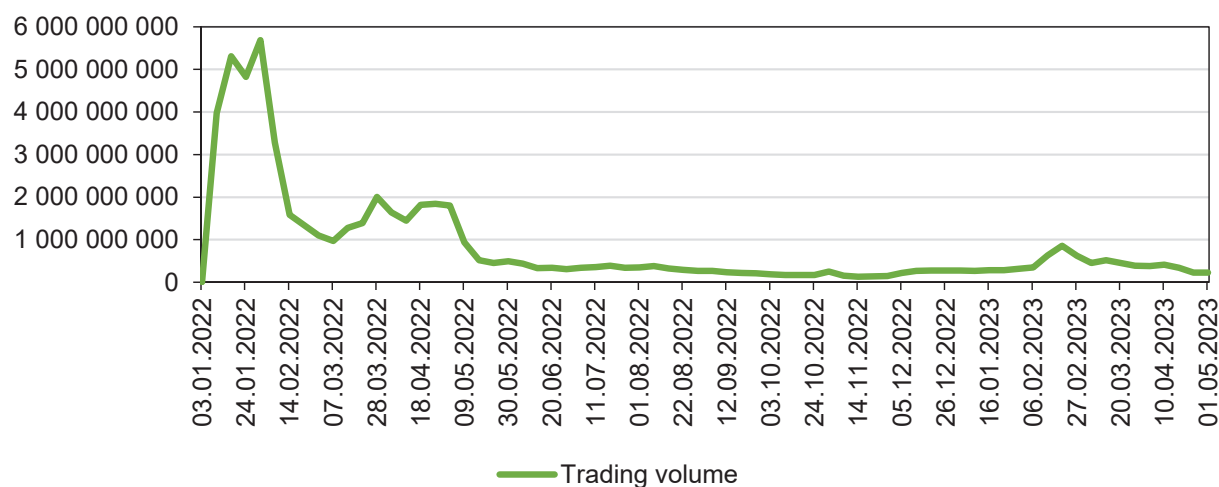
	Levene's Test	t-test for Equality of Means		
	Significance	Significance	Mean Difference	Confidence Interval of the Difference
Equal variances assumed	0.197	0.011	-0.26781	<-0.47346; -0.06216>

Source: own processing

From the above results, it follows that the agreement of the variances of the examined sets was confirmed, which made it possible to use the two-sample t-test, the significance of which came out at the level of 0.011. At the standard significance level of 5%, the authors therefore conclude that the null hypothesis H_0 is rejected in favor of the alternative hypothesis H_1 , and thus that both groups of respondents evaluated the situation surrounding NFT in the Czech Republic differently. Specifically, the group of respondents who were familiar with the term NFT and had some awareness of these assets evaluated the overall situation of these assets in the market environment of the Czech Republic worse than the group of respondents who did not know the term. The result is also confirmed by the confidence interval. The average difference in the evaluation of the indicators shows the mean difference. These are tenths of the values, which, however, create a noticeable difference in the average rating.

The research question 2 therefore asked: *“Whether the respondents who stated that they know what the acronym NFT means in the field of finance, evaluated the awareness and the situation around these assets in the Czech Republic better than the respondents who did not know the term?”* The answer is that the group of respondents who stated that they know what the acronym NFT means in the field of finance evaluated the overall situation surrounding NFT in the Czech Republic worse than the group of respondents who did not know the given term.

The conclusion of the test can be based on a real situation, when the total volume of investments in the NFT area has dropped dramatically over the last year, as shown in Figure 2. The figure shows a rapid decrease in traded NFTs from the winter of 2022. Until then, the NFT area was experiencing an unprecedented boom, also due to the Covid-19 pandemic, which helped the growth of digital assets. However, this boom did not last, and as the pandemic began to subside, the level of traded NFTs fell sharply. In the same way, it is possible to proceed from the starting points mentioned in chapter 1 also in the case of the Czech Republic, which, in international comparison, is not one of the countries that would use the potential of intangible assets as investment instruments to such an extent.

Figure 3: NFT trading volume 01/2022-04/2023 [USD]

Source: own processing

The last research question asked whether all the assessment of NFTs have a connection with the level of education of the respondents. Data were subjected to the normality test and Levene's test for the homogeneity of variances within groups. Subsequently, the ANOVA test was performed.

The reason for asking this question was to verify the hypothesis whether people with a higher level of education tend to have more information, are more interested in new trends, investment opportunities in not-so-well-known areas, i.e. whether their assessment of NFTs in Czech Republic was statistically significantly different from the respondents with a lower level of education. The conclusion could thus show that, for example, university graduates answered diametrically differently in the overall assessment compared to, for example, secondary school graduates, when it is the tertiary education that emphasizes the acquisition of one's own knowledge, interest in information, confrontation of acquired knowledge with different sources, formation of own opinions and a certain degree of general overview. Table 3 shows the test results.

Table 3: ANOVA test results

	Levene's Test	ANOVA		
	Significance	Significance	Mean Square	F
Results	0.379	0.732	0.123	0.430

Source: own processing

First, a test on the agreement of the variances was performed, when the null hypothesis was not rejected at the 5% level of significance, i.e. confirmation of the agreement of the variances of the investigated groups. This could lead to the use of the ANOVA test, the significance of which was 0.732 at $\alpha = 0.05$. This means that the null hypothesis H_0 was not rejected at the 5% level of significance, and thus the dependence between the level of education of the respondents and the overall assessment of the situation surrounding NFT assets in the Czech Republic was not proven. Moreover, mean square value of 0.123 determined also low significance of education factors. Similarly, the value of the F ratio standing at 0.430 indicates that if the ratio of between the groups and within the group variation is sufficiently large, it can be concluded that not all the means are equal. The last variable Levene's Test in ANOVA was greater than 0.05 which means that the variances were not significantly different from each other, so that there were not significant differences among primary, secondary and tertiary levels of education responses.

The evaluation of the analyzed groups of respondents according to the level of education – primary, secondary and tertiary – was not statistically significantly different enough to confirm dependence. Therefore, it cannot be said that people with a university education were able to express themselves better on the issue of NFT than, for example, people with a secondary education. It is therefore necessary to look for differences in evaluation in other factors, such as gender, awareness of the issue, personal experience and others. Research question 3 asked: ***“Does all this evaluation have a connection with the level of education of the respondents?”*** The answer is that there is no statistically significant connection between the level of education of the respondents and the overall assessment of NFT assets in the Czech Republic.

4. Conclusion

NFT is the technology on which cryptocurrency is based. It represents an irreplaceable token that serves as a means of proving ownership of a digital or physical item. Ownership information is captured in the NFT's metadata and stored on the blockchain, preventing it from being tampered with. (Mühlfeit, 2022). There is a lot of uncertainty in the terms of the future of NFTs. It can be predicted that the expansion of the NFT market could continue if more people learn about what it is and what its benefits are. Also, the way NFTs are used will only keep on growing as developers continue coming up with new and creative ways to utilize them (Vigderman, 2023).

The aim of this work was to find out the level of awareness of NFTs in the Czech Republic and how the interviewed respondents evaluated the overall situation of these assets. It seeks to establish what factors did the respondents consider valid for the Czech Republic, assuming such possibilities as a low level of awareness, a general lack of trust in digital assets, a lack

of trust in the future of NFTs or a bad geopolitical situation. The majority of the respondents agreed that in the Czech Republic there is both a low level of awareness of NFTs and a low level of trust in digital assets in general, namely more than 70% of respondents support it. According to the results, these elements are also the key to increasing the volume of investments in NFT when they are improved. It was also found that the way how individual respondents assessed the situation surrounding NFT in the Czech Republic was directly related to whether they knew this term at all. It was concluded that people who were aware of NFT evaluated the overall situation of NFT in the Czech Republic worse than people who did not know the term. The reason was precisely the knowledge of information and context in this area, when there is an overall decline in traded NFTs in the world and when these assets are experiencing a phase of mild recession. At the same time, however, it was not confirmed that the difference in the NFT assessment was in any way due to the level of education of the respondents. Even though the response rate was low, the results of the article show certain signals of the present Czech public heading in the field of non-fungible tokens. The obtained statements can be considered relevant for further investigation due the lack of any similar research in the field of NFTs in the Czech Republic.

Nowadays many people are still unaware of NFTs. There is a growing amount of support and conviction in the potential of NFTs, but there is still considerable ambiguity over the future of NFTs. On the other hand, approaching NFTs as a new asset class that needs specific legislation would be a much superior strategy in the long term. Important are also areas that are currently experiencing advances, such as tokenomics, the metaverse, regulation and risk, video games or asset pricing. NFTs are assets with an uncertain future, but thanks to the constant development and improvement of the digital environment, there is still a real potential for these assets even in the Czech Republic (Kod'ousková, 2023).

5. Discussion

An American study made by Security.org asked more than 1,000 American consumers what they know about NFTs, what are their opinions on trading these assets in the current economic environment. The survey conducted in 2023 shows that recent inflation and crashing of cryptocurrency values have impacted the NFT market as well as most consumers' attitude toward buying the digital art. Even though about 9.3 million Americans have bought or sold NFTs, many of them still view NFTs as a passing trend which only rich can afford. As awareness has risen in the recent years, so have sales. In 2021, NFT sales generated about USD 25 billion, compared to USD 94.9 million in 2019. The main factors supporting the increase in the level of awareness and thus the volume of investments in NFTs are considered the rise in crypto popularity, growing number of NFT creators, and artist and celebrity buzz (Vigderman, 2023).

The presented quantitative research shows that 2% of the respondents have a basic awareness of what the acronym NFT means, but only 27.2% could explain this term. From the aforementioned American study, it emerged that 81% of the respondents are somehow identified with the term, can describe NFT, but only 4% of them traded via the NFT online marketplaces. The most represented Americans who understand the issue of NFT were people between the age of 25 and 34. Then about 56% of Americans think that NFTs are just a quick boom that will go away (Vigderman, 2023). According to the survey in this work, about 19.42% of asked Czech people agree with this statement.

In Europe, the NFT market is expected to grow at an annual rate of 18.82% during the period 2023 to 2027, when the revenue value is expected to reach USD 793.9 million in 2027 (Statista, 2023). For the situation in the Czech Republic, there is currently still a lack of professional studies that would deal with the issue of NFT assets, and which would further examine quantitative data regarding traded volumes of NFT in the Czech Republic, their development over time and factors that slow down or limit this trend. Virtually all studies come from abroad and provide information on the markets where the largest NFT transactions occur, such as the US, Japan, China, Thailand, the UK and a few others. For further research, the area of NFT in the market environment of the Czech Republic is an opportunity for more detailed investigation.

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