

# Cryptoassets & the digital euro

2021 consumer survey in Slovakia

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# Introduction

Technological progress has led to the creation of an entirely new class of assets in recent years – cryptoassets. Bitcoin was the first cryptoasset to demonstrate that distributed ledger technology (“DLT”) makes it possible to create a digital asset that does not need a central authority to ensure secure transfers and storage. This branch of technology was subsequently used to create many other cryptoassets so that now there are thousands with new additions launching all the time. A rich service infrastructure has also gradually developed around cryptoassets to build a market in this new asset category. Cryptoassets have grown from a relatively marginal phenomenon to a financial innovation that fascinates consumers and entrepreneurs.

Central banks all around the world have also been watching developments in this technology closely. Modern technologies enable central banks to create digital currencies that could help to improve the functioning of the financial system. The creation of digital currencies is under consideration in all the world’s top central banks, including the European Central Bank (“ECB”), which has already published some information on its proposals for its own digital currency – the digital euro.

Although a great deal of discussion is taking place about these topics, there is as yet little information on how they are perceived by typical consumers in Slovakia. Národná banka Slovenska (“NBS”) therefore decided to map consumers’ knowledge, attitudes and experience regarding cryptoassets and the digital euro. This document summarises the results of the consumer research and presents NBS’s commentary on the findings.

# 1 Summary

As part of its monitoring of the development of financial innovations, NBS conducted consumer research on cryptoassets and the digital euro. The aim was to get a more detailed picture of consumers' knowledge, attitudes and experience concerning these topics. The results of the survey enable NBS to identify more precisely what it should focus on in its communication about these areas of innovation that overlap with its activities.

The survey was carried out for NBS by the Focus agency between 26/11/2021 and 3/12/2021. The survey used a combined data-collection method (an online panel and in-person interviews) with a representative sample of 1,010 respondents.

All the respondents were asked whether they had heard the terms “digital euro”, “cryptoasset”, “cryptocurrencies” and “Bitcoin”. Follow-up questions were asked only to respondents who had already heard the terms.

## Attitudes and knowledge regarding the digital euro

The term “digital euro” had been heard by 32% of all respondents. More than a third of those who had heard of the digital euro had no knowledge of the topic and therefore they were not asked any additional questions.

Just under a half of the respondents who were aware of the digital euro had no specific concerns about it; a third were concerned about it possibly replacing cash and an even smaller percentage were concerned about inadequate privacy safeguards. Despite these concerns, the respondents who were aware of the digital euro would rather use it than private stablecoins in the future. These results show that Slovaks are currently at least theoretically open to using a digital euro.

## Opinions and knowledge of cryptoassets

While 84.1% of respondents claimed to have heard at least one of the terms “cryptoasset”, “cryptocurrency” or “Bitcoin”, nearly half of this group said that they knew nothing about cryptoassets, and they were excluded from follow-up questions.

Bitcoin<sup>1</sup> was known to a large majority of crypto-aware respondents and was followed at a considerable distance by Ethereum<sup>2</sup> and then Dogecoin. Knowledge of the cryptoassets' legal standing and risks lagged substantially behind the awareness of specific names. Less than half the crypto-acquainted respondents answered correctly that NBS does not carry out supervision in this area; around a quarter incorrectly

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<sup>1</sup> The native cryptoasset is called bitcoin. In the present text the blockchain and its cryptoasset are referred to jointly as Bitcoin.

<sup>2</sup> The native cryptoasset is called Ether. In the present text the blockchain and its cryptoasset are referred to jointly as Ethereum.

believed that NBS supervises the market in cryptoassets and other respondents said that they could not answer.

Respondents' opinions about cryptoassets revealed significant differences. For most crypto-acquainted respondents, cryptoassets are a high-risk gamble; just over half see them as the future of online payments and less than half consider them a good long-term investment.

The survey respondents showed an appreciation for the advantages of cryptoassets. They described their main advantages compared to the traditional financial system as a higher degree of anonymity, faster transactions and lower fees.

On the other hand, respondents also see disadvantages in cryptoassets such as adverse effects on the environment and potential uses in illegal activities. More than a third of respondents think that some cryptoassets have a negative impact on the environment; a third believe that no cryptoassets have a negative impact in this area and just a few consider all cryptoassets to be problematic in terms of adverse environmental effects. More than half of crypto-acquainted respondents think that cryptoassets are used for illegal activity only in a limited extent while just over a fifth believe that most use of cryptoassets is for illegal activity.

## Ownership and interest in the purchase of cryptoassets

One of the most important findings of the survey was that 5.8% of research participants own cryptoassets and another 3.1% of respondents had owned cryptoassets in the past. This means that 8.9% of the adult population has practical experience with cryptoassets. Such numbers show that cryptoassets are no longer a marginal phenomenon.

When comparing crypto users with the total survey population, it was found that they tend to be younger, with a higher level of education and higher income. This group of respondents is also predominantly male (86.7%).

Based on the finding of our survey, there is reason to expect that the number of owners of cryptoassets will continue to grow. 13.7% of crypto-acquainted respondents planned to purchase cryptoassets in future and another 29% were considering it.

Respondents who do not own cryptoassets give many reasons. The most frequent is a lack of finance, the high risk of loss and a shortage of information.

## Practical experience with cryptoassets

The last part of the survey concerned specific practical experience with cryptoassets and were therefore given only to the current and former owners of cryptoassets (users).

Exactly 40% of owners had purchased their cryptoassets in the last two years and another 30% had bought them in 2018 and 2019. Although cryptoassets have existed for over 13 years, more than two thirds of owners first purchased them in the last four years. Crypto-owning respondents most frequently own two to five different asset types. Another relatively large group has a holding in just one cryptoasset. Very few own more than five types of cryptoassets. As expected, Bitcoin is the most common type of asset owned. The number owning the second most popular cryptoasset, Ethereum, is much smaller. Cardano took third place. The same proportion of respondents chose the option “other”, mentioning a wide range of cryptoassets outside the top ten by market capitalisation. This finding points to a high degree of heterogeneity in the crypto market.

Respondents’ most frequent reasons for purchasing cryptoassets were to get to know them better and to make a speculative investment. A relatively small proportion of respondents purchased cryptoassets as an alternative to securities.

Most respondents said cryptoassets made up only a small part of their investment portfolio and thus indicated adherence to NBS's recommendation to invest only funds that the investor can afford to lose. Most investors dedicated no more 5% of their investment portfolio to cryptoassets. This explains why the total value of cryptoassets owned is relatively low. More than a third of crypto owners owned assets with a total value under €250 and just over a quarter had holdings between €250 and €1,000. A little over 15% of owners had cryptoassets worth €1,000 to €5,000 and just under 12% owned cryptoasset holdings greater than €5,000. The lower invested sums are reflected in the financing of cryptoasset purchases. The most frequent source of finance for crypto purchases was the user’s own disposable income, which was followed at a large distance by financing from savings. High-risk debt-funded purchases of cryptoassets had been used by 13.6% of owners.

Despite the existence of a large number of Slovak providers of crypto services, most owners in the survey reported using the services of foreign firms. Only just over a fifth of the owners in the survey reported purchasing cryptoassets through a Slovak company. A similar percentage of respondents had acquired cryptoassets by alternative means such as mining or an ICO.

Most owners declared that they were currently making a profit from their cryptoasset investments; just under a fifth were around the same level as their initial investment and less than a tenth reported a loss. These results will change significantly over time. The survey was conducted at the end of 2021 after a long period of substantial growth. If the market were to enter a “bear market” phase, in which cryptoasset prices decreased for several years – as has happened several times in the past – it can be expected that many investors would suffer losses.



## Comparison with foreign surveys

Similar consumer research was carried out in France and the United Kingdom in 2021. While there were many differences in the questions asked so that a full comparison is not possible, several of the most important results can be compared.

All three surveys found that a strong majority of respondents had heard about cryptoassets. Specifically, the Slovak research reported 84.1% awareness, the French 77% and the British 78%.

Cryptoassets were owned by 5.8% of the Slovak adult population, 8% of the French adult population and 4.4% of the British adult population. In all three countries, men are far more likely than women to invest in cryptoassets. Slovak respondents were most likely to own Bitcoin, Ethereum and Dogecoin; for the French, the top three were Bitcoin, Ethereum and Bitcoin Cash, and for the British they were Bitcoin, Ethereum and Litecoin.

The preferred way to store cryptoassets was the same in all three states – with a crypto service provider. This storage method was used by 62.7% of respondents in Slovakia, 62% in France and 59% in the UK.

The results are relatively consistent in many respects, which suggests that the market for cryptoassets is in a similar situation in Slovakia, France and the UK despite significant differences between the countries' economies and legal systems.

## Conclusion

NBS plans to repeat this customer research in future to monitor the development of knowledge, attitudes and experience of these financial and technological innovations over time.

## 2 Report of findings

### 2.1 Research context and design

Cryptoassets and the digital euro are two innovations that are currently being widely discussed. Various opinions have been expressed in public debate, but it is not clear what Slovak consumers think about these relatively new topics. There has not yet been any relevant consumer research on cryptoassets and the digital euro in Slovakia.

#### Motivation

Our main motivation for undertaking consumer research was to obtain relevant data that would help NBS gain a realistic picture of consumer's knowledge, attitudes and experience in relation to the chosen topics. With these findings, NBS can better identify what it should focus on in its communication with the public about these areas of innovation that overlap with activities of NBS. [The digital euro](#) is a project of the Eurosystem (in which NBS cooperates with the ECB and other national central banks) exploring the potential for its own digital currency. Cryptoassets do not fall directly under the competence of NBS because NBS is not currently authorised to oversee the cryptoasset market, though this is expected to [change based on European plans for regulation of the market in cryptoassets](#). Even so, NBS actively monitors the market in cryptoassets as part of its missions to promote innovation in Slovak financial markets and to increase consumers' financial literacy. NBS's prior activities in this area include a [survey of cryptoasset service providers](#) participation in discussion of plans for European regulation of the market in cryptoassets and articles on cryptoassets that are regularly published on the platform [5peňazí \(only in Slovak\)](#).

#### Detailed information on research design

The survey was carried out for NBS by the Focus agency between 26/11/2021 and 3/12/2021. The survey was carried out using a combined data-collection method – online administration with an online panel (for the online part of the population) and in-person administration (for the offline part of the population). The sample of respondents was selected using stratified sampling. The stratification criteria were: sex, age, education, settlement size and the region in which the respondent lived. The 1,010 respondents in the sample are representative of the population of Slovakia aged 18 and over in terms of these stratification criteria. The sampling error is 3.1% for a confidence level of 95%.

Questions about practical engagement with cryptoassets were given only to those respondents who were current or former owners of cryptoassets. Since these were only a few dozen respondents in absolute numbers, the sample is relatively small and may not be sufficiently representative. Caution should therefore be exercised in interpreting the results of section [2.5 Practical experience with cryptoassets](#) as they cannot support general conclusions.

## Opinion of NBS regarding the research findings

The survey captured the knowledge, opinions and attitudes of the respondents. The research results do not represent the opinions of NBS, which may be completely different from the opinions of the consumers recorded by the present research.

## 2.2 Knowledge and attitudes regarding the digital euro

The **digital euro** is a project of the Eurosystem for the creation of a Central Bank Digital Currency (CBDC). Unlike the digital forms of the euro that currently exist such as electronic money or bank deposits, the digital euro would be issued directly by the Eurosystem. The digital euro would be the same as any other euro but in digital form, and therefore it would have the same value as cash. The digital euro would not replace cash but complement it. The digital euro would be a quick, simple and secure instrument for everyday payments that would be available to everyone in the euro area. Every citizen would thus have direct access to central bank money in digital form. They would be able to make instant transfers without having to worry about whether their bank or the beneficiary's bank were connected to an instant payment system. No final decision has yet been taken on the implementation of the digital euro. Its present status, since October 2021, is the investigation phase, looking into how it could be designed and distributed, as well as the impact that it could have on the market. The investigation phase will last for two years, at the end of which the ECB Governing Council will decide whether the digital euro will become reality. Even if implementation is approved, several more years of development will still be needed. More detailed information about the digital euro can be found the [ECB website](#). There has recently been intensive discussion about the digital euro and we were therefore interested to know whether the public had heard about the project and what they knew and thought about it.

### Awareness of the digital euro

Within the whole sample, 32% of respondents had heard the term “digital euro” and the remaining 68% had never heard it. The respondents first heard about the digital euro on various websites, blogs and forums (26.6%), traditional media such as television, radio and the press (25.1%) or on social media (21.4%).

Just under a tenth (9.9%) of these respondents believed that they had detailed knowledge of the digital euro, somewhat more than half (55.7%) rated their knowledge as basic and approximately a third of respondents (34.4%) said that they knew nothing about the digital euro but the name. These respondents who claimed to know nothing about the digital euro were not asked any of the other follow-up questions. We were thus left with a group of 212 respondents who indicated they had some knowledge of the digital euro. Just over a half (54.2%) of the respondents in this group were able to identify the correct definition of the digital euro in a list of assorted definitions.

## Opinions about the digital euro

Respondents who claimed some familiarity with the digital euro were then asked whether they had any concerns about it. Their responses are summarised in the following chart:

**Chart 1**  
Concerns about the digital euro

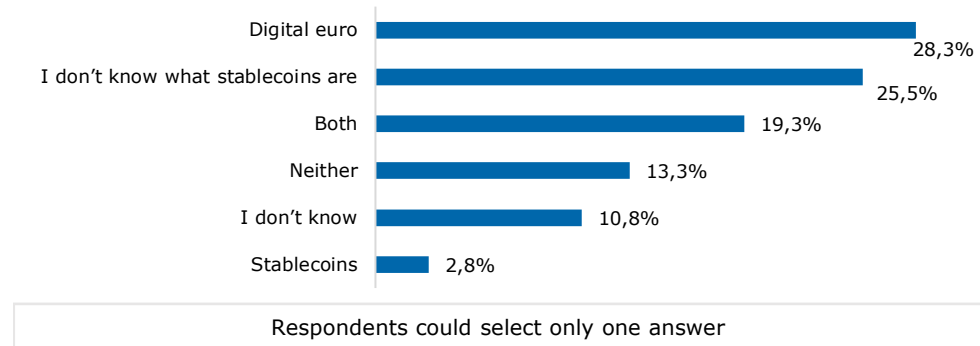


Respondents could select multiple answers that were not mutually exclusive

The largest group of respondents said that they did not have any specific concerns about the digital euro. While it is to some extent gratifying that these respondents are not worried, on the other hand it is probably linked to the small amount of information that has been published about the digital euro. Approximately a third of respondents are worried about the digital euro replacing cash. The ECB has, however, repeatedly stated that cash will not be affected in any way by the launch of the digital euro. The digital euro is not intended to be a replacement for cash but a complement to it, a fully functional digital currency whose value will always be the same as a physical euro. Less than a third of respondents were worried about the protection of privacy in digital euro payments. Protection of privacy was found to be one of the key requirements of EU citizens in the [ECB's public consultation on the digital euro](#). The level of privacy protection will depend on the specific design of the digital euro, which is not yet known. The ECB is seeking technical measures that will reasonably meet people's expectations for privacy.

Despite the concerns described above, these respondents would rather use it than private stablecoins in future.

**Chart 2**  
Digital euro vs private stablecoin payments



More than a quarter of respondents do not know what stablecoins are, as can be seen in Chart 2. This is a type of cryptoasset with the special property that its value is stabilised by one of several possible means to reduce the volatility that affects other cryptoassets. The value of stablecoins is usually linked to an official currency such as the dollar or the euro. The stabilisation mechanism is designed to keep the value of the stablecoin equal to the value of the official currency. These cryptoassets are, however, managed by private companies and therefore it is not possible to guarantee that price stability can be maintained. On the other hand, if the ECB starts to issue a digital euro, this will be an official currency without the risks represented by private stablecoin issuers.

This view was shared by the respondents who were acquainted with the digital euro. As Chart 2 shows, more than 28% of them would prefer to pay using the digital euro and just under a fifth would be open to both payment methods. More than 13% of these respondents do not expect to use either of these innovative means of payments and only just under 3% of respondents would rather use stablecoins than the digital euro. Just over a tenth of respondents said that they did not know, which is understandable given that the digital euro is still only a test concept. These are, nevertheless, encouraging results for the Eurosystem that show that Slovaks are currently at least theoretically open to using the digital euro.

### Neither the digital euro nor cryptoassets

Before turning to the research findings on cryptoassets, consideration should be given, for the sake of completeness, to the large group of respondents who had never heard of cryptoassets or the digital euro. To be precise, 68% of respondents had not previously heard about the digital euro, though this is hardly surprising considering that the digital euro does not yet exist. The structure of this group of respondents is very similar to the overall sample. Compared to the whole population, there are slightly larger percentages of women (55.9% compared to 51.6%) and people aged over 65 (22.9% compared to 19.8%). In other areas, the differences between the two groups are very slight.

Only 15.9% of respondents had never heard of cryptoassets (or cryptocurrencies such as Bitcoin). The differences between this group of respondents and the full sample are larger than for those who had never heard of the digital euro. There are many more women (61.5% compared to 51.6%) and significantly more people aged over 65 (44.7% compared to 19.8%), people with secondary education without a high-school diploma (42.2% compared to 26.8%), a net monthly income below €500 (57.1% compared to 32%) and with conservative political views (29.2% compared to 18.6%).

## 2.3 Knowledge and attitudes regarding cryptoassets

Cryptoassets have existed as a new class of assets for over a decade but they have achieved more significant popularity only in the last few years. The first cryptoasset, Bitcoin, was launched in 2009, but it built on ideas that had been known in cryptography for decades. The founder of Bitcoin, who used the pseudonym Satoshi Nakamoto, found a practical way to link these ideas together and created a digital asset which, thanks to distributed ledger technology (DLT), could be securely transferred and stored without recourse to any central authority. The technology was later used to create many other cryptoassets, many of which are significantly different from Bitcoin. There are now thousands of cryptoassets with new ones constantly being launched. Various service providers have grown up around these cryptoassets and it is now possible to talk about a complex market in cryptoassets.

We therefore published an [Overview of the cryptoassets market in Slovakia](#) in November 2020, focussing on the providers of cryptoasset services. One thing this document lacked was information on the knowledge, attitudes and experience of consumers relating to this phenomenon. That was the main motivation for the present research.

### Awareness of cryptoassets

While there has been a lot of talk about cryptoassets in recent years, it is still a relatively new phenomenon. We were therefore interested to know how familiar the Slovak population is with cryptoassets and what they know about them. As public discussion tends to focus on cryptocurrencies, which are only a part of the broader phenomenon of cryptoassets, we also asked respondents about cryptocurrencies and the most famous cryptoasset – Bitcoin.

**Table 1**  
Awareness of cryptoassets

	Percentage of all respondents
1. who had heard only about cryptoassets (cryptocurrencies)	4,1 %
2. who had heard only about Bitcoin	10,0 %
3. who had heard about both cryptoassets (cryptocurrencies) and Bitcoin	70,0 %
Crypto-aware - who had heard about cryptoassets (cryptocurrencies) or about Bitcoin	84,1 %

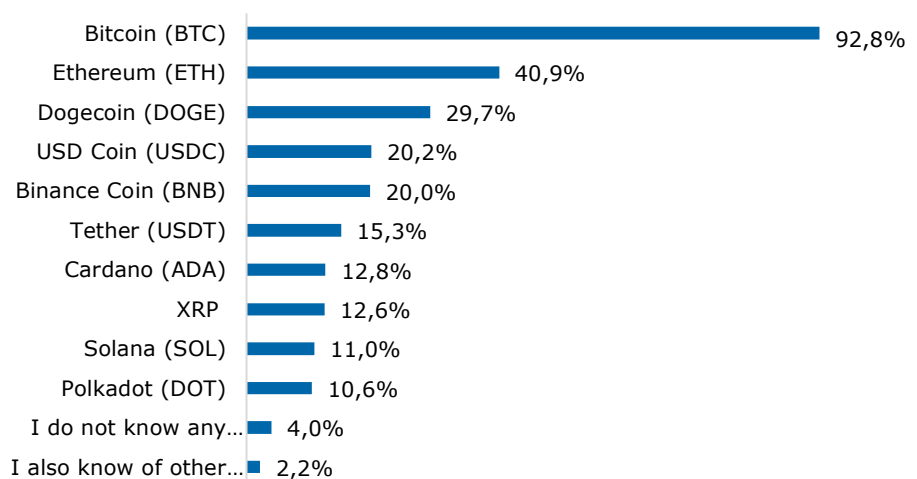
A large majority of respondents had already heard all these terms. A tenth of respondents had heard about Bitcoin but not about cryptoassets and less than 5% of respondents had heard the term cryptoassets (cryptocurrencies) but not yet about Bitcoin. In total, 84.1% of respondents had heard at least one of the terms. This group of respondents can be described as “crypto-aware”. From these results, it is possible to conclude that a large majority of the Slovak population has already heard about cryptoassets.

Crypto-aware respondents first heard about cryptoassets from traditional media (24.5%), social media (22.5%) and various websites, blogs and internet forums (19.2%). Hearing about something does not mean knowing anything about it though. Just under 5% of crypto-aware respondents (4.9%) considered their knowledge to be advanced, more than half (47.5%) said that they knew only the basics of cryptoassets and a similar proportion (47.6%) declared that they knew nothing about cryptoassets. We decided to exclude these last respondents from other follow-up questions and the following text works only with the responses of those participants who were familiar with at least the basics of the matter. The sample for the follow-up questions was thus reduced to 445 respondents. In the following text this group of respondents will be referred to as “crypto-acquainted”. People’s assessment of their own knowledge (including knowledge of cryptoassets) may not always conform to reality, as was confirmed by the follow-up checking question. Only 68.8% of crypto-acquainted respondents were able to select the correct definition of a cryptoasset from a list.

Many people see cryptoassets and Bitcoin as synonyms but the market in cryptoassets is now much more diverse, so we wanted to know how well respondents know the top ten cryptoassets by market capitalisation.

**Chart 3**

Knowledge of cryptoassets at least by name



Respondents could select multiple answers that were not mutually exclusive

As expected, Bitcoin is the best-known cryptoasset. More than 90% of respondents in this group said that they are familiar at least with the name Bitcoin. There is a large gap

between knowledge of Bitcoin and other cryptoassets. Ethereum, as the second best-known cryptoasset was known to just over 40% of crypto-acquainted respondents. The next best-known was Dogecoin, which has a much lower market capitalisation than other cryptoassets but it was known to nearly 30% of respondents, probably thanks to significant attention even in more traditional media. Binance Coin, which is issued by one of the largest providers of cryptoasset services – Binance – and the stablecoin USD Coin were known to around a fifth of crypto-acquainted respondents. All the other cryptoassets in the top ten by market capitalisation were known to 10-15% of the respondents in this group. Just over 2% of these respondents also knew of other cryptoassets. Despite claiming a basic familiarity with cryptoassets, 4% of respondents in this group said that they did not know the names of any cryptoassets. This points to a further reason for caution in interpreting the results of the present research since respondents may not always give truthful answers.

## Knowledge regarding cryptoassets

NBS actively monitors the market in cryptoassets but it is not yet responsible for supervision of this area. We are, nevertheless, frequently contacted by consumers who are convinced of the opposite and expect NBS to resolve their complaints against crypto service providers. We were therefore interested to see what knowledge consumers have of this question. Less than half the respondents (44%) answered correctly that NBS does not carry out supervision in this area; around a quarter (25.2%) incorrectly believed that NBS supervised the market in cryptoassets, and the other respondents (30.8%) said that they did not know. These findings indicate that NBS needs to be clearer in communicating that it does not at present supervise the market in cryptoassets but primarily focuses on increasing financial literacy.

NBS does not discourage consumers from investing in cryptoassets but it regularly informs them of the risks, for example, through articles on cryptoassets published on the website *5peňazí* (only in Slovak). One of the most significant risks of investing in cryptoassets is the potential failure of a crypto service provider (e.g., a crypto-exchange) that holds clients' cryptoassets. Unlike in cases when a bank, investment firm or management company goes bankrupt, the collapse of a crypto service provider does not entitle clients to any compensation from the state. Most crypto-acquainted respondents (64.3%) are aware that they would get no compensation from the state, a smaller group (13.3%) expected to be compensated and just over a fifth (22.5%) said that they did not know.

## Opinions about cryptoassets

Various opinions about cryptoassets can be heard in public discussion. Some see them as the future of finance whereas others consider them a massive bubble with minimal added value for society. We were therefore interested to see what the predominant views in Slovak society were.



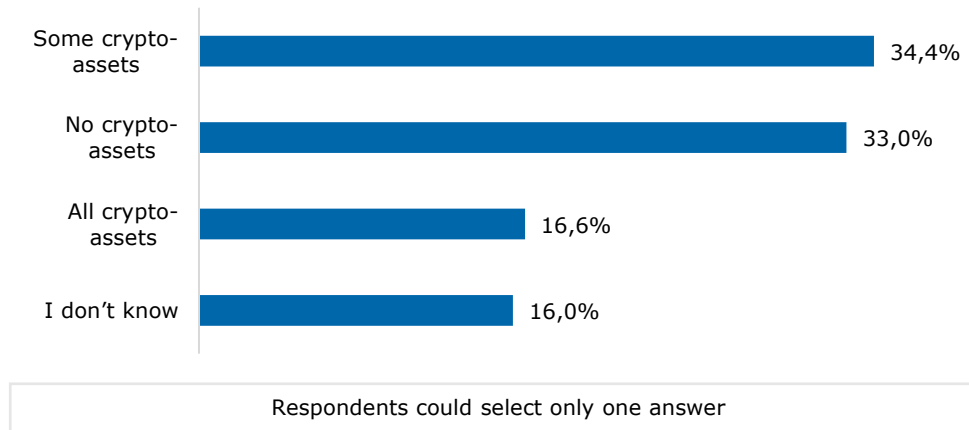
**Table 2**  
Opinions about cryptoassets

Claim	Crypto-acquainted respondents		
	I agree	I disagree	I don't know
Cryptoassets are a high-risk speculative investment	62,5 %	20,0 %	17,5 %
Cryptoassets are the future of online payments	51,7 %	27,0 %	21,3 %
Cryptoassets are a good long-term investment	48,8 %	29,9 %	21,3 %
Cryptoassets are just a fashionable trend that will eventually fade away	33,9 %	43,4 %	22,7 %
Cryptoassets will replace traditional currencies in the future	33,0 %	44,0 %	22,9 %

Most crypto-acquainted respondents agreed that this type of assets is a high-risk speculative investment. Given their significant volatility, often times unclear use-cases and the widespread frauds in the cryptoasset market, this is an understandable point of view. Just over half these respondents believe that cryptoassets are the future of online payments despite the fact that after more than a decade of existence, cryptoassets have still not become a widespread means of payment in online shopping. Just under half of respondents consider cryptoassets a good long-term investment. The market in cryptoassets has grown rapidly in the last decade but most cryptoassets have existed for less than ten years so it remains to be seen how the asset class will perform as a long-term investment. Only around a third of crypto-acquainted respondents think that cryptoassets are just a fashionable trend that will eventually fade away. Over 43% disagree with this opinion. The longer cryptoassets exist and the more widespread they become, the greater the probability that they will continue to exist in future. The market for cryptoassets is changing fast though and those that are popular now need not remain popular in future. What is more, around a third of the crypto-acquainted respondents even expect cryptoassets to replace official currencies, though a larger group (44%) do not agree with this view. At present it appears very unlikely that cryptoassets could ever replace official currencies. In this regard, it is interesting to follow developments in El Salvador in Central America, where Bitcoin is now legal tender.

Another major topic of recent years has been electricity consumption in the mining of cryptoassets and its negative impacts on the environment. We therefore inquired about respondent's views on this problem.

**Chart 4**  
Negative environmental impacts of cryptoassets



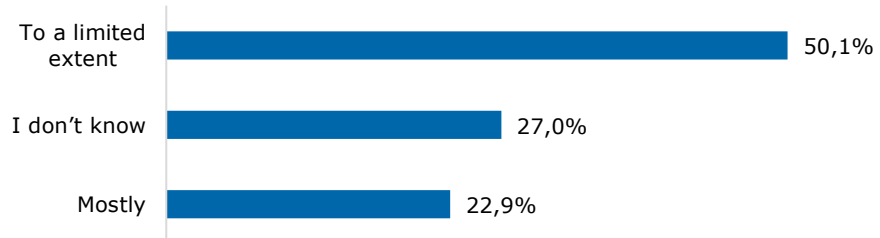
Just over 16% of respondents in the crypto-acquainted group think that all cryptoassets have a negative impact on the environment, as can be seen in Chart 4. It is likely that these respondents are not aware of the differences between DLTs based on the different consensus mechanisms used and therefore they lump all cryptoassets into the same category. The reality is much more diverse and different cryptoassets have different energy demands and therefore different impacts in terms of their electricity consumption. Just over a third of crypto-acquainted respondents share this view and think that not all cryptoassets necessarily have a negative impact on the environment. Furthermore, a third of this group believe that no cryptoassets have an adverse impact on the environment. These respondents may have been convinced by the arguments that the electricity used in cryptoasset mining comes mainly from renewable sources and therefore production need not lead to adverse environmental effects. Finally, 16% of respondents objectively decided that they could not answer this complex question.

The environmental impact of cryptoassets affected the investment choices of around a quarter of the crypto-acquainted respondents (25.2%) while just over half did not take them into consideration when investing (51.5%). Nearly a quarter of the respondents said that they did not know how to answer (23.4%).

In public discussions, it is sometimes said that government should not tolerate the excessive energy use of cryptoassets and that they should take action against them. Some countries have already taken significant action to limit the use of electricity for crypto mining. We were therefore interested in the Slovak public's opinion on this question. Government intervention to mitigate environmental impacts would be supported by more than a third (36%) of the crypto-acquainted group whereas somewhat more would be opposed (40.4%) and nearly a quarter (23.6%) said that they could not comment.

Another major criticism of cryptoassets is that their anonymity/pseudo-anonymity makes them an attractive means for engaging in illegal activity. We were also interested to know the Slovak public's opinion on this problem.

**Chart 5**  
Use of cryptoassets for illegal activity



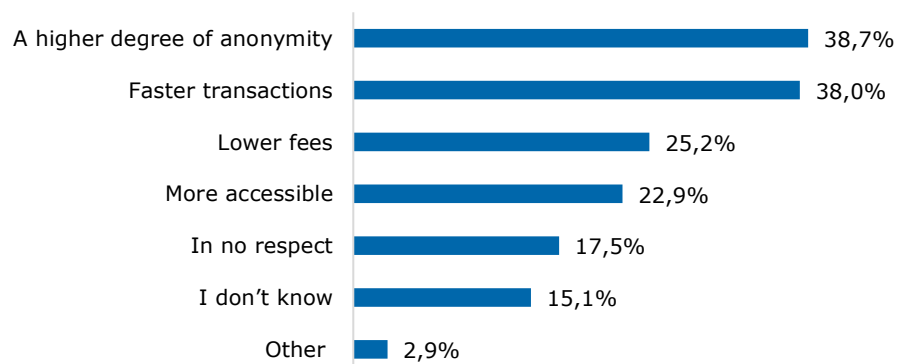
Respondents could select only one answer

Only just over a fifth of crypto-acquainted respondents think that cryptoassets are mainly used for illegal activity. Such opinions developed mainly in the early years of cryptoassets' existence when cryptoassets were frequently linked to criminal enterprises such as the Silk Road marketplace. At present, the vast majority of crypto-related activity is legal, and the scope of illegal activity is relatively limited. According to the company Chainalysis, transactions related to illegal activity made up only 0.15% of the total volume of crypto transactions. As Chart 5 shows, more than half of the crypto-acquainted group appear to be aware of this. Another 27% respondents said that they did not know.

More than half of the crypto-acquainted respondents (50.8%) believe that the state should restrict the anonymity of crypto users to mitigate risk. Around a third (32.4%) disagreed with this and the remainder (16.9%) could not comment.

Naturally, cryptoassets have not only risks but also many benefits. We were therefore interested to know what respondents think about the comparison between the crypto-world and the traditional financial system.

**Chart 6**  
Advantages of cryptoassets compared to the traditional financial system



Respondents could select multiple answers that were not mutually exclusive

Crypto-acquainted respondents most frequently reported the higher degree of anonymity as a benefit of cryptoassets. Many crypto service providers now require

verification of their clients' identities and the degree of anonymity or pseudo-anonymity in the cryptoasset market is decreasing. Similar number of respondents consider faster transactions to be a benefit of cryptoassets. However, this is another area in which the market in cryptoassets and the traditional financial system are coming closer together. Several Slovak banks recently launched instant payments that provide transaction speeds rivalling crypto transactions. When the research was carried out, instant payments had not yet been launched in Slovakia. Therefore, when NBS repeats the research in future, it will be interesting to see whether consumers still consider transaction speed to be a significant advantage of cryptoassets compared to the traditional financial system. Around a quarter of the crypto-acquainted respondents associate cryptoassets with lower fees. It is not, however, so easy to compare the fees of the traditional financial system and cryptoassets. There are significant differences between the fees in different cryptoassets and they can also fluctuate over time, whereas the fees for interbank transfers are relatively high, especially for transfers to states outside the EU. Cryptoassets tend to offer favourable terms for this sort of cross-border payment, though bank transfers within the EU are now much cheaper. Just under 23% of respondents find cryptoassets easier to access. A crypto wallet can be set up very quickly and with relative ease but in this area too, traditional financial institutions have made great strides in recent years so that in many Slovak banks, accounts can be opened in a relatively straightforward way, quickly and entirely online. Just 17.5% of the crypto-acquainted respondents do not see any benefit in cryptoassets compared to the traditional financial system and just over 15% of respondents did not know how to answer the question. Just under 3% of respondents see other benefits in cryptoassets such as decentralisation and independence from the state.

We were also interested whether respondents would see cryptoassets as a riskier investment than securities in general. Most respondents (61.3%) consider cryptoassets to be riskier while just under a quarter (24.9%) consider securities to be riskier and the remainder (13.7%) could not say.

## 2.4 Cryptoasset ownership and interest in their purchase

One of the main aims of the present research was to determine whether cryptoassets are just a theoretical interest for the population in Slovakia or whether people have practical experience of it. We therefore asked whether the respondents owned cryptoassets or had owned them in the past.

**Table 3**  
Ownership of cryptoassets

		Percentage of all questionnaire respondents
1.	current owners of cryptoassets	5,8 %
2.	former owners of cryptoassets	3,1 %
Users		
	- Current or former owners of cryptoassets	8,9 %

Considering the sample as a whole, 5.8% of respondents owned cryptoassets at the time of the questionnaire and another 3.1% had owned cryptoassets in the past but no longer did. This means that than nearly 9% of the respondents had practical experience with cryptoassets. Another 2.4% of the overall sample did not want to answer, so the real numbers could be slightly larger. These findings clearly show that cryptoassets are no longer a marginal topic and in fact nearly a tenth of the Slovak adult population has experience with them.

### Characteristics of users

The present report will refer to the current and former owners of cryptoassets and “users”. They differ from the overall sample in many ways. Whereas the overall research sample was made up 48.4% of men and 51.6% of women, men significantly predominated amongst users, making up 86.7% of the group. In the overall research sample, the largest age group was respondents in “Generation X”, the 35-44 age group (20.2%), whereas the largest age group of users was “Generation Y” or the “millennials”, people aged 25 to 34 (44.4%). As regards education, users usually had a higher education level than the general population. Just under half the users (48.9%) had completed secondary education with a high-school diploma whereas in the overall research sample the proportion was significantly lower (37.5%). Furthermore, 40% of users had graduated from higher education compared with around a quarter (23,5%) in the overall sample. Large differences can also be observed in economic status. Whereas the largest group in the overall sample was pensioners (28%), the largest category in the user group was creative and professional workers (21.1%) such as doctors, teachers, lawyers or IT professionals. This difference was also reflected in net monthly personal income. Whereas the largest group of the overall sample (43.1%) had income in the range €500 – 1,000, users most frequently (47.8%) had a net monthly income of €1,000 to 2,000.

On the other hand, the results for the size of respondents' town or village of residence were very similar for both groups, with municipalities with 1,000 to 5,000 inhabitants being home to just under a third (29.7%) of the overall sample and just over a third (34.4%) of crypto users. A bigger difference can be observed in terms of regional distribution. Whereas the largest group of users (18.9%) lived in the Bratislava Region, the largest group in the overall population (14.8%) was in the Prešov Region.

Users also differed from the overall sample in their political views. Whereas the most frequent position in the overall sample (26.1%) was a social-democratic orientation, crypto users most often (20%) had a right-wing, liberal political orientation.

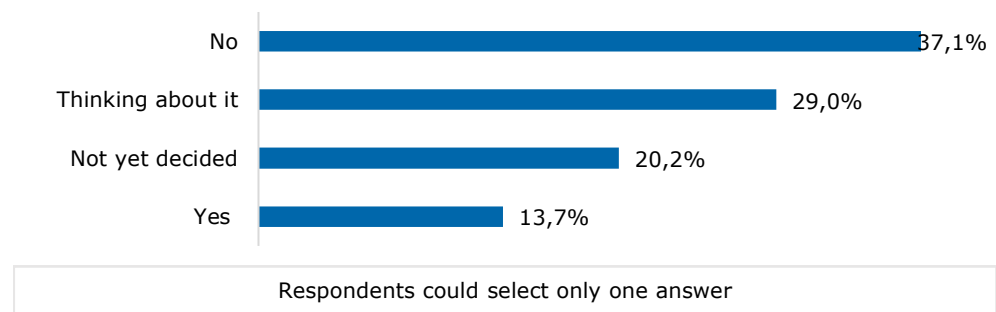
Another interesting point of comparison was the relationship of the two groups to our other area of research interest – the digital euro. As could be expected, awareness of the digital euro was higher amongst users (36.7%) than in the overall research sample (32%).

It should be noted that the above results give a simplified image of users and the relatively small number of users in the sample cannot support general conclusions about their characteristics.

### Interest in the purchase of cryptoassets

The above findings reflect the current situation. However, the research also aimed to learn something of future developments, and we were therefore interested whether crypto-acquainted respondents had plans to acquire such assets in future.

**Chart 7**  
Purchase of cryptoassets in future



A plurality of crypto-acquainted respondents had no plans to purchase cryptoassets in future. Another 29% were thinking about it and just under 14% said that they would purchase cryptoassets. Just over a fifth of the respondents had not yet made a firm decision about purchasing cryptoassets. If these numbers materialize in future, the number of cryptoasset owners in the Slovak Republic will continue to grow. A key factor will be the decision of people who are thinking about purchasing cryptoassets but have not yet made their mind up. It is recommended that before purchasing cryptoassets, every potential investor should weigh up the relevant risks and, if they decide to invest, it is recommended that they never invest more than they can afford to lose.

The respondents in the crypto-acquainted group who had not yet purchased cryptoassets were asked why they had not. The results are summarised in Chart 8.

**Chart 8**  
Reasons for not purchasing cryptoassets



Respondents could select multiple answers that were not mutually exclusive

People tend to have multiple reasons for not purchasing cryptoassets. The most frequent was lack of funds, which was mentioned by over 37% of respondents. Excessive risk of loss put off 35% of the relevant respondents and a lack of information was mentioned by over 34% of respondents. This was followed at a larger distance by security risks such as the theft of cryptoassets and the loss of the private key, which were considered relevant by just over 25% of respondents. None of the other factors were mentioned by more than a fifth of respondents. As mentioned above, it is recommended that every potential investor should consider all the risks and if they decide that the risks are too much for them, it is better that they stay away from cryptoassets.

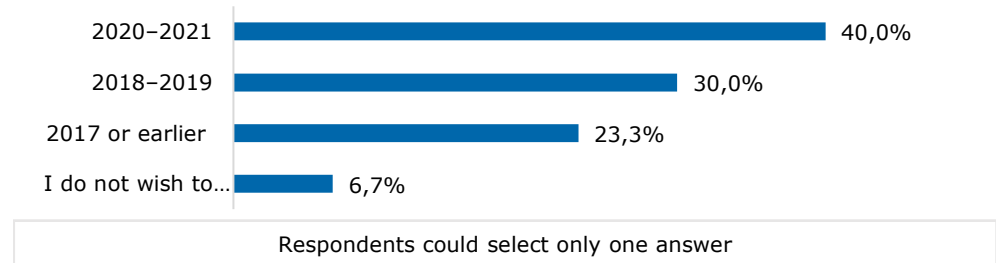
## 2.5 Practical experience with cryptoassets

The questions in the last section of the questionnaire were given only to users because they relate to practical experience with cryptoassets. This group made up 8.9% of the overall research population, 5.8% in the case of people who currently own cryptoassets. Since this gave only 90 crypto users and 59 crypto owners in absolute numbers, the sample is relatively small and may not be sufficiently representative. The answers to these questions should therefore be treated as illustrative and it is not possible to draw general conclusions about Slovak crypto users from them.

### Cryptoassets owned

Cryptoassets have existed for around a decade and significant growth in their popularity has occurred only in recent years. We therefore wanted to know when users first bought their cryptoassets.

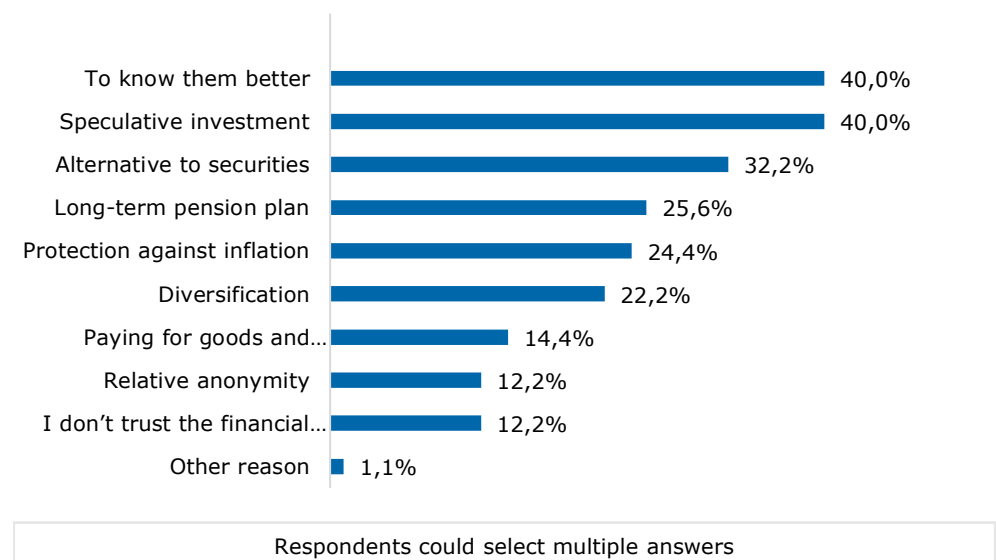
**Chart 9**  
Date of first cryptoasset purchase



The popularity of cryptoassets has increased every year, as Chart 9 shows. Exactly 40% of owners had purchased their cryptoassets in the last two years and another 30% had bought them in 2018 and 2019. Although cryptoassets have existed for over 13 years, more than two thirds of cryptoasset owners purchased theirs in the last 4 years.

There are many reasons why people acquire cryptoassets so we thought it would be useful to find out what our respondents' motivation was for their purchases.

**Chart 10**  
Reasons for purchasing cryptoassets



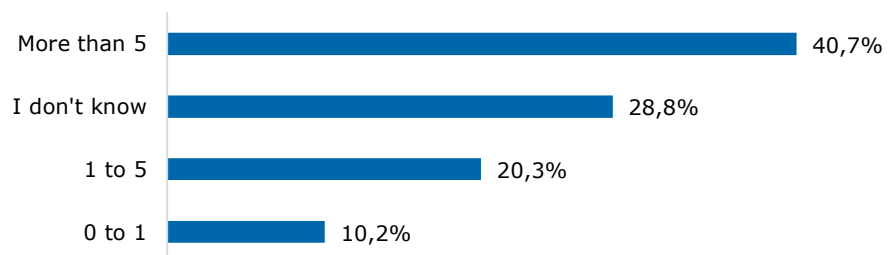
Respondents' most frequent reason for purchasing cryptoassets was to get to know them better. Nothing can replace practical experience and this finding shows that many crypto owners want to try out the new financial innovation before deciding whether it is a good investment for them. The same percentage of respondents bought cryptoassets as a speculative investment. In recent years the prices of many cryptoassets have risen astronomically and it is therefore unsurprising that many people are buying them in the hope that they will get a multiple return on their investment. Just under a third of users bought cryptoassets instead of securities and over a quarter of them hold them as part of a long-term pension portfolio. These respondents are confident of cryptoassets' long-term growth potential. As mentioned



above, cryptoassets do not yet have such a long track record as assets like real estate or securities and it remains to be seen whether there are at least some cryptoassets that can perform as long-term investments. To rely only on cryptoassets for a pension is a very high-risk strategy that NBS would advise investors against. Just under a quarter of crypto users see cryptoassets as a form of protection against inflation. These respondents probably believe that because cryptoassets are independent of the state, their value should not be eroded by inflation as is the problem of official currencies. However, the central banks of developed states seek to keep inflation to an annual rate of around 2%, whereas the price of cryptoassets can rise or fall by more than 10% in a single day. The volatility of cryptoassets can thus cause investors a significantly greater loss of value than inflation. Unlike certain other, more traditional assets that have historically shown themselves to provide protection against inflation, relying on cryptoassets in this regard appears to be something of a gamble. The value of cryptoassets and the rate of inflation have so far developed fairly independently of each other and this will probably remain the case in future. More than 22% of crypto users bought their cryptoassets as a way to diversify their investment portfolio. In general, NBS recommends that investors diversify their portfolio. The key question for diversification is the correct allocation. In relation to cryptoassets, NBS recommends investing a sum no larger than the investor can afford to lose. Other reasons for purchasing cryptoassets were relevant to less than 15% of crypto users.

Another important question about investment in cryptoassets is whether to consider it a short-term gamble or a long-term investment. We therefore decided to ask the crypto owners in our research sample about their plans.

**Chart 11**  
Expected period to hold cryptoassets



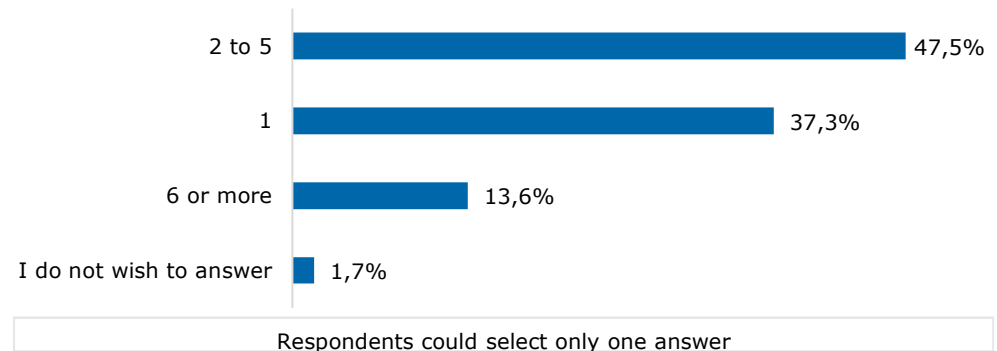
Respondents could select only one answer

Chart 11 provides some support for the findings of Chart 10. A significant number of the crypto users see this asset type as a longer-term investment and therefore over 40% of them plan to hold them for more than five years. Just over a fifth of them plan to hold them for more than one year but less than five years. Just over a tenth of crypto owners plan to hold cryptoassets for less than one year and therefore they probably bought them as a speculative investment or for the purpose of getting to know them better. A relatively large group of crypto owners (29%) do not yet know how long they plan to keep their holdings. These are probably people who do not yet have a fixed opinion about cryptoassets and will decide based on future developments.

The next questions aimed at building a clearer picture of the cryptoassets that people own. There are thousands of types of cryptoasset but most people know only Bitcoin. We were therefore interested to know how many different types of cryptoassets were owned in the research sample.

Chart 12

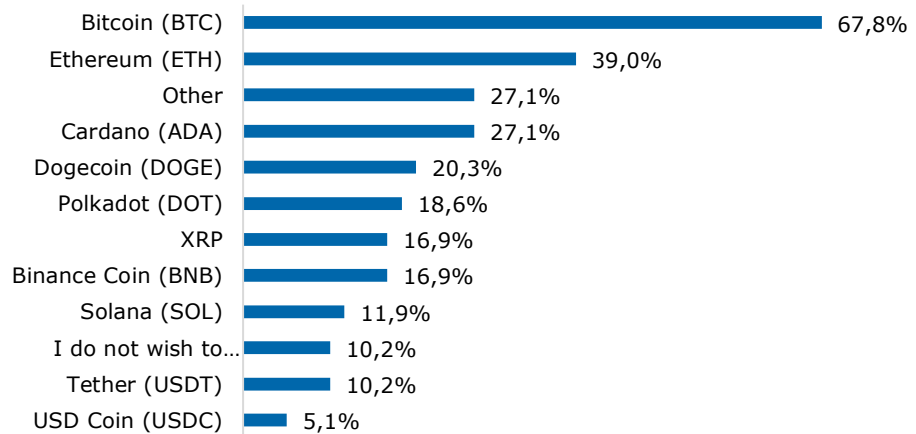
Number of different cryptoasset types owned



The crypto-owning respondents most frequently own two to five different asset types. Another relatively large group (over 37%) own just one cryptoasset. Only a little over 13% own more than five types of cryptoasset. In the traditional world of equities, a broader diversification is usually recommended as a way to reduce risk. A relatively easy way to achieve this is to invest in mutual funds or exchange-traded funds (ETF). No such simple or reliable means of diversification is currently available for investors in cryptoassets. Furthermore, many of the thousands of existing cryptoassets do not have much long-term potential so the extent to which diversification would help to reduce investment risk is uncertain in the case of cryptoassets. Bitcoin alone currently accounts for around 40% of the market capitalisation of all cryptoassets. These are factors that make it less surprising that the crypto-owning respondents do not have very widely diversified investments in cryptoassets.

After clarifying the number of cryptoasset types that the respondents own, they were asked about the specific cryptoassets they owned.

**Chart 13**  
Cryptoassets owned

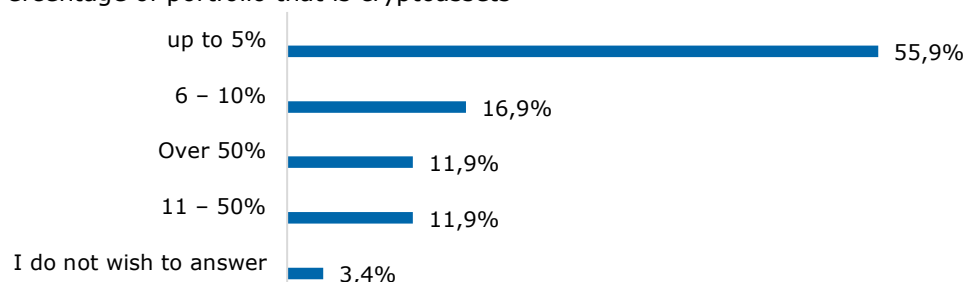


Respondents could select multiple answers that were not mutually exclusive

As expected, the majority (more than two thirds) of crypto owners owned Bitcoin. The second most popular cryptoasset, Ethereum, was held by 39% of crypto owners. Cardano took third place. Behind it came Dogecoin, which became popular thanks to publicity from several famous personalities. All the other cryptoassets in the top ten were held by less than a fifth of crypto owners. Holdings of other crypto assets were reported by over 27% of respondents. Under this option, respondents mentioned various cryptoassets outside the top ten.

NBS regularly warns consumers about the risks associated with investing in cryptoassets and the need for a diversified investment portfolio so that losses from cryptoassets do not threaten the achievement of investment goals. For this reason, we were interested how the survey respondents managed diversification.

**Chart 14**  
Percentage of portfolio that is cryptoassets



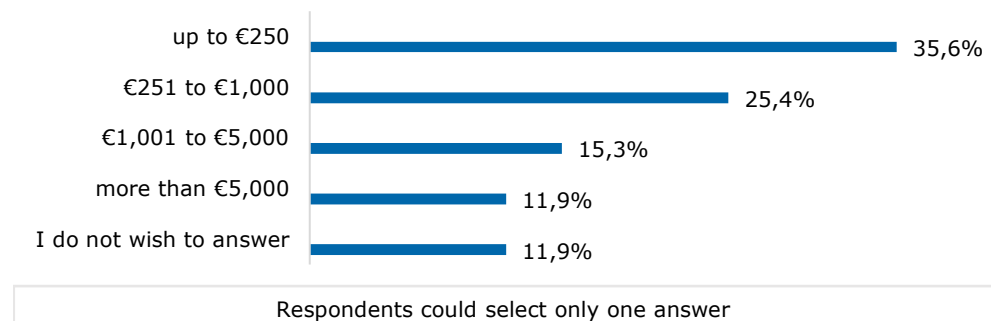
Respondents could select only one answer

For most respondents, cryptoassets made up only a small part of their investment portfolio and thus acted in line with the recommendation to invest only funds that the investor can afford to lose. Just under 56% of respondents who own cryptoassets had allocated less than 5% of their investment portfolio to them while just under 17% dedicated 6 to 10% of their portfolio to them. A riskier strategy was chosen by 12% of crypto owners, who allocated 11 to 50% of their investment portfolio to this asset class.

The same percentage had chosen the even riskier strategy of investing more than 50% of their portfolio in cryptoassets. These owners must be prepared for possibility that their investment could lose tens of percent due to the high volatility of cryptoassets and they could take many years to recover from a downturn, as has been observed several times in the history of cryptoassets.

In discussions regarding Slovak market in cryptoassets, people often wonder how much money Slovaks have invested in them. Given the pseudo-anonymity of crypto wallets and the use of foreign crypto service providers, it is not possible to obtain an exact number but the results of the present research permit at least a rough estimate. We therefore asked the respondents about the total value of the cryptoassets that they own.

**Chart 15**  
Total value of owned cryptoassets

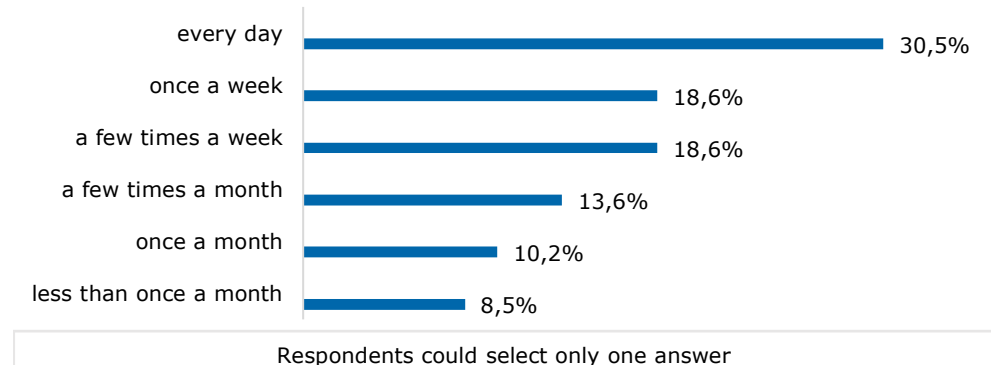


The largest group of respondents (35%) owned cryptoassets with a total value of less than €250. Just over a quarter of crypto owners have allocated between €250 and €1,000 to this asset class. Over 15% of respondents have cryptoassets worth between €1,000 and €5,000. Just under 12% of crypto owners did not wish to tell us the value of the crypto investments, which is understandable because in spite of the anonymity of the survey, the information is highly sensitive. The same percentage of respondents, just under 12%, said that they had allocated more than €5,000 to cryptoassets.

NBS regularly warns consumers that they should not invest more in cryptoassets than what they can afford to lose. We were therefore curious to what extent the public complies with such recommendations. The research findings are encouraging. Only 8.5% of crypto owners were investing more than they could afford to lose and 91.5% had invested a lower sum.

Cryptoassets are famous for their extreme volatility, with values that can fluctuate significantly over the course of just a few hours. It is therefore no surprise that crypto owners check their value significantly more often than other types of assets. This observation was also supported by the present research.

**Chart 16**  
Frequency of checking the value of cryptoassets

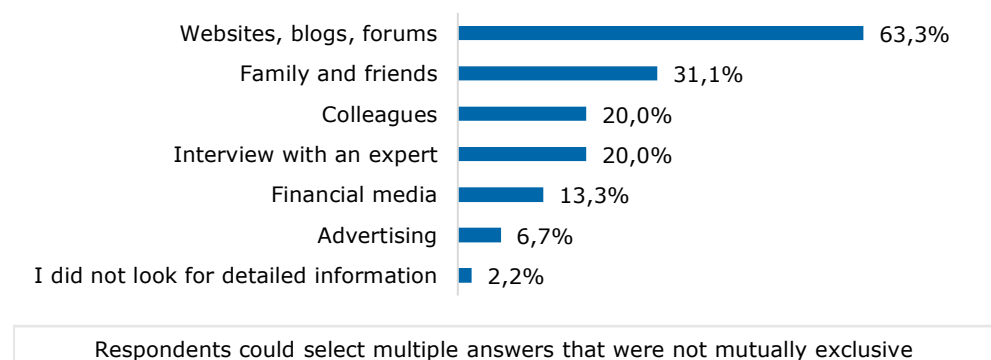


More than 30% of respondents check the value of their cryptoassets every day. A significant percentage of respondents check their cryptoassets at least once a month and only a little over 8% of respondents check the value of their crypto portfolio less than once a month. Too frequent checking of the value of cryptoassets may lead to excessive trading, which is often counterproductive, especially for long-term investing.

## Sources of information on cryptoassets

It is also interesting to know where crypto users get information.

**Chart 17**  
Sources of information for buying cryptoassets



Respondents who own cryptoassets mainly get information from the internet, followed at considerable distance by their family, friends and colleagues. Just a fifth of them bought cryptoassets based on an interview with an expert. This finding is not surprising because whereas traditional investments like mutual funds or other securities can be bought at nearly every bank and information on them is available from a large group of financial intermediaries, it is often difficult for regular consumers to find an expert who can advise them on buying cryptoassets. Only a little more than 13% of respondents used information from the financial media because traditional media provide only limited coverage of investment opportunities in the world of cryptoassets. The research findings clearly show that consumers considering an investment in cryptoassets are

often dependent on information from the internet, which can be very varied, thus making it more difficult for potential investors to make the best possible decision. Advertising influenced the crypto investment decisions of just under 7% of respondents and just over 2% of respondents admitted to not seeking more detailed information, which is understandable to some extent when investing small sums as seen in Chart 17.

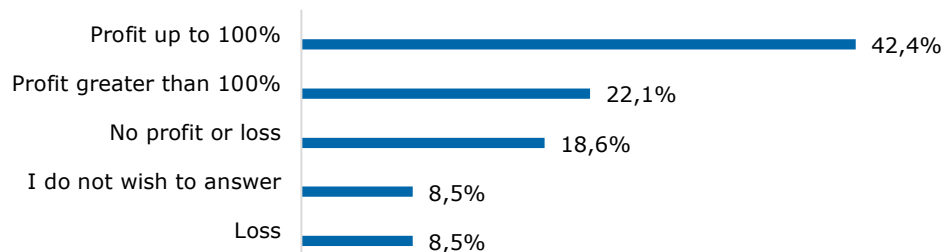
A related question that often arises is how significant an effect advertising has in decisions on investments in cryptoassets. The respondents did not think that advertising had a significant effect on them because about a third of users (33.3%) had never seen any advert and over a third (34.4%) were convinced that advertising never affected their opinions about cryptoassets.

### Profit or loss from cryptoassets

Although the media frequently report the fantastic profits that a few investors have achieved and the total losses that can follow various frauds, the experience of most investors falls between these extremes. In a period of persistent growth (bull market), even short-term investors make profits but when the market as a whole is falling, many investors make a loss. We were therefore curious how the respondents participating in our research were doing.

Chart 18

Profit or loss from investing in cryptoassets



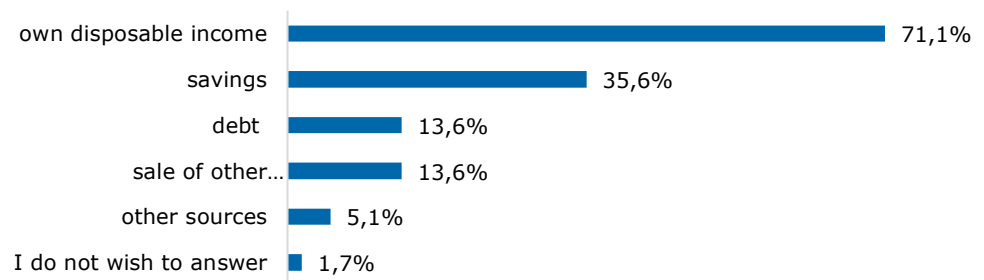
Respondents could select only one answer

More than 64% of users had made a profit, of which more than 42% had a profit of up to 100% and over 22% had a profit over 100%, as can be seen in Chart 18. Over 18% made no profit or loss and a little over 8.5% of users reported a loss. The same percentage of users did not wish to answer the question. These results are highly dependent on time. The survey was conducted at the end of 2021 after a long period of significant growth in the price of cryptoassets. If the market switches into a “bear market” phase, in which crypto prices decrease for several years – as has happened several times in the past – it can be expected that many investors will suffer losses. In a period of growth, the market in cryptoassets offers opportunities for significant profits, as can be seen in Chart 18, but if it enters a longer period of decline, investors may at least temporarily lose a substantial part of their investment.

## Financing the purchase of cryptoassets

The purchase of cryptoassets can be financed from various sources. We were therefore interested in how the crypto owners participating in the research looked at this question.

**Chart 19**  
Financing the purchase of cryptoassets



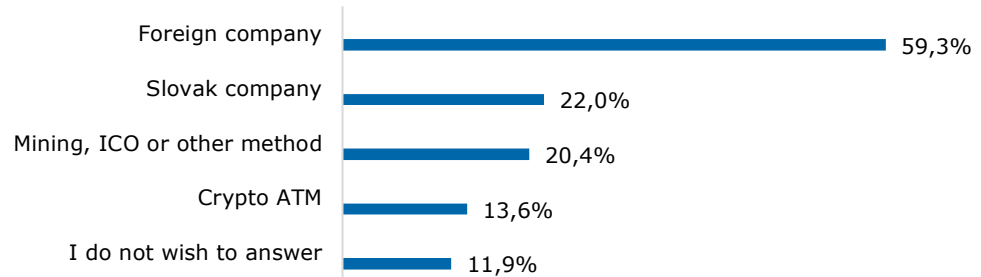
Respondents could select multiple answers that were not mutually exclusive

Crypto users in the research population were most likely to finance the purchase of cryptoassets with their own disposable income, which is consistent with the relatively small amounts invested, as can be seen in Chart 19 above. This source is followed at a considerable distance by financing from savings, which was used by just over 35% of respondents. Over 13% of respondents had sold other investments to purchase cryptoassets and the same percentage financed their purchase with debt. Other sources were used by just over 5% of crypto users. It is incredibly risky to finance the purchase of cryptoassets with debt because it may happen that when the debtor needs to repay the debt, the significant volatility of the prices may result in them selling the cryptoassets for less than they paid for them. Most respondents probably recognise this risk and therefore do not borrow to finance the purchase of cryptoassets.

## Method used to purchase cryptoassets

NBS recently published an [Overview of the crypto assets market in Slovakia](#), but even in that publication, we noted that many consumers do not purchase cryptoassets only from Slovak companies. The present research provides further evidence of this.

**Chart 20**  
Method used to purchase cryptoassets



Respondents could select multiple answers that were not mutually exclusive

Despite the existence of dozens of Slovak crypto service providers, most of the respondents who owned crypto (over 59%) had purchased them through foreign crypto service providers. Only 22% of users reported purchasing cryptoassets through a Slovak company. Alternative acquisition methods such as mining or an ICO (the sale of newly created cryptoassets on creation) were used by over a fifth of respondents. More than 13% of users had purchased cryptoassets for cash using a “crypto ATM” (a device similar to a bank ATM that allows cryptoassets to be bought and sold for cash). Just under 12% of respondents did not wish to answer this question. The results clearly show that the crypto world inherently functions across borders and therefore NBS supports regulation of the market in cryptoassets on the European level.

## Storing cryptoassets

The method chosen for storing cryptoassets can be crucial. We were therefore interested how respondents approached this problem. Most users (62.7%) stored their cryptoassets with the company where they purchased them, which is a relatively risky approach because they could lose their cryptoassets if the company went bankrupt. Just under a third of users (30.5%) used a software wallet and the safest means of storage – a hardware wallet – was used by a relatively small percentage of users (13.6%). This was the same as the percentage of users that did not wish to answer the question (13.6%).

The less safe the form of storage used, the greater the risk of losing all one’s cryptoassets. We therefore asked respondents if they had ever lost cryptoassets due to a security or technology incident. Most users (81.1%) had fortunately avoided such problems. The others lost cryptoassets due to the collapse of the company where the cryptoassets were held (13.3%) or by other means, for example, loss of access to a private key or the hacking of a crypto wallet (7.7%).

## Use of cryptoassets

In public discussion, opponents often claim that cryptoassets are only a speculative investment and cannot be used effectively for other purposes. We therefore wanted to ask what the crypto users in our research sample used their cryptoassets for. More than



three quarters of crypto owners (76.3%) intend to hold them as a long-term investment; around a quarter (25.4%) used them to purchase other assets in trading; just over a tenth (11.9%) used them for other activities related to cryptoassets such as staking, or as security for a loan. The same percentage of users (11.9%) used them to purchase goods or services. Other use types were reported by 3.4% of users and 6.8% declined to answer the question.

Stablecoins have been proposed as a solution to the problem of high volatility making cryptoassets unsuitable for paying for goods and services. Our research found that 13.6% of crypto owners had used stablecoins for this purpose; around a quarter (25.4%) had used them as a store of value on trading platforms and the same percentage (25.4%) had used them to exchange cash. A slightly smaller percentage (23.7%) had not used them at all and the same percentage of users (23.7%) did not know what stablecoins are. These are probably users intending to invest long-term in a cryptoasset (mainly Bitcoin) without taking a deeper interest in the market in cryptoassets. Only a small percentage (1.7%) mentioned other uses or did not wish to answer (1.7%).

## New trends in cryptoassets

The world of cryptoassets is developing at breakneck speed, with new trends emerging in the market every year. We were interested in whether Slovak crypto users know about these trends and whether they are actively engaging with them.

A major trend of recent years has been decentralised finance (DeFi). This name covers a range of financial products and services that function automatically based on “smart contracts” so that they are not managed by specific entities but by decentralised protocols. Supporters of this trend believe that DeFi is the future of the financial sector. A large percentage of the crypto users in our research (38.9%) did not recognise the term. The same percentage (38.9%) said that they had not yet used DeFi services. Only a small percentage of users (16.7%) said that they had used them at least once and an even smaller percentage (5.6%) claimed to use them regularly. DeFi thus remains a marginal phenomenon in the Slovak market for the time being.

Another trend that became popular in 2021 was non-fungible tokens (NFTs). Most cryptoassets of one type can be freely exchanged for each other, so that one bitcoin is usually worth the same as any other bitcoin, but, as the name suggests, each NFT is unique. Thanks to this property, NFTs have found uses for art, collecting and computer games.

Just under a third (32.2%) of the crypto users in our research sample did not know what NFTs are and around half (51.1%) knew about them but had never bought one. Only just over a tenth (11.1%) had bought at least one NFT and an even smaller percentage (5.6%) bought them regularly.

## Taxation and regulation of cryptoassets

The unfavourable taxation of cryptoassets is a common complaint in discussions of this asset class in Slovakia. In our [Overview of the crypto assets market in Slovakia](#), crypto service providers ranked taxation as one of the top three impediments to business growth in the Slovak market, so we were interested to see whether this view was shared by crypto users.

Exactly half of them (50%) considered the Slovak tax regulations for cryptoassets to be a fundamental problem whereas just under a third (32.2%) did not consider it a serious problem and the remainder (17.8%) were unable to comment. Nearly two thirds of users (61.1%) said that tax policy affected their investment decisions.

Another major issue is the potential regulation of cryptoassets. At present the market in cryptoassets is subject to only limited regulation, mainly in respect of the prevention of money laundering (AML). Unlike some other EU Member States, Slovakia does not have comprehensive regulation of the market in cryptoassets. We were therefore interested in the opinion of the research participants on this topic. Opinions were fairly evenly divided. A bit less than half the users (44.4%) thought that the market in cryptoassets should be subject to reasonable regulation; a slightly smaller percentage (42.2%) believed that it should remain completely unregulated; the remaining 13.3% did not know.

Differences in regulation between EU Member States have led the European Commission to propose European regulation of the market in cryptoassets (MiCA). There has been intensive discussion of this proposal on the European level for some time, in which NBS has also participated. We recently published an analysis of the first draft of the MiCA regulation (only in Slovak). We therefore wanted to know whether ordinary Slovak crypto users were aware of the planned European regulation. Less than a quarter (24.4%) of users had heard about it and the remaining three quarters (75.6%) had not heard of the MiCA regulation.

## 2.6 Comparison with foreign surveys

As the growing popularity of cryptoassets is a worldwide phenomenon, similar research has been conducted in several countries. The rapid development of the market in cryptoassets means that research in this area quickly goes out of date. It is therefore possible to compare only surveys conducted in the same period. The Slovak research was conducted at the end of 2021 and in the same year, consumer research on cryptoassets was also conducted in France<sup>3</sup> and the United Kingdom.<sup>4</sup>

As mentioned at the beginning, the Slovak research was carried out for NBS by the Focus agency between 26/11/2021 and 3/12/2021 with a representative sample of 1,010 respondents. The French research was commissioned by the ADAN crypto association and the auditing and consulting company KPMG, and conducted by the

<sup>3</sup> [La crypto en France: Structuration du secteur et adoption par le grand public](#). February 2022.

<sup>4</sup> [Research Note: Cryptoasset consumer research 2021](#). June 2021.

IPSOS agency between 9/12/2021 and 19/12/2021 with a representative sample of 2,003 respondents. The British research was carried out for the Financial Conduct Authority (FCA) by YouGov agency between 5/1/2021 and 24/1/2021 with a representative sample of 2,568 respondents and an additional boost sample of 994 crypto users.

The Slovak research found that 84.1% of respondents had heard about cryptoassets / cryptocurrencies; the French research found that 77% of respondents had heard about cryptocurrencies or NFTs while in Britain, 78% of respondents had heard about cryptocurrencies.

The three surveys found that cryptoassets were owned by 5.8% of the Slovak adult population, 8% of the French adult population and 4.4% of the British adult population. It is reasonable to assume that if the British research had been conducted at the end rather than the beginning of 2021, their percentage would be higher.

In all three countries, men are far more likely than women to invest in cryptoassets. The biggest difference was found in Slovakia, where 86.7% of users were men; in the French research, 60% of users were men and the British research found 78% of users were men.

Slovak respondents were most likely to own Bitcoin, Ethereum and Dogecoin; for the French, the top three were Bitcoin, Ethereum and Bitcoin Cash, and for the British they were Bitcoin, Ethereum and Litecoin. This result confirms the long-term dominance of the top two cryptoassets, which are the same in all countries whereas the third most popular cryptoasset is different in each of the compared countries.

The preferred way to store cryptoassets was the same in all three states – with a crypto service provider. Keeping cryptoassets on the trading platform where they were bought is reported by 62.7% of Slovak respondents, 62% of French respondents and 59% of British respondents. Although this method is convenient, it involves a higher level of risk because several trading platforms have gone bankrupt in the past, leaving their users with significant losses.

Many of the questions differed from country to country so they cannot be compared. In the questions where comparison is possible, however, the results for the three countries are consistent in many aspects. This suggests that the market for cryptoassets is in a similar situation in Slovakia, France and the UK despite significant differences between the countries' economies and legal systems. The market in cryptoassets is essentially global and tends to blur differences between countries. This is another reason for harmonising regulation of the market in cryptoassets as is envisaged by the proposed European MiCA regulation.

## Conclusion

NBS would like to take this opportunity to thank all the respondents and the Focus agency for the implementation of the consumer research. As far as we are aware, it is the first survey dedicated to cryptoassets and the digital euro to be carried out with a representative sample of the population. NBS will take the results into account in its activities in these areas, especially in providing financial literacy education for consumers. The consumer research should be repeated in future so that we can monitor the development of consumers' awareness, attitudes, knowledge and experience of these innovations.