

The State of Cryptocurrency Adoption: Germany Q4 2019

Results of a representative survey among German Internet users

Report No. 3

February 12th, 2020

Executive Summary

Based on a representative survey among 3,059 German adult Internet users, this report offers a range of insights about cryptocurrencies and blockchain technology. 86.8% of the respondents have at least some knowledge of cryptocurrencies, whereas only 64% of them know about blockchain technology. 14.1% of the respondents currently own cryptocurrency, while another 10.7% did so in the past. Among the cryptocurrency owners, 85% hold Bitcoin, followed by Ethereum (30%) and Litecoin (23%).

Cryptocurrency owners have on average made a profit of 85% on their initial investment. The average (former) cryptocurrency owner is male (68.7%), well-educated, and over 10 years younger than a non-owner. Additionally, their average net income is €432 higher than that of non-owners. A 'predominantly ideological' motivation for buying and owning cryptocurrency can be assigned to 64% of current and past owners.

About us

The *Blockchain Research Lab (BRL)* was founded in April 2018 as a non-profit organization. Our focus is on independent and interdisciplinary academic research on blockchain technology and its socio-economic impact. We award scholarships to high-potential, motivated and committed scientists. The scholarships enable the recipients to work on their projects independently and autonomously.

Introduction

The relevance of cryptocurrencies in society remained unclear until recently for a lack of research activity. Based on representative population data, the Blockchain Research Lab (BRL) researches the proliferation of cryptocurrencies and the knowledge about these innovative applications of blockchain technology over time. The results are regularly published in the form of scientific reports.¹ The present report presents insights into the current state of the adoption of cryptocurrencies in Germany. It focuses on providing a general understanding of the relevance of cryptocurrencies in German society, offering substantial and insightful data to the public, to politics and to science. The analysis covers awareness of cryptocurrencies, ownership, investments and demographics.

Methodology

This report builds on the data of 3,059 German Internet users, i.e. people who were online at least once in the last quarter. The sample is representative of the German Internet-using population in terms of age and gender. The participants responded to an online questionnaire created by the BRL. The survey was conducted during October and November 2019 by the panel provider *mo'web research*, who maintains a panel of more than 150,000 individuals in Germany for online surveys. 27,094 panelists were contacted, 4,905 of which responded. 615 respondents were rejected because their IP address, browser cookies or browser fingerprints would not have allowed us to prevent multiple participation. To ensure high data quality, another 250 participants who sped through the survey, i.e. answered too quickly for their answers to carry much meaning, were dropped manually. 910 respondents were not considered because they did not fit the given quotas for representativeness, and 71 other persons failed to complete all of the questionnaire. This left us with 3,059 usable responses.

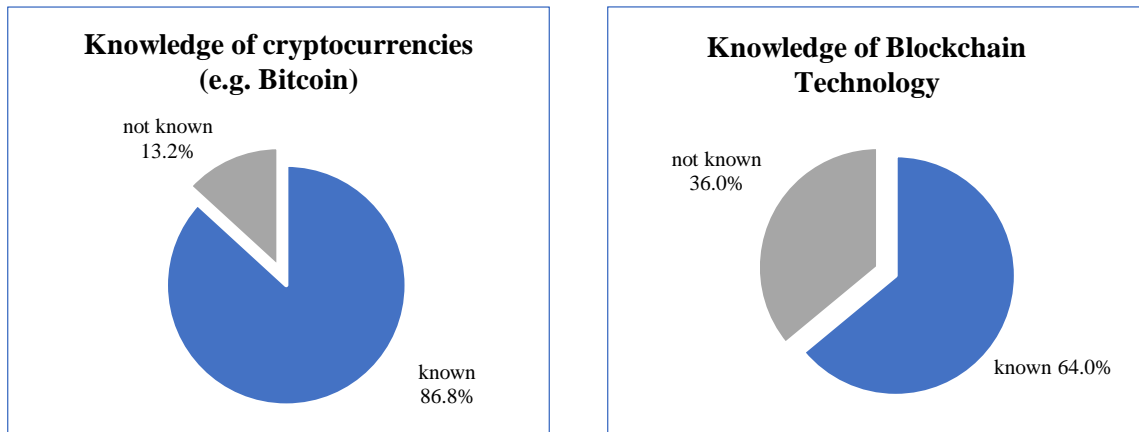
The survey proceeded as follows: The panelists were invited by e-mail, while initially no indication was given as to the topic of the survey to prevent any bias from self-selection. Monetary rewards for participation were offered. The questionnaire itself filtered the participants twice: once according to their familiarity with cryptocurrencies and then, at a later stage, according to whether they had at any point possessed cryptocurrencies. Participants who met neither criterion were forwarded to a set of mandatory socio-economic questions about their personal status, including for example income and education.

Generally, any recruitment of survey participants is likely to introduce bias. For example, conducting a telephone survey requires respondents not only to own a phone but also to accept an unknown caller and to have the time and interest to then answer the questions. This is certainly more likely for some parts of the population than for others. Similarly, our sample only comprises those who were willing to join a panel. This likely means that certain subgroups of the population are overrepresented, for example people who are affine to the Internet, who have time to answer surveys and who are comfortable sharing personal details over the Internet. So, while our sample is approximately representative, like any other survey, we cannot claim representativeness of the population in all regards.

¹ The BRL conducted a first survey in Q1 2019, whose results are available at blockchainresearchlab.org in the form of two reports on [the state of cryptocurrency adoption](#) and [the perception and actual use of cryptocurrencies](#) in Germany.

Knowledge

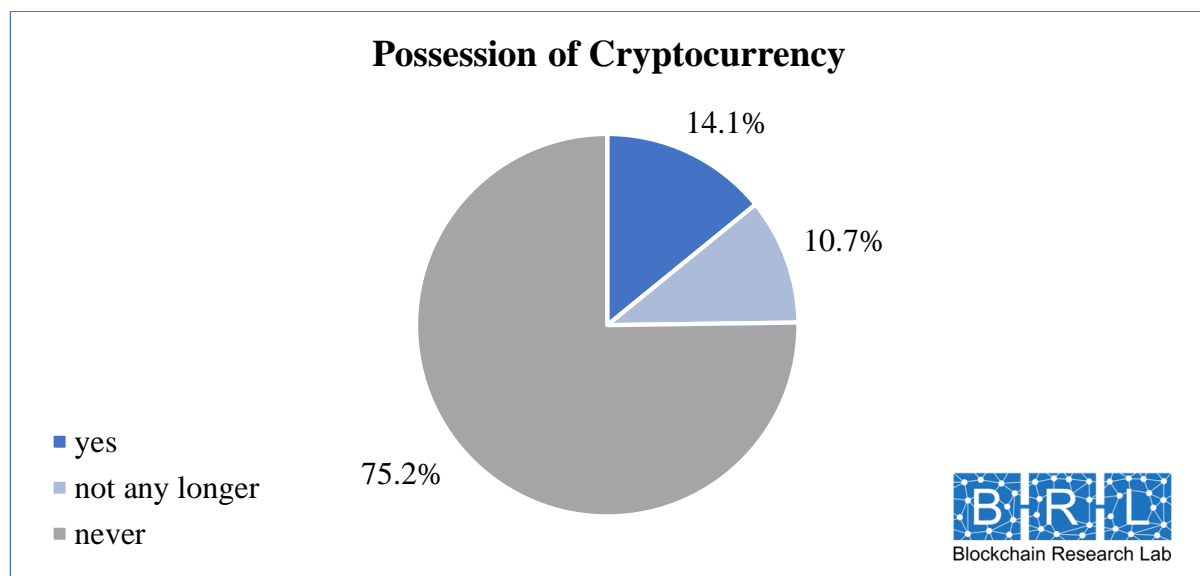
13.2% of respondents stated that they had no knowledge of cryptocurrencies, e.g. Bitcoin, while the vast majority (86.8%) said they had at least a little knowledge of cryptocurrencies.



By comparison, the blockchain technology that underlies the cryptocurrencies is only known to a smaller share of society. 64% of the survey participants stated that they knew blockchain technology at least somewhat, while 36% said they had no such knowledge whatsoever.

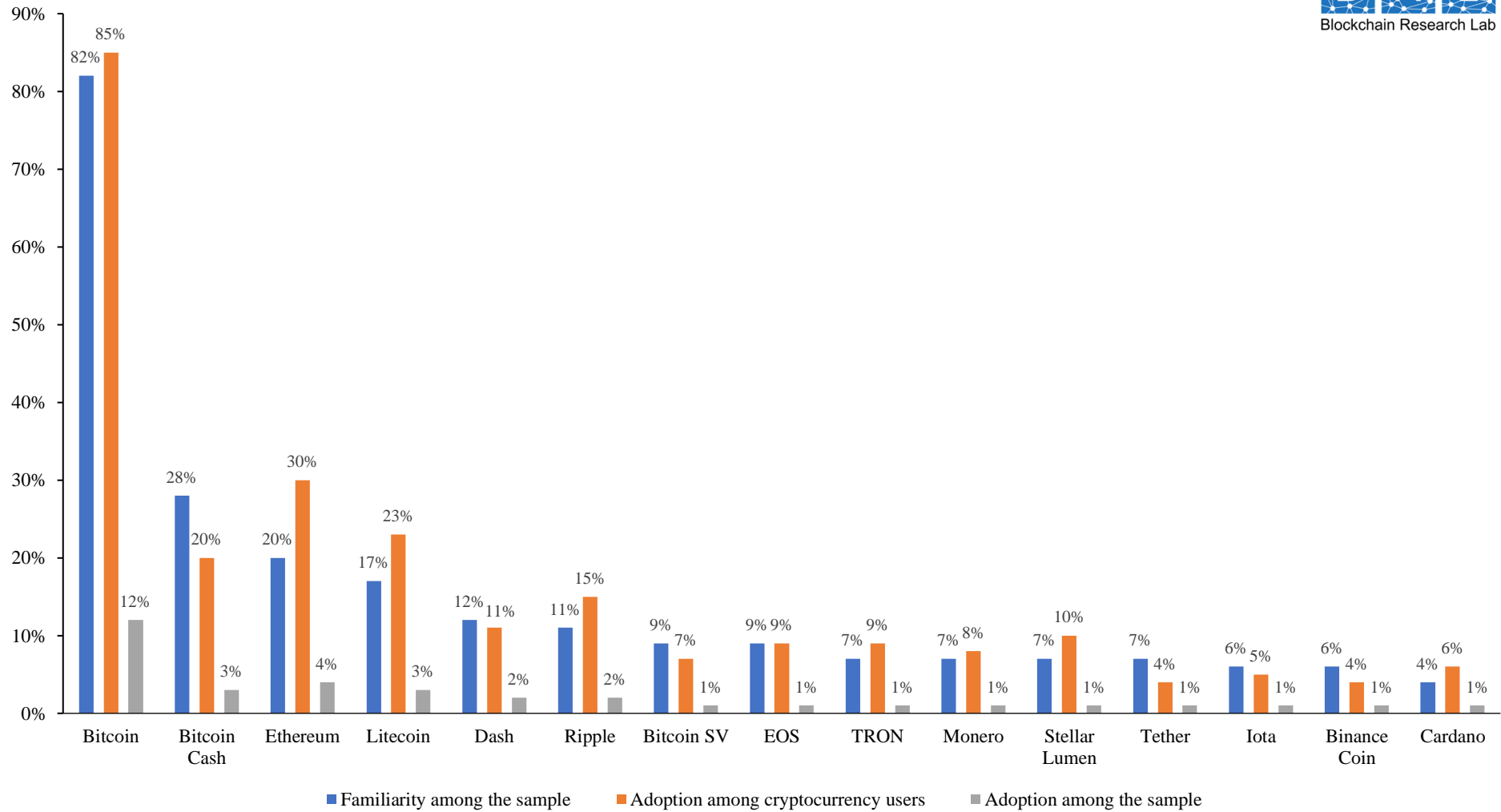
Familiarity and usage

14.1% of the survey participants stated that they currently own cryptocurrencies with Bitcoin clearly dominating (85%). Another 10.7% said they had owned cryptocurrencies in the past, while the majority (75.2%) of the respondents have no personal experience with cryptocurrencies. In comparison, 19.3% of the respondents own stocks, which is significantly more than the share of stock holdings among the German population of 16.2% (7.1% directly through shares; 9.1% indirectly through equity funds and mixed funds).²



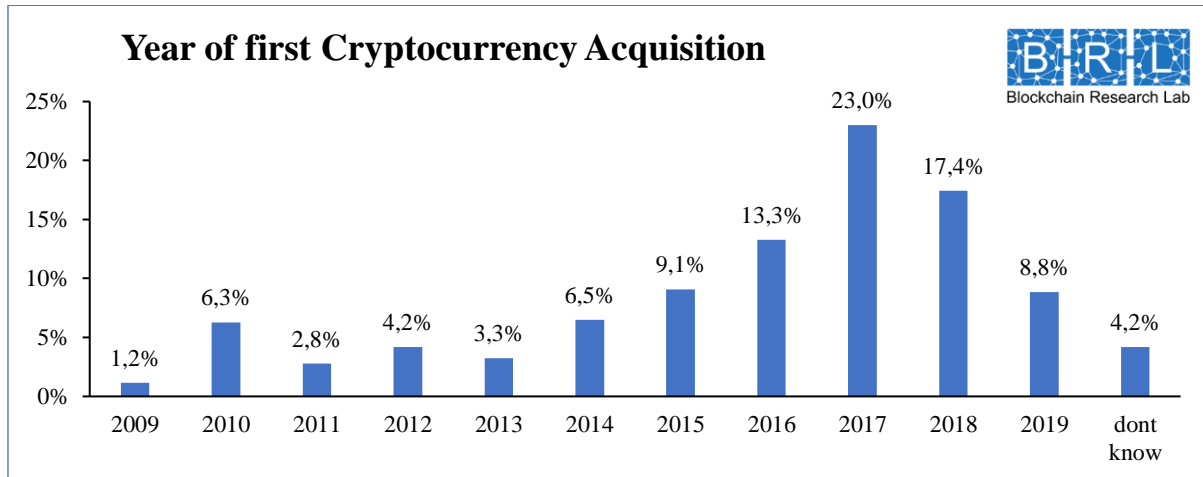
² Determined by [Deutsches Aktieninstitut e.V. for the year 2018](#). The total number of stock owners amounts to 10.3 million among the German population (respondents aged 14+ years). While 4.5 million own stocks only and 5.8 million are owners of funds only, a total of 2 million are owners of both.

Familiarity and Usage of Major Cryptocurrencies

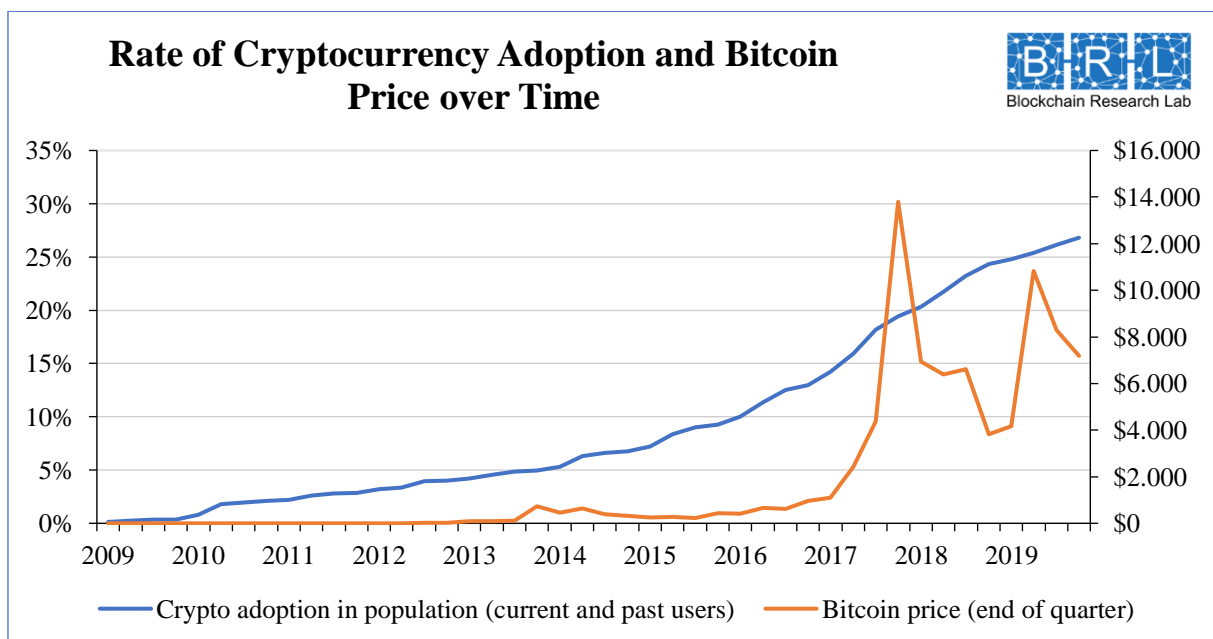


Adoption

Asked when they bought their first cryptocurrency, most current users mentioned 2017 or 2018, which corresponds to the period when the Bitcoin price was at its peak. While a surprisingly large number of users bought their first cryptocurrency in 2010, we observe an increase from 2011 to 2017 and a steady decline thereafter.

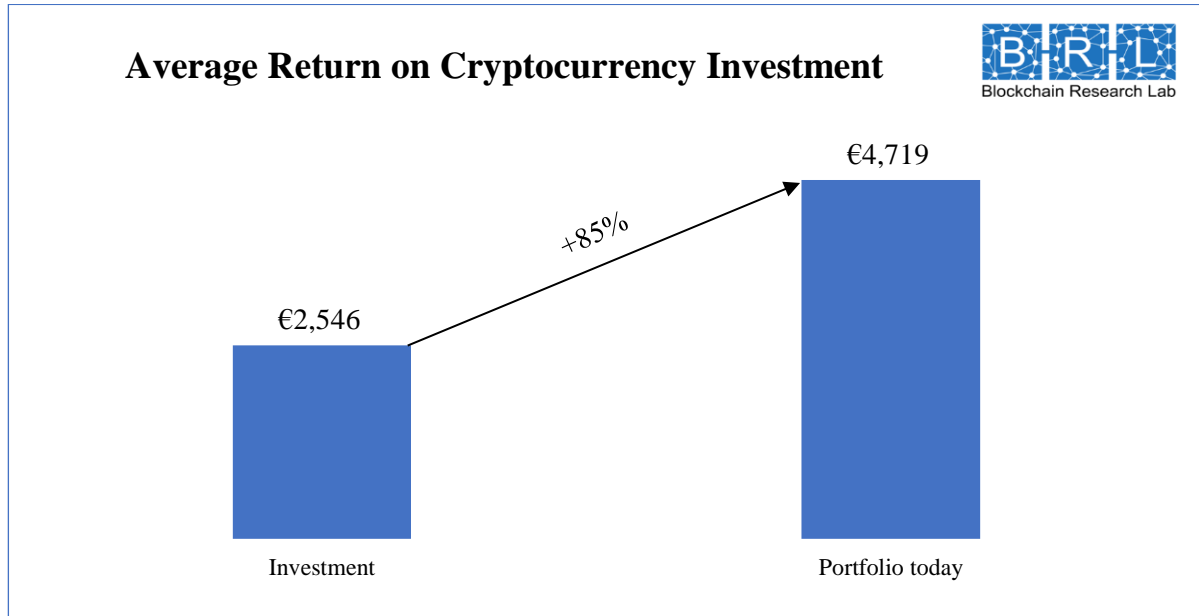


In the following, the cumulative ownership rate over time is presented on the basis of the respondents' statements on when they first bought cryptocurrencies and plotted alongside the quarterly average Bitcoin price. Here, adoption means the share of people either having currently or in the past owned cryptocurrency. It can be seen that the adoption rate's increase has been rising steadily until 2016, whereas the slope is steepest for the year 2017 where the price of Bitcoin was surging. In line with a heavy price drop in early 2018, the rate of new adopters slowed down.



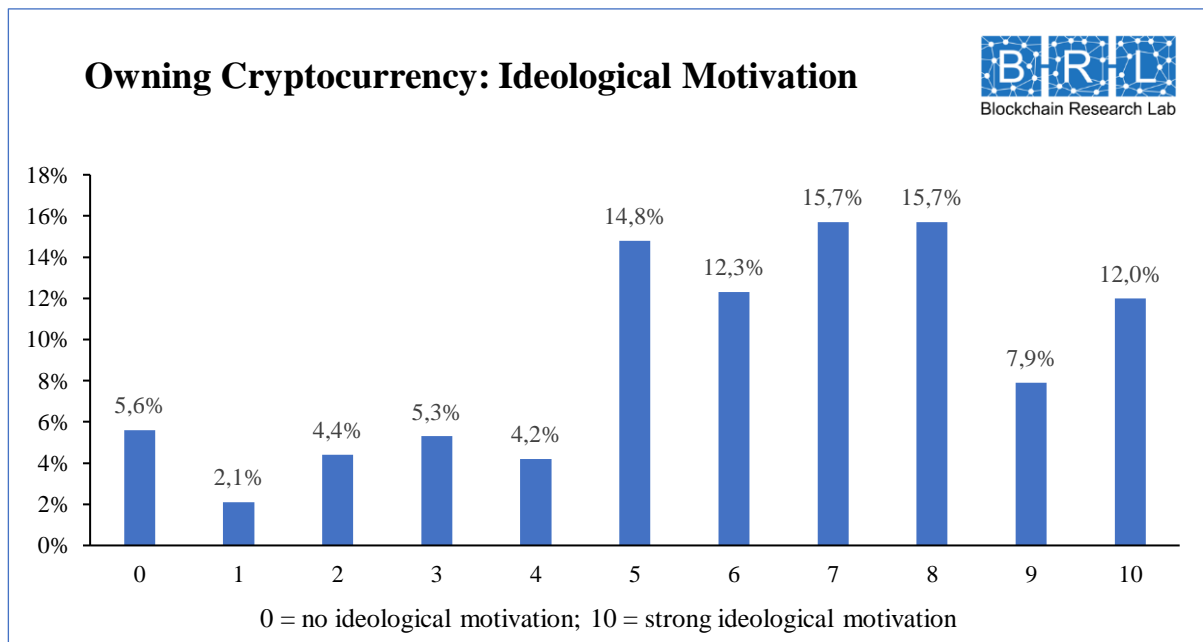
Return on Investment

The respondents' investments in cryptocurrencies have on average increased in value by 85%. Today's portfolio value averages €4,719. By contrast, the first investigation conducted a year ago revealed an average return of 128% and a portfolio value of €6,314, while investments were at a similar level.



Ideology

Asked about the importance of ideology as part of their motivation to own cryptocurrency, the owners on average indicated a value of 6.2 on a scale of 0 (no ideological motivation) to 10 (strong ideological motivation). Summing up the responses of 6 and above, it can be concluded that for 64% the motivation was 'predominantly ideological', 2% more compared to the first survey. Otherwise, the distribution of responses to this question has remained fairly stable over time.



Demographics

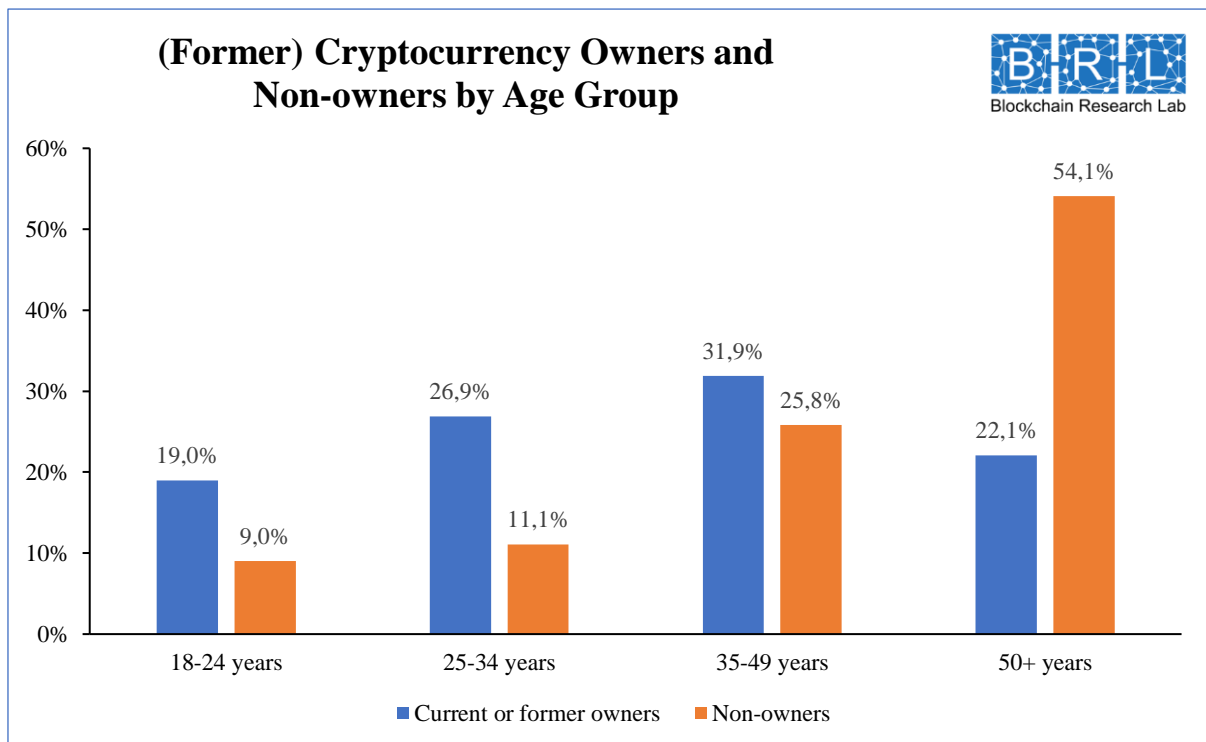
Respondents who currently own or have in the past owned cryptocurrency are much more likely to be males than non-owners (69% versus 45%).

Gender	Have you ever owned cryptocurrency?	
	yes	no
Males	68.7%	45.1%
Females	31.3%	54.9%

On average, (former) owners are markedly younger than those who have never owned cryptocurrency (38.1 versus 49.5 years).

Age	Have you ever owned cryptocurrency?	
	yes	no
Average age	38.1 years	49.5 years

Most former or current cryptocurrency owners are in the 35 to 49 years age bracket, whereas 54% of the non-owners are 50 years or older. Thus, cryptocurrencies are mostly used by younger people.



Cryptocurrency owners – past or present – are somewhat better educated: A greater share of them has a university degree or even a PhD than among the non-owners. When applying a simple scoring model to rate education levels, cryptocurrency owners achieve an average of 3.15, while non-owners score only 3.03 on average.

Educational achievement	Score	Have you ever owned cryptocurrency?	
		yes	no
No graduation	1	0.8%	0.5%
Main or secondary school	2	19.5%	21.2%
High school (A-levels)	3	22.2%	14.3%
Craftsman training	3	10.6%	16.3%
Commercial training	3	14.4%	24.3%
University degree	4	29.7%	22.3%
PhD	5	2.9%	1.2%
Average score		3.15	3.03

Cryptocurrency owners also differ from non-owners with respect to their personal income – the formers are markedly better off, being overrepresented in all income classes upwards of €2,000. While 55% of all present or former cryptocurrency users have a net monthly household income of €2,000 or more, this only applies to 40% of the other group.

Net monthly household income	Have you ever owned cryptocurrency?	
	yes	no
Below €500	4.1%	6.3%
€500 to €999	7.8%	12.1%
€1.000 to €1.499	13.6%	18.3%
€1.500 to €1.999	15.7%	17.4%
€2.000 to €2.499	27.6%	20.7%
€3.000 to €4.999	21.5%	15.2%
€5.000 or more	6.1%	3.7%
Average	€2,399	€1,967

In terms of relationship status, we find that singles are overrepresented among cryptocurrency owners, while non-owners are more likely to be widows or persons living in separation.

Relationship status	Have you ever owned cryptocurrency?	
	yes	no
Single	29.9%	23.6%
Married	41.7%	41.7%
In a partnership	22.0%	19.0%
Widowed	1.2%	3.9%
Separated or divorced	5.3%	11.9%

Cryptocurrency owners (past and current) tend to live in slightly larger households than non-owners, while the number of the respondents' children is quite similar across the two groups (0.93 vs. 1.06). The average number of children per woman among the German population is approximately 1.565, which indicates a certain bias in our sample towards singles.³

Further information	Have you ever owned cryptocurrency?	
	yes	no
Number of persons in the household	2.49	2.18
Number of children	0.93	1.06

Households include the respective person interviewed, i.e. the minimal value per household is 1.

Concluding remarks

This report has provided a current overview of the phenomenon of cryptocurrencies in Germany and their relevance in society. Considering that cryptocurrency owners have invested an average of €2,546 while their net household income is €2,399 per month, it seems that they are, by and large, investing responsibly and not taking excessive risks. This would be consistent with cryptocurrency owners having a higher education level compared to non-owners and thus being able to better assess the risks associated with cryptocurrency investments. On the contrary, the relatively high income of cryptocurrency owners would enable them to take higher risks. Note also that despite a sharp drop in prices since 2018, German cryptocurrency owners continue to enjoy positive returns on average.

How steep the adoption curve for cryptocurrencies will turn out in the near future, remains to be seen. A correlation of an increasing ownership rate with increasing prices for cryptocurrencies has not been assessed academically but is presumable. In case, the share of the population which has had contact with cryptocurrencies (current and past ownership) is expected to increase moderately until the next survey.

³ Determined by [Statistisches Bundesamt for the year 2018](#). On average, 1.565 children were born per woman in the German population aged 15 – 49 years. The maximum number of children that could be mentioned in the survey was "five or more", which we interpreted as five.

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