

Is Using a Financial Advisor Related to Cryptocurrency Investment?

Alex Brockbank,¹ Charlene Kalenkoski,² Christopher Browning,³ and Michael Guillemette⁴

Abstract

Do financial advisors recommend cryptocurrency investment within a household portfolio? Cryptocurrencies have emerged in popularity, especially in the United States, as households seek to maximize returns. Financial advisors are expected to provide beneficial advice for a household in managing financial decisions including investments. The existing literature has examined this relatively new form of investing and found determinants for cryptocurrency investment but has not sufficiently explored the association between the investor's use of a financial advisor and the decision to invest in cryptocurrency. With data from the 2018 wave of the National Financial Capabilities Study (NFCS), this paper examines the relationship between the use of a financial advisor and cryptocurrency investment for American investors. The results suggest that investors who use a financial advisor are more likely to invest in cryptocurrencies. Additional determinants seen in previous works are also confirmed in the current study; showing that investors who are younger, married, and have higher subjective financial literacy are more likely to have cryptocurrency investments compared to individuals who are older, unmarried, and have lower levels of subjective financial literacy.

Creative Commons License



This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 License

Recommended Citation

Brockbank, A, Kalenkoski, C., Browning, C., & Guillemette, M. (2025). Is using a financial advisor related to cryptocurrency investment? *Financial Services Review*, 33(3), 1-19.

Introduction

Cryptocurrencies have emerged as a popular and exciting investment opportunity. In early 2017, the global cryptocurrency market capitalization was just under \$20 billion and a year later that market cap was closer to \$500 billion—extending beyond \$3 trillion in 2025 (Best, 2025). This

phenomenon is also taking hold in the United States. In 2022, the U.S. cryptocurrency market size alone was valued at just under \$1.2 billion with researchers expecting an annual growth rate of about 12% until 2030 (Grand View Research, 2023). Furthermore, about two out of three Americans say they are familiar with

¹ Corresponding author (alex.brockbank@uvu.edu). Utah Valley University, Orem, UT, USA.

² James Madison University, Harrisonburg, VA, USA.

³ Texas Tech University, Lubbock, TX, USA.

⁴ Texas Tech University, Lubbock, TX, USA.

cryptocurrency and about 28% of American adults own cryptocurrency in the U.S. (Blackstone, 2025).

The opportunity and ability to invest in cryptocurrency has continued to increase over time. From the inception of Bitcoin, the first cryptocurrency investment option, to the first exchange-traded fund (ETF) that included cryptocurrency becoming available in the U.S., to even more availability and ease of investment (Zweig, 2021).

There is plenty of reason for excitement, but also hesitation about cryptocurrencies and the volatility it introduces to investment decisions. When navigating complicated and risky investments, individuals may hire a financial advisor to help them select and optimize these investments within their portfolios, thereby mitigating risks and increasing returns. While current literature has thoroughly examined cryptocurrency as an investment option (Andrianto & Diputra, 2017; Inci and Lagasse, 2019), including the determinants of cryptocurrency investment (Xi et al., 2020; Kim et al., 2023) and its impact on an investment portfolio (Wong et al., 2018), little extensive research has been conducted to determine the role and influence of a financial advisor on cryptocurrency investment. This problem—and gap in the body of literature—is addressed in the current study. Does an individuals' use of a financial advisor have an influence on their decision to invest in cryptocurrencies?

The current study addresses this question, along with furthering the research on the associations between other measures of personal human capital and cryptocurrency investment. First, the relevant literature on cryptocurrency and financial advisors will be thoroughly examined. A theoretical framework is discussed and hypotheses developed. A statistical estimation is completed using a probit model on data from the 2018 wave of the National Financial Capabilities Study (NFCS).

The findings show that investors using a financial advisor have a higher probability of investing in cryptocurrency. This finding suggests that individuals who use a financial advisor are more likely to use beneficial complex investment

options, specifically cryptocurrency, within their investment portfolio. There are valuable implications from the results of the current study. From the financial advisor's perspective, as the popularity of cryptocurrencies continue to increase, clients will have more questions about the opportunity and a greater desire to participate and reap the benefits of investment. For clients, if they desire to better use complex investment tools, they can benefit from hiring a financial advisor.

Literature Review and Theoretical Framework

Human Capital and Existing Cryptocurrency Investment Research

Research has examined common traits among the individuals who choose to invest in cryptocurrencies and found certain demographic variables to be influential in the decision. Among them, gender, education, income, and wealth are significant predictors of cryptocurrency investment—most investors are men, higher educated, have higher income, and have accumulated greater wealth (Lammer et al., 2020; Xi et al., 2020). Another association exists between investor age and the cryptocurrency investment decision, wherein younger investors are more likely to invest compared to older individuals (Xi et al., 2020). Hackethal et al. (2022) show that cryptocurrency investors are more likely to be engaged in risk-seeking financial behaviors.

Social influence and public perception are associated with the decision to invest in cryptocurrency (Gupta et al., 2020). Ayedh et al. (2020) find that profitability, compatibility, awareness, and facilitating conditions impact cryptocurrency investment decisions. Other studies have similarly found that potential future gain (profitability) is a significant factor in cryptocurrency investment (Yilmaz & Hazar, 2018; Arias-Oliva et al., 2019).

The existing literature finds conflicting results with the relationship between financial literacy and cryptocurrency investment. Arias-Oliva et al. (2019) find evidence that financial literacy has no statistical significance; however, Zhao & Zhang (2021) show that financial literacy was a

statistically significant determinant, but that investment experience predicts cryptocurrency investment more accurately than financial literacy. They further delve into the significance of financial literacy and show that only subjective financial knowledge, determined by asking the individual to assess their knowledge, is found to have a significant positive association. The relationship between objective financial knowledge, determined by a scored questionnaire on important financial topics and cryptocurrency investment, is not significant (Zhao & Zhang, 2021). Kim et al. (2023) find cryptocurrency investment to have a negative association with objective investment literacy, but a positive association with subjective literacy measures. An earlier study also found that subjective financial knowledge was significantly related to investment behavior regardless of objective financial knowledge levels (Allgood & Walstad, 2016).

Previous literature has examined portfolio construction utilizing cryptocurrencies and found that cryptocurrencies add beneficial diversification results within an investment portfolio (Andrianto & Diputra, 2017; Chuen et al., 2018; Wong et al., 2018; Inci and Lagasse, 2019). Wong et al. (2018) further examine cryptocurrency investments and find that different coins have different hedging or diversification benefits, thus adding to the potential of the investment, but also adding to the complexity and volatility.

Human capital theory posits that obtained education, training, and skills will increase an individual's abilities, including financial capabilities (Ibrahim, 2018), and overall productive efficiency (Becker, 1962). Additional research has examined domain-specific human capital and emphasized the importance of specialization within different industries on outcomes (Gibbons & Waldman, 2004; Sullivan, 2010; Rauch & Rijsdijk, 2013). Studies have reviewed domain-specific expertise within the context of financial advisor services and found similar benefits of specialization (Hershey et al., 1990; Hanna & Lindamood, 2010; Pilote et al., 2024).

The current study also uses the theoretical framework of information economics. Consumers engage in the search for information to maximize their utility, but the cost of search—including monetary spending, time consumption, and opportunity cost—is negatively related to consumer engagement in search (Stigler, 1961; Lin & Lee, 2004). Cryptocurrency investments are complex in nature (Wong et al., 2018; Stosic et al., 2019) and can be extremely volatile (Dasman, 2021), which increases the cost of the search for information and reduces participation. Smith et al. (1999) find that higher knowledge reduces cost and increases the efficiency of the information search process. It can, therefore, be expected that greater domain-specific human capital increases an individual's willingness to complete meaningful research of complex investments—such as cryptocurrency investments. While the ownership of human capital is generally nontransferable (Lev & Schwartz, 1971), hiring professionals with domain-specific human capital, such as a financial advisor, is an effective way to increase decision-making capacity by utilizing the hired professional's expertise and training (Hershey et al., 1990).

One role of a financial advisor is to help clients navigate the risk and complexities of investing (Kitces, 2021). Studies find that households using a financial advisor tend to be wealthier, have higher incomes, and have greater financial literacy than those who do not use a financial advisor (Smith et al., 2012). Additional research also shows that financial advisors play a crucial role in helping individuals navigate significant life events, and that experiencing these major events significantly influence the decision to seek out a financial advisor (Cummings & James, 2014; Sommer & MacDonald, 2022). Educational achievement and risk tolerance are also positively associated with a consumer's decision to seek help from a financial advisor (Hanna, 2011; Barthel & Lei, 2021).

Hypotheses

Within the scope of the current study, financial advisors are assumed to have high domain-specific (financial) human capital relevant to investments. Given this assumption, and the

framework of information search and human capital theory, it is expected that financial advisors will be more likely to engage in the search for information on cryptocurrency investments to better maximize the utility of their clients. Thus, leveraging the human capital of a financial advisor should lead to an increase in the utilization of beneficial complex investment options, such as cryptocurrency, within an investment portfolio. Therefore, the main hypothesis of the current study is as follows:

Hypothesis 1: The use of a financial advisor is associated positively with cryptocurrency investment.

Human capital theory and the existing literature on cryptocurrency also motivate the following hypotheses:

Hypothesis 2: The key demographic variables (education, gender, income, and investment assets) are each associated positively with cryptocurrency investment.

Hypothesis 3: Age is associated negatively with cryptocurrency investment.

Data

The data utilized are from the 2018 National Financial Capability Study (NFCS) State-by-State and follow-up Investor surveys. The later surveys, from 2021, were considered for use alone, or in combination with 2018 data, but the key variable measuring the use of a financial advisor was significantly altered and, therefore, it was determined that the use of 2018 survey results are sufficient for the current study. The survey is a project of the FINRA Investor Education Foundation (FINRA Foundation). The State-by-State survey is conducted to provide an extensive analysis of the financial capabilities of U.S. adults. NFCS State-by-State data are

nationally representative of American adults (age 18+). A portion of these survey respondents are then asked additional questions for the investor survey. The investor survey data provide a more in-depth analysis regarding the investing decisions of the state-by-state survey respondents. The respondent count for the investor survey is 2,003.

Knowing that approximately two-thirds of Americans say they are familiar with cryptocurrency, as stated in the introduction, and that about 28% of American adults own cryptocurrency (Blackstone, 2025), a dataset that examines U.S. investors within the scope of the current paper. The NFCS data fit these parameters.

While the initial data contain 2,003 respondents, investors who have not heard of cryptocurrency and those that did not answer, or chose not to answer, the applicable questions from the survey for the variables of the present study are removed from the analysis sample. The final count after these exclusions is 1,556 respondents. Weights are provided and applied to approximate the investor population in terms of age and education.

Two-sample t-tests are completed to compare the analysis sample to the original sample (shown in Table 1). The results show insignificant differences between the two samples for gender, ethnicity, marital status, age, and income; indicating that the analysis sample is not statistically different from the original sample on these dimensions. There is, however, a statistically significant difference found between the two samples in education, though the magnitude of difference is negligible. The analysis sample is slightly higher educated than the original survey sample.

Table 1. Demographic Variables Mean Comparison via T-Test

Variable	Full Mean ¹ (Standard Error) (N = 2,003)	Analysis Mean ² (Standard Error) (N = 1,556)	p-Value
Gender	0.5667 (0.0111)	0.5925 (0.0125)	0.1208
Ethnicity	0.8178 (0.0086)	0.8130 (0.0099)	0.7147
Marital Status	0.6370 (0.0107)	0.6343 (0.0122)	0.8669
Age	4.6505 (0.0328)	4.6407 (0.0372)	0.8437
Education	2.6410 (0.0229)	2.7204 (0.0251)	0.0201 **
Income	2.2341 (0.0217)	2.2661 (0.0246)	0.3298

1: Full mean represents the mean of the NFCS Investor survey complete sample.

2: Analysis mean represents the mean of the current paper analysis sample.

*Significance at the 10% Level, **Significance at the 5% Level, ***Significance at the 1% Level

The dependent variable is the choice of respondents to invest in cryptocurrency. It is a dummy variable that takes a value of 1 if the respondent is currently invested in cryptocurrency (either directly or through a fund) and 0 otherwise.

The main explanatory variable captures the investor's use of a financial advisor when making investment decisions. Investors are asked on the survey whether they use a "financial advisor other than stockbrokers" when "making an investment decision." This variable is dichotomous and takes a value of 1 if the respondent answered yes, and 0 otherwise.

Additional key independent variables for this study are measures of human capital. These include two measures of financial literacy (subjective investment literacy and objective investment knowledge) and two measures of education (education level and participation in a financial education program). For subjective investment literacy, respondents are asked to self-assess their overall knowledge about investing from 1 to 7. This variable is reduced to include three groupings (below average, average, and above average). This reduction is based on the variable statistics, with "average" representing respondents who self-assessed the mean rating of 5 (a score of 1-4 is labeled "below average", the reference category, while "above average" is a score between 6-7).

The NFCS survey asks ten questions to assess the respondent's investment knowledge, four of them

cover basic investment knowledge topics including stocks, bonds, the relationship between risk and return, and average return. The objective investment knowledge variable sums the correct responses for these four questions and takes a value from 0 (no correct responses, the reference category) to 4 (all correct answers). Answers of "don't know" and "prefer not to say" are coded as incorrect responses for each investment question.

Education level is a categorical variable including no college (reference group), some college, a bachelor's degree, and a post-graduate degree. Participation in a financial education is a dummy variable that takes a value of 1 if the respondent received and participated in a financial education program, and 0 otherwise.

Other demographic and economic factors are included as independent variables for control purposes. These include age bracket, gender, ethnicity, marital status, income range, employment status, investment assets, and risk aversion. Gender, ethnicity, and marital status are dichotomous variables that take a value of 1 if the respondent is male, white, or married, and 0 otherwise. Age bracket ranges from 18-24 (youngest bracket) to 65+ (oldest bracket) with 10-year increments for each bracket. The lowest age group (aged 18-24) is used as the reference category. Income range is coded into four categories: less than \$50k (reference group), \$50k-\$100k, \$100k-\$150k, and greater than \$150k. Employment status includes self-employed, employed full-time, employed part-time, retired, and those not currently employed.

The investment assets variable measures the approximate value of the respondents' non-retirement accounts and is coded into seven groups: \$10k or less (reference group), \$10k-\$50k, \$50k-\$100k, \$100k-\$250k, \$250k-\$500k, \$500k-\$1 million, and \$1 million or more. Risk aversion is measured on a scale of 1 to 10 (self-reported on the survey as risk willingness and reverse coded to represent risk aversion). Due to a small number of respondents within the extremities of the ten categories, this variable is condensed by combining the lowest scores (1 and 2) and then the highest scores (9 and 10). The resulting variable of risk aversion is eight categories, with a value of 1 being those very willing to take risk (lowest risk aversion) and 8 for those not at all willing to take risk (highest level of risk aversion).

Model

The current study estimates the following probit model to examine the cryptocurrency investment decision of investors:

$$y_i^* = \beta_0 + X_i\alpha + Z_i\lambda + e_i \quad e_i \sim N(0,1)$$

$$y_i = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{if } y_i^* \leq 0 \end{cases}$$

where y_i^* is a latent variable representing whether the investor, i , chooses to invest in cryptocurrency or not. The observed variable, y_i , takes a value of 1 if the respondent invests in cryptocurrency and 0 otherwise.

The main explanatory variables (use of a financial advisor, objective investment knowledge, subjective investment literacy, financial education participation, and education) are represented by X_i in the model. The matrix, Z_i , includes all the demographic and economic variables in the study. These variables are age, gender, ethnicity, marital status, income level, employment status, investment assets, and risk aversion.

The intercept for the model is β_0 . The coefficients for the main explanatory variables are represented by α , and λ is the vector of coefficients for the control variables. The error term, e_i , is assumed to follow the standard normal distribution.

To test the robustness of the full model, eight additional probit models are estimated. Each new model iteration removes a single dependent variable from the full model. The removed variables were determined based on existing literature and include objective investment literacy, subjective investment literacy, education, age, gender, marital status, income, and investment assets.

Results

Table 2 provides descriptive statistics for the dependent and explanatory variables. About 85% of the analysis sample is not currently invested in cryptocurrencies and approximately 60% of the sample is using a financial advisor

Table 2. Descriptive Statistics

Variable	Percent	Variable	Percent
Cryptocurrency Investment		Ethnicity	
No	84.86%	Non-White	23.34%
Yes	15.14%	White	76.66%
Use Financial Advisor		Marital Status	
No	39.71%	Not Married	41.27%
Yes	60.29%	Married	58.73%
Objective Investment Knowledge		Income Range	
0 - None Correct	2.17%	Less than \$50k	26.21%
1	11.77%	\$50k - \$100k	43.19%
2	21.14%	\$100k - \$150k	19.25%
3	31.52%	Greater than \$150k	11.35%
4 - All Correct	33.39%	Employment Status	
Subjective Investment Knowledge		Self-Employed	9.83%
Below Average (1-4)	32.98%	Employed Full-Time	42.44%
Average (5)	34.88%	Employed Part-Time	7.32%
Above Average (6-7)	32.14%	Retired	30.43%
Financial Education Participation		Not Currently Employed	9.97%
No	72.68%	Non-Retirement Investment Assets	
Yes	27.32%	\$10k or Less	19.25%
Education Level		\$10k - \$50k	18.90%
No College	16.92%	\$50k - \$100k	14.54%
Some College	35.52%	\$100k - \$250k	16.43%
Bachelor's Degree	28.55%	\$250k - \$500k	14.17%
Post Graduate Degree	19.02%	\$500k - \$1 Million	8.81%
Age Group		\$1 Million or More	7.91%
18 - 24	7.90%	Risk Aversion	
25 - 34	17.41%	1 – Low (Very Willing)	16.21%
35 - 44	12.27%	2	14.73%
45 - 54	15.81%	3	21.26%
55 - 64	17.35%	4	14.14%
65+	29.26%	5	13.91%
Gender		6	7.83%
Female	42.21%	7	6.12%
Male	57.79%	8 – High (Not Willing)	5.80%

Observation Count = 1,556

Analysis using the 2018 NFCS surveys. Survey weights are applied.

The analysis sample has high self-rated investment literacy and high objective investment

knowledge. About half of the sample has a bachelor's degree or higher, with about 19%

having a post-graduate degree, and only 27% have participated in a financial education program. Most of the analysis sample is male, white, and married. Almost half make over \$50k per year and have between \$50k and \$500k in non-retirement investment assets.

Table 3 provides a breakdown of the analysis sample between respondents who have a cryptocurrency investment and those who do not.

As expected, based on the findings of existing literature, the sample of cryptocurrency investors are a greater percentage male, young, and non-risk averse (risk seeking). The sample of cryptocurrency investors also shows a higher percentage of respondents using a financial advisor and self-rating investment knowledge compared to the non-cryptocurrency invested sample.

Table 3. Descriptive Statistics by Crypto Investment

Variable	Percent	
	No Cryptocurrency	Have Cryptocurrency
Use Financial Advisor		
No	41.00%	32.52%
Yes	59.00%	67.48%
Objective Investment Knowledge		
0 - None Correct	1.64%	5.18%
1	9.82%	22.71%
2	20.98%	22.01%
3	31.58%	31.21%
4 - All Correct	35.98%	18.89%
Subjective Investment Knowledge		
Below Average (1-4)	35.17%	20.73%
Average (5)	37.07%	22.59%
Above Average (6-7)	27.76%	56.68%
Financial Education Participation		
No	74.83%	60.64%
Yes	25.17%	39.36%
Education Level		
No College	16.07%	21.66%
Some College	34.53%	41.02%
Bachelor's Degree	29.24%	24.67%
Post Graduate Degree	20.15%	12.64%
Age Group		
18 - 24	4.66%	26.05%
25 - 34	13.61%	38.72%
35 - 44	11.56%	16.25%
45 - 54	16.88%	9.81%
55 - 64	19.26%	6.67%
65+	34.04%	2.49%
Gender		

Female	43.16%	36.91%
Male	56.84%	63.09%
Ethnicity		
Non-White	19.84%	42.92%
White	80.16%	57.08%
Marital Status		
Not Married	40.23%	47.13%
Married	59.77%	52.87%
Income Range		
Less than \$50k	24.49%	35.90%
\$50k - \$100k	43.21%	43.10%
\$100k - \$150k	19.90%	15.60%
Greater than \$150k	12.40%	5.41%
Employment Status		
Self-Employed	9.65%	10.87%
Employed Full-Time	38.56%	64.19%
Employed Part-Time	6.81%	10.21%
Retired	35.14%	4.04%
Not Currently Employed	9.84%	10.69%
Non-Retirement Investment Assets		
\$10k or Less	18.66%	22.60%
\$10k - \$50k	17.42%	27.21%
\$50k - \$100k	13.85%	18.39%
\$100k - \$250k	16.98%	13.30%
\$250k - \$500k	14.72%	11.08%
\$500k - \$1 Million	10.11%	1.52%
\$1 Million or More	8.27%	5.90%
Risk Aversion		
1 – Low (Very Willing)	13.49%	31.46%
2	13.83%	19.79%
3	21.37%	20.65%
4	15.42%	6.99%
5	14.09%	12.94%
6	8.27%	5.40%
7	6.88%	1.83%
8 – High (Not Willing)	6.67%	0.94%
<i>Observation Count</i>	<i>1,405</i>	<i>151</i>

Table 4 shows the marginal effects and standard errors for the probit model. The association between using a financial advisor and investing

in cryptocurrency is positive and statistically significant, consistent with hypothesis 1. Investors using a financial advisor have a higher

probability of investing in cryptocurrency of about 0.03.

Table 4. Marginal Effects of Cryptocurrency Investment

Variable (Reference Group)	Marginal Effect	Std. Err.	p-Value	95% Conf. Int.	
Use Financial Advisor (No)					
Yes	0.0318*	0.0192	0.097	-0.0057	0.0693
Obj. Inv. Knowledge (None Correct)					
1	-0.1303*	0.0747	0.081	-0.2768	0.0161
2	-0.1937***	0.0720	0.007	-0.3349	-0.0525
3	-0.1790**	0.0706	0.011	-0.3174	-0.0407
4 - All Correct	-0.2255***	0.0714	0.002	-0.3654	-0.0857
Sub. Inv. Knowledge (Below Average)					
Average (5)	0.0167	0.0232	0.472	-0.0288	0.0622
Above Average (6-7)	0.1315***	0.0271	0.000	0.0785	0.1845
Fin. Educ. Participation (No)					
Yes	0.0065	0.0207	0.752	-0.0341	0.0472
Education Level (No College)					
Some College	0.0032	0.0319	0.921	-0.0593	0.0657
Bachelor's Degree	-0.0198	0.0307	0.520	-0.0801	0.0405
Post Graduate Degree	0.0183	0.0360	0.611	-0.0522	0.0888
Age Group (18-24)					
25 - 34	-0.1545**	0.0775	0.046	-0.3063	-0.0026
35 - 44	-0.2631***	0.0761	0.001	-0.4122	-0.1140
45 - 54	-0.3294***	0.0748	0.000	-0.4760	-0.1828
55 - 64	-0.3508***	0.0745	0.000	-0.4969	-0.2048
65+	-0.4047***	0.0734	0.000	-0.5485	-0.2609
Gender (Female)					
Male	0.0277	0.0213	0.194	-0.0141	0.0695
Ethnicity (Non-White)					
White	-0.0190	0.0228	0.404	-0.0638	0.0257
Marital Status (Not Married)					
Married	0.0427**	0.0201	0.033	0.0034	0.0820
Income Range (Less than \$50k)					
\$50k - \$100k	-0.0158	0.0290	0.586	-0.0726	0.0410
\$100k - \$150k	-0.0130	0.0356	0.716	-0.0827	0.0568
Greater than \$150k	-0.0583*	0.0353	0.099	-0.1274	0.0109
Employment Status (Full-Time)					
Self-Employed	-0.0240	0.0318	0.450	-0.0863	0.0383
Employed Part-Time	0.0472	0.0401	0.239	-0.0314	0.1257
Retired	-0.0351	0.0321	0.274	-0.0981	0.0278
Not Currently Employed	-0.0628**	0.0317	0.047	-0.1249	-0.0008

Table 4 Continued

Variable (Reference Group)	Marginal Effect	Std. Err.	p-Value	95% Conf. Inv.	
Non-Ret. Inv. Assets (\$10k or Less)					
\$10k - \$50k	0.0271	0.0328	0.410	-0.0373	0.0914
\$50k - \$100k	-0.0209	0.0343	0.542	-0.0880	0.0463
\$100k - \$250k	-0.0169	0.0339	0.618	-0.0834	0.0495
\$250k - \$500k	0.0150	0.0360	0.678	-0.0557	0.0856
\$500k - \$1 Million	-0.1008***	0.0338	0.003	-0.1671	-0.0346
\$1 Million or More	-0.0175	0.0458	0.702	-0.1073	0.0723
Risk Aversion (1 – Lowest)					
2	-0.0064	0.0327	0.844	-0.0705	0.0576
3	-0.0163	0.0326	0.618	-0.0801	0.0476
4	-0.0750**	0.0344	0.029	-0.1424	-0.0076
5	-0.0156	0.0364	0.668	-0.0869	0.0557
6	-0.0257	0.0440	0.559	-0.1119	0.0605
7	-0.0625	0.0427	0.144	-0.1462	0.0213
8 - Highest	-0.0985**	0.0446	0.027	-0.1860	-0.0111

Number of Observations = 1,556

Pseudo R-Squared = 0.3219

Significance at the 10% Level, **Significance at the 5% Level, *Significance at the 1% Level
Analysis using the 2018 NFCS state-by-state and investor surveys. Survey weights are applied.*

Table 4 also shows a negative association between *objective* investment literacy and cryptocurrency investment, but a positive association between the highest level of *subjective* investment literacy and cryptocurrency investment.

Age is related significantly and negatively to cryptocurrency investment. Older investors have a substantially lower probability of investing in cryptocurrency compared to younger investors (up to a marginal effect of about -0.40 for those ages 65 and above compared to those between the ages of 18-24). Investor risk aversion is also

related negatively to cryptocurrency investment in that those not willing to take risks (the highest level of risk aversion) have a lower probability of investing in cryptocurrency of approximately -0.099. Results additionally show that married investors have a higher probability of owning cryptocurrencies compared to non-married investors by about 0.043.

Table 5 shows the results of the additional models estimated to test robustness and find the marginal effect of the key variable, the use of a financial advisor, to remain relatively stable in significance and magnitude on cryptocurrency investment.

Table 5. Model Robustness Testing (w/ Marginal Effects)

Variable (Reference Group)	Full Model	w/o Obj Inv Know	w/o Sub Inv Know	w/o Educ	w/o Age	w/o Gender	w/o Mar Status	w/o Income	w/o Inv. Assets
Use Fin Adv (No)									
Yes	0.0318 *	0.0368 *	0.0383 *	0.0316 *	0.0384 *	0.0306	0.0346 *	0.0314	0.0266
Obj Inv Know (0 Correct)									
1	-0.1303 *		-0.0796	-0.1293 *	-0.1115	-0.1286 *	-0.1354 *	-0.1297 *	-0.1045
2	-0.1937 ***		-0.1527 **	-0.1941 ***	-0.2075 **	-0.1881 ***	-0.2011 ***	-0.1953 ***	-0.1714 **
3	-0.1790 **		-0.1294 *	-0.1814 **	-0.1959 **	-0.1705 **	-0.1868 **	-0.1816 ***	-0.1565 **
4 - All Correct	-0.2255 ***		-0.1724 **	-0.2271 ***	-0.2493 ***	-0.2185 ***	-0.2364 ***	-0.2284 ***	-0.2080 ***
Sub Inv Know (Below Average)									
Average (5)	0.0167	0.0134		0.0168	0.0039	0.0183	0.0169	0.0170	0.0166
Above Average (6-7)	0.1315 ***	0.1227 ***		0.1304 ***	0.1269 ***	0.1332 ***	0.1335 ***	0.1326 ***	0.1253 ***
Fin Educ Participation (No)									
Yes	0.0065	0.0109	0.0101	0.0059	0.0313	0.0064	0.0077	0.0078	0.0047
Education Level (No College)									
Some College	0.0032	0.0087	0.0023		-0.0095	0.0034	-0.0062	-0.0016	0.0027
Bachelor's Degree	-0.0198	-0.0229	-0.0225		-0.0305	-0.0197	-0.0219	-0.0260	-0.0208
Post Graduate Degree	0.0183	0.0145	0.0067		-0.0188	0.0195	0.0123	0.0028	0.0181
Age Group (18-24)									
25 - 34	-0.1545 **	-0.1569 **	-0.1353 *	-0.1528 **		-0.1607 **	-0.1323 *	-0.1557 **	-0.1671 **
35 - 44	-0.2631 ***	-0.2755 ***	-0.2447 ***	-0.2593 ***		-0.2649 ***	-0.2360 ***	-0.2698 ***	-0.2718 ***
45 - 54	-0.3294 ***	-0.3482 ***	-0.3167 ***	-0.3234 ***		-0.3341 ***	-0.3032 ***	-0.3345 ***	-0.3415 ***
55 - 64	-0.3508 ***	-0.3688 ***	-0.3436 ***	-0.3455 ***		-0.3527 ***	-0.3237 ***	-0.3554 ***	-0.3632 ***
65+	-0.4047 ***	-0.4220 ***	-0.3898 ***	-0.3991 ***		-0.4069 ***	-0.3791 ***	-0.4090 ***	-0.4151 ***
Gender (Female)									
Male	0.0277	0.0210	0.0297	0.0283	0.0251		0.0267	0.0291	0.0265
Ethnicity (Non-White)									
White	-0.0190	-0.0239	-0.0304	-0.0168	-0.0537 **	-0.0181	-0.0156	-0.0192	-0.0208
Marital Status (Not Married)									
Married	0.0427 **	0.0501 **	0.0469 **	0.0400 **	0.0161	0.0421 **		0.0369 *	0.0443 **

Variable (Reference Group)	Full Model	w/o Obj Inv Know	w/o Sub Inv Know	w/o Educ	w/o Age	w/o Gender	w/o Mar Status	w/o Income	w/o Inv. Assets
Inc Range (Less than \$50k)									
\$50k - \$100k	-0.0158	-0.0356	-0.0376	-0.0153	-0.0284	-0.0191	-0.0048		-0.0224
\$100k - \$150k	-0.0130	-0.0416	-0.0402	-0.0115	-0.0221	-0.0146	0.0041		-0.0283
Greater than \$150k	-0.0583 *	-0.0755 **	-0.0747 **	-0.0514	-0.0813 **	-0.0611 *	-0.0374		-0.0824 **
Emp Status (Full-Time)									
Self-Employed	-0.0240	-0.0327	-0.0177	-0.0211	-0.0592	-0.0235	-0.0251	-0.0220	-0.0244
Employed Part-Time	0.0472	0.0302	0.0253	0.0507	0.0292	0.0409	0.0507	0.0517	0.0498
Retired	-0.0351	-0.0343	-0.0458	-0.0325	-0.1619 ***	-0.0384	-0.0306	-0.0311	-0.0421
Not Currently Employed	-0.0628 **	-0.0694 **	-0.0685 **	-0.0611 *	-0.0657	-0.0695 **	-0.0634 **	-0.0614 *	-0.0631 **
Inv Assets (\$10k or Less)									
\$10k - \$50k	0.0271	0.0332	0.0388	0.0268	0.0399	0.0284	0.0280	0.0258	
\$50k - \$100k	-0.0209	-0.0086	0.0196	-0.0227	-0.0038	-0.0196	-0.0208	-0.0255	
\$100k - \$250k	-0.0169	-0.0140	0.0142	-0.0187	-0.0305	-0.0163	-0.0177	-0.0231	
\$250k - \$500k	0.0150	0.0242	0.0511	0.0111	-0.0269	0.0162	0.0125	0.0060	
\$500k - \$1 Million	-0.1008 ***	-0.0973 ***	-0.0707 **	-0.1020 ***	-0.1200 ***	-0.0988 ***	-0.1029 ***	-0.1124 ***	
\$1 Million or More	-0.0175	-0.0291	0.0268	-0.0220	-0.0225	-0.0173	-0.0206	-0.0316	
Risk Aversion (Lowest)									
2	-0.0064	-0.0019	-0.0218	-0.0090	-0.0343	-0.0042	-0.0064	-0.0037	-0.0028
3	-0.0163	-0.0155	-0.0378	-0.0182	-0.0396	-0.0173	-0.0198	-0.0155	-0.0115
4	-0.0750 **	-0.0724 **	-0.1096 ***	-0.0805 **	-0.1100 ***	-0.0756 **	-0.0780 **	-0.0734 **	-0.0664 *
5	-0.0156	-0.0051	-0.0576	-0.0182	-0.0567	-0.0219	-0.0144	-0.0142	-0.0096
6	-0.0257	-0.0261	-0.0678	-0.0294	-0.0676	-0.0314	-0.0258	-0.0195	-0.0236
7	-0.0625	-0.0631	-0.1039 **	-0.0692 *	-0.1122 **	-0.0679	-0.0647	-0.0637	-0.0629
8 - Highest	-0.0985 **	-0.1010 **	-0.1428 ***	-0.1045 **	-0.1457 ***	-0.1056 **	-0.0933 **	-0.0944 **	-0.1040 **
Pseudo R-Squared	0.3220	0.3051	0.2889	0.3199	0.2476	0.3199	0.3172	0.3197	0.3109

Number of Observations = 1,556

*Significance at the 10% Level, **Significance at the 5% Level, ***Significance at the 1% Level

Analysis using the 2018 NFCS state-by-state and investor surveys. Survey weights are applied.

The model fit, measured by pseudo r-squared, also remain stable in most estimated models—with one major exception. When age is removed from the model, pseudo r-squared drops from 0.322 (full model) to 0.2476—a difference of 0.0744. This change in explained variance suggests that age has substantial explanatory power in the original model.

To gain better knowledge of the relationship between the use of a financial advisor and cryptocurrency investment within the context of the current study, additional literature on the topic is examined. Research shows that older individuals are significantly less likely to invest in cryptocurrency (Xi et al., 2020) while younger individuals have historically been less likely to utilize the services of a financial advisor, though newer generations are seeking out services earlier (Nourallah et al., 2023). Lin (2024) observes that Millennials search for formal financial advice on average at age 29, while Generation X and Baby Boomers do so on average at ages 38 and 49,

respectively. Although this trend suggests earlier use of a financial advisor, those in the youngest age group in the sample of the current study still, on average, do not use a financial advisor. These findings suggest that neither of the outermost age categories can be considered the pliable middle, those willing to consider both the use of a financial advisor and cryptocurrency investment.

Due to these findings, an additional robustness check on the full probit model is estimated in which the youngest and oldest age groups (ages 18-24 and 65+) are removed from the sample to reduce the potential bias that these age categories may present. Table 6 describes the findings of this new model which show an increase in the magnitude and significance of the relationship between the use of a financial advisor and cryptocurrency investment. Among these middle-aged investors (aged 25-64), those who use a financial advisor have a higher probability of having cryptocurrency investments by about 0.05 (compared to 0.03 in the full model).

Table 6. Marginal Effects on Cryptocurrency Investment (w/o Age Groups 18-24 & 65+)

Variable (Reference Group)	Marginal Effect	Std. Err.	p-Value	95% Conf. Int.	
Use Financial Advisor (No)					
Yes	0.0524 **	0.0257	0.041	0.0020	0.1028
Obj. Inv. Knowledge (None Correct)					
1	-0.1828	0.1187	0.123	-0.4155	0.0498
2	-0.2655 **	0.1154	0.021	-0.4918	-0.0393
3	-0.2562 **	0.1135	0.024	-0.4787	-0.0337
4 - All Correct	-0.3165 ***	0.1140	0.006	-0.5399	-0.0930
Sub. Inv. Knowledge (Below Ave.)					
Average (5)	0.0509 *	0.0296	0.086	-0.0071	0.1089
Above Average (6-7)	0.1813 ***	0.0363	0.000	0.1101	0.2524
Fin. Educ. Participation (No)					
Yes	0.0226	0.0282	0.423	-0.0327	0.0780
Education Level (No College)					
Some College	-0.0346	0.0478	0.469	-0.1284	0.0592
Bachelor's Degree	-0.0378	0.0467	0.418	-0.1292	0.0536
Post Graduate Degree	-0.0028	0.0527	0.957	-0.1061	0.1005
Age Group (25-34)					
35 - 44	-0.1098 **	0.0462	0.017	-0.2003	-0.0193
45 - 54	-0.1756 ***	0.0441	0.000	-0.2620	-0.0891
55 - 64	-0.1997 ***	0.0447	0.000	-0.2873	-0.1121

Gender (Female)					
Male	0.0442	0.0296	0.135	-0.0138	0.1022
Ethnicity (Non-White)					
White	-0.0060	0.0296	0.839	-0.0640	0.0519
Marital Status (Not Married)					
Married	0.0333	0.0278	0.231	-0.0212	0.0877
Income Range (Less than \$50k)					
\$50k - \$100k	-0.0134	0.0409	0.743	-0.0936	0.0668
\$100k - \$150k	-0.0141	0.0498	0.778	-0.1117	0.0836
Greater than \$150k	-0.0774 *	0.0465	0.096	-0.1685	0.0137
Employment Status (Full-Time)					
Self-Employed	-0.0503	0.0382	0.188	-0.1253	0.0246
Employed Part-Time	0.0452	0.0583	0.438	-0.0690	0.1594
Retired	-0.0599	0.0450	0.183	-0.1482	0.0283
Not Currently Employed	-0.0463	0.0470	0.325	-0.1384	0.0458
Non-Ret. Inv. Assets (\$10k or Less)					
\$10k - \$50k	0.0232	0.0450	0.607	-0.0651	0.1114
\$50k - \$100k	-0.0772 *	0.0429	0.072	-0.1613	0.0069
\$100k - \$250k	-0.0185	0.0462	0.689	-0.1089	0.0720
\$250k - \$500k	-0.0075	0.0485	0.877	-0.1025	0.0875
\$500k - \$1 Million	-0.1265 ***	0.0454	0.005	-0.2154	-0.0376
\$1 Million or More	0.0048	0.0659	0.942	-0.1244	0.1339
Risk Aversion (1-Lowest)					
2	-0.0194	0.0445	0.663	-0.1067	0.0679
3	-0.0389	0.0442	0.378	-0.1255	0.0476
4	-0.0763	0.0481	0.113	-0.1707	0.0180
5	-0.0341	0.0518	0.510	-0.1356	0.0674
6	-0.0746	0.0606	0.218	-0.1933	0.0442
7	-0.0752	0.0580	0.195	-0.1889	0.0384
8 - Highest	-0.1617 ***	0.0527	0.002	-0.2649	-0.0585

Number of Observations = 889

Pseudo R-Squared = 0.2255

Significance at the 10% Level, **Significance at the 5% Level, *Significance at the 1% Level*

Analysis using the 2018 NFCS state-by-state and investor surveys. Survey weights are applied.

Discussion, Limitations, And Suggestions for Further Research

Human capital theory proposes that increased knowledge should improve decision-making abilities (Becker, 1962). Given the diversification benefits that cryptocurrency provides (Andrianto

& Diputra, 2017; Wong et al., 2018), using the domain-specific human capital of a financial advisor should increase the likelihood of an individual to invest in cryptocurrency. The finding that using a financial advisor is associated positively with cryptocurrency investment

confirms the theoretical expectation and is consistent with hypothesis 1.

Inconsistent results are found regarding hypothesis 2, in that education and gender are not significantly associated with cryptocurrency investment. Additionally, the few areas of significance for income and the level of investment assets are negatively associated with cryptocurrency investment, contradictory to hypothetical expectations and previous literature (Lammer et al., 2020; Xi et al., 2020). Those with the highest level of income, greater than \$150k, are significantly less likely to be invested in cryptocurrencies compared to those with income less than \$50k. These discrepancies may be explained through the data (international vs U.S. data and/or sample size) or other means, though specifics are only speculation and fall outside the focus of the current study but could provide the foundation for future research. Consistent with hypothesis 3, a strong negative relationship between age and cryptocurrency investment is shown in the findings (Xi et al., 2020).

Many additional findings are consistent with theoretical expectations and strengthen the current body of literature on cryptocurrencies. Those with higher levels of risk aversion are less likely to invest in cryptocurrencies, consistent with the findings of Hackenthal et al. (2022). Those with higher subjective investment knowledge have a greater probability of having cryptocurrency investments, consistent with human capital theoretical expectations and existing literature (Zhao & Zhang, 2021; Kim et al., 2023). However, those with a higher objective investment knowledge score have a lower probability of having cryptocurrency investments. This finding is also consistent with Kim et al. (2023), but contrary to the findings of Arias-Oliva et al. (2019) who found financial literacy to be a non-significant determinant of cryptocurrency investment. Future research of these apparent discrepancies could be helpful. These findings also suggest that there may be a gap in the subjective and objective investment knowledge measures among cryptocurrency investors, which could provide the foundation for a future research project. It is important to note that the current paper is the first to our knowledge to specify “*investment knowledge*” instead of a

general financial knowledge, and this distinction could be a relevant factor in future research endeavors.

Lastly, the economic theory of marriage suggests that individuals get married because they believe it will make them better off through pooled resources, combined human capital, risk sharing, and opportunities for specialization (Becker, 1973). Risk-sharing and combined human capital may explain the increased probability of cryptocurrency investment among married investors compared to non-married ones.

A limitation of the current study concerns cryptocurrency risk for investors and advisors. While existing research finds evidence of the positive benefits of cryptocurrency investments, they also acknowledge the extreme volatility. Future research could further examine the real risk associated with cryptocurrency investment and compare the volatility with more established investment options, especially post “crash” of late 2022 and the collapse of FTX—one of the largest digital exchange platforms for cryptocurrencies (Dai et al., 2022; Smith, 2023).

Additional research also could examine how investors define the use of a financial advisor and determine whether the relationship is formal or informal, and how the advisor provides investment advice. Respondents in the current study are asked only if they use a financial advisor when making an investment decision, but not the depth of use (or advice given). Other limitations of the study are specific to the data available for cryptocurrency investment. The current analysis sample evaluates the binary decision to invest in cryptocurrency (yes or no) but does not examine the allocation percentages of these investments. Information about the volume of investment would provide better insight and transparency into the investors’ intent. There is a vast difference between investing 5% of a portfolio into cryptocurrencies compared to 50% or more, and studying individuals with various levels of cryptocurrency investment would be valuable. Longitudinal data also would prove useful in determining a causal relationship between the dependent and main explanatory variable, where the current study (and data) could only determine a correlated

relationship between the use of a financial advisor and cryptocurrency investment.

Although these limitations exist, it is maintained that this study provides evidence to address a gap in the literature on the relationship between the use of a financial advisor and cryptocurrency investment.

Conclusion

This paper shows that investors who use a financial advisor have a higher probability of investing in cryptocurrency. This finding suggests that financial advisors may be recommending cryptocurrency investment within client portfolios to take advantage of the diversification benefits that are experienced when doing so (Andrianto & Diputra, 2017; Chuen et al., 2018; Wong et al., 2018; Inci and Lagasse, 2019). Financial advisors have greater domain-specific human capital in financial matters (through education, experience, and training) and are more likely to engage in the search for information on complex topics. Therefore, investors who leverage their financial advisor's domain-specific knowledge will make informed financial decisions, including the utilization of investments that benefit the diversification of the investment portfolio—i.e., cryptocurrency, which is confirmed by the findings of this study.

With the increasing use and interest in cryptocurrency investments, especially in the United States, individuals are challenged with making complex decisions within their investments. Financial advisors have a fiduciary responsibility to understand and make recommendations that benefit their clients, including the use of cryptocurrency when necessary. The findings of the current study suggest that these recommendations may already be taking place and emphasize the role of the financial advisor in these decisions.

Investors expect financial advisors to help optimize their investment returns and financial goals. Does an individuals' use of a financial advisor have an influence on their decision to invest in cryptocurrencies? Evidence from the current study answers that question and shows that investors who use a financial advisor are more likely to utilize the diversification benefits

of cryptocurrency to optimize their investment portfolio.

References

- Allgood, S., & Walstad, W. B. (2016). The effects of perceived and actual financial literacy on financial behaviors. *Economic Inquiry*, 54(1), 675–697.
- Andrianto, Y., & Diputra, Y. (2017). The effect of cryptocurrency on investment portfolio effectiveness. *Journal of Finance and Accounting*, 5(6), 229–238.
- Arias-Oliva, M., Pelegrín-Borondo, J., & Matías-Clavero, G. (2019). Variables influencing cryptocurrency use: a technology acceptance model in Spain. *Frontiers in Psychology*, 10, 475.
- Ayedh, A., Echchabi, A., Battour, M., & Omar, M. (2020). Malaysian Muslim investors' behaviour towards the blockchain-based Bitcoin cryptocurrency market. *Journal of Islamic Marketing*, 12(4), 690–704.
- Barthel, A. C., & Lei, S. (2021). Investment in financial literacy and financial advice-seeking: Substitutes or complements? *The Quarterly Review of Economics and Finance*, 81, 385–396.
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, 70(5, Part 2), 9–49.
- Becker, G. S. (1973). A theory of marriage: Part I. *Journal of Political Economy*, 81(4), 813–846.
- Best, R. (2025). *Crypto market cap 2010-2025*. Statista.
<https://www.statista.com/statistics/730876/cryptocurrency-market-value/>
- Blackstone, T. (2025). *2025 Cryptocurrency adoption and consumer sentiment report*. Security.org.
<https://www.security.org/digital-security/cryptocurrency-annual-consumer-report/>
- Cummings, B. F., & James III, R. N. (2014). Factors associated with getting and dropping financial advisors among older

- adults: Evidence from longitudinal data. *Journal of Financial Counseling and Planning*, 25(2), 129–147.
- Dai, P. F., Goodell, J. W., Huynh, L. D. T., Liu, Z., & Corbet, S. (2022). Understanding the transmission of crash risk between cryptocurrency and equity markets. *Financial Review*, 58(3), 539–573.
- Dasman, S. (2021). Analysis of return and risk of cryptocurrency Bitcoin asset as investment instrument. In N. M. Alsharari (Ed.), *Accounting and finance innovations* (pp. 1–14). IntechOpen.
- Gibbons, R., & Waldman, M. (2004). Task-specific human capital. *American Economic Review*, 94(2), 203–207.
- Grand View Research. (2023). *U.S. cryptocurrency market size and share report, 2030*. Grand View Research. <https://www.grandviewresearch.com/industry-analysis/us-cryptocurrency-market-report>
- Gupta, S., Gupta, S., Mathew, M., & Sama, H. R. (2020). Prioritizing intentions behind investment in cryptocurrency: A fuzzy analytical framework. *Journal of Economic Studies*, 48(8), 1442–1459.
- Hackethal, A., Hanspal, T., Lammer, D. M., & Rink, K. (2022). The characteristics and portfolio behavior of Bitcoin investors: Evidence from indirect cryptocurrency investments. *Review of Finance*, 26(4), 855–898.
- Hanna, S. D. (2011). The demand for financial planning services. *Journal of Personal Finance*, 10(1), 36–62.
- Hanna, S. D., & Lindamood, S. (2010). Quantifying the economic benefits of personal financial planning. *Financial Services Review*, 19(2), 111–127.
- Hershey, D. A., Walsh, D. A., Read, S. J., & Chulef, A. S. (1990). The effects of expertise on financial problem solving: Evidence for goal-directed, problem-solving scripts. *Organizational Behavior and Human Decision Processes*, 46(1), 77–101.
- Ibrahim, M. (2018). Interactive effects of human capital in finance–economic growth nexus in Sub-Saharan Africa. *Journal of Economic Studies*, 45(6), 1192–1210.
- Kim, K. T., Hanna, S. D., & Lee, S. T. (2023). Investment literacy, overconfidence and cryptocurrency investment. *Financial Services Review*, 31(2/3), 121–132.
- Lammer, D. M., Hanspal, T., & Hackethal, A. (2020). *Who are the Bitcoin investors? Evidence from indirect cryptocurrency investments* (SAFE Working Paper Series No. 277). Leibniz Institute for Financial Research SAFE.
- Lev, B., & Schwartz, A. (1971). On the use of the economic concept of human capital in financial statements. *The Accounting Review*, 46(1), 103–112.
- Lin, N. (2024). Younger generations seek out advisers earlier. *Planadviser*. <https://www.planadviser.com/younger-generations-seek-advisers-earlier/>
- Lin, Q., & Lee, J. (2004). Consumer information search when making investment decisions. *Financial Services Review*, 13(4), 319–332.
- Nourallah, M., Öhman, P., & Amin, M. (2023). No trust, no use: How young retail investors build initial trust in financial robo-advisors. *Journal of Financial Reporting and Accounting*, 21(1), 60–82.
- Pilote, P. E., Boulianne, E., & Magnan, M. (2024). Impact of the financial advisor on clients' financial outcomes: An integrative model. *Financial Services Review*, 32(3), 32–67.
- Rauch, A., & Rijsdijk, S. A. (2013). The effects of general and specific human capital on long-term growth and failure of newly founded businesses. *Entrepreneurship Theory and Practice*, 37(4), 923–941.
- Smith, H. (2023, May 22). Bitcoin price crash: What caused the latest collapse?. *Times Money Mentor*.

- <https://www.thetimes.co.uk/money-mentor/article/is-bitcoin-crash-coming/>
- Smith, H., Finke, M., & Huston, S. (2012). The influence of financial sophistication and financial planners on Roth IRA ownership. *Journal of Financial Service Professionals*, 66(6), 69.
- Smith, G. E., Venkatraman, M. P., & Dholakia, R. R. (1999). Diagnosing the search cost effect: Waiting time and the moderating impact of prior category knowledge. *Journal of Economic Psychology*, 20(3), 285–314.
- Sommer, M., Lim, H., & MacDonald, M. (2022). Financial advisor use, life events, and the relationship with beneficial intentions. *Financial Services Review*, 30(1), 69–88.
- Stigler, G. J. (1961). The economics of information. *Journal of Political Economy*, 69(3), 213–225.
- Stosic, D., Stosic, D., Ludermit, T. B., & Stosic, T. (2019). Exploring disorder and complexity in the cryptocurrency space. *Physica A: Statistical Mechanics and Its Applications*, 525, 548–556.
- Sullivan, P. (2010). Empirical evidence on occupation and industry specific human capital. *Labour Economics*, 17(3), 567–580.
- Xi, D., O'Brien, T. I., & Irannezhad, E. (2020). Investigating the investment behaviors in cryptocurrency. *The Journal of Alternative Investments*, 23(2), 141–160.
- Yilmaz, N. K., & Hazar, H. B. (2018). Predicting future cryptocurrency investment trends by conjoint analysis. *Journal of Economics, Finance and Accounting*, 5(4), 321–330.
- Zhao, H., & Zhang, L. (2021). Financial literacy or investment experience: Which is more influential in cryptocurrency investment?. *International Journal of Bank Marketing*, 39(7), 1208–1226.
- Zweig, J. (2021, October 22). Why your adviser might start talking up Bitcoin. *The Wall Street Journal*. <https://www.wsj.com/articles/why-your-adviser-might-start-talking-up-bitcoin-11634914812>.