Overconfidence, Financial Literacy, and Crypto Asset Ownership in Europe

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Table of contents

Abstract

The role of financial literacy and overconfidence bias in shaping crypto-asset ownership remains empirically unresolved, with prior studies reporting conflicting results across countries and survey instruments. This paper advances the literature by providing harmonized EU-wide evidence on how subjective and objective financial literacy, overconfidence, digital confidence, and advisory trust predict crypto-asset ownership. Using individual-level data from the 2023 Flash Eurobarometer for 27 EU Member States, we estimate weighted logit models with country fixed effects and clustered standard errors. The results show that higher objective and subjective financial knowledge are consistently associated with a higher probability of owning crypto-assets, whereas overconfidence, measured as miscalibration between perceived and observed knowledge, is associated with a lower probability of ownership. Digital confidence exerts a large and robust positive effect while confidence in financial advisers has a mixed association with ownership. In contrast to the extant literature on the relationship between overconfidence and crypto-asset ownership, these findings suggest that retail crypto adoption in Europe is driven more by knowledge and perceived digital competence than by miscalibration.

Keywords: Cryptocurrencies; Financial Literacy; Overconfidence Bias

JEL Classification: D14; G11; G19; G41; G53

Introduction

Crypto-assets have become an increasingly visible part of retail finance, but the predictors of crypto ownership remain contested. One common view is that participation in this market is driven by overconfidence, with individuals overestimating their financial knowledge and underestimating risk. Another view is that crypto holders are simply more financially engaged, more digitally confident, or better informed than non-holders. Findings vary across countries, datasets, and survey instruments, testing the impact of financial literacy and overconfidence bias on crypto ownership.

In this paper, we use harmonized survey data from the 2023 Flash Eurobarometer on financial literacy across the 27 member states of the European Union to revisit this question. The survey is especially useful because it includes an objective financial literacy quiz, a comparative self-assessment of financial knowledge, and questions on digital confidence, trust in financial advice, and financial behaviour. It also records whether respondents currently hold, or have held in the previous two years, crypto-securities including crypto-currency. This allows us to study whether crypto ownership is more closely associated with knowledge, confidence, or miscalibration between the two.

Our results do not support the familiar image of the crypto holder as unusually overconfident. Instead, we find that crypto ownership is more common among respondents with higher objective and subjective financial knowledge, stronger digital confidence, higher levels of financial prudence, and a more advantaged socioeconomic profile. By contrast, overconfidence, measured as miscalibration, is not positively associated with crypto ownership. Rather we find evidence of a negative association.

The rest of the article proceeds as follows. The next section reviews the relevant literature. We then present the data, variable construction, and empirical strategy. The results section first examines overconfidence and then turns to subjective and

objective financial literacy. The final section discusses the broader implications of the findings.

Literature Review

Despite a growing interest in research on the predictors of crypto-asset ownership, evidence regarding the role of financial literacy and overconfidence remains contested. Early work using nationally representative surveys emphasized sociodemographic correlates, showing that predictors such as age, gender, education, and digital engagement were strongly associated with crypto ownership. For the United States, Auer and Tercero-Lucas (2022) find that crypto investors tend to be younger, more educated, and more digitally active, with little evidence that ownership is primarily driven by distrust in fiat money or the banking system. Similar patterns have been documented in Austria, where owners appear younger, more willing to take financial risks, and more interested in new technologies (Stix 2021). Evidence from Japan also points in this direction, with Fujiki (2020) finding that crypto owners are more likely to be male, younger, less risk-averse, and more interested in financial and technological innovation.

Nevertheless, the literature on the relationship between financial literacy and crypto ownership has produced more mixed results. Using data from a 15-country survey, Panos and Karkkainen (2019) find that higher financial literacy is associated with a lower likelihood of current cryptocurrency ownership, while also being associated with greater awareness of cryptocurrencies and a lower intention to hold them in the future. By contrast, Stix (2021) finds that Austrian owners have higher financial knowledge than non-owners on average, while Fujiki (2020) finds that Japanese owners also display higher objective financial literacy. Recent evidence for Spain shows that holders present higher financial literacy, greater portfolio diversification,

and stronger comfort with financial risk (Guirola and Isla Martínez 2025). However, based on survey data from the United States collected in 2018, Kim, Hanna, and Lee (2023) find that objective financial literacy predicted a lower probability of cryptocurrency ownership whereas subjective literacy had a positive association.

Recent Canadian evidence further complicates this picture. Balutel et al. (2023) show that Bitcoin owners are heterogeneous in both crypto and financial literacy, with a sizeable share of owners displaying low financial literacy even as others score highly. Importantly, this highlights gender differences in crypto literacy, and suggest that the relationship between ownership and literacy is more uneven than a simple high-literacy or low-literacy account would imply.

Similarly, a growing body of research has linked crypto-asset ownership to overconfidence, with most studies pointing towards a positive relationship between the two. In the broader finance literature, overconfidence is generally understood as a form of miscalibration in which subjective beliefs about one's knowledge, skill, or precision exceed observed performance or objective benchmarks (Grežo 2021; Singh et al. 2024). More generally, overconfidence has been linked to excessive risk-taking and suboptimal investment decisions beyond the crypto context. Experimental evidence shows that both overestimation and overplacement can lead to non-value-maximizing investment choices (Pikulina, Renneboog, and Tobler 2017), while evidence from Chinese households suggests that financial literacy overconfidence is positively associated with risky asset holding and other forms of financial risk-taking (Xu et al. 2024). In studies of crypto ownership, however, this concept has not been operationalized in a uniform way. Some papers measure overconfidence as the gap between subjective and objective financial or investment literacy, others rely on residual or bias-adjusted measures, and still others compare standardized confidence and knowledge scores (Kim, Hanna, and Lee 2023; Carbó-Valverde, Cuadros-Solas, and Rodríguez-Fernández 2025; Smith and Finke 2025). Crucially, the substantive meaning of overconfidence depends heavily on how the divergence between perceived and actual competence is

defined.

Recent survey-based studies nevertheless point in a similar direction. Kim, Hanna, and Lee (2023) find that, in a U.S. investor sample, objective investment literacy is negatively associated with cryptocurrency investment, whereas subjective literacy and overconfidence are positively associated with it.[1] Similarly, Fujiki (2020) reports that average crypto owners in Japan are more likely to be overconfident and impatient than non-owners, even as they also display higher objective financial literacy on average. Based on survey data from Spain, Carbó-Valverde, Cuadros-Solas, and Rodríguez-Fernández (2025) find that bias-corrected financial literacy is negatively associated with crypto ownership, whereas financial literacy bias, interpreted as overconfidence, increases the likelihood of owning crypto-assets. In a similar vein, Chhatwani and Parija (2023) find that financially overconfident American investors are more likely to own crypto and more likely to report a high probability of owning it in the future.

More recent work also suggests that overconfidence may be reinforced by market experience rather than simply selecting into crypto ownership. Smith and Finke (2025) define overconfidence as the standardized gap between investment confidence and investment literacy and find that it is highest among younger crypto owners whose holdings more than doubled in value during the crypto boom. Their results suggest that large gains may amplify perceived skill, especially among younger investors, even when underlying investment literacy remains low. Along related lines, Iamin (2025) identifies overconfidence as a notable bias distinguishing crypto investors from non-investors in Brazil and Portugal. Importantly, that result also holds when overconfidence is measured using a second indicator based on the comparison between self-assessed financial knowledge and actual rank in the group, rather than self-assessment alone.

[1] These results were found to be robust across several operationalizations of overconfidence, including a categorical mismatch measure, a continuous divergence measure, and a residual-based specification (Kim, Hanna, and Lee 2023).

Taken together, the literature suggests a fairly consistent sociodemographic profile of crypto holders, while evidence on financial literacy remains mixed and evidence on overconfidence tends more often to point in a positive direction. Yet these findings are not fully comparable because overconfidence is operationalized in different ways across studies. Since the substantive meaning of overconfidence depends on how the gap between perceived and actual competence is defined, a more careful operationalization is needed. This is especially important when the underlying survey item is explicitly comparative, as it raises the question of whether overconfidence is better understood as simple self-assurance or as miscalibration in perceived relative position.

Data and Methods

We use individual-level survey data from Flash Eurobarometer 525, *Monitoring the Level of Financial Literacy in the EU* (European Commission 2023). The survey includes a comparative self-assessment of financial knowledge, a short financial literacy quiz, questions on digital financial services and trust in financial advice, and standard sociodemographic items across all 27 EU Member States. This was the first time the EU has carried out such an exercise to measure financial literacy at the European level, thus filling an important gap in comparability between national surveys (Demertzis, Mejino-López, and Léry Moffat 2024).

The main hypotheses for this study are:

- *H1: Objective financial literacy is associated with the likelihood of owning crypto assets.*
- *H2: Subjective financial literacy is associated with the likelihood of owning crypto assets.*

- *H3: Overconfidence bias is associated with the likelihood of owning crypto assets.*

The dependent variable is derived from Q9.7 and coded as a binary indicator equal to one if the respondent reports currently having, or having had in the previous two years, crypto-securities including crypto-currency, and zero otherwise. Strictly speaking, this measure captures recent crypto exposure rather than point-in-time spot ownership, since it includes both current and recent past holders. We retain the term crypto ownership for readability, but the empirical quantity is broader and should be interpreted accordingly.

The main explanatory variables are built from two parts of the financial literacy module. The first is a subjective measure based on Q1. We construct the subjective score by reverse-coding the original five-category item so that higher values indicate greater self-assessed financial knowledge, from 1 for very low to 5 for very high. The second is an objective measure based on Q2 to Q6. For each item, a correct answer is coded one and all other responses, including "don't know," are coded zero. The resulting objective score is the sum of correct answers and ranges from 0 to 5. This operationalization follows the logic of the instrument itself, which presents Q2 to Q6 as a quiz and explicitly offers "don't know" as a non-correct response option.

The overconfidence variable is designed to capture miscalibration rather than simple self-assurance. This distinction is necessary as Q1 is explicitly comparative. Respondents are not asked whether they know a lot about finance in the abstract, but how knowledgeable they are *relative to other adults* in their country. For that reason, the overconfidence measure is constructed as the difference between perceived and observed rank within country, rather than as the difference between a relative self-rating and an absolute quiz score.

For respondents i in country c, objective financial knowledge O is defined as:

$$O_{ic} = \sum_{j=2}^{6} \mathbf{1}(q_{j,ic} = a_j), \tag{1}$$

where $q_{j,ic}$ is respondent i's answer to quiz item j, a_j is the correct answer to that item, and $\mathbf{1}(\cdot)$ is an indicator function equal to 1 when the response is correct and 0 otherwise.

Subjective financial knowledge SL is mapped onto a symmetric set of subjective percentile placements:

$$S_{ic} \in \{0.10,\ 0.30,\ 0.50,\ 0.70,\ 0.90\}, \tag{2}$$

where higher values indicate greater perceived standing relative to other adults in the respondent's country.

Observed relative financial knowledge is then computed as a within-country weighted midrank percentile based on the post-stratification weight *w1*.

$$P_{ic} = \frac{\sum_{r \in c:\, O_r < O_{ic}} w_r \ + \ 0.5 \sum_{r \in c:\, O_r = O_{ic}} w_r}{\sum_{r \in c} w_r}. \tag{3}$$

This weighted midrank assigns tied objective scores the same midpoint percentile and places the observed measure on the same relative scale as the self-assessment item.

The continuous overconfidence measure is then defined as:

$$OC_{ic} = S_{ic} - P_{ic}, \tag{4}$$

where OC_{ic} captures the gap between perceived and observed relative position in the national distribution of financial knowledge. Positive values indicate overplacement, meaning that respondents place themselves above their observed position in the national knowledge distribution. Values close to zero indicate calibration, and negative values indicate underconfidence or underplacement.

This strategy has two advantages. First, it aligns the operationalization with the wording of Q1 by treating overconfidence as miscalibration in perceived relative position. Second, it avoids the more problematic comparison between a relative self-assessment and a raw quiz total on a different scale. In that sense, the measure is not simply a proxy for high self-regard. It is intended to capture the gap between where respondents think they stand and where their observed knowledge places them within their national context. The main limitation is that the percentile mapping for Q1 necessarily imposes an assumption about how the five response categories correspond to relative position. We use a conservative and symmetric mapping to keep that assumption transparent.

The remaining explanatory variables are coded as follows. Digital confidence is derived from Q11 and reverse-coded so that higher values indicate greater comfort with digital financial services, ranging from none to high. Advisor confidence is derived from Q12 and reverse-coded so that higher values indicate greater confidence that advice is in the respondent's best interest. In the current coding, non-substantive response categories in the release are absorbed into a residual "don't know" category. Financial prudence is recoded into low, medium, and high categories; this variable corresponds to the battery on affordability checks, expense monitoring, and long-term financial goals asked in Q7.

The empirical strategy relies on two main weighted logistic models. We use the post-stratification weight *w1*, country-fixed effects are included to absorb unobserved cross national differences, and standard errors are clustered by country throughout. The

first model estimates the association between overconfidence as miscalibration and crypto-asset ownership:

$$\log\left(\frac{\Pr(Y_{ic}=1)}{1-\Pr(Y_{ic}=1)}\right)=\alpha+\beta_1 OC_{ic}+\beta_2 FP_{ic}+\beta_3 AC_{ic}+\beta_4 DC_{ic}+\mathbf{X}'_{ic}\gamma+\lambda_c, \quad (5)$$

where FP_{ic} denotes financial prudence, AC_{ic} advisor confidence, DC_{ic} digital confidence, and $\mathbf{X}_{ic}$ the vector of sociodemographic controls (age, community, income, occupation, gender).

The second model focuses on financial literacy directly by replacing the overconfidence measure with its two underlying components:

$$\log\left(\frac{\Pr(Y_{ic}=1)}{1-\Pr(Y_{ic}=1)}\right)=\alpha+\beta_1 \mathrm{SL}_{ic}+\beta_2 O_{ic}+\beta_3 FP_{ic}+\beta_4 AC_{ic}+\beta_5 DC_{ic}+\mathbf{X}'_{ic}\gamma+\lambda_c. \quad (6)$$

These specifications are estimated separately because overconfidence is constructed from literacy scores, so combining them would blur the distinction between the metrics. We ran VIF collinearity diagnostics on both models finding very low scores throughout suggesting that the estimates are not being driven by any problematic overlap among the regressors. Variable-level missingness is reported in Figure 4 in the appendix.

Results

As shown in Figure 1, the distributions of the overconfidence gap for holders and non-holders overlap heavily, suggesting little sharp separation between the two groups

along this dimension. At the same time, the distribution for crypto holders is modestly shifted to the left. Given that higher values for the overconfidence gap indicate greater overplacement relative to observed financial knowledge, this pattern does not support the view that crypto holders are more overconfident in the sense of miscalibration. The summary statistics are consistent with this pattern. Mean overconfidence is slightly lower among crypto holders, while both subjective and objective knowledge are clearly higher. Taken together, the descriptive evidence suggests that crypto holders in the sample is associated less with confidence detached from skill than with a combination of stronger self-assessed knowledge, higher demonstrated knowledge, and greater digital confidence. Similarly, consistent with prior studies, crypto holders are younger on average, more likely to be male, more urban, and more likely to be employed and higher income.

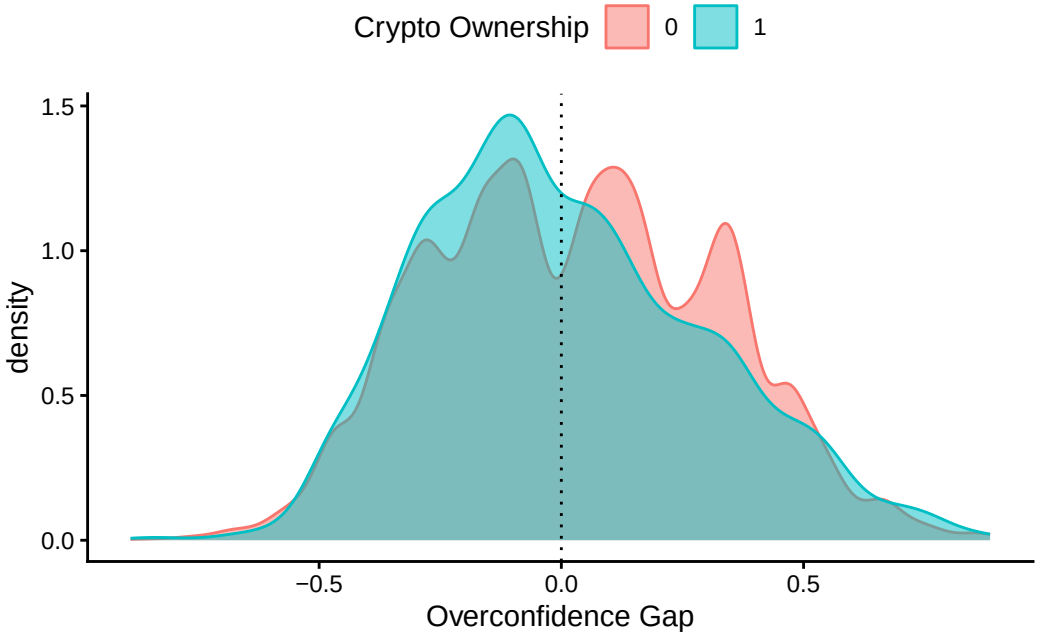

Figure 1: Dependent variable density

Figure 2 and Figure 3 report average marginal effects from weighted logistic models[2]

[2]The reported quantities are average marginal effects, logistic coefficients were selected to make it

Table 1: Summary Statistics

crypto	No			Yes		
Variable	N	Mean	SD	N	Mean	SD
financial_prudence	23512			2612		
... low	2141	9%		203	8%	
... mid	6122	26%		453	17%	
... high	15249	65%		1956	75%	
digital_confidence	23173			2603		
... none	1250	5%		45	2%	
... low	2553	11%		124	5%	
... mid	9175	40%		797	31%	
... high	10195	44%		1637	63%	
advisor_confidence	23512			2612		
... none	3373	14%		367	14%	
... low	7389	31%		868	33%	
... mid	7772	33%		960	37%	
... high	1369	6%		218	8%	
... don't know	3609	15%		199	8%	
gender	23512			2612		
... female	12659	54%		699	27%	
... male	10788	46%		1903	73%	
... other	65	0%		10	0%	
age	23512	49	17	2612	38	13
occupation	22667			2579		
... employee	11018	49%		1612	63%	
... self_employed	2419	11%		465	18%	
... manual_worker	1435	6%		167	6%	
... no_activity	7795	34%		335	13%	
income_decile	20427	6	2.7	2448	7	2.5
overconfidence_gap	23258	0.027	0.29	2602	0.002	0.29
objective_score	23512	2.6	1.3	2612	3.1	1.2
subjective_score	23258	3.2	0.79	2602	3.6	0.77
community	23512			2612		
... city	8187	35%		1103	42%	
... town	9281	39%		955	37%	
... rural	6044	26%		554	21%	

of crypto ownership with country fixed-effects and country-clustered standard errors. The first specification uses the overconfidence gap as the main explanatory variable. The second replaces that composite measure with separate indicators of subjective and objective financial literacy. Across both models, country effects are included but omitted from the figures for readability.

The regression results shown in Figure 2 reinforce this pattern. Once financial prudence, advisor confidence, digital confidence, and the full set of sociodemographic controls are introduced, overconfidence remains negatively associated with crypto ownership. The average marginal effect for the overconfidence gap is -0.043, which implies that a one-unit increase in the miscalibration measure is associated with a 4.3 percentage point lower probability of reporting crypto ownership, net of the other covariates in the model. Since higher values of the gap indicate greater overplacement relative to observed knowledge, this result runs against the extant expectation that crypto participation is driven by more positively miscalibrated respondents. Respondents who rate themselves above their actual level of financial knowledge are, if anything, *less* likely to report crypto ownership once relevant covariates are accounted for. We find rather that an increase of one standard deviation in our overconfidence metric corresponds to roughly a 1.3 percentage point decrease in the predicted probability of crypto ownership.

Figure 3 estimates the association of subjective and objective financial knowledge with crypto ownership alongside the same financial, demographic, and country controls as Figure 2. Both dimensions of literacy are positively associated with the dependent variable. The average marginal effect for subjective financial literacy is 0.027, implying that a one point increase in self assessed financial knowledge is associated with a 2.7 percentage point higher probability of reporting crypto ownership. Objective financial literacy is also positive, with an average marginal effect of 0.020,

easier to interpret as percentage point changes in the probability of reporting crypto ownership. The significance threshold of $p < 0.10$ is used in both figures. Table 4 in the appendix displays the full p values alongside log-odds coefficients.

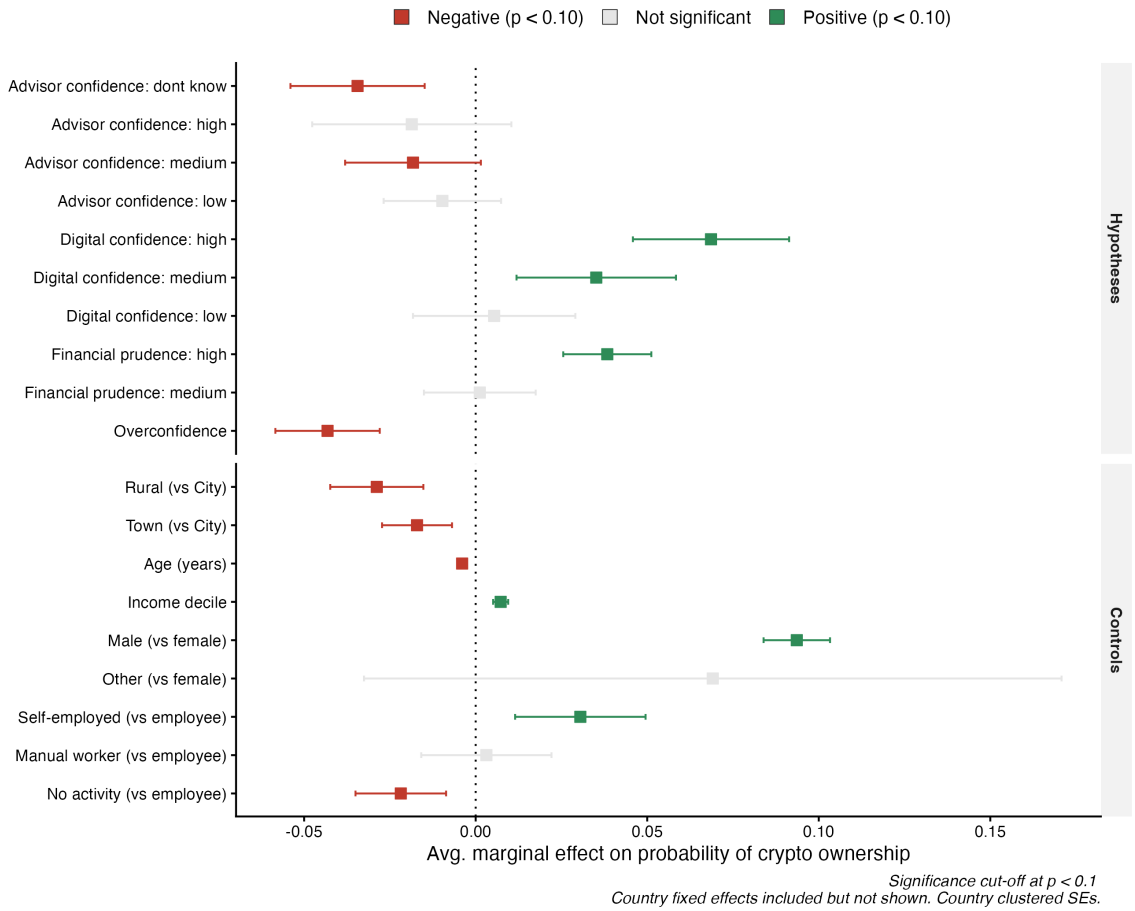

Figure 2: Overconfidence Logistic Model

or roughly a 2.0 percentage point increase in predicted probability for each additional correct answer. Read together, these estimates suggest that crypto ownership is more common among respondents who both think they know more about finance *and* demonstrate higher financial knowledge.

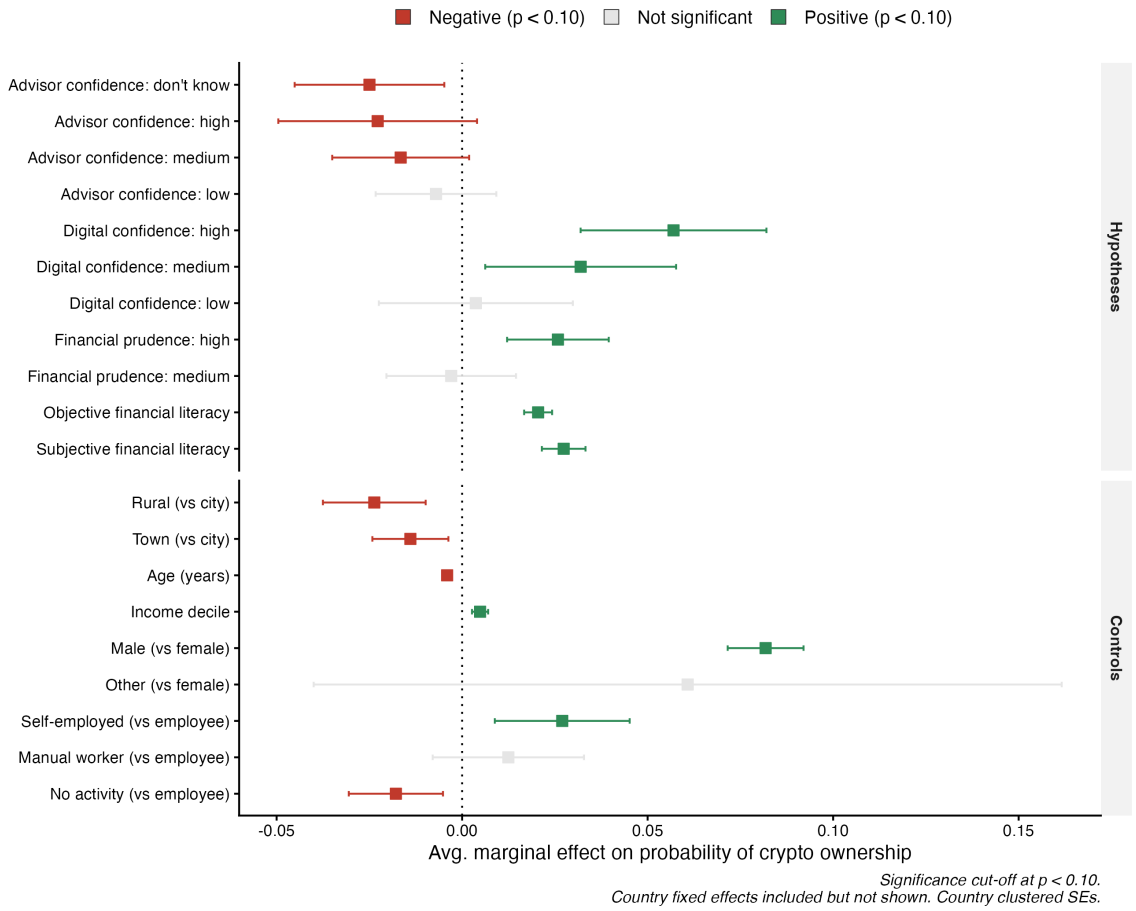

Figure 3: Financial Literacy Logistic Model

Across both models, crypto ownership remains strongly associated with high digital confidence, as well as with the socio-demographic controls found in prior studies. In the overconfidence mode (see Figure 2), relative to the baseline category "none", high digital confidence is associated with a 6.9 percentage point higher probability of

ownership, and medium digital confidence with a 3.5 percentage point higher probability. High financial prudence is likewise positive across both specifications. By contrast, some categories of advisor confidence are negatively associated with ownership, especially the medium and "don't know" categories. Similarly, men are about 9.4 percentage points more likely than women to report crypto ownership. Income is also positively associated with ownership, with each additional income decile linked to about a 0.7 percentage point increase in predicted probability. By contrast, age is negatively associated with ownership, at about 0.4 percentage points lower probability per additional year of age. Self-employed respondents are about 3.1 percentage points more likely than employees to report crypto ownership, while respondents with no economic activity are about 2.2 percentage points less likely. Rural residence is associated with a 2.9 percentage point lower probability relative to city residence.[3] These patterns suggest that the typical crypto holder in this sample is younger, more male, more digitally confident, and somewhat better positioned economically, but not more overconfident in the sense of miscalibration or less financially literate both in subjective or objective terms.[4]

Discussion

As in earlier work, crypto ownership in this sample is associated with a fairly recognizable social profile. Holders are younger, more often male, more digitally confident, and somewhat better positioned economically. The literacy results also fit the strand of the literature that links crypto participation to greater financial capability rather than to simple confusion or low competence. Across specifications, both subjective and objective financial literacy are positively associated with ownership. In that

[3] Similar results can be found in the controls-only model in Table 2 in the appendix.

[4] In the stepwise models in Table 3, objective literacy is about 0.31 and subjective literacy about 0.43, both strongly significant. Similarly, in the pooled models in Table 4, both remain positive and significant. In our robustness checks, no variable meaningfully changes direction across specifications.

respect, the findings are closer to evidence from Austria, Japan, and parts of the more recent Spanish literature than to studies that associate crypto participation with lower literacy alone (Stix 2021; Fujiki 2020; Carbó-Valverde, Cuadros-Solas, and Rodríguez-Fernández 2025).

The main departure concerns overconfidence. A growing literature has linked crypto ownership to overconfidence, often finding that investors with higher self-assessed knowledge relative to their measured literacy are more likely to hold crypto-assets (Kim, Hanna, and Lee 2023; Chhatwani and Parija 2023; Iamin 2025). Our results do not reproduce that pattern. Once overconfidence is operationalized as country-relative miscalibration between perceived and observed financial knowledge, the association is not positive and instead turns negative. Crypto holders in this sample appear more knowledgeable and more self-assured, but not more positively miscalibrated. Ownership is associated with higher confidence and higher knowledge taken together, rather than with a wider gap between the two.

One plausible explanation for this divergence from extant literature lies in operationalization. Existing studies do not measure overconfidence in the same way. Some rely on score gaps between subjective and objective literacy, others on residualized confidence or bias-adjusted literacy, and others on standardized divergences between confidence and knowledge (Kim, Hanna, and Lee 2023; Carbó-Valverde, Cuadros-Solas, and Rodríguez-Fernández 2025; Smith and Finke 2025). Those approaches are related, but they do not identify exactly the same phenomenon. In the Eurobarometer, the subjective item is explicitly comparative, asking respondents to assess their knowledge relative to other adults in their country. A relative-rank measure therefore fits the wording of the instrument more closely than a simple gap between a self-rating and a raw quiz score. Under this specification, the familiar figure of the overconfident crypto holder is less convincing.

The timing of the data may also help account for the difference. Much of the literature on overconfidence and crypto ownership relies on surveys collected around 2018

to 2021, often in periods closer to intense speculative enthusiasm and rapid price appreciation (Panos and Karkkainen 2019; Kim, Hanna, and Lee 2023; Chhatwani and Parija 2023; Balutel et al. 2022). The present study uses a harmonized EU-wide survey from 2023. By then, respondents had already seen repeated boom-bust cycles, more public scrutiny, and a more institutionalized crypto environment.[5] Smith and Finke (2025) show that overconfidence is especially pronounced among younger crypto owners whose holdings more than doubled during the boom period. Read against that backdrop, our results are consistent with a later phase of crypto participation in which digital confidence and financial knowledge remain important, while positive miscalibration is less central than in earlier boom-period samples. Crucially, this interpretation should remain cautious, since the design is cross-sectional and does not identify change over time directly.

Conclusion

In line with extant literature, our results show that crypto-asset holders are younger, more likely to be male, richer, more urban, more self-employed, more financially knowledgeable, and more comfortable with digital financial services. Similarly, we find support for the positive association between subjective and objective financial literacy found by prior studies. However, we find that when overconfidence is operationalized as country-relative miscalibration between perceived and observed financial knowledge, it is not positively associated with recent crypto-related holding, and across current specifications the association is in fact negative. Subjective and objective knowledge, by contrast, are positively associated with the outcome.

The broader implication is that crypto ownership may be too easily reduced to a story of behavioral bias. This does not imply that crypto participation is prudent

[5]Similarly, many of these studies pre-date the sharp expansion of retail and institutional participation in crypto markets following the launch of more mainstream instruments such as the first US Bitcoin ETF on 19 October 2021 Todorov (2021).

or normatively desirable. However, it does suggest that the relevant divide may lie less in overconfidence alone than in the combination of literacy, digital familiarity, and willingness to engage with novel financial products as well as adapation to the maturity of the crypto-asset market.

Appendix

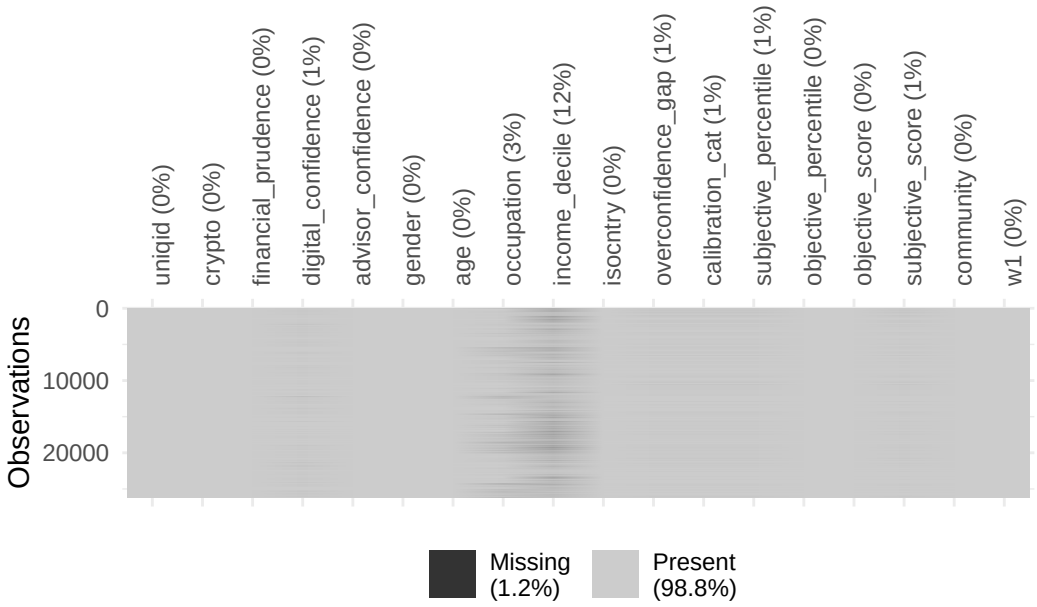

Figure 4: Missing Variables

Table 2: Control Variables

term	Model 1
(Intercept)	-1.19 ***
	(0.17)
age	-0.04 ***
	(0)
gender:male	1.15 ***
	(0.06)
gender:other	0.8 **
	(0.38)
occupation:self.employed	0.28 ***
	(0.08)
occupation:manual.worker	-0.09
	(0.11)
occupation:no.activity	-0.32 ***
	(0.08)

(continued)

term	Model 1
income.decile	0.12 *** (0.01)
community:town	-0.21 *** (0.06)
community:rural	-0.37 *** (0.08)
isocntry	Y
N	22309
AIC	12389

Significance: ***p < .01; **p < .05; *p < .1. Note: Robust Standard Errors

Table 3: Step-wise Hypothesis Tests

term	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	-1.09 *** (0.17)	-2.46 *** (0.2)	-1.73 *** (0.17)	-1.49 *** (0.19)	-1.91 *** (0.26)	-1.1 *** (0.18)
overconfidence.gap	-0.54 *** (0.09)					
subjective.score		0.43 *** (0.04)				
objective.score			0.31 *** (0.02)			
financial.prudence:mid				0.02 (0.12)		
financial.prudence:high				0.54 *** (0.1)		
digital.confidence:low					0.1 (0.23)	
digital.confidence:mid					0.58 *** (0.2)	
digital.confidence:high					0.98 *** (0.2)	
advisor.confidence:low						-0.05 (0.09)
advisor.confidence:mid						-0.1 (0.09)

(continued)

term	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
advisor.confidence:high						-0.06 (0.13)
advisor.confidence:don't know						-0.42 *** (0.12)
isocntry	Y	Y	Y	Y	Y	Y
age	Y	Y	Y	Y	Y	Y
income.decile	Y	Y	Y	Y	Y	Y
occupation	Y	Y	Y	Y	Y	Y
community	Y	Y	Y	Y	Y	Y
gender	Y	Y	Y	Y	Y	Y
N	22156	22156	22309	22309	22078	22309
AIC	12285	12144	12164	12289	12187	12380

Significance: ***p < .01; **p < .05; *p < .1. Note: Robust Standard Errors

Table 4: Financial Literacy and Overconfidence

term	Model 1	Model 2	Model 3	Model 4
(Intercept)	-1.88 *** (0.28)	-2.9 *** (0.29)	-2.34 *** (0.28)	-3.14 *** (0.29)
overconfidence.gap	-0.51 *** (0.1)			
financial.prudence:mid	0.02 (0.12)	-0.02 (0.12)	-0.02 (0.12)	-0.04 (0.12)
financial.prudence:high	0.48 *** (0.11)	0.36 *** (0.11)	0.41 *** (0.11)	0.32 *** (0.11)
advisor.confidence:low	-0.11 (0.09)	-0.09 (0.09)	-0.1 (0.09)	-0.08 (0.09)
advisor.confidence:mid	-0.21 ** (0.09)	-0.24 *** (0.09)	-0.18 ** (0.09)	-0.19 ** (0.09)
advisor.confidence:high	-0.21 (0.13)	-0.42 *** (0.13)	-0.17 (0.13)	-0.27 ** (0.13)
advisor.confidence:don't know	-0.42 *** (0.12)	-0.33 *** (0.12)	-0.37 *** (0.12)	-0.3 ** (0.12)
digital.confidence:low	0.1 (0.23)	0.09 (0.23)	0.07 (0.23)	0.06 (0.23)

(continued)

term	Model 1	Model 2	Model 3	Model 4
digital.confidence:mid	0.55 ***	0.54 ***	0.49 **	0.47 **
	(0.2)	(0.2)	(0.2)	(0.21)
digital.confidence:high	0.93 ***	0.87 ***	0.82 ***	0.76 ***
	(0.2)	(0.2)	(0.2)	(0.2)
subjective.score		0.37 ***		0.33 ***
		(0.04)		(0.04)
objective.score			0.27 ***	0.24 ***
			(0.02)	(0.02)
isocntry	Y	Y	Y	Y
age	Y	Y	Y	Y
income.decile	Y	Y	Y	Y
occupation	Y	Y	Y	Y
community	Y	Y	Y	Y
gender	Y	Y	Y	Y
N	21930	21930	22078	21930
AIC	12004	11918	11935	11787

Significance: ***p < .01; **p < .05; *p < .1. Note: Robust Standard Errors

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