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Do You Even Crypto, Bro? Cryptocurrencies in Household Finance

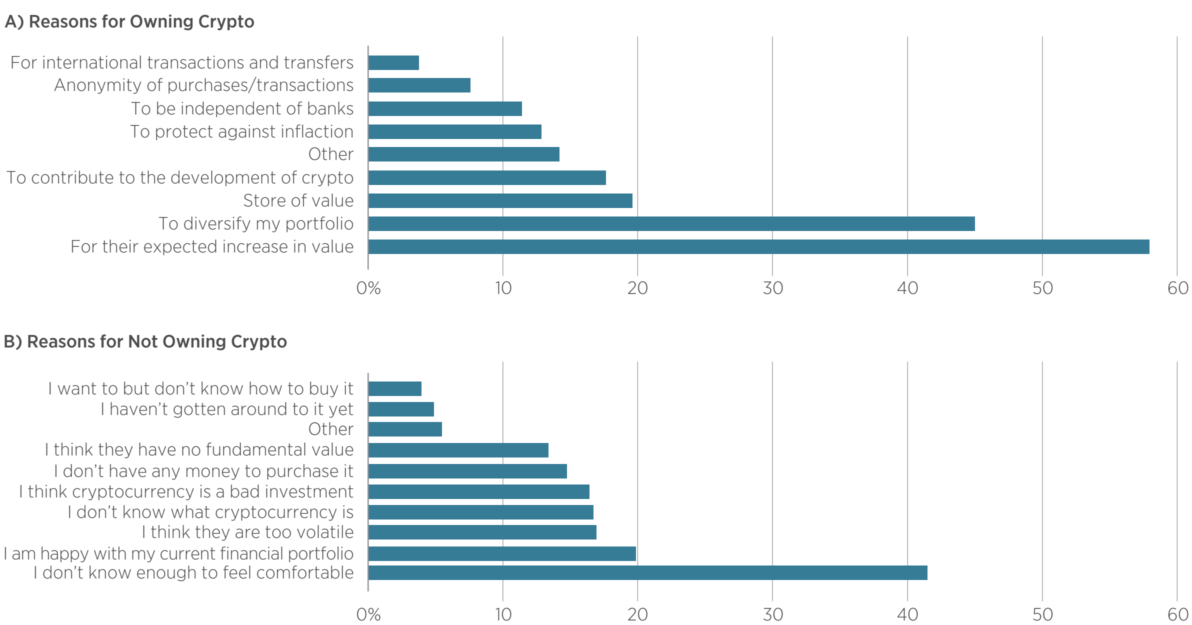
Based on BFI Working Paper No. 2023-70, "Do You Even Crypto, Bro? Cryptocurrencies in Household Finance," by Bernardo Candia, UC Berkeley; Olivier Coibion, UT Austin; Yuriy Gorodnichenko, UC Berkeley, and Michael Weber, Chicago Booth

Cryptocurrency holders are younger, male, less likely to be white, and more libertarian relative to non-crypto holders. They also expect much higher rates of returns for crypto and perceive it as relatively safer than do other households. Information about historical returns for cryptocurrencies leads individuals to increase their desired share of crypto holdings and makes them more likely to purchase cryptocurrency.

Since its inception in 2009, Bitcoin has become an outlier for generating polar assessments, with some embracing it while others treat it as a poison. In addition to these diametric viewpoints lie the majority of American households, who are largely uninformed about cryptocurrencies. These widely varying perspectives beg the question: Who buys crypto, and why?

In this paper, the authors study crypto-owners (and non-owners) and their reasons for purchasing (and not purchasing) cryptocurrencies. They rely on a largescale, nationally representative survey of U.S. households that has been running since 2018 (The Chicago Booth Expectations and Attitudes Survey on the Nielsen Homescan Panel). In 2021 the authors began incorporating a wide range

Figure 1 • Reasons for Owning Crypto (Or Not)



Note: This figure shows the percentage of survey respondents who cite a given reason for either owning or not owning cryptocurrency.

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of questions focusing on the expectations of households towards financial assets, especially with respect to cryptocurrencies. Their analysis yields the following results:

Who Owns Crypto, And Why?

- The share of people owning any cryptocurrency rose from 3% to 11% between 2021 and 2022, at the same time that Bitcoin prices were rising. As Bitcoin prices fell precipitously thereafter, the share of people holding crypto rose further to 12%.
- Relative to the full population, those holding cryptocurrencies are disproportionately male, higher-income, libertarian or politically independent, less likely to be white, and younger.
- While most individuals owning cryptocurrencies report that crypto represents only small fraction of their financial wealth, almost 20% report that cryptocurrency accounts for at least 50% of their financial holdings. Furthermore, the vast majority of crypto-holders are either happy with their crypto-holdings or would like to hold more.
- While Bitcoin is the most common cryptocurrency, most individuals who own crypto own multiple currencies (with Ether and Dogecoin being the next most popular).
- Crypto-holders most commonly justify their decision through the high expected returns of cryptocurrency, followed by a desire for a diversified portfolio. Other commonly cited reasons for owning crypto include wanting a store of value and a hedge against inflation, as well as a desire to support the development of cryptocurrencies.
- In contrast, those who do not hold cryptocurrencies generally cite one of two reasons: either a lack of knowledge about cryptocurrency, or a negative opinion about cryptos as a financial asset.
- Those who own crypto and those who do not have very different beliefs about crypto's future performance. For example, when asked to report expected future returns for Bitcoin during the third quarter of 2021, crypto-owners reported an average expected return of 22% while non-crypto-owners reported an expected return of 7%.
- These differences in perceptions of crypto as a financial asset extend to perceived correlations with other asset returns as well as with inflation. Among individuals holding crypto, those who expect higher inflation also expect higher crypto returns, suggesting that cryptocurrencies serve as an inflation hedge. By contrast, those who do not hold cryptocurrencies view them as largely uncorrelated with inflation.
- The level of returns that an individual expects from crypto is the single strongest predictor of whether they own the asset, exceeding the predictive power of each of the demographic characteristics listed above.
- Changes in the price of Bitcoin affect the subsequent durable goods spending decisions of crypto-holders in proportion to the share of their financial wealth that is held in the form of cryptocurrency.

Is Crypto Unique?

Is cryptocurrency unique for the patterns documented above, or is it just another asset class that happens to be targeted towards certain types of young people? The following results suggest that cryptocurrency is in fact quite different:

- Crypto is unique for the extent to which most individuals are uninformed about it. The share of people who are unwilling to even hazard a guess for the expected return is higher for crypto than for any other type of asset.
- Those who do make predictions about future returns to crypto do so in ways that are strikingly different than those to other assets. While owners of cryptocurrency are much more optimistic about future crypto returns than those who hold no cryptocurrency, no such pattern arises for other assets. In addition, other assets do not exhibit the same difference in beliefs about whether assets are an inflation hedge depending on whether an individual holds that asset or not.
- Expected returns for other assets are much weaker predictors of whether people hold

that asset relative to fundamentals than is the case for cryptocurrency. For every non-crypto asset class, observables, such as buyer demographics, have a much larger explanatory power than expected returns in accounting for who owns particular assets.

- Crypto differs from more conventional assets in terms of how returns passthrough into spending as well. While the passthrough into durable goods purchases is broadly in line with those of other assets, the passthrough into non-durable spending is effectively zero, a finding strongly at odds with stocks and bonds.

Impacts of Information

Given that many individuals don't have much knowledge about crypto and that crypto differs from other financial assets, one might expect that providing information about cryptocurrency to survey participants could have meaningful effects on their decisions about whether or how much to invest. To test this hypothesis, the authors apply information treatments to randomly selected groups of survey respondents. They find the following:

- When individuals are told that cryptocurrency has experienced high positive returns in recent years, they tend to raise their desired share of cryptocurrency in their portfolio, usually at the expense of stocks, and are more likely to own cryptocurrency in subsequent waves.

- This effect is particularly pronounced for those individuals who initially said they owned no cryptocurrency because they did not know about it.

- Households tend to not only increase the amount of cryptocurrency they would like to hold in their ideal portfolio, but they also tend to increase the desired share of gold. In contrast, information about stock returns has little detectable impact on desired portfolio shares or actual crypto holdings, perhaps because these returns are already better known by households.

- Information about inflation tends to move the desired share of cryptocurrency in the same direction as inflation expectations, again consistent with the idea that some individuals perceive cryptocurrencies as an inflation hedge.

These results shed new light on the types of individuals buying cryptocurrency, their reasons for doing so, and the ways in which their opinions and expectations differ from those who choose not to invest in crypto. Cryptocurrency looks different from most financial assets in a number of ways, the most striking of which may be just how different the beliefs about the asset are for those holding the asset versus those not holding the asset.

As new information about cryptocurrency is acquired, potential investors reach very different conclusions about its viability as a financial asset. The absence of common information and beliefs about crypto across investors suggests that price volatility will continue to be one of the most defining characteristics of this new asset for the foreseeable future.

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