605 STUDIOS



Crypto asset disclosure study

Insights on holders and how they analyze their holdings



INTRODUCTION

Proper disclosure to investors and holders of crypto assets lies at the center of global regulatory efforts aiming to improve the integrity of constantly evolving crypto markets. In short, in a market driven often by speculation and complex technological operations, investors need to know what they are buying, and to understand the risks and rewards of those crypto assets.

But developing disclosure principles for a novel industry is not entirely a linear process. The standard measure of what should be disclosed is tied to materiality, which refers to when there is a substantial likelihood that a fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available. But in a novel market, just what a reasonable investor may want, or the "total mix" may not be entirely clear. Additionally, even reasonable retail investors may not have sufficient experience or literacy to know just what information is most relevant to holding a crypto asset. As a result, their priorities may or may not align with what experts may suggest.

Still, understanding what investors consider important is a critical exercise. It helps to uncover areas that investors may naturally cling to and highlights for founders, companies, and regulators, issue areas that will be especially important. And it may uncover areas missed or underappreciated in government and the private sector.



"Understanding what investors consider important is a critical exercise. It helps to uncover areas that investors may naturally cling to, and highlight for founders, companies and regulators, topics that should be disclosed to investors." At the same time, identifying where investors may have misplaced or accepted erroneous assumptions can help illuminate just how sophisticated investors are, and where opportunities for upgrading financial literacy are most warranted.

To get a sense of today's holder of crypto assets, Broadridge conducted a survey of 2,000 randomly selected self-identified crypto market participants in Canada, the U.K., and the United States, from March to June 2023. The goal was to get a sense as to what holders and prospective holders of crypto assets think is important when purchasing a crypto asset, the drivers behind their insights, and how they prioritize these items.

No study has ever been taken to rigorously investigate the priorities of holders and investors of crypto assets, or for that matter where they receive their information. This study, prepared by Chris Brummer, Robert Krugman, Aaron Miller, and Aviad Stein offers first insights.

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AN OVERVIEW OF OUR FINDINGS

Respondents to our study provided insight into a maturing market comprised of individuals with strong knowledge of the space and many just beginning their investment careers. Here are some of our key findings:

Persistent interest

Despite the serious challenges and setbacks facing the industry, participants signaled persistent interest in the space as investors and users of crypto assets.

Long-term investment

Over 65% of respondents suggested their holdings represented a long-term investment, suggesting that, contrary to popular perception, most participants are not speculators.

Additionally, 46.7% of respondents answered that their investments in the space were being used to educate themselves, indicating a "learning by doing" approach by holders.

Traditional metrics prioritized over native crypto metrics

When asked about what type of disclosure information is most important in their decision making, respondents consistently selected traditional investment metrics including financials, risk and security, and information about the management team over native crypto metrics such as tokenomics and network / platform activity. While not surprising given the novelty of crypto assets, this suggests possible underappreciation of items critical to pricing and understanding the attractiveness of a crypto asset.

Dispersed sources of information

When asked to respond to questions about where they access information about their crypto asset holdings, respondents selected crypto asset websites, brokers, and exchanges as primary sources, trumping by a sizable margin social media, third-party data providers, and specialized publications.

Interestingly white papers, a primary source of information for the space, consistently finished last across all available sources.

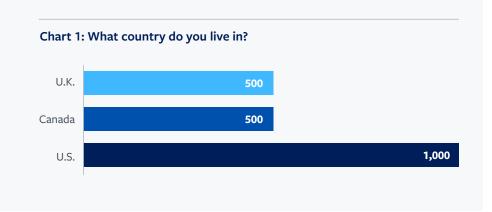
More frequent updates to information

Respondents recognized the 24x7 global nature of the space in highlighting a need for information to be updated more frequently than traditional assets, with over 50% suggesting disclosure information should be updated monthly or as changes occur.

While more study will be required, the results suggest the need for a disclosure regime that will ensure access to appropriate information in a timely manner delivered through a multitude of channels.

PARTICIPANTS AND METHODOLOGY





To better ensure that individuals had a basic understanding of the crypto asset ecosystem and could provide results based upon their experience we included only those respondents who currently own, previously held, or plan on holding crypto assets in the near future.²

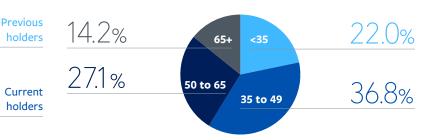
273

831

Participants were limited to those over the age of 18. We found an average age of those who currently or previously held crypto assets to be 39.5 years old while prospective holders had an average age of 55 years.

Chart 2: What is your experience with crypto assets?





² Data captured within the report has a 90% confidence level with a margin of error of +/- 2% across the total sample with +/- 3% in the U.S. and +/- 4% in the U.K. and Canada.

3.6%

41.6%

Prospective

holders

INVESTOR PROFILE AND TRANSACTIONAL HABITS OF RESPONDENTS

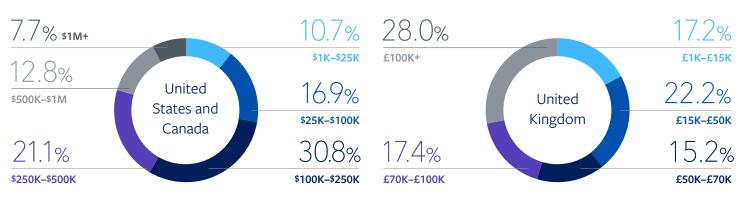
One important goal of the study was to better understand holders of crypto assets and the respondents to the survey. We thus devised a series of questions designed to understand the amount of investable assets held by respondents, the amount of crypto assets within their portfolio, the kinds of crypto assets held, and the purposes for which they hold crypto assets. The results largely confirm the existing literature: that holders of crypto assets rely on centralized exchanges, prefer Bitcoin to other assets, and have considerable net wealth.

Investable assets of respondents

To begin the survey, we asked respondents to disclose the current value of their total investable assets. We found within the United States and Canada that 52% of respondents held between \$100K and \$500K in assets with respondents averaging approximately \$340K in investable assets. Within the U.K., the total amount of

assets owned by respondents was significantly lower than in the United States and Canada, with the average respondent holding approximately £75K in assets. Given this discrepancy, we have broken out U.K. respondents in a separate chart below.





We also asked what percentage of each respondent's assets were comprised of crypto assets. As seen in Chart 6 below, our results indicate that the average respondent holds 27.9% of their total assets in crypto assets, with the largest percentage being in Canada where the average respondent held almost 36.6% of their assets in crypto assets. Notably, 18.3% of respondents held at least 50% of their total assets in crypto assets.

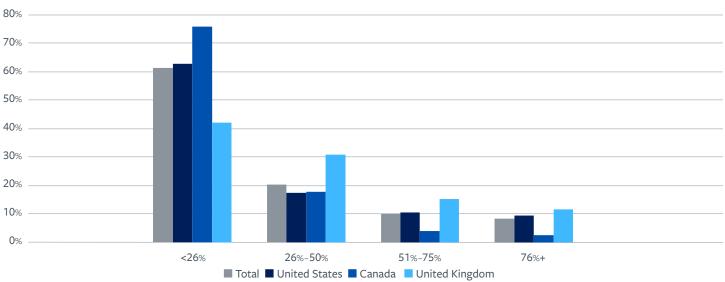


Chart 6: What percentage of your investable assets are comprised of crypto assets?

Delving deeper, we also asked respondents which crypto assets they held, choosing a range of popular crypto assets including Bitcoin, NFTs, governance tokens, and, more broadly speaking, cryptocurrency.

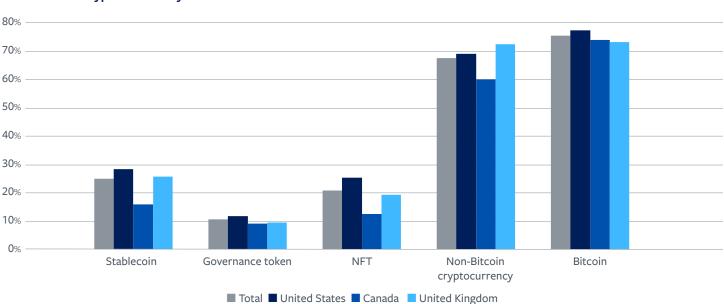
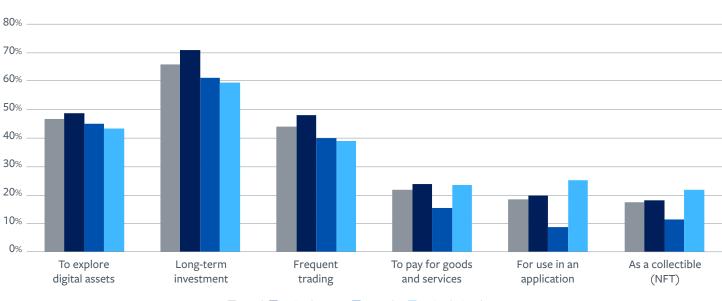


Chart 7: What crypto assets do you hold?

As seen in Chart 7, Bitcoin was the most popular asset across all three countries, though other cryptocurrencies also proved popular, particularly in the U.K. and U.S. Generally speaking, stablecoins were marginally more frequently held when compared to NFTs (and even more so) governance tokens, though they were still held less often than Bitcoin and other crypto assets.

How and why respondents hold crypto assets

In order to understand the motivation related to their holdings, respondents were asked for what purpose they hold crypto assets. While over 65% of respondents were holding crypto assets for the purpose of long-term investment, perhaps the more interesting number was the 46.7% of respondents who were using their investment to explore crypto assets. Notwithstanding the turbulence and volatility in the market, the responses suggest that interest (or curiosity) across all sampled countries, including the United States, continues to be considerable.





■ Total ■ United States ■ Canada ■ United Kingdom

Chart 9: How did you acquire your crypto assets? 80% 70% 60% 50% 40% 30% 20% 10% 0% ATM or kiosk Mining reward Brokerage firm Decentralized Centralized exchange exchange ■ Total ■ United States ■ Canada ■ United Kingdom

Individuals were further asked to identify which channels they used to acquire the crypto assets they hold, and respondents were offered the choice of centralized and decentralized exchanges, brokerage firms, ATMs / kiosk, and acquisition via a mining reward.

Just over half of the respondents selected a centralized exchange, followed by a brokerage firm. Mining rewards and acquisition through ATMs and kiosks paled by comparison. Importantly however, decentralized exchanges appear as more than nominal players, with 19.5% of U.S. respondents, 16.8% of U.K. respondents, and 13.4% of Canadian respondents indicating that they rely on them. Beyond financial channels, we also asked about other peer-to-peer methods of acquisition related to payments, gifts, and private transactions. As seen below in Chart 10, over 20% of respondents in the U.K. acquired assets through a private seller or as a gift.

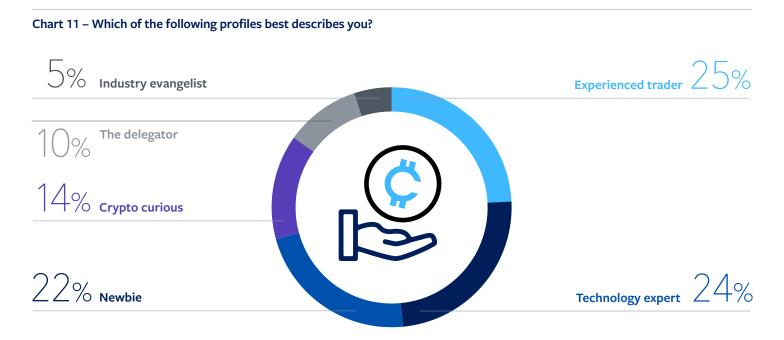


Chart 10: Beyond the mentioned channels, did you receive crypto assets through any of the following?

8 Broadridge

INDIVIDUAL SEGMENTATION

In an effort to further understand respondents and begin to identify segmentation, we asked respondents to review six descriptions of personas and select which most closely aligns with their interest in crypto assets. For purposes of presentation Broadridge then created names for each of the personas which we felt best represented the description, making it easier to present the findings.



- Newbie: I'm just starting my career. A friend got me into crypto. I value guidance from influencers, social media groups, and friends who know more than I do, since I don't want to spend too much time learning on my own.
- Crypto curious: I've been playing around in the Web3 space for a few years, own a few NFTs, and have joined a few communities. I can see the value of getting into this space early, but I still don't fully understand how everything works.
- 3. Technology expert: I consider myself a technologist, so it's important to me that I have a solid understanding of crypto investing. I've taught myself a lot, made some mistakes, and am concerned about security. I'm willing to allocate time and money to becoming more experienced.
- 4. Experienced trader: I'm an informed trader. I diversify my assets and constantly stay on top of market trends and platforms. I have a close group of friends and colleagues that I communicate with regularly about investing. I value anonymity and don't want to miss the next big thing.
- 5. Industry evangelist: I run a startup, host a niche podcast on Web3 tech, and regularly speak at meetups and other events.
 I want to be known for solving important problems in this space and take advantage of new opportunities.
- 6. The delegator: I'm a business leader with extensive experience in traditional investing and have a good relationship with my financial advisor. I know blockchain technologies are disrupting traditional industries and I want to start investing in crypto, but I don't want to do it myself.

KEY SURVEY FINDINGS: TERMINOLOGY AND DEFINITIONS

Within the survey we wanted to better understand what types of information holders found both necessary and useful.

To enable us to test the market, we spent considerable effort analyzing information currently provided on-chain and off-chain by the registrars themselves as well as the underlying technologies being leveraged. While not an exhaustive list, we created ten categories of information which were the basis for many of the questions asked. For our readers to appreciate the survey results, we have included the definitions below.



Crypto token description Purpose of the token, genesis and creators of tokens, economic benefits



Financial overview Including existing or expected revenue model and performance



Governance model How decisions relating to how the token operates are made



Management Who they are, amount of holdings they have, and vesting schedules



Major holders Partner and investor number of holdings, who they are, and vesting schedules



Network and platform activity Number of transactions, developers, projects and proposals, and voting information



Perspective of core team An overview of how the core or governance team analyze the performance of the asset, highlight key decisions, and discuss

plans and goals



Risk and security Conflicts of interest, legal, integrity, and forking information



Supporting materials Availability of white papers, source code, or block explorer

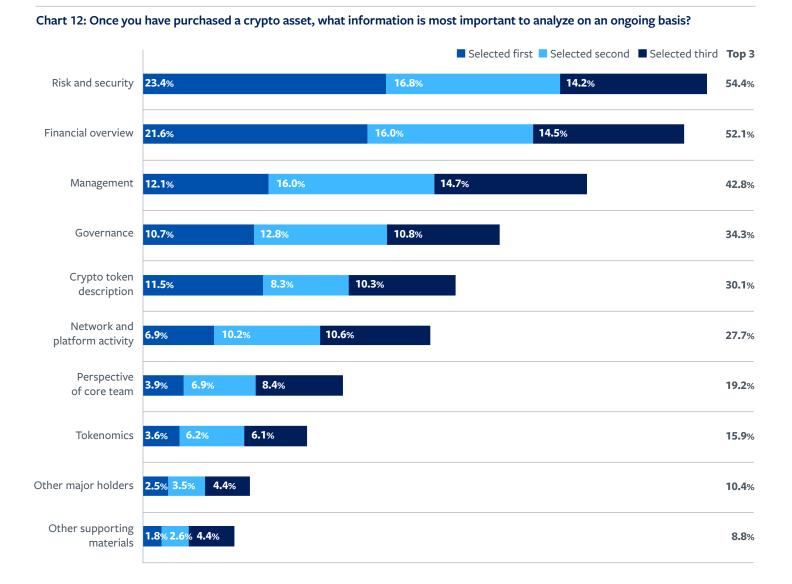


Tokenomics How many tokens exist, any collateral behind assets, the model for inflation / deflation

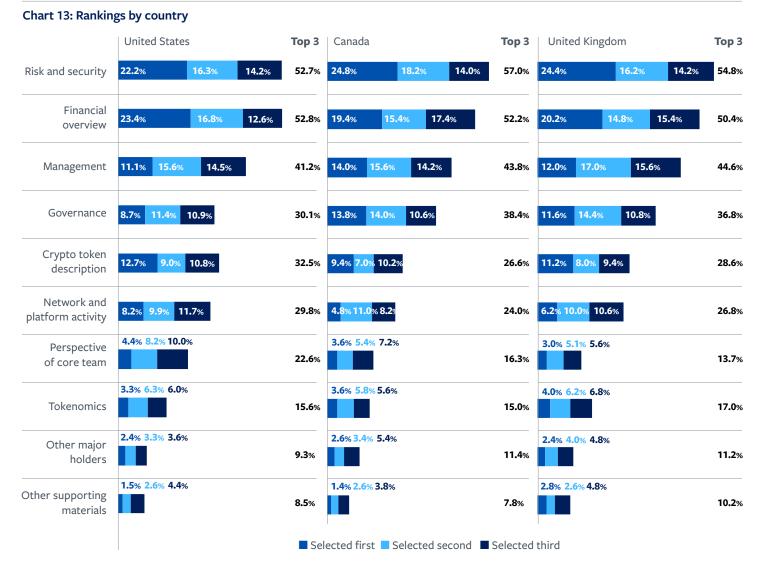
WHAT INFORMATION IS IMPORTANT FOR HOLDERS OF CRYPTO ASSETS?

The survey's initial point of emphasis seeks to identify what current and prospective holders of crypto assets rank as the most important factors driving their decisions to purchase crypto assets. We decided that this was an appropriate starting point given a range of emerging scholarship directed towards the importance of the founder team, overview of technology, and tokenomics in understanding a crypto asset.

With this in mind, we asked respondents to rank the ten categories of information by order of importance. Below are the findings ranked by the percentage of time the category appeared in the top three.



As the chart above illustrates, respondents viewed risk and security as the top disclosure item. Respondents ranked the issue as the top disclosure item 23.4% of the time, second most important at 16.4% and third most important at 14.2%. Similarly, financials were highly prioritized, with respondents ranking a financial overview as the most important factor 21.6% of the time, the second most important factor 16% of the time, and the third most important factor 14.5% of the time. Management ranked third, followed by governance and the crypto token description.



Within the U.S. respondents slightly prioritize the financial overview over risk and security (52.8% to 52.7%). Within Canada and the U.K. respondents significantly prioritize governance over the crypto token description, and in the U.K. respondents prioritize tokenomics over the core team's perspective.

Traditional metrics rank higher than crypto native metrics

One interesting takeaway from the previous chart is that factors like tokenomics and perspective of the core team were viewed by investors across all three countries as relatively unimportant as compared to other factors like the financial overview, risks, and management. Indeed, despite the relatively central importance of tokenomics among crypto investors due to the way it provides for the current and future supply of the crypto asset, tokenomics ranked only as the seventh most important factor in the U.S., and the sixth most important factor in Canada and the U.K. Also of considerably less emphasis was the governance and information on major holders (i.e., investors with 5+% of total crypto supply), network / platform activity and perspective of the core team, which we described along the lines of the "management discussion and analysis" comparable in a public company disclosure. Digging further, we wanted to understand if higher net worth investors with over \$100k in crypto asset holdings had a different perspective. The data we found can be summarized below.

Chart 14: Disclosure items as ranked by high net worth holders vs all holders

Rank order			Total High Asset /	Rank order High Asset /	Change in
Total U.S.	Types of information	Total U.S.	High Crypto	High Crypto	rank order
1	Financial overview	24%	19%	3	-2
2	Risk and security	23%	22%	1	1
3	Crypto token description	13%	19%	2	1
4	Management	12%	11%	4	0
5	Governance	9%	8%	6	-1
6	Network and platform activity	9%	10%	5	1
7	Tokenomics	3%	2%	9	-2
8	Perspective of core team	3%	3%	8	0
9	Other major holders	2%	4%	7	2
10	Other supporting materials	2%	2%	10	0

As seen in comparing Chart 12 and Chart 14, we found few differences in the overall perceived importance of crypto native metrics, regardless of respondent holdings.

Several possible theories may explain the results. Because many investors in crypto assets do so for speculative or investment purposes, an overview of how an asset generates revenues and how gas fees are determined and collected are core aspects to the decision making. Additionally, many of the elements of the category were stablecoin-specific, like the total reserves held against issued tokens and treasuries held against issued tokens, and thus the most popular use case for crypto assets. Given the well-documented crises concerning crypto assets, the risk profile of assets appears to be a central concern for respondents. Based on the respondents' feedback, a short description of the purpose, genesis, and the primary issuing and supporting organizations for the asset; the jurisdiction(s) where they are located; and identification of founders seem like natural starting points for understanding a crypto asset. At a minimum, a casual observer could understand their relative importance to investors and holders of crypto assets over even

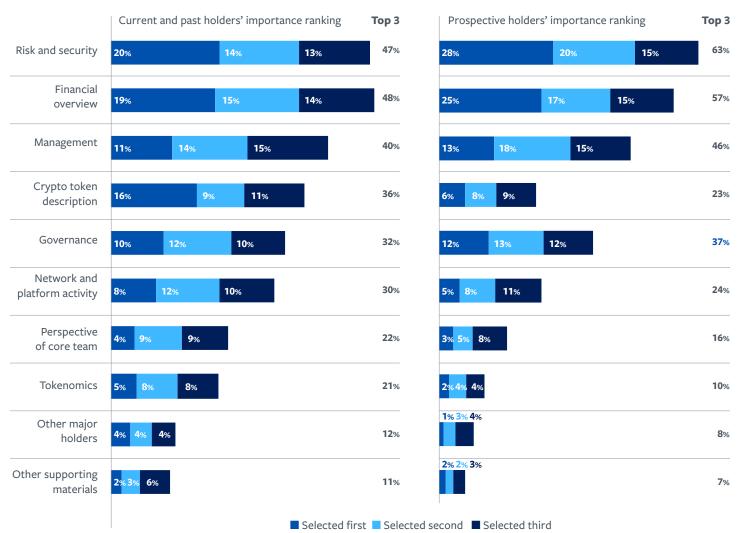
management — a category which includes the names of founders and executives, along with the identification of governing board members — where, for better or worse, board members are not always present.

Still, there are arguably simpler explanations. Perhaps the most striking feature of the results is that *the more crypto-specific elements of crypto-related investment tend to be the data elements investors prioritize the least*. In other words, the issues with the most overlap with familiar traditional financial disclosure concepts — financial information, risk factors, management — are, not surprisingly, emphasized by investors and prospective investors of crypto assets. Meanwhile, issues with the least overlap with traditional finance mechanics — tokenomics, network mechanics, etc. — are least emphasized, suggesting a possible lack of understanding of the drivers of value in crypto markets. The results could merely reflect less overall familiarity and experience with crypto assets and what makes them distinct, which in turn is filtered into the list of items they view to be most important.

Do experienced holders place more importance on crypto-native metrics?

One question raised is whether or not this ranking reflected the varying levels of experience among respondents. Presumably, the more experienced the investor or holder, the more they might support or value crypto-native disclosure items. Our results, however, were mixed.





As one might expect, the group of respondents more familiar with crypto assets, current and past holders, consistently ranked crypto native disclosure categories higher. Current and past holders across the board ranked network / platform activity, the perspective of the core team, and tokenomics higher than those respondents who were only prospective holders. Each item ranked in the top three most significant disclosure items 30%, 22% and 21% of the time respectively. However, their relative importance vis-à-vis traditional disclosure items remained constant.

THE CRYPTO NATIVE CATEGORIES: A CLOSER LOOK AT TOKENOMICS AND NETWORK ACTIVITY

Network / platform activity and tokenomics represent just two of a wide and growing number of novel categories of information native to crypto assets and unfamiliar to traditional finance. As a result, they may not be as familiar as other categories of information, even if they are material to decisions as to whether to hold or invest in an asset. Looking into each of these provides for additional insights.

The puzzle of tokenomics

For many commentators and professional investors, information related to the tokenomics of a crypto asset is among the most important factors that are taken into consideration when trying to assess its attractiveness. However, as indicated in Chart 12, only 16% of respondents apparently shared this view (or perhaps were aware of its importance).

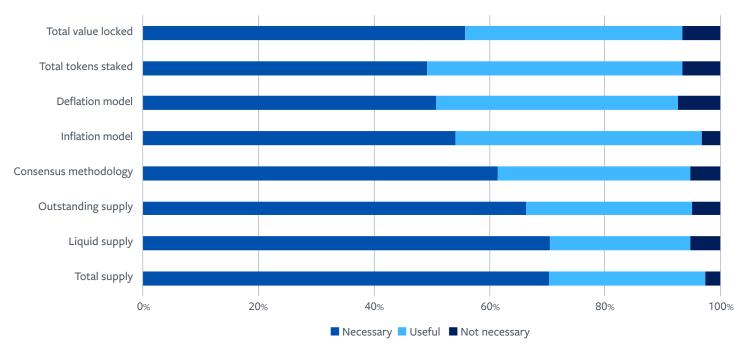
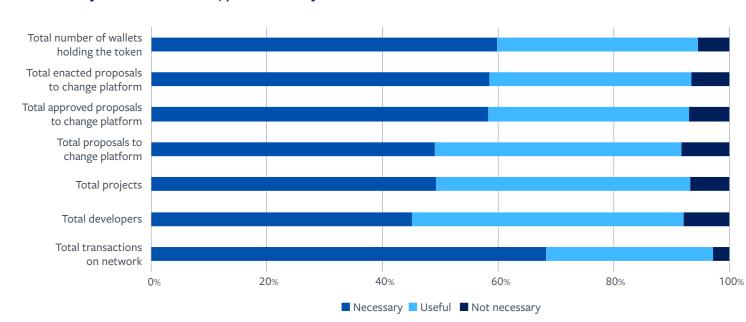


Chart 16: How useful are individual tokenomics elements?

The data above illustrate that nearly 96% of all respondents identifying tokenomics as important found total value locked, total tokens staked, the consensus mechanism, and the outstanding and liquid supply as necessary or useful in decisions to hold or invest in crypto assets. Total supply, perhaps not surprisingly, ranked even higher, along with the corresponding concept of token inflation, e.g., whether or not the token supply is capped or not and thus decreases over time.

Network / platform activity

Network or platform activity is routinely considered a critical metric for evaluating a crypto asset, especially insofar as such data reveal community engagement around the asset and the number of projects and developers building on the technology. Nevertheless, as seen in Charts 13 and 14, respondents did not identify this item as a top priority, with less than 30% of respondents doing so. Yet for those respondents who did identify network / platform activity as important, their intensity of preference was high. As seen below, disclosure items like the total number of wallets holding the token, and proposed changes to the platform, were found to be necessary or useful for over 90% of respondents. Meanwhile, total transactions on the network, the most important disclosure item, was found to be important for nearly 97% of the respondents.



Across the board, network / platform activity data elements enjoy overwhelmingly high perceived importance. Yet outstanding questions persist. For example, the importance placed on proposals suggests that additional questions should be asked, including what percentage of holders would like to participate in the discussions accompanying the proposal process and how holders should be notified of new proposals and voting. Similarly, issue areas that are especially dynamic, like the total number of wallets holding a token, deserve additional unbundling to include investor preferences relating to when, and what changes in total numbers, would demand additional or follow-up disclosures.

Chart 17: Utility of individual network / platform activity data elements

HOW INFORMATION IS ACCESSED

Along with the issue of investor priorities, we surveyed current, previous, and prospective holders of crypto assets, asking respondents to what degree they found information concerning cryptocurrencies to be available to them and how they access and / or receive it.

In traditional markets, investors can receive information from any number of sources including issuers of securities, television, road shows, and more. Additionally, although rarely relied on by retail investors, they have the benefit of disclosures published on databases such as the SEC's EDGAR system and the Canadian SEDAR system. Crypto markets similarly have an array of possible informational touchpoints, and we felt it useful to get a sense as to their perceived usefulness and relative importance.

Chart 18: How available is material information necessary for deciding whether to hold or invest in a cryptocurrency?



Respondents in our survey felt that information required to make an informed decision is always available 36.9% of the time and sometimes available 43.9% of the time.

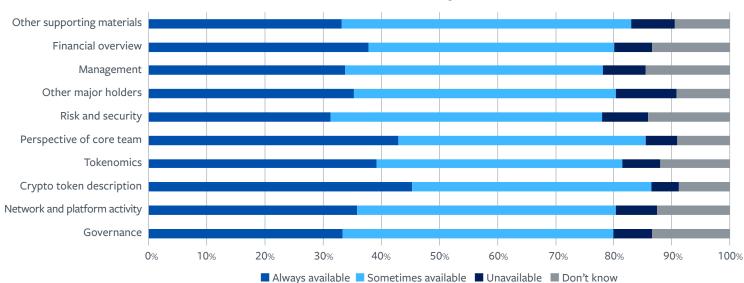


Chart 19: How available is material information broken down by disclosure categories?

When looking at individual categories of disclosure, the responses were fairly consistent — with the exception of the perspective of the core team and crypto token description, where respondents felt information was always available more often than sometimes available.

Where do you find this information?

Against this backdrop, we asked respondents questions relating to the sources from which they drew their information, however limited. Respondents were presented with a range of sources including:



Crypto website E.g., the website managed by the community (.org), the lab or founding teams



General press and social media



Broker Tools and information provided by a broker for the individual (e.g., Fidelity, Robinhood, eToro, etc.)



Specialized publications and media



Exchange Trading venue or exchange (Coinbase, Binance, etc.)

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Third-party data provider E.g., Chainalysis, Messari, Token Terminal, etc.



DEX Secondary market counterparty offering the crypto asset (Uniswap, Pancake, dYdX, etc.)



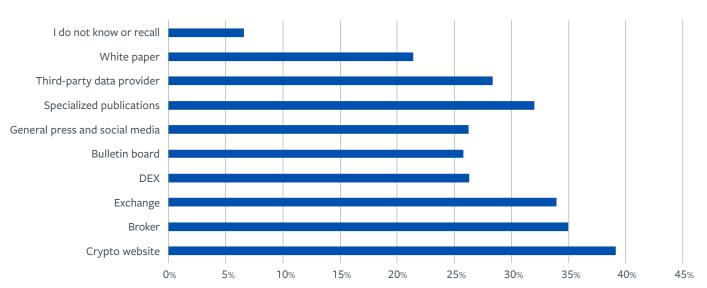




I do not know or recall

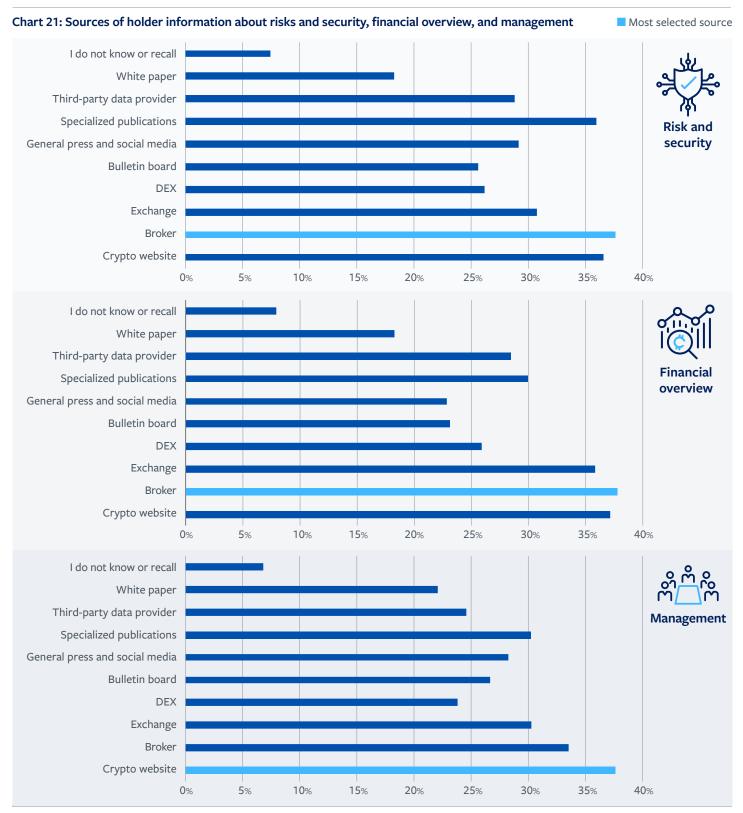
Our first objective was to identify which sources of information respondents accessed. Recognizing that most individuals referenced more than one source of information, we presented respondents with the option of selecting multiple sources across all of the categories listed above. The results were as follows.

Chart 20: Source of holder information about crypto assets



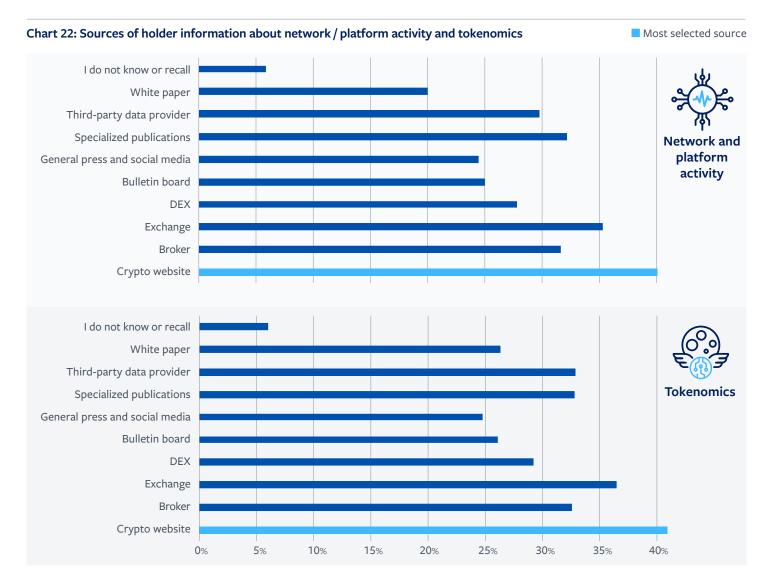
Perhaps most striking is the overwhelming importance of websites for sources of holder information, at 39.1% percent of respondents, followed by brokers at 35%, and exchanges at 33.9%. Thus, despite the importance of third-party data providers, holders chose with the notable exception of white papers — to go to the perceived source for their information, the website created by the sponsor or creator, or to an intermediary. Moreover, despite the perceived dominance of "crypto Twitter," social media's importance was limited, with only 26.3% of respondents citing it as a source of information.

To get a more differentiated vantage into responses, our survey also queried participants as to where they received their information for those disclosure elements identified by respondents to be most important (those they ranked 1, 2 or 3). Below we have shared the results for several categories.



As seen in Chart 21, respondents identified their broker as the most likely source of information concerning a crypto asset's risks and security as well as the financial overview, with the crypto website as a close second. (And perhaps to be expected, in the case of risk and security, specialized publications ranked high, a close third behind crypto websites.) In the case of information concerning management, the crypto website was the predominant source, the broker shortly thereafter. Across all domains, third-party data providers were among the least relied on, and white papers were consistently ranked last.

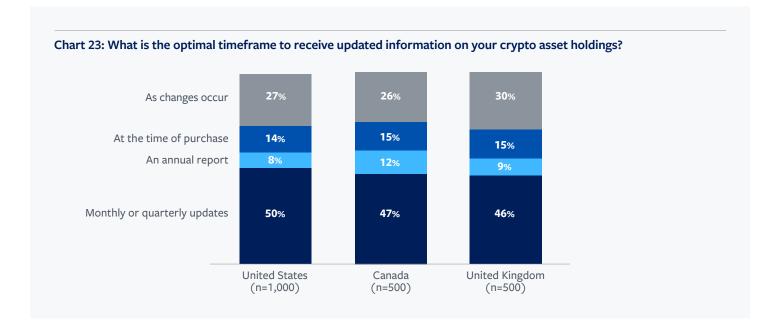
In order to provide an interesting comparison, we also inspected the responses in order to evaluate where respondents were most likely to source their data concerning network / platform activity and tokenomics crypto native disclosure fields. The results were as follows.



In these two categories, the importance of brokers falls considerably, with crypto websites maintaining their dominance. White papers, meanwhile, continue to lag with regard to information concerning network / platform activity, though they become more important sources of data, along with third-party data providers, when it comes to sourcing information on a crypto asset's tokenomics.

FREQUENCY OF INFORMATION

Crypto markets operate constantly, 24x7, and due to forks, new projects, and business developments, they are prone to rapid changes. With this in mind, we asked respondents what they believe would be the appropriate frequency for information to be updated, and for notifications about the updates sent to investors.



As indicated above, just under half of respondents indicated that they would like to receive monthly or quarterly information updates, with another 27.6% preferring to be updated as information changes. Only 8% of respondents in the U.S., 12% of respondents in Canada, and 9% in the U.K. preferred updates only once a year. Looking deeper, we wanted to understand if respondents had different preferences with regards to the frequency of updates for the survey's major disclosure items.

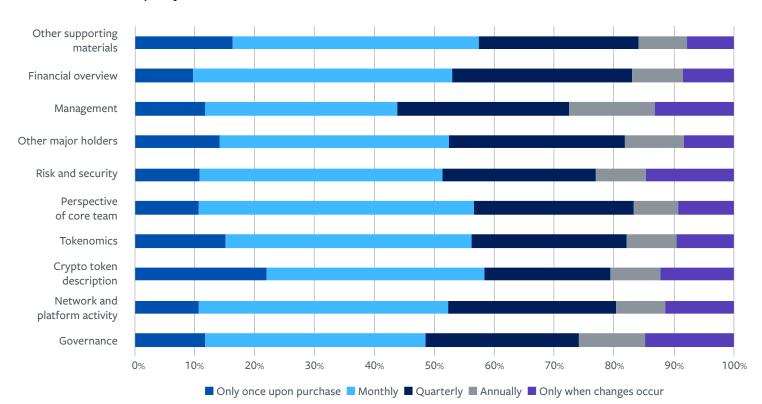


Chart 24: Preferred frequency of disclosures — selected disclosure items

Looking at the results, respondents were fairly consistent across disclosure items, selecting a monthly frequency most often, followed by quarterly. The one exception was the crypto token description: upon purchase (22.1%) slightly edged quarterly, the second most selected frequency (21.1%). When averaging across all categories, we found that 39.9% of respondents preferred monthly updates to the disclosure items, 27.1% preferred quarterly updates, 12.5% preferred when changes occurred, 11.2% only upon purchase, and 9.3% annually. With the monthly option comprising the highest frequency option selected by respondents, further surveys will be necessary to examine whether investors would prefer more updates in even smaller time periods (e.g., bi-weekly, weekly, or daily).

INITIAL TAKEAWAYS

Much more study and analysis is required now and into the future regarding the crypto asset marketplace and the expectations and needs of participating investors and consumers. However, our data does suggest a number of preliminary takeaways.

- 1. The expectations of traditional finance likely inform the expectations of investors. Across our results, those factors common to traditional finance appear to inform holder preferences in crypto assets. Concepts like financial overviews and management weigh more heavily on investor decision making than tokenomics and a crypto asset's underlying network. Additionally, investors appear to place a high degree of importance on old-fashioned websites and traditional institutions like centralized exchanges and brokers for their information.
- 2. Holders may not necessarily know what information they need to have in order to make sound investment or other related decisions. The predominance of traditional concepts and preoccupations among respondents suggest that investors, regardless of their wealth, may not fully appreciate the importance of crypto native disclosure items in their assessment of the attractiveness of any crypto asset.
- 3. Some of the tools relied on for disclosure may not be optimally deployed. For all of their centrality, white papers in particular were rarely referenced as important sources of data and information. While further research will be needed, it could be because of their technical nature and difficult accessibility, which then offers limited or little utility for retail holders of crypto assets.
- 4. Holders of crypto assets want information more frequently than the baseline disclosure system requires under traditional assets. In many ways, this is unsurprising given the quickly changing and often volatile nature of crypto markets. But it also suggests an interest in, and demand for, information to inform market activities that is not, according to respondents, necessarily available.

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