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Canadian Bitcoin Ownership in 2023: Key Takeaways

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Abstract

We provide an update on cryptoasset ownership in Canada using data from the Bitcoin Omnibus Survey conducted in late 2023. Bitcoin ownership remained stable at around 10% in 2023 and continues to be concentrated among men, younger individuals and those with higher income and levels of education. The use of Bitcoin for payments remains limited, with most owners viewing it primarily as an investment. Despite growing awareness of alternative cryptocurrencies, Bitcoin remains the dominant holding among Canadians, with a median value of Can\$500.

Topics: Bank notes; Digital currencies and fintech; Econometric and statistical methods JEL codes: E4, C81, O51

Résumé

Nous faisons le point sur la possession de cryptoactifs au Canada en nous appuyant sur les données de l'enquête-omnibus sur le bitcoin menée à la fin de l'année 2023. La possession de bitcoins est restée stable à environ 10 % en 2023 et continue d'être concentrée chez les hommes, les plus jeunes et ceux dont le revenu et le niveau d'éducation sont plus élevés. L'utilisation du bitcoin pour les paiements reste limitée, la plupart des détenteurs le considérant avant tout comme un investissement. Même si les autres cryptomonnaies sont de plus en plus connues, le bitcoin demeure la plus détenue par les Canadiens, avec une valeur médiane de 500 dollars canadiens.

Sujets : Billets de banque; Méthodes économétriques et statistiques; Monnaies numériques et technologies financières

Codes JEL : E4, C81, O51

1 Introduction

Bitcoin, the first cryptocurrency, was introduced in 2009 and has since become the most valuable and widely recognized cryptoasset. Other cryptocurrencies and a growing ecosystem of new financial technologies have developed in the years after Bitcoin's launch. The Bank of Canada's 2023 Financial System Review noted that these cryptoasset markets should be monitored even though they did not represent a systemic risk to Canada's financial system.

The 2023 Bitcoin Omnibus Survey (BTCOS) marked the seventh iteration of the survey since its inception in 2016. The purpose of the survey is to monitor the adoption and use of cryptoassets by Canadian consumers. The Bank designs the BTCOS, while Ipsos, a market research firm, conducts the fieldwork. Data collection took place between December 4 and December 12, 2023, following a similar schedule from previous BTCOS surveys. For previous versions of the survey, see the following reports: Balutel et al. (2023b); Balutel et al. (2022a); Balutel et al. (2022b); Henry et al. (2017); Henry et al. (2018b); and Henry et al. (2019).

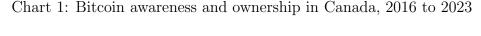
The survey employs an online, device-agnostic methodology, allowing respondents to complete it on any device with internet access, such as a computer, laptop, tablet or mobile phone. Respondents are recruited through quota-based sampling to ensure representation by age, gender and region. After data cleaning, the final 2023 BTCOS sample consists of 1,987 Canadians, including 223 Bitcoin owners. The sample is weighted using an iterative raking procedure to adjust for differences between the sample's demographic composition and that of the Canadian population (Deville et al., 1993).¹

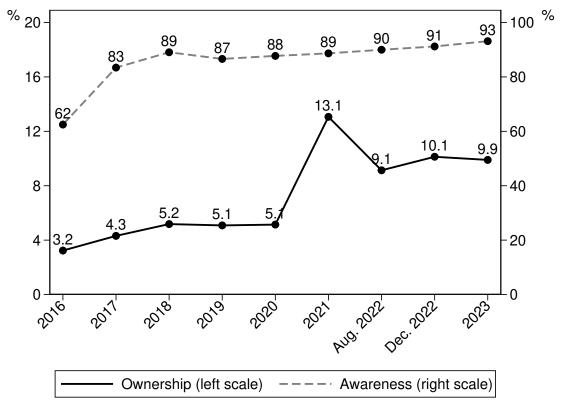
In the following sections, we present key highlights from the results of the 2023 BTCOS. Additional information can be found in the tables available in **Appendix A** and the charts in **Appendix B**.

¹The weighting procedure for the 2023 BTCOS sample follows the same methodology used in the 2022 BTCOS (Balutel et al., 2023b).

2 Bitcoin awareness among Canadians remains high, while ownership remains low

As in previous years, awareness of Bitcoin among the Canadian public remains high at around 90%. However, ownership remains relatively low, with about 10% of the population owning bitcoin in recent years (**Chart 1**). Similar to previous years, ownership rates continue to be highest among men, individuals aged 18–34, university graduates and individuals with a household income exceeding \$70,000. We also examine Bitcoin adoption and retention by asking current owners when they first invested and non-owners when they exited the crypto market. The results show a decrease in the number of new entrants in 2023 and fewer exits—owners cashing out or leaving the crypto market—compared with 2022. This helps explain the steady ownership rate observed between 2022 and 2023.





Note: The estimated percentage of Canadians who are aware of Bitcoin (dashed line) and reported owning bitcoin (solid line). The horizontal axis corresponds to the years of survey data collection.

3 Owners prefer acquiring bitcoin through crypto exchanges, either via mobile apps or websites

The preference for user-friendly platforms that simplify the buying and selling of cryptoassets became evident during the COVID-19 pandemic, when fintech companies started to introduce cryptoassets alongside conventional investment products. As a result, current bitcoin owners mainly use cryptocurrency exchanges accessed through a website or a mobile phone app to invest in Bitcoin (**Chart 2**). The most used platforms are Coinbase (used by 36% of owners to acquire their bitcoin), Wealthsimple (35%) and Crypto.com (30%).

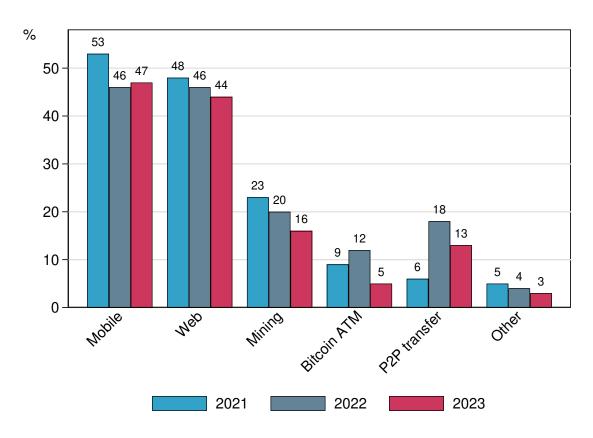
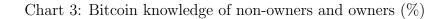


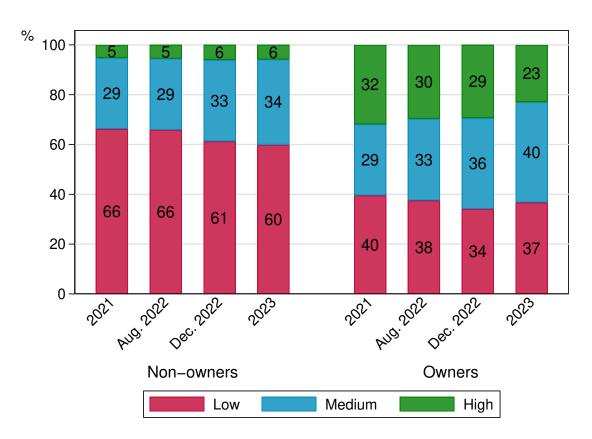
Chart 2: Methods used to acquire Bitcoin, 2021 and 2023 (%)

Note: This chart reports the percentages of Bitcoin owners who obtained Bitcoin using each indicated method. Respondents could select more than one method. *Mobile* refers to a mobile app and *Web* refers to a cryptocurrency exchange on a website. P2P is person-to-person.

4 While most Canadians are aware of Bitcoin, they are unfamiliar with its main features

As part of the BTCOS, we explore Canadians' knowledge of Bitcoin's basic features. For example, we ask respondents whether Bitcoin is backed by the government (it is not). Based on their responses, we calculate a knowledge score and group respondents into three levels of knowledge. Among non-owners, who represent the majority of Canadians, 60% exhibit a low level of understanding of how Bitcoin works (Chart 3), and only a small share has a high level of knowledge. As expected, Bitcoin owners have a better understanding of Bitcoin's features, with almost one-quarter of owners demonstrating a high level of knowledge. However, the share of high-knowledge owners has been declining in the last few years, and well over one-third of Bitcoin owners fall into the low-knowledge category. We also examine how respondents learn about cryptocurrencies. Non-owners typically rely on news stories from traditional or online media and advice from family and friends. Bitcoin owners are more likely to actively seek information from dedicated crypto news websites, exchanges, social media and streaming platforms, but also family and friends.





Note: Three questions assess respondents' knowledge of Bitcoin by asking whether they understand that: the supply of bitcoin is fixed, bitcoin is not backed by the government and all Bitcoin transactions are recorded on a publicly accessible distributed ledger. Each respondent receives a crypto knowledge score calculated by subtracting the number of incorrect answers from the number of correct ones. The score can range from -3 to 3. Based on this score, crypto knowledge is classified as follows: "high" (score of 3), "medium" (scores of 1 or 2) or "low" (score of 0 or less).

5 Investment motives drive bitcoin ownership, while profit-taking and concerns about the technology lead to selling

The main reason respondents reported for owning bitcoin in 2023 remains investment (cited by 44% of Bitcoin owners) (**Chart 4**). The second most common reason for ownership is interest in new technologies (21%). For former Bitcoin owners, the primary reason for selling their holdings was cashing out for profit, followed by distrust in private digital currencies and losses incurred due to high volatility. Most Bitcoin owners never use their holdings for purchases of goods and services. However, about one-third reported using bitcoin at least once a month for purchases. When asked where they last used it, most cited crypto-focused businesses, such as exchanges or casinos.

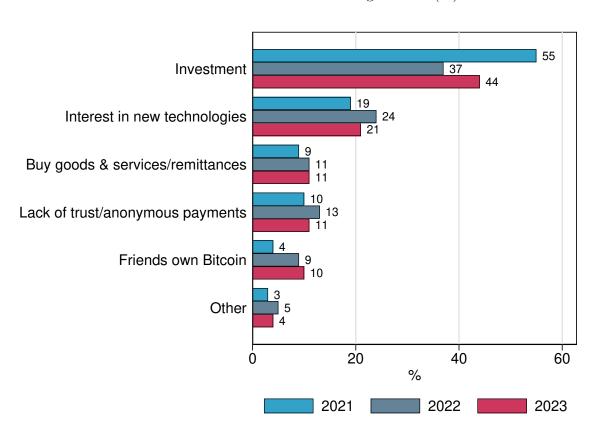


Chart 4: Main reason for owning Bitcoin (%)

6 Smaller investors dominate Bitcoin holdings

Bitcoin ownership is skewed toward relatively small values, with about half of Bitcoin owners having the equivalent of Can\$500 or less (**Chart 5**). The median amount of Bitcoin held in 2023 remains consistent with previous years, at approximately Can\$500.

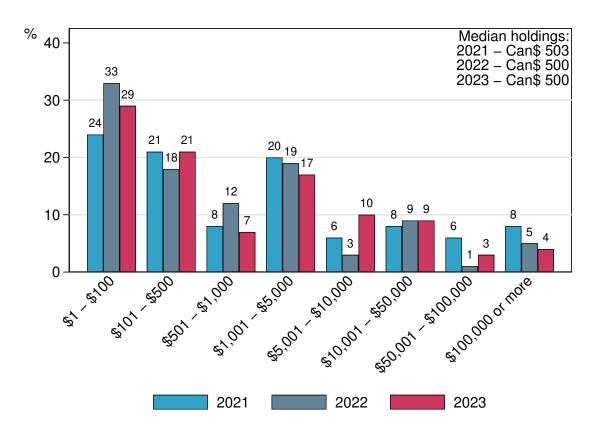


Chart 5: Distribution of Bitcoin holdings (%)

7 Awareness of altcoins increased in 2023, but ownership remains low

Overall awareness of cryptoassets other than Bitcoin—known as altcoins—increased slightly from 40% of the Canadian population in 2022 to 50%. Despite this increased awareness, ownership rates for altcoins remained very low, with Ether at 5%, and Bitcoin Cash and USD Coin each at 3% (**Chart 6**). Nearly 70% of Bitcoin owners in our sample also hold altcoins, indicating that these investors often diversify their portfolios by including other cryptoassets.

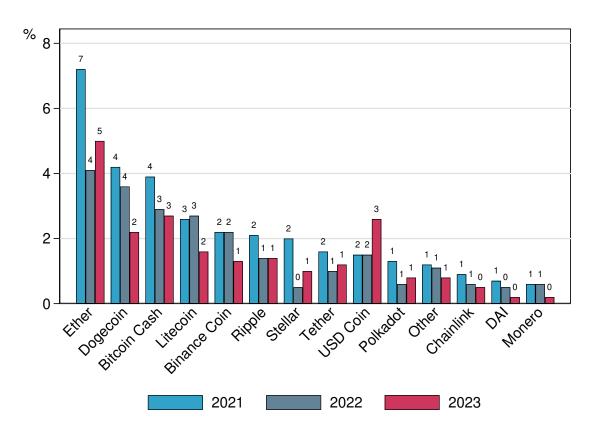


Chart 6: Altcoin ownership (%)

8 Substantial loss from a price crash is the most frequently reported incident

In 2023, nearly one-quarter of Bitcoin owners (22%) reported that their holdings lost substantial value due to a price crash, down from one-third in 2022 (31%). In addition, we see increases between 2022 and 2023 in the number of reports of stolen funds, incidents of exchanges holding client assets being hacked and loss of access to wallets.

% 10 9 Stolen funds
Stole Price crash Problem with transaction

Chart 7: Incidents experienced by Bitcoin owners, 2021 to 2023

A Tables

Table 1: Percentage of Canadians who are aware of Bitcoin, 2016 to 2023

	2016	2017	2018	2019	2020 Nov	2021	2022 Aug	2022 Dec	2023
Overall	62	83	89	87	88	89	90	91	93
Male	72	90	93	93	92	91	91	93	96
Female	54	77	85	81	83	87	89	89	90
Age 18–34	69	87	91	88	86	94	91	92	95
Age 35–54	58	82	88	84	86	86	88	91	91
Age 55 and over	62	82	88	88	91	87	91	91	93
High school	55	76	84	82	82	83	87	88	90
College	59	85	90	88	90	92	91	92	94
University	78	93	95	92	94	94	93	95	97
Less than $30,000$	49	74	87	77	79	82	86	86	90
30,000-69,000	61	82	88	84	86	90	91	90	92
70,000 or more	69	87	91	91	91	90	93	93	95
Employed	64	85	90	88	87	90	91	92	94
Unemployed	74	80	90	75	91	95	89	87	93
Not in labour force	58	81	87	87	90	86	90	91	92
British Columbia	74	93	94	89	91	95	92	96	98
Prairies	66	84	89	88	93	92	94	95	96
Ontario	64	85	92	90	91	91	93	93	95
Quebec	49	75	84	78	75	78	84	82	85
Atlantic	65	80	83	88	88	88	83	92	95
Low financial literacy			80	78	76	79	82	86	88
Medium financial literacy			90	86	88	91	88	89	92
High financial literacy			94	94	95	96	96	97	98

Note: This table reports the estimated percentage of Canadians in each demographic segment who are aware of Bitcoin, which is based on the proportion of "Yes" responses to the survey question "Have you heard of Bitcoin?". The data for November 2020 and August 2022 estimates are from the Cash Alternative Survey and Cash Pulse Survey, respectively, that contained an abbreviated module of the BTCOS questionnaire. The BTCOS sample sizes are: 1,997 in 2016; 2,623 in 2017; 1,987 in 2018; 1,987 in 2019; 3,893 in 2020; 1,974 in 2021; 1,994 in 2022 and 1,987 in 2023. FL represents financial literacy categories that are based on responses to the "Big Three" financial literacy questions developed by Lusardi and Mitchell (2014). Prairies includes Alberta, Saskatchewan and Manitoba. Atlantic includes New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. All estimates are calculated using survey weights.

Table 2: Percentage of Canadians who own bitcoin, 2016 to 2023

	2016	2017	2018	2019	2020 Nov	2021	2022 Aug	2022 Dec	2023
Overall	3.2	4.3	5.2	5.1	5.1	13.1	10.1	10.3	9.9
Male	4.4	6.6	6.7	8.1	8.3	19.3	15.7	15.8	14.9
Female	2.2	2.1	3.7	2.2	2.1	7.2	4.7	5.2	5.1
Age 18–34	9.1	11.1	10.5	7.8	11.0	25.6	19.8	20.8	19.1
Age 35–54	1.6	3.2	4.9	6.7	5.6	14.7	11.2	10.9	11.4
Age 55 and over	0.5	0.5	1.7	1.7	0.6	2.8	2.3	2.5	2.8
High school	3.8	3.7	2.3	3.3	3.7	11.2	9.4	9.6	6.6
College	1.5	3.1	5.7	4.3	5.1	10.5	8.6	8.6	9.4
University	4.3	6.7	9.1	8.7	7.4	18.8	12.9	13.4	15.1
Less than 30,000	3.1	4.3	2.8	3.7	4.3	5.8	6.7	8.2	8.4
30,000-69,000	3.9	5.6	4.8	3.8	4.9	12.4	8.8	10.6	8.0
70,000 or more	3.7	4.3	7.0	6.6	5.4	17.2	13.3	12.0	13.3
Employed	3.9	6.1	7.1	6.8	7.3	18.9	14.8	14.7	14.0
Unemployed	7.3	1.9	5.2	0.9	3.8	12.4	7.2	5.0	13.1
Not in labour force	1.5	1.5	1.9	2.3	1.8	3.3	2.9	2.8	3.0
British Columbia	2.8	5.2	6.3	5.3	5.1	19.6	13.0	6.9	10.5
Prairies	2.1	4.1	6.0	3.9	7.6	14.2	10.3	7.8	7.8
Ontario	2.5	3.9	5.2	6.2	5.0	12.3	9.2	10.3	11.9
Quebec	5.5	5.1	4.6	4.4	3.9	11.6	10.7	15.0	9.7
Atlantic	3.2	3.1	2.8	3.8	3.3	6.2	7.3	7.7	3.3
Low financial literacy			7.3	7.5	8.4	15.6	15.7	14.2	13.4
Medium financial literacy			4.7	2.9	5.3	8.8	5.9	7.3	7.7
High financial literacy			4.1	5.0	5.3	14.7	10.6	10.4	9.8

Note: This table reports the estimated percentage of Canadians in each demographic segment who own bitcoin, which is based on the proportion of "Yes" responses to the survey question "Do you currently have or own bitcoin?" The data for November 2020 and August 2022 estimates are from the Cash Alternative Survey and Cash Pulse Survey, respectively, that contained an abbreviated module of the BTCOS questionnaire. The BTCOS sample sizes are: 1,997 in 2016; 2,623 in 2017; 1,987 in 2018; 1,987 in 2019; 3,893 in 2020; 1,974 in 2021; 1,994 in 2022 and 1,987 in 2023. FL represents financial literacy categories that are based on responses to the "Big Three" financial literacy questions developed by Lusardi and Mitchell (2014). Prairies includes Alberta, Saskatchewan and Manitoba. Atlantic includes New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. All estimates are calculated using survey weights.

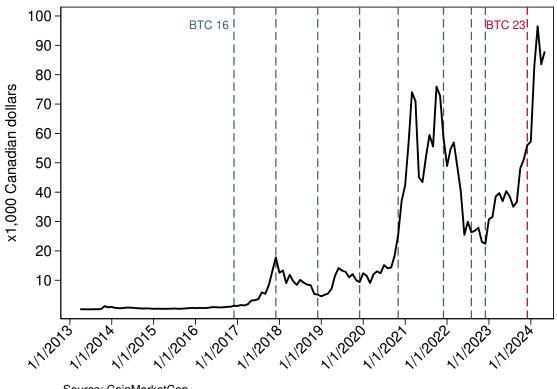
Table 3: Reasons for owning or not owning bitcoin, 2021 to 2023

	2021	2022 (Aug.)	$2022 \; ({ m Dec.})$	2023
Owners (%)				
Buy goods & services / make remittances	9	14	11	11
Investment	55	37	37	44
Lack of trust / anonymous payments	10	14	13	11
Interest in new technologies	19	22	24	21
Friends own Bitcoin	4	10	10	10
Other	3	3	5	4
Never owners (%)				
Lack of knowledge/understanding; not easy to use	39	30	29	32
Lack of payment function	23	24	21	22
Volatility	6	9	8	8
Concerns or lack of trust in private digital currency	27	33	37	34
Use alternative digital currencies	1	1	1	1
Other	4	3	4	3
Past owners (%)				
Lack of knowledge/understanding; not easy to use	12	9	11	11
Lack of payment function	7	9	12	11
Volatility	8	5	6	6
Concerns or lack of trust in private digital currency	7	22	14	19
Use alternative digital currencies	10	2	4	0
A price crash caused my Bitcoin to lose substantial value	11	23	14	16
I lost access to my personal cryptocurrency wallet	3	2	9	1
I cashed out my Bitcoin for a profit	39	21	24	30
Other	3	7	6	5

Note: Survey respondents were asked to provide the primary reason for their ownership or non-ownership. *Past owners* are individuals who held Bitcoin in the past but not at the time of the survey. See questions 3a and 4b in the **Appendix C** for the full list.

B Charts

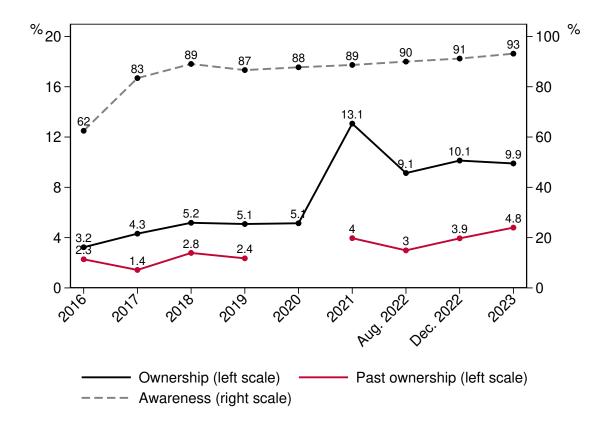
Chart 8: Bitcoin price trends and survey data over time, 2016 to 2023



Source: CoinMarketCap

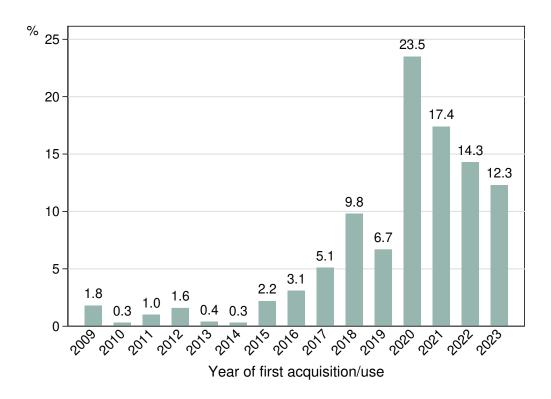
Note: This figure plots the price of Bitcoin in Canadian dollars. Vertical dashed lines correspond to the timing of digital currency surveys: the Bitcoin Omnibus Survey (2016–19, 2021–23), the Cash Alternative Survey (Nov. 2020) and the Cash Pulse Survey (Aug. 2022).

Chart 9: Bitcoin awareness, current and past ownership in Canada, 2016 to 2023



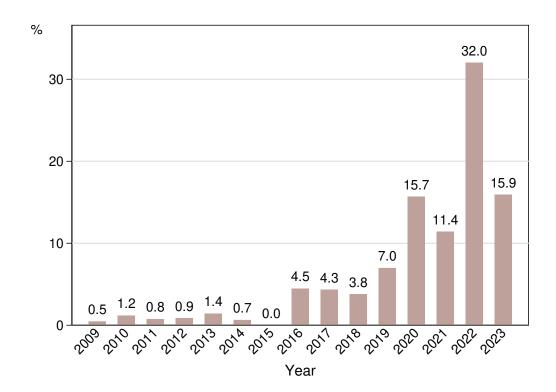
Note: This chart plots the estimated percentage of Canadians who are aware of Bitcoin (dashed line), those who reported owning Bitcoin at the time of the survey (solid line), and those who reported having owned Bitcoin in the past but not at the time of the survey (red line). The horizontal axis corresponds to the years of survey data collection. Data used to estimate ownership from 2016 to 2019, in 2021 and in December 2022 and 2023 are from the Bitcoin Omnibus Survey (BTCOS), while the data for 2020 and August 2022 estimates are from the Cash Alternative Survey and Cash Pulse Survey, respectively, which contained an abbreviated module of the BTCOS questionnaire. Estimates are calculated using survey weights.

Chart 10: Share of current Bitcoin owners according to the year they first obtained it, 2023



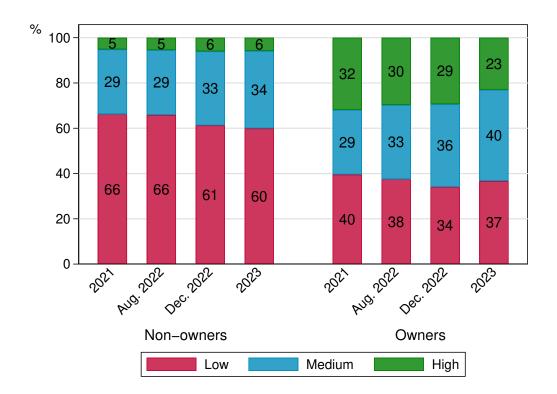
Note: This chart shows the distribution of current owners' responses to the question "When did you first obtain Bitcoin?" in the 2023 BTCOS sample (N=223). Estimates are calculated using survey weights.

Chart 11: Share of past Bitcoin owners according to when they sold it, 2023



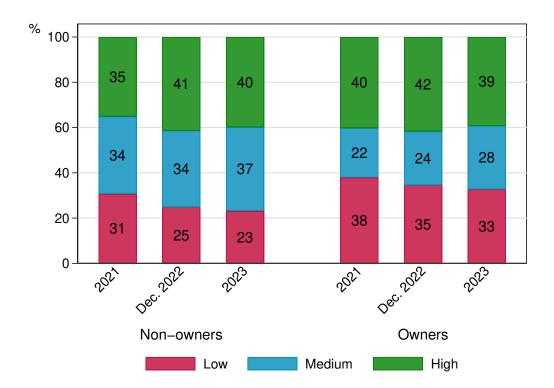
Note: This chart represents the distributions of past owners' responses to the question "When did you sell or stop using Bitcoin?" in the 2023 sample (N=112). Estimates are calculated using survey weights.

Chart 12: Distribution of Bitcoin knowledge among Bitcoin owners and non-owners, 2021 to 2023



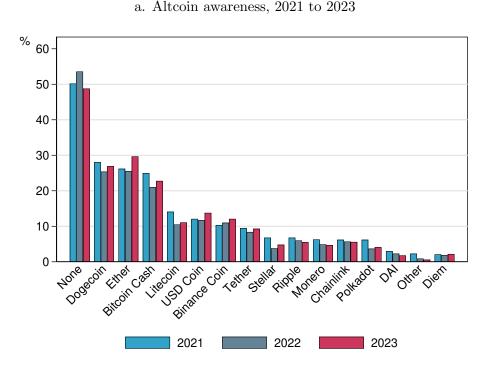
Note: This chart illustrates the distribution of Bitcoin knowledge among non-owners (left panel) and owners (right panel). The vertical bars correspond to the 2021, 2022 and 2023 surveys. The low, medium and high Bitcoin knowledge categories are constructed based on Henry et al. (2018a). Three questions assess respondents' level of knowledge of Bitcoin by asking whether they understand that: the supply of Bitcoin is fixed, Bitcoin is not backed by the government and all Bitcoin transactions are recorded on a publicly accessible distributed ledger. Each respondent receives a crypto knowledge score calculated by subtracting the number of incorrect answers from the number of correct ones. The score can range from -3 to 3. Based on this score, crypto knowledge is classified as follows: high (score of 3), medium (scores of 1 or 2) or low (score of 0 or less). Consult Balutel et al. (2023a) for more details about crypto knowledge of Bitcoin owners in Canada.

Chart 13: Distribution of financial literacy among Bitcoin owners and non-owners, 2021 to 2023

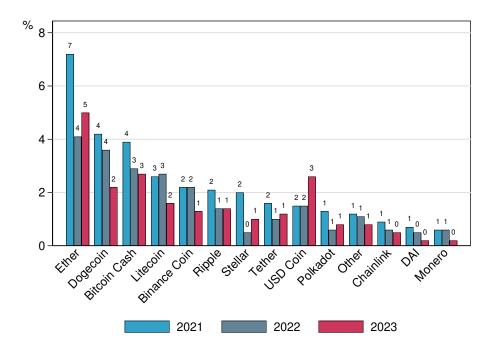


Note: This chart illustrates the distribution of levels of financial literacy among non-owners (left panel) and owners (right panel). The vertical bars correspond to the 2021, 2022 and 2023 surveys. Financial literacy categories are based on the responses to the "Big Three" financial literacy questions developed by Lusardi and Mitchell (2014). Three questions assess respondents' level of financial literacy by asking whether their understanding about interest compounding, inflation and risk diversification. Each respondent receives a financial literacy score calculated by subtracting the number of incorrect answers from the number of correct ones. The score can range from -3 to 3. Based on this score, crypto knowledge is classified as follows: high (score of 3), medium (scores of 1 or 2) or low (score of 0 or less). Consult Balutel et al. (2023a) for more details about the level of financial literacy of Bitcoin owners in Canada.

Chart 14: Awareness and ownership of alternative cryptoassets (altcoins), 2021 to 2023



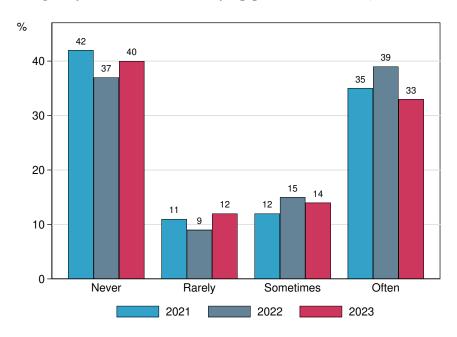
b. Altcoin ownership, 2021 to 2023



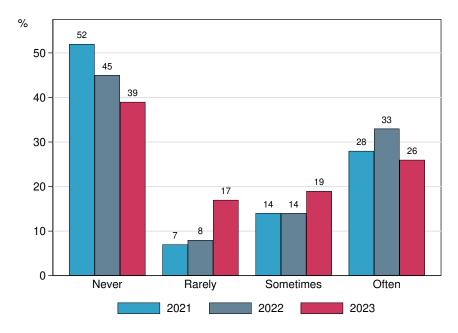
Note: The top panel reports the percentage of Canadians who reported being aware of alternative cryptoassets, or altcoins. The bottom panel shows the self-reported rates of ownership of each cryptoasset. Results from the 2021 Bitcoin Omnibus Survey are represented by blue bars, those from 2022 by grey bars and those from 2023 by red bars. Estimates are calculated using survey weights.

Chart 15: Frequency of Bitcoin use for transactions, 2021 to 2023

a. Frequency of Bitcoin use for buying goods and services, 2021 to 2023

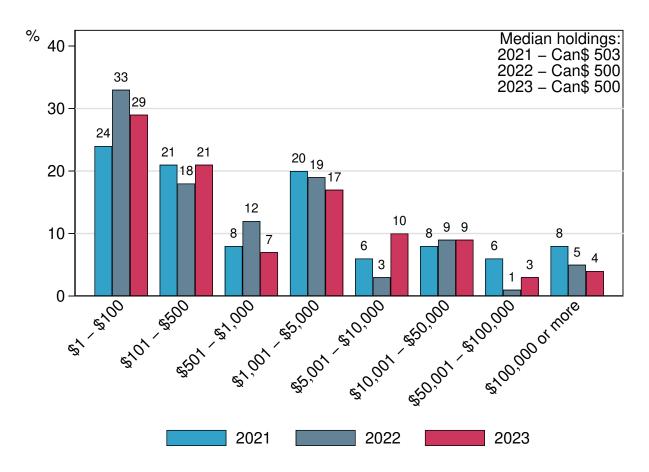


b. Frequency of Bitcoin use for person-to-person transfers, 2021 to 2023



Note: This chart illustrates Bitcoin owners' self-reported frequency of use of the cryptoasset. The top panel represents how frequently owners reported using Bitcoin to pay for goods and services, and the bottom panel shows the cryptoasset's use for sending money to other people. Categories are defined as follows: Never corresponds to the option "have never used Bitcoin for this purpose"; Rarely refers to less than once per year; Sometimes encompasses "once a year" to "a few times a year"; and Often refers to a frequency of at least once a month.

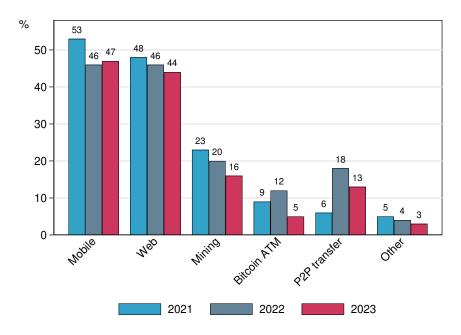
Chart 16: Self-reported value of Bitcoin holdings in Canadian dollars, 2021 to 2023



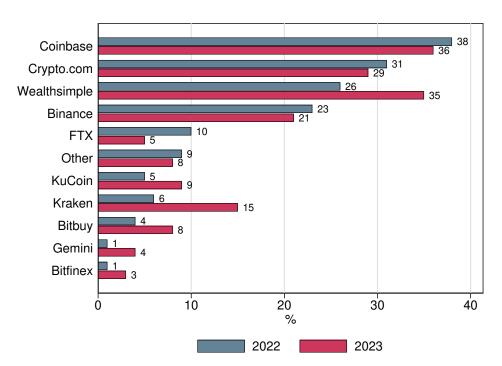
Note: Bitcoin owners were asked to report the value of their holdings on a continuous range denominated in Canadian dollars. This chart represents the percentage of owners with holdings that fall within the given sub-ranges (denoted on the horizontal axis). All estimates are calculated using survey weights.

Chart 17: How Bitcoin owners in Canada acquire the cryptoasset, 2021 to 2023

a. Methods used to acquire Bitcoin, 2021 to 2023



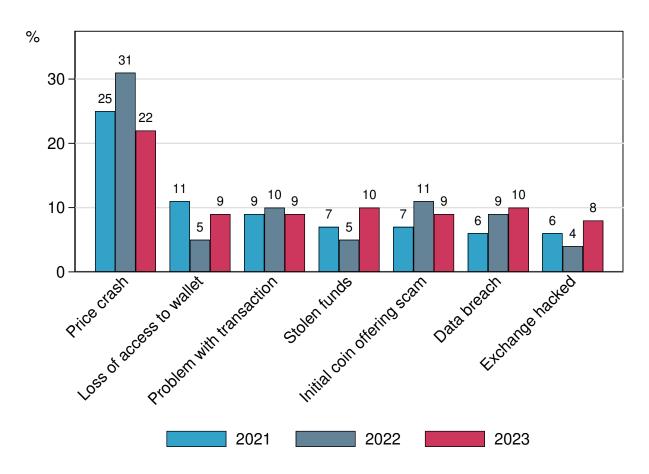
b. Specific exchanges used to acquire Bitcoin, 2022 and 2023



Note: Panel a reports the percentages of Bitcoin owners who obtained Bitcoin using each indicated method. Respondents could select more than one method. Mobile refers to a mobile app, and Web refers to a cryptocurrency exchange on a website. P2P is person-to-person. Panel b summarizes the results of a question introduced in the 2022 Bitcoin Omnibus Survey asking Bitcoin owners to select the names of the exchanges used to acquire Bitcoin from a list. The list includes major cryptoasset exchanges that have operated in Canada since Bitcoin's introduction, as well as a text box if an exchange was not included. All estimates are calculated using survey weights.

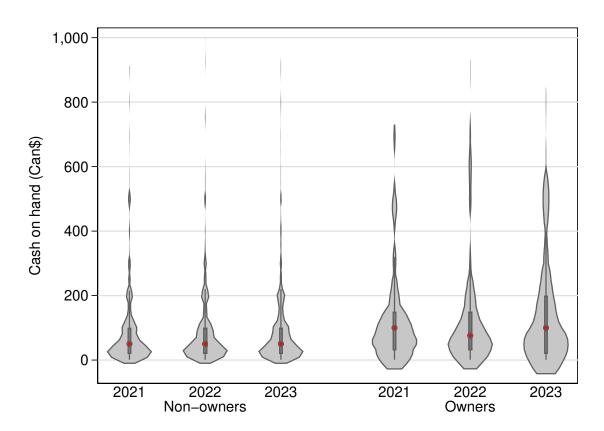
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Chart 18: Incidents experienced by Bitcoin owners, 2021 to 2023



Note: This chart reports the percentage of Bitcoin owners who reported experiencing any of the listed incidents associated with participation in the cryptoasset market.

Chart 19: Cash on hand of Bitcoin owners and non-owners, 2021 to 2023



Note: This chart, known as a violin plot, shows the amount of cash on hand for Bitcoin owners and non-owners over 2021–23. Cash on hand is defined as the reported amount of cash in a respondent's "wallet, purse or pocket." For each year and ownership category, the violin plot shows the distribution of cash on hand estimated via kernel density (in grey); that is the vertical grey height indicates the amount of people in the sample holding the given amount of cash. The red dot indicates the median value of cash on hand.

C 2023 Bitcoin Omnibus Survey instrument

The survey instrument for the 2023 BTCOS is an updated version of the 2022 BTCOS instrument (see Balutel et al. (2023b)) and includes a new module on access to cash, which covers both stated and revealed preferences regarding cash withdrawals and cash resilience. However, we do not include results from this module because this short report focuses primarily on cryptocurrency. Additionally, we have updated the response options for the question "What sources do you use to access information about cryptocurrencies?" The main change involves distinguishing social media from other digital platforms by listing options related to social media under a separate header. We also slightly reformulated some of the examples provided for the response options.

Respondents completed the 2023 BTCOS entirely online through a device connected to the internet. The following is a representation of the online survey instrument. Skip logic and other programming instructions, which we have included here in square brackets, were not shown to participants. Note that we also asked demographic questions and screening questions related to survey recruitment, which we have not shown here.

Chart C-1: 2023 BTCOS instrument

MQB

Q1. Have you heard of Bitcoin?

Yes No

[IF 'YES' TO Q1, ASK Q1b, ELSE SKIP TO Q12]

Q1b. Please indicate whether the following statements about Bitcoin are true or false. If you are unsure, please select "don't know".

ICOLUMNS1

True

False

Don't know

[ROWS: RANDOMIZE]

The total supply of Bitcoin is fixed. [True]

All Bitcoin transactions are recorded on a distributed ledger that is publicly accessible. [True]

Bitcoin is backed by a government. [False]

Q2. Do you currently have or own any Bitcoin?

Yes

Nο

[ASK IF Q2 = 'Yes']

Q2a. When did you first obtain Bitcoin?

[PN: TWO DROP DOWN BOXES.

DROPDOWN BOX FOR MONTH (JANUARY TO DECEMBER)

DROPDOWN BOX FOR YEAR (SHOW 2022 to 2009)]

[IF 'YES' TO Q2, ASK Q3a to Q3c, ELSE SKIP TO Q4a]

Q3a. Please tell us your main reason for owning Bitcoin.

(Select one)

[RANDOMIZE LIST]

I am interested in new technologies

It is an investment

I use it to buy goods and services on the Internet in Canada/elsewhere

I use it to buy goods and services in physical stores in Canada/elsewhere

It allows me to make payments anonymously

I use it to make remittances or other international payments

It uses secure blockchain technology to prevent loss and fraud

I do not trust banks

I do not trust the government or the Canadian dollar

My friends own Bitcoin

It is a cost saving technology, e.g. it has lower transaction fees

[ANCHOR] Other (specify)

Yes No

[ASK BTC_4a_1 & BTC_4a_2 IF BTC_4a = 'Yes'] [SHOW BTC_4a_1 & BTC_4a_2 ON SAME SCREEN] [PN: BTC_4a_1 value EQUAL OR LESS THAN BTC_4a_2]

Q BTC 4a 1. When did you first obtain Bitcoin?

IPN: TWO DROPDOWN BOXES.

DROPDOWN BOX FOR MONTH (JANUARY TO DECEMBER)

DROPDOWN BOX FOR YEAR (SHOW 2022 to 2009)]

Q BTC_4a_2. When did you sell or stop using Bitcoin?

[PN: TWO DROPDOWN BOXES.

DROPDOWN BOX FOR MONTH (JANUARY TO DECEMBER)

DROPDOWN BOX FOR YEAR (SHOW 2022 to 2009)]

Q4b. Please tell us your <u>main</u> reason for [PIPE IN "not" if Q4a =no; PIPE IN "no longer" if Q4a = yes] owning any Bitcoin.

[RANDOMIZE LIST]

A price crash caused my Bitcoin to lose substantial value [SHOW IF Q4A = 'Yes': ANCHOR]

I lost access to my personal cryptocurrency wallet [SHOW IF Q4A = 'Yes'; ANCHOR]

I cashed out my Bitcoin for a profit [SHOW IF Q4A = 'Yes': ANCHOR]

I do not understand/know enough about the technology

It is not widely accepted as a method of payment

My current payment methods meet all my needs

The value of Bitcoin varies too much

It is not easy to acquire/use

I do not trust a private currency that is not backed by the government

I am concerned about cyber theft

I am concerned about lack of oversight from regulatory bodies

I use alternative digital currencies instead (e.g. Ethereum, Tether, Litecoin, etc.)

I do not believe the Bitcoin system will survive in the future

[ANCHOR] Other (specify)

[ASK ONLY IF Q4A = 'Yes']

Q4c. How did you previously obtain Bitcoin?

[RANDOMIZE LIST]

(Select all that apply)

Cryptocurrency exchanges through a mobile app

Cryptocurrency exchanges on a website

Bitcoin Automated Teller Machines (ATMs)

From a friend or family member

Mining Bitcoin

[ANCHOR] Other, please specify [PROVIDE TEXT BOX FOR RESPONSE] [DO NOT CODE]

Τ

[ASK IF Q4c = "Cryptocurrency exchanges through a mobile app", "Cryptocurrency exchanges on a website" OR "Other, please specify"]

Q4d. Which cryptocurrency exchanges / companies did you use to buy Bitcoin? (Select all that apply)

[RANDOMIZE LIST]

Binance.

Coinbase

Crypto.com

Kraken

Wealthsimple

FTX

Kucoin

Bittinex.

Gemini

Bitbuy

Other, please specify [PROVIDE TEXT BOX FOR <u>RESPONSE]</u> [ANCHOR] [DO NOT CODE]

None of the above [EXCLUSIVE. ANCHOR]

[ASK Q6a IF 'YES' TO Q1]

Q6a. How likely do you think it is that the Bitcoin system will survive for the next 15 years? Please use the sliding scale where 0 means that the system will certainly fail and 100 means the system will certainly survive.

[INSERT SLIDING SCALE WITH WORD ANCHORS 0=Will certainly fail, 50=Unsure, 100=Will certainly survive] [DO NOT PUT THE NUMBER 0, 50, OR 100 WITHIN THE WORD ANCHOR BOX]

[ASK Q6b IF 'YES' TO Q1]

Q6b. What percentage of Canadians do you think will be using Bitcoin 15 years from now? Please use the sliding scale where 0 means no Canadians will be using Bitcoin and 100 means all Canadians will be using Bitcoin. [INSERT SLIDING SCALE WITH WORD ANCHORS] [DO NOT PUT THE NUMBER 0 OR 100 WITHIN THE WORD ANCHOR BOX]

[ASK Q7a - Q7c IF Q1=YES, ELSE SKIP TO Q12]

Q7a. What is the current price of Bitcoin?

Please provide your best estimate in Canadian dollars. Please round to the nearest dollar. [INSERT NUMERIC BOX]

1 BTC = \$ ____ CAD

[SHOW Q7b AND Q7c ON SAME SCREEN]

Q7b. The price of one Bitcoin is around \$[INSERT RELEVANT PRICE EACH MORNING WHILE THE SURVEY IS IN FIELD] Canadian, as of this morning. In one month, what do you expect the price of Bitcoin to be?

Please provide your best estimate in Canadian dollars. Please round to the nearest dollar. IINSERT NUMERIC BOXI

| 1 BTC = \$____ CAD

Q7c. In one year, what do you expect the price of Bitcoin to be?

Please provide your best estimate in Canadian dollars. Please round to the nearest dollar. [INSERT NUMERIC BOX]

1 BTC = \$____ CAD

Q8a. Please indicate whether you have heard of any of the following digital currencies.

(Select all that apply) [RANDOMIZE LIST]

Ethereum (ETH)

Bitcoin Cash (BCH)

Litecoin (LTC)

Tether (USDT)

USD Coin (USDC)

DAI (formerly known as Sai)

Binance Coin (BNB)

XRP (RIPPLE)

Diem (formerly known as Libra)

Polkadot (DOT)

Dogecoin (DOGE)

Chainlink (LINK)

Stellar (XLM)

Monero (XMR)

[ANCHOR] Other digital currency (please specify) [PROVIDE TEXT BOX FOR

RESPONSE] [DO NOT CODE]

[ANCHOR] No. I have not heard of any other digital currencies

[PIPE IN RESPONSES FROM Q8a; SKIP Q8b IF THEY HAVE NOT HEARD OF ANY OTHER DIGITAL CURRENCIES]

Q8b. Do you currently own any of the following digital currencies?

(Please check all that apply) [RANDOMIZE LIST]

[DISPLAY THOSE SELECTED IN Q8a]

[ANCHOR] Other (please specify) [PROVIDE TEXT BOX FOR RESPONSE] [DO NOT CODE]

[ANCHOR] No, I do not hold any other digital currencies

[ASK IF Q8b # "No, I do not hold any other digital currencies"]

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Q8c. Which cryptocurrency exchanges / companies do you use to buy other digital currencies? Please select those you currently use or have used in the past.

(Select all that apply)

[RANDOMIZE LIST]

Binance,

Coinbase

Crypto.com

Kraken

Wealthsimple

FTX

Kucoin

Bittinex.

Gemini

Bitbuy

Other, please specify [PROVIDE TEXT BOX FOR <u>RESPONSE]</u> [ANCHOR] [DO NOT CODE]

None of the above [EXCLUSIVE. ANCHOR]

[ASK Q9 IF Q2=YES OR Q8b = 'Tether', ELSE SKIP TO INSTRUCTIONS ABOVE Q11]

Q9. Approximately how often do you use the following to pay for goods and services? (Please select the most appropriate response)

[ROWS]

Once a week or more

A few times a month

Once a month

A few times a year

Once a year

Less than once a year

Never

[COLUMNS; PIPE IN BASED ON Q2 AND Q8b]

Bitcoin

Tether

[ASK Q9a if Q9= "Once a week or more", "A few times a month", "Once a month" OR "A few times a year"]

Q9a. What was the name of the last business or website where you used the following to pay for a good or service?

[ROWS] [TEXT BOX]

Don't know / prefer not to say

[COLUMNS; PIPE IN BASED ON Q2 AND Q8b]

Bitcoin Tether

[ASK Q10 IF Q2=YES, ELSE SKIP TO INSTRUCTIONS ABOVE Q11]

Q10. Approximately how often do you use Bitcoin to send money to other people? (Please select the most appropriate response)

Once a week or more A few times a month Once a month A few times a year Once a year Less than once a year Never

Ι

[ASK Q11 IF Q2=YES OR Q4a=YES OR (Q8b was asked and ≠ "No, I do not hold any other digital currencies"), ALL ELSE SKIP TO Q12]

Q11. Have any of the following incidents happened to you?

(Select all that apply) [RANDOMIZE LIST]

I lost access to my personal cryptocurrency <u>wallet</u>
The cryptocurrency exchange holding my funds was <u>backed</u>
I experienced problems with a purchase made using <u>cryptocurrencies</u>
I participated in an Initial Coin Offering and it turned out to be a <u>scam</u>
A price crash caused my cryptocurrency to lose substantial <u>value</u>
My personal data held by a cryptocurrency exchange was <u>compromised</u>
The cryptocurrency exchange I was using stole my <u>funds</u>
None of the above [EXCLUSIVE]

[ASK Q_Network_a and Q_Network_b IF Q1 = YES]

Q Network a. How many people do you know who currently own Bitcoin?

Please include:

- family members, friends, acquaintances and even those individuals you may have communicated with anonymously via social media or other <u>channels</u>
- only people who currently live in Canada and are 18 years of age or older.

of people [NUMERIC RANGE 1 to 99]

I do not know anyone who currently owns Bitcoin [EXCLUSIVE]

Q Network b, What sources do you use to access information about cryptocurrencies? (Select all that apply) [MULTI-SELECT. RANDOMIZE LIST] Traditional media (e.g. TV, daily and weekly newspapers, radio) Family, friends and collegues Online news publications (e.g. BNNBloomberg, The Globe and Mail, Reuters) Crypto news websites (e.g. Coin Bureau, Coin Desk, The Block) Existing companies/exchanges offering cryptocurrencies (e.g. Wealthsimple, Coinbase) Social Media [header] Social networking platforms (e.g. Facebook, Twitter, Instagram, TikTok, LinkedIn) Video or streaming platforms (e.g. YouTube, Twitch) Blogs or forums (e.g. Reddit) Other (please specify) [TEXTBOX] [ANCHOR] None [ANCHOR. EXCLUSIVE] [ASK ALL; SHOW Q12a and Q12b on same screen] Q12a. Thinking now about regular Canadian currency, how much cash do you currently have in your purse, wallet, or pockets? (Please round to the nearest dollar) I prefer not to answer [EXCLUSIVE] Q12b. How much cash do you currently have outside of your purse, wallet, or pockets, for example in your car, house or another safe place? (Please round to the nearest dollar) I prefer not to not answer [EXCLUSIVE] -- NEW MODULE STARTS HERE: ACCESS TO CASH--[ASK ALL] NEW_A2C_STATEDPREF. When you need to withdraw cash, how easy or difficult is it for vou to?

[SCALE] Very difficult Difficult

Neither difficult nor easy

Easy Very easy Unsure

[PROGRESSIVE GRID]

Get to an ATM or ABM Get to a bank

[ASK ALL]

NEW_A2C_REVEALEDPREF. When you need to withdraw cash, where is your most conveniently located?

(SELECT ALL)

In my residential neighbourhood

At a shopping or commercial center in my town/city A location that requires traveling to another town/city Other (please specify)

[PROGRESSIVE GRID]

ATM or ABM Bank

[ASK ALL]

NEW_A2C_RESILIENCE. In the <u>past year</u>, when you have <u>shopped in-person</u> for goods or services, have you encountered any issues with the internet or electronic services <u>while</u> paying? For example, disruptions or malfunctions of card terminals or cash registers?

(SELECT ONE)

Yes No

Don't know/Unsure

[ASK NEW_A2C_RESILIENCE_A AND NEW_A2C_RESILIENCE_B IF

NEW_A2C_RESILIENCE = "Yes"]
NEW_A2C_RESILIENCE_A. How did you manage your shopping during the disruption?

ISINGLE SELECTI

Paid for my shopping using cash I already had on me

Had to withdraw cash to pay

Stopped shopping, but went back to the same shop later and paid by card

Stopped shopping and went to a different shop where I was able to pay by card

Bought less as I did not have enough cash on me

Cancelled my purchase and did not buy anything

Other (please specify): _____

NEW_A2C_RESILIENCE_B. How has this experience affected the way you now use/keep cash?

After the experience, I....

[SINGLE SELECT]

Always keep extra cash on hand, either in my pocket/wallet or at home No impact

Kept extra cash on hand for a short period of time, but now have less again

[ASK NEW_A2C_RESILIENCE_C IF NEW_A2C_RESILIENCE = "No" or "Don't know/Unsure"]

NEW_A2C_RESILIENCE_C. If you experience a disruption of card terminals or cash registers while shopping in-person, how you would you <u>expect</u> to manage your shopping during the disruption?

[SINGLE SELECT]

Pay for my shopping using cash I already have on me
Withdraw cash to pay
Stop shopping, but go back to the same shop later and pay by card
Stop shopping and go to a different shop where I am able to pay by card
Buy less as I do not usually have enough cash on me
Cancel my purchase and not buy anything
Other (please specify): ______

Q13. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think would have left in the account if you left the money to grow?

More than \$102 Exactly \$102 Less than \$102 Don't know

Q14. Imagine the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with this money in this account?

More than today Exactly the same Less than today Don't know

Q15. Please indicate whether or not this statement is true or false: "Buying a single company's stock usually provides a safer return than a mutual fund of stocks".

True False Don't know

Q16. Switching topics, about how long do you think you will live?

I think I will live until I am...

____ years old [RANGE >CURRENT AGE TO 150]

[IF YES TO Q2 AND RESPONDENT IS FROM AMPARIO SAMPLE, ASK Q17, ELSE SKIP TO NEXT SECTION]

Q17.

We may have other studies coming up in the near future about the use of Bitcoin and other digital currencies. May we invite you to participate in these future surveys?

Yes

No

[IF YES TO Q17 AND RESPONDENT IS FROM AMPARIO SAMPLE, ASK Q18, ELSE SKIP TO SURVEY END]

Q18a. Would you like to provide your contact information (first name and email address). A "Prefer not to answer" option will be available for you to select at your discretion. Participation for this study is completely voluntary and you may withdraw your consent at any time.

lpsos will have access to your name, email address and individual responses for the purposes of this research. They will retain this information for up to 3 months.

Do you accept the collection of personal data (your name and email address)?

Yes, I accept

No, I do not accept [SKIP TO SURVEY END]

Q18b.

Please type in your name and the email address you would like us to use to contact you.

[INSERT TEXT BOX FOR NAME AND FOR EMAIL ADDRESS]

References

- Balutel, D., W. Engert, C. S. Henry, K. P. Huynh, D. Rusu, and M. C. Voia (2023a): "Crypto and financial literacy of cryptoasset owners versus non-owners: The role of gender differences," *Journal of Financial Literacy and Wellbeing*, 1, 514–540.
- Balutel, D., W. Engert, C. S. Henry, K. P. Huynh, and M. C. Voia (2022a): "Private Digital Cryptoassets as Investment? Bitcoin Ownership and Use in Canada, 2016-2021," Bank of Canada Staff Working Paper No. 2022-44.
- BALUTEL, D., M.-H. FELT, G. NICHOLLS, AND M. C. VOIA (2022b): "Bitcoin Awareness, Ownership and Use: 2016-20," Bank of Canada Staff Discussion Paper No. 2022-10.
- Balutel, D., D. Rusu, and C. S. Henry (2023b): "Cryptoasset Ownership and Use in Canada: An Update for 2022," Bank of Canada Staff Working Paper No. 2023-26.
- DEVILLE, J., C. SARNDAL, AND O. SAUTORY (1993): "Generalized Raking Procedures in Survey Sampling," *Journal of the American Statistical Association*, 88, 1013–1020.
- Henry, C. S., K. P. Huynh, and G. Nicholls (2017): "Bitcoin Awareness and Usage in Canada," Bank of Canada Staff Working Paper No. 2017-56.

- Henry, C. S., K. P. Huynh, G. Nicholls, and M. Nicholson (2019): "2018 Bitcoin Omnibus Survey: Awareness and Usage," Bank of Canada Staff Discussion Paper No. 2019-10.
- Lusardi, A. and O. Mitchell (2014): "The Economic Importance of Financial Literacy: Theory and Evidence," *Journal of Economic Literature*, 52, 5–44.