

2021 Global Crypto User Index

Crypto user profiles, attitudes,
and motivations

TABLE OF CONTENTS

| | |
|---|----|
| The 2021 Global Crypto User Index..... | 03 |
| Who are the crypto users?..... | 08 |
| What motivates crypto users?..... | 13 |
| How do crypto users around the world compare?..... | 26 |
| Who do crypto users trust?..... | 30 |
| How do crypto users buy, store and use cryptocurrencies?..... | 42 |
| Can crypto adoption meet its expectations?..... | 52 |
| Perceptions on crypto adoption..... | 61 |



01

THE 2021 GLOBAL CRYPTO USER INDEX

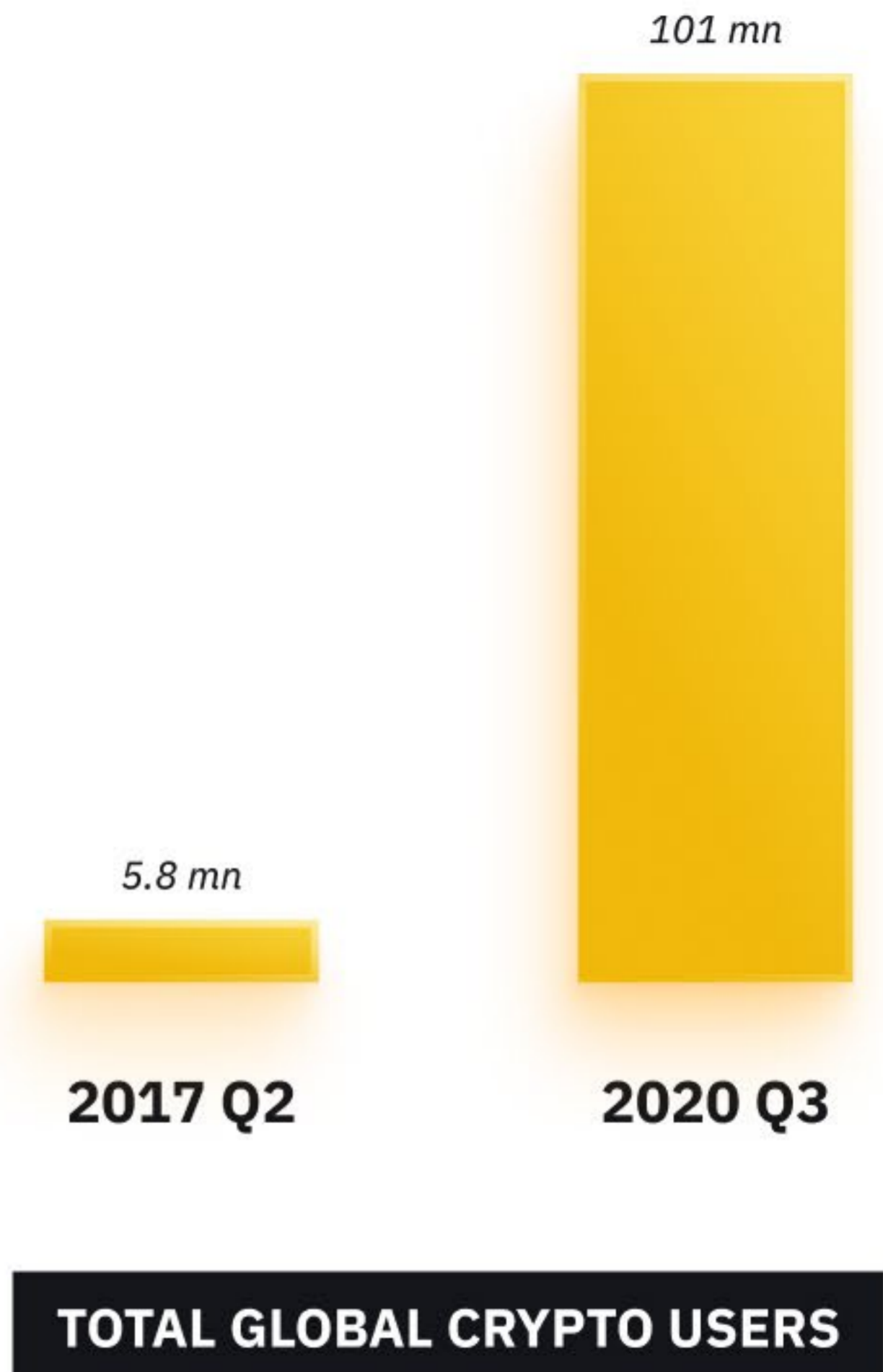


UNDERSTANDING Crypto Users

Retail investment in cryptocurrencies is growing around the world. As cryptocurrencies become more accessible via more channels -- Paypal, LocalBitcoins, Grayscale, Binance, and more -- it is increasingly important to understand the dominant user profiles and their corresponding preferences.

Aside from anecdotal reports, there has not been an objective investigation into the motivations, behaviors and preferences of these growing audiences from a **global scope**.

That's why we created the **Global Crypto User Index**. Its goal is to understand the similarities and differences between retail crypto users across different profile types in addition to countries and markets.



METHODOLOGY

The 2021 Global Crypto User Index is based on a global survey issued to over **61,000 crypto users** across **178 countries and regions**.

The survey, which ran from 15 September to 25 October 2020, explored questions surrounding the **respondents' demographics** as well as their **attitudes, preferences, adoption, and motivations** towards cryptocurrency investment.

Furthermore, the survey features **12,000 unique comments**, ranging from personal anecdotes to suggested areas of improvement for the crypto industry.



KEY FINDINGS

AFFILIATION

- **52%** of cryptocurrency owners do not consider crypto as a hobby, but a **source of income**
- For **15% of users**, crypto is their **primary source of income**

PURCHASE BEHAVIOR

- **65%** own BTC: most bitcoin owners (30%) allocate **1-20%** of their crypto portfolio to BTC
- **63%** exclusively funded their cryptos with **disposable funds**
- **Four times (12%)** as many people regretted their decision to not purchase cryptos (vs the percentage of people who regretted buying crypto)

REASONS TO BUY CRYPTO

- Most people (55%) own crypto as part of a **long-term investment strategy**
- Other reasons are a **distrust** of the current financial system (38%), short-term **trading opportunities** (31%), and **FOMO** (27%)

EXCHANGES

- Most customers value security (**28%**), followed by UI/UX (**25%**), and available trading pairs (**23%**)
- As **60%** of cryptocurrency owners store their assets on an exchange, **security** is their most important consideration

KEY FINDINGS

INSTITUTIONAL TRUST

- 17 out of the 20 markets have **less than 50% trust** in local institutions
- When comparing the two concepts against each other, **institutional trust outweighs** confidence in crypto

USAGE

- Most cryptos (39%) are bought and **HODL'ed**
- Other use cases include **staking & lending** (22%) and **payments** (11%)
- Using crypto as a **medium of exchange** may not be perceived as the most important use-case (21%), but is partially already playing that role (38%)

DECENTRALIZED FINANCE

- DeFi is most popular in **Southeast Asia**, where more than **52%** of users use these dApps
- **66%** of all dApp users are using **DeFi applications**

CONFIDENCE IN CRYPTO

There is near-unanimous **confidence in crypto** (97%) amongst crypto users, with some notable caveats:

- **Stablecoins: 78%** would rather use **bank coins** instead of stablecoins
- **Perceived risk** remains the **last barrier to adoption when leveraging Pavlou's (2003) TAM model**
- **'No greater fools'**: adoption is primarily **driven by expected future utility** for crypto assets

02

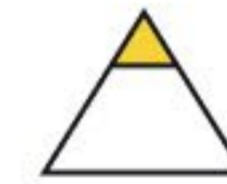
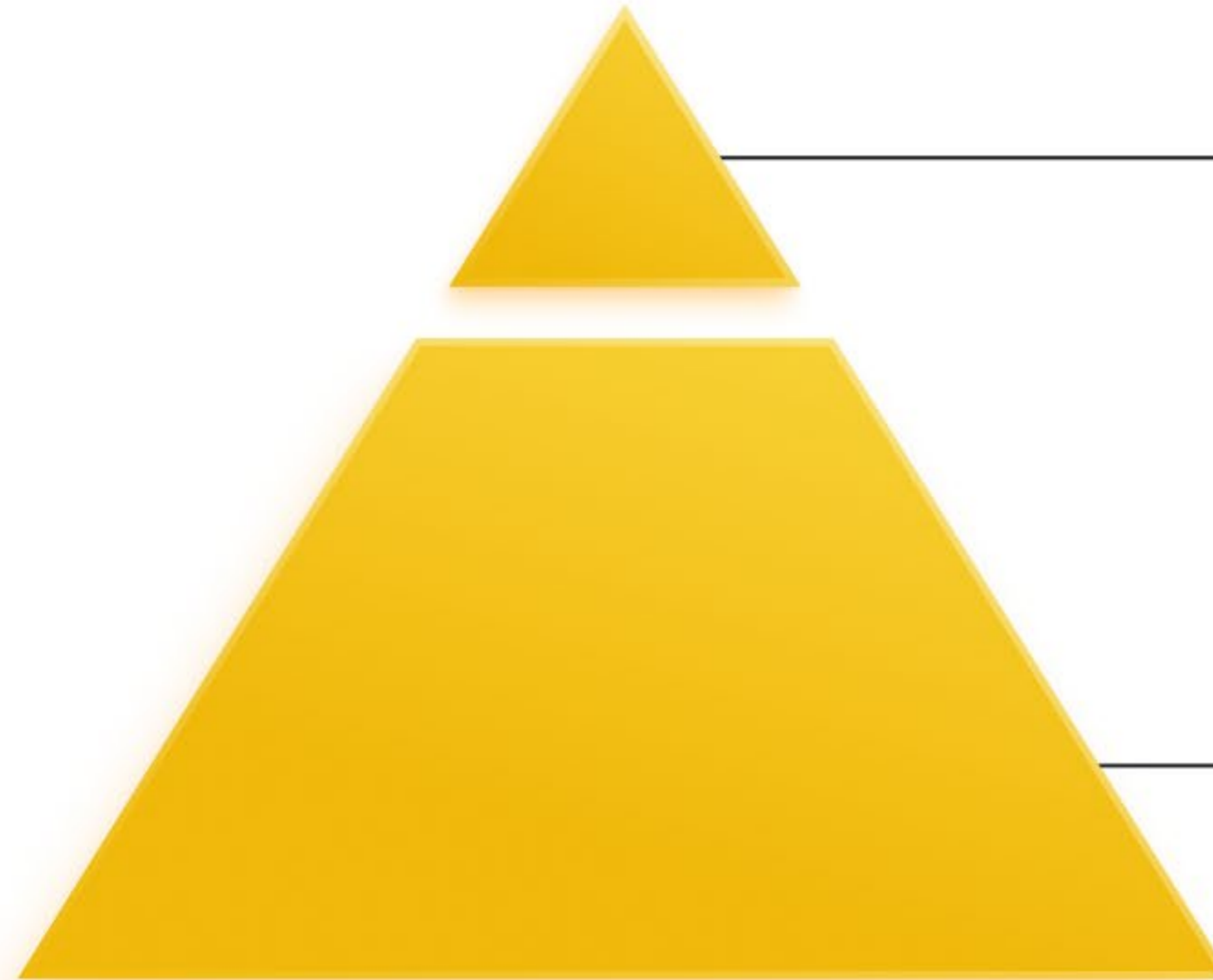
WHO ARE CRYPTO OWNERS?



WHO ARE CRYPTO USERS?

Crypto users can be divided into one of two camps:

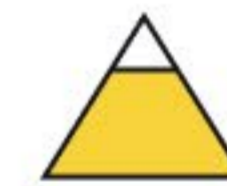
- (1) Crypto Natives
- (2) General Crypto Users



Crypto Natives

Crypto natives (13% of crypto users) must demonstrate the following characteristics:

- Be power users
- Have skin in the game
- Have a good understanding of Bitcoin



General Crypto Users

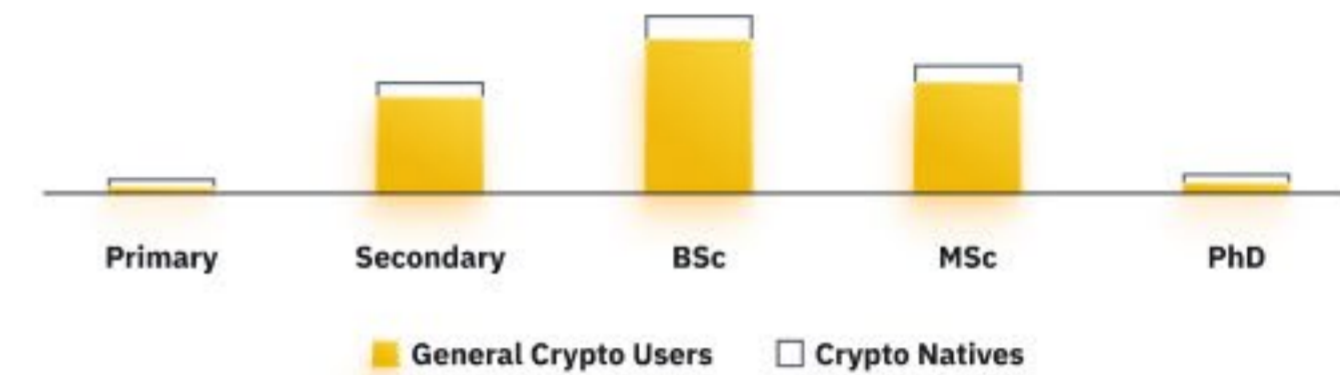
The remaining 87% fall under general crypto users.

WHO ARE CRYPTO USERS?

Crypto users around the world share a number of key characteristics:

Are predominantly male
(n = 57k or 95%)

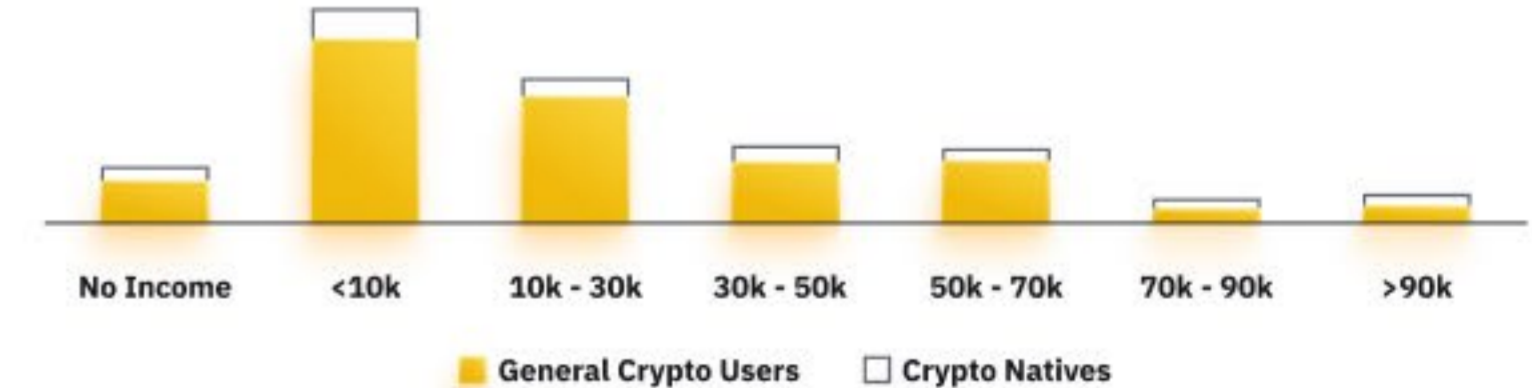
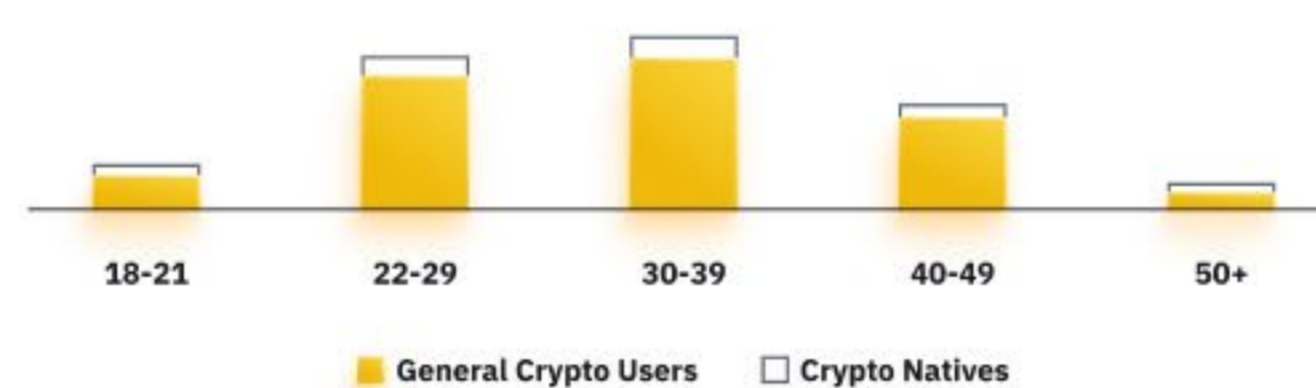
Have an undergraduate degree
(n = 25k or 41%)



Are employed
(n = 27k or 45%)

About 34 years-old

Earn about 25,000 USD per year

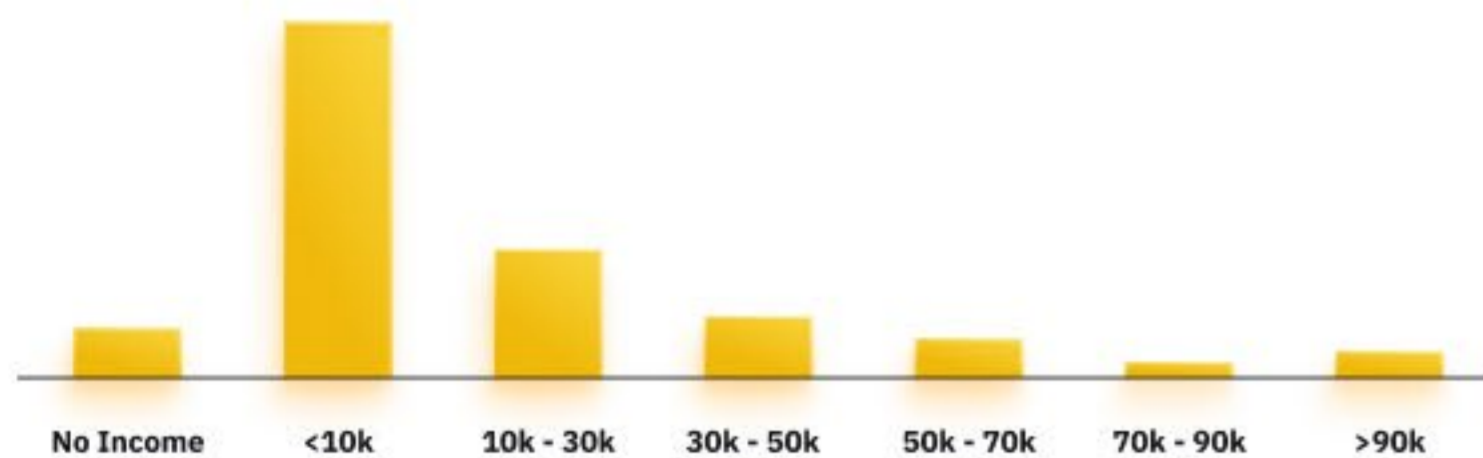


For full details on post-stratification refer to the Technical Appendix. Data set: average of raw data set. Demographics were assessed after the statement: 'First we need some general information about you'. The measure demographics entails (i) demographics_age, question: 'Which age group best describes you?', answer options: 18-21, 22-25, 26-29, 30-39, 40-49, 50+; (ii) demographics_gender, question: 'Please indicate your gender.' answer options: male, female, other; (iii) demographics_education, question: 'What is your highest level of completed education?', answer options: Primary school, Secondary school, undergraduate degree (BSc or equivalent), graduate degree (MSc or equivalent), post-graduate degree (PhD or equivalent), respondents indicating Russia as their location received the answer option 'Other' instead of 'primary school'; (iv) demographics_location, question: 'In which country have you been the longest?', (v) demographics_employment, question: 'What is your employment status?', answer options: self-employed, employed, currently unemployed, currently in academic training; (vi) demographics_income, question: 'What is your annual income?', answer options: less than 10 000 USD, 10 000 USD to 30 000 USD, 30 001 USD to 50 000 USD, 50 001 USD to 70 000 USD, 70 001 USD to 90 000 USD, more than 90 000 USD, in USD or equivalent amount in local currency. Assumed averages for income bracket.

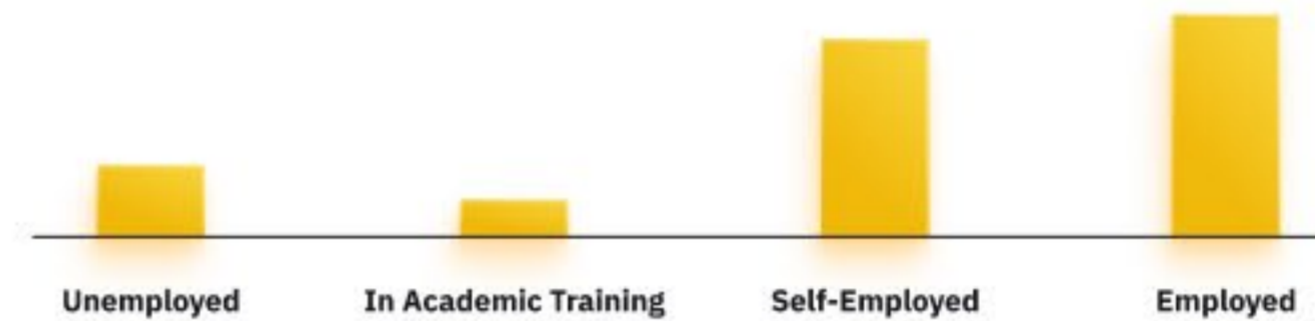
CRYPTO NATIVES

There are key distinguishing features that set crypto natives apart from other crypto users:

Earn slightly less (-13%, 22k USD) than the average 'general user'



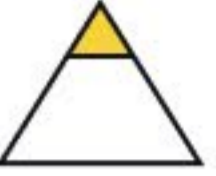
Are more likely to be **self-employed** than employed
($\Delta = 5\%$, 38% to 42%)



Are much **more likely to have undergone higher education** than local peers

+220%

Tend to be based in **South-east Asia**
(n = 821 or 15%)



For full details on demographic information refer to the Technical Appendix. Data set: cross-stratified data set for respondents classifying as 'crypto native'. Comparisons to 'general crypto users' are based on the respective data set, complementary third-party data from <http://data.uis.unesco.org/>. "Not that different" refers to gender (94% or n = 5k male), age (mean = 33), education (45% or n = 2.4k with B.Sc. degree) and employment (42% or n = 2.3k are 'employed'). The measure 'higher education' is assessed by measuring the share of respondents indicating to have completed tertiary education. As such 'BSc', 'MSc' and 'PhD' are counted. This share is compared against UNESCO data assessing enrollment rates in tertiary education programmes in the countries constituting the region 'South-east Asia, i.e., Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, Philippines, Singapore, Thailand, Viet Nam. This region is chosen since the 'average' (i.e., mode) crypto native is based in SEA. After weighing the enrollment rates with unstratified survey data of the respective countries, the respective average is used as higher-bounded comparison to survey data. It is a higher bound, as survey data only includes completed tertiary education programmes, whereas the UNESCO data refers to enrollment data.

WHAT DOES IT TAKE TO BECOME A CRYPTO NATIVE?

1 EXPOSURE

DeFi / dApp user

OR

Crypto as main source of income

OR

Use crypto for payments

2 SKIN IN THE GAME

High wealth concentration in crypto

OR

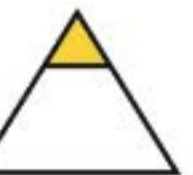
Long-term aligned with moderate-to-high
wealth concentration

3 KNOWLEDGE

A good understanding of Bitcoin

AND

At ease with using crypto



The measure crypto natives is a subset of the post-stratified data set of respondents. The subset is defined by three measures, (i) 'exposure', (ii) 'skin in the game' and (iii) 'knowledge'. It requires boolean values for certain general measures and has defined Likert-style scale cut-off values for measures assessing the level of a respondent's agreement to a statement. (i) requires a respondent to have used DeFi dApps, boolean, or dApps, boolean, or state that crypto is 'my primary source of income' in the measure 'attitude_affiliation', boolean, or state that 'It is important for me to use cryptocurrencies as a means of payment' in the measure attitude_ownership_reason_payment, boolean. (ii) requires a respondent to indicate 5/5 agreement in response to the statement 'Cryptocurrencies are the biggest position in my investment portfolio' or indicate that 'I want to include them into my long-term savings plan (e.g. pension)' in which case 3/5 and 4/5 agreement for the statement 'Cryptocurrencies are the biggest position in my investment portfolio' are sufficient. (iii) requires a respondent to indicate 5/5 agreement in response to the statement 'I completely understand how the Bitcoin blockchain works' and indicate at least 4/5 agreement to the statement 'I think cryptocurrencies are easy to use'. Alternatively, a respondent may indicate 4/5 agreement to the first statement, when the respondent indicates 5/5 agreement to the latter statement.

03

UNDERSTANDING CRYPTO USERS

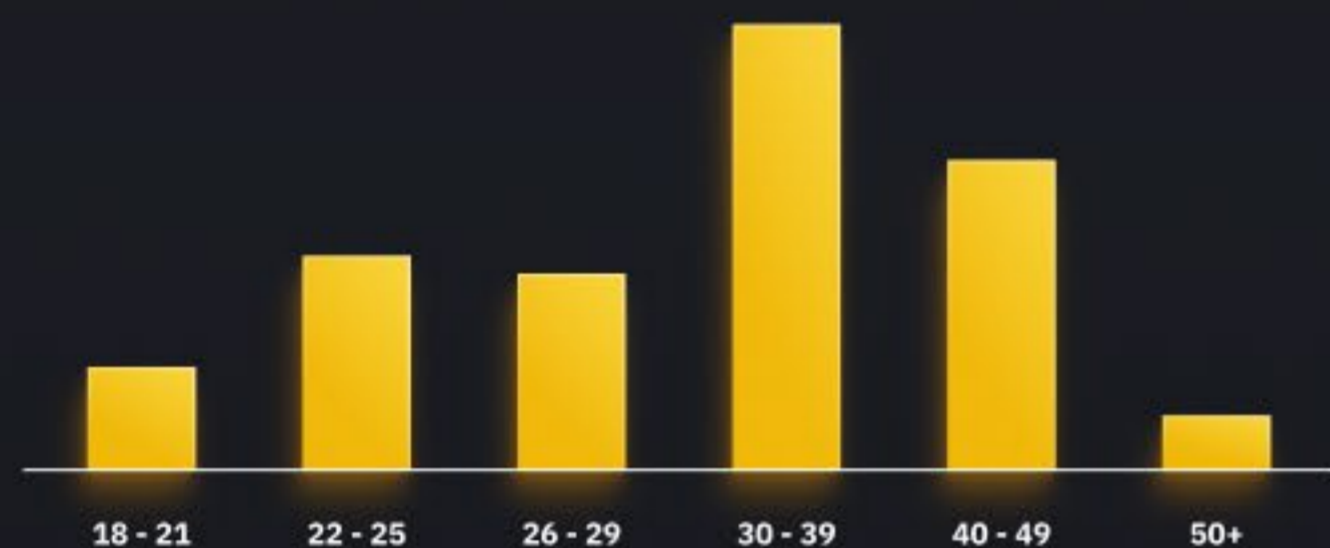


WHY GET INTO CRYPTO?

In It For The Tech

Crypto users who are highly **motivated by the technology behind crypto and blockchain** maintain some key differences from the wider crypto user base:

Are roughly similar to the wider crypto user base, aside from an **overrepresentation (+13%)** in the **age group 40 - 49**.



Are more likely to be **male**.

16%

This group shows the **greatest differences in country of origin** for:

China (+54%)
Latin America (-35%)

Are more likely to report **maximum confidence in crypto**.

+25%

Are more likely to report **minimal 'gold rush' scores**.

+19%

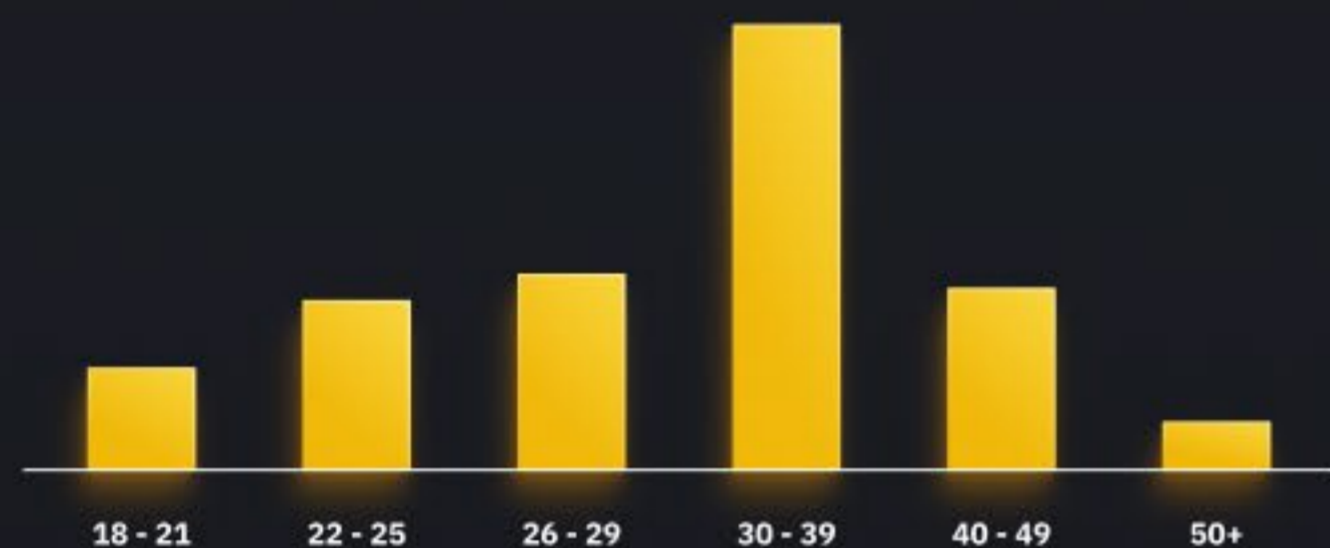
For full details on demographic information refer to the Technical Appendix. Data set: cross-stratified data set for respondents indicating their answer to the question: 'Why did you buy cryptocurrencies?' as 'I don't trust the current financial system' or 'It is important for me to use cryptocurrencies as a means of payment'. Comparisons to the respondents are based on the full data set. Sample size is n = 36414. Measures capturing age, gender and country of origin are described in the appendix. The measure describing 'confidence in crypto' is compiled out of several Likert-style scale items, where the strongest agreement is indicated by a '5'. The measure describing 'gold rush' scores is compiled out of several Likert-style scale items, where the strongest disagreement is indicated by a '1'. Further information on the compiled measures is available in the technical appendix.

WHY GET INTO CRYPTO?

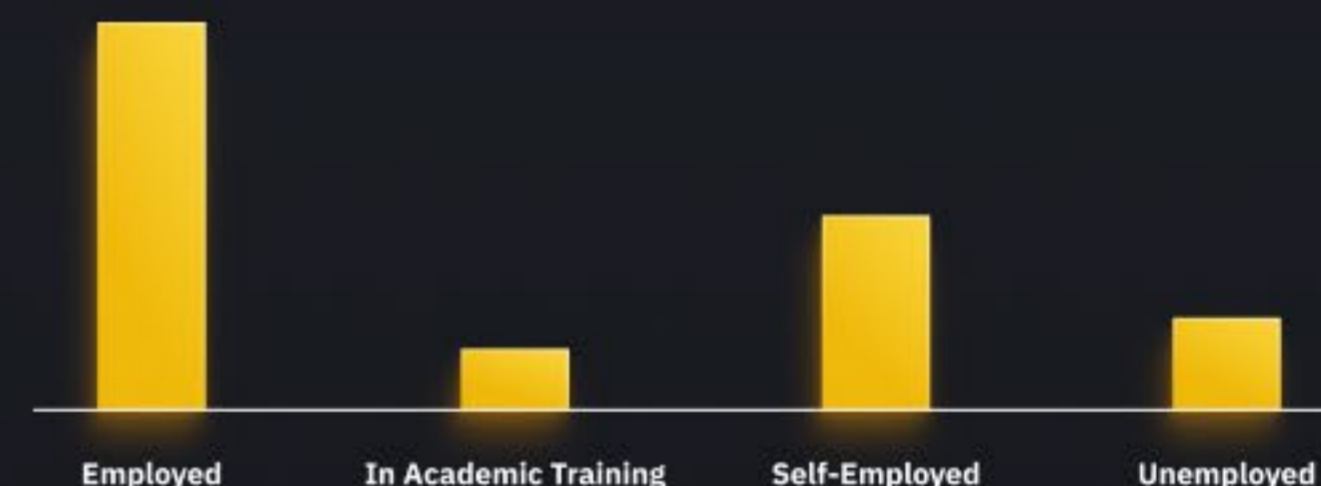
In It For The Money

Crypto users who are highly **motivated by their desire to make profits** maintain some key differences from the wider crypto user population:

Are on average one year younger and are more likely to be in the **youngest** age group (+17%).



Are less likely (-20%) to be **self-employed or unemployed**.



Are less likely to be male and **more likely to identify as:**

Female (+29%)
Other (+12%)

Are more likely to **invest only a small portion of total wealth** in crypto.

+30%

Are twice as likely to have **minimal confidence in crypto**.

+212%

For full details on demographic information refer to the Technical Appendix. Data set: cross-stratified data set for respondents indicating their answer to the question: 'Why did you buy cryptocurrencies?' as 'I want to make some short-term profits,' or 'I want to take a gamble and fund a big ticket purchase (e.g. home, car, business)' or 'I don't want to miss out on buying cryptocurrencies'. Comparisons to the persona 'in it for the money' are based on the respective data set. Sample size is n = 30923. Measures capturing age, gender and employment status are described in the appendix. The measure capturing the share of wealth invested in crypto is described in the appendix as 'financial entanglement'. The measure capturing 'confidence in crypto' is compiled out of several Likert-style scale items. 'Minimal confidence' relates to the strongest disagreement, i.e., '1' for respective items. Further explanations are available in the technical appendix.

CRYPTO USERS

Are Predominantly Relying On Online Channels

80%

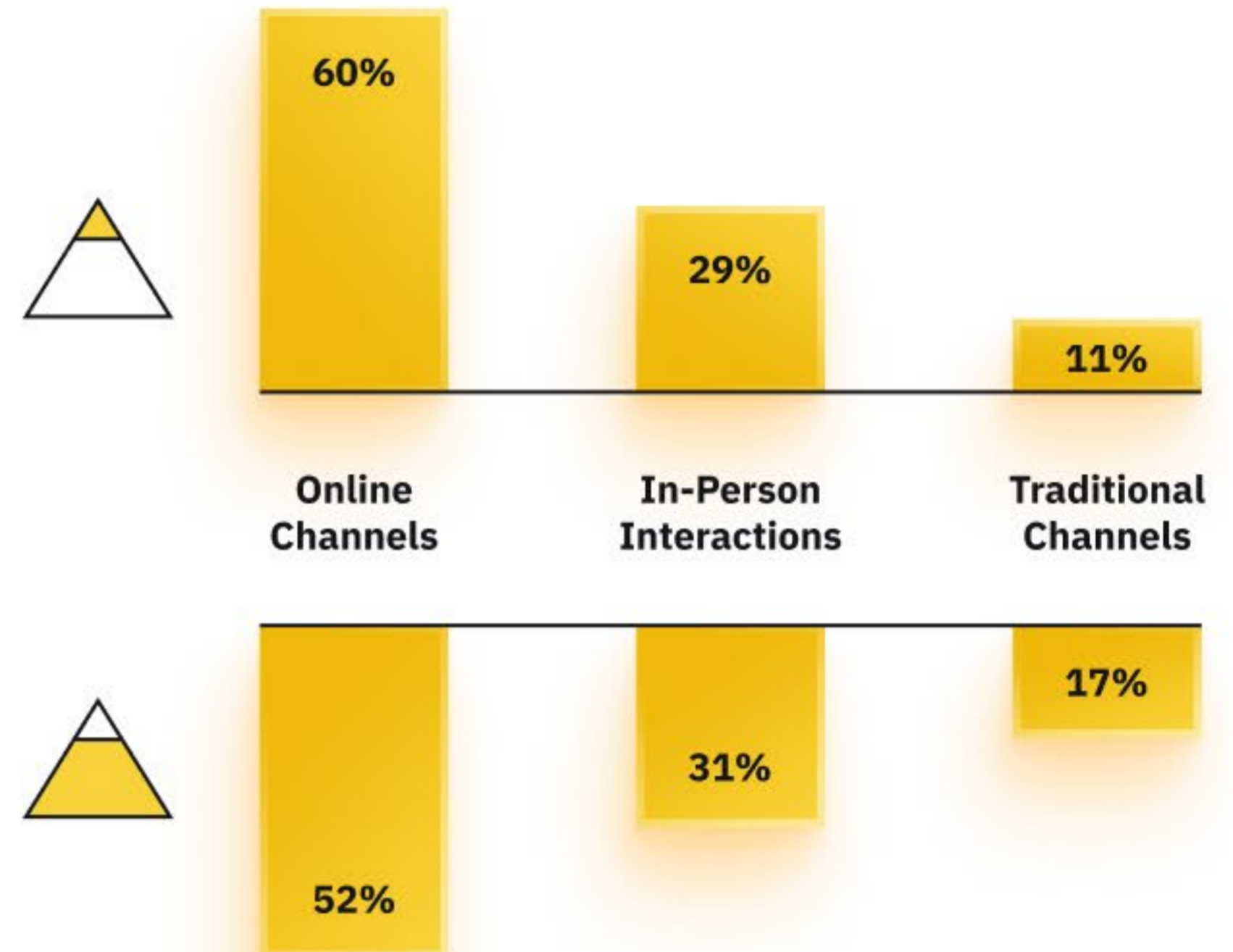
- 1%

+ 0%

of the **general population** list online channels as the most important source when it comes to learning about crypto.

for **crypto natives**

for **general crypto users**



Top channels via which respondents were first introduced to crypto.

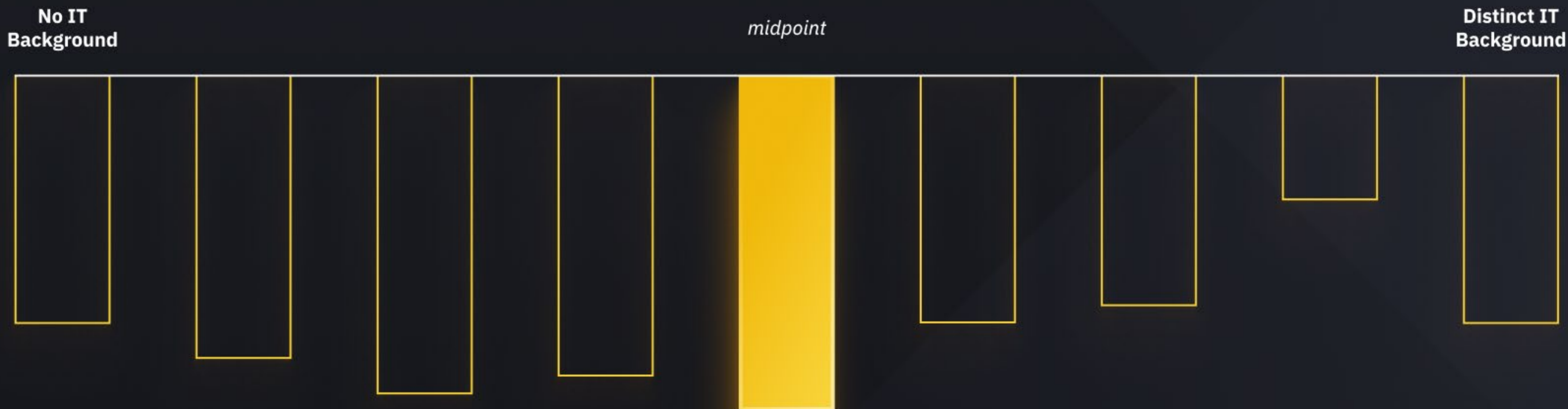
Data set: post-stratified data set for 'Global' region. Skipped by 3254 respondents. Question: 'Where did you first hear about cryptocurrencies?', respectively 'And which of these channels was most important in educating you [about crypto]?'. Answer options are displayed in aggregates. 'Traditional channels' was computed by including responses for 'Traditional media (TV, newspaper, radio, etc)' (n = 4886, 8%) and 'Formal education' (n = 4591, 8%); 'In-person interactions' was computed by including responses for 'Friends or family' (15862, 27%) and 'Work colleagues' (n = 2076, 4%); 'Online channels' was computed by including responses for 'Online news and advertisements' (n = 12280, 21%) and 'Social media and forums (Twitter, Reddit, etc)' (n = 18125, 31%).



CRYPTO USERS

With An IT Background Have A Better Understanding Of The Bitcoin Blockchain

There is a **medium-sized correlation** ($p = 0.455^{**}$) between survey respondents having an Information Technology (IT) background and their assessment of how well they understood the Bitcoin blockchain.



Data set: post-stratified data set for 'Global' region. Skipped by 3254 respondents. 'IT background' is a composite measure (average) of the Likert-style scale item 'IT_background_work' assessed with agreement to the statement 'I have a strong educational or working background in IT' and the item 'IT_background_code' assessed with agreement to the statement 'I am very familiar with reading programming code', 5-point scales. A Pearson Correlation coefficient of $p = 0.455$ is significant at the 0.01 level and indicates a moderate correlation between IT background and understanding of the Bitcoin blockchain. The latter measure was assessed with a Likert-style scale item where agreement to the statement 'I completely understand how the Bitcoin blockchain works' was assessed in a 5-point scale.

EXCHANGES

Are The Most Popular Place To Store Crypto

60%

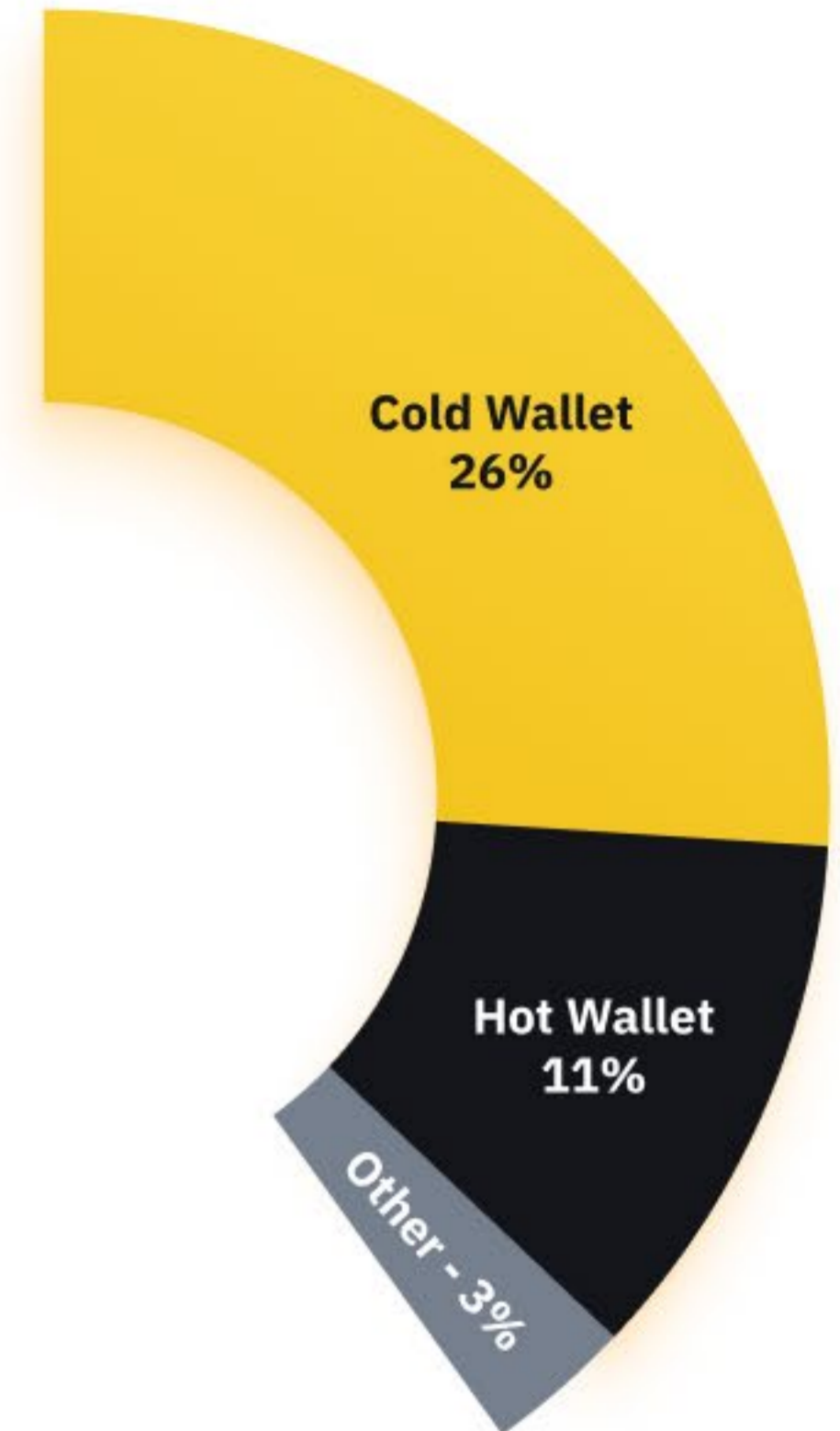
of the **general population** store their cryptocurrencies on an exchange.

0%

for **crypto natives**

+ 2%

for **general crypto users**

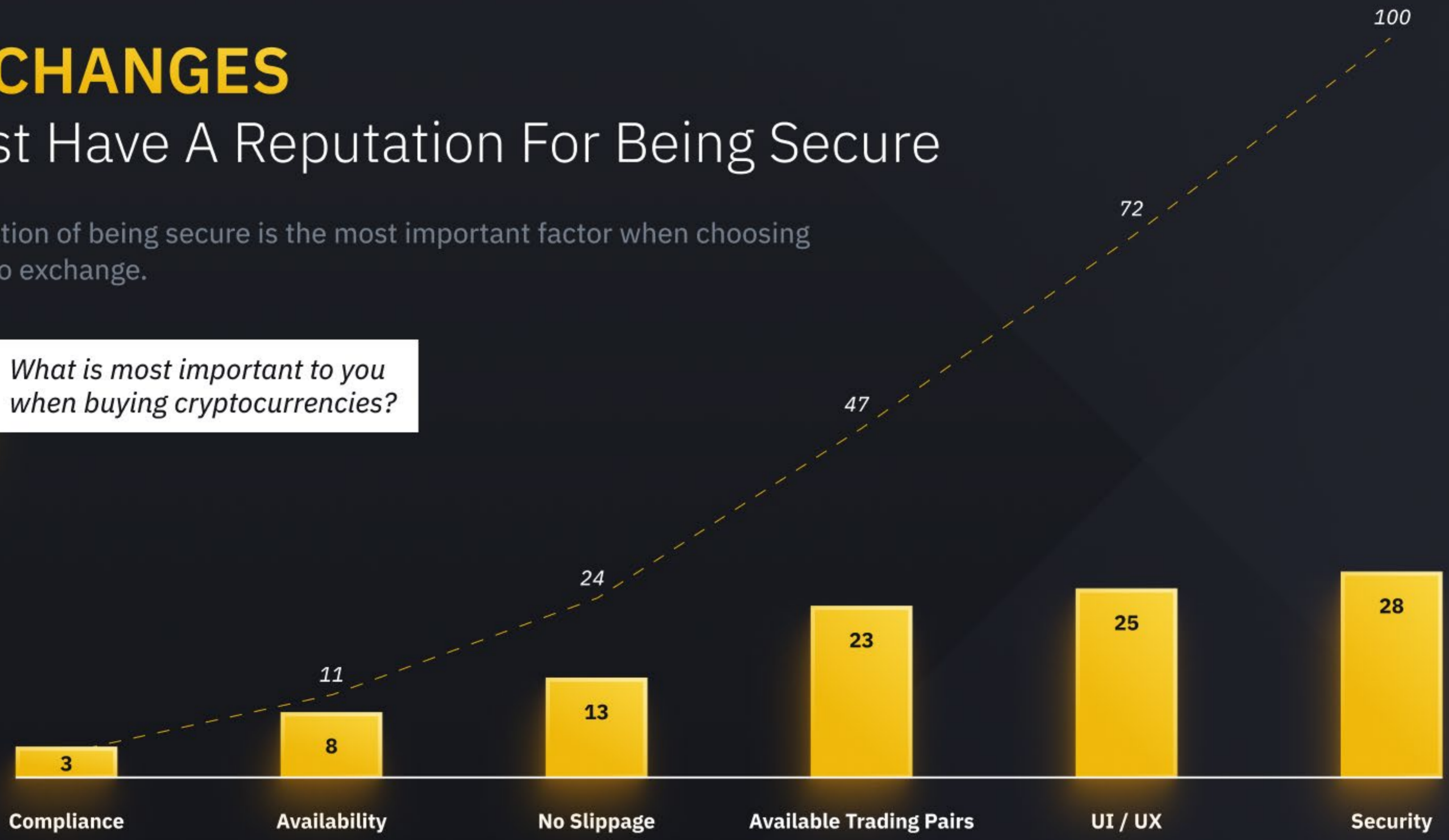


EXCHANGES

Must Have A Reputation For Being Secure

Reputation of being secure is the most important factor when choosing a crypto exchange.

“ What is most important to you when buying cryptocurrencies? ”



Data set: post-stratified data set for 'Global' region. Question: What is most important to you when buying cryptocurrencies?. The available answer options were 'An intuitive user experience and user interface' (n = 14407), displayed as UI/ UX., 'A broad offer of many different cryptocurrency trading pairs' (n = 12903), displayed as 'Available trading pairs', 'A reputation for low prices and little slippage' (n = 7399), displayed as 'No slippage', 'A reputation for constant availability' (n = 4430), displayed as 'Availability', 'A reputation for being secure' (n = 15794), displayed as 'Security', 'A reputation for being regulatory compliant' (n = 1788), displayed as 'Compliance'.



CRYPTO USERS'

Love Of Bitcoin Remains Strong

Unsurprisingly, the most popular cryptocurrency is **Bitcoin**, which is held by **65%** of those who own any crypto.



Data set: post-stratified data set for 'Global' region. Question: 'Which of the following cryptocurrencies do you own?'. Multiple choice was possible. As such, the amount of answer options exceeds the size of the general population. Respondents stating that they own 'None', n = 1098 were excluded. Year-over-year (YOY) was calculated by averaging the last 7 closing values of 2020 and dividing it by the difference of the respective values of 2019. Publicly available data from CoinMarketCap was used.

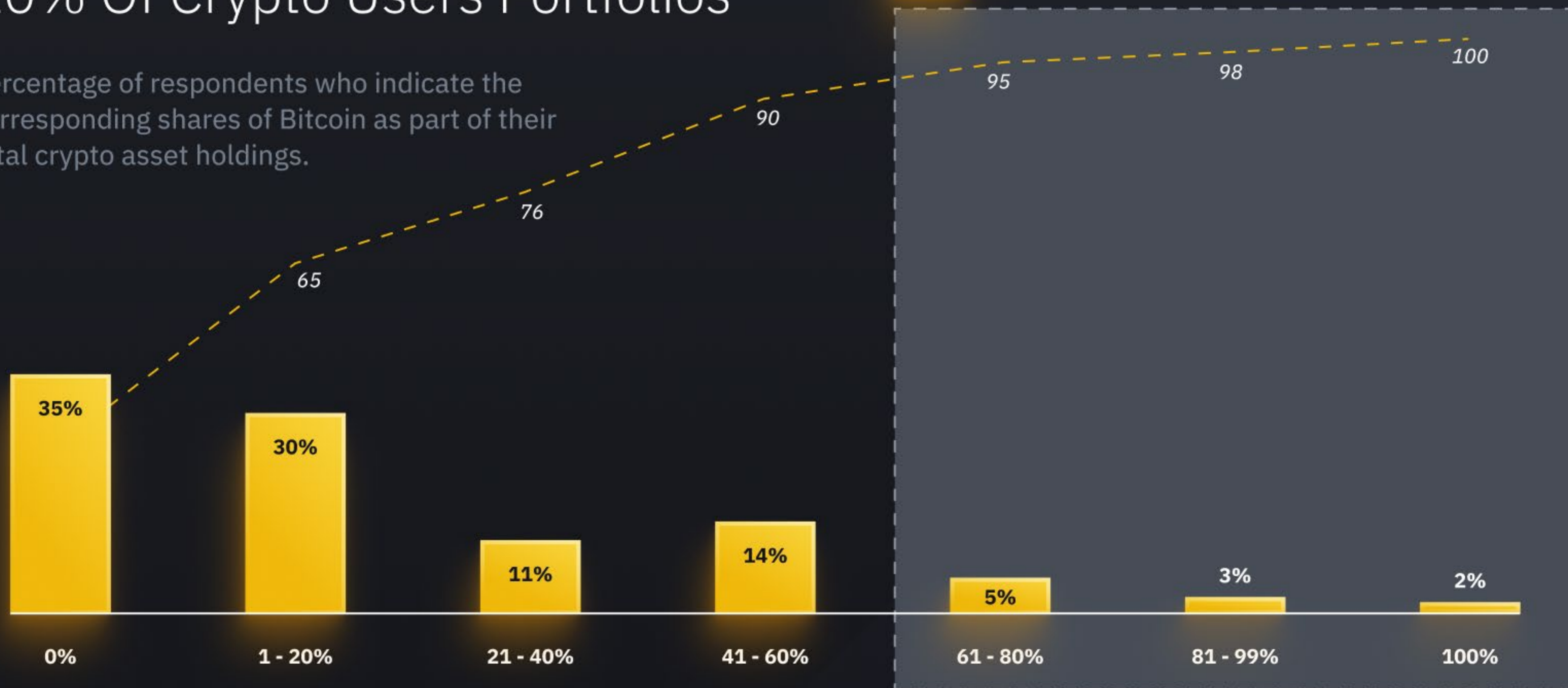


BITCOIN DOMINATES

10% Of Crypto Users Portfolios

Percentage of respondents who indicate the corresponding shares of Bitcoin as part of their total crypto asset holdings.

“ How much of your cryptocurrency holdings are in Bitcoin?



Data set: post-stratified data set for 'Global' region. Question: 'How much of your cryptocurrency holdings are in Bitcoin'. Answer options were '0%', '1 to 20%', '21 to 40%', '41 to 60%', '61 to 80%', '81 to 99%', '100%'. Missing values (n=20502) are excluded.

BITCOIN MAXIMALISTS

Bitcoin maximalists are defined as (i) having **more than half** of their invested wealth in cryptocurrencies and (ii) **exclusively owning BTC**.

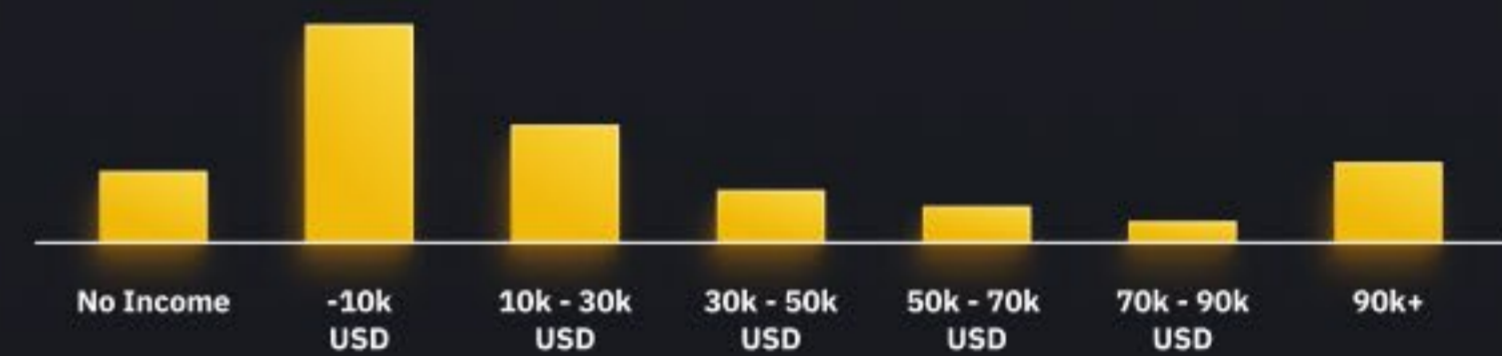
Are more likely to **hold a PhD**.

406%



Are more likely to report **annual earnings above 90k USD**.

+179%



Are more likely to use crypto as their **primary source of income**.

+265%

Are more likely to **buy Bitcoin with borrowed capital**.

+401%

Are more likely to own crypto in the **hope of a 'moonshot'**.

365%

Data set: subset of post-stratified data set for 'Global' region. Question: 'How much of your cryptocurrency holdings is in Bitcoin'. Data set (n = 533) defined by answer options '100%'. To exclude people holding small amounts of Bitcoin, another condition to qualify as a 'Bitcoin maximalist' is to have more than half of their invested wealth in cryptocurrencies. Due to the small sample size inferences to a broader population may not be possible. The other displayed measures are described on other slides and within the Technical Appendix.

CRYPTOCURRENCIES

Are Becoming A Regular Source Of Income

51%

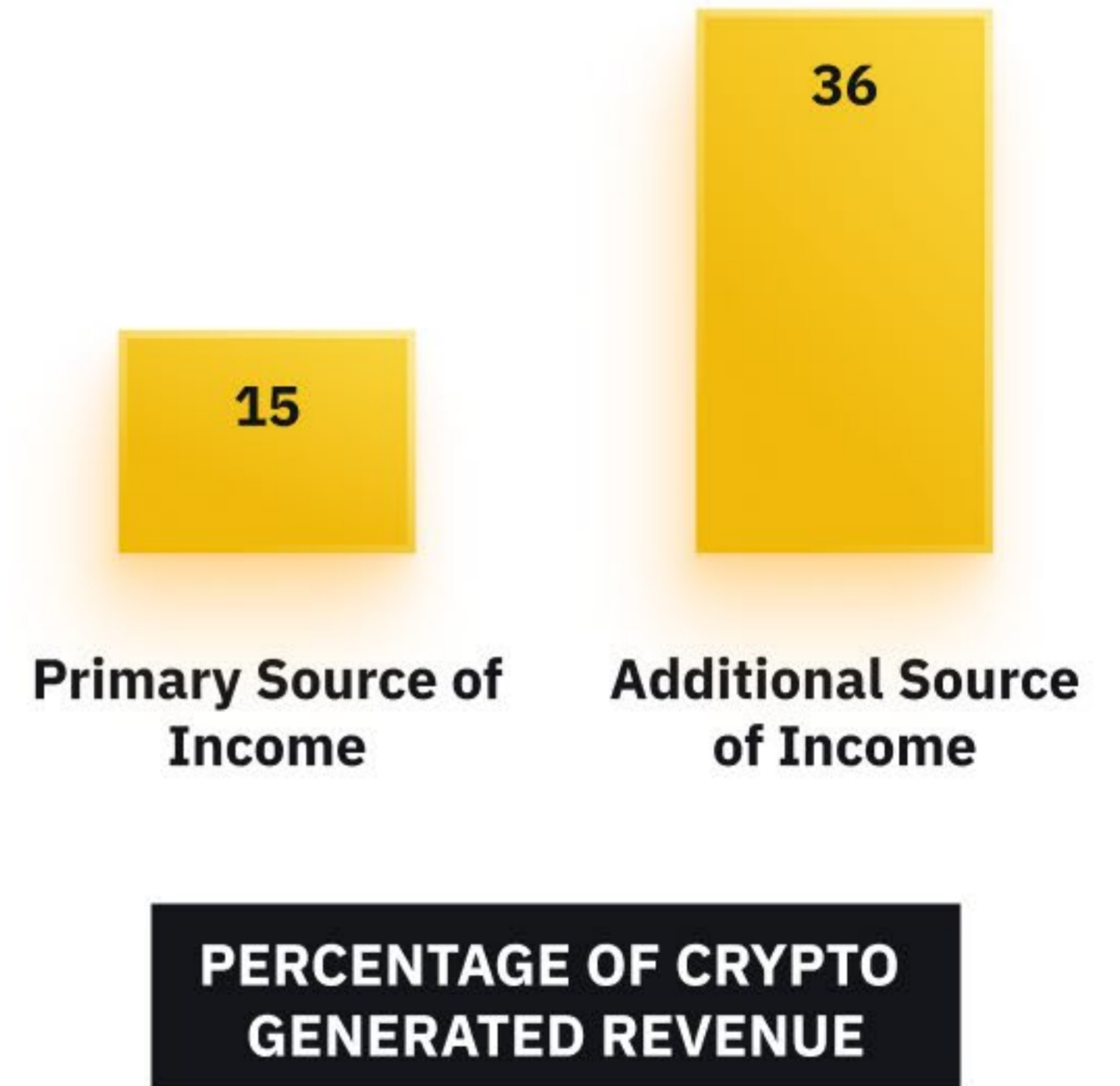
of the **general population** derive their income from crypto.

+ 30%

for **crypto natives**

- 3%

for **general crypto users**



Data set: post-stratified data set for 'Global' region. Question: 'Which of the following best describes your involvement with cryptocurrencies and blockchain?'. Answer options were 'It is my primary source of income', 'It is an additional source of income', 'It is my hobby / interest', 'I am not invested in cryptocurrencies or involved in the blockchain industry', 'Other'. The displayed measure 'derived income' is a composite measure counting responses 'It is my primary source of income' (n = 8581, 15%) and 'It is an additional source of income' (n = 21k, 35.5%).



CRYPTOCURRENCY INVESTING

Is Still Considered A Hobby By Half
Of The Population

48%

of the **general population**
consider crypto a hobby
/ personal interest.

- 19%

for **crypto natives**

+ 2%

for **general crypto users**



CRYPTOCURRENCIES

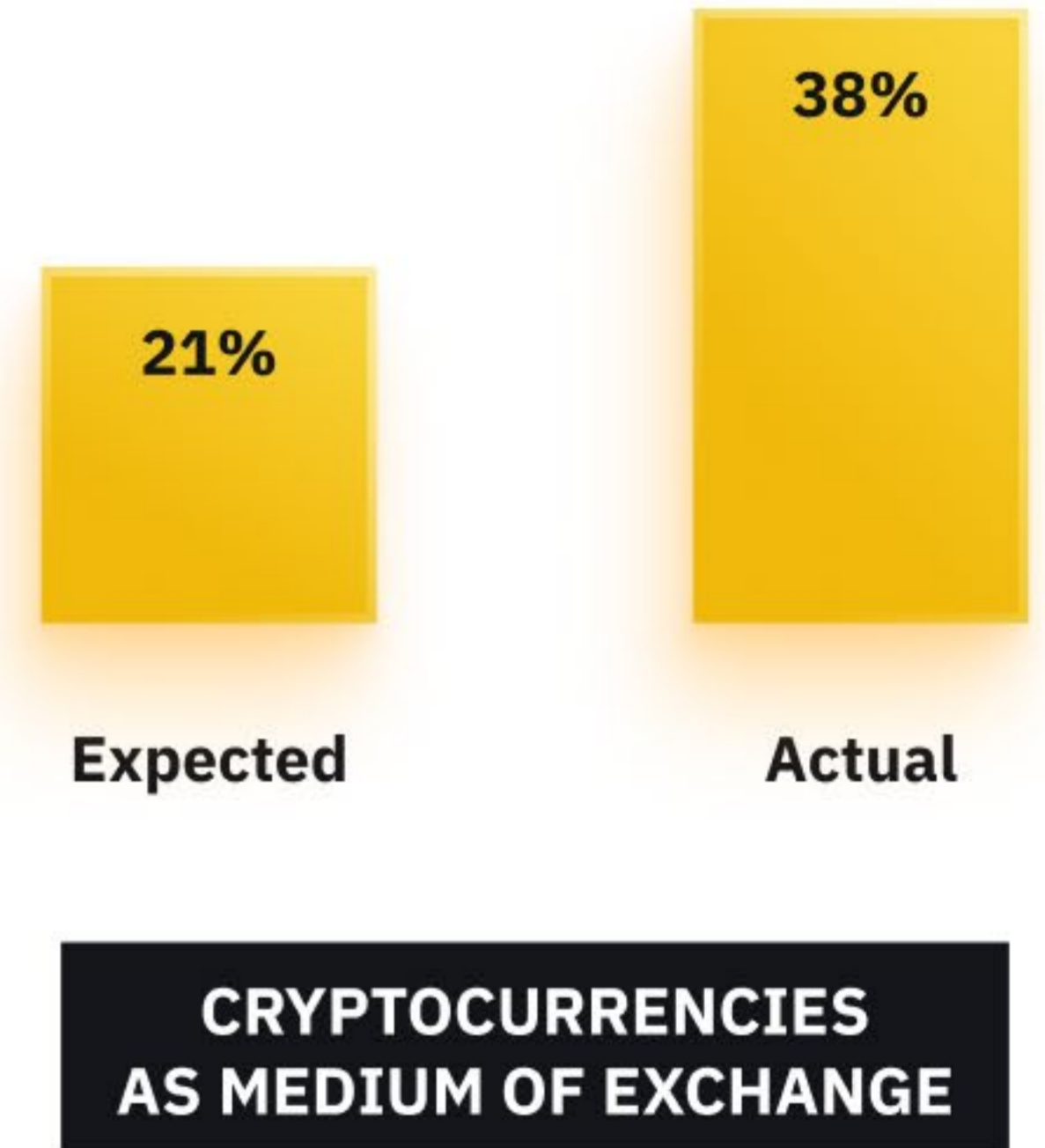
Take The Function Of Traditional Money More Than Users Anticipate

Differences observed between proclaimed and actual usage of crypto as a medium of exchange

There are three functions of money:

- (1) Store of value
- (2) Medium of exchange
- (3) Unit of account.

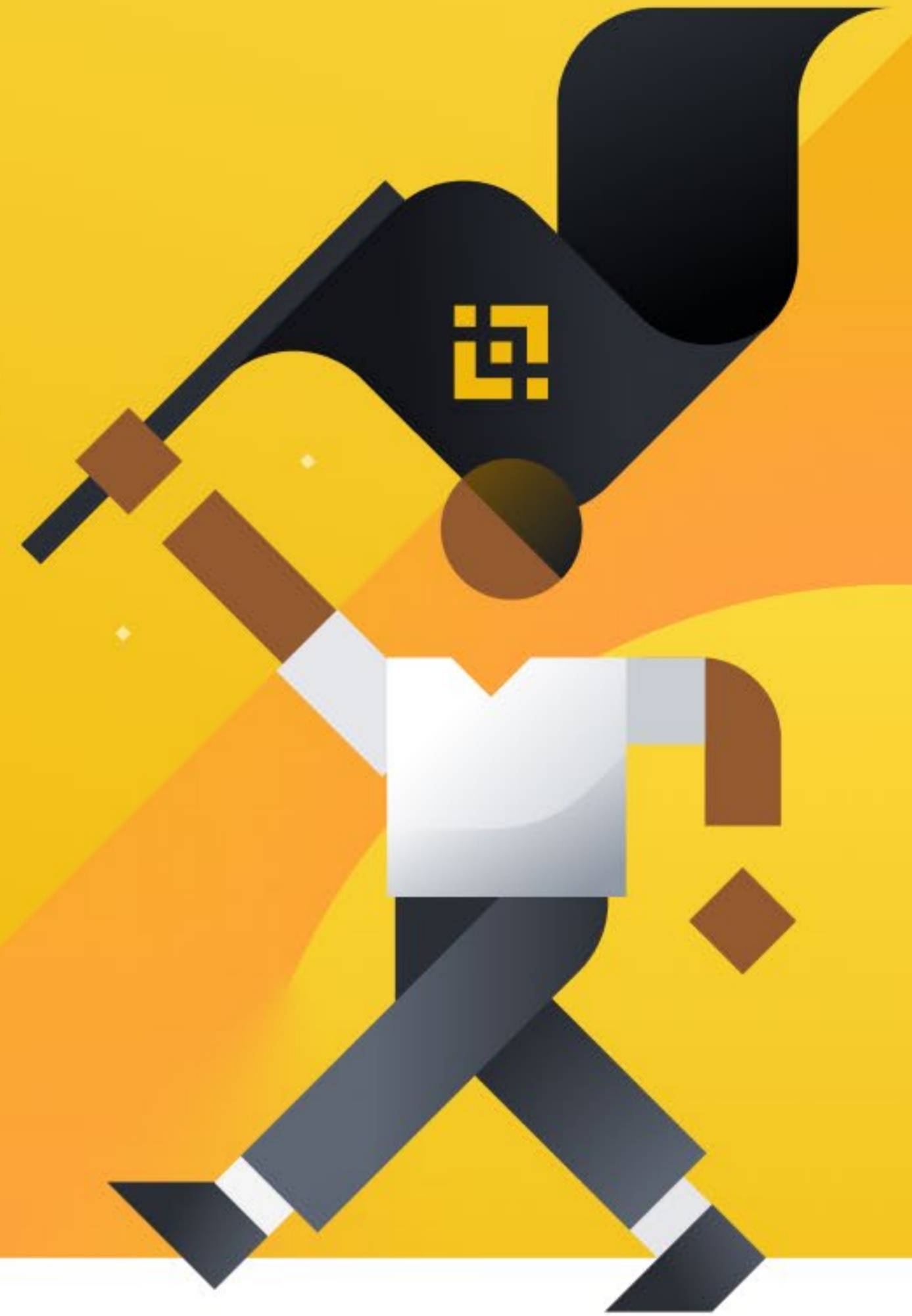
The medium of exchange function is the most important one, from which the other functions are derived.



Data set: post-stratified data set for 'Global' region. The displayed measure 'Crypto as medium of exchange - proclaimed' is the share of respondents indicating their answer to the question 'Why did you buy any cryptocurrencies?' as 'It is important for me to use cryptocurrencies as a means of payment.', whereas the displayed measure 'Crypto as medium of exchange - actual' is the share of respondents indicating their reply to the question 'How do you use most of your cryptocurrencies?' as buying other crypto, transferring value, or using crypto as a payment method for everyday goods and services.

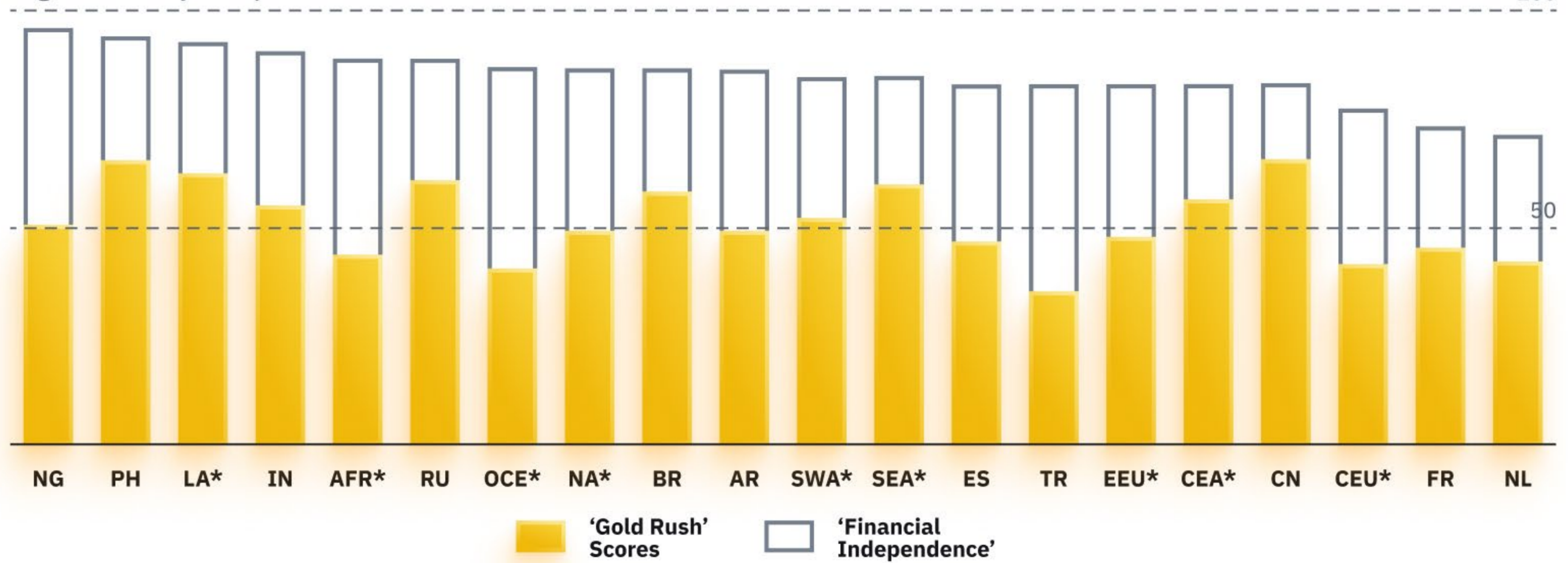
04

HOW DO CRYPTO USERS AROUND THE WORLD COMPARE?



FINANCIAL FREEDOM: A Universal Driver For Crypto Adoption

Percentage of the general population who identified as having a 'gold rush', respectively stating their greatest current goal as being 'financially independent'

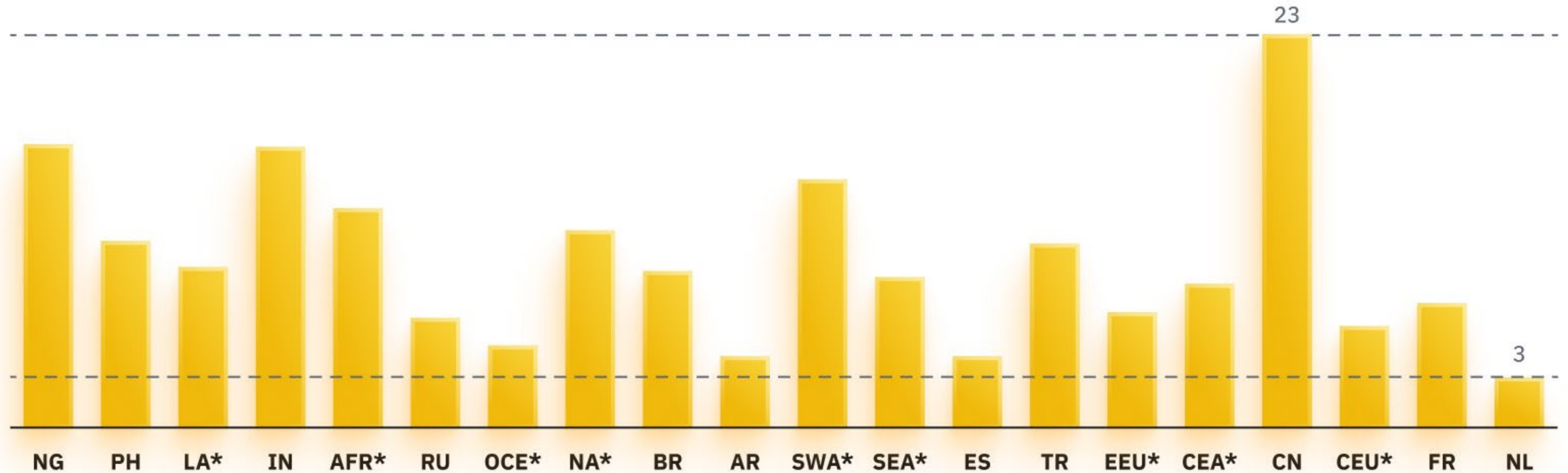


Data set: post-stratified data set for 'Global' region. The narrow measurement of 'gold rush' is assessed with a 5-point Likert-style scale item assessing agreement to the statement: 'Currently, my most important goal is to become financially independent'. The broader 'gold rush' measurement is compiled out of the narrow measurement and three other 5-point Likert-style scale items: (i) 'I enjoy playing the lottery', (ii) 'I enjoy gambling', (iii) 'I would consider myself as a very risk-averse person', reverse coded.

DEBT FINANCING OF CRYPTOCURRENCIES

Is Most Common In China

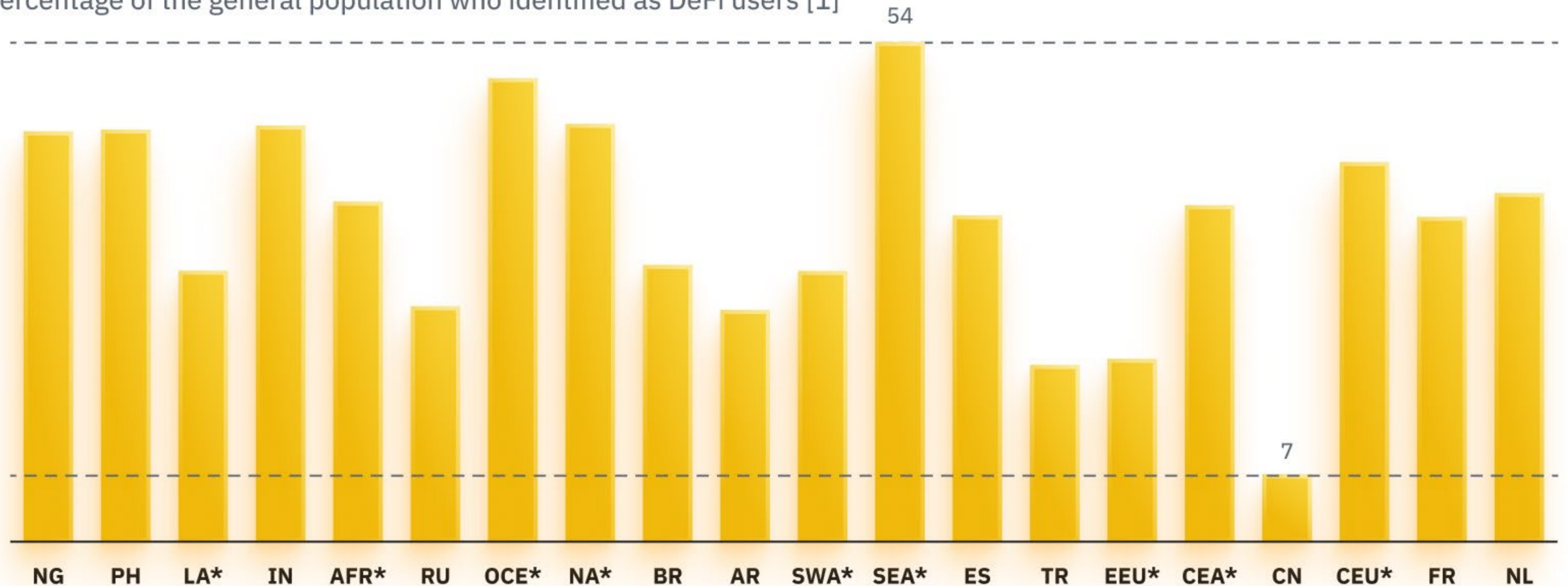
Percentage of the general population financing their cryptocurrency purchases with borrowed capital



Data set: post-stratified data set for 'Global' region. Borrowed capital includes two answer options from the question "How did you pay for cryptocurrencies?", the option 'By borrowing money from financial firms', as well as the option 'By borrowing money from friends and family.'

CRYPTO USERS FROM CHINA ARE LEAST LIKELY To Use DeFi Applications

Percentage of the general population who identified as DeFi users [1]



Data set: post-stratified data set for 'Global' region. Borrowed capital includes two answer options from the question "How did you pay for cryptocurrencies?", the option 'By borrowing money from financial firms', as well as the option 'By borrowing money from friends and family.' [1] does not fit external market data which puts a total cap on DeFi users at ~1.1mn. Explained by the fact, that the survey is only weighted against active users. Thus, 54% of active crypto users from SEA use DeFi dApps.

05

WHO DO CRYPTO USERS TRUST?



LOWER INSTITUTIONAL TRUST

The New Normal?

Percentage of average 'Institutional trust' above Likert-style scale midpoint (i.e., '3')

17

out of 20 markets represented have less than 50% of responses saying that they trust their local institutions.

| | |
|----|--------------------------------|
| 56 | South-Eastern Asia (SEA)* |
| 50 | Philippines |
| 49 | India |
| 45 | Southern & Western Asia (SWA)* |
| 36 | Nigeria |
| 35 | Brazil |
| 34 | Netherlands |
| 30 | Central & Eastern Asia (CEA)* |
| 24 | France |
| 23 | Turkey |
| 23 | Central Europe (CEU)* |
| 22 | Africa (AFR)* |
| 21 | Northern America (NA)* |
| 17 | Oceania (OCE)* |
| 17 | Eastern Europe (EEU)* |
| 13 | Latin America (LA)* |
| 11 | Spain |
| 10 | Russia |
| 4 | Argentina |

The displayed measure 'Institutional trust' is an aggregated 5-point Likert-style scale measure. Statement: 'Here is a list with institutions. For each, please indicate your level of trust in the institutions of the country you spent the most time in'; listed institutions: parliament, legal system, police, large companies, current financial system, media, NGOs, trade unions. The percentage of average 'Institutional trust' scores above 3 are displayed and color coded as follows: 100% to 50%, 49% to 40%, 39% to 0%. Markets with * are highlighted as being a regional aggregate and do not include countries coded as single market.

LOWER INSTITUTIONAL TRUST

Correlates With A Higher Confidence In Crypto

78%

of the **general population** said they have confidence in crypto.

+ 15%

for **crypto natives**

- 2%

for **general crypto users**

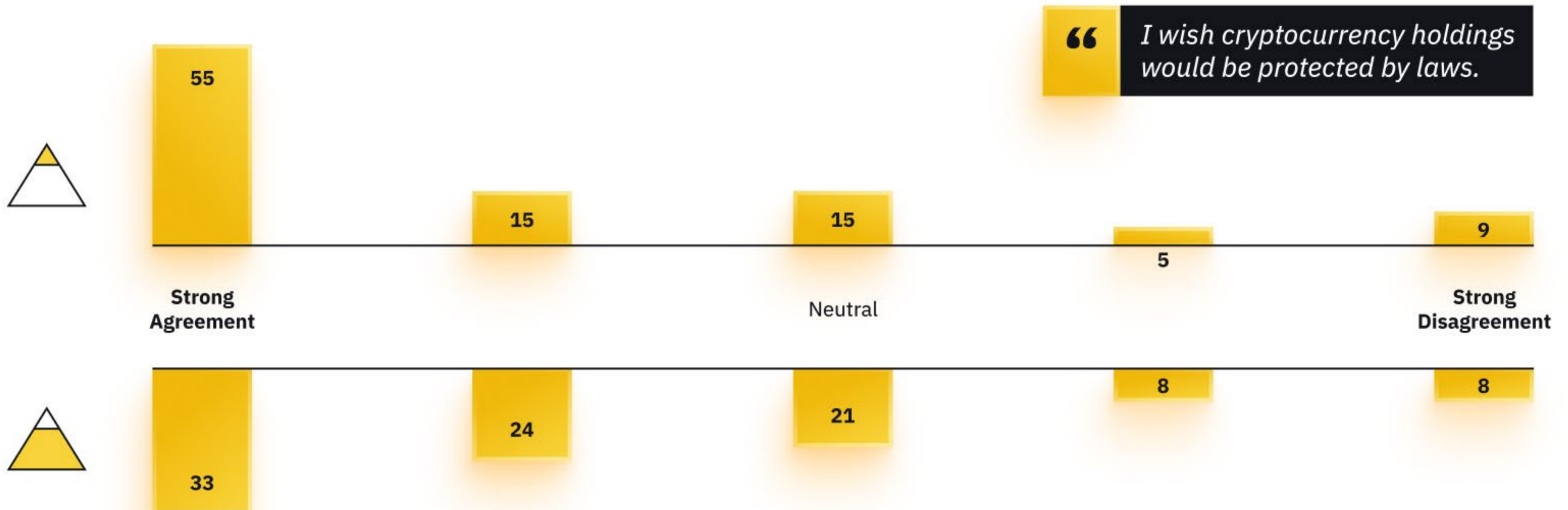


PEARSON CORRELATION COEFFICIENT
CRYPTO CONFIDENCE - INSTITUTIONAL TRUST

Data set: post-stratified data set for 'Global' region (n = 57819). The displayed measure 'crypto_confidence_pure' is compiled by averaging the 5-point Likert-style scale items (i) 'cryptoIdeology_positive_1', statement: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies' and (ii) 'cryptoIdeology_positive_2', statement: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain'. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%). Institutional trust is an aggregate measure further explained in the Technical Appendix. Pearson correlation coefficients between 'pure crypto confidence' and 'institutional trust' were both significant at the 0.01 level. For the subgroup 'general crypto users' p = -0.29, for 'crypto natives', p = -0.46. A particular explanation on the usage of the terms 'trust' and 'confidence' is available in the Technical Appendix.

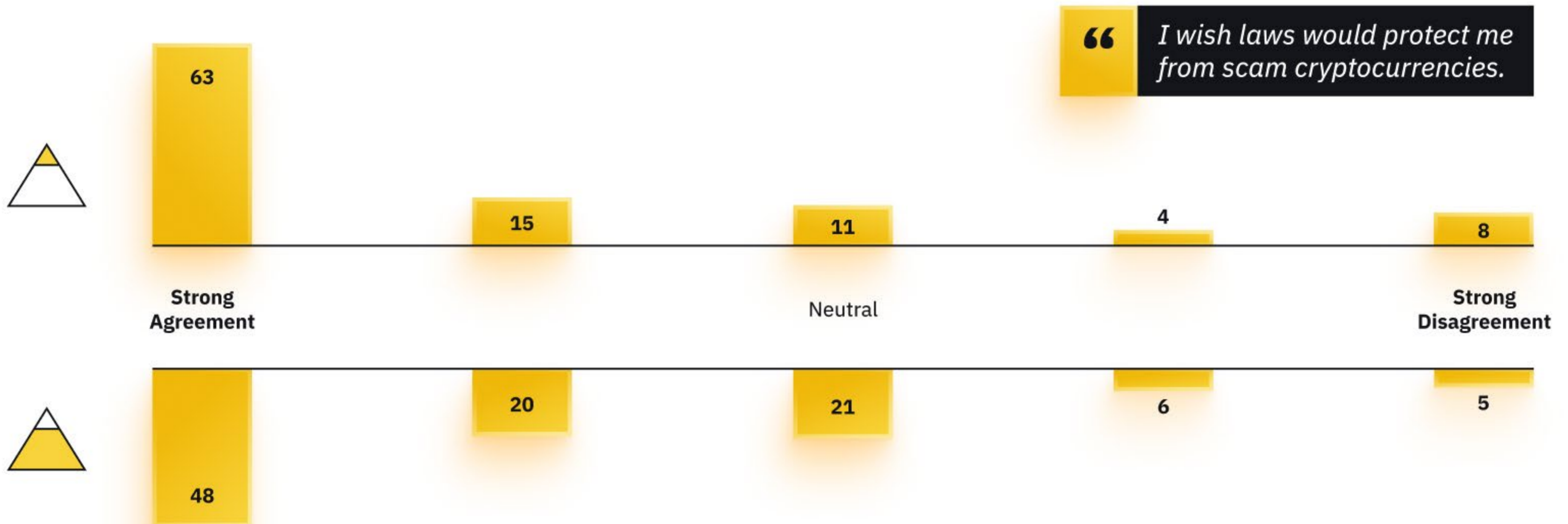
LOWER INSTITUTIONAL TRUST: Forgotten If It's Pro-Crypto?

Percentage of **reverse-coded** complementary measures to 'crypto confidence' targeting institutional mechanisms



LOWER INSTITUTIONAL TRUST: Forgotten If It's Pro-Crypto?

Percentage of **reverse-coded** complementary measures to 'crypto confidence' targeting institutional mechanisms



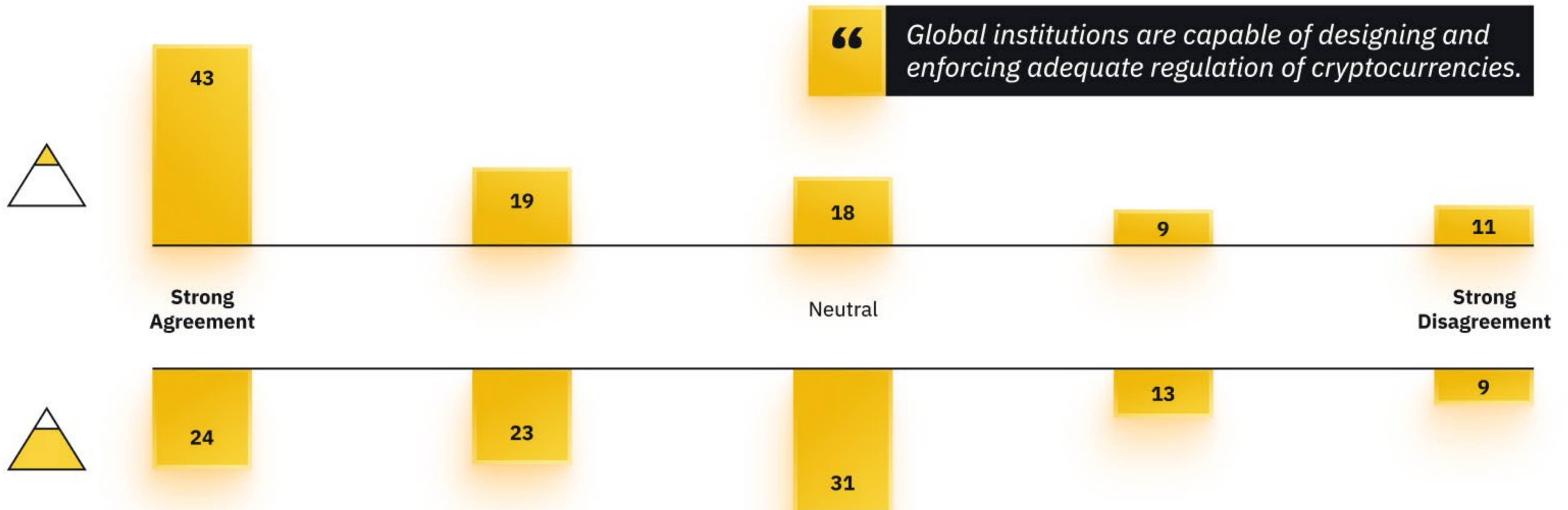
LOWER INSTITUTIONAL TRUST: Forgotten If It's Pro-Crypto?

Percentage of **reverse-coded** complementary measures to 'crypto confidence' targeting institutional mechanisms



LOWER INSTITUTIONAL TRUST: Forgotten If It's Pro-Crypto?

Percentage of **reverse-coded** complementary measures to 'crypto confidence' targeting institutional mechanisms



INSTITUTIONAL TRUST

Still Outweighs Confidence In Crypto

After introducing these previous, additional measures, the broader defined 'crypto confidence' drops by 46%.

- 46%
32%

of the **general population** said they have confidence in crypto when taking a more holistic measure.

- 4%

for **crypto natives**

+ 1%

for **general crypto users**

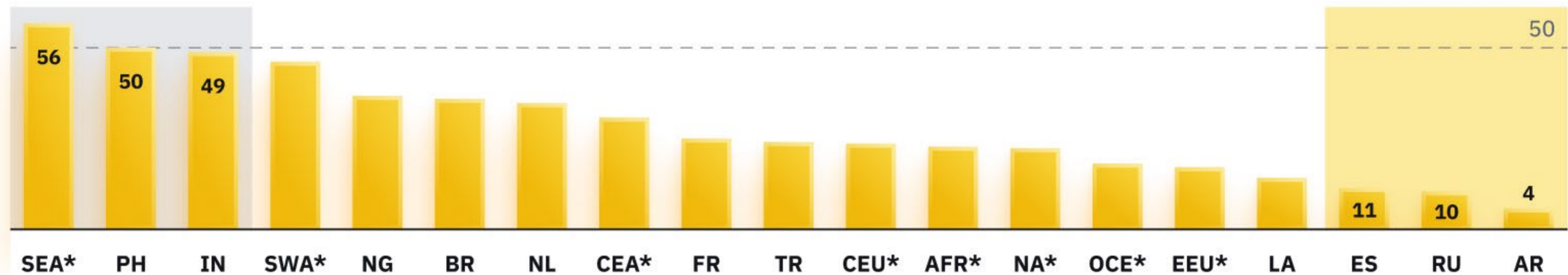
Data set: post-stratified data set for 'Global' region (n = 57819). The displayed measure 'crypto_confidence_broad' is compiled by averaging the 5-point Likert-style scale items (i) 'cryptoIdeology_positive_1', statement: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies' and (ii) 'cryptoIdeology_positive_2', statement: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain'. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%).

INSTITUTIONAL TRUST

Is Unevenly Represented Across Markets

High
Low

Percentage of responses indicating their trust into local institutions



Data set: post-stratified data set for 'Global' region (n = 57819). The displayed measure 'crypto_confidence_broad' is compiled by averaging the 5-point Likert-style scale items (i) 'cryptoIdeology_positive_1', statement: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies' and (ii) 'cryptoIdeology_positive_2', statement: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain'. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%).

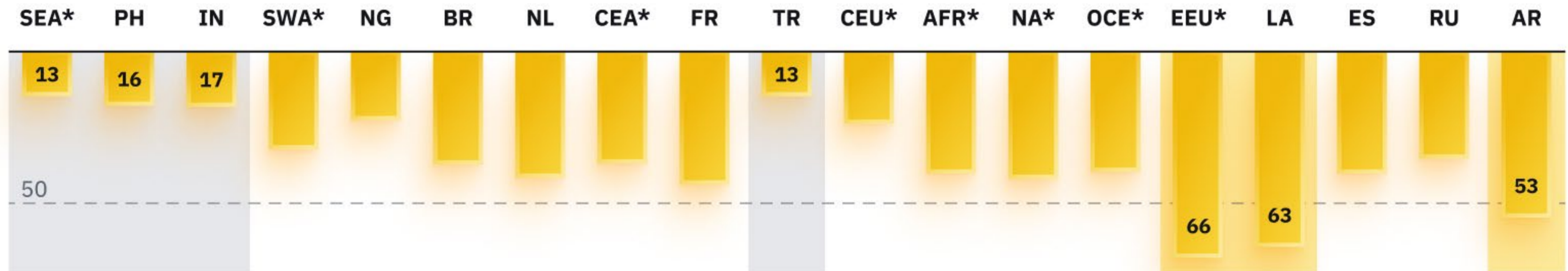
CRYPTO CONFIDENCE

Is Similarly Dispersed Across Markets

High

Low

Percentage of responses indicating trust into the crypto ecosystem



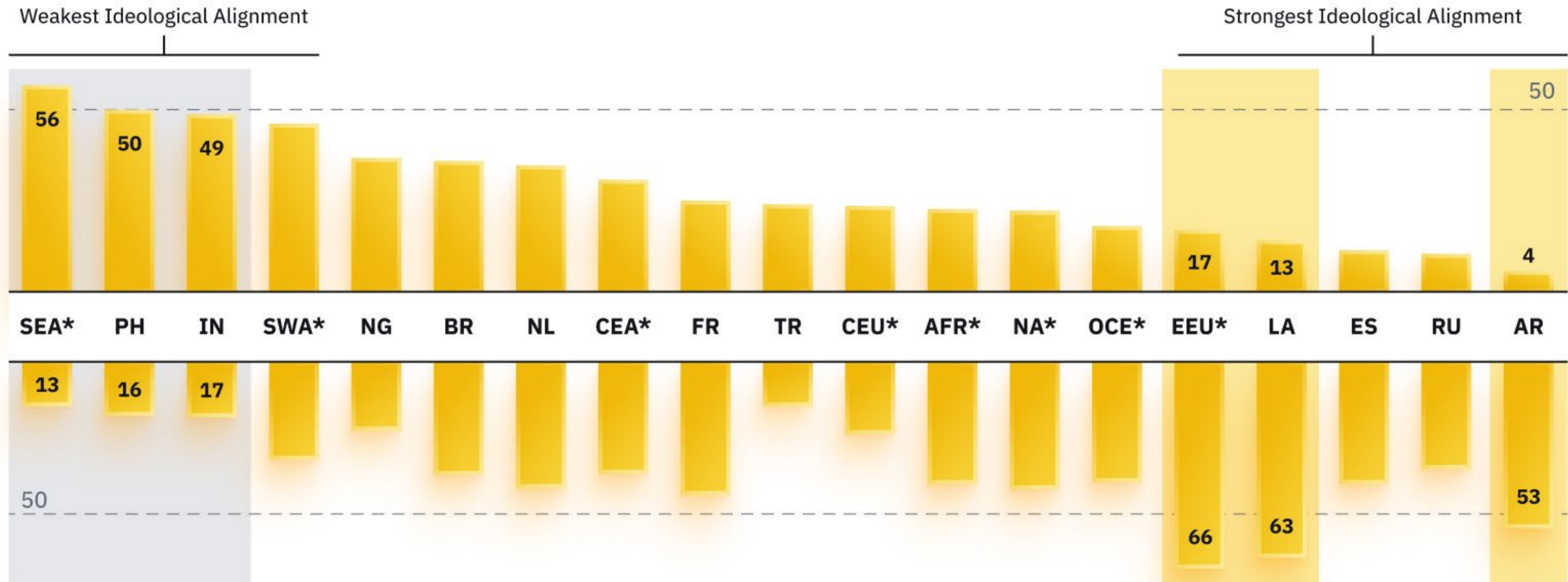
Data set: post-stratified data set for 'Global' region (n = 57819). The displayed measure 'crypto_confidence_broad' is compiled by averaging the 5-point Likert-style scale items (i) 'cryptoIdeology_positive_1', statement: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies' and (ii) 'cryptoIdeology_positive_2', statement: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain'. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%).

COMPARING THE TWO

Shines The Spotlight On A Few Markets

High
Low

Percentage of responses indicating trust into local institutions and the crypto ecosystem



Data set: post-stratified data set for 'Global' region (n = 57819). The displayed measure 'crypto_confidence_broad' is compiled by averaging the 5-point Likert-style scale items (i) 'cryptoIdeology_positive_1', statement: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies' and (ii) 'cryptoIdeology_positive_2', statement: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain'. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%).

UNDERSTANDING USERS WITH A Strong Ideological Alignment

Users with a strong ideological alignment share a number of demographic differences from the general population of active crypto users

Are **employed**

+209%

as likely

Have at least **61% of crypto portfolio in BTC**

+156%

as likely

Do not use
borrowed capital

59%

as likely

Use crypto as a
store of value

+131%

as likely

Do not buy out of **FOMO** or
hoping for **quick returns**

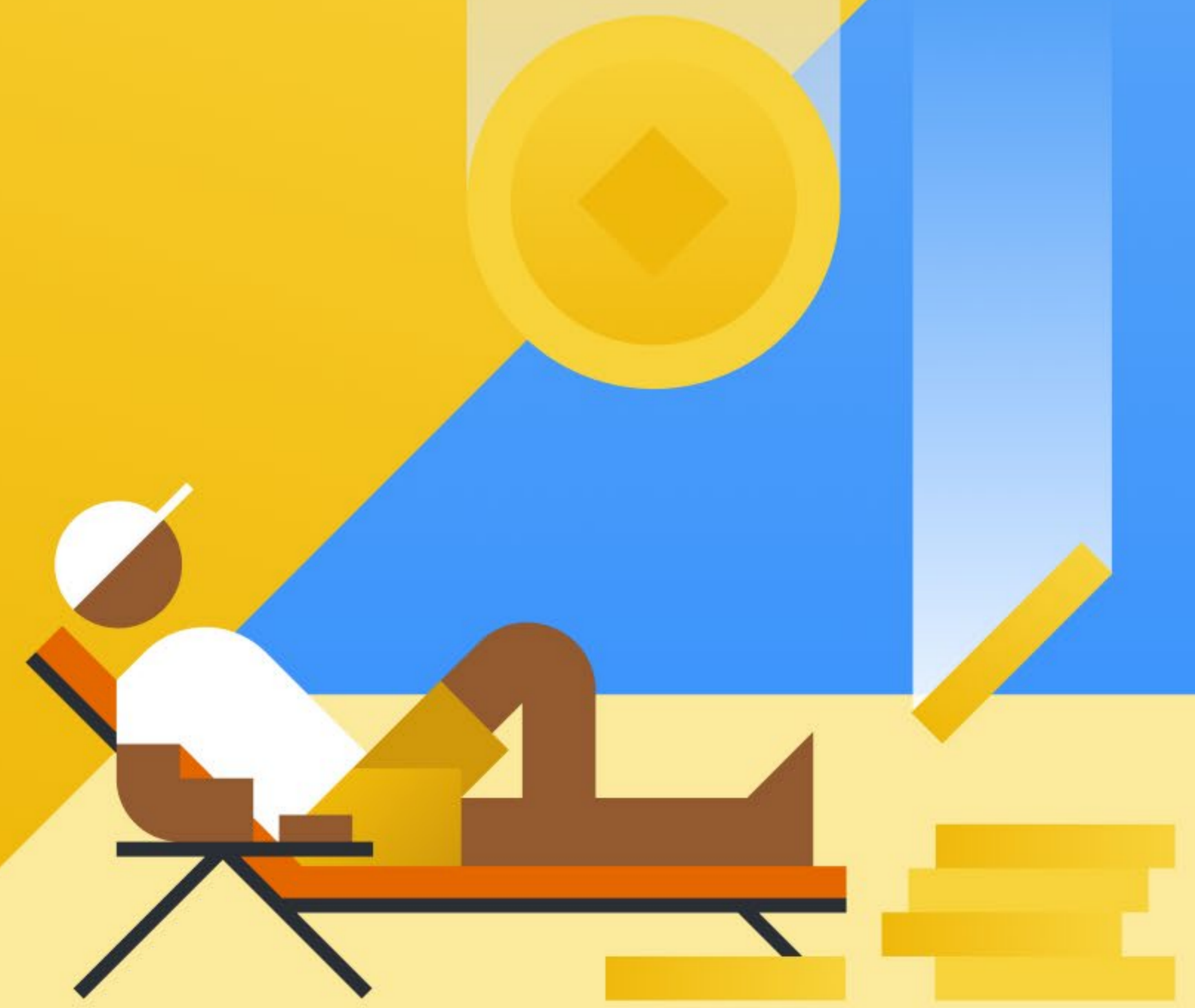
76%

as likely

The displayed measure 'Institutional trust' is an aggregated 5-point Likert-style scale measure. Statement: 'Here is a list with institutions. For each, please indicate your level of trust in the institutions of the country you spent the most time in'; listed institutions: parliament, legal system, police, large companies, current financial system, media, NGOs, trade unions. Values above the midpoint (i.e., '3') were considered as 'having confidence' (n = 45096 or 78%), while values below the midpoint were considered as 'having no confidence' (n = 4104, 7%).

06

HOW MUCH IS CRYPTO WORTH TO YOU?



MAJORITY ONLY USE

Disposable Income To Buy Their Crypto

63%

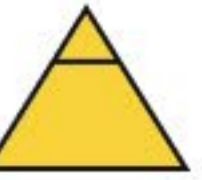
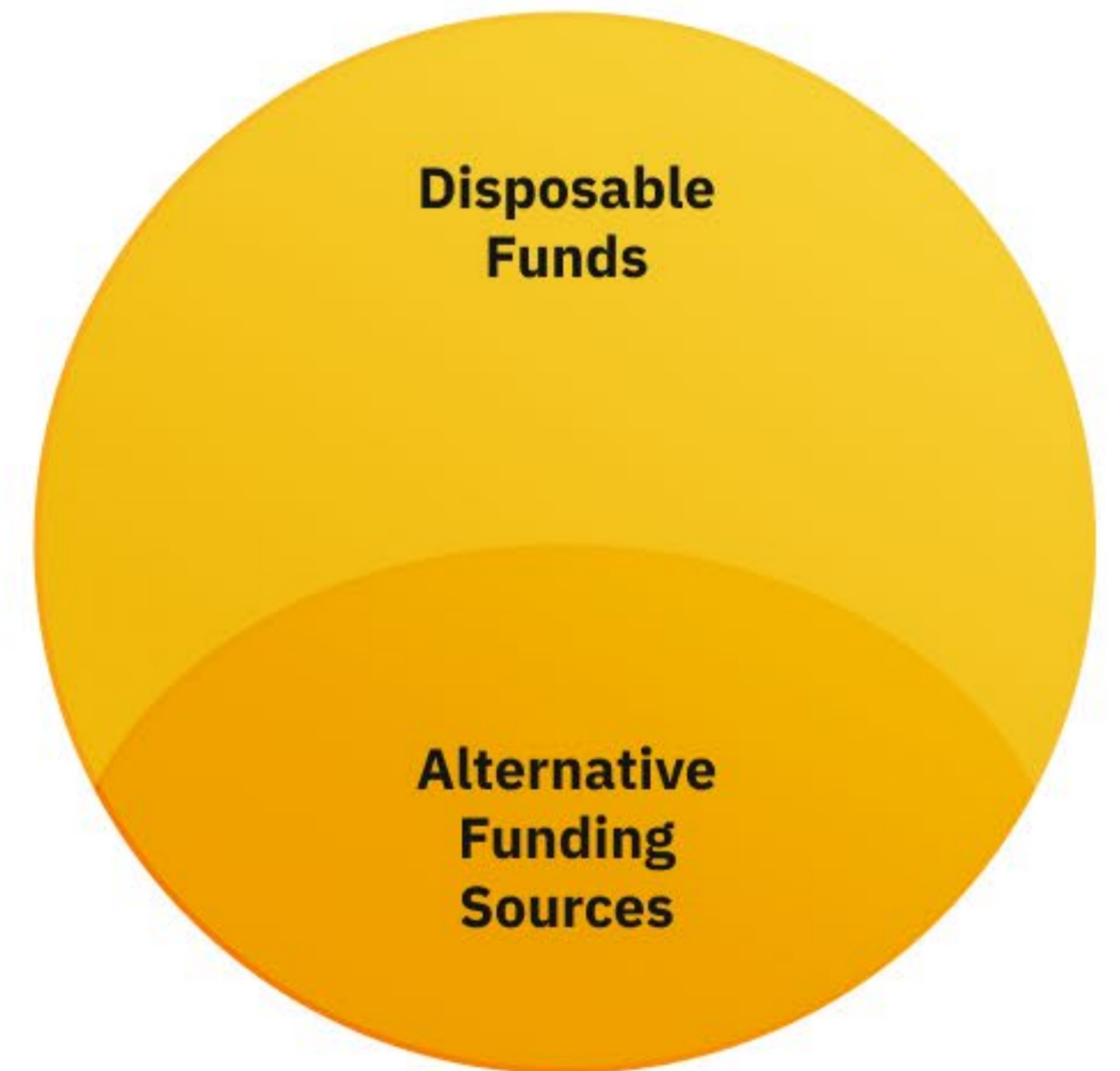
of the **general population** exclusively used disposable funds to buy crypto

-15%

for **crypto natives**

+1%

for **general crypto users**



THE REST

Required Additional Funding Sources

Distribution of funding sources for purchasing cryptocurrencies:



Data set: post-stratified data set for 'Global' region. Question: 'How did you pay for cryptocurrencies?'. Multiple choice was possible. As such, the amount of answer options exceeds the size of the respondents. The measure 'Disposable funds' combines the answer options 'With my disposable savings' and 'With my salary'. The displayed measure 'Liquidated assets' combines the answer options 'By selling long-term savings or investments' and 'By selling other personal assets/items'. The displayed measure 'Borrowed capital' combines the answer options 'By borrowing money from financial firms' and 'By borrowing money from friends and family'. The displayed measure 'Exclusive usage of disposable funds' shows the share of people not liquidating any of their assets or borrowing additional capital. The displayed measure 'Exclusive debt financing' shows the share of people fully relying on borrowed capital to purchase cryptocurrencies.



THE RISKIER THE FUNDING SOURCE

The More Likely Funds Are Stored On Exchanges

X 10

Those who took out loans to buy cryptocurrencies are ten times more likely to store these cryptocurrencies on exchanges than respondents who use other sources of funding.

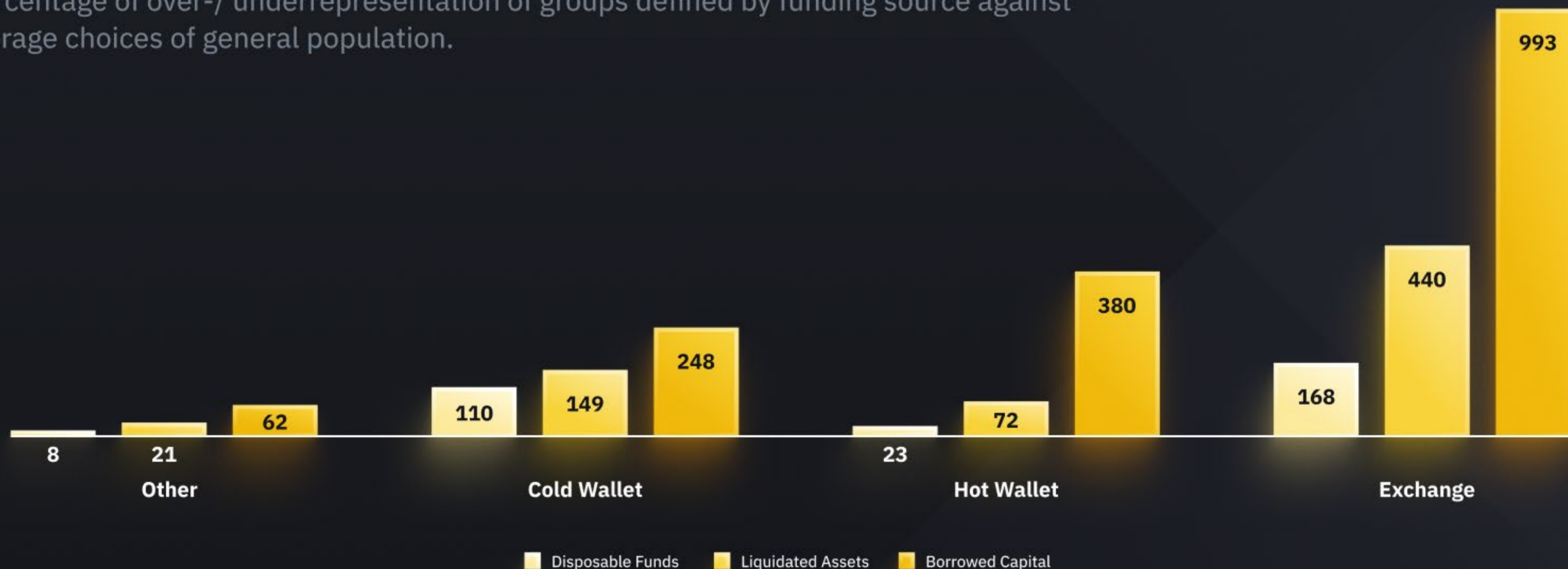
Data set: post-stratified data set for 'Global' region. Question: How did you pay for cryptocurrencies?. Multiple choice was possible. As such, the amount of answer options exceeds the size of the respondents. The measure 'Disposable funds' combines the answer options 'With my disposable savings' and 'With my salary'. The displayed measure 'Liquidated assets' combines the answer options 'By selling long-term savings or investments' and 'By selling other personal assets/items'. The displayed measure 'Borrowed capital' combines the answer options 'By borrowing money from financial firms' and 'By borrowing money from friends and family'. Question: 'Where do you store most of your cryptocurrencies?'. Answer options were 'On an exchange', 'On a hot wallet', 'On a cold wallet', 'Other'. The chart shows the relation between sub-groups defined by specified funding sources and storage solution against respondents. Chart values represent the relative over-/ underrepresentation, chart sizes are relative to each other.



THE RISKIER THE FUNDING SOURCE

The More Likely Funds Are Stored On Exchanges

Percentage of over-/ underrepresentation of groups defined by funding source against storage choices of general population.



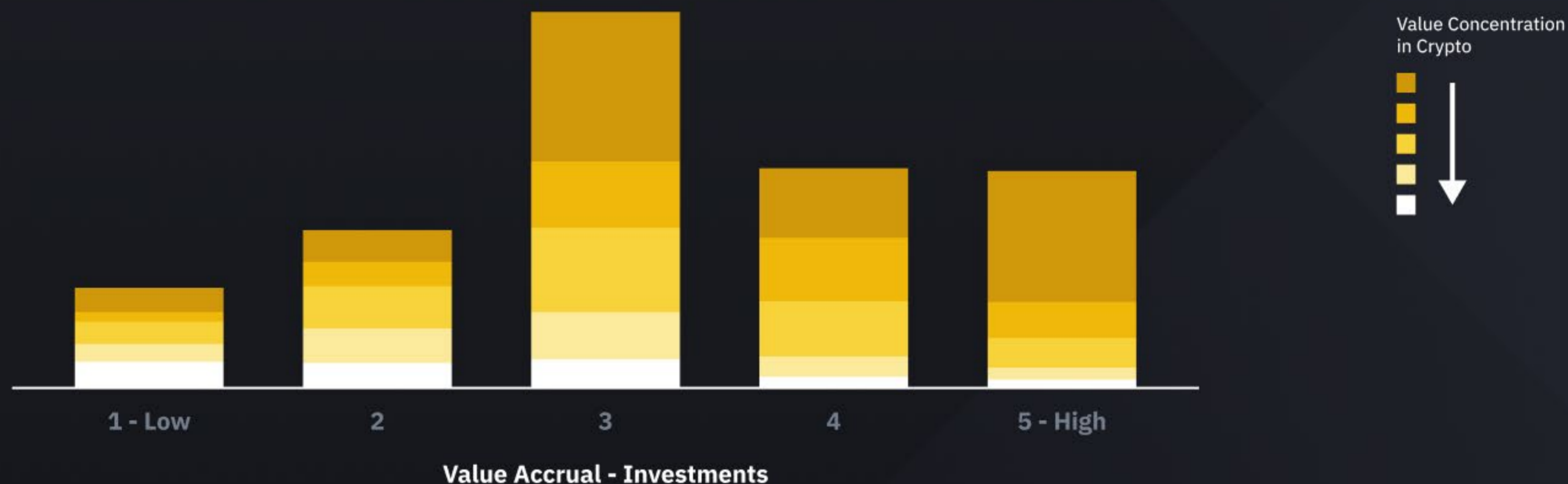
Data set: post-stratified data set for 'Global' region. Question: How did you pay for cryptocurrencies?. Multiple choice was possible. As such, the amount of answer options exceeds the size of the respondents. The measure 'Disposable funds' combines the answer options 'With my disposable savings' and 'With my salary'. The displayed measure 'Liquidated assets' combines the answer options 'By selling long-term savings or investments' and 'By selling other personal assets/items'. The displayed measure 'Borrowed capital' combines the answer options 'By borrowing money from financial firms' and 'By borrowing money from friends and family'. Question: 'Where do you store most of your cryptocurrencies?'. Answer options were 'On an exchange', 'On a hot wallet', 'On a cold wallet', 'Other'. The chart shows the relation between sub-groups defined by specified funding sources and storage solution against respondents. Chart values represent the relative over-/ underrepresentation, chart sizes are relative to each other.



A CONCENTRATION OF WEALTH IN CRYPTO

Usually Pays Off

Investment performance was (weakly) **positively correlated** ($p = 0.292^{**}$) with a wealth concentration in cryptocurrencies. This can be corroborated by the fact that BTC YOY outperformed stocks (i.e., SPY) by more than **+1,800%**.



For full details on the calculation of the correlation measure refer to the Technical Appendix. Data set: post-stratified data set of the 'respondents' in the 'Global' region. Spearman correlation coefficient assesses monotonicity of the correlation between (i) financialEntanglement_exposure, statement: 'Cryptocurrencies are the biggest position in my investment portfolio.', 5-point scale and (ii) financialEntanglement_gains, statement: 'Ever since I started investing, the value of my investment increased significantly', 5-point scale. The correlation is significant at the 0.01 level and weakly positively correlated. The year-over-year performance of BTC and SPY was calculated by averaging the last seven closing values of 2020 and dividing them against the difference of the respective values from 2019. BTC had a YOY performance of +274%, SPY had a YTD performance of +16%. Comparing these performances against each other, BTC outperformed SPY by 1801%. Publicly available data from CoinMarketCap and Yahoo Finance was used.

A CONCENTRATION OF WEALTH IN CRYPTO

Is Typical For Crypto Users

57%

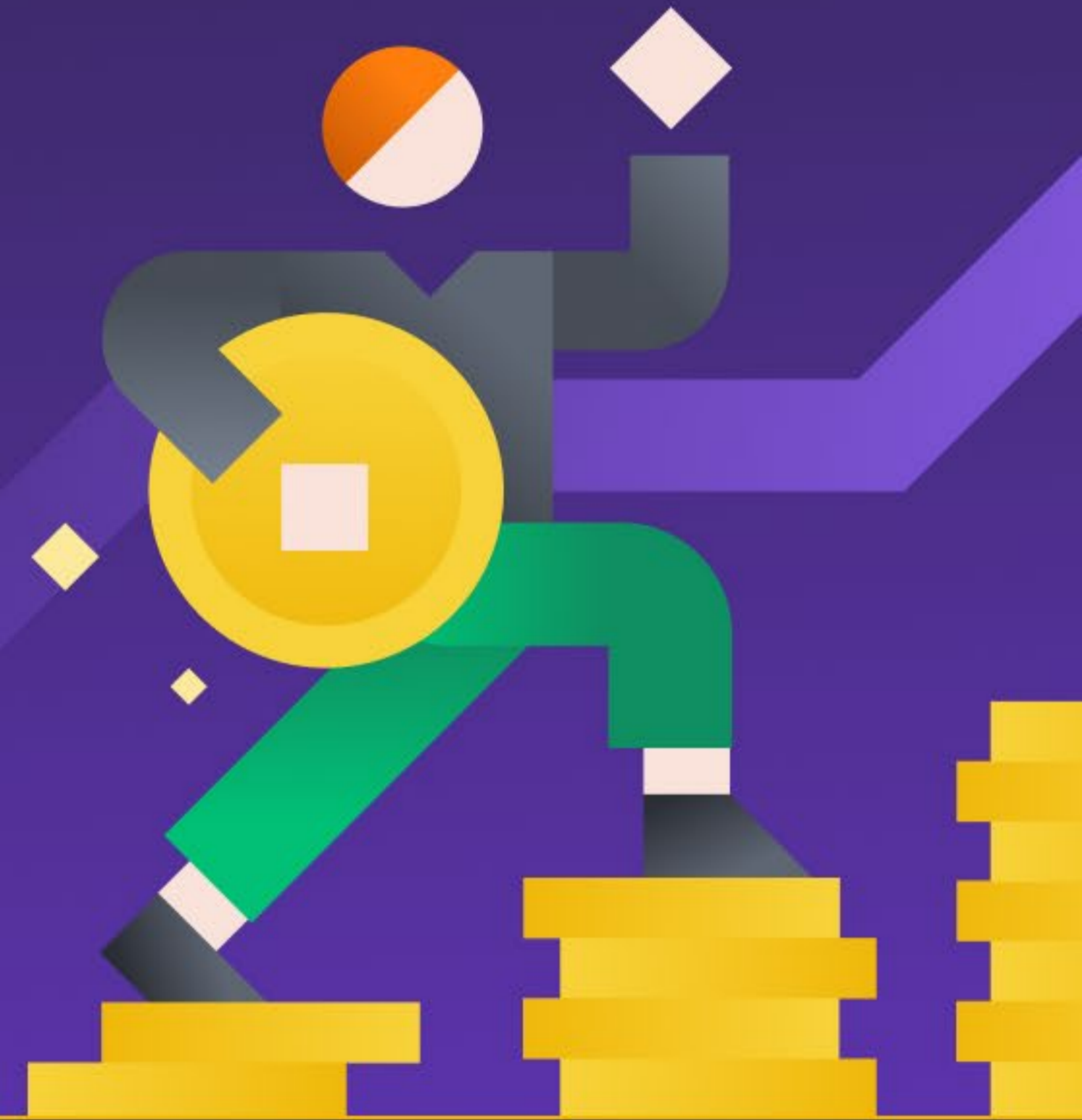
of the **general population** have more than half of their invested wealth in cryptocurrencies.

+ 30%

for **crypto natives**

- 3%

for **general crypto users**



A CONCENTRATION OF WEALTH IN CRYPTO Is Usually Part Of A Long-Term Savings Plan

A concentration of wealth in crypto coincides with a strong wish for financial independence (p=0.426**).

55%

of the **general population** own crypto as part of their long-term savings plan.

+ 17%

for **crypto natives**

- 6%

for **general crypto users**



Data set: respondents of the post-stratified data set for 'Global' region, excluding respondents who don't currently own cryptocurrencies (n = 1098). The measure 'attitude ownership reason' allows multiple responses to the question: 'Why did you buy cryptocurrencies?'. Possible options were 'It is important for me to use cryptocurrencies as a means of payment', 'I don't trust the current financial system', 'I don't want to miss out on buying cryptocurrencies', 'I want to make some short-term profits', 'I want to take a gamble and fund a big ticket purchase (e.g. home, car, business)', 'I want cryptocurrencies to be part of my long-term savings plan (e.g. pension)'. Similarly, 13.4% of the respondents stated they want to '[...] take a gamble and fund a big ticket purchase [...]', whereas 51.7% of the respondents stated that they 'want cryptocurrencies to be part of [their] long-term savings plan'. For further information on general crypto users/ crypto natives please refer to the Technical Appendix. The measure financial independence is measured as agreement to the 5-point Likert-style scale item 'Currently, my most important goal is to become financially independent'. A Pearson correlation coefficient of p=0.426 is highly significant at the 0.01 level.



USERS ACROSS THE BOARD HAVE NO REGRETS

Over Their Crypto Investments

3%

of the **general population** regret buying cryptocurrencies.

- 3%

for **crypto natives**

+ 1%

for **general crypto users**

percentage w. strongest wish for counterfactual

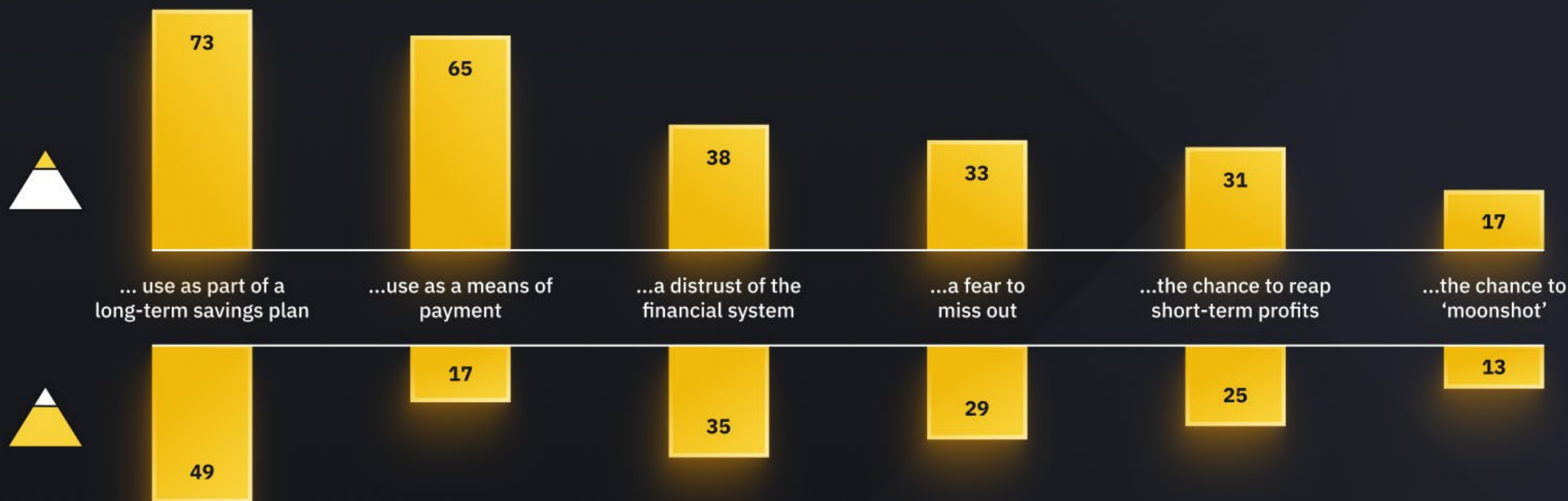


Data set: post-stratified data set for 'Global' region. The displayed measure 'regrets buying cryptocurrencies' is a composite measure of answers to two Likert-style scale items, with the statement 'I don't regret buying cryptocurrencies', respectively 'I want to buy more cryptocurrencies'. 5-point scale with 1 expressing strong disagreement, 5 expressing strong agreement. Composite values < 3 are counted as 'regret', whereas values > 3 are counted as 'no regret'. 'Strongest wish for counterfactual' describes respondents indicating maximal agreement to statements assessing their regret to have acted in they way they did.



CRYPTOCURRENCIES ARE MOSTLY PART OF Crypto Users' Long-term Investment Plans

Percentage of stated reasons to purchase cryptocurrencies; multiple reasons possible



Data set: post-stratified data set for 'Global' region. Question: 'Why did you buy cryptocurrencies?'. Multiple choice was possible. As such, the amount of summed answers exceeds the size of the respondents. The answer option attitude_ownership_reason_payment represents 'It is important for me to use cryptocurrencies as a means of payment' and is displayed as '.. to use them as a means of payment'; the answer option attitude_ownership_reason_distrust represents 'I don't trust the current financial system' and is displayed as '.. a distrust of the financial system', the answer option 'attitude_ownership_reason_fomo' represents 'I don't want to miss out on buying cryptocurrencies' and is displayed as '.. a fear to miss out'; the answer option attitude_ownership_reason_trading represents 'I want to make some short-term profits' and is displayed as '.. the chance to reap short-term profits'; the answer option 'attitude_ownership_reason_moonshot' represents 'I want to take a gamble and fund a big ticket purchase (e.g. home, car, business)' and is displayed as '..the change to moonshot'; the answer option 'attitude_ownership_reason_investment' represents 'I want cryptocurrencies to be part of my long-term savings plan (e.g. pension).' and is displayed as '.. long-term savings plan'. For further information on general crypto users/ crypto natives refer to the Technical Appendix.

07

CAN CRYPTO ADOPTION MEET ITS EXPECTATIONS?

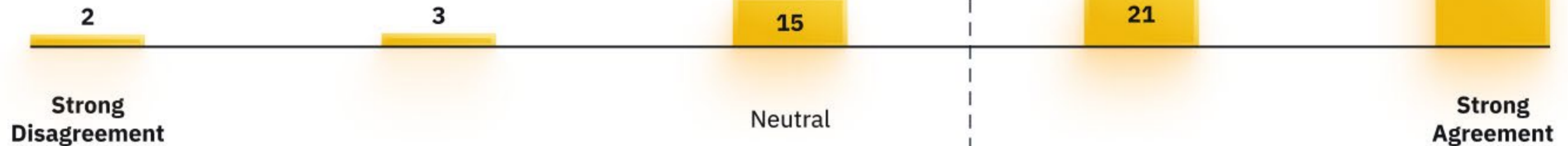
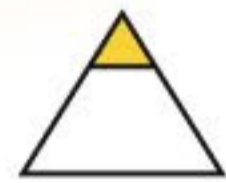


PRIVACY CONCERNS

Are A Key Driver For Crypto Usage

Percentage of responses that agree with the statement “privacy concerns inform one of the most compelling arguments for cryptocurrencies”.

“ Privacy concerns inform one of the most compelling arguments for cryptocurrencies.”

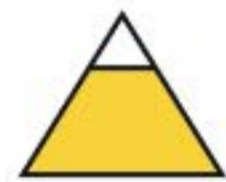
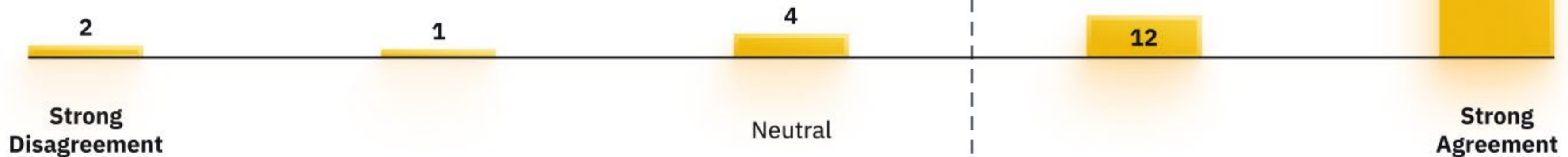
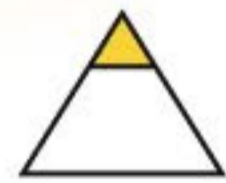


CRYPTO USAGE

Is Widely Expected To Be Normalized Over Time

Percentage of responses agreeing with the statement “crypto will once be used for everyday payments”.

“*I think that one day in the future I will use a cryptocurrency to buy everyday goods or services e.g. groceries or carwash.*”



CRYPTO USAGE

Does Not Reflect Expectations For Payments

The sub-group that uses most of their crypto for payments have a slightly higher chance (+12%) of declaring a strong disagreement to the statement “crypto might once be used to buy everyday goods or services (e.g. groceries or carwash)”.

11%

of the **general population** that uses most of their cryptocurrencies for payments or value transfers (e.g., remittances).

+ 3%

for **crypto natives**

- 1%

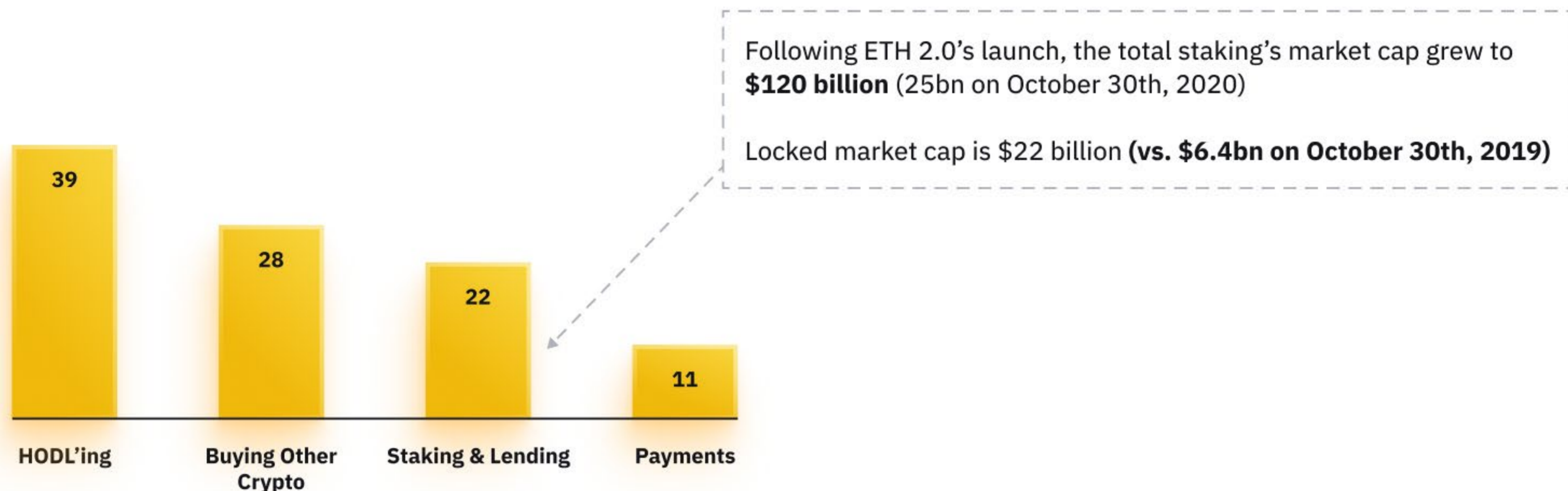
for **general crypto users**

Data set: post-stratified data set for 'Global' region. Question: 'How do you use most of your cryptocurrencies? Note: 'most' in terms of USD equivalent value'. Answer options were 'I am saving them for later', 'I use them to access goods or services', 'I use them for staking or borrowing', 'I use them to buy other cryptocurrencies', 'I use them to make fiat transfers'. The displayed measure is compiled by aggregating responses for 'I use them to access goods or services' and 'I use them to make fiat transfers'. The statement 'I think that one day in the future I will use a cryptocurrency to buy everyday goods or services e.g. groceries or carwash' is a Likert-style scale item with a 5-point scale. Respondents of the sub-group are 112% as likely than the general public to express strong disagreement to the previous statement.

CRYPTO USAGE

Is Still Dominated By 'HODLING'

Percentage of the general population expressing their usage of cryptocurrencies is dominated by (i) staking & lending, (ii) buying other crypto, or (iii) hodling.

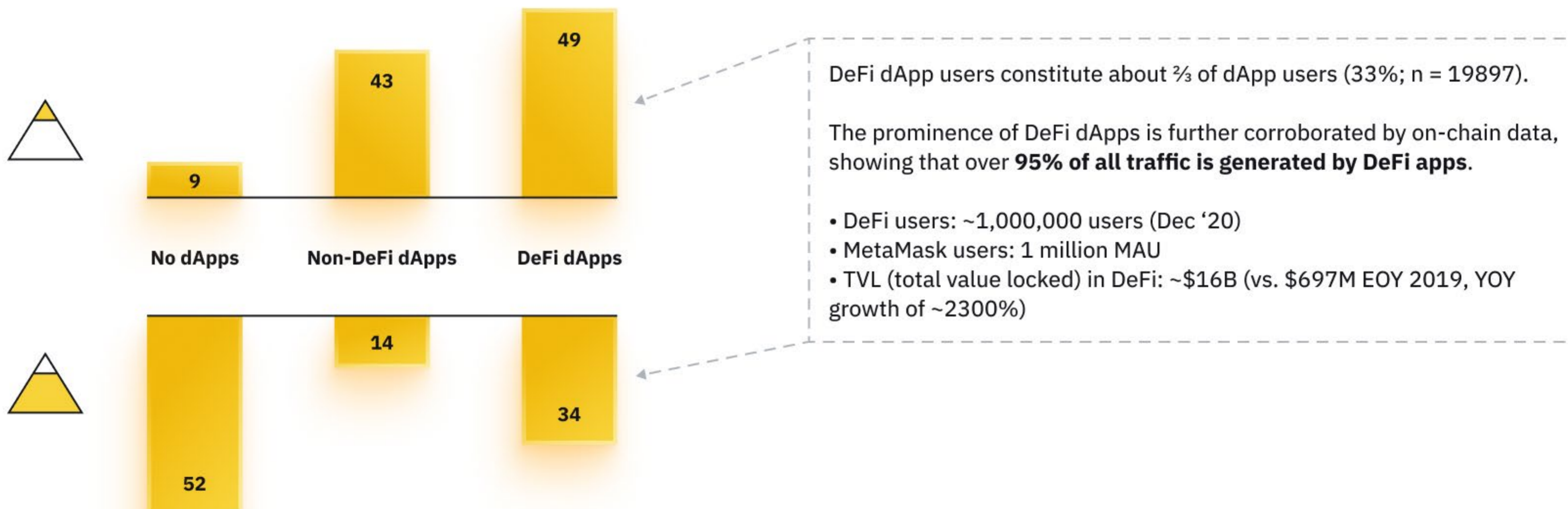


Data set: post-stratified data set for 'Global' region. Question: 'How do you use most of your cryptocurrencies? Note: 'most' in terms of USD equivalent value'. Answer options were 'I am saving them for later', 'I use them to access goods or services', 'I use them for staking or borrowing', 'I use them to buy other cryptocurrencies', 'I use them to make fiat transfers'. The displayed measure is compiled by aggregating responses for 'I use them to access goods or services' and 'I use them to make fiat transfers'.

CRYPTO USAGE

Is Driven By DeFi DApps Picking Up

Percentage of the general population that have already used a respective dApp



Data set: post-stratified data set for 'Global' region. Question: 'How do you use most of your cryptocurrencies? Note: 'most' in terms of USD equivalent value'. Answer options were 'I am saving them for later', 'I use them to access goods or services', 'I use them for staking or borrowing', 'I use them to buy other cryptocurrencies', 'I use them to make fiat transfers'. The displayed measure is compiled by aggregating responses for 'I use them to access goods or services' and 'I use them to make fiat transfers'.

STABLECOINS

Are Predominantly Used As A Liquid Trading Asset

Percentage of the general population that cites liquidity as the main reason to use stablecoins.

47%

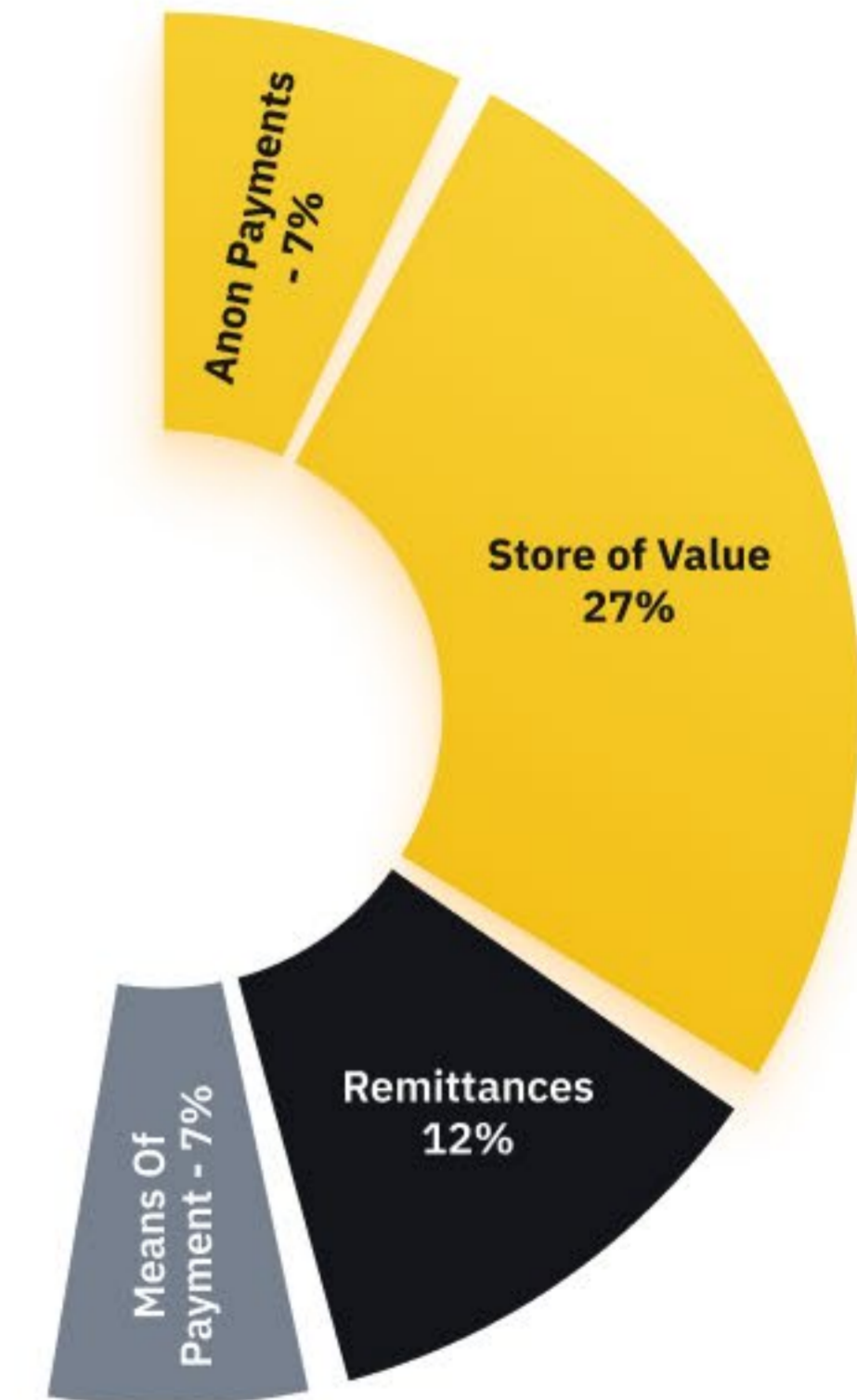
+ 4%

- 1%

of the **general population** that predominantly uses stablecoins as a highly-liquid asset to move between different cryptocurrencies (i.e., in a trading scenario).

for **crypto natives**

for **general crypto users**



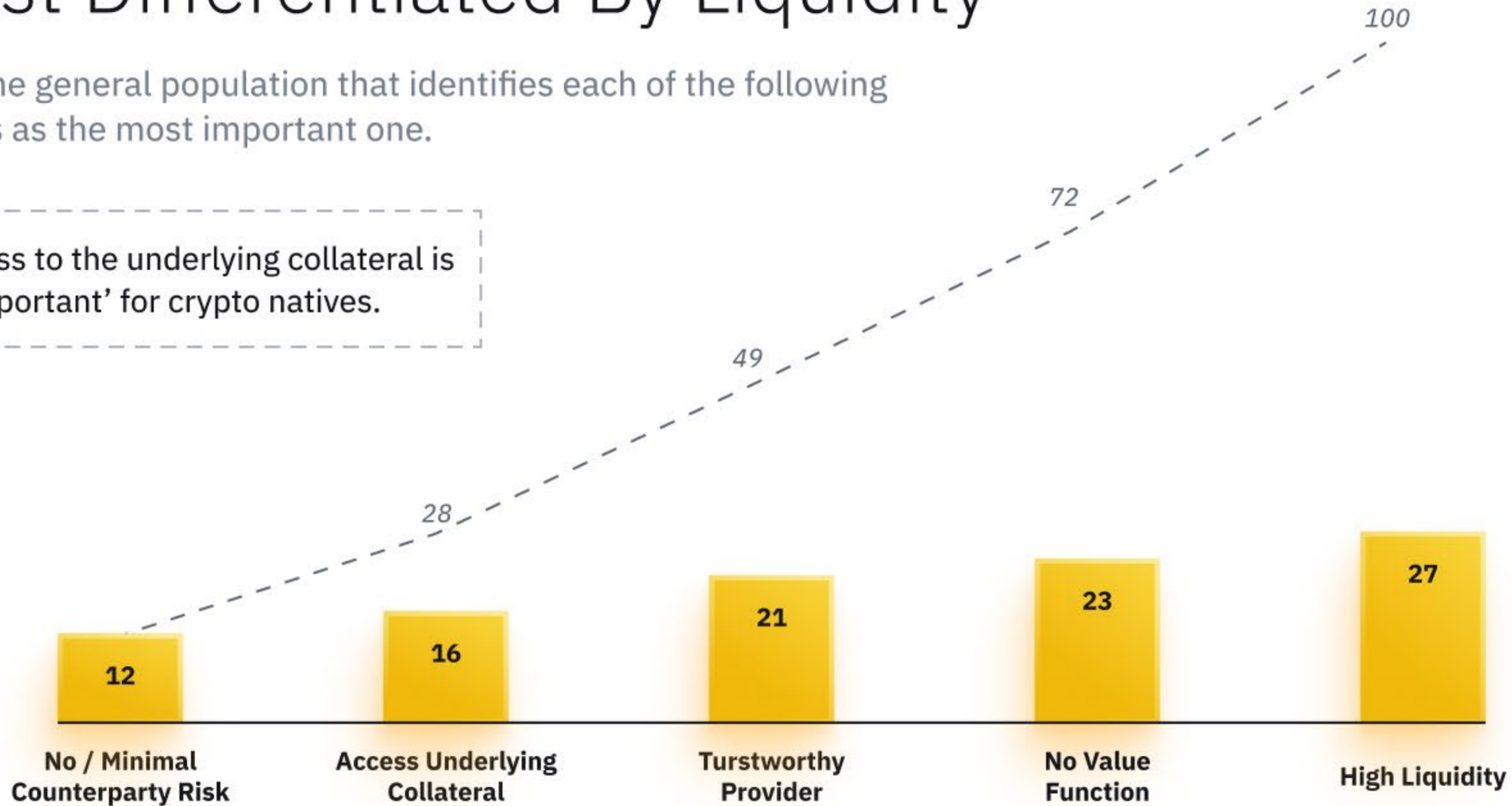
Data set: post-stratified data set for 'Global' region. Question: 'What is the main reason why you would use stablecoins?'. Answer options were 'To move between different cryptocurrencies with a highly-liquid asset (e.g. trading)', 'To make anonymous payments (i.e., no KYC required)', 'To access a safe asset in a risky environment (e.g. store of value)', 'To access greater capital mobility (e.g. remittances)', 'To pay in crypto for every-day purchases (e.g. point-of-Sale purchases, salaries, ..)'.

STABLECOINS

Are Most Differentiated By Liquidity

Percentage of the general population that identifies each of the following stablecoin traits as the most important one.

Curiously, access to the underlying collateral is only 'half as important' for crypto natives.

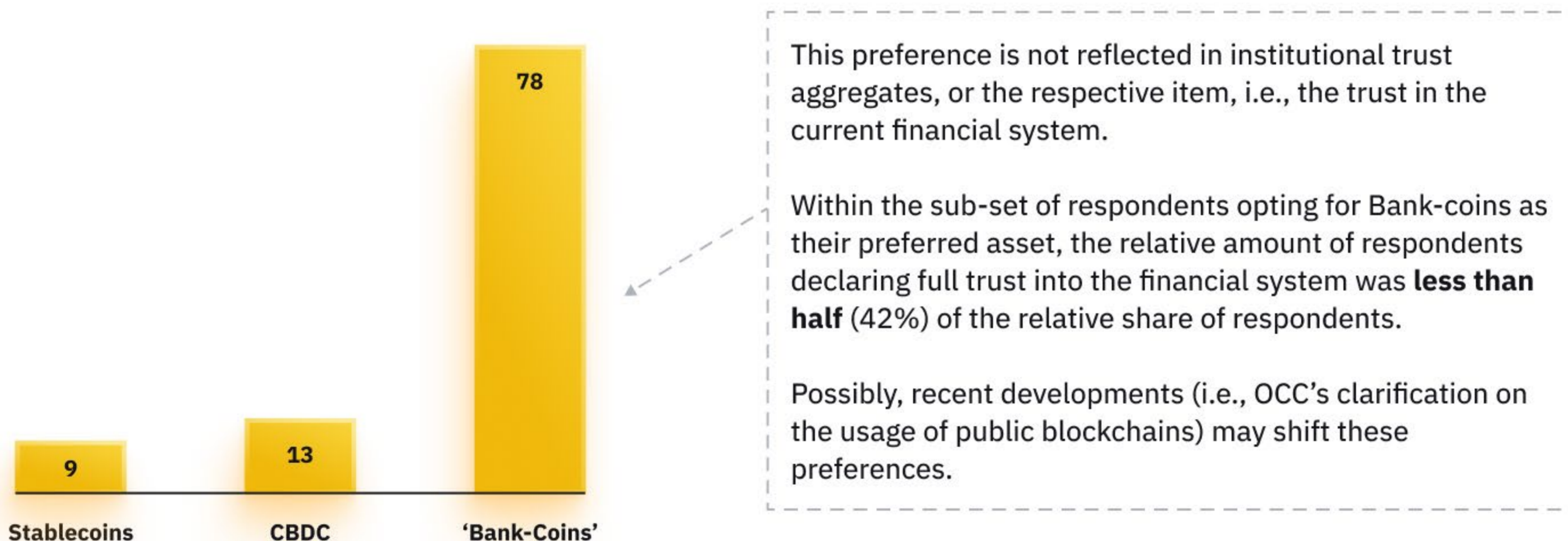


Data set: post-stratified data set for 'Global' region. Question: 'What is the most important trait of a stablecoin?'. Answer options were 'Liquidity', 'Ability to redeem for underlying collateral', 'Trustworthy providers', 'No / minimal counterparty risk', 'No value fluctuations'. The trait 'ability to redeem for underlying collateral' was only chosen by 57% (n =500) of the relative amount of the respondents as the most important trait of a stablecoin.

STABLECOINS

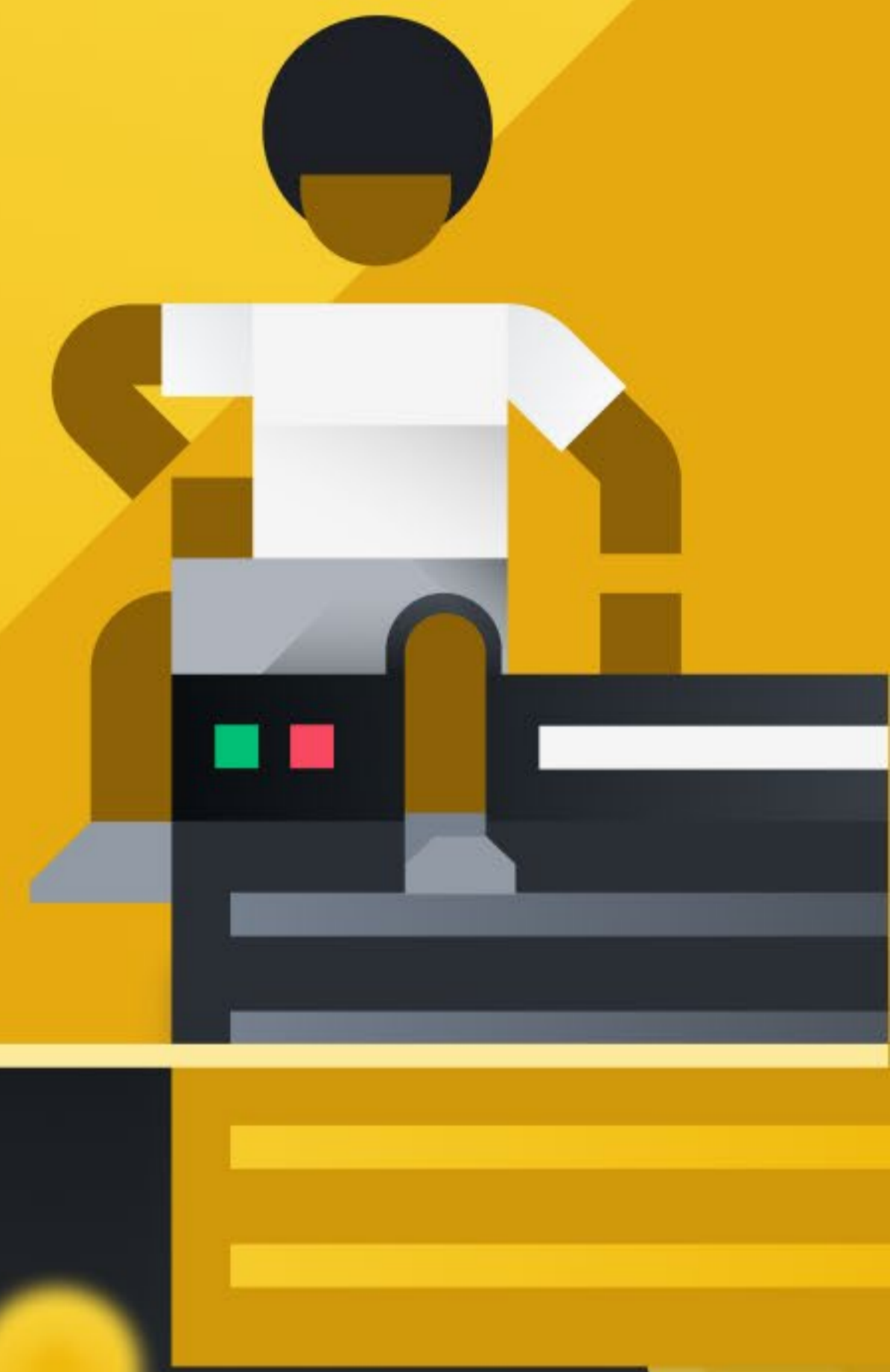
Are Viewed As A Temporary Phenomenon

Percentage of the general population who indicates their preference for the respective assets [assuming access is available].



08

PERCEPTIONS ON CRYPTO ADOPTION



ACCEPTANCE OF NEW TECHNOLOGY

Can Be Modeled Via Three Factors

1

PERCEIVED RISK

- Sudden Loss
- User Errors
- Fail Safes

2

PERCEIVED EASE OF USE

- Ease of Use
- Ease of Buying
- Ease of Getting Information

3

PERCEIVED USEFULNESS

- Useful
- Useful For Personal Needs
- Useful For Specific Needs

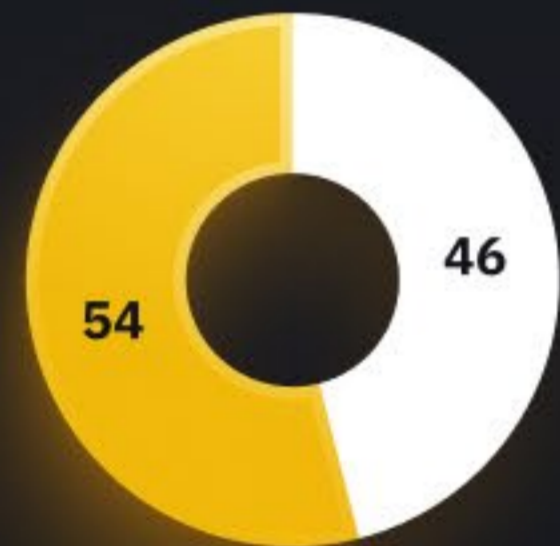
Based on Pavlou's (2003) paper 'Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model', three distinct variables influence the acceptance of new technology. Data set: post-stratified data set for 'Global' region. Compiled measure of adoption_useful_aggregate, adoption_easeOfUse_aggregate, adoption_risk_aggregate. These Likert-style measures are computed by aggregating various 5-point Likert-style scale items. (i) adoption_useful_aggregate is computed by averaging adoption_useful_pure, statement: 'I think cryptocurrencies are very useful', , adoption_useful_specific, statement: 'I can easily imagine multiple areas of applications where cryptocurrencies would be extremely useful', adoption_useful_needs, statement: 'I hope that I will soon be able to use cryptocurrencies for all my needs'; (ii) adoption_easeOfUse_aggregate is computed by averaging adoption_easeOfUse_pure, statement: 'I think cryptocurrencies are easy to use', adoption_easeOfUse_buy, statement: 'Attempting to use or purchase cryptocurrencies is confusing to me', reverse coded, adoption_easeOfUse_information, statement: 'I find it easy to access all the information about cryptocurrencies that I am looking for', (ii) adoption_risk_aggregate is computed by averaging adoption_risk_suddenLoss, statement: 'How do you estimate the risk of losing your cryptocurrencies in an unplanned way?', reverse coded, adoption_risk_userError, statement: 'How do you estimate the risk of losing your cryptocurrencies while making a user error?', reverse coded, adoption_risk_purchase, statement: 'How do you estimate the risk of making a mistake while buying cryptocurrencies?', reverse coded. The measure adoption_risk_purchase is displayed as 'fail safe' as it aims to capture the potential for user errors while using custodial services that could provide fail safes.

PERCEIVED RISK AS LAST BARRIER

To Further Acceptance Of Crypto

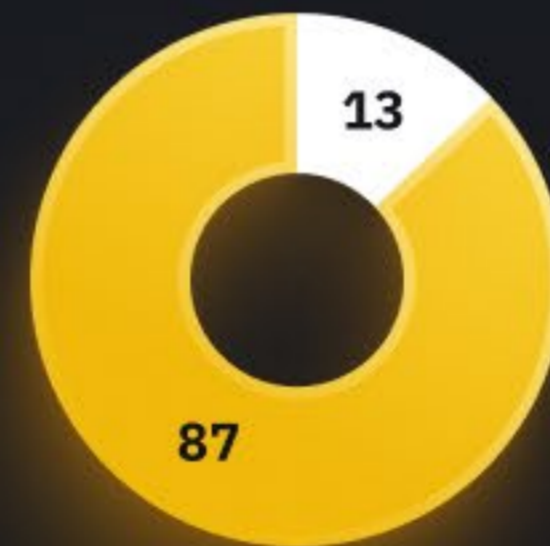
Percentage of responses above/ below the midpoint of the three displayed Likert-style measures.

PERCEIVED RISK



■ High Risk ■ Low Risk

PERCEIVED EASE OF USE



■ Easy To Use ■ Difficult To Use

PERCEIVED USEFULNESS



■ Useful ■ Not Useful

Based on Pavlou's (2003) paper 'Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model', three distinct variables influence the acceptance of new technology. Data set: post-stratified data set for 'Global' region. Compiled measure of adoption_useful_aggregate, adoption_easeOfUse_aggregate, adoption_risk_aggregate. These Likert-style measures are computed by aggregating various 5-point Likert-style scale items. (i) adoption_useful_aggregate is computed by averaging adoption_useful_pure, statement: 'I think cryptocurrencies are very useful', , adoption_useful_specific, statement: 'I can easily imagine multiple areas of applications where cryptocurrencies would be extremely useful', adoption_useful_needs, statement: 'I hope that I will soon be able to use cryptocurrencies for all my needs'; (ii) adoption_easeOfUse_aggregate is computed by averaging adoption_easeOfUse_pure, statement: 'I think cryptocurrencies are easy to use', adoption_easeOfUse_buy, statement: 'Attempting to use or purchase cryptocurrencies is confusing to me', reverse coded, adoption_easeOfUse_information, statement: 'I find it easy to access all the information about cryptocurrencies that I am looking for', (ii) adoption_risk_aggregate is computed by averaging adoption_risk_suddenLoss, statement: 'How do you estimate the risk of losing your cryptocurrencies in an unplanned way?', reverse coded, adoption_risk_userError, statement: 'How do you estimate the risk of losing your cryptocurrencies while making a user error?', reverse coded, adoption_risk_purchase, statement: 'How do you estimate the risk of making a mistake while buying cryptocurrencies?', reverse coded. The measure adoption_risk_purchase is displayed as 'fail safe' as it aims to capture the potential for user errors while using custodial services that could provide fail safes.

A BETTER TECHNICAL UNDERSTANDING

Seemingly Leads To More Confidence In Crypto

Mean values indicating group differences in crypto confidence by (1) IT knowledge and (2) bitcoin knowledge.

“Blockchain produces confidence based on an understanding of their procedural and rule-based functioning.”



Data set: post-stratified data set for 'Global' region. A one-way Analysis of Variance or ANOVA was used to compare means between groups and showed small differences for the two displayed classification measures. Grouping by IT skills shows mean of group 1 to be 3.8956, with mean of group 2 to be 4.123, whereas grouping by bitcoin knowledge shows the mean of group 1 to be 3.861 and mean of group 2 to be 4.1109.

CAN THE 'GREATER FOOLS THEORY'

Explain Crypto Adoption

In the stock market, the greater fools theory describes users that buy a stock exclusively based on the assumption that they will be able to sell it to someone else - to 'a greater fool' than themselves - at a higher price.

SPECULATORS

- Longing for financial independence
- Hoping for adoption by general public

USERS

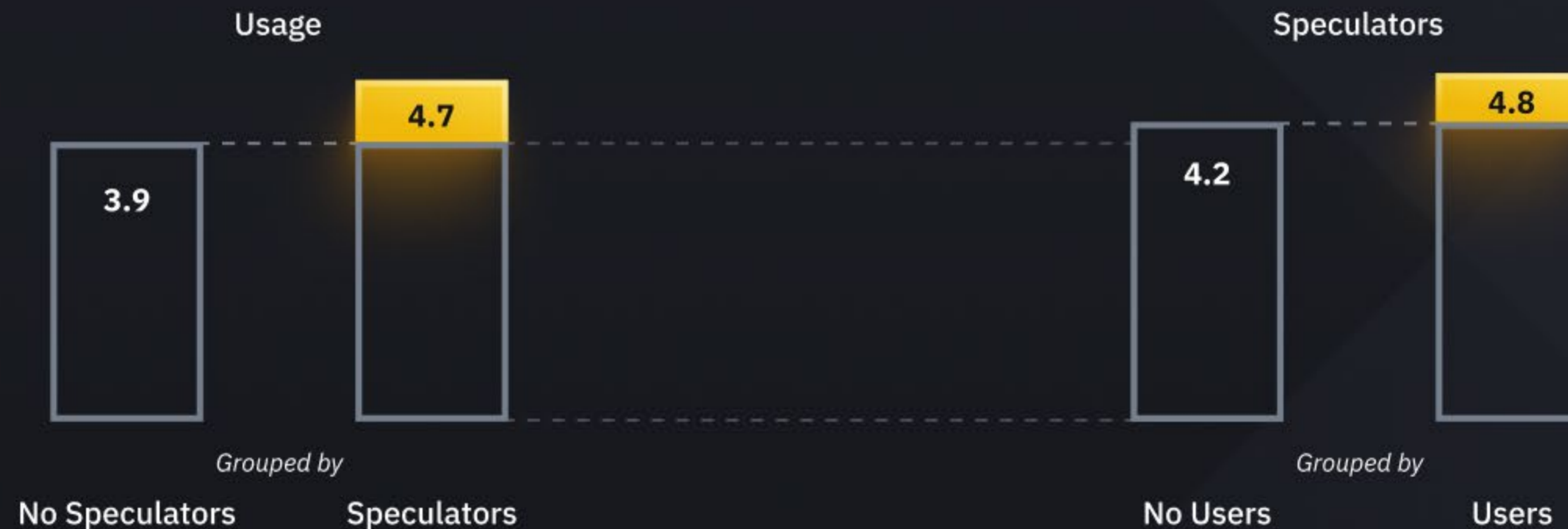
- Consider crypto generally useful
- Consider crypto useful for personal needs
- Consider crypto useful for specific needs

Fool_user is computed by averaging (i) 'adoption_useful_pure', a 5-point Likert-style scale item assessing agreement to the statement: 'I think cryptocurrencies are very useful', (ii) 'adoption_useful_specific', a 5-point Likert-style scale item assessing agreement to the statement: 'I can easily imagine multiple areas of applications where cryptocurrencies would be extremely useful', (iii) 'adoption_useful_needs', a 5-point Likert-style scale item assessing agreement to the statement: 'I hope that I will soon be able to use cryptocurrencies for all my needs'. Fool_speculator is computed by averaging (i) 'goldRush_seeking', a 5-point Likert-style scale item assessing agreement to the statement: 'Currently, my most important goal is to become financially independent', (ii) 'adoption_useful_general', a 5-point Likert-style scale item assessing agreement to the statement: 'I hope that cryptocurrencies will be adopted more widely'.

EXPECTED UTILITY MAY BE EXPLAINING ADOPTION

Not The Greater Fools Theory

Mean values indicating group differences for hardcore speculators and users in the respectively other measurement.



- The seeming interrelation between usage and speculation is best explained by an expected future utility of cryptocurrencies
- The grouping is seemingly robust, as speculators are, nonetheless, more likely to purchase cryptocurrencies for moonshots (+47%), trading (+47%) or FOMO (+44%)

THERE IS ALMOST UNANIMOUS CONFIDENCE

Into Crypto And Its Governance

Percentage of Likert-style scale items for 'crypto confidence'.

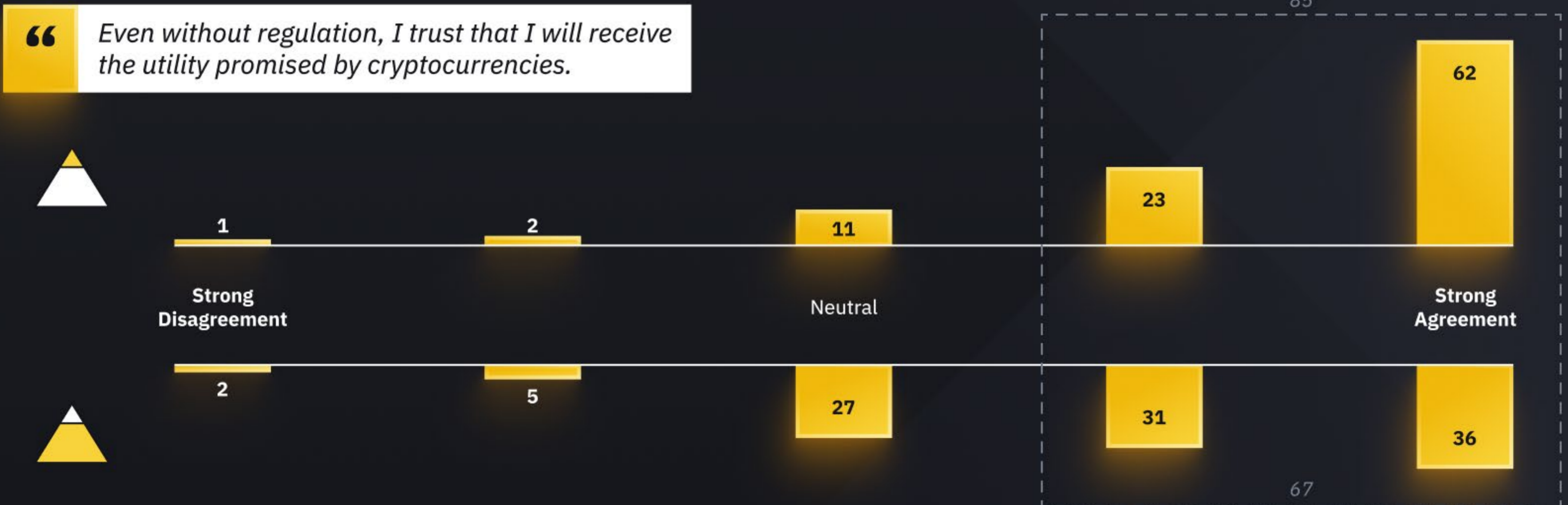


Data set: post-stratified data set for 'Global' region. Question: 'I trust in the collective ability of the crypto community to review, evaluate and agree on changes to a blockchain.' Agreement to the Likert-style item was assessed with a 5-point scale, ranging from 'Strong disagreement' (i.e., 0) to 'Strong agreement' (i.e., 5).

TRANSPARENCY AND INFORMAL GOVERNANCE

Of Crypto Seem To Be Sufficient To Appease Users

Percentage of Likert-style scale items for 'crypto confidence' .



Data set: post-stratified data set for 'Global' region. Question: 'Even without regulation, I trust that I will receive the utility promised by cryptocurrencies.' Agreement to the Likert-style item was assessed with a 5-point scale, ranging from 'Strong disagreement' (i.e., 0) to 'Strong agreement' (i.e., 5).

ABOUT BINANCE RESEARCH

Binance Research provides institutional-grade analysis, in-depth insights, and unbiased information to all participants in the cryptocurrency and digital asset industry.

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