

Survey results: Investing in Initial Coin Offerings (ICOs)

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Overview

What did we do?

- **Empirical evidence** on ICO investors is lacking and the current discussion mostly relies on anecdotes. **We do not really know who invests in ICOs and why.** We decided to approach this topic in an explorative and quantitative fashion and designed a **survey** that focusses on ICO investments. This document presents **the data collected in the survey in a descriptive way.**
- We collected data between **June and August 2018**. Respondents were mainly acquired via **LinkedIn** and **reddit** (/r/cryptocurrency and /r/ethtrader). Other sources were **Telegram**, **Facebook**, or **forums** like Bitcointalk. We do not know the exact origin of every response, so that a more specific breakdown is not possible.
- After conducting some validity tests and excluding several observations (e.g., respondents that stated they had never invested in an ICO), the final sample contains **517 responses**. We are very happy with the sample size, which should allow meaningful inferences.
- As an incentive for participation, we gifted **0.5 ETH** to one randomly chosen respondent that left his/her email address. **414 out of 517** individuals left their e-mail addresses. The winner, a reddit user, was chosen on October 5th, 2018 and received the ETH on the same day.
- **Whats next?** This document is descriptive and does not include many inferences or interpretations. Our goal is and always was to produce and publish a scientific paper in which we explore ICO investors and their decision-making in a more **theory-driven and sophisticated fashion** (we do not have any commercial interest in this project). As such, we will now try to connect investment motives and behavior in a more detailed way. Since producing a scientific paper (and going through a peer-review process) can take a long time, we decided to publish this short report as soon as possible.

Thank you for your help, encouragement, and participation in this project!

Executive summary

Some of the most important findings

- Most of the **517 respondents** reside in the **US (14.7%)**, **Germany (11.6%)**, and **the Netherlands (9.5%)**. 95% were male. The average age was **33 years**. However, there is a large heterogeneity with regard to country of residence and age. The average level of education is rather high: 80% of the respondents had a **Bachelor's degree or higher**. The most common field of studies was **business or economics (32.3%)**, followed by computer sciences (22.8%). Most respondents were **employed (48.9%)** or **self-employed (36.4%)**. 38.7% had a **professional background in technology**.
- Contrary to popular belief, investors **do not seem to be inexperienced**: 51.8% rate their investment knowledge outside the cryptosphere as 'good' or 'very good'. More specifically, investors stated that they had previously invested in **stocks (41.6%)**, **funds (42.2%)**, or **real estate (30.0%)**. Only 19.1% had no prior investment experience.
- ICO investments are a very recent phenomenon. 61.9% of the respondents **first invested in an ICO in 2017**. 61.7% of the respondents last invested in an ICO in 2018. While there is a lot of variance, **ETH is the most common first ICO investment (4.6%)**. 46.2% of the respondents first invested in cryptocurrencies in **2017**. 53.0% initially invested in **BTC**, while 28.0% invested in ETH.
- Very interesting findings emerge with regard to the money invested (p. 17). Investment volumes are almost equally distributed across categories, indicating a considerable heterogeneity among investors. For example, 11.4% of respondents invested **less than 250 USD** in total, while 8.3% invested **more than 100,000 USD**. It is thus very difficult to characterize the „average investor in ICOs“ with regard to the money invested.
- With regard to **regulation and fraud**, 61.2% agree with the statement that ICO regulation should be more strict. While the majority of investors is not afraid of fraud, **17.4%** stated that they had already **experienced fraud** when investing in ICOs.
- The **most important motive** (p. 21–23) for investing in ICOs is the '**future sale of the token at a higher price (at a later point in time)**'. However, this motive is immediately followed by 'personal enthusiasm for the business model or business idea' and 'personal enthusiasm for the technology'. The differences between those motives are **marginal** and not statistically significant. It can be concluded that most investors are not **singularly** interested in profits.
- The **information seeking behavior** of investors is **diverse**. However, most investors rely on the **venture's white paper (82%)**, website (75%), Telegram (68%), and reddit (68%). Further underlining the importance of white papers, 49.1% of the respondents stated that they **read the white paper** and try to understand its general content, while 31.5% indicated that they read the white paper **in detail** and try to understand everything. This contradicts the common narrative that the average investor is uninformed and only follows hype.
- The final part of the survey identified **determinants of the investment decision**. The most important venture characteristics are whether the **venture's team seems competent (mean importance 4.6 of 5)**, whether the **venture's team is reputable (4.4)**, and the **venture's white paper (4.3)**. The most important determinants with regard to the venture's ICO campaign include a high share of the tokens offered in the ICO (3.5) and whether Institutional investors participated in a pre-sale (3.5). With regard to the environment, investors consider whether the general market sentiment is positive (3.7) and whether there is a high amount of hype surrounding the ICO (3.6). Notice, however, that the **venture characteristics are overall more important** than characteristics of the ICO campaign or the environment.
- **Limitations**: Before jumping to conclusions, please keep in mind that this survey is subject to a number of limitations. These include the possibility of false answers, a social desirability bias, and non-representativeness (especially since many inexperienced investors may already have left the market in 2018).

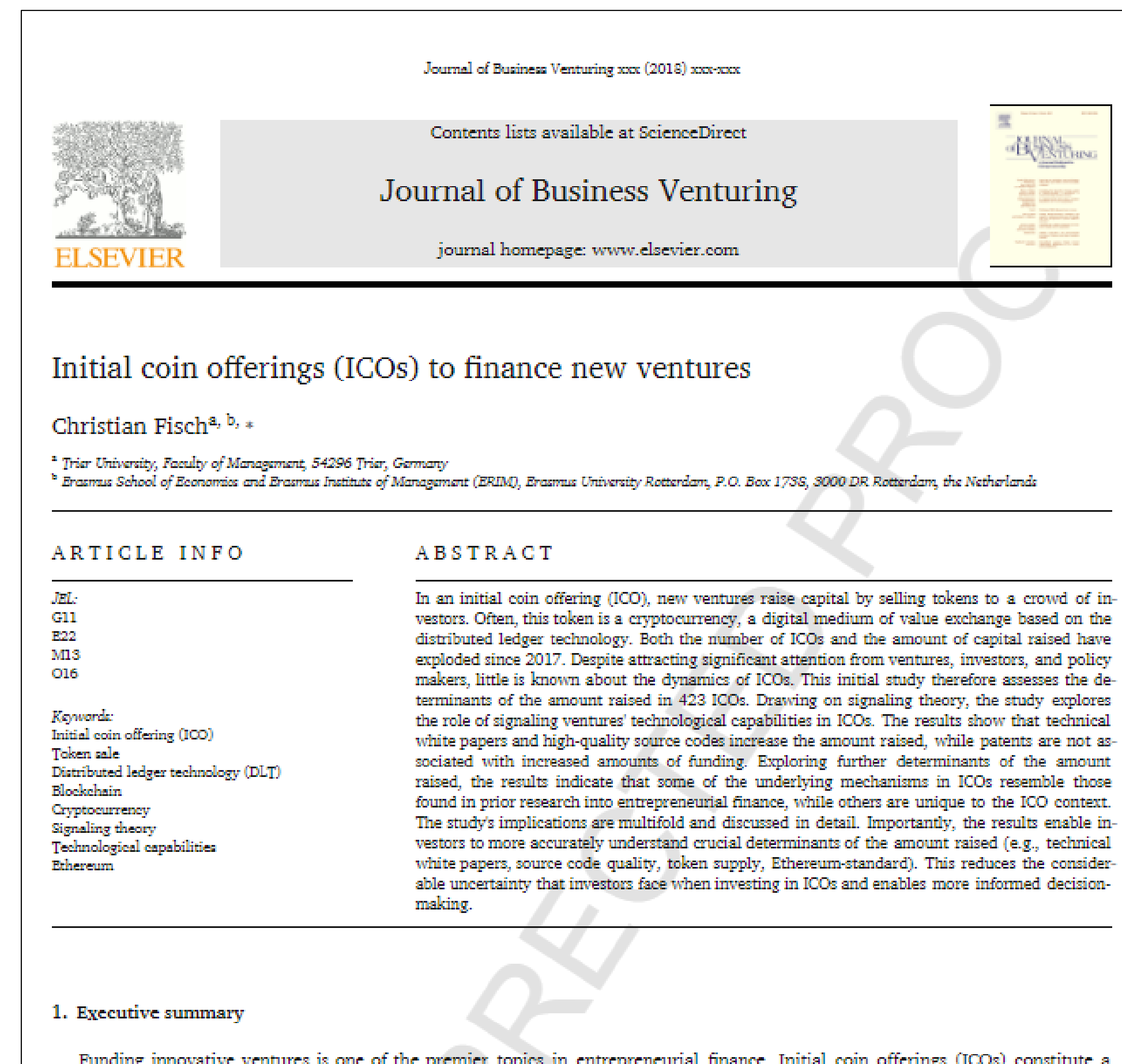
Related publication

„Initial coin offerings (ICOs) to finance new ventures“

- One of the authors (Christian Fisch) **recently published one of the first scientific studies on ICOs in an academic journal**. The paper „Initial Coin offerings (ICOs) to finance new ventures“ was just published in the **Journal of Business Venturing**, the premier outlet for all things related to entrepreneurial finance. This also gives you an impression of where we want to go with this data set.
- Feel free to have a look at this paper, which is available for free via the following link: https://www.researchgate.net/publication/328190956_Initial_coin_offerings_ICOs_to_finance_new_ventures or here on the publisher's page: <https://doi.org/10.1016/j.jbusvent.2018.09.007>

- **Abstract:**

In an initial coin offering (ICO), new ventures raise capital by selling tokens to a crowd of investors. Often, this token is a cryptocurrency, a digital medium of value exchange based on the distributed ledger technology. Both the number of ICOs and the amount of capital raised have exploded since 2017. Despite attracting significant attention from ventures, investors, and policy makers, little is known about the dynamics of ICOs. This initial study therefore assesses the determinants of the amount raised in 423 ICOs. Drawing on signaling theory, the study explores the role of signaling ventures' technological capabilities in ICOs. The results show that technical white papers and high-quality source codes increase the amount raised, while patents are not associated with increased amounts of funding. Exploring further determinants of the amount raised, the results indicate that some of the underlying mechanisms in ICOs resemble those found in prior research into entrepreneurial finance, while others are unique to the ICO context. The study's implications are multifold and discussed in detail. Importantly, the results enable investors to more accurately understand crucial determinants of the amount raised (e.g., technical white papers, source code quality, token supply, Ethereum-standard). This reduces the considerable uncertainty that investors face when investing in ICOs and enables more informed decision-making.



Part 1: Sample

Who participated in the survey?

Country of residence

Q: Where do you currently reside?

Country	Frequency	Percent	Cum.
USA	76	14.70	14.70
Germany	60	11.61	26.31
Netherlands	49	9.48	35.78
UK	36	6.96	42.75
Afghanistan	29	5.61	48.36
India	19	3.68	52.03
Canada	18	3.48	55.51
Switzerland	18	3.48	58.99
Australia	16	3.09	62.09
Italy	13	2.51	64.60
Indonesia	11	2.13	66.73
Singapore	11	2.13	68.86
Russia	10	1.93	70.79
Austria	9	1.74	72.53
Philippines	9	1.74	74.27
Nigeria	8	1.55	75.82
Ukraine	8	1.55	77.37

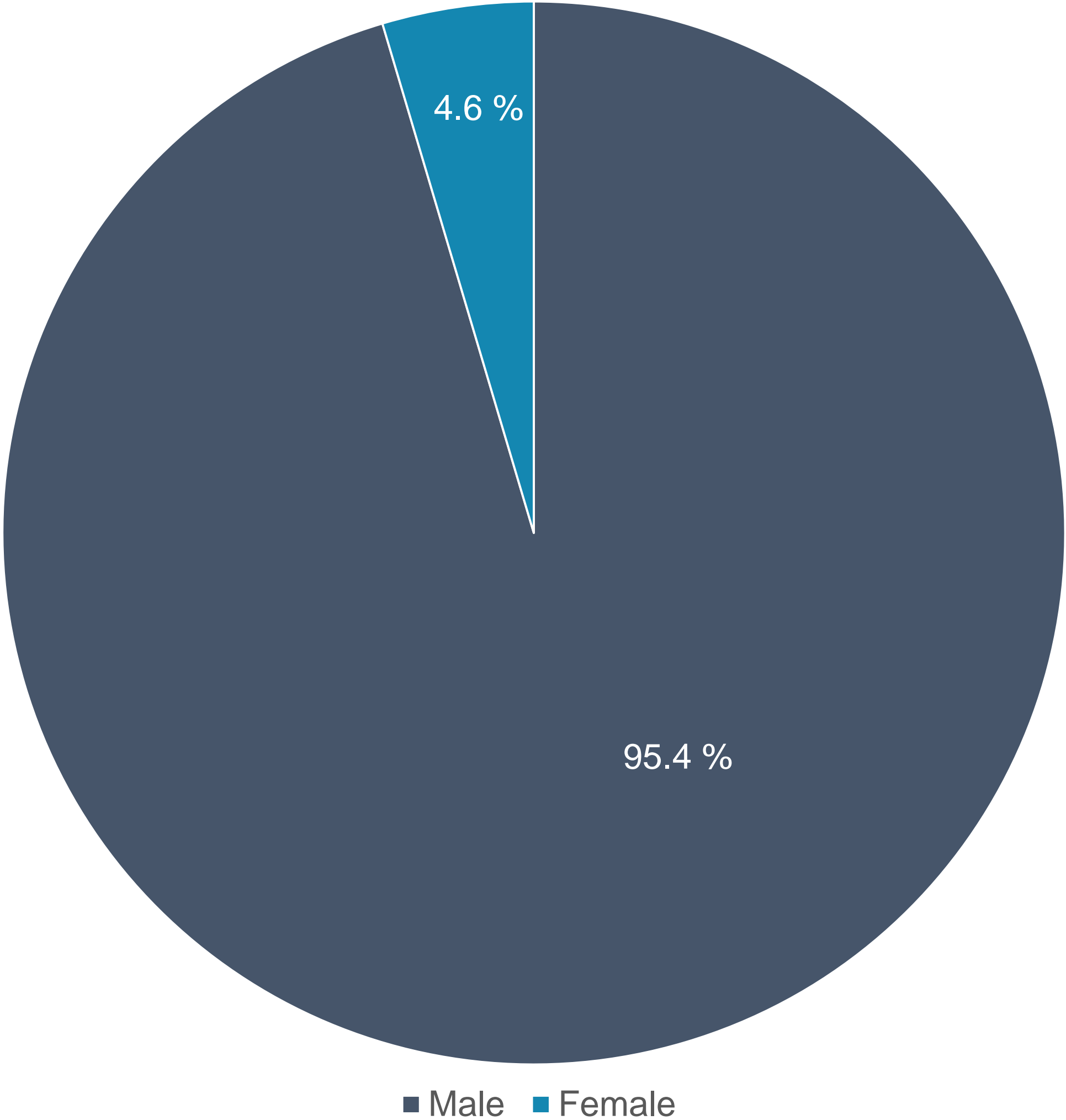
Pontential bias, as this was the first option

We will, unforttunately, have to exclude these observations later.

Total number of respondents = 517

Age and gender

Q: What is your gender?



Q: How old are you?

Mean value	Std. Dev.
32.86	8.66

Distribution	
Group 20–29	193
Group 30–39	209
Group 40–49	81
Rest	34

Educational background

Q: Please indicate your highest level of education.

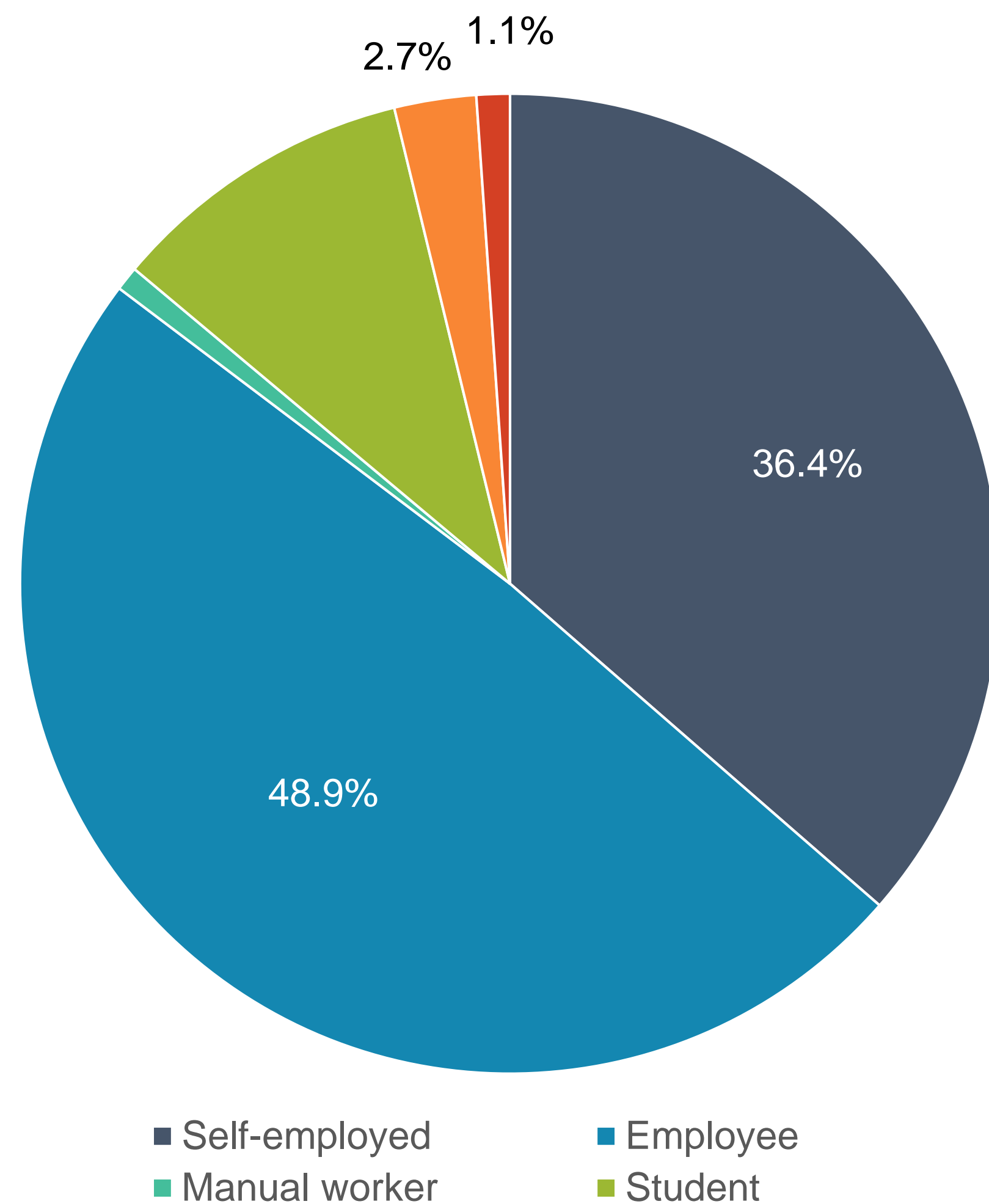
Education	Frequency	Percent	Cum.
No schooling completed	6	1.16	1.16
High school degree	63	12.19	13.34
Trade/technical/vocational training	31	6.00	19.34
Bachelor's degree	220	42.55	61.90
Master's degree	169	32.69	94.58
Doctorate degree	28	5.42	100.00
	517	100.00	

Q:Please indicate your main field of studies.

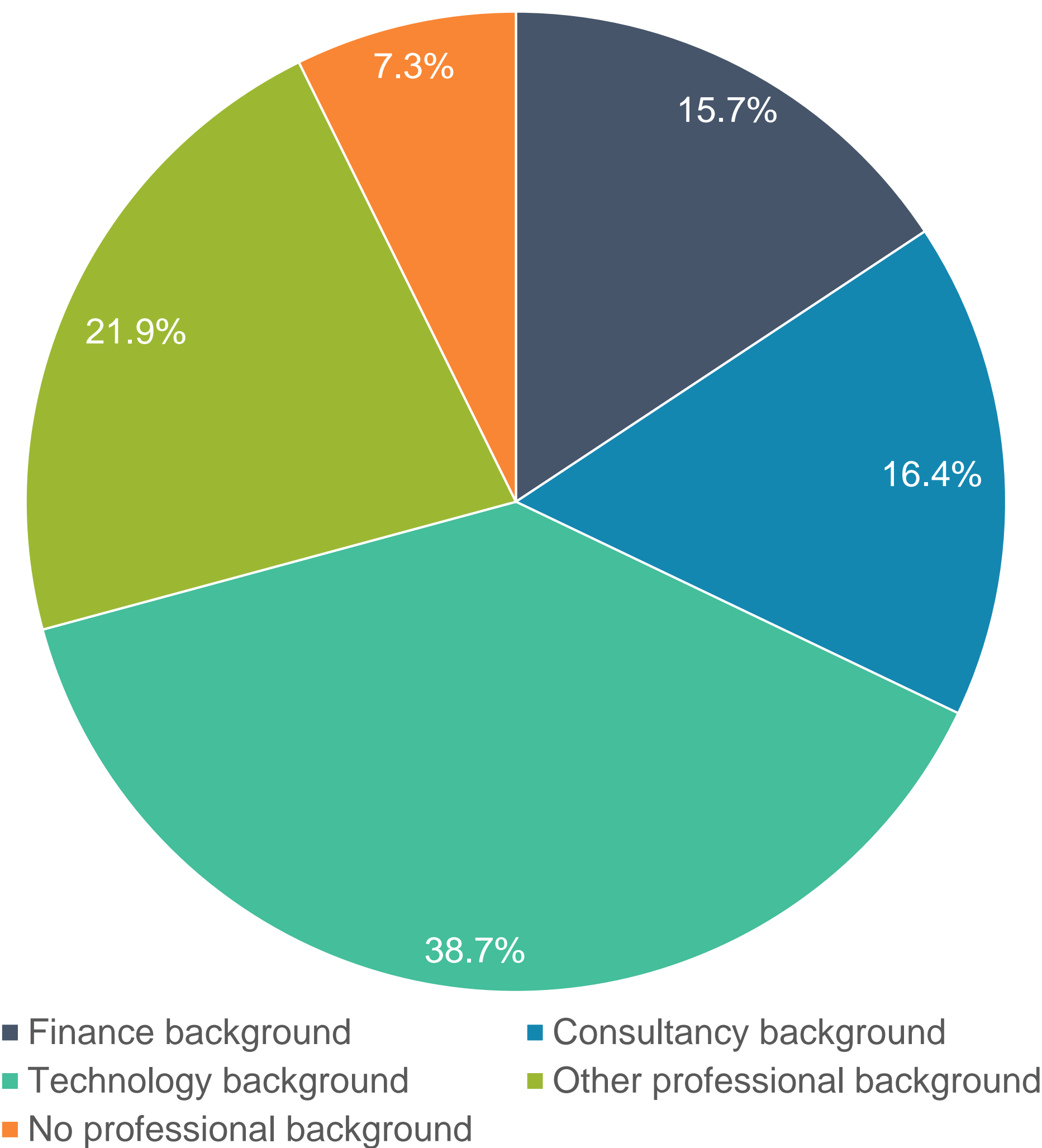
Field of study	Frequency	Percent	Cum.
Social sciences	39	7.54	7.54
Economics and business	167	32.30	39.85
Mathematics and natural sciences	29	5.61	45.45
Computer sciences	118	22.82	68.28
Engineering	77	14.89	83.17
Others	61	11.80	94.97
I did not attend college/university	26	5.03	100.00
	517	100.00	

Professional background

Q: What is your main occupation?



Q: How would you describe your professional background?



Part 2: Investment background

Assessing respondents' investment behavior

Investment background (1/4)

Q: Which of the following statements best describe your feelings about you household’s income these days?

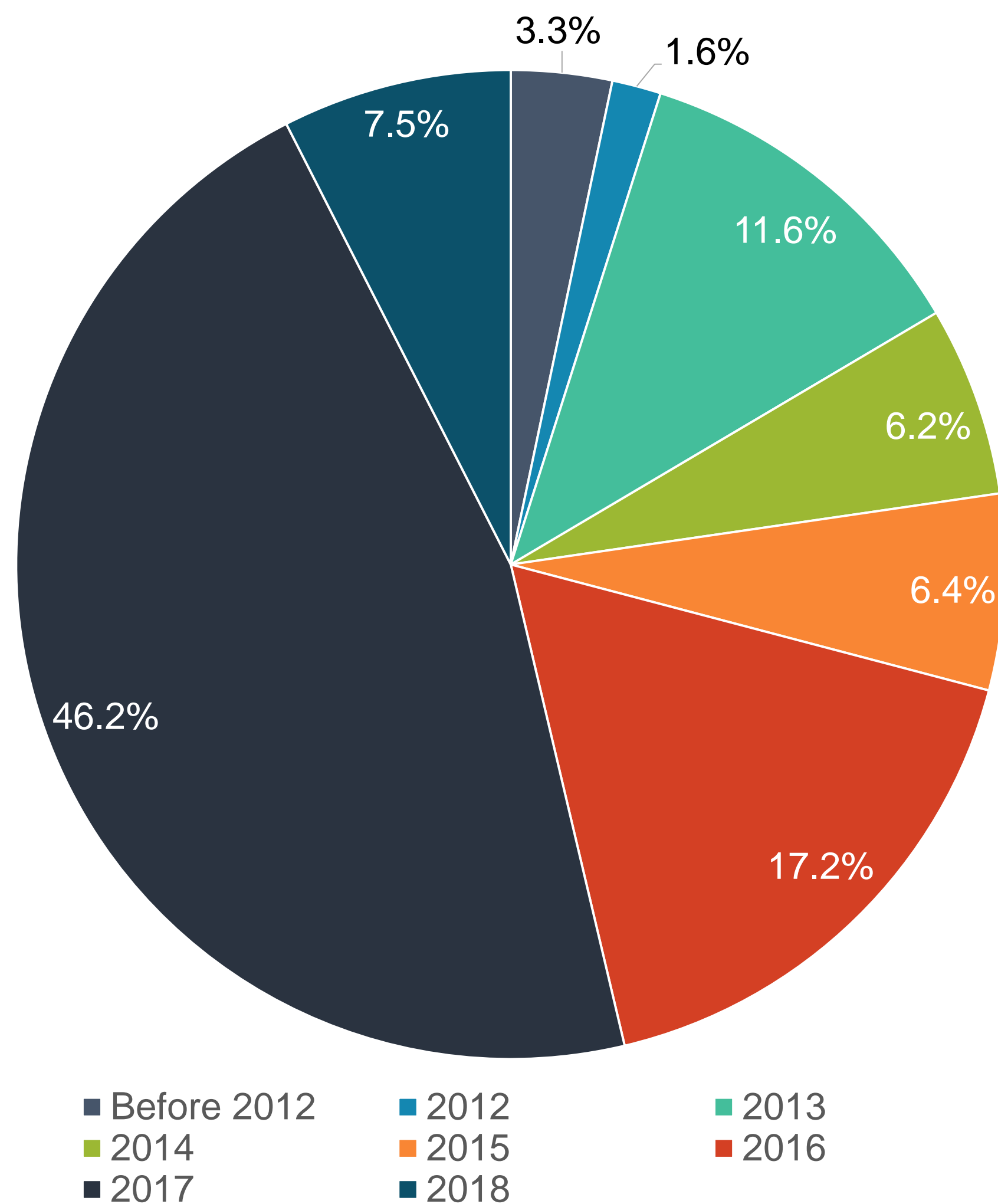
Q: Are you generally a person who is willing to take risks or do you try to avoid taking risks?

Income	Frequency	Percent	Cum.
Live comfortably	298	59.96	59.96
Get by	168	33.80	93.60
Dificult to manage	24	4.83	98.59
Very difficult to manage	7	1.41	100.00
497		100.00	

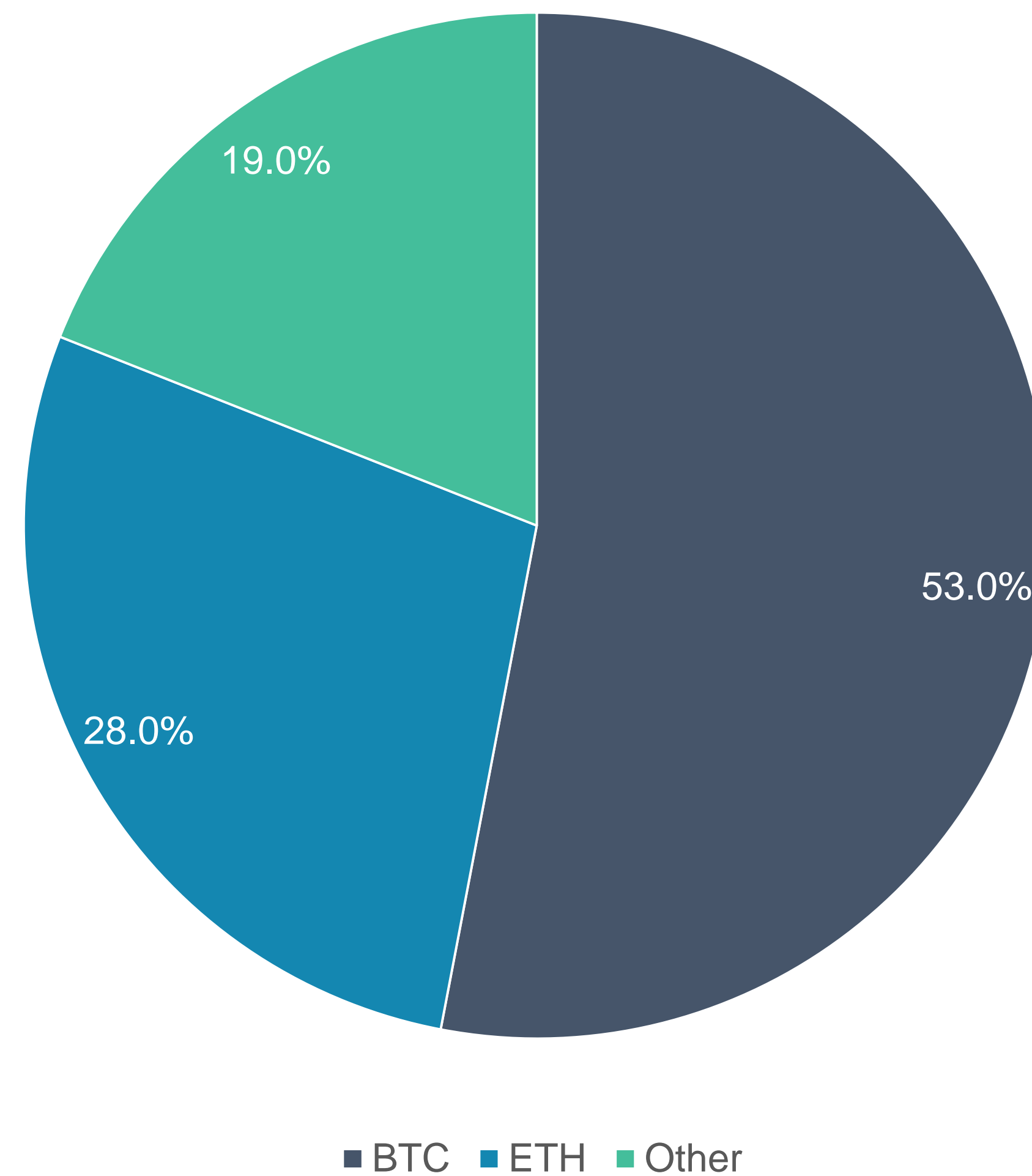
Risk	Frequency	Percent	Cum.
1	1	0.19	0.19
2	5	0.97	1.16
3	12	2.32	3.48
4	14	2.71	6.19
5	28	5.42	11.61
6	62	11.99	23.60
7	144	27.85	51.45
8	132	25.53	76.98
9	72	13.93	90.91
10	47	9.09	100.00
517		100.00	

Investment background (2/4)

Q: When did you first invest in cryptocurrencies?

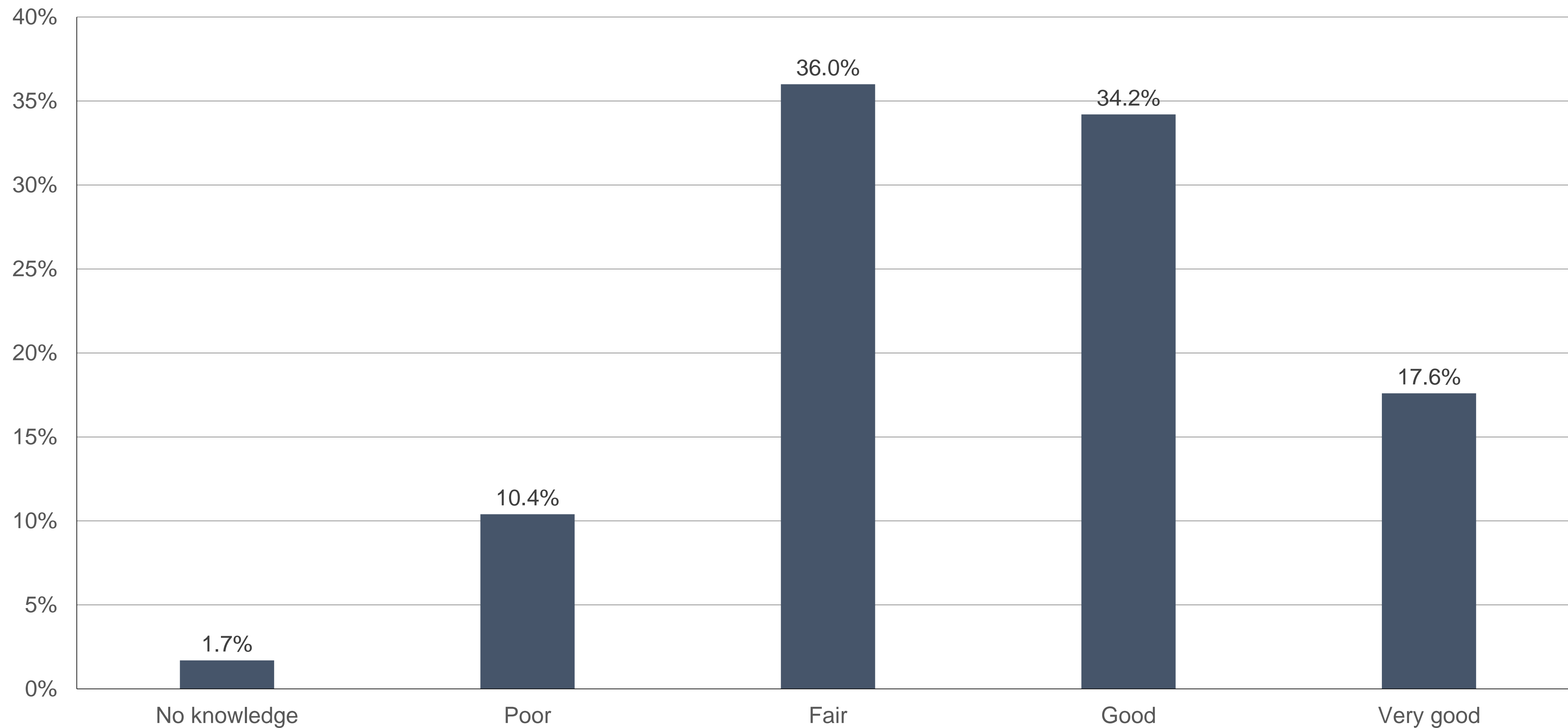


Q: Which cryptocurrency did you first invest in?



Investment background (3/4)

Q: Please rate your overall investment knowledge outside the cryptosphere?



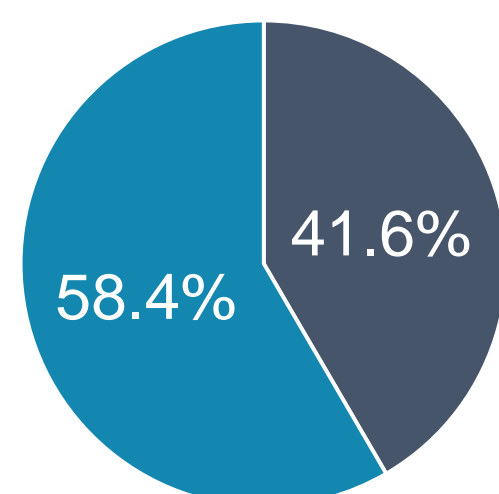
Investment background (4/4)

Q: Please indicate whether you have invested in the following investment vehicles prior to your first ICO investment.

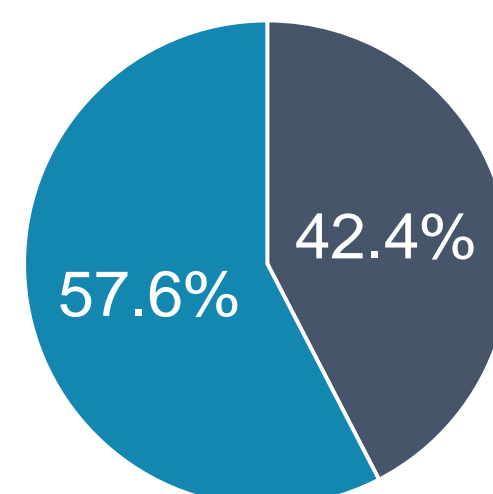
Yes

No

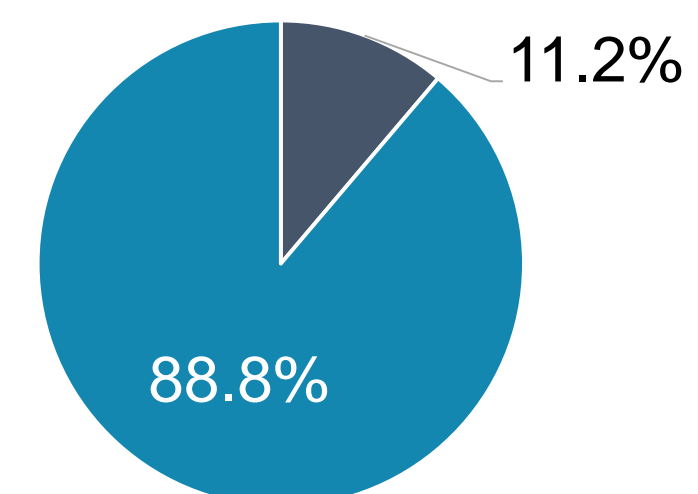
Stocks



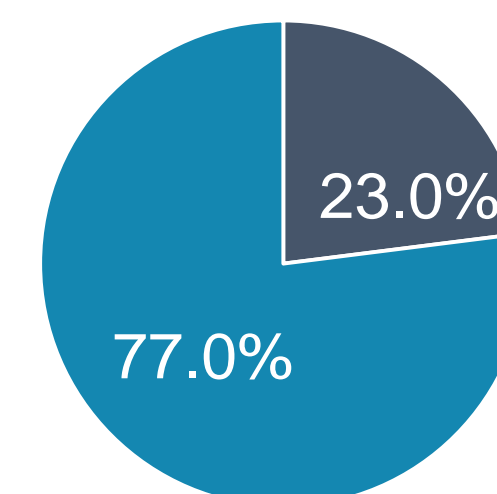
Funds



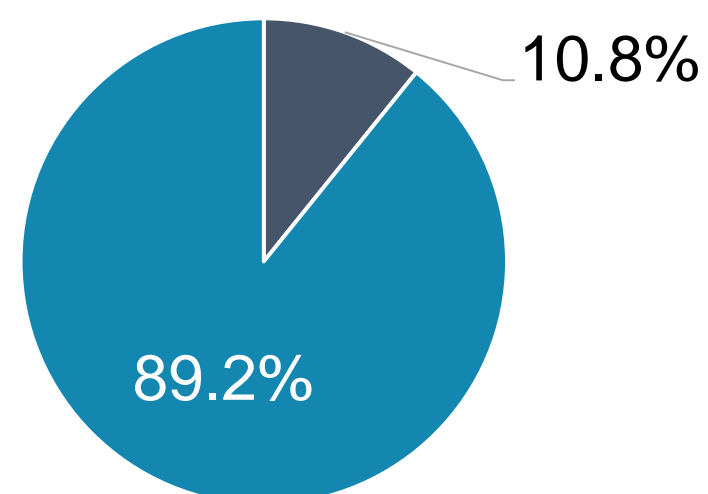
Venture Capital



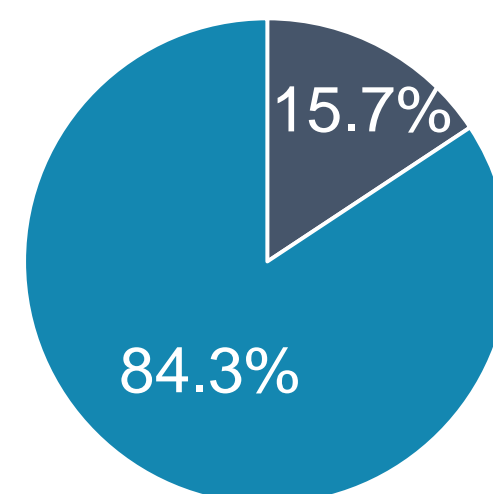
Crowdfunding



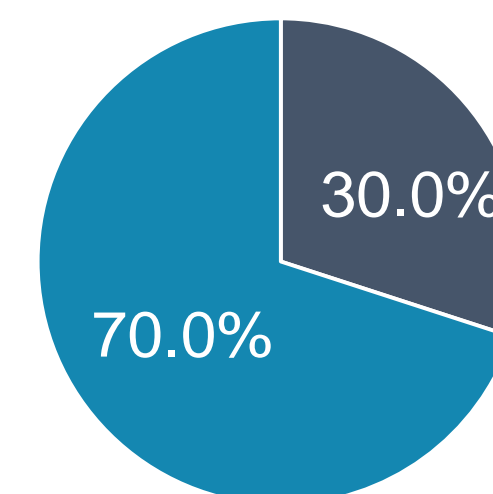
Equity crowdfunding



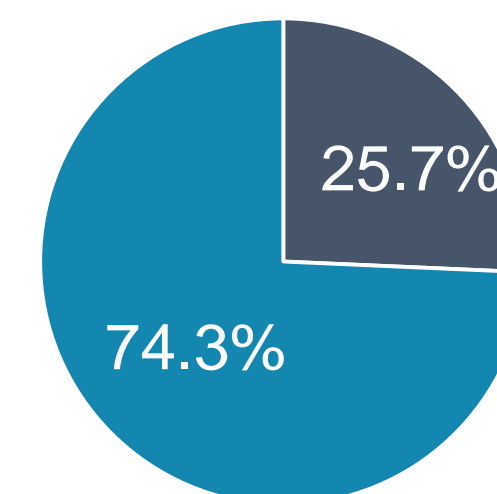
Derivatives



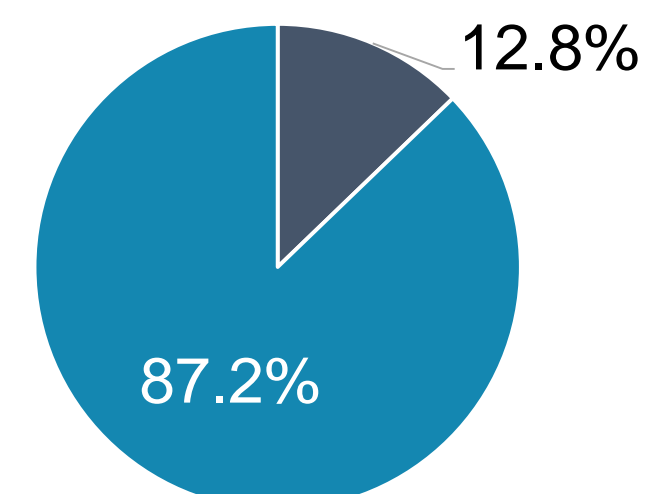
Real estate



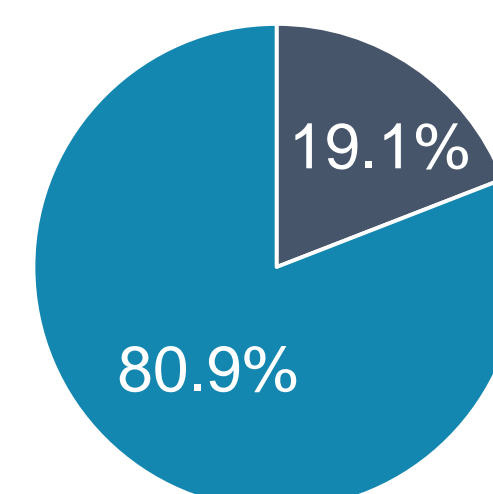
Commodities



Other investment vehicles



No prior experience

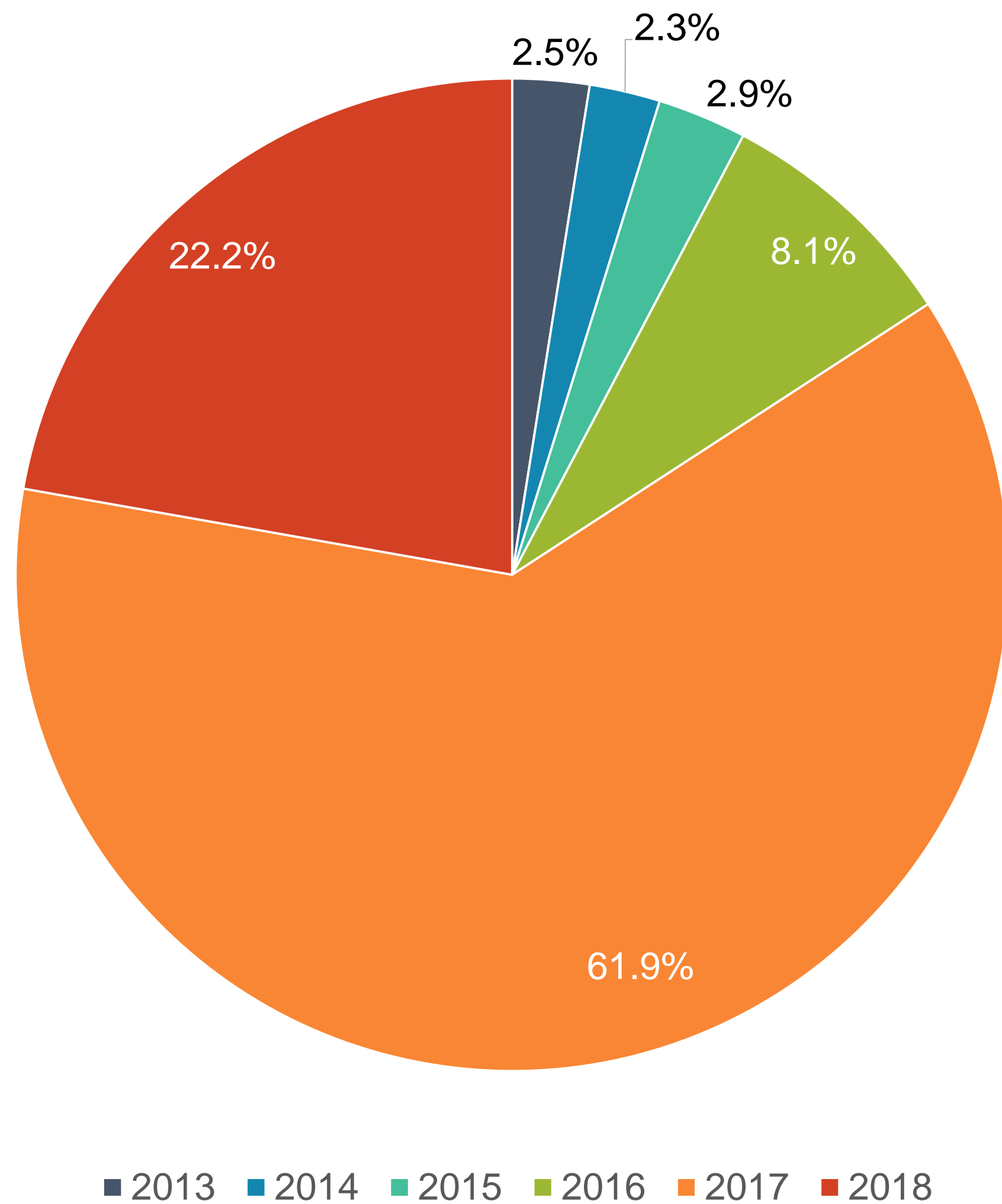


Part 3: ICO investments

Information on respondents' ICO investments

First ICO investments

Q: When did you first invest in an ICO?

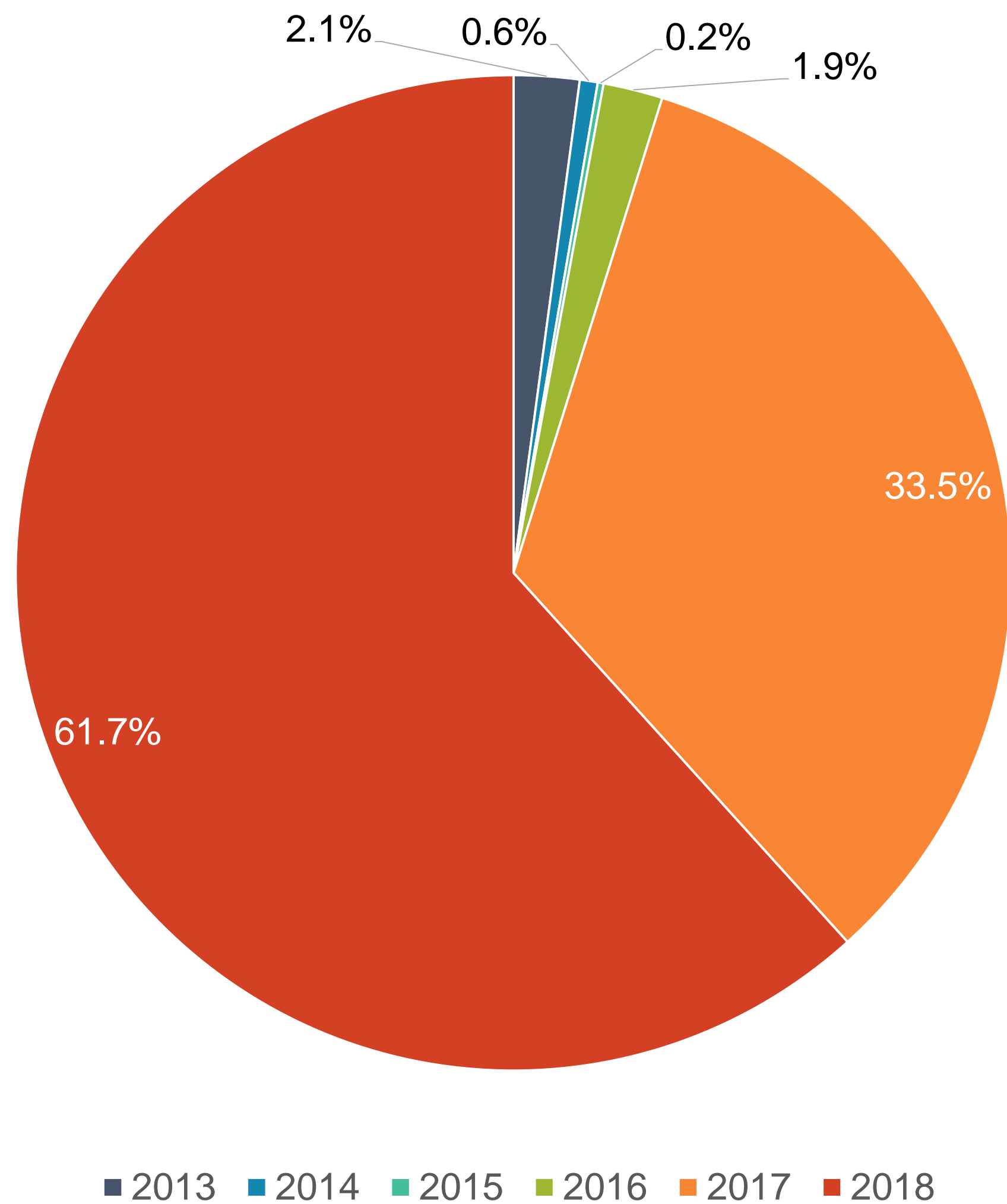


Q: Which ICO did you first invest in?

Name	Freq.	Percent	Cum.
Etherum	24	4.64	4.64
Electroneum	14	2.71	7.35
Status	13	2.51	9.86
Augur	12	2.32	12.19
EOS	9	1.74	13.93
Golem	9	1.74	15.67
The DAO	9	1.74	17.41
ZRX	9	1.74	19.15
CS	6	1.16	20.31
CarVertical	6	1.16	21.47
Enjin Coin	6	1.16	22.63
REQ	6	1.16	23.79
Bancor	5	0.97	24.76
Envion	5	0.97	25.73
Kyber Network	5	0.97	26.69

Most recent ICO investments

Q: When did your most recent ICO investment take place?

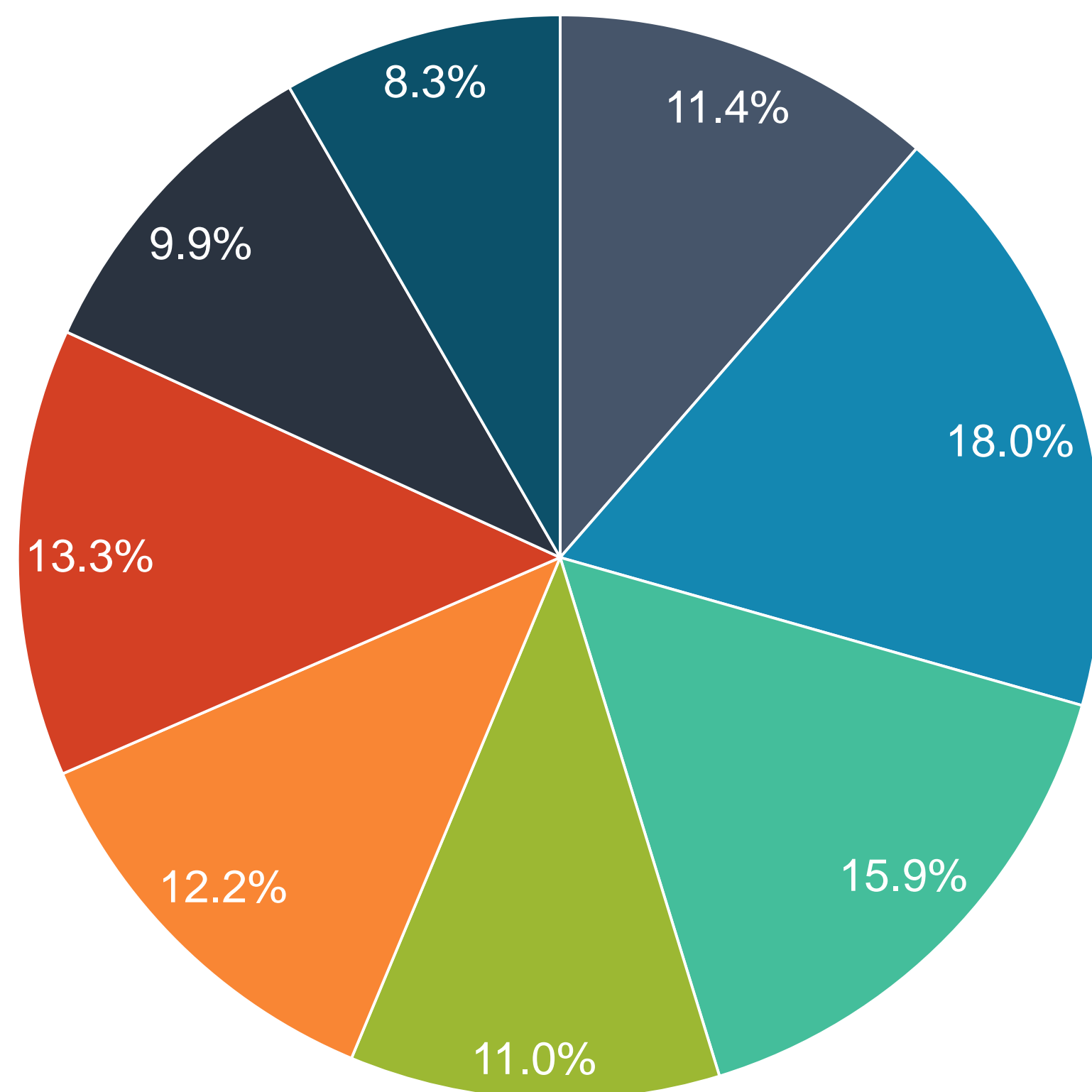


Q: Which ICO did you invest in most recently?
(preliminary, data not yet fully harmonized)

Name	Freq.	Percent	Cum.
EOS	11	2.13	2.13
Ethereum	7	1.35	3.48
Sparkster	5	1.35	4.48
Bloom	5	0.97	5.80
Tezos	4	0.97	6.77
Atonomi	4	0.77	7.54
CarVertical	4	0.77	8.32
Enjin Coin	4	0.77	9.09
Envion	4	0.77	9.86
Etherisc	4	0.77	10.64
Fantom	4	0.77	11.41
Golem	4	0.77	12.19
KIN	4	0.77	12.96
OmiseGo	4	0.77	13.73
REQ	4	0.77	14.51

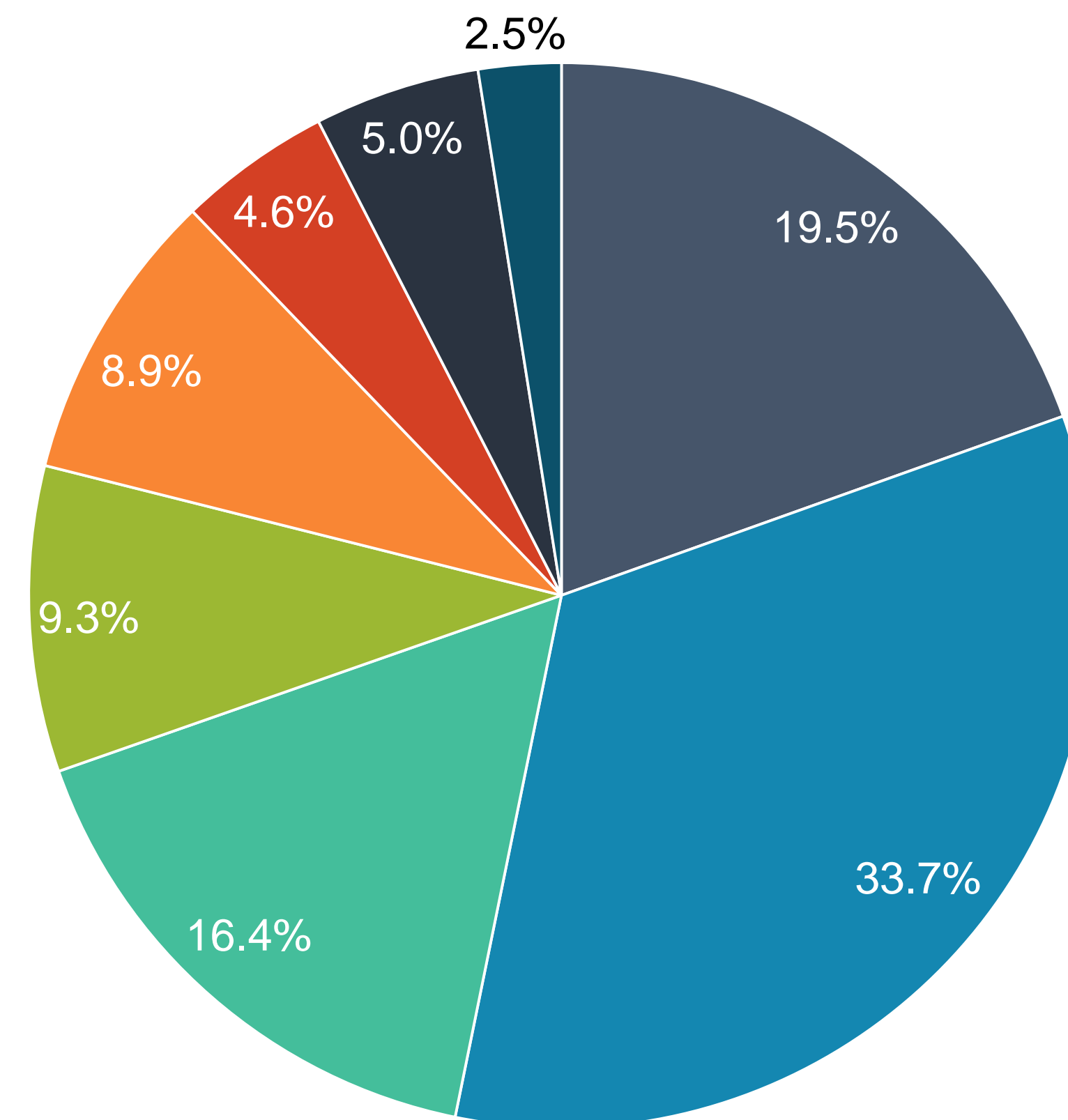
Money inevsted in ICOs

Q: In total, how much did you invest in ICOs so far
(total investments in USD)?



■ <250
 ■ 251-1,000
 ■ 1,001-2,500
 ■ 2,501-5,000
 ■ 5,001-10,000
 ■ 10,001-25,000
 ■ 25,001-100,000
 ■ >100,000

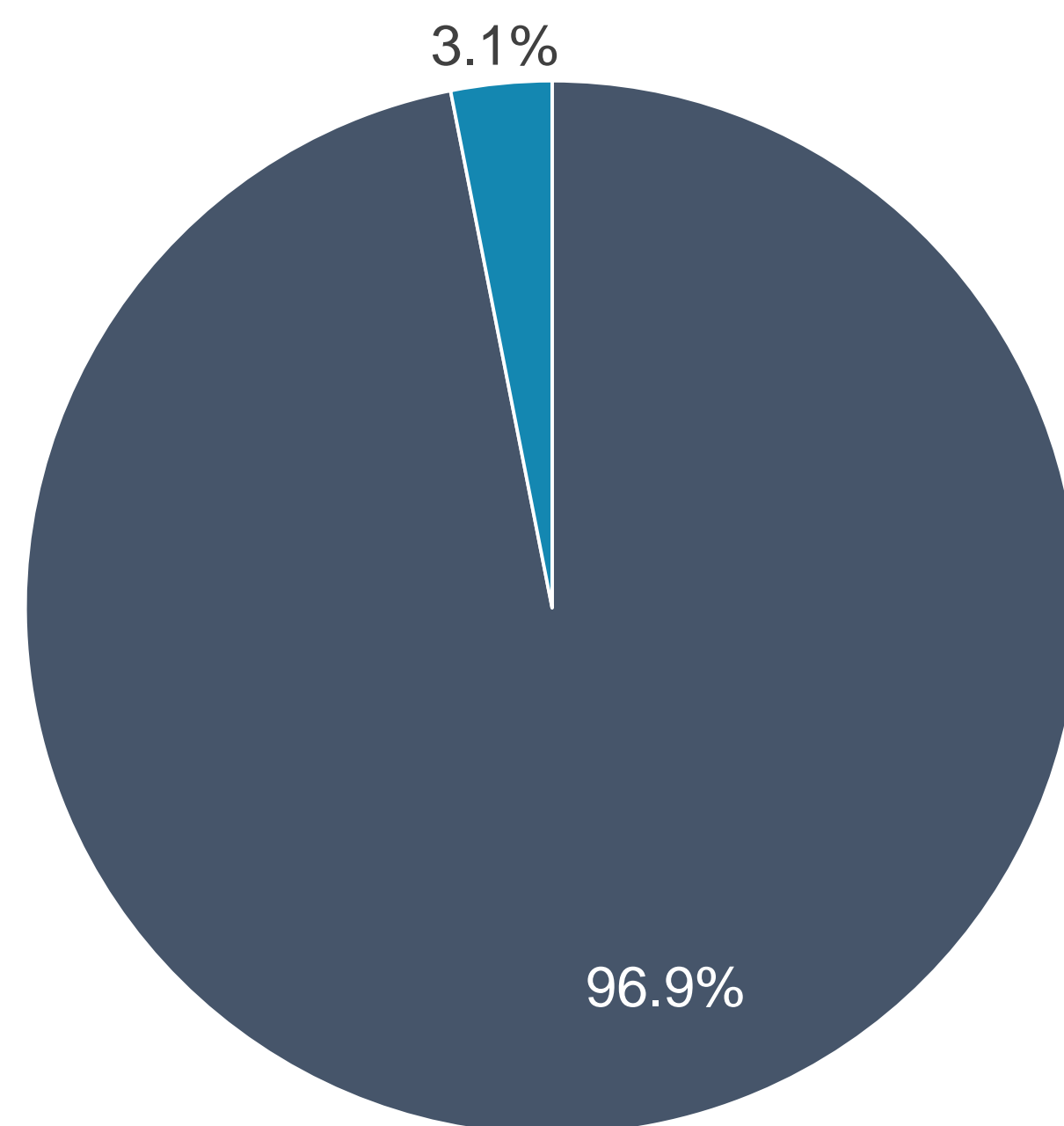
Q: How much did you invest in this most recent ICO investment?
(most recent investment in USD)



■ <250
 ■ 251-1,000
 ■ 1,001-2,500
 ■ 2,501-5,000
 ■ 5,001-10,000
 ■ 10,001-25,000
 ■ 25,001-100,000
 ■ >100,000

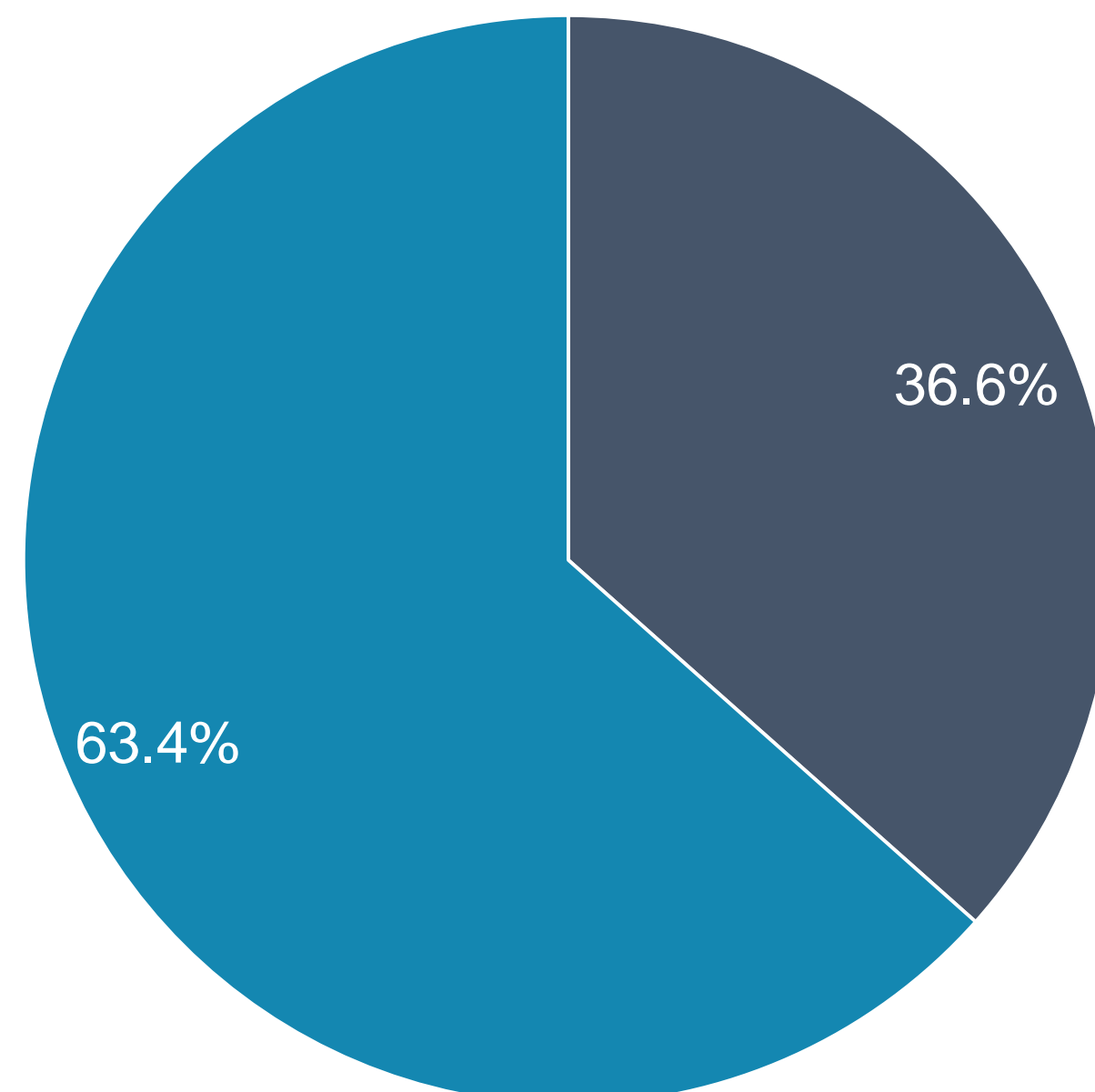
Investment behavior

Q: In general, do you invest on your behalf of other parties?



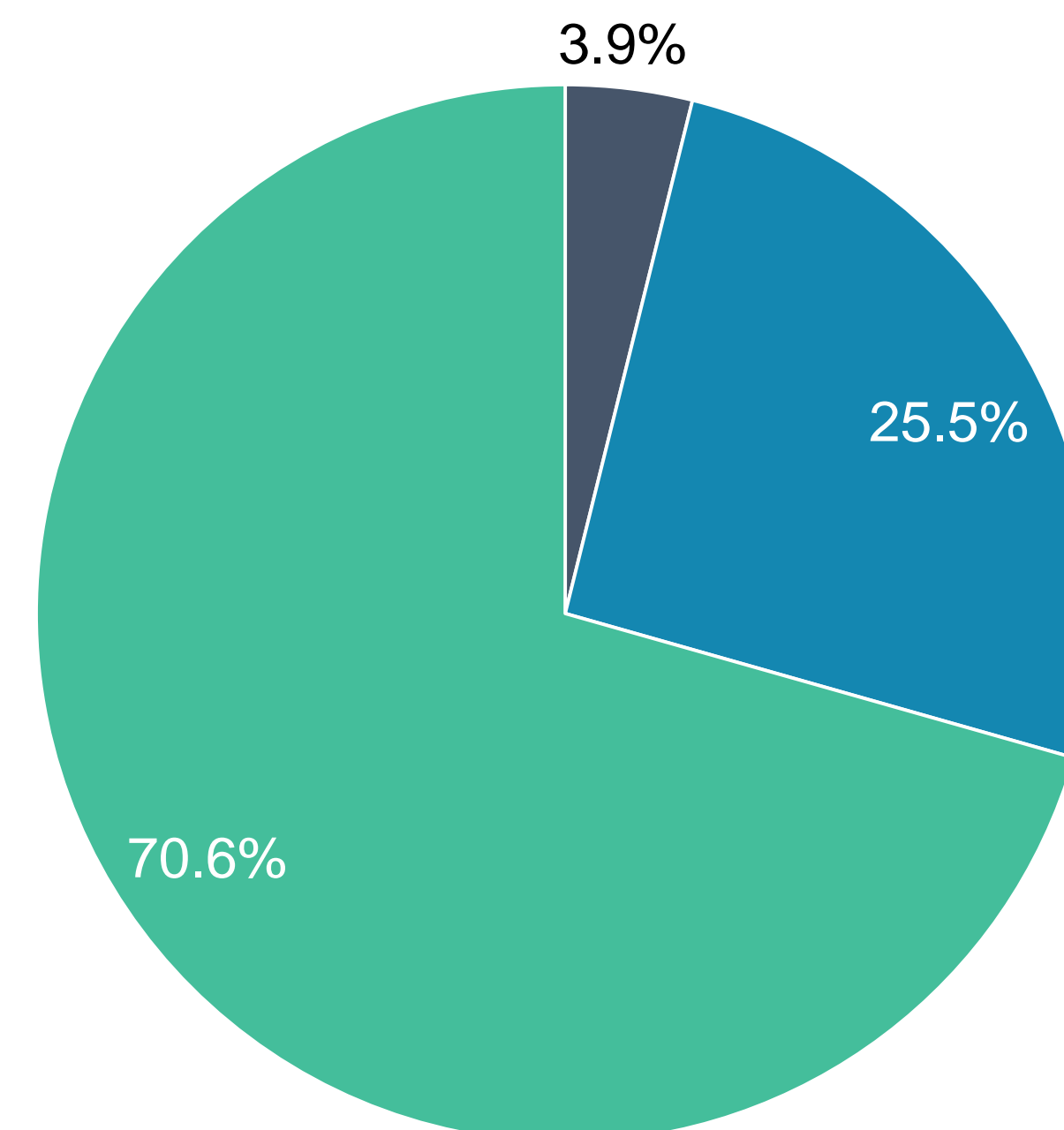
■ Mostly on my behalf
■ Mostly on behalf of other parties

Q: Usually, do you convert a FIAT currency to a cryptocurrency to invest in an ICO?



■ Yes
■ No

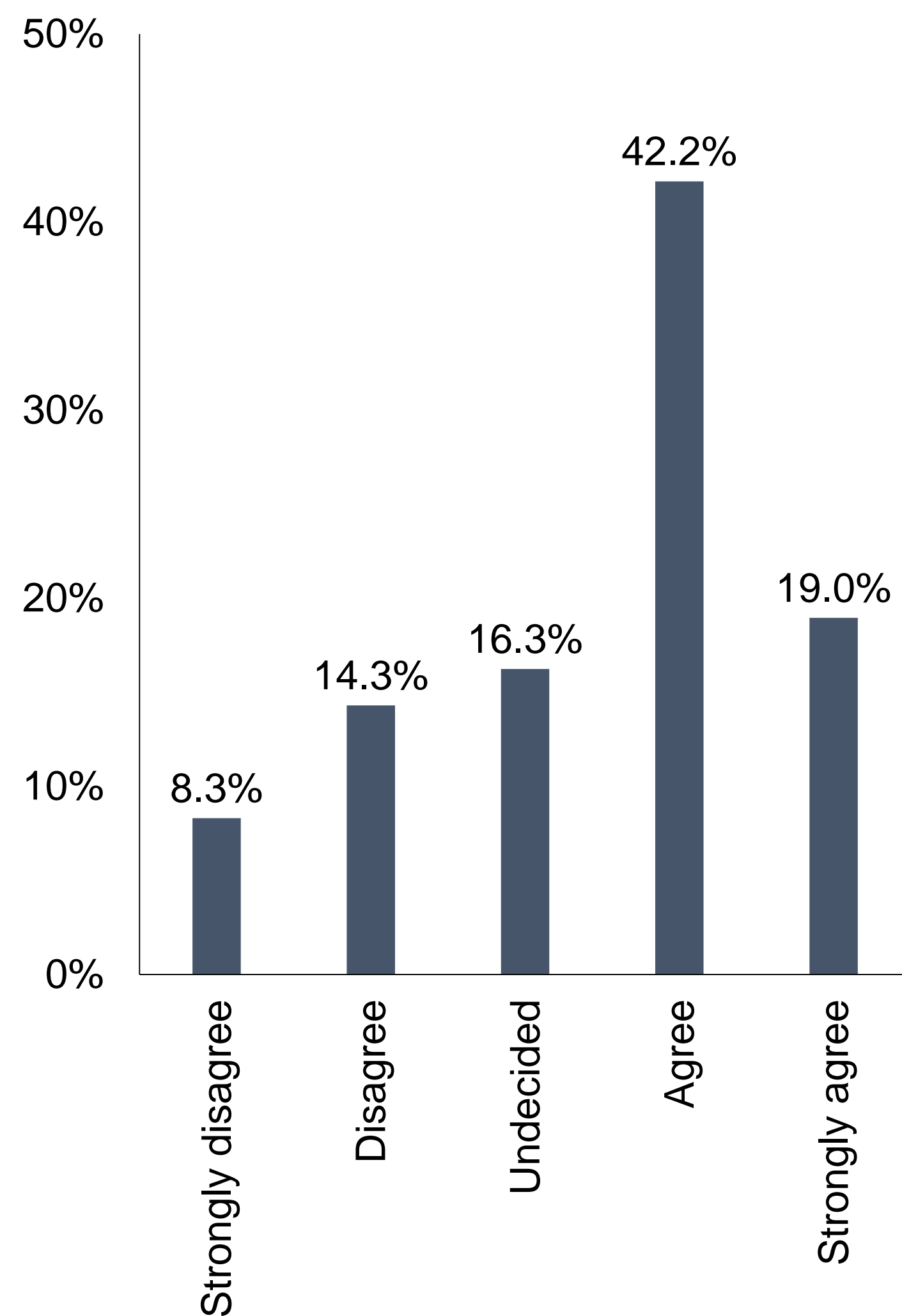
Q: Would you consider yourself a day trader, a trader, or a holder?



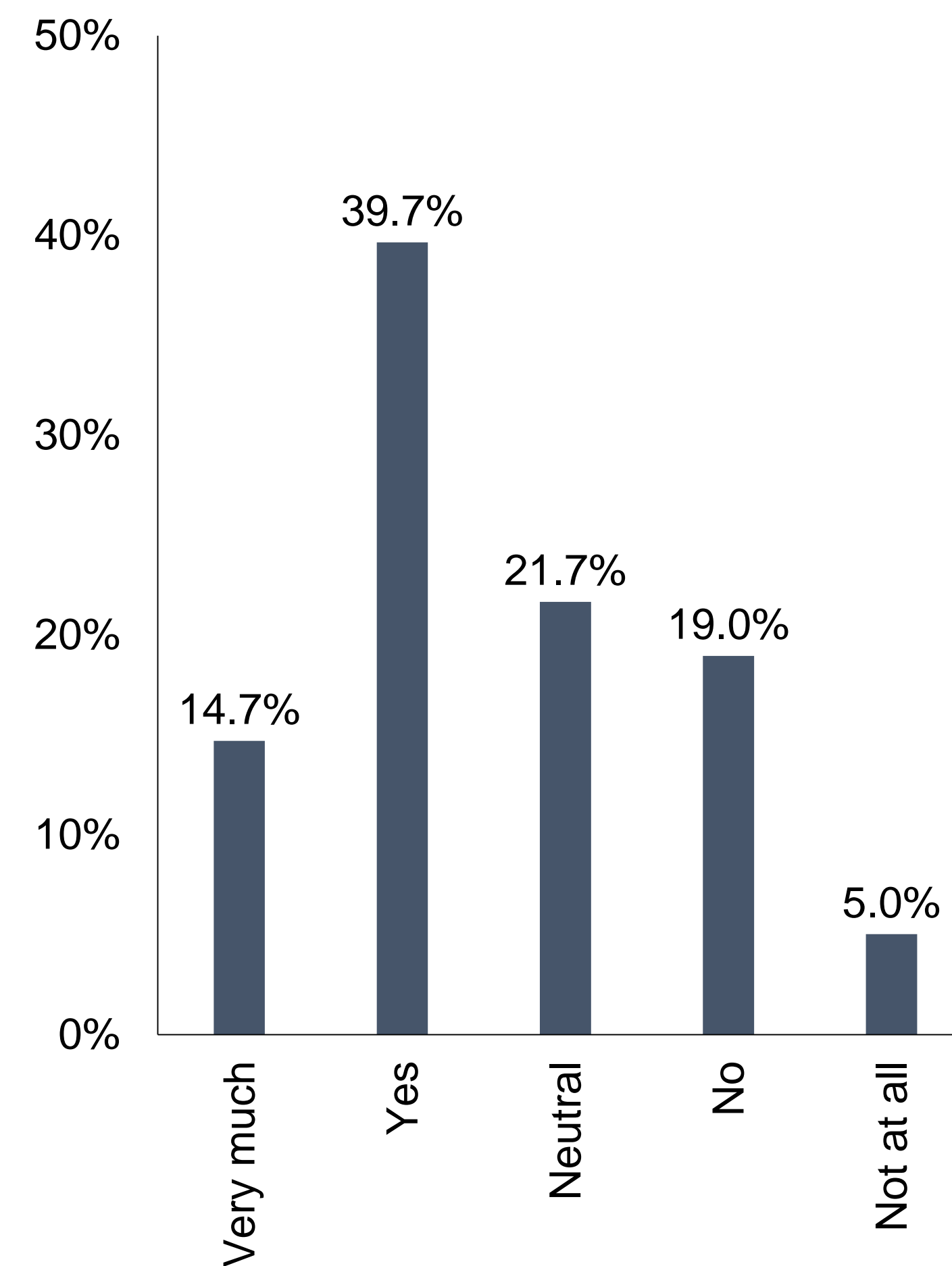
■ Day trader
■ Trader
■ Holder

Regulation and fraud

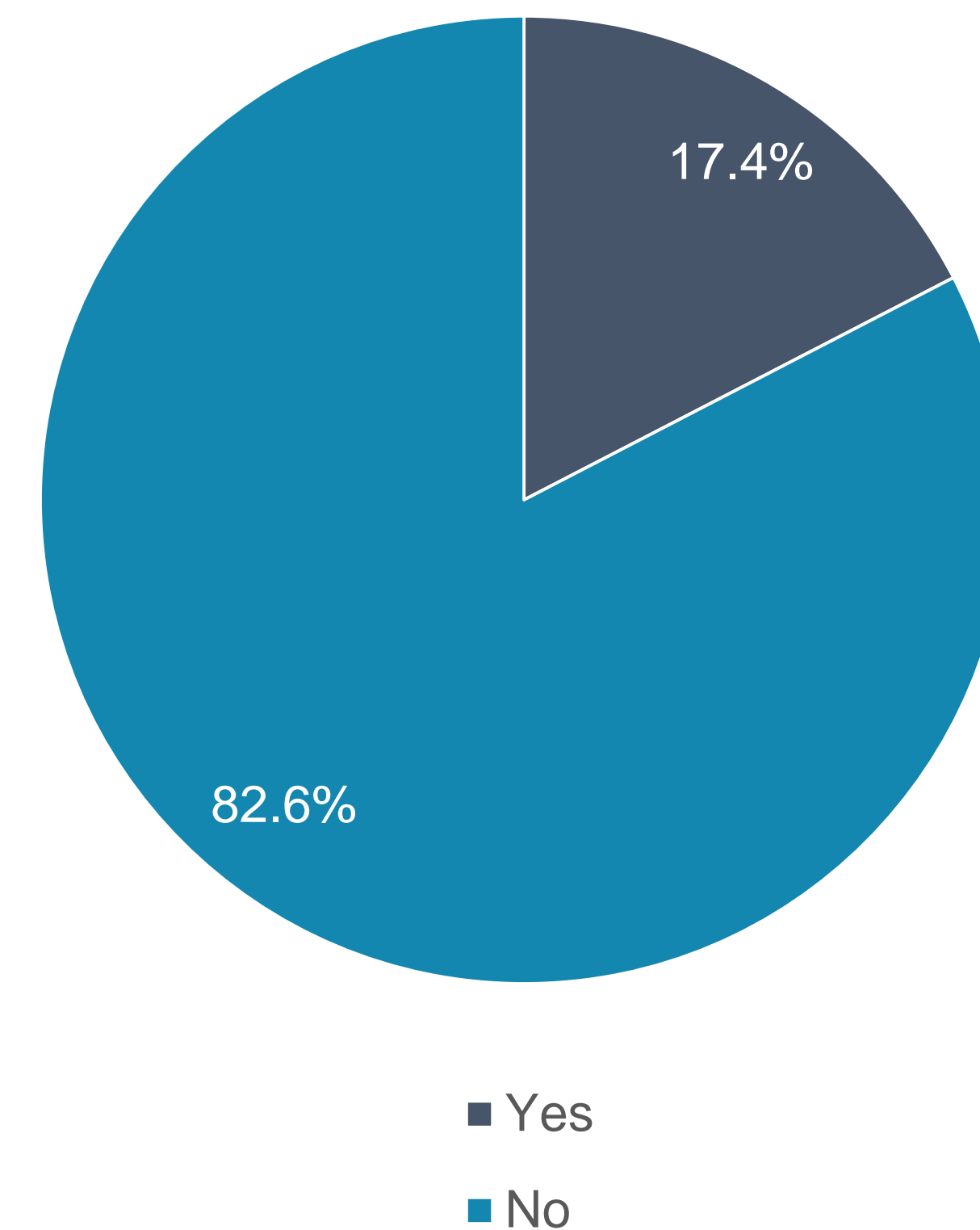
Q: Please indicate your level of agreement with the following statement: "ICO regulation should be more strict."



Q: Are you afraid of fraud when investing in ICOs?



Q: Have you ever invested in an ICO that eventually turned out to be fraudulent?



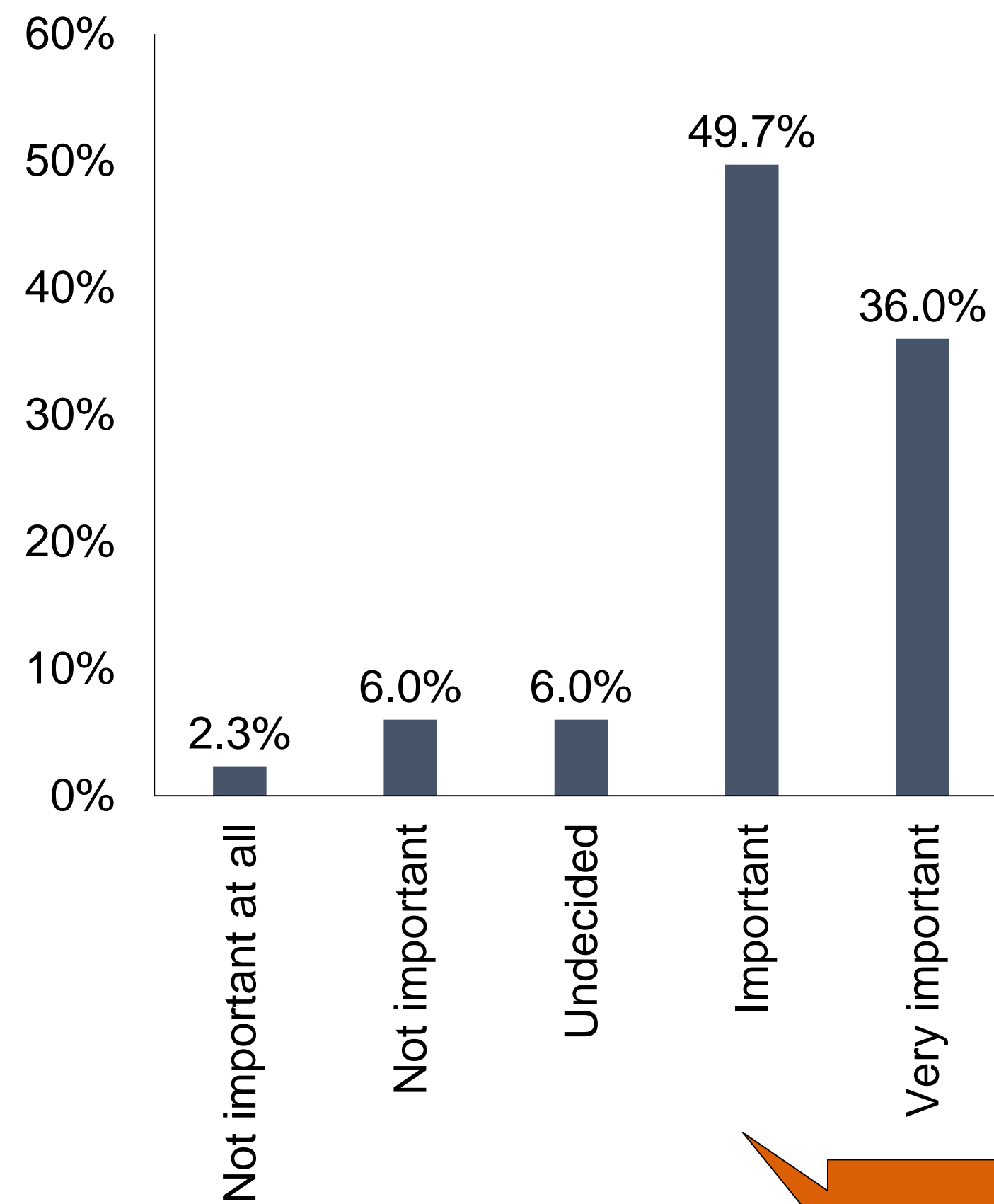
Part 4: Investment motives and behavior

Assessing why and how respondents invested in ICOs

Investment motives (1/3)

Q: In general, how important are the following motives in your decision to invest in ICOs?

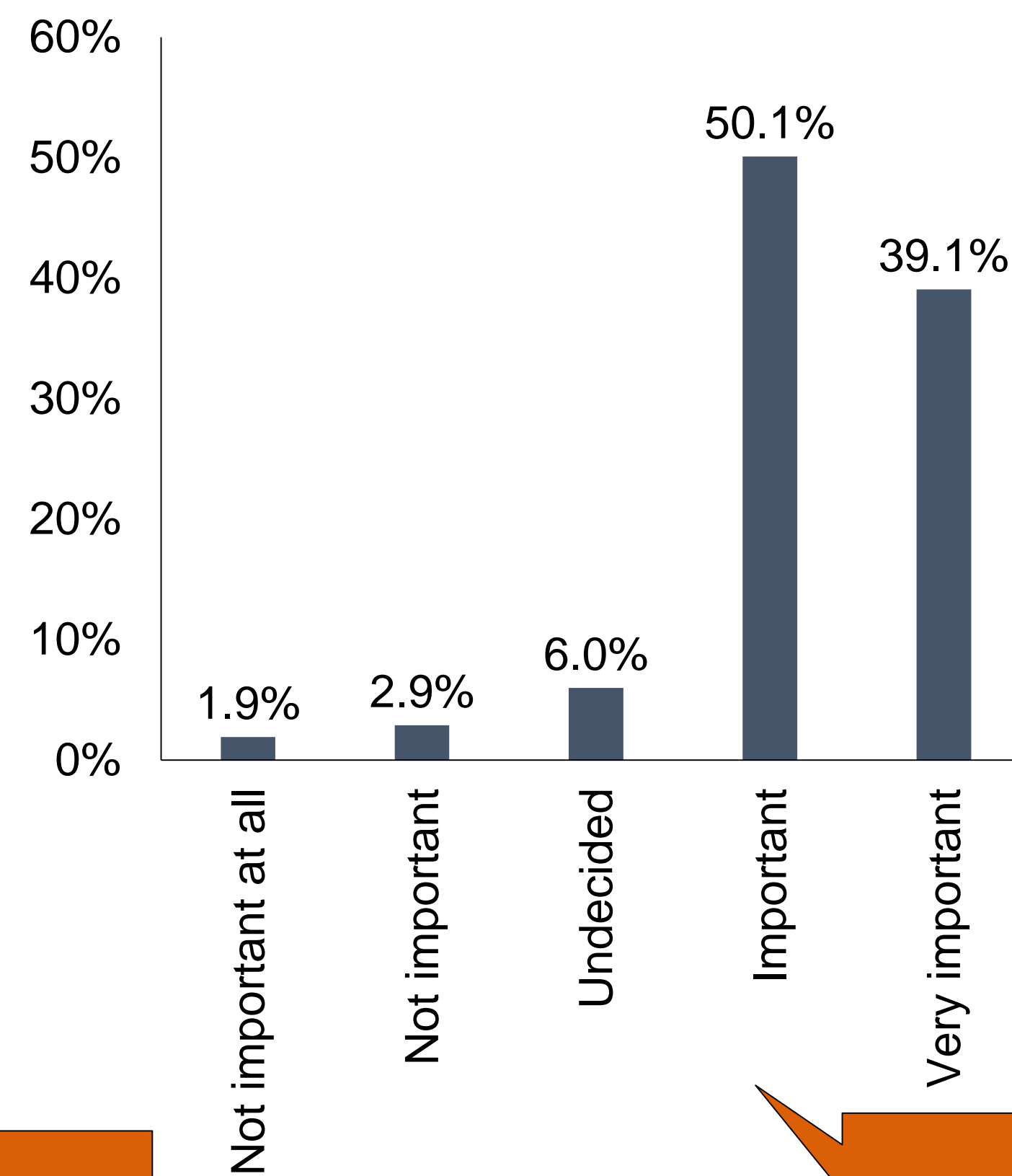
Personal enthusiasm for the technology



Mean	Std. Dev.
4.11	0.92

3rd
Most important

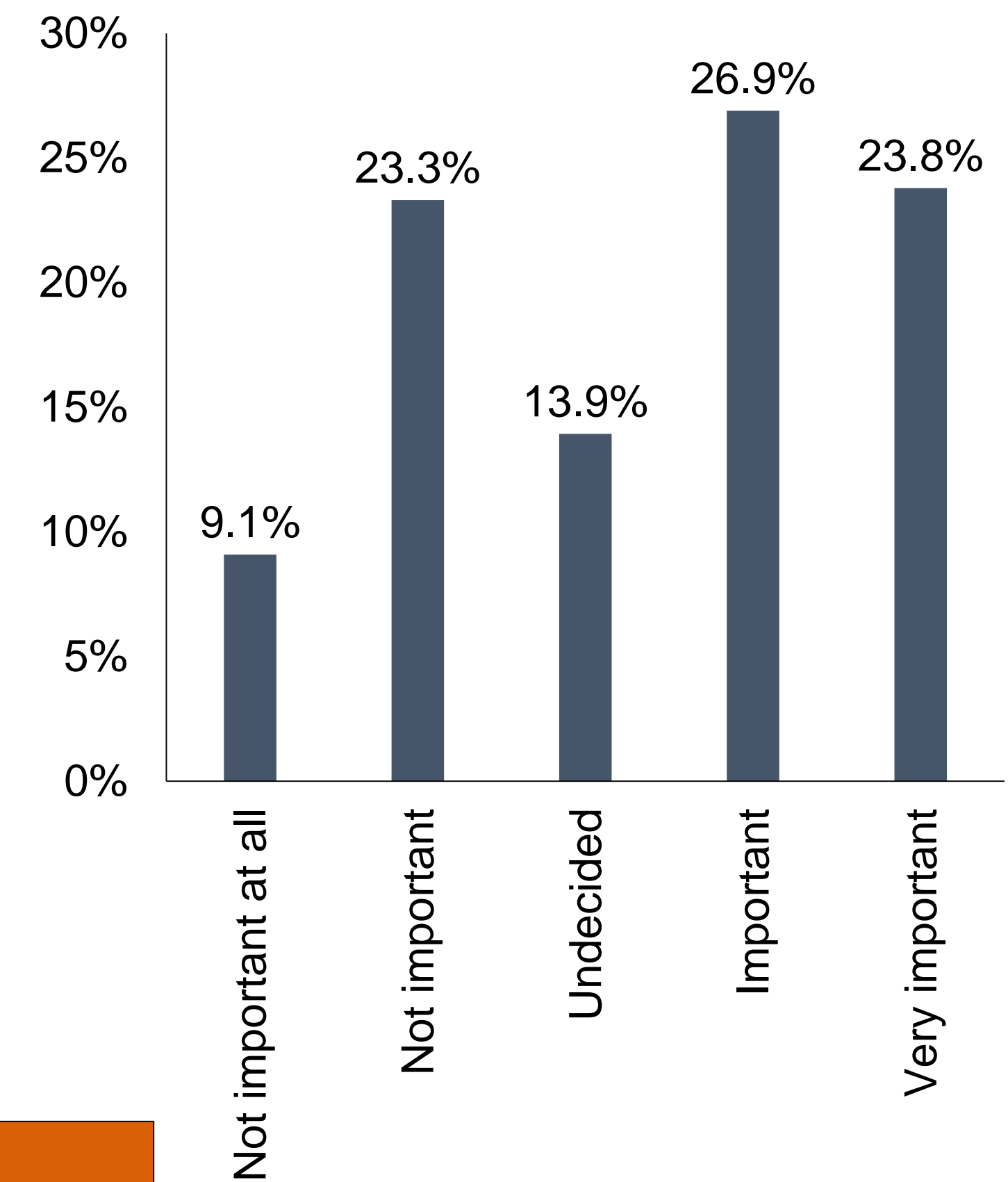
Personal enthusiasm for the business model or business idea of the ICO venture



Mean	Std. Dev.
4.21	0.83

2nd
Most important

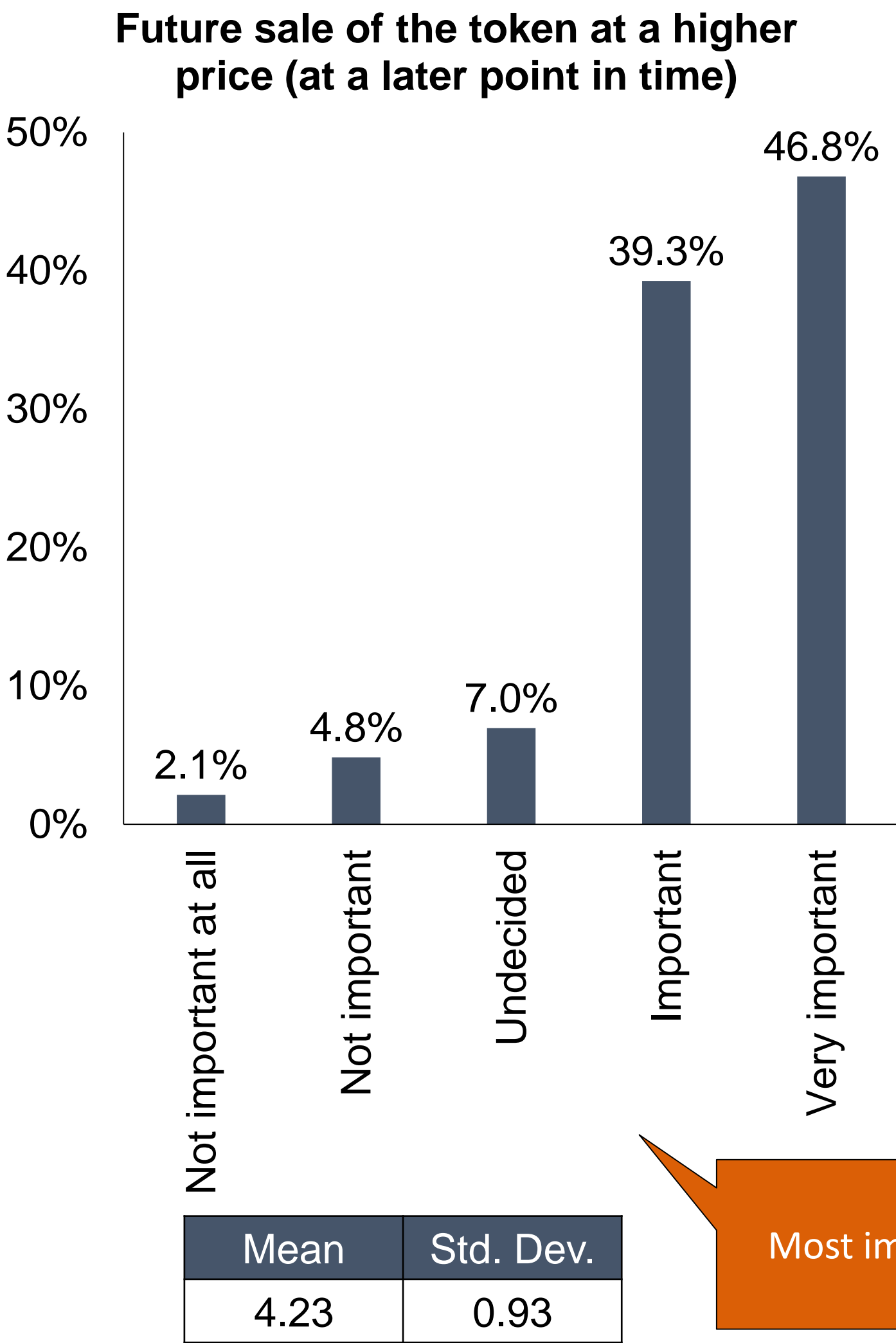
Future sale of the token at a higher price (shortly after the ICO)



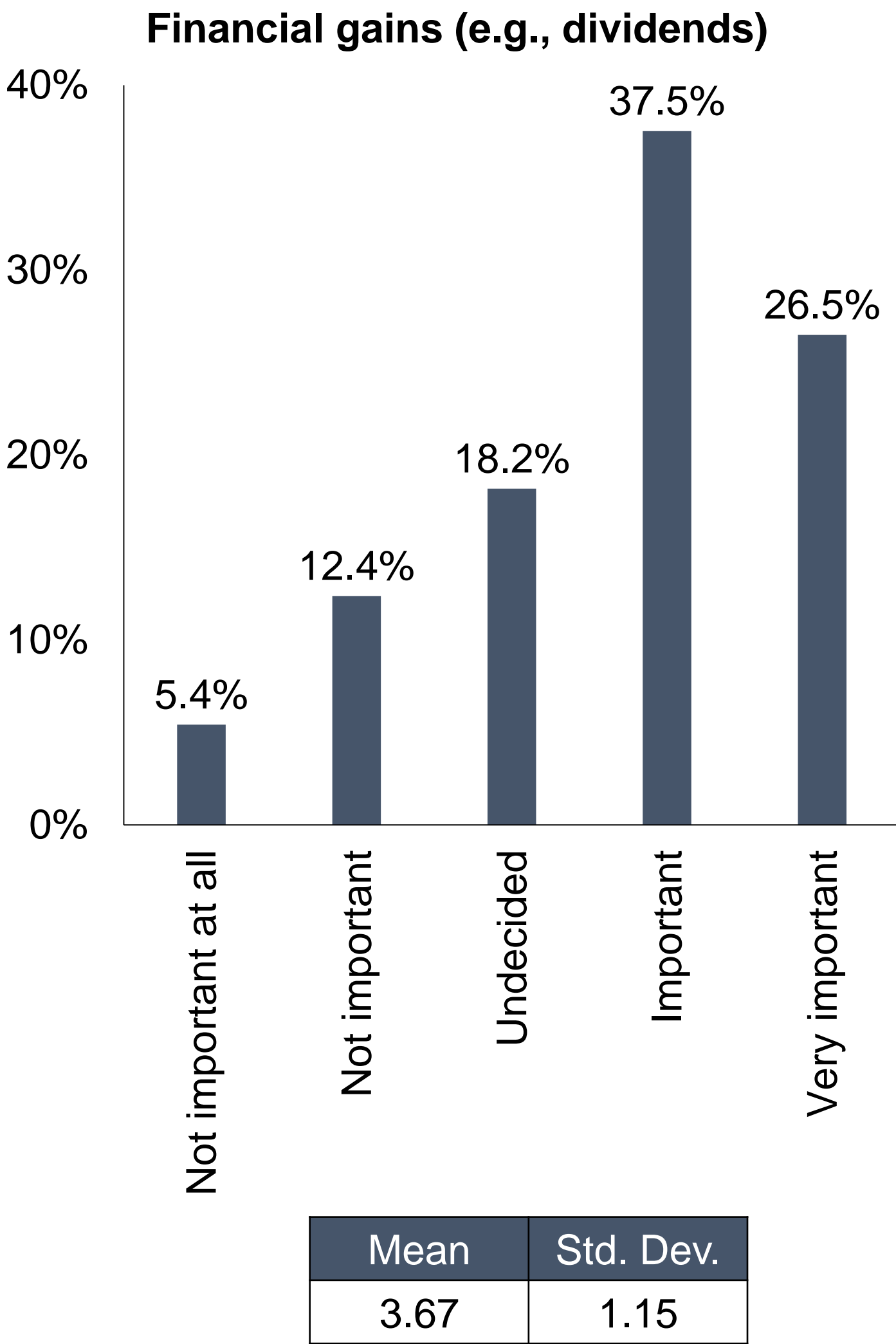
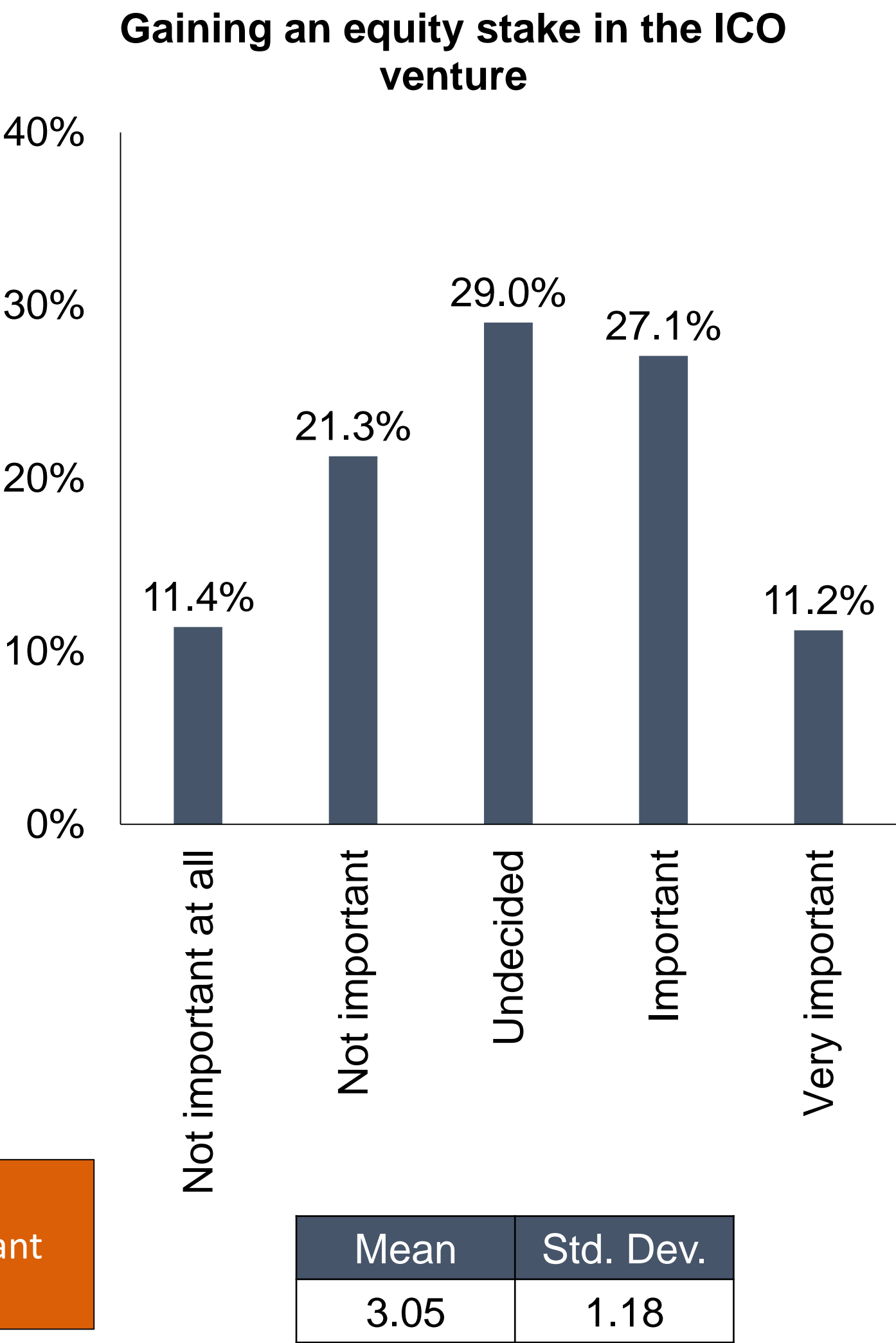
Mean	Std. Dev.
3.30	1.33

Investment motives (2/3)

Q: In general, how important are the following motives in your decision to invest in ICOs?

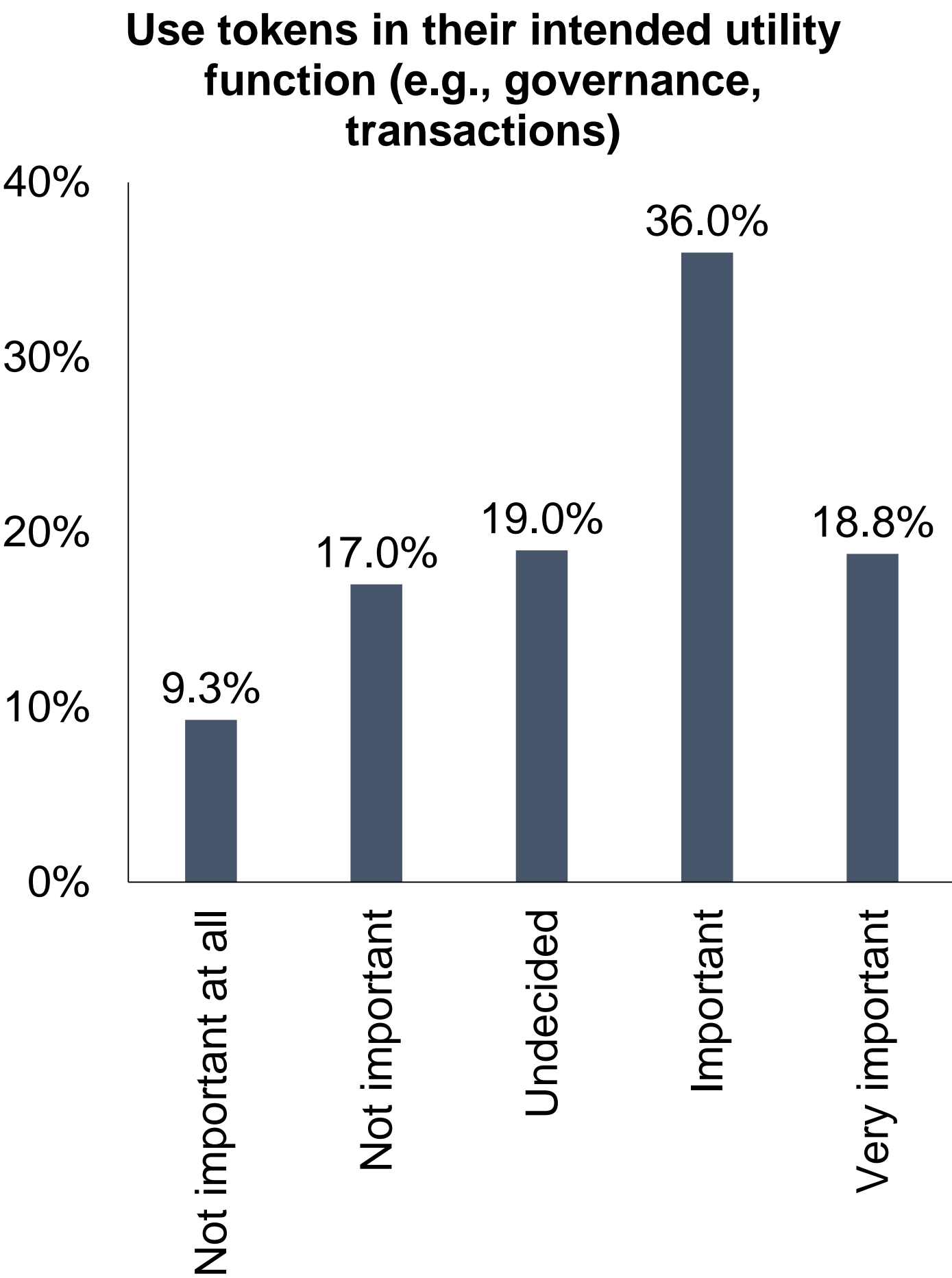


Most important

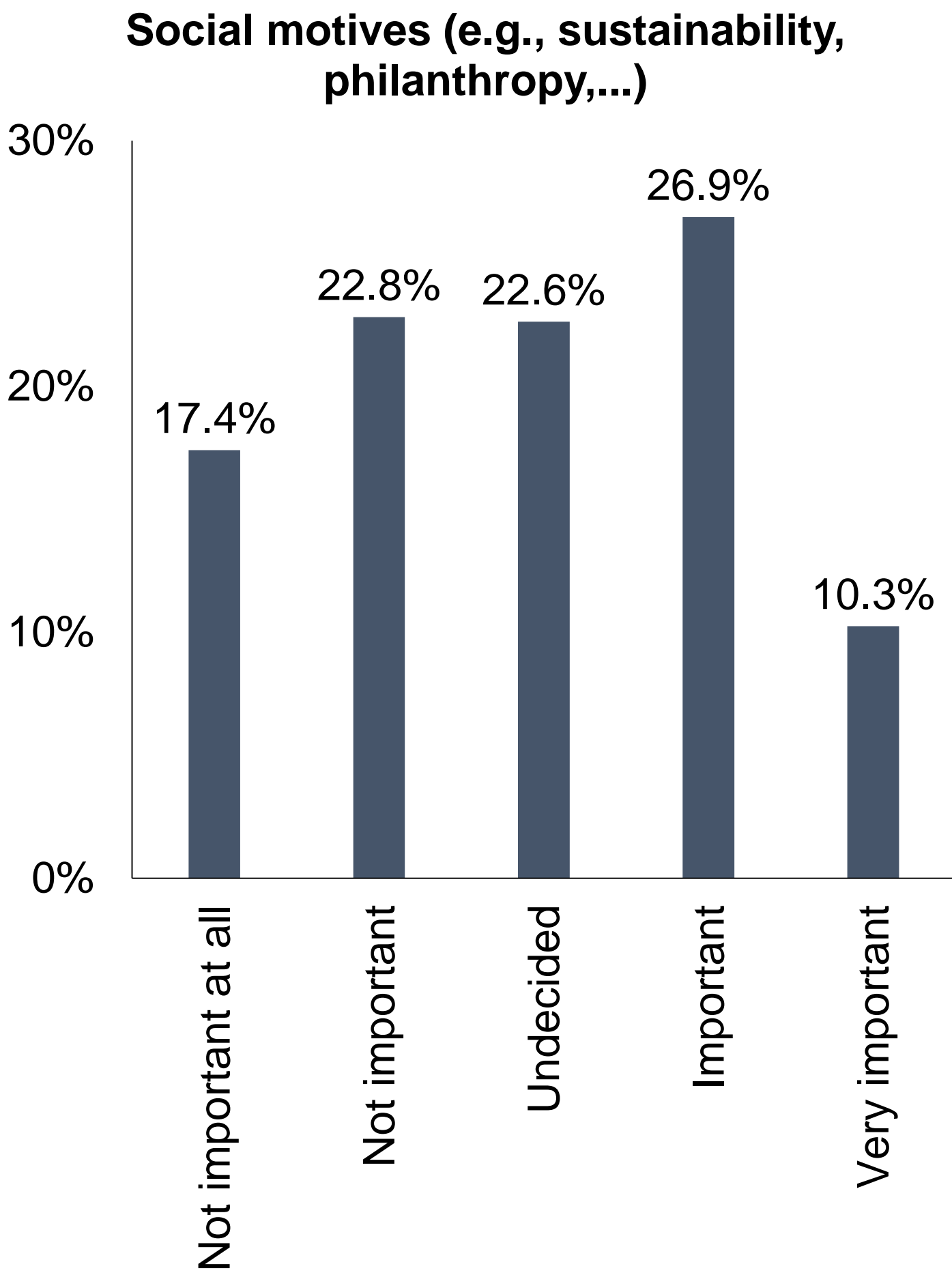


Investment motives and behaviour (3/3)

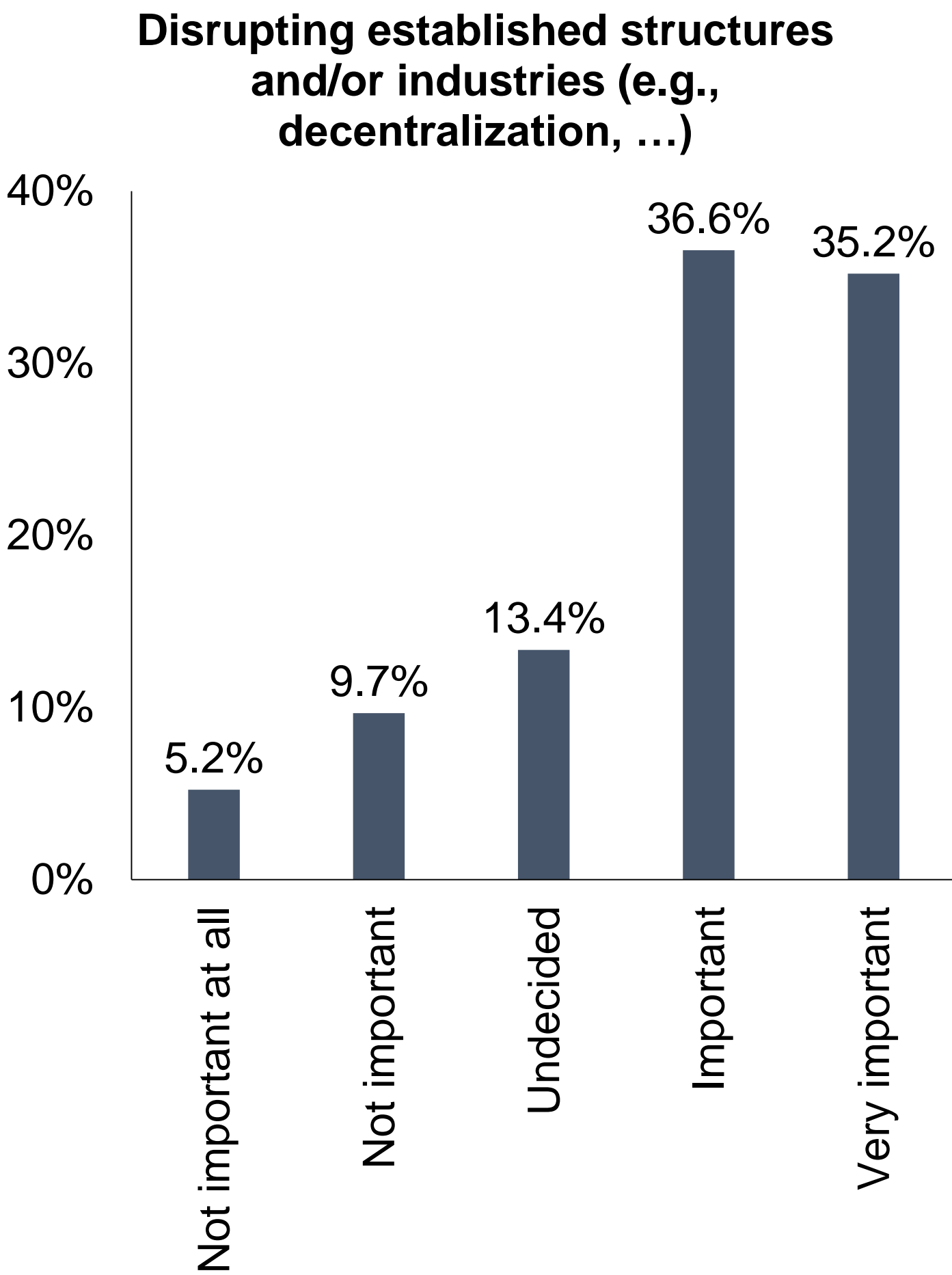
Q: In general, how important are the following motives in your decision to invest in ICOs?



Mean	Std. Dev.
3.38	1.22



Mean	Std. Dev.
2.90	1.26



Mean	Std. Dev.
3.87	1.15

Information seeking behavior

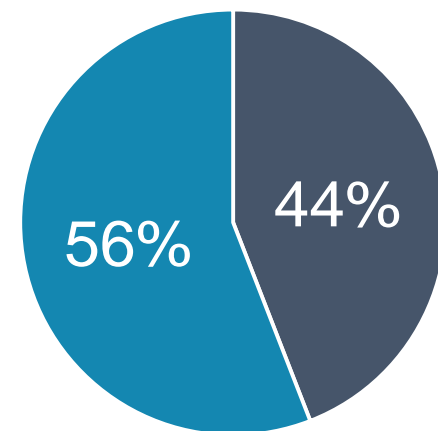
25

Q: Which of the following sources of information do you consult before investing in an ICO?

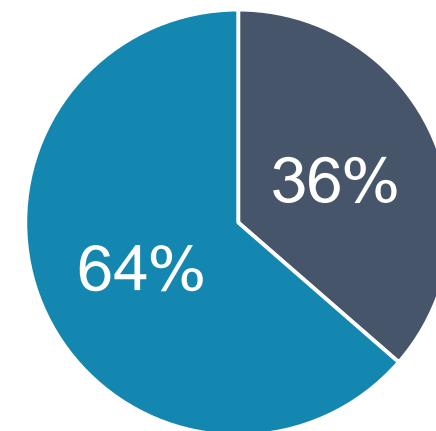
Yes

No

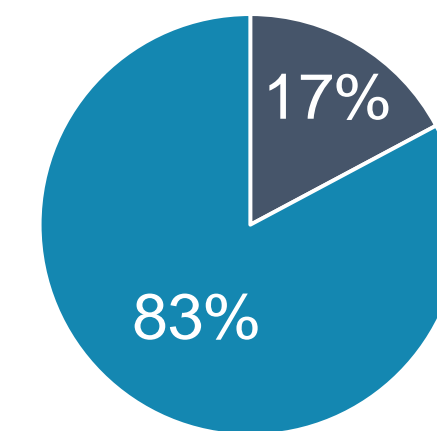
Venture's Twitter



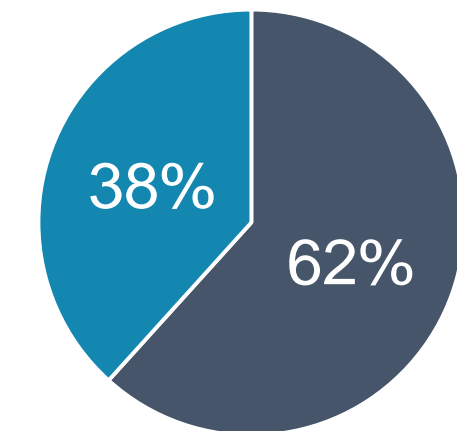
Venture's LinkedIn



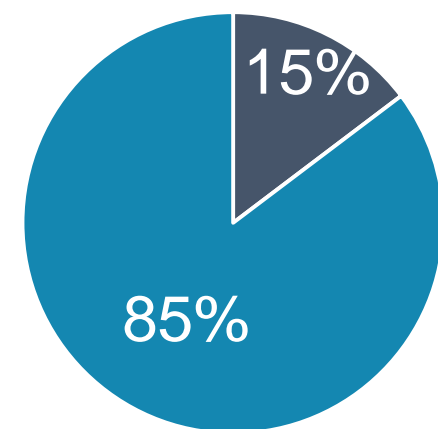
Venture's Facebook



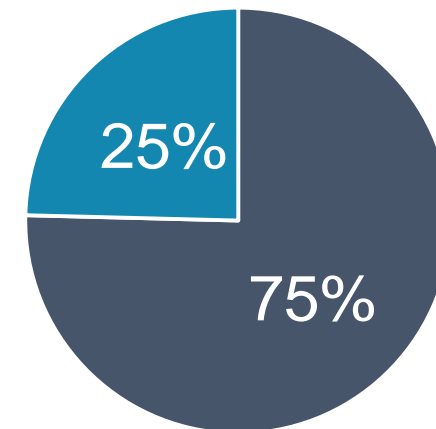
Venture's Telegram



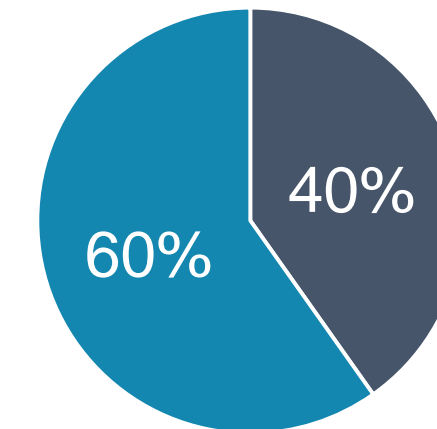
Venture's Slack



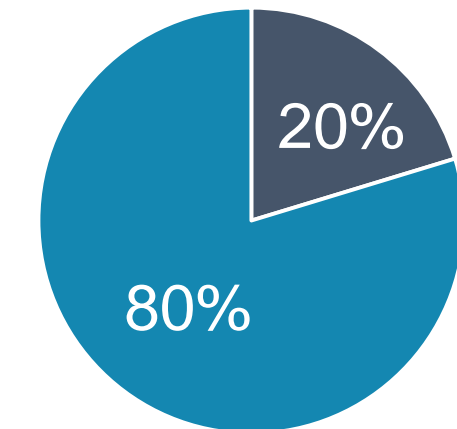
Venture's website



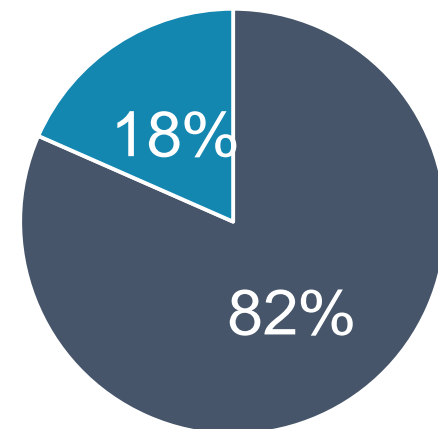
Venture's GitHub



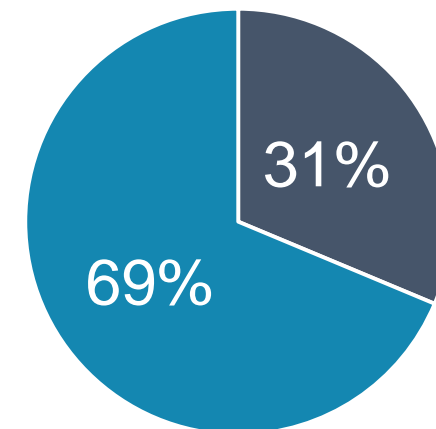
Venture's Discord



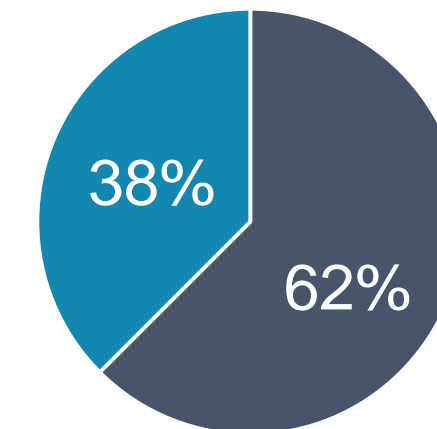
Venture's white paper



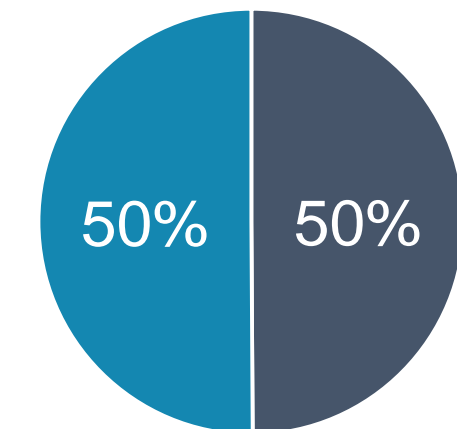
Bitcointalk



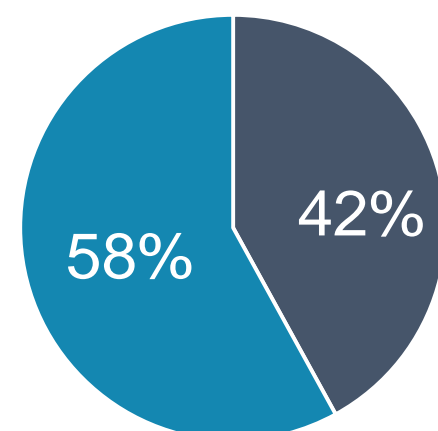
Reddit



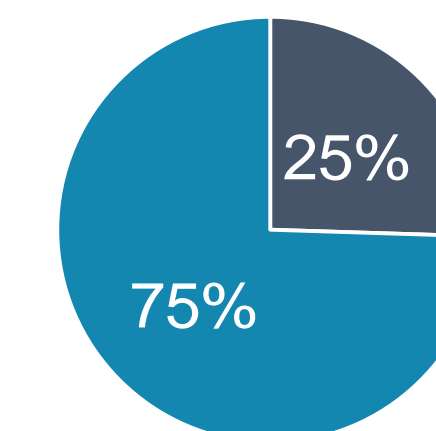
ICO-tracking sites



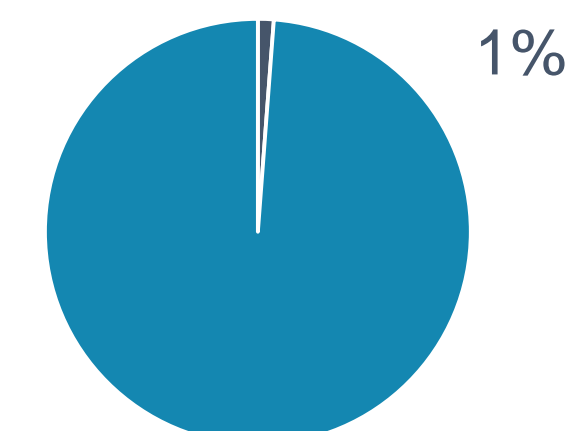
ICO news sites



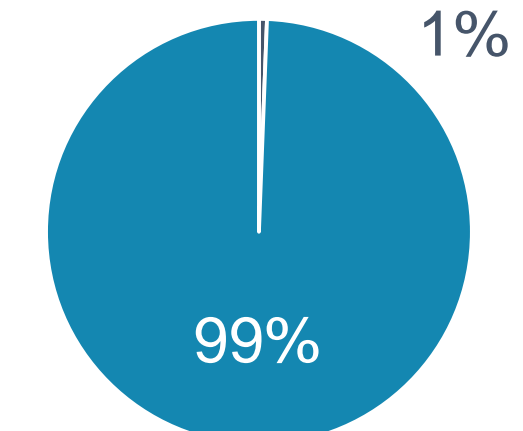
Conference presentations



None of the above

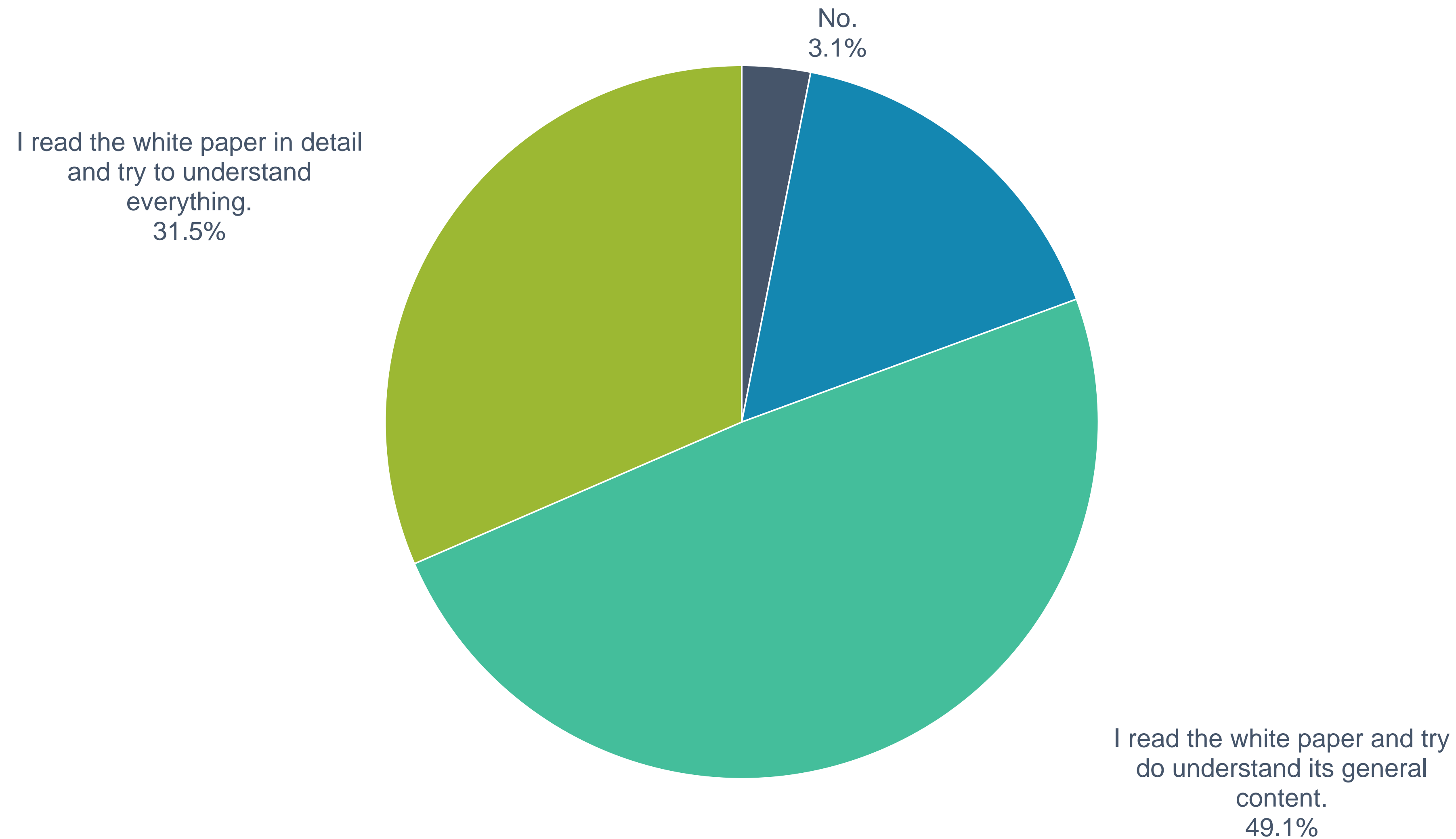


None at all



White paper

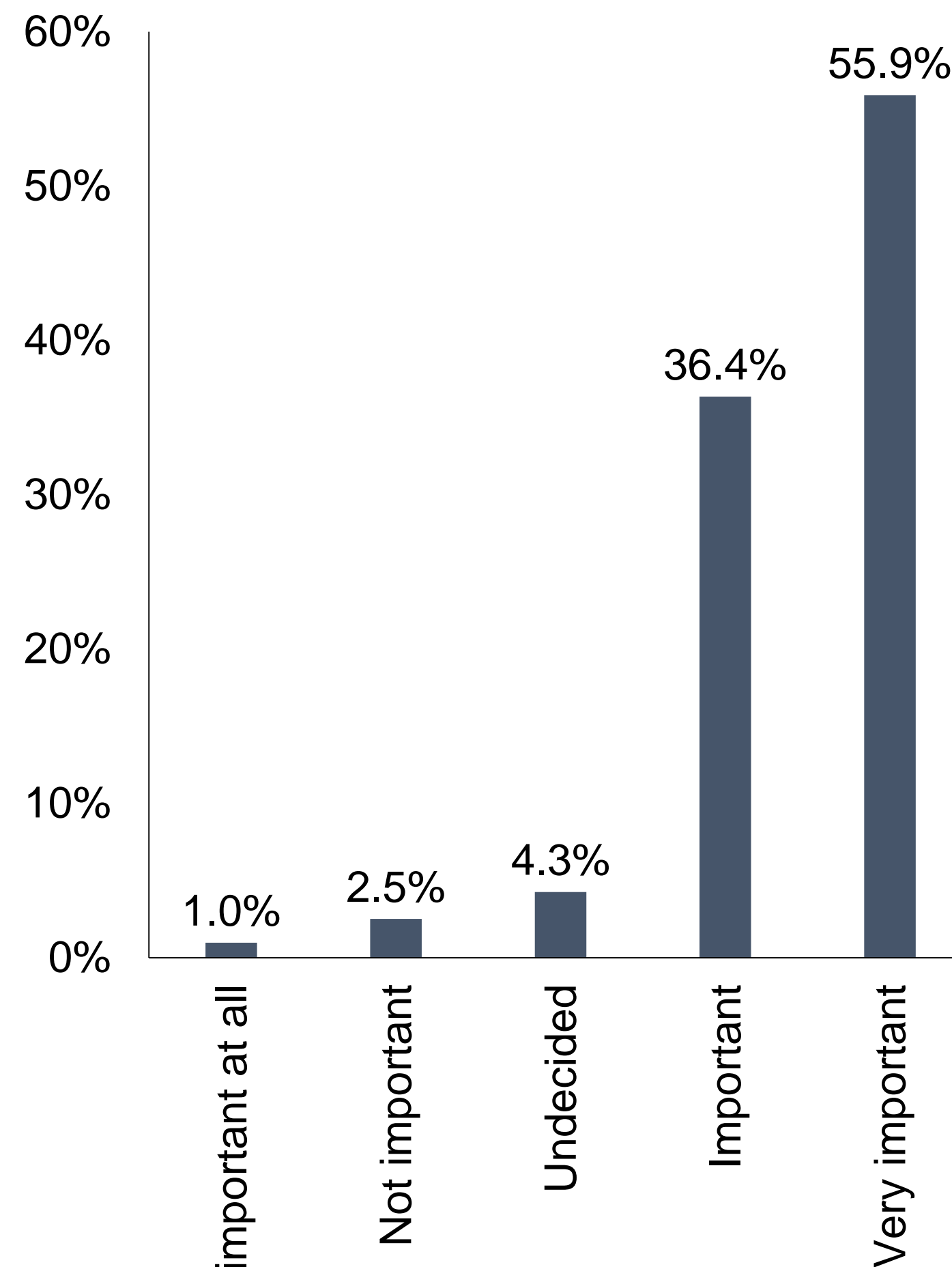
Q: Do you usually read the ICO's white paper before investing?



Determinants: venture (1/4)

Q: Overall, how important are the following factors related to the venture in your investment decision(s)?

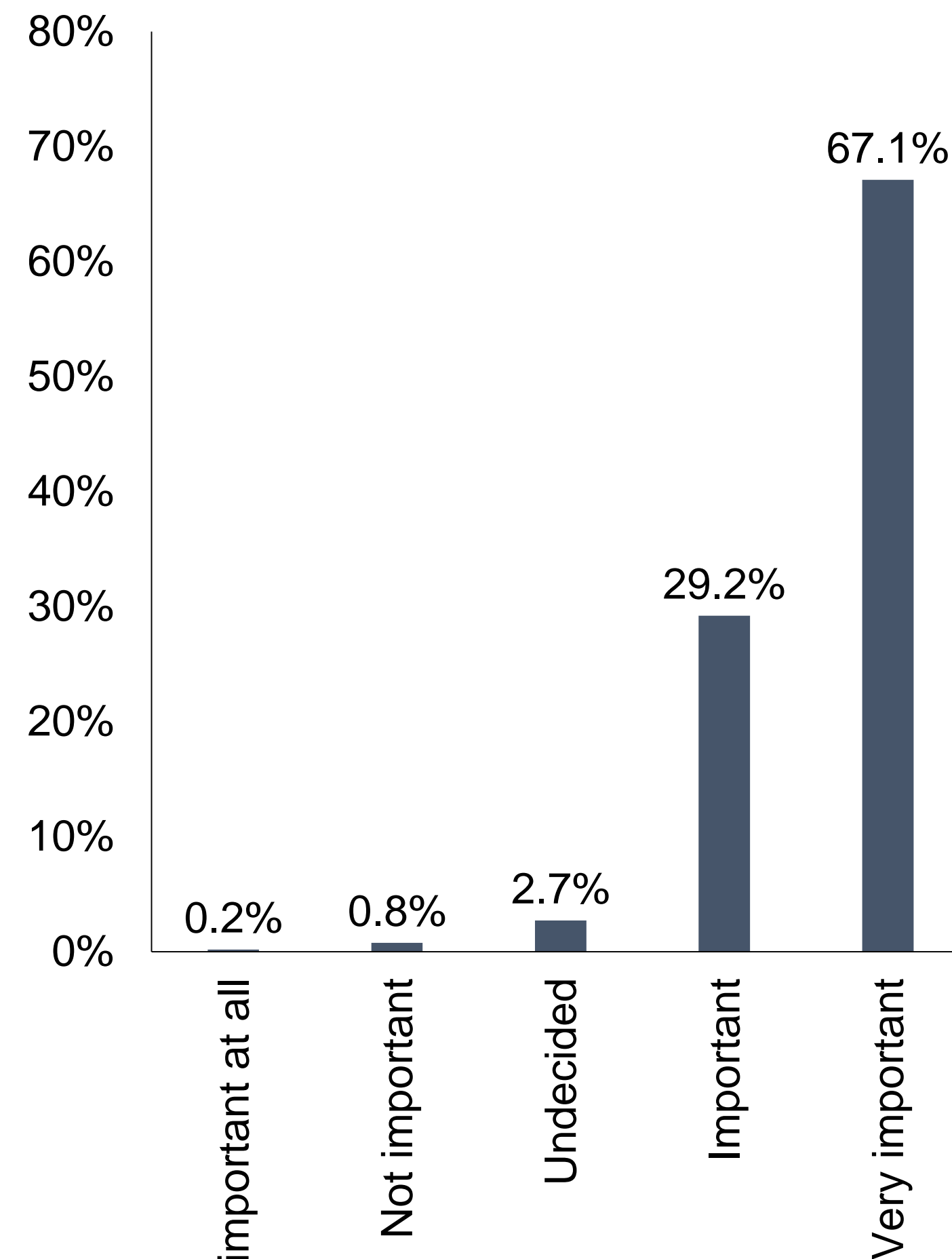
Venture's team reputable



Mean	Std. Dev.
4.44	0.77

2nd
Most important

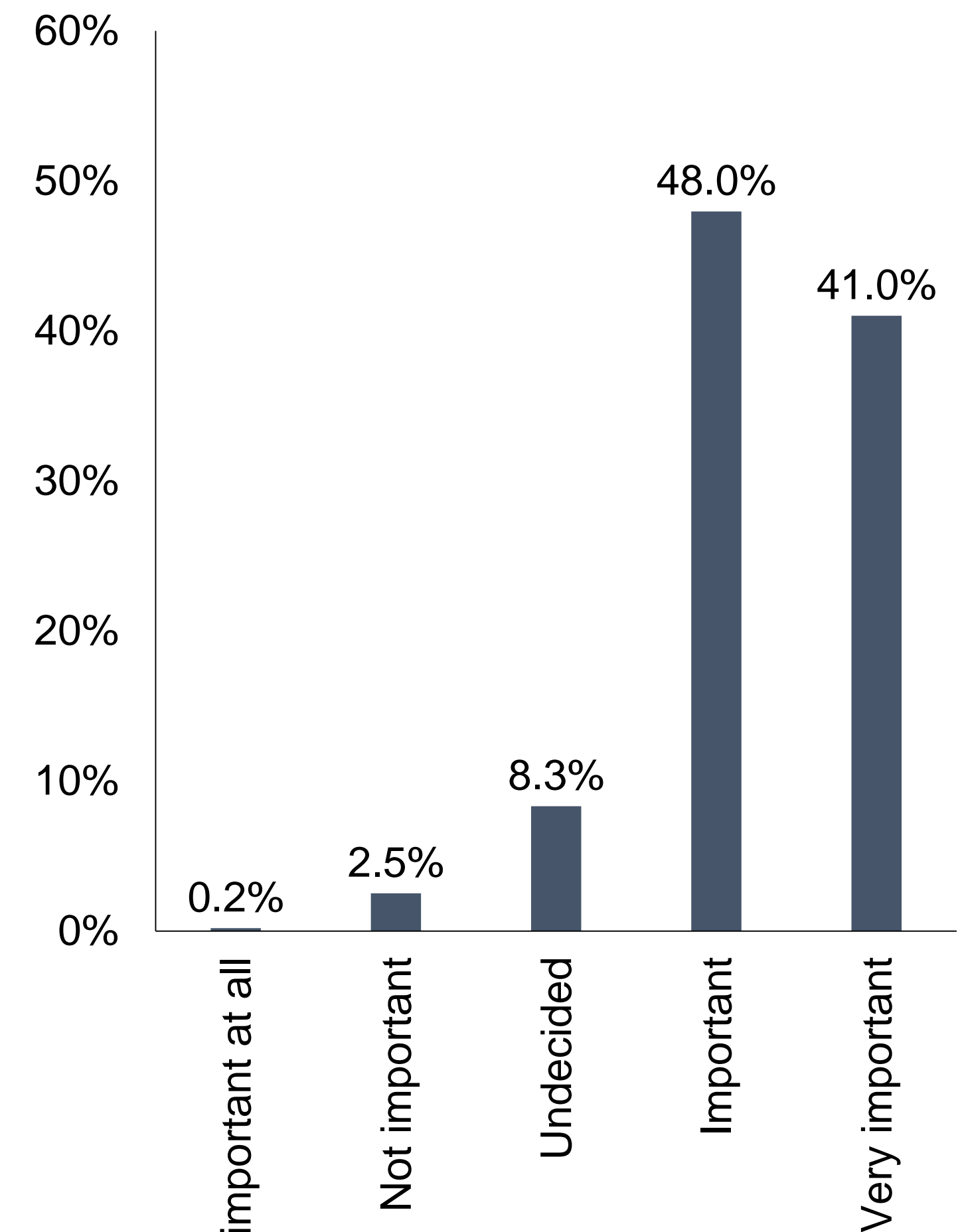
Venture's team seems competent



Mean	Std. Dev.
4.62	0.60

Most important

Venture's white paper



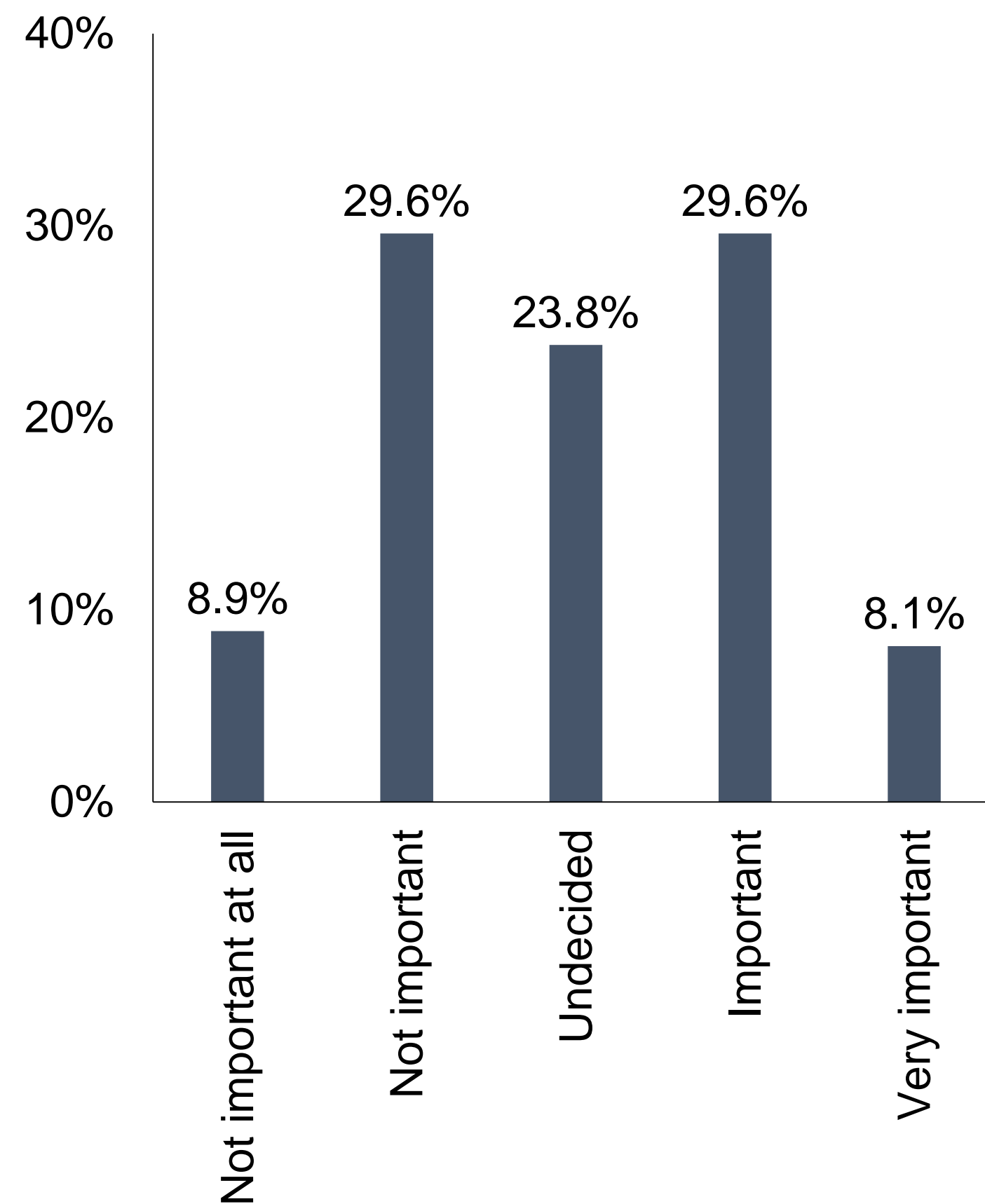
Mean	Std. Dev.
4.27	0.73

3rd
Most important

Determinants: venture (2/4)

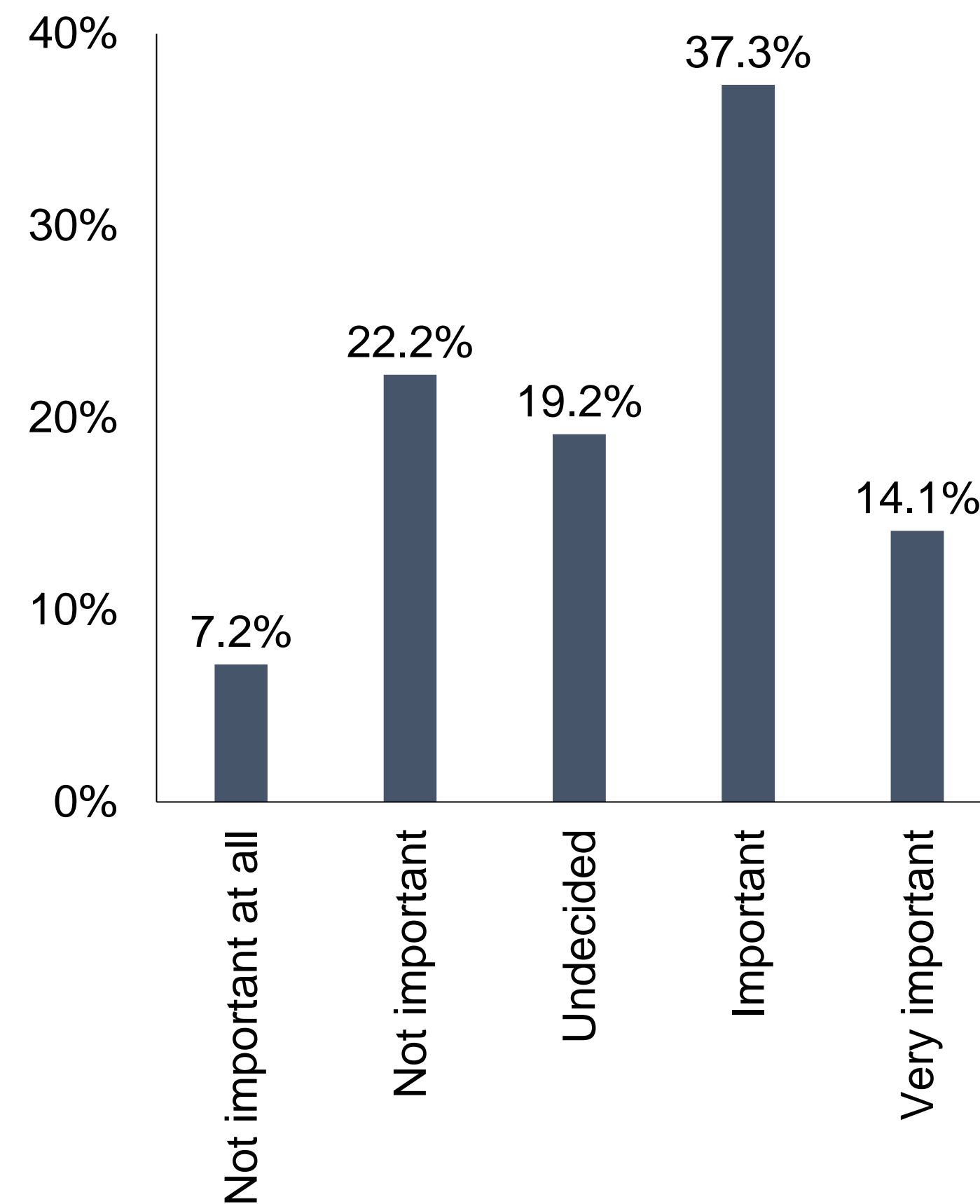
Q: Overall, how important are the following factors related to the venture in your investment decision(s)?

Venture's presence and activity on Twitter



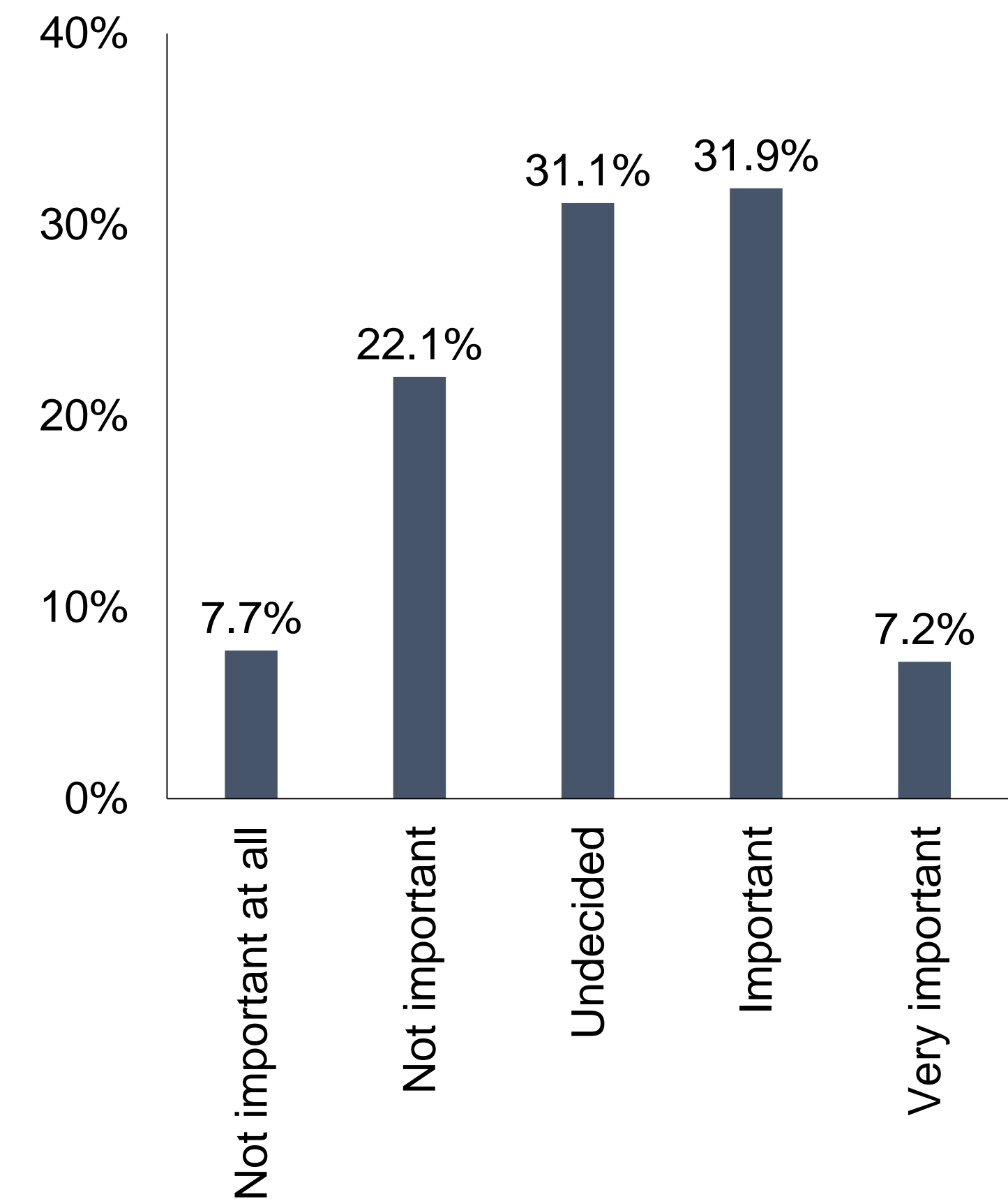
Mean	Std. Dev.
2.98	1.13

Venture's presence and activity on Telegram



Mean	Std. Dev.
3.29	1.17

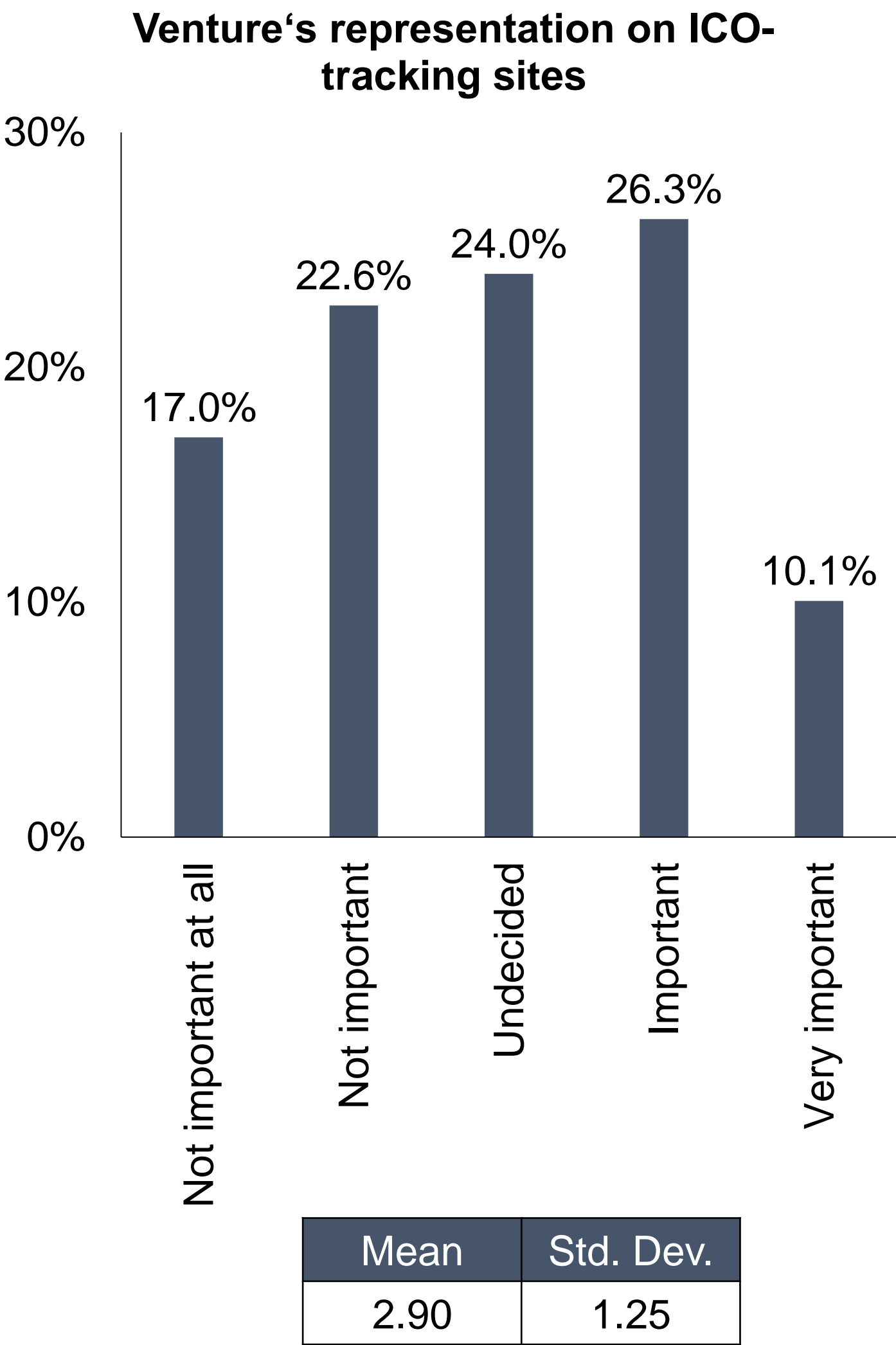
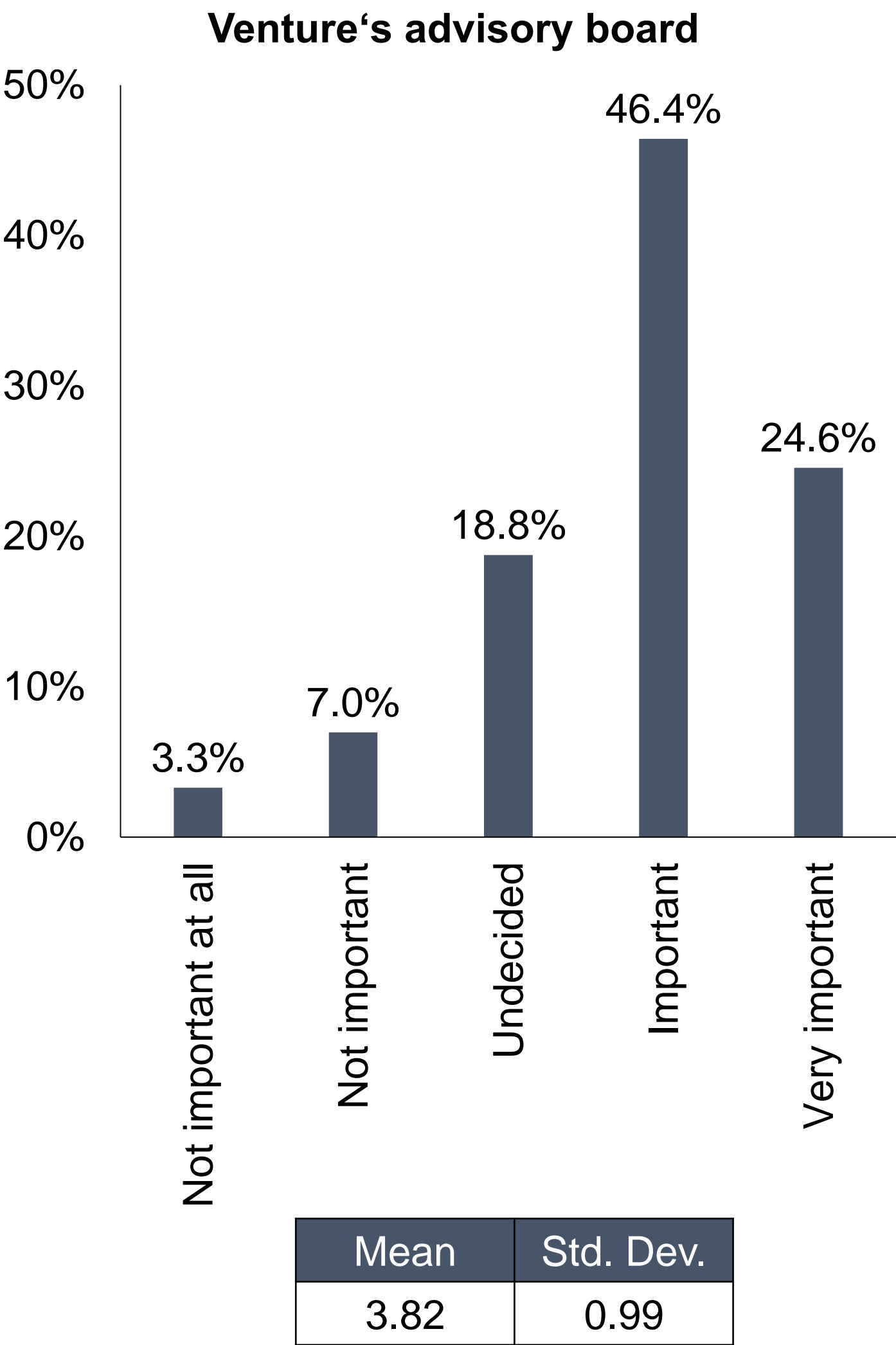
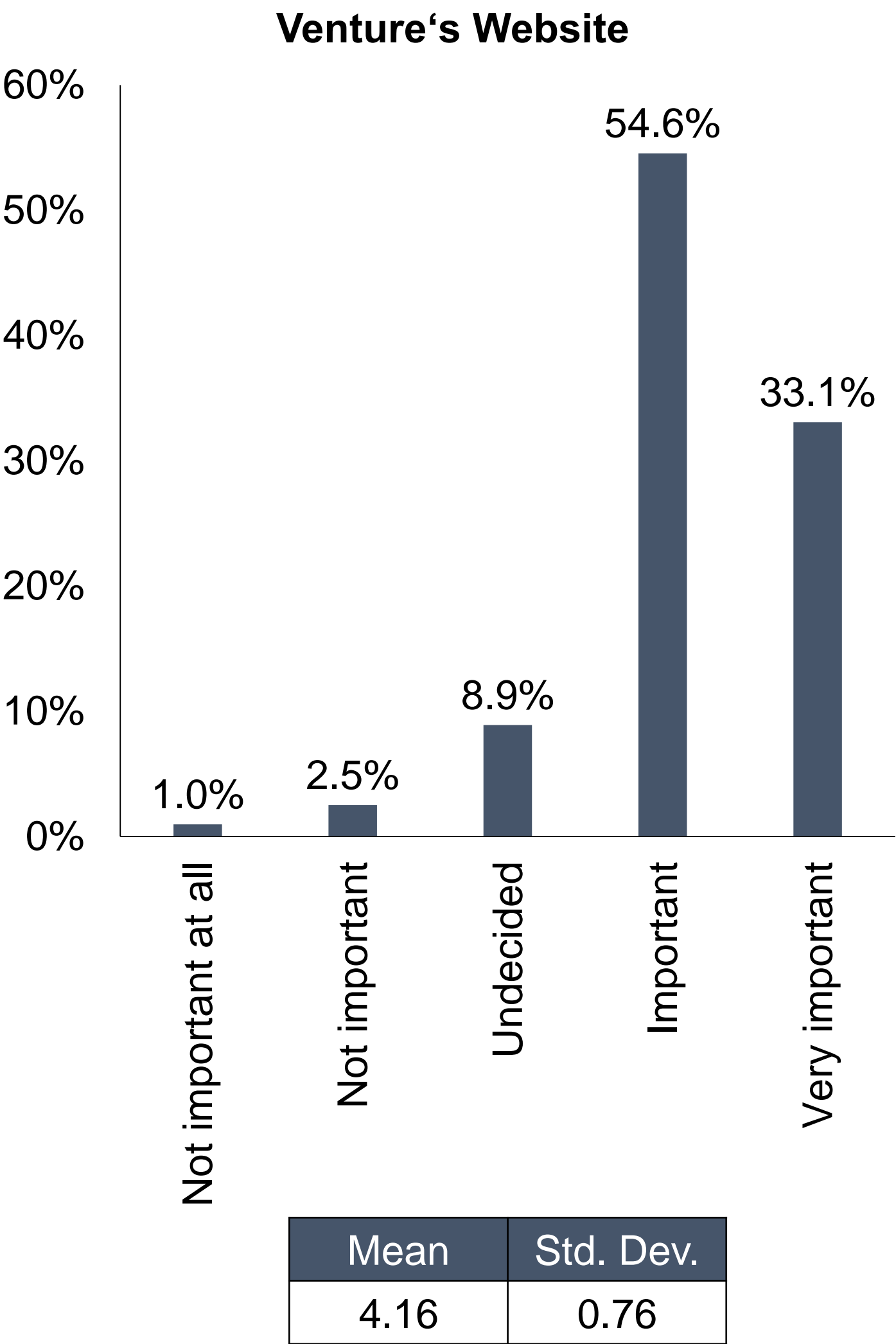
Venture's presence and activity on Reddit



Mean	Std. Dev.
3.09	1.06

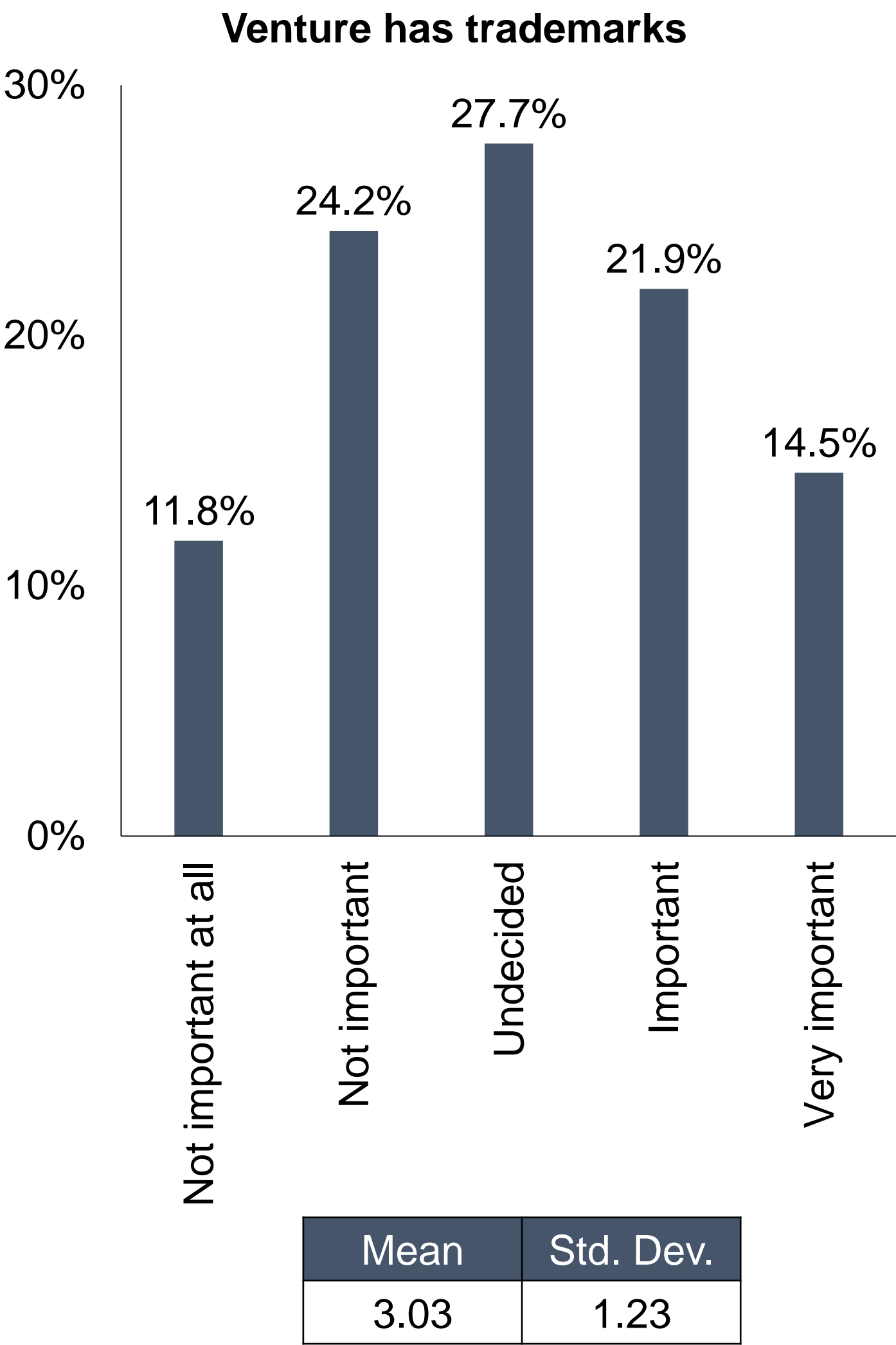
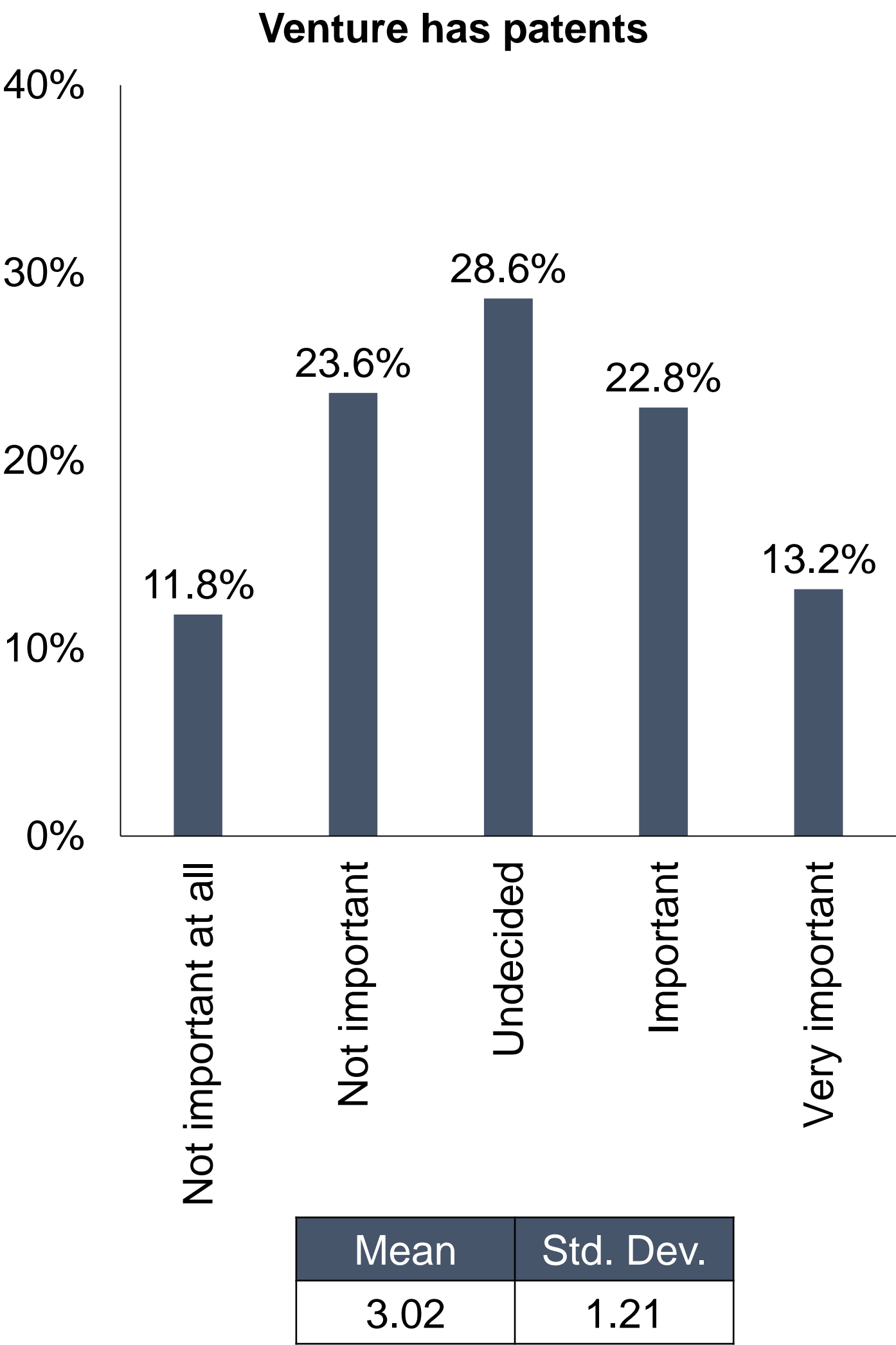
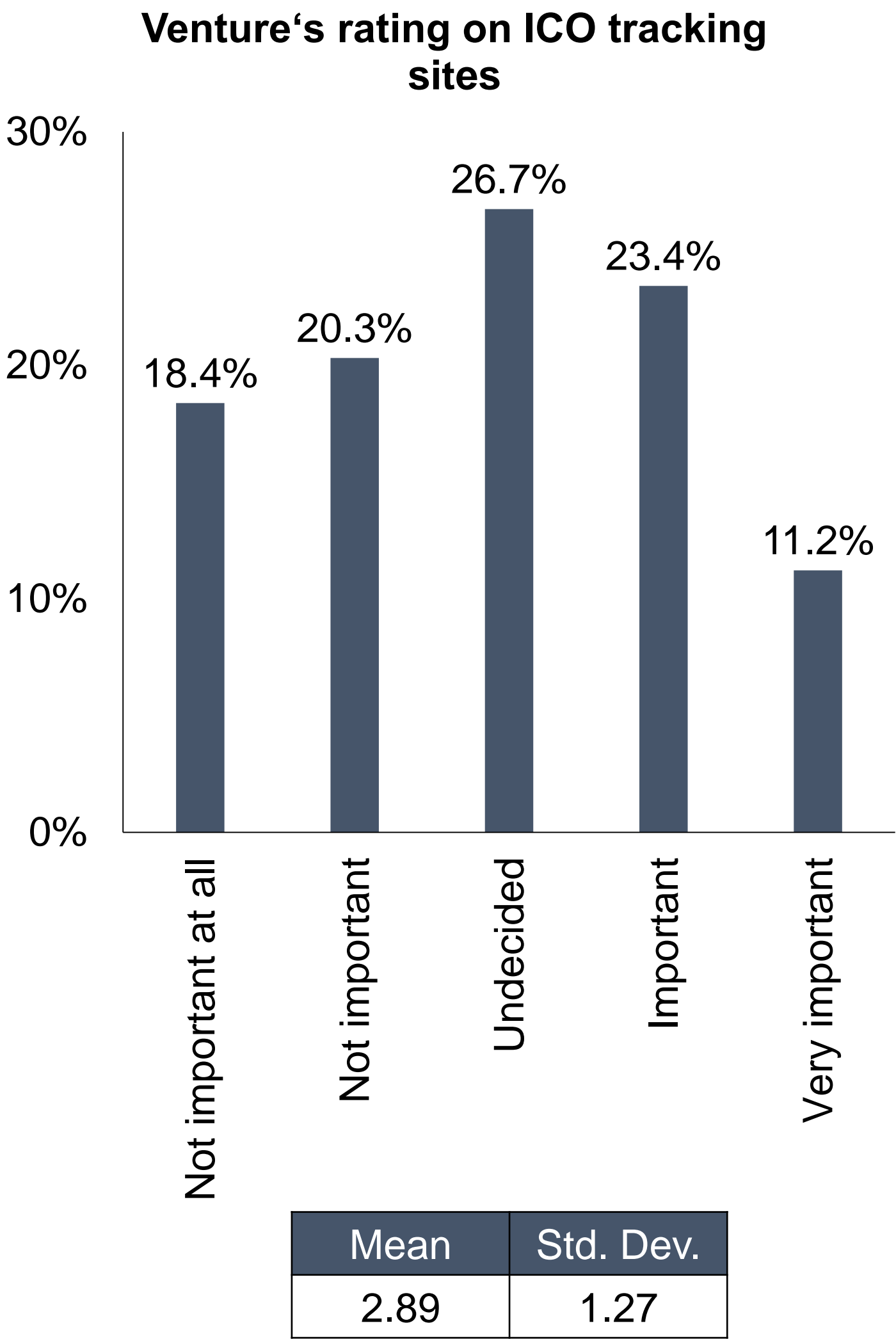
Determinants: venture (3/4)

Q: Overall, how important are the following factors related to the venture in your investment decision(s)?



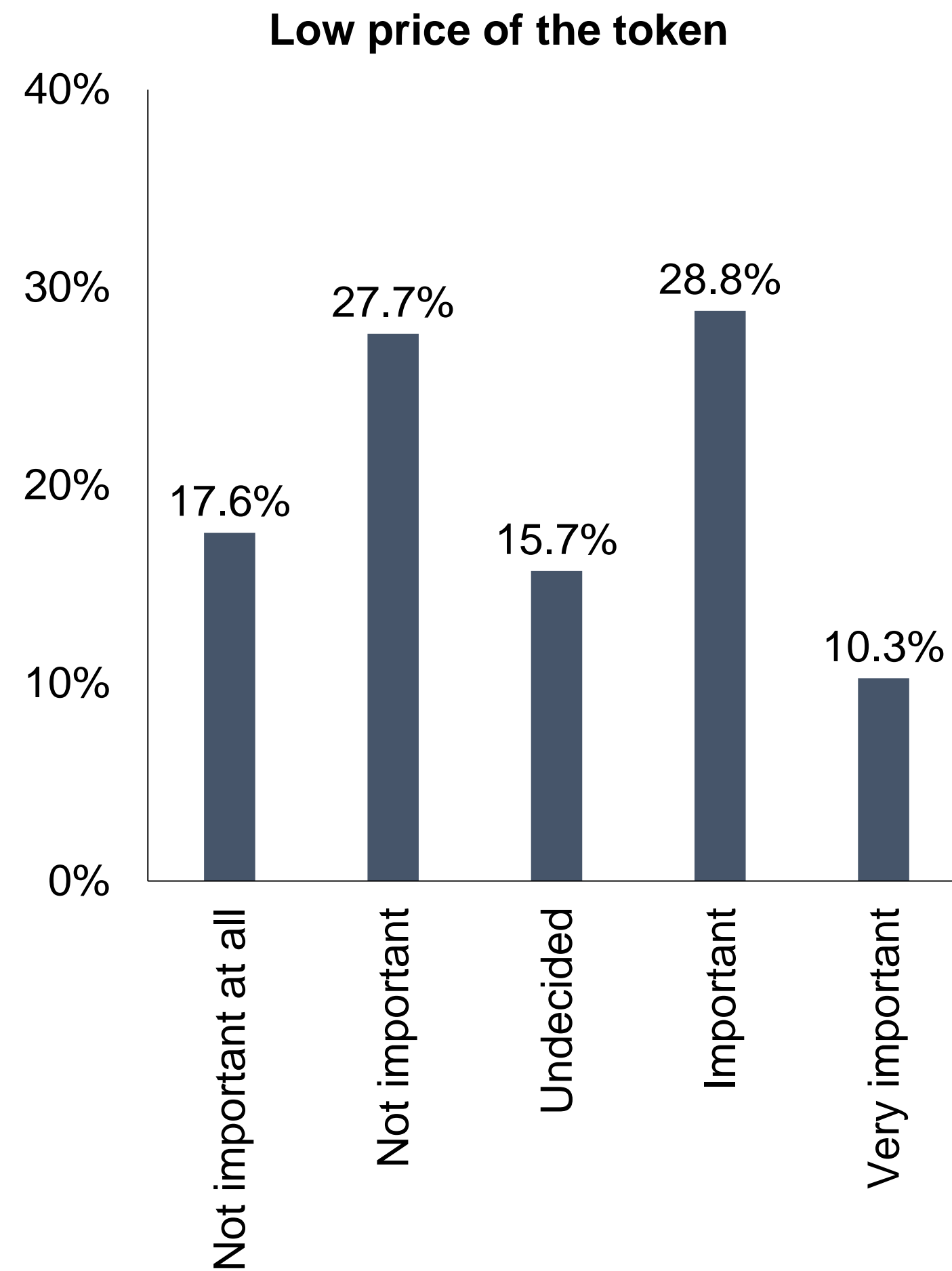
Determinants: venture (4/4)

Q: Overall, how important are the following factors related to the venture in your investment decision(s)?

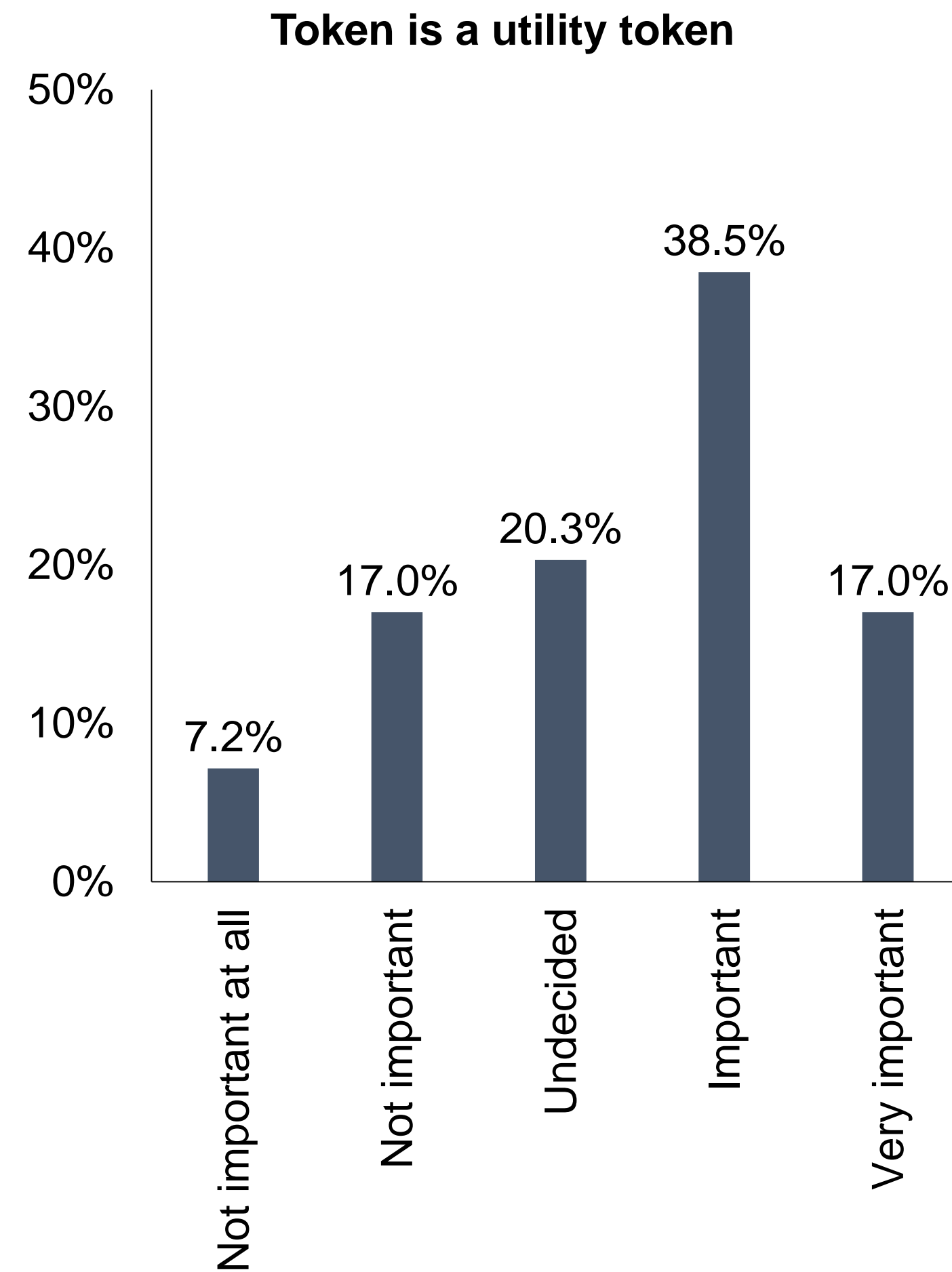


Determinants: ICO campaign (1/4)

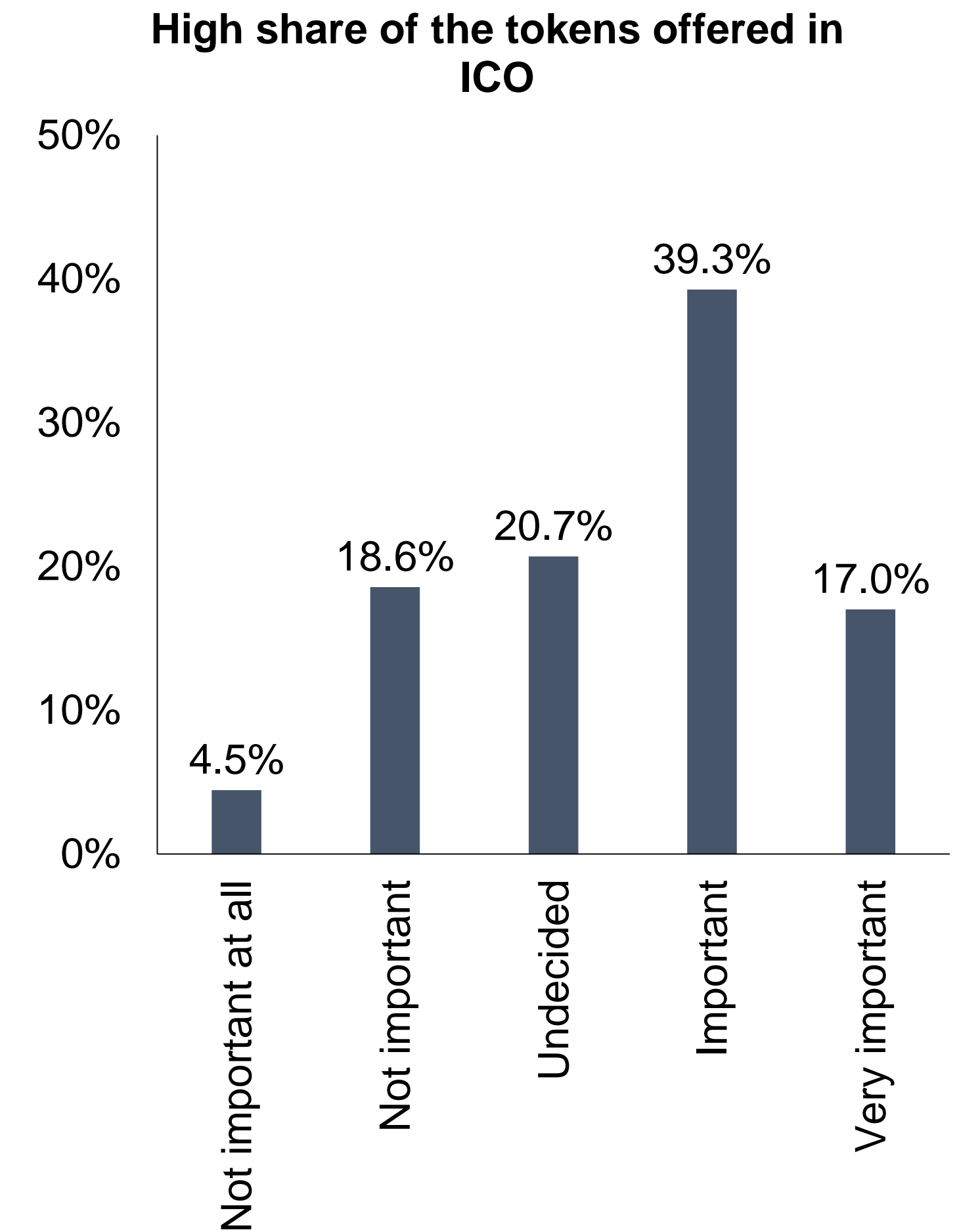
Q: Overall, how important are the following factors related to the ICO campaign in your investment decision(s)?



Mean	Std. Dev.
2.86	1.29



Mean	Std. Dev.
3.41	1.16

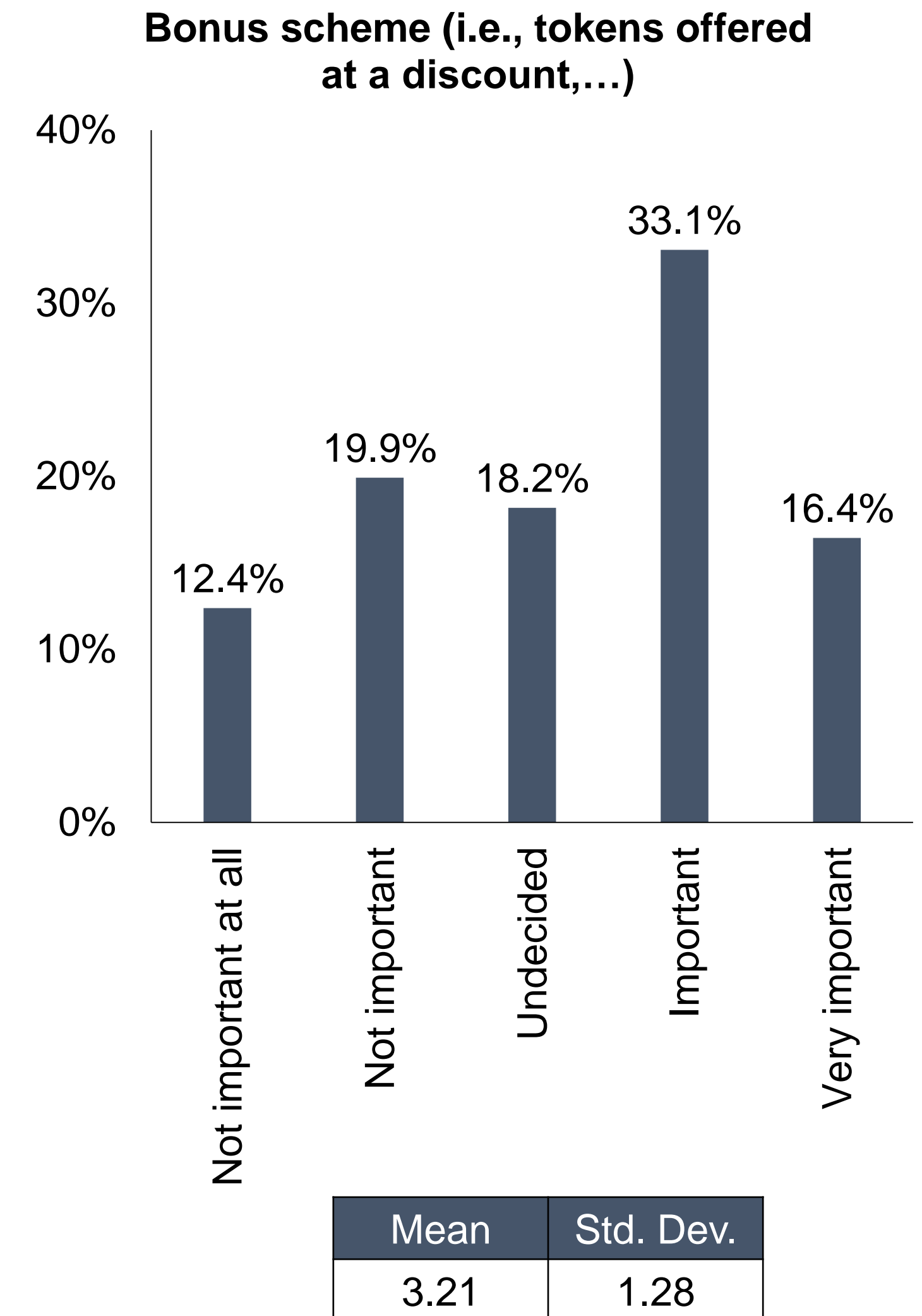
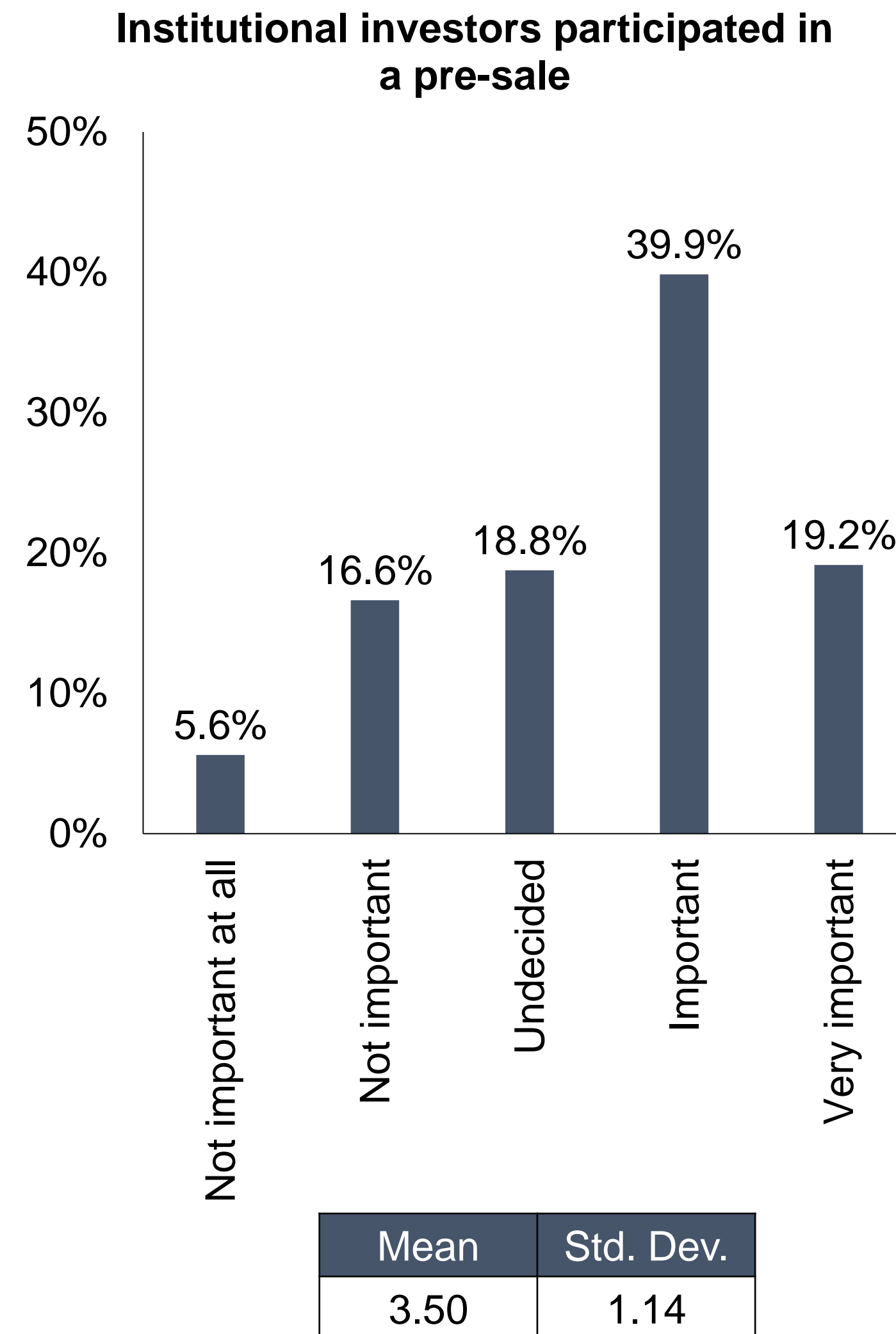
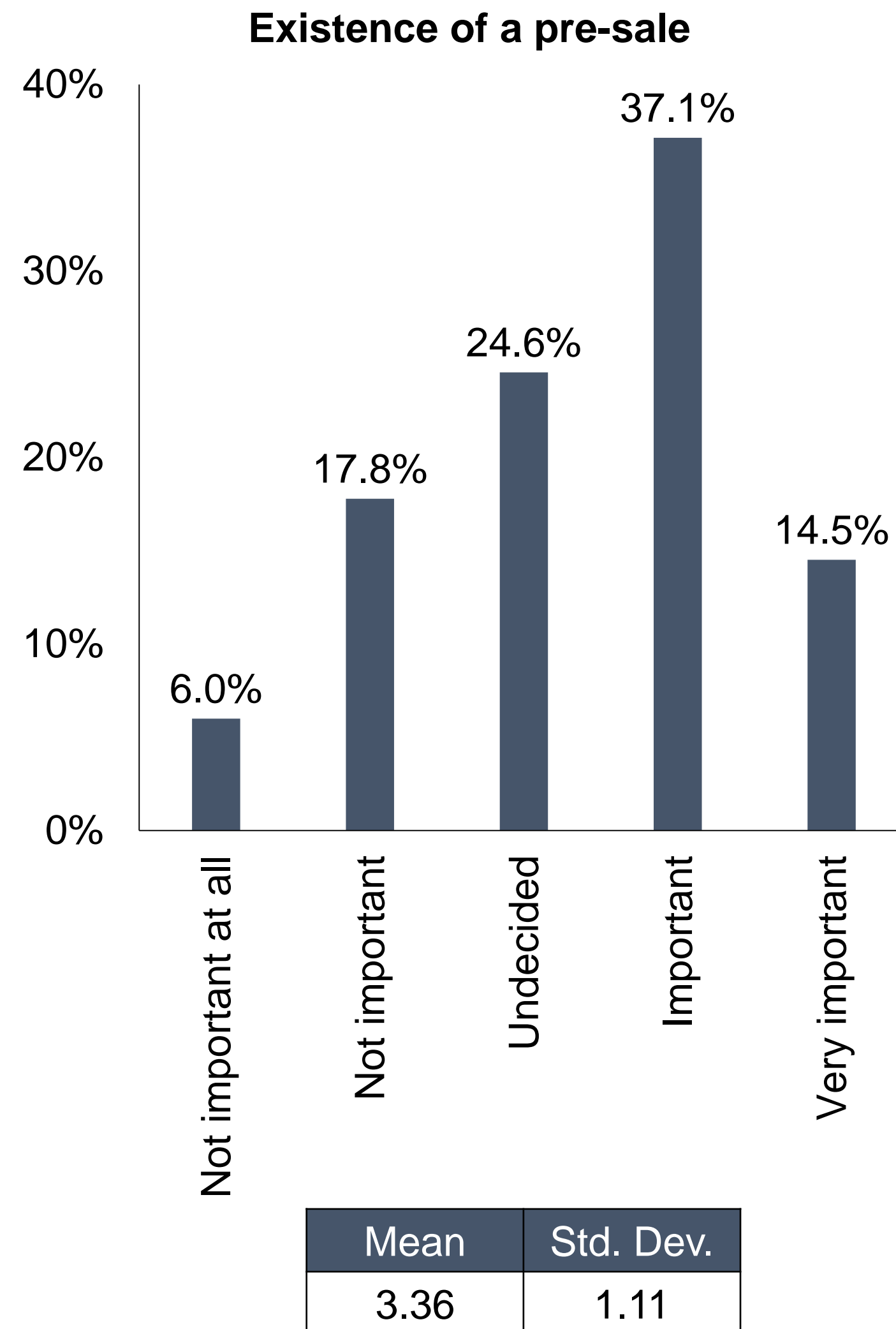


Mean	Std. Dev.
3.46	1.11

Determinants: ICO campaign (2/4)

32

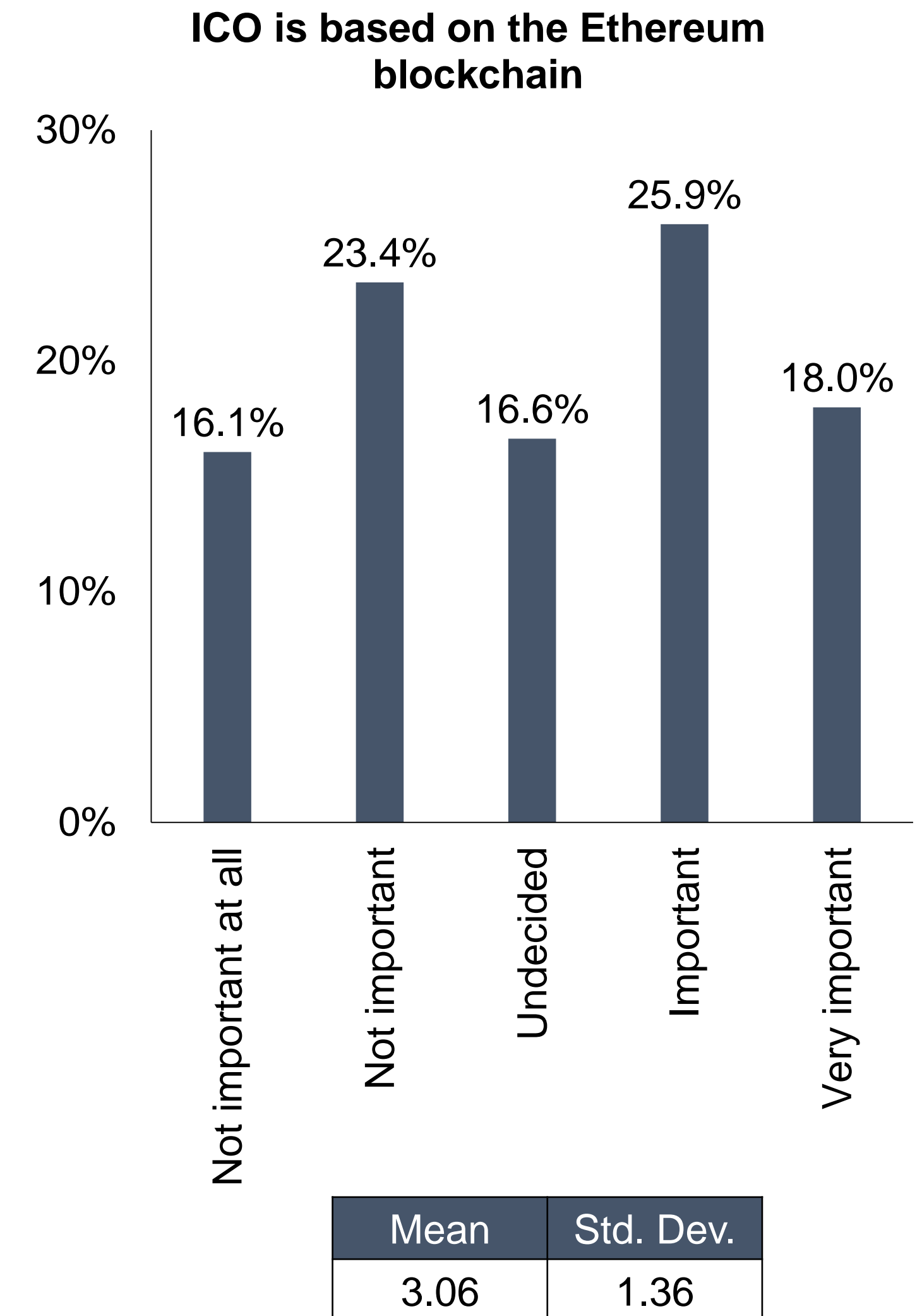
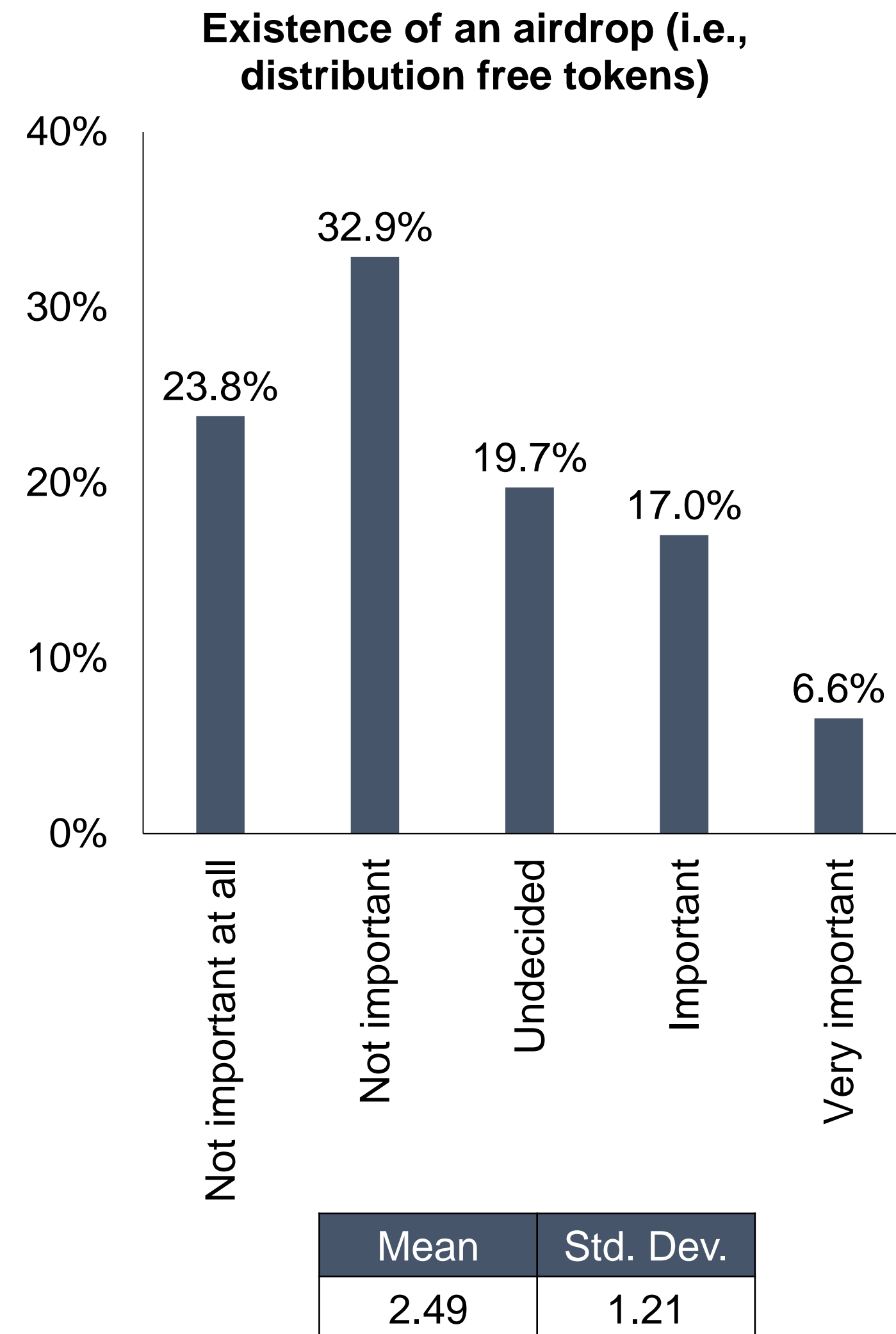
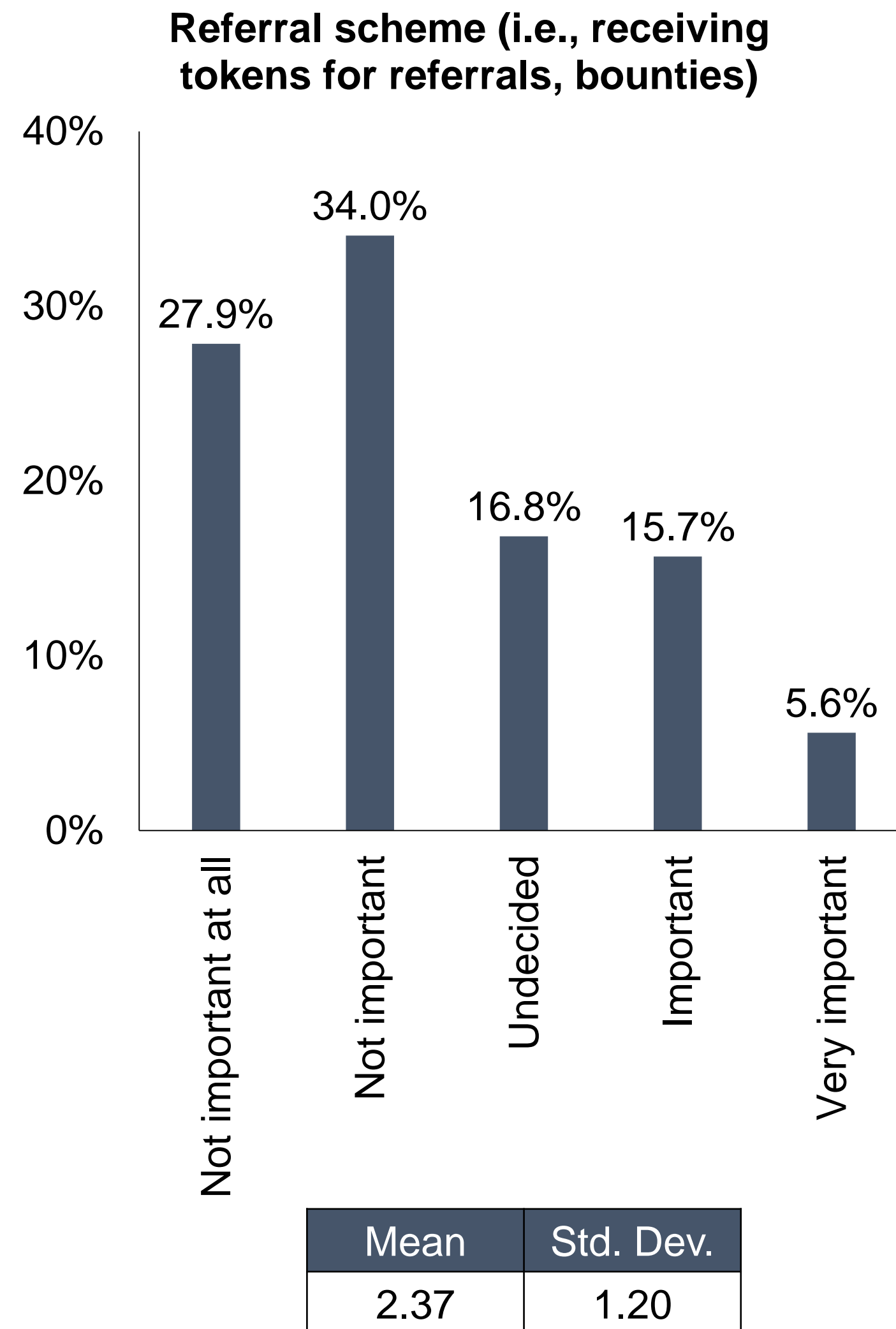
Q: Overall, how important are the following factors related to the ICO campaign in your investment decision(s)?



Determinants: ICO campaign (3/4)

33

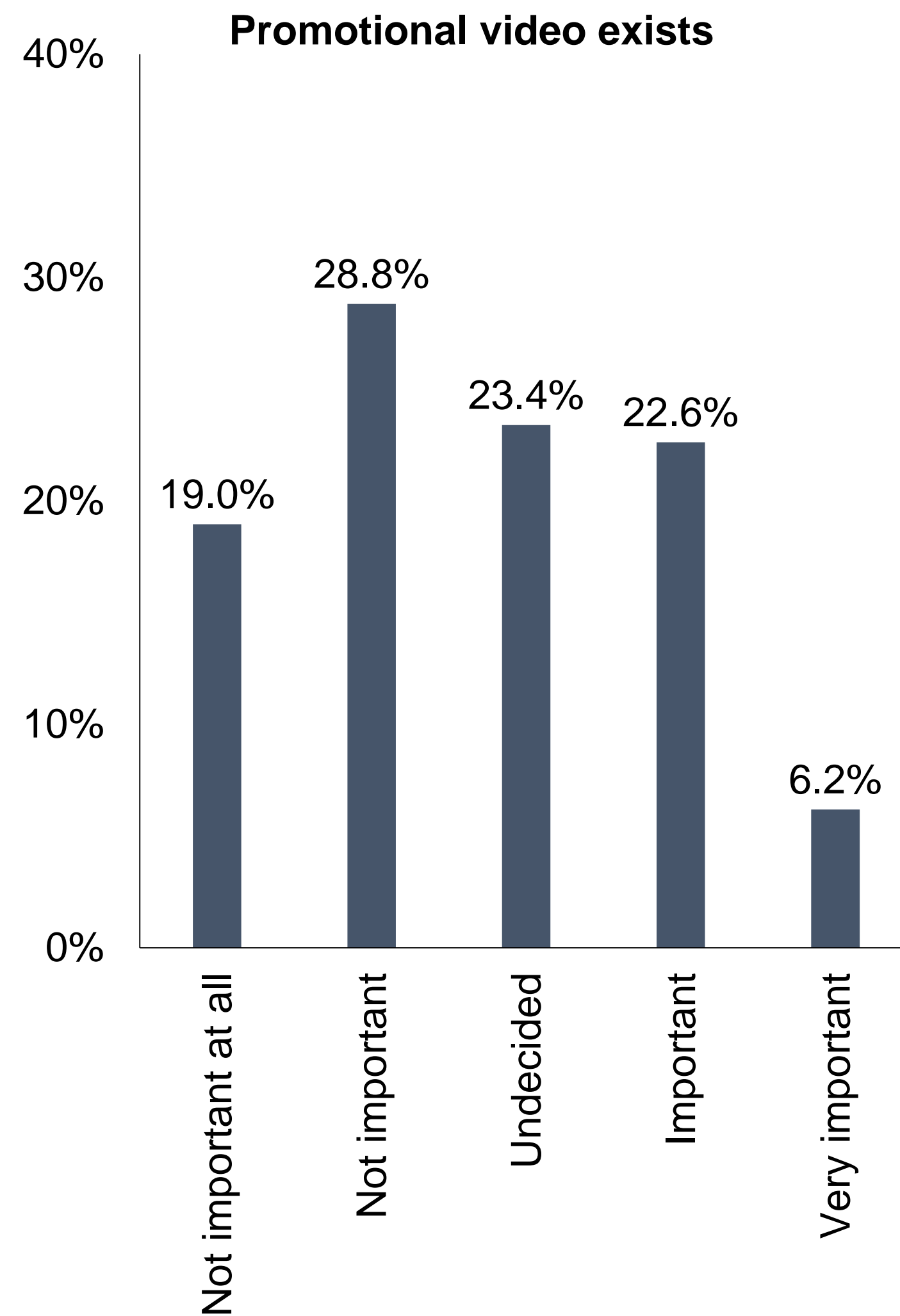
Q: Overall, how important are the following factors related to the ICO campaign in your investment decision(s)?



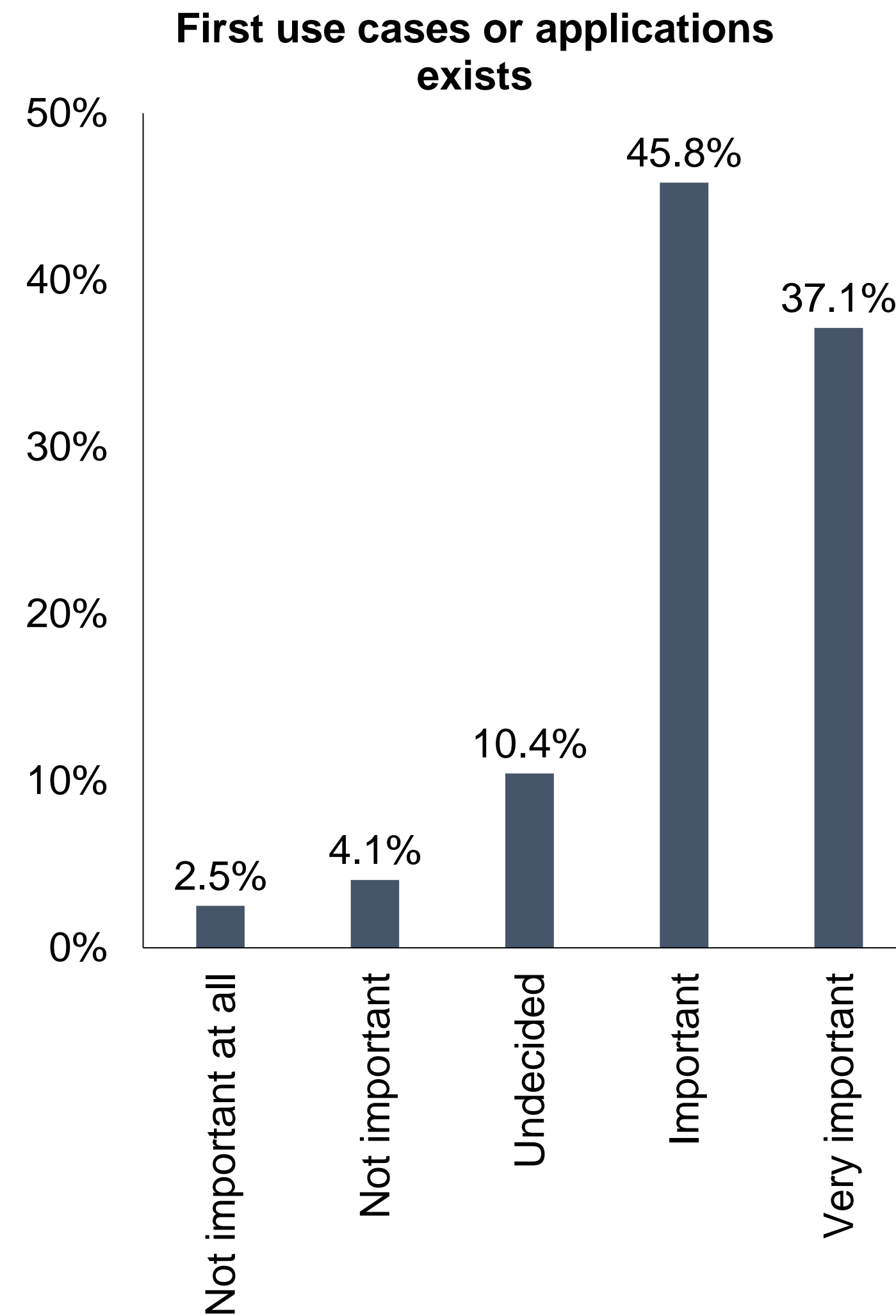
Determinants: ICO campaign (4/4)

34

Q: Overall, how important are the following factors related to the ICO campaign in your investment decision(s)?



Mean	Std. Dev.
2.68	1.19

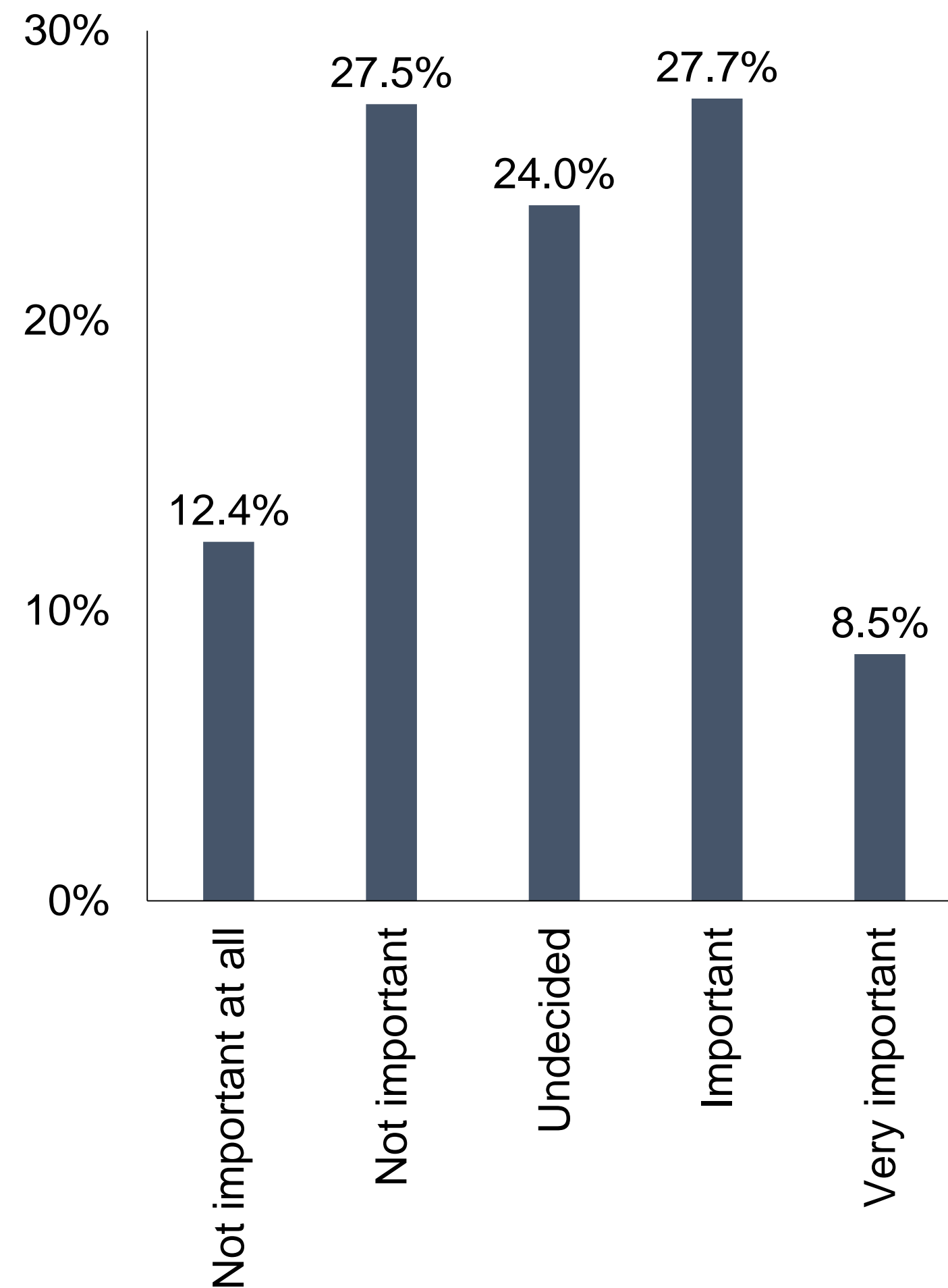


Mean	Std. Dev.
4.11	0.92

Determinants: environment (1/2)

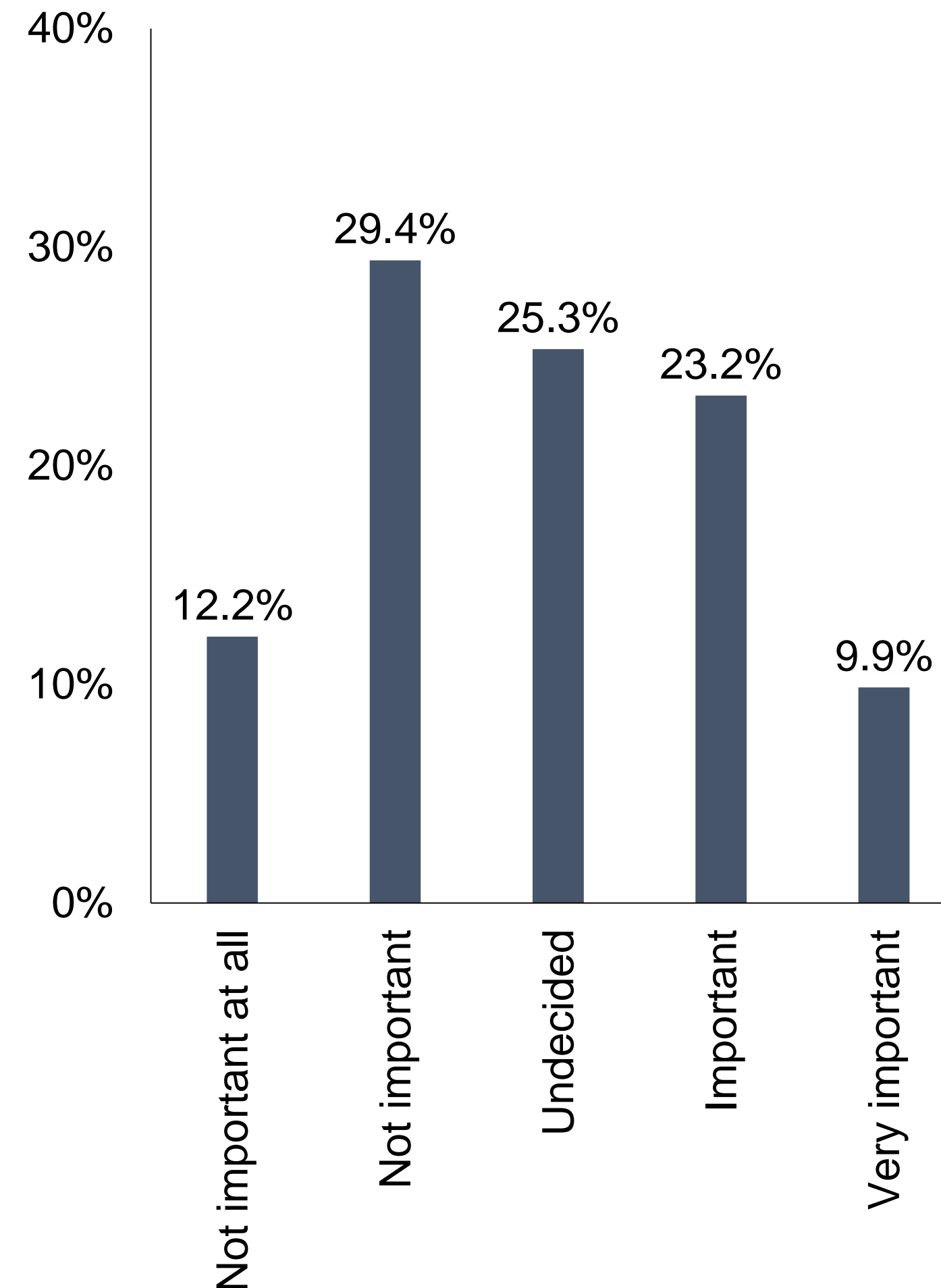
Q: Overall, how important are the following factors related to the environment in your investment decision(s)?

A high price of Ether/Bitcoin at the time of investment



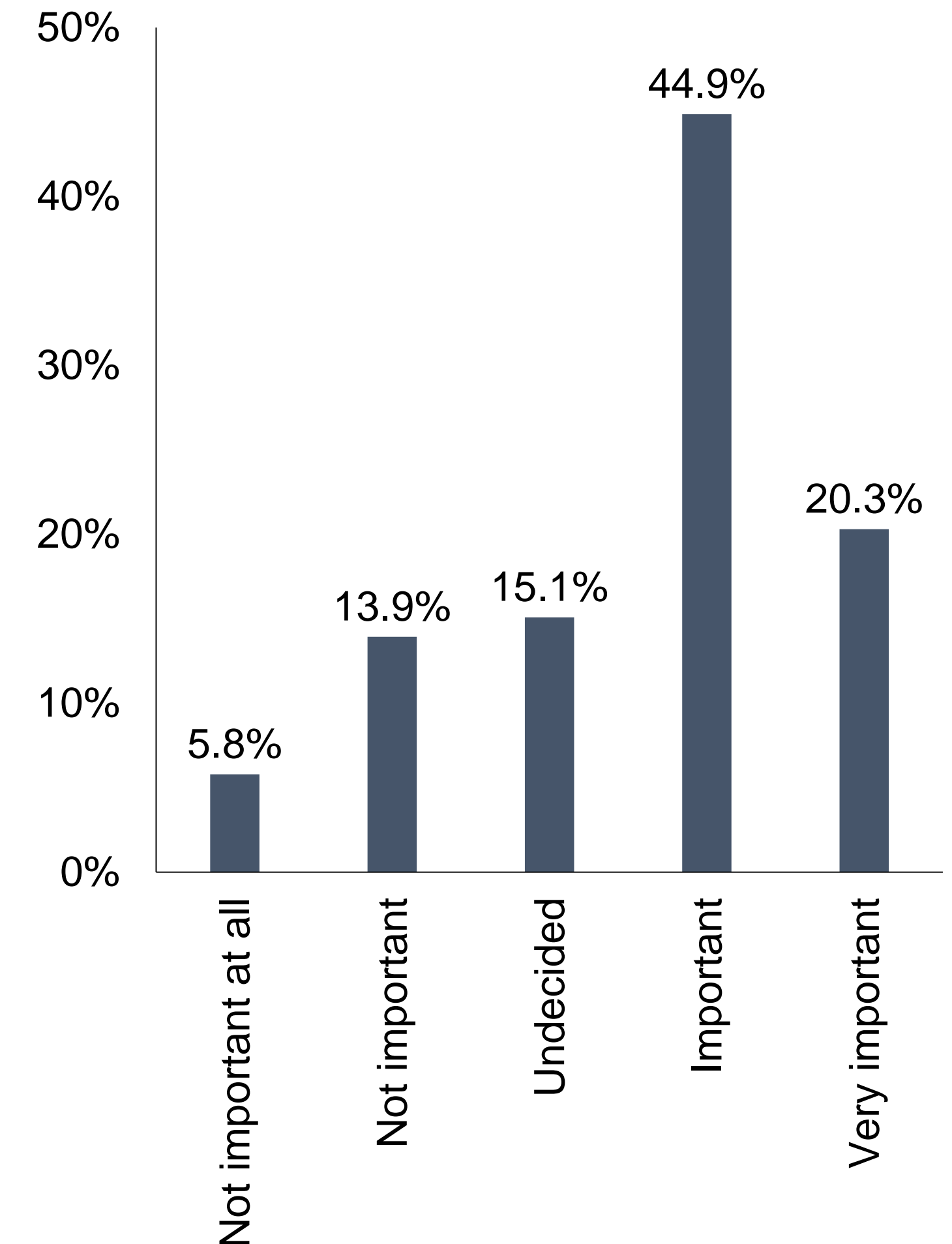
Mean	Std. Dev.
2.92	1.18

A low price of Ether/Bitcoin at the time of investment



Mean	Std. Dev.
2.89	1.82

High amount of hype surrounding the ICO



Mean	Std. Dev.
3.60	1.13

Determinants: environment (2/2)

Q: Overall, how important are the following factors related to the environment in your investment decision(s)?

