

MARKET RESEARCH
FINANCIAL QUESTIONNAIRE

THE WINDFALL GAME

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Research Objective

- To better understand how well the average person understands **Bitcoin** & measure how opinions change after education.
- To measure demographic differences of **Bitcoin** education impact.
- To examine the general population's perceived knowledge and understanding (*by both age and socio-economic status*) of **US monetary systems** and **financial markets**.

The goal of this research is to help Bitcoin companies & evangelists create more effective & relevant messaging to positively impact 'newcoiner' investment decision-making.

Hypothesis

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01

Hypothesis 1: Gender Differences

Gender Effects

We hypothesize there will be gender differences (male vs. female) throughout the survey. It is assumed that men are more interested in Bitcoin & Cryptocurrency than women.

02

Hypothesis 2: Demographics Differences

Generation Effects

It is assumed that two younger demographics, Millennials (1981-1994) and Gen Z (1995-2009) will **express significantly more interest** in investing in Bitcoin & cryptocurrencies than either Gen X (1965-1981) or Baby Boomers (1946-1964).

03

Hypothesis 3: Socio-economic Status

SES Effects

It is assumed that wealthier individuals will **express higher knowledge and interest** in investing **and** be more unaware of their flawed perceptions, while poorer individuals prefer cash over investing.

We will examine survey questions using this framework.

Hypothesis 4

Education Effects

04

Hypothesis 4: Financial Education Effect

We propose there will be a significant **lift in interest in Bitcoin** between the start of the survey & when they are asked the same question again at the end.

Note: The information gained in the survey will serve as the “education” component to affect this change.

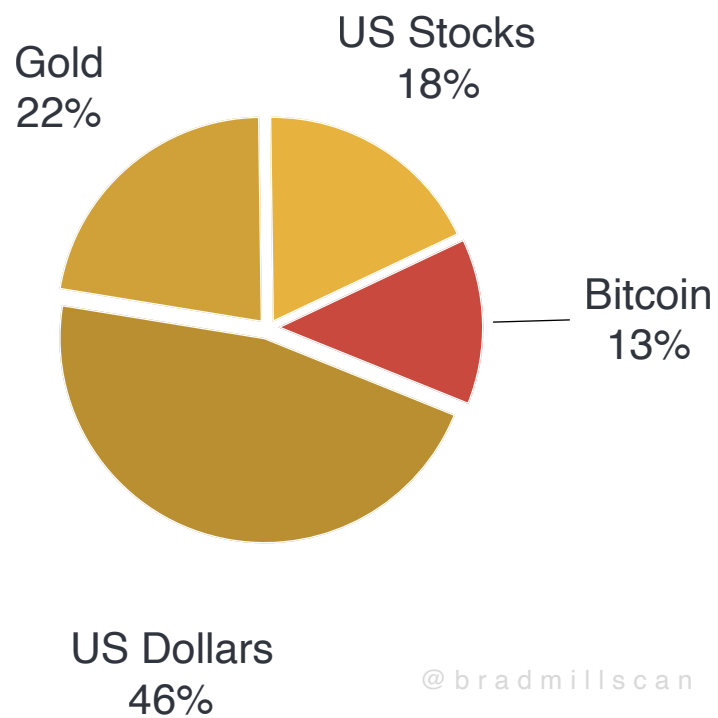


THE WINDFALL GAME Q1: A wealthy person gifts you \$10,000. You get to choose in which form you'll accept the gift. But there's a catch: You must keep the gift in the form that you choose for 10 years without touching it. In which form would you accept the gift?



Total Sample

13% of the population would choose to invest in Bitcoin with 46% choosing US dollars (cash).

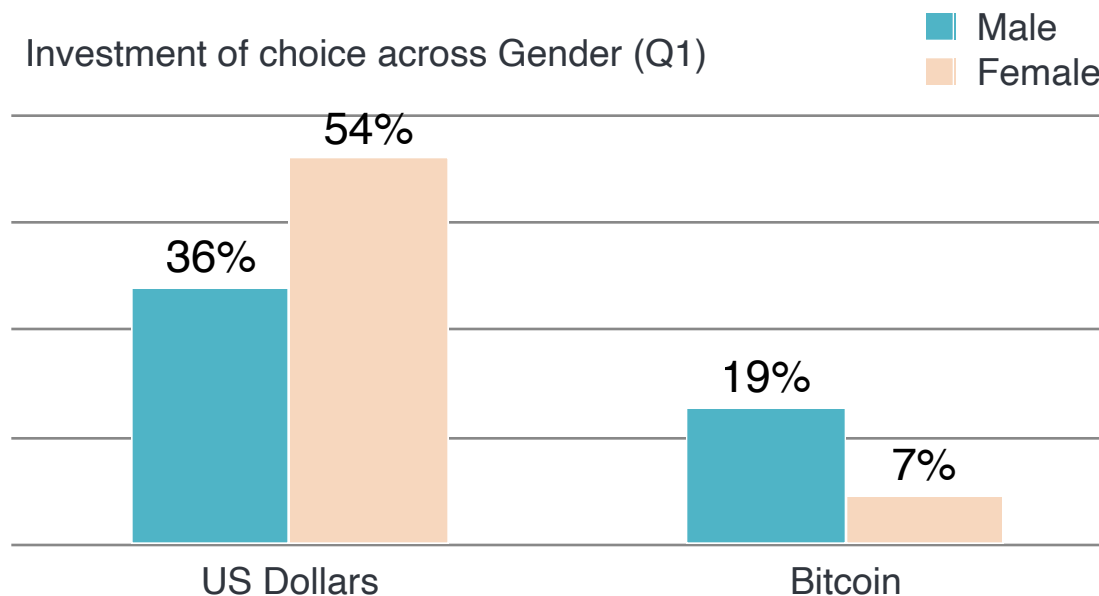


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Gender Effects

There are significant differences between genders. **Men are more likely than women to invest in Bitcoin** while women are more likely to choose US Dollars.





THE WINDFALL GAME Q1: A wealthy person gifts you \$10,000. You get to choose in which form you'll accept the gift. But there's a catch: You must keep the gift in the form that you choose for 10 years without touching it. In which form would you accept the gift?



Generation Effects

1. Boomers & Gen X

Significantly more likely to chose Gold as their investment of choice.

2. Gen X, Millennial & Gen Z

Significantly more likely to **choose Bitcoin** as their investment of choice than Boomers.

SES Effects

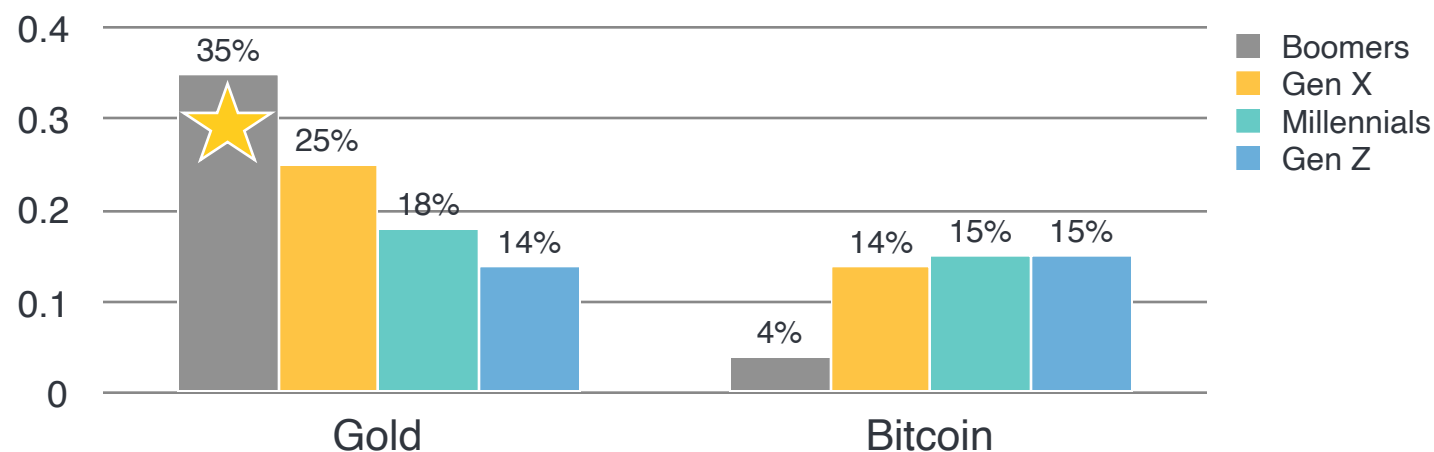
1. Wealthy:

Significantly more likely than all other classes to invest in Bitcoin (*22% vs. 8-14% of others*).

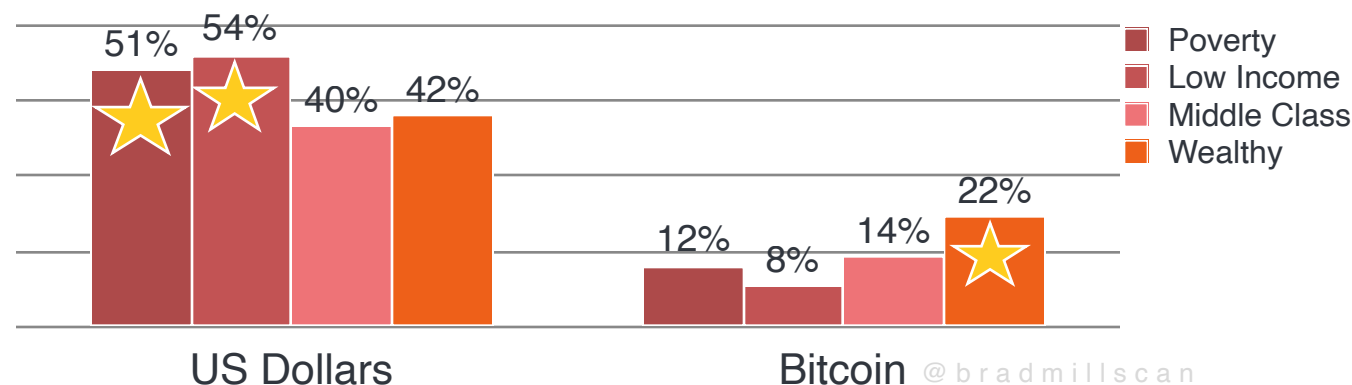
2. Low Income & Below Poverty Line

Significantly more likely to choose US Dollars (cash) than middle class or wealthy.

Investment of Choice across Age Groups (Q1 - Before Education)



Investment of Choice across Socio-economic classes (Q1)





Education Effects



During the course of the survey, respondents learn:

- ▽ Bitcoin has outperformed commodities, stocks, currencies & bonds over the last 10 years.
- ▽ Bitcoin is an open source technology used as a currency on the internet, not controlled by any group, country or company.
- ▽ Investing in Bitcoin is best thought of as electronic gold, a scarce digital asset that can't be printed at will like fiat currencies.
- ▽ How US dollars are created, the size of the US national debt and how much inflation has destroyed the purchasing power of dollars over the last 50-100 years.
- ▽ The relatively small size of Bitcoin's market cap compared to gold, all real estate, stock markets & the total supply of money.

Did this motivate individuals to switch their answers?

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Comparing Q1 & Q17

Education Effects

YES! At the beginning of the survey, 13% of the general population chose Bitcoin in the windfall scenario investment of choice.

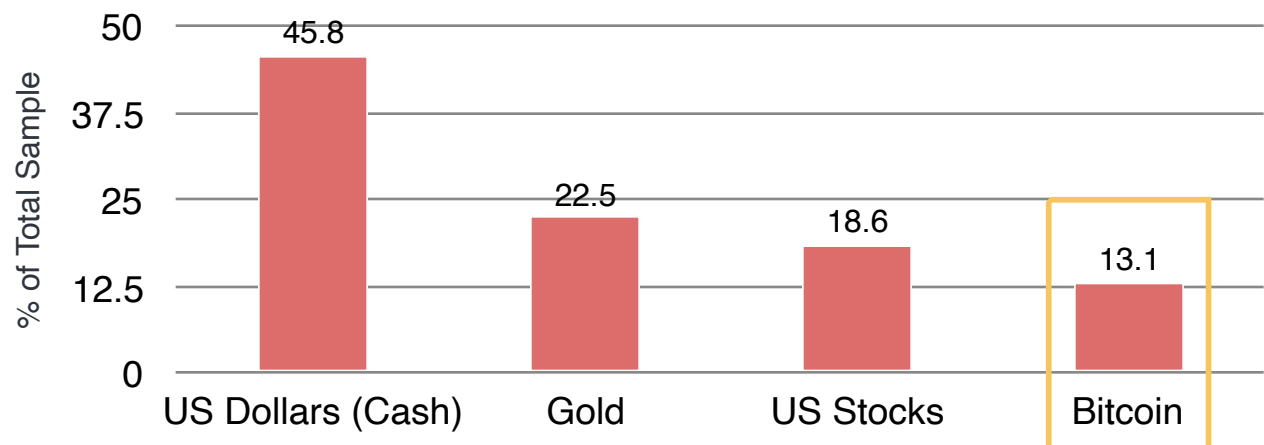
At the end of the survey, Bitcoin emerges as the #1 overall choice to accept the windfall as an investment.

38% of the general population would choose to invest in Bitcoin, significantly higher than US Dollars, Gold, or US stocks.



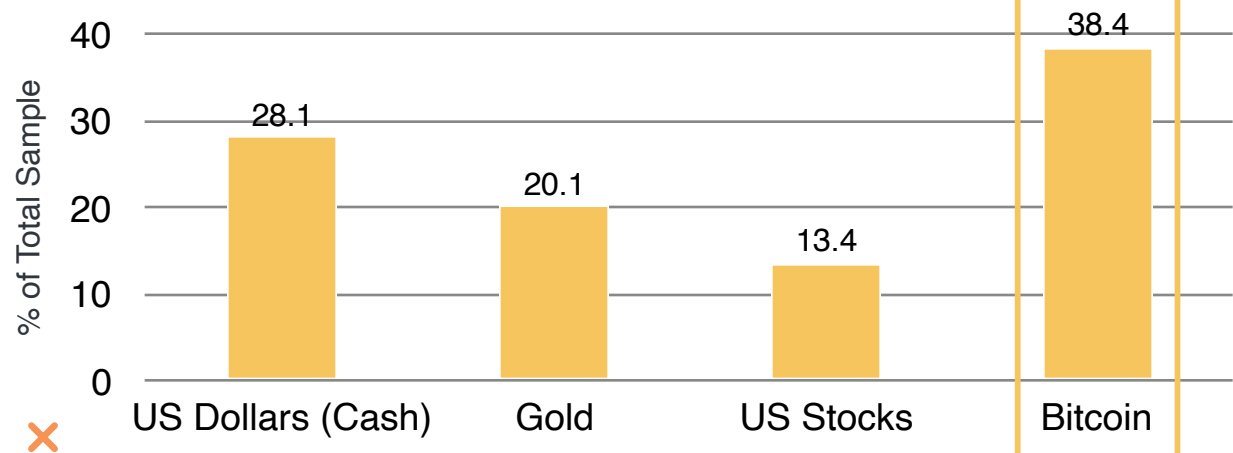
Bitcoin saw a +193% change as the “investment of choice” before & after financial education.

Investment Choices of Total Sample at the Beginning of the Survey (Q1)



n=849

Investment Choices of Total Sample at the End of the Survey (Q17)

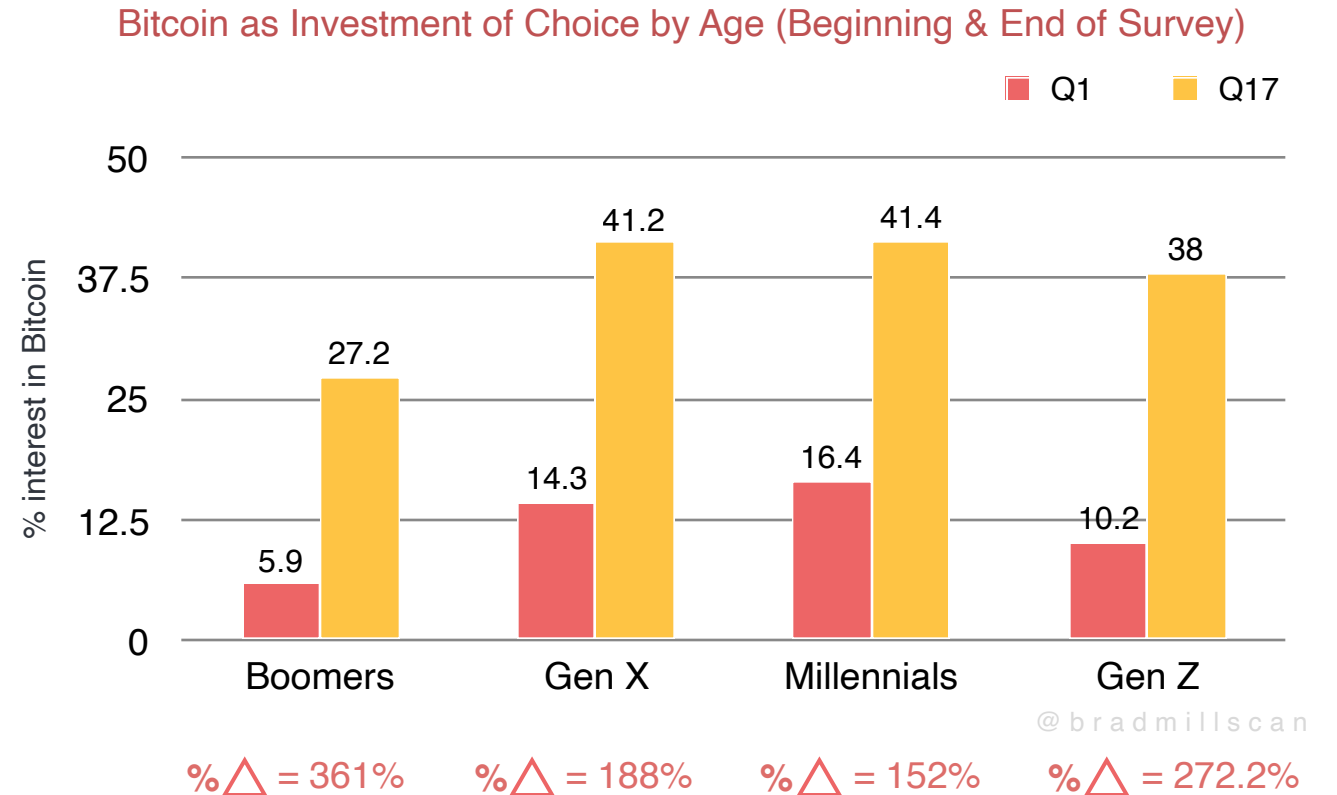


n=807

Comparing Q1 & Q17 By Generation

Education Effects

- ▲ There was a significant lift across all generations from the start of the survey to the end.
- ▲ Gen X, Millennials and Gen Z are still significantly more likely to invest in Bitcoin than Boomers.
- ▲ Boomers were more open-minded & likely to chose Bitcoin as an investment after education.

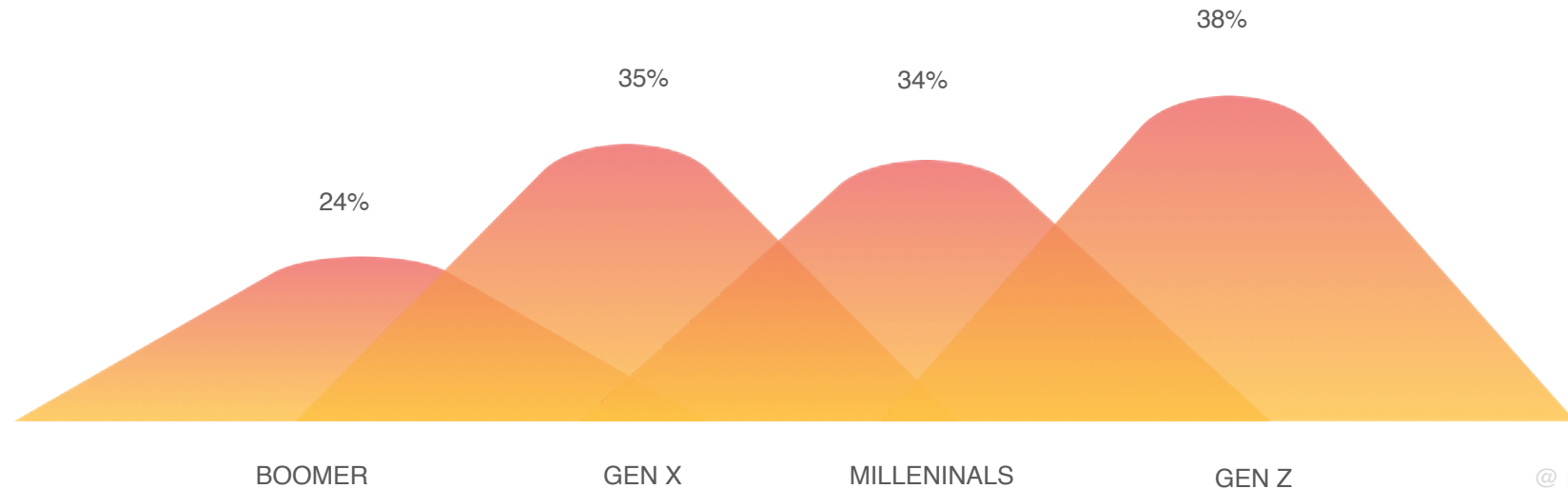


41% of Gen X & Millennials will invest in Bitcoin, Boomers are most receptive.

ESTHER'S INSIGHTS: Who Switched?

Education Effects

AMONG THOSE WHO DID NOT CHOOSE BITCOIN AS THEIR INVESTMENT CHOICE
IN Q1, HOW MANY WILL SWITCH AT THE END OF THE SURVEY (Q17)?



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After learning more about Bitcoin, Gen X, Millennials & Gen Z were equally likely to switch investment to Bitcoin (35%, 34% and 38%, respectively).

+33%

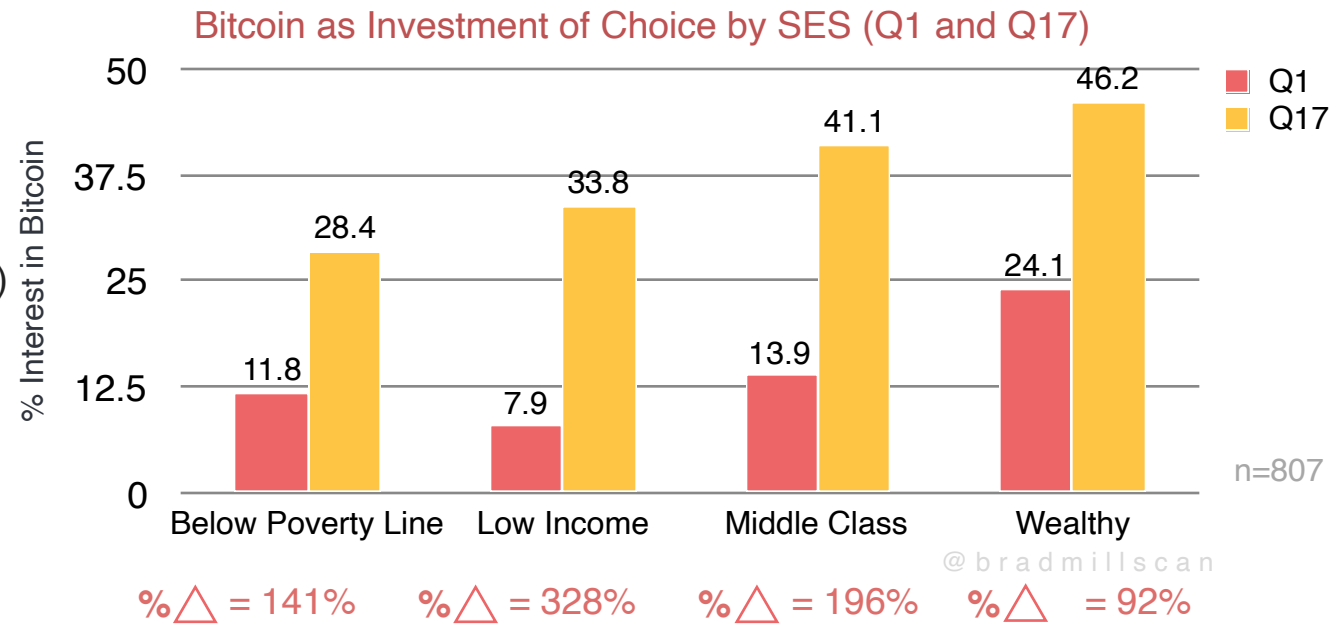
Overall, 33% of those who did not invest in Bitcoin the first time (Q1) will invest in Bitcoin after the survey (Q17).

Comparing Q1 & Q17 By economic class

Education Effects

All demographics increased their interest in Bitcoin, with the those in the “middle class” & “low income” classes showing the largest jumps (+196%, +328%, respectively.)

Those who reported being “Wealthy” are significantly more likely than those in Poverty or Low Income classes to select Bitcoin in the Windfall game at the beginning & the end.



Wealthy individuals are more likely to invest in Bitcoin both pre and post survey (46%), Low Income showed significant uptick (+328%).

Data & Analysis For: Investing Financial Markets Monetary Policy

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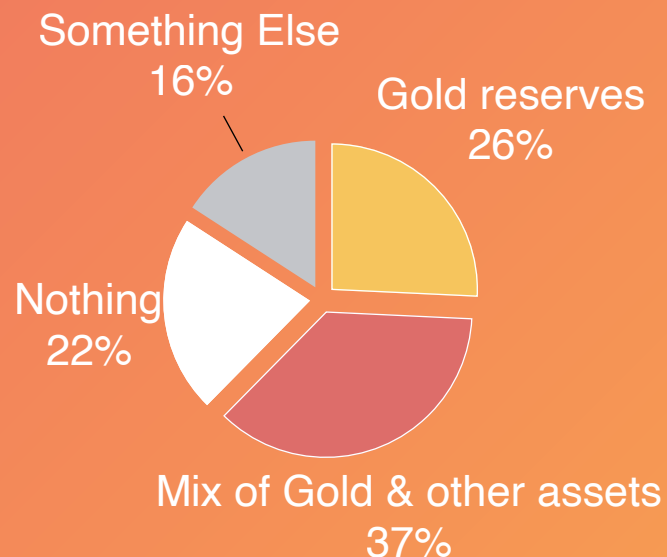
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Q2: Instinctively, without googling, what do you think US Dollars are backed by?

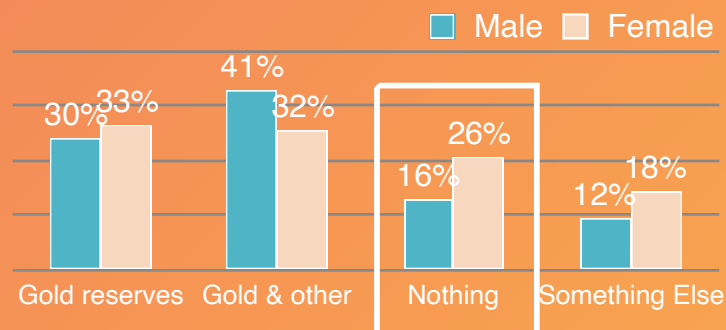
Total Sample

Only 22% of the respondents know that the US Dollar is backed by “Nothing.” (n=839)



Gender Effects

Women were more likely than men to choose “Nothing”.

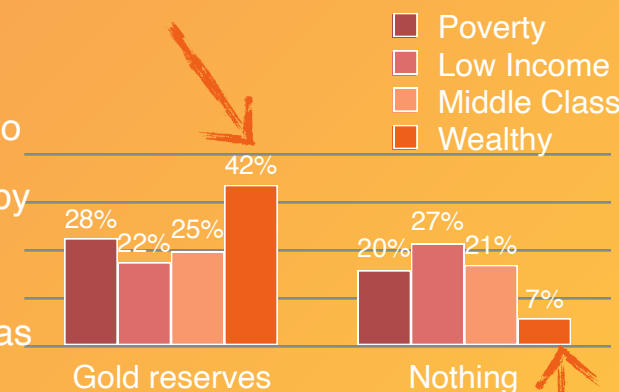


Generation Effects

Boomers and Gen X were more likely than Millennials or Gen Z to think the US dollar was backed by “Gold Reserves in Fort Knox”.

SES Effects

The Wealthy were more likely to think US Dollars were backed by Gold Reserves in Fort Knox (42%) & less likely to think it was backed by “Nothing” (7%).

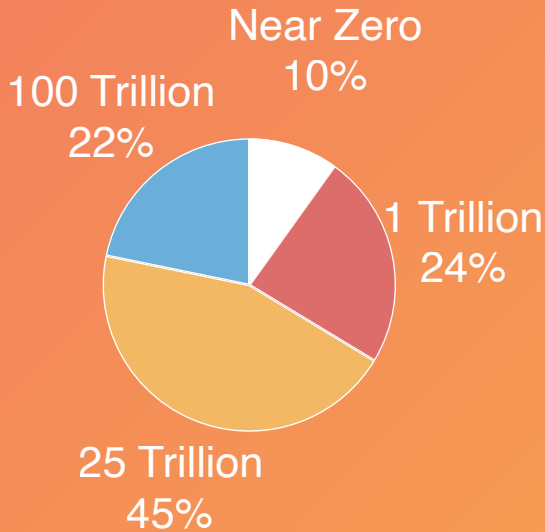




Q5: What do you think the United States national debt is?

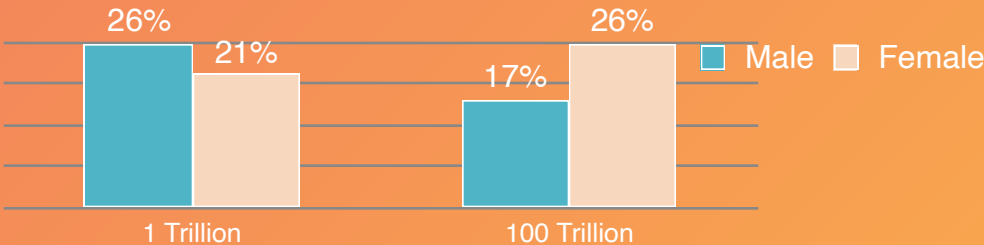
Total Sample

Almost half of the US population (45%) chose the correct answer of “25 Trillion Dollars”. (n=835)



Gender Effects

Men were likely to underestimate the national debt while Women were more likely to over-estimate. (n=835)

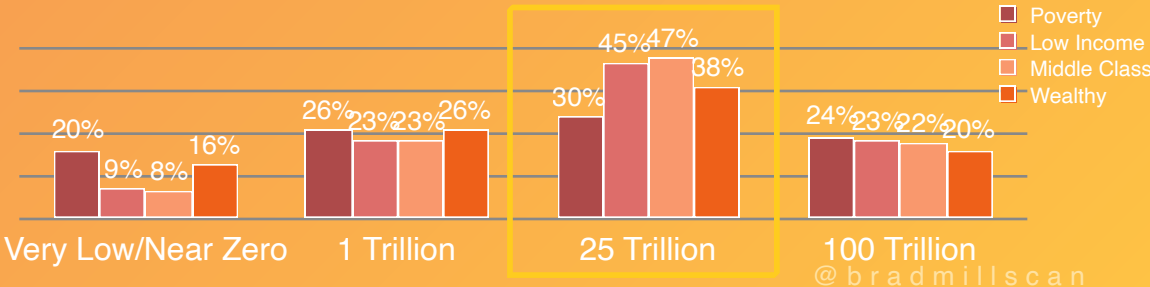


Generation Effects

About 45% of all generations guessed the correct answer (no generation differences here). Boomers were more likely to overestimate, while Gen X, Millennials Gen Z were more likely to underestimate.

SES Effects

Low Income and Middle Class were more likely than the Wealthy/Poor to report the right answer “25 Trillion”,

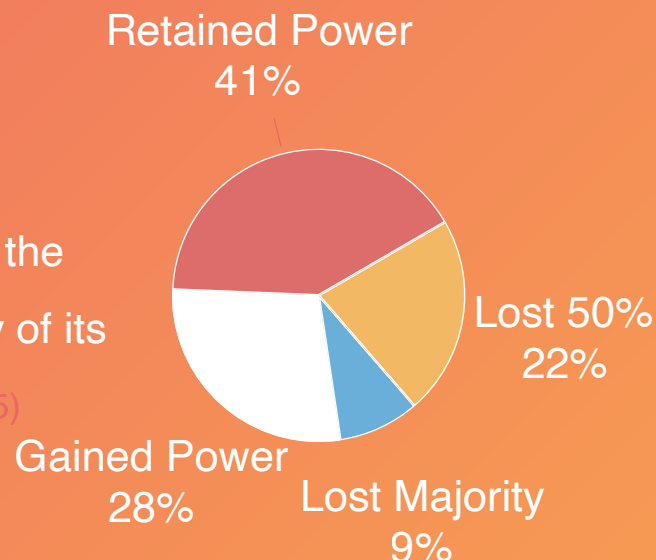




Q6: How do you think the US Dollar has performed as a store of value over the last 100 years?

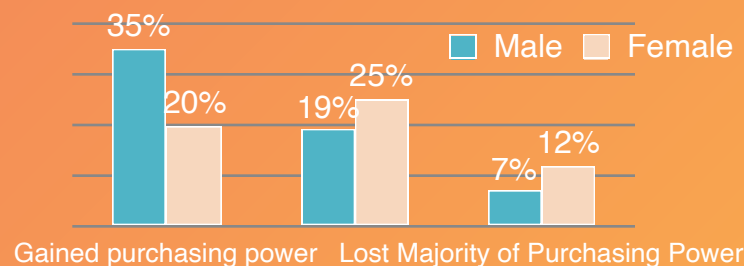
Total Sample

Only 9% of the total pop. accurately answered that the US Dollar “Lost a Majority of its Purchasing Power.” (n=825)



Gender Effects

Men were more likely to say the US Dollar had “Gained purchasing power” while women were more likely to say the US Dollar lost “50%” or “A majority” of its purchasing power.

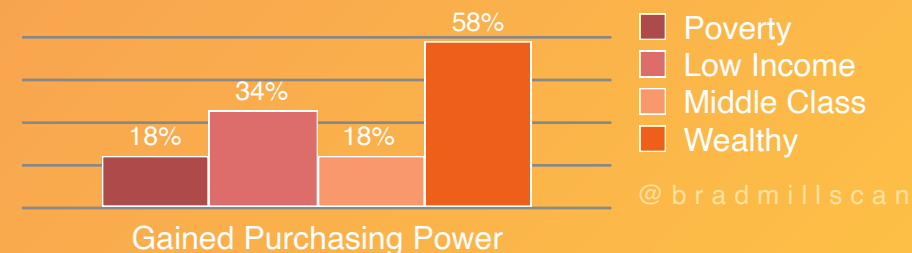


Generation Effects

There are significant differences amongst the generations. However, Boomers and Gen Z are more likely to state the US Dollar has “lost 50% of its purchasing power” than Gen X or Millennials.

SES Effects

The Wealthy are extremely more likely than others to believe that the US Dollar has “Gained Purchasing Power”.



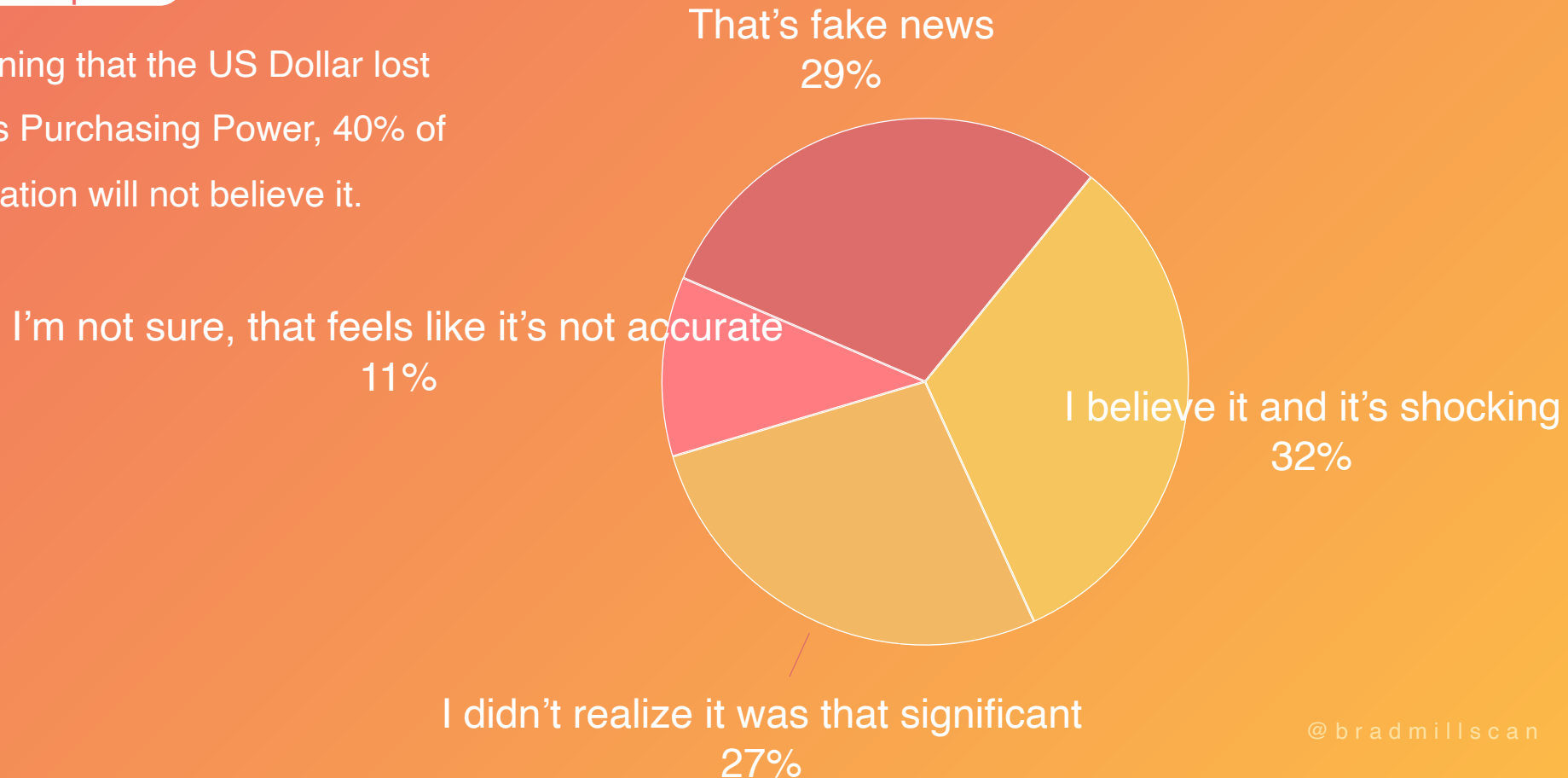


Q7: Would you be surprised to learn that the US Dollar has lost 96% of its purchasing power over the last 100 years compared to Gold?

Total Sample

▼ After learning that the US Dollar lost 96% of its Purchasing Power, 40% of the population will not believe it.

(n=825)

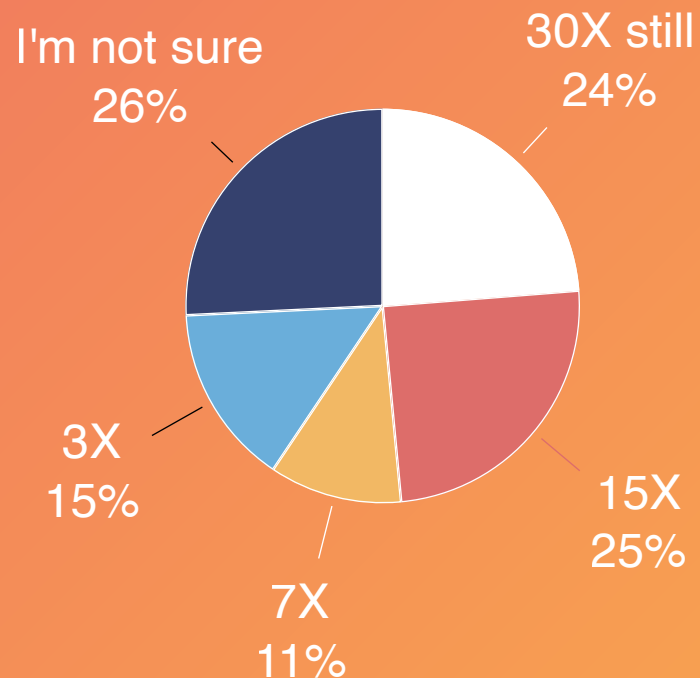




Q8: What would the S&P's 30X return would be equivalent to if you factor in the drop in the buying power of the dollar?

Total Sample

While most reported “I’m not sure” (26%), and 24% reported “30X Still”, only 15% reported the correct answer 3X.

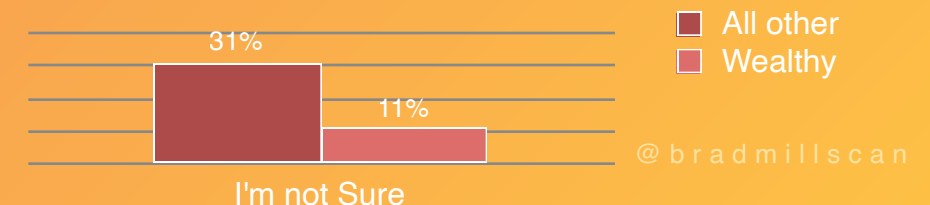


Generation Effects

Boomers were the most likely to report “I’m not sure” (at 46%), compared to the 23% average of the other age groups.

SES Effects

Those in the middle class, low income or below poverty line were all more likely to report “I’m not sure” (31%) than the Wealthy (11%).

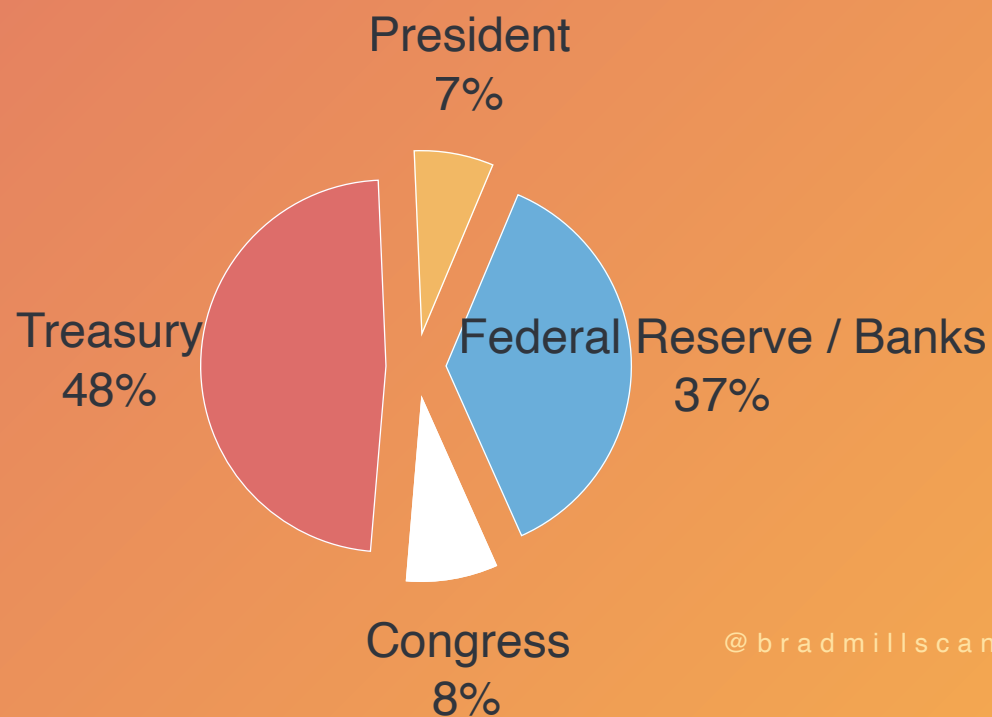




Q9: Who do you think creates new US Dollars?

Total Sample

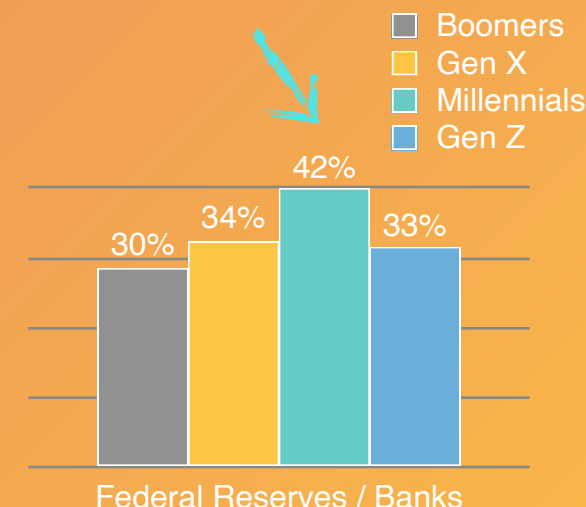
Nearly 50% of the population believes US Dollars are made by the US Treasury.



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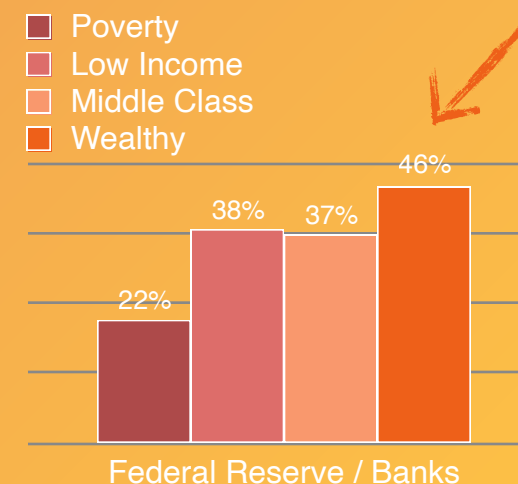
Generation Effects

Millennials were the most likely to answer Federal Reserve / Banks at 42%.



SES Effects

- Those below the poverty line were least likely to answer Federal Reserve / Banks.
- 46% of the Wealthy answered Federal Reserve / Banks.

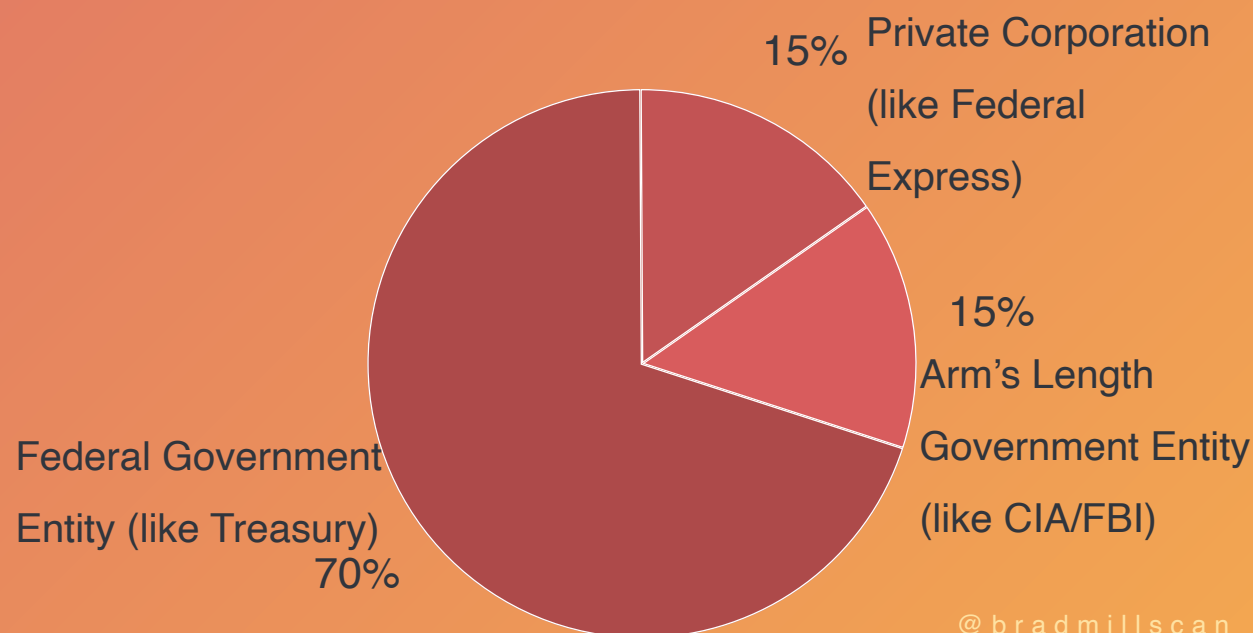




Q10: What type of entity do you think The US Federal Reserve is?

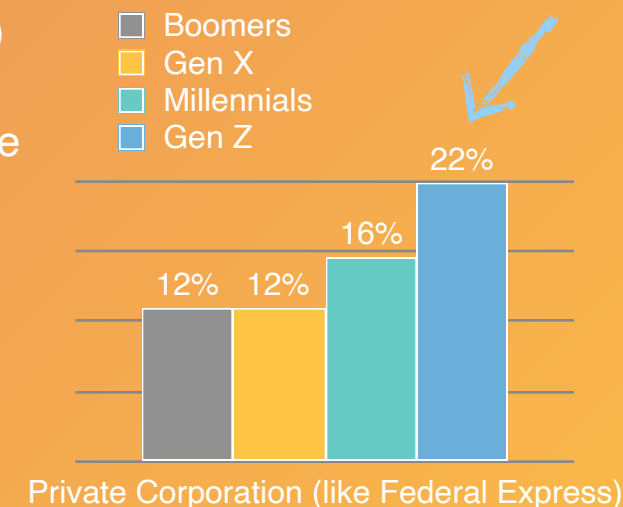
Total Sample

70% of the respondents incorrectly believes that the US Federal reserve is a federal government entity.



Generation Effects

Gen Z is significantly more likely than other generations to get the right answer "Private Corporation".



SES Effects

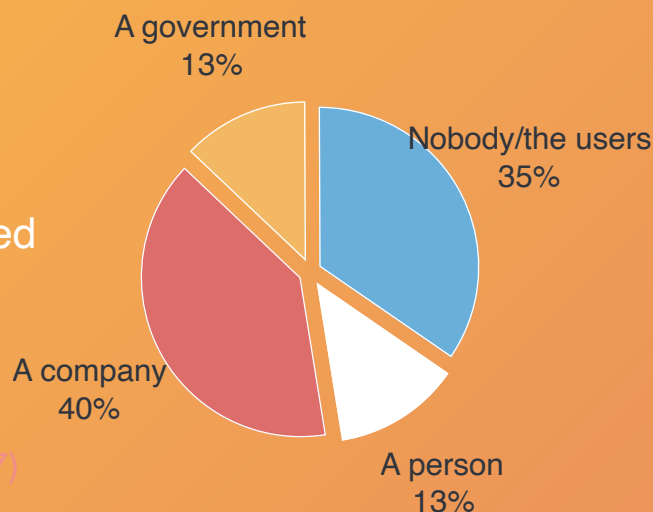
There are no significant group differences.



Q11: Without googling, who do you think controls Bitcoin?

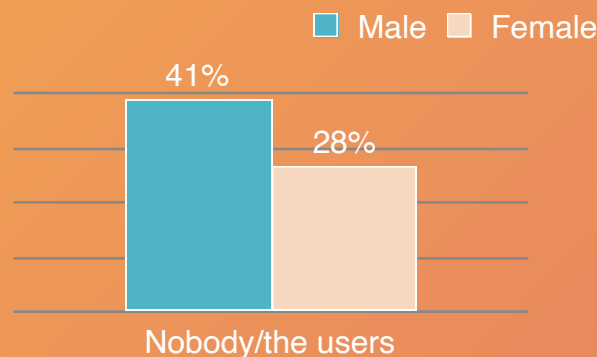
Total Sample

40% of the population believes Bitcoin is controlled by a company, while 35% believe it is controlled by “Nobody/ the users.” (n=817)



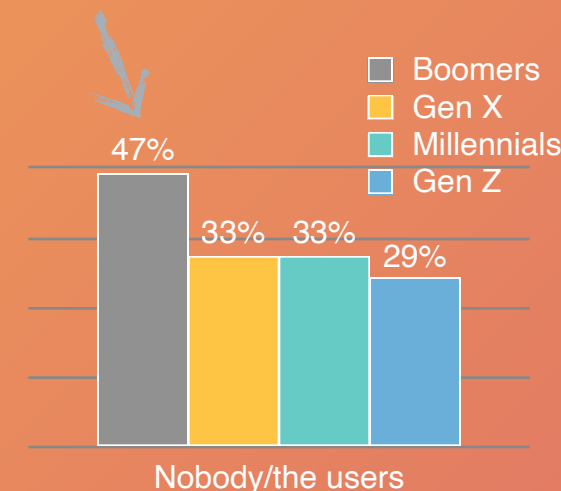
Gender Effects

Men were significantly more likely than women to select “Nobody/the users”.



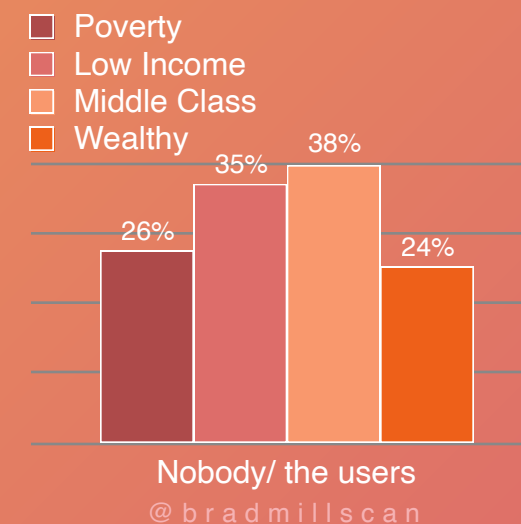
Generation Effects

Boomers were significantly more likely to get the right answer (Nobody/the users) at 47%.



SES Effects

Low income and middle class were more likely than the wealthy or poor to get the answer right.





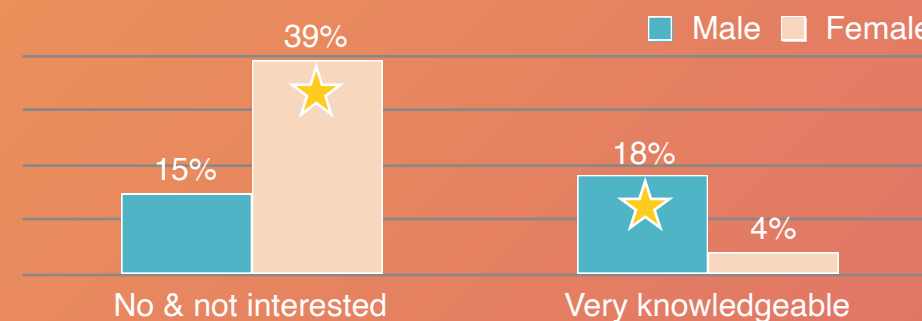
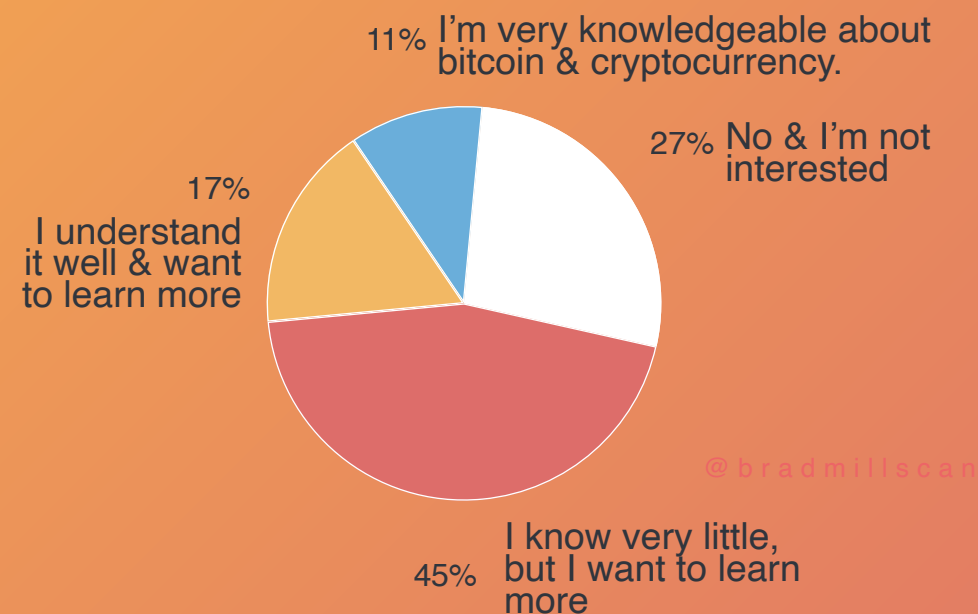
Q12: Do you consider yourself knowledgeable about what bitcoin is?

Total Sample

62% of the population reports “wanting to learn more”, while 27% don’t care to learn more.

Gender Effects

Women are significantly more likely to be “uninterested” in learning more. Men are more likely to report that they are knowledgeable about Bitcoin & cryptocurrency.

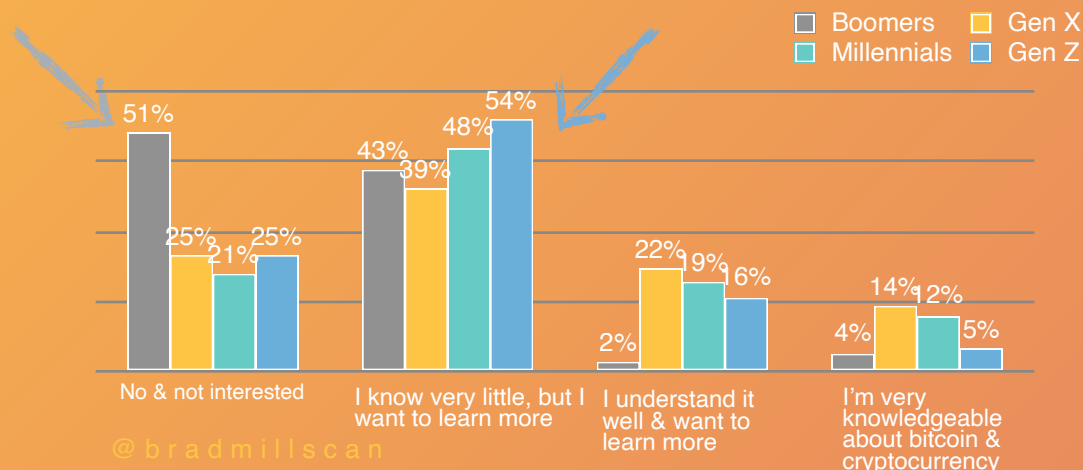




Q12: Do you consider yourself knowledgeable about what bitcoin is?

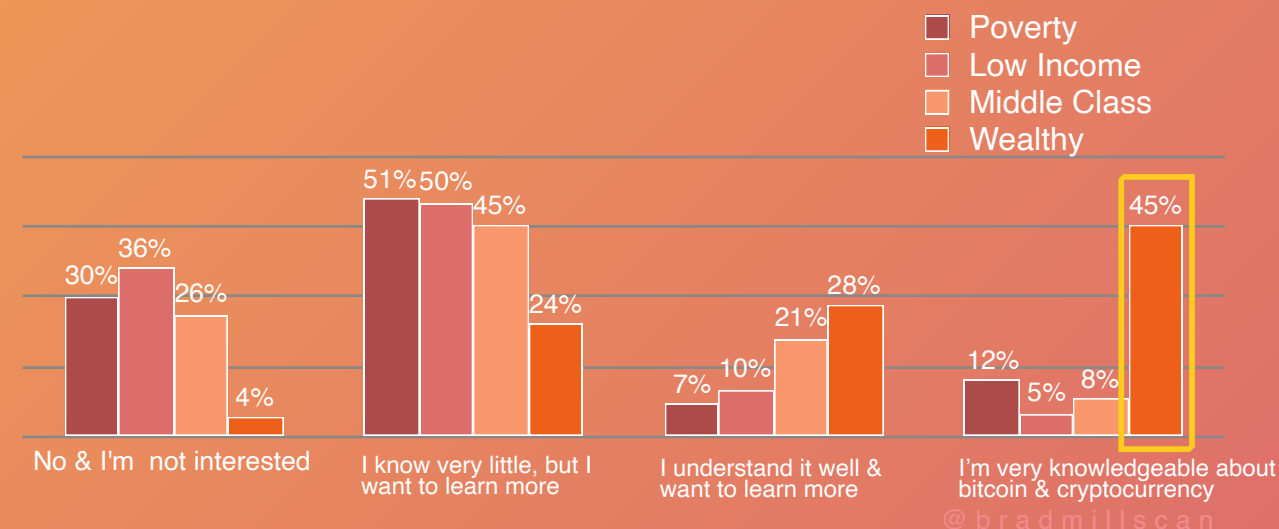
Generation Effects

- 1. Boomers are significantly less interested.
(51% no interest vs 25% no interest of others)
- 2. Gen X and Millennials consider themselves the most knowledgeable.
- 3. When Gen Z “knows very little” about Bitcoin, they definitely want to learn more.



SES Effects

- 1. The Wealthy report they are “very knowledgeable about Bitcoin.”
- 2. Poverty, Low Income & Middle class are significantly more likely to say they “know very little” & express less interest.
- 3. Middle Class and Wealthy are more likely to report that they “understand it well”.

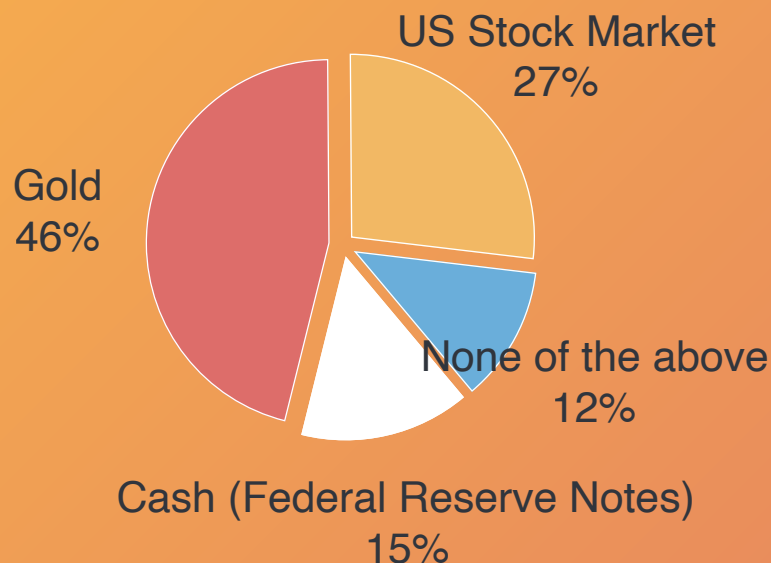




Q13: Which asset do you think has been a better investment over the last 10 years than Bitcoin?

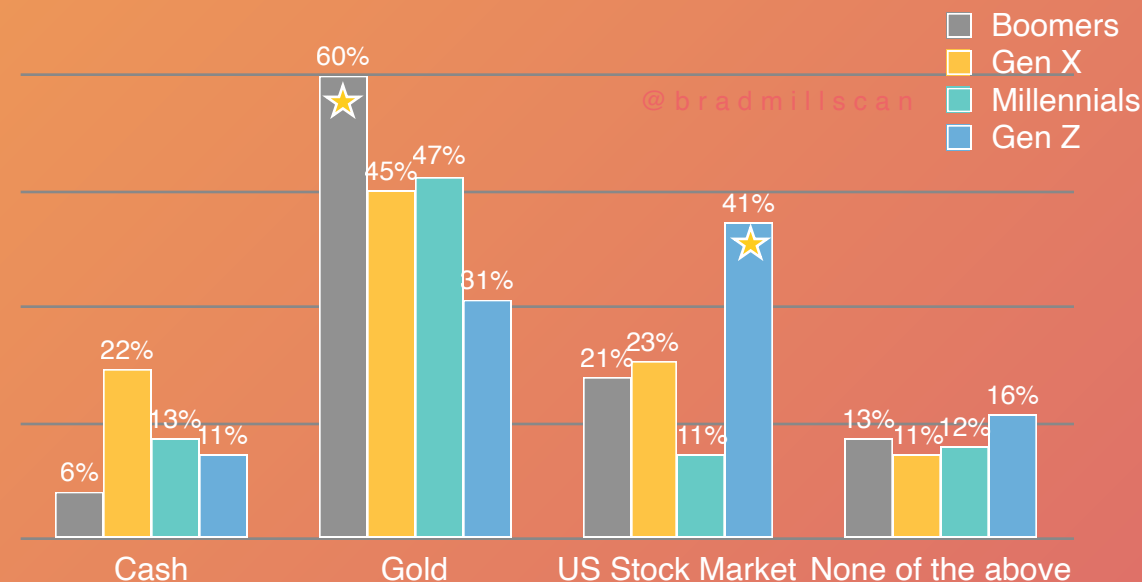
Total Sample

88% of people think that there were better investment options available than Bitcoin. Most believed Gold was a better investment (46%), while only 12% agreed that none were a better choice than Bitcoin.



Generation Effects

1. Boomers were most likely to select Gold (60%).
2. Gen Z is more likely to select US Stock Market.



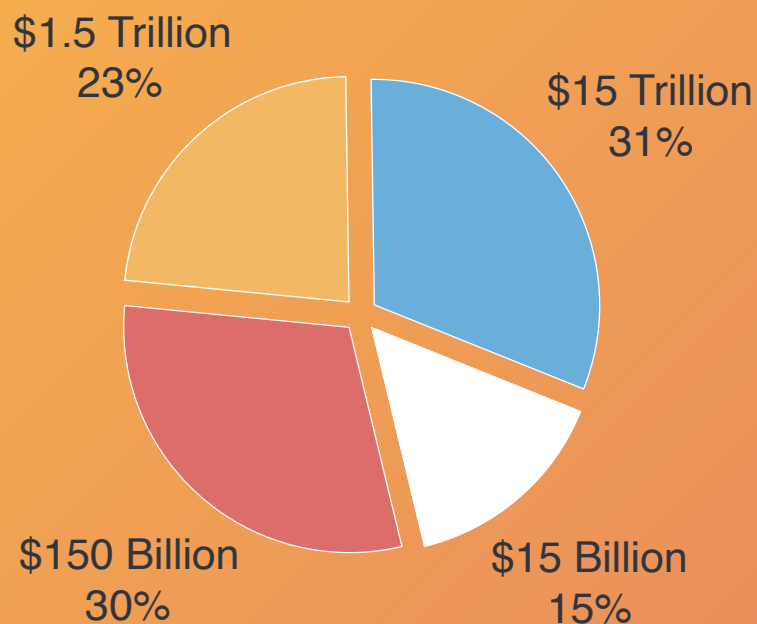


Q14: If all cash money in the world is worth \$80 Trillion, all Gold is worth \$8 Trillion, all Real Estate is worth \$200 Trillion - what do you think all the Bitcoin in the world is worth?

Total Sample

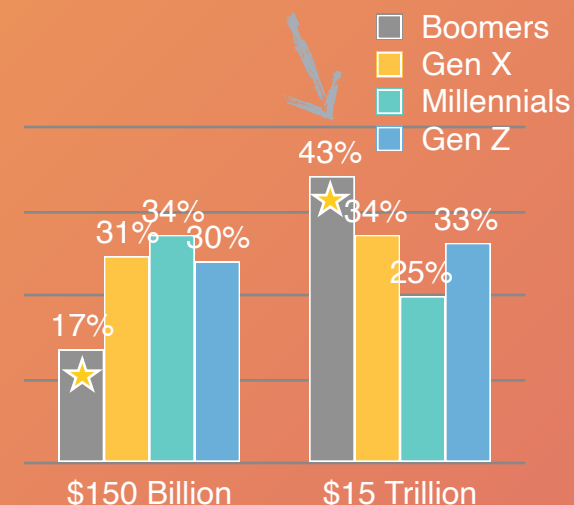
30% of the population got the right answer of \$150 Billion.

54% overestimated the market cap of Bitcoin.



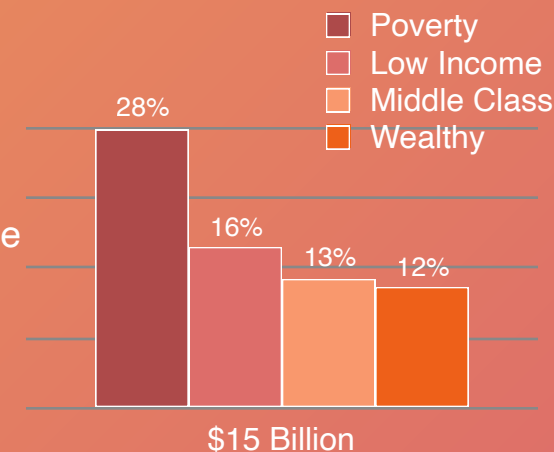
Generation Effects

1. Boomers were the least likely to get this question correct (\$150 Billion).
2. Boomers & Gen X were also more likely to overestimate its worth (15 Trillion).



SES Effects

Those below the poverty line are more likely to underestimate Bitcoins worth (\$15 Billion).

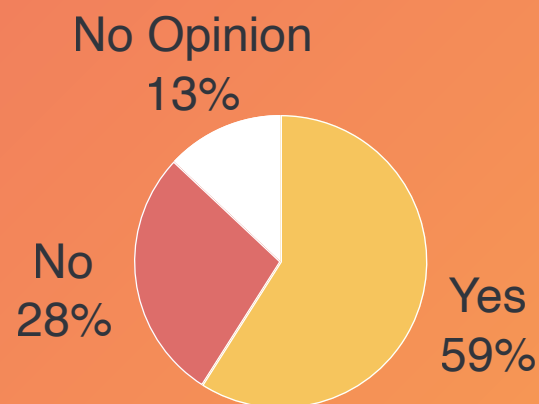




Q15: Do you trust the banks?

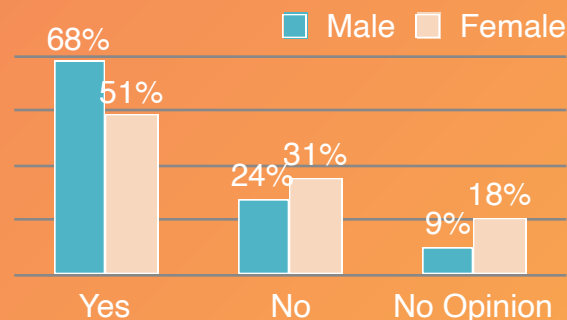
Total Sample

59% of respondents reported that they trust the banks.



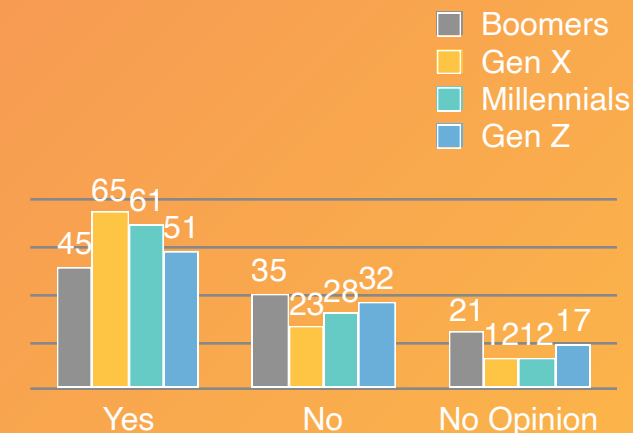
Gender Effects

Men were significantly more likely than women to trust banks (68% vs. 51%). Women were more likely to have “No opinion”.



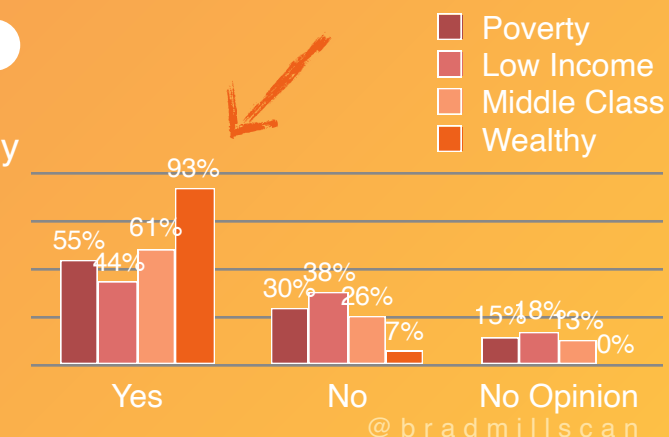
Generation Effects

Gen X and Millennials are the most trusting of banks. Boomers are most likely to distrust the banks.



SES Effects

The Wealthy are significantly more trusting of banks, with 93% saying “Yes”. Every wealthy person also had an opinion.



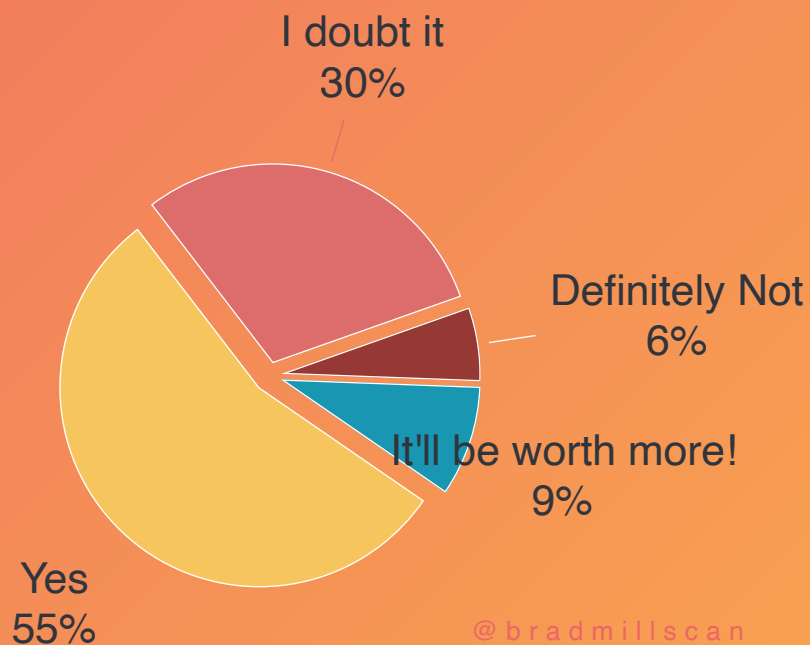
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Q16: If Bitcoin succeeds as digital money of the internet, do you think it could ever increase in price 50X to be worth the same amount as gold, \$8 Trillion?

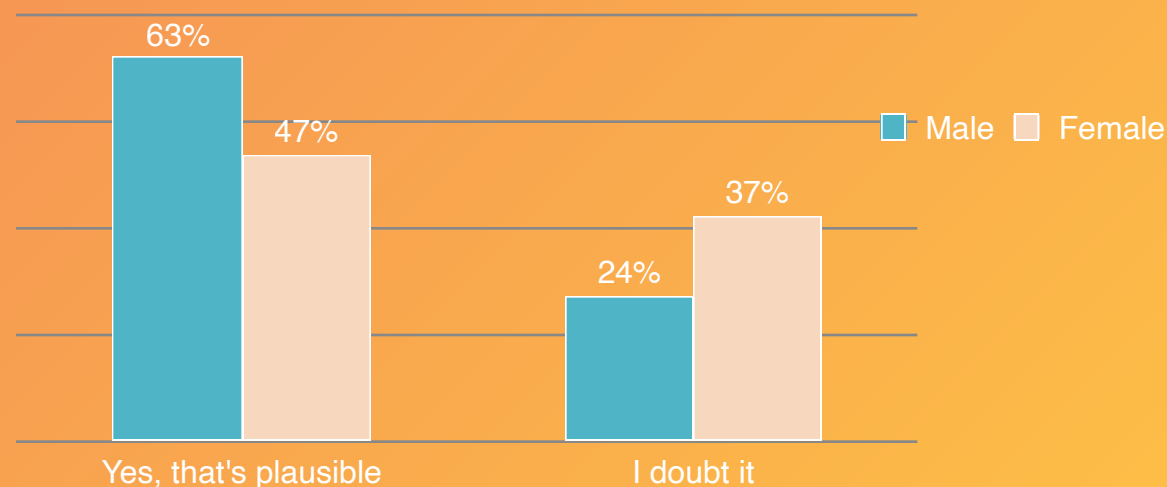
Total Sample

By the end of the survey, 55% of people believe Bitcoin could become worth as much as gold.



Gender Effects

Men believe this is more possible than women do, and women have significantly higher doubt.

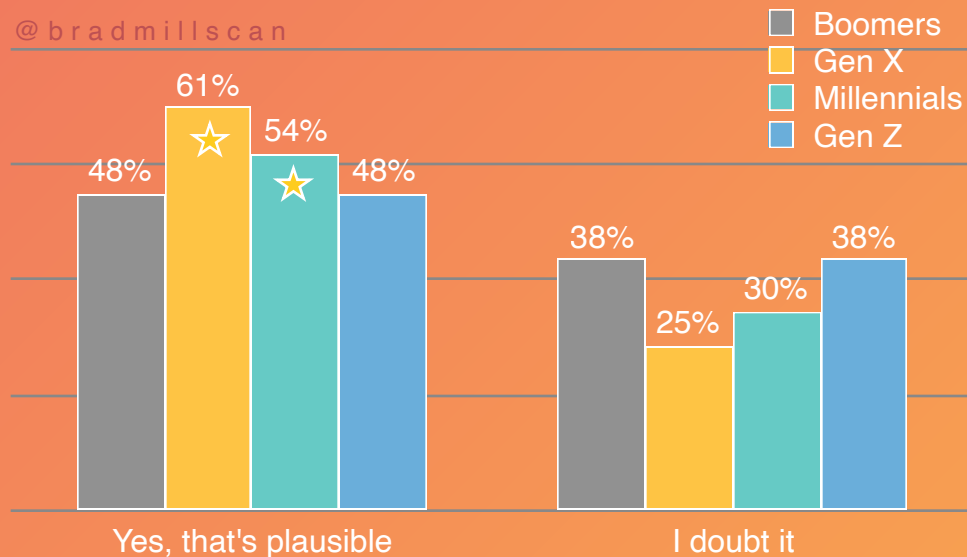




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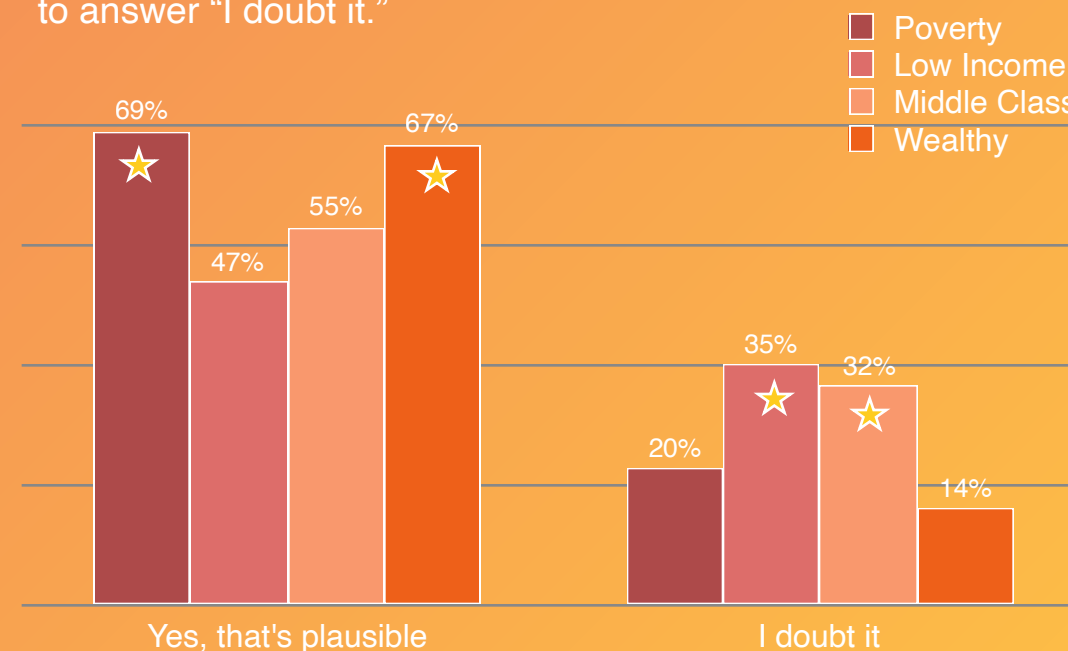
Generation Effects

Gen X & Millennials were significantly more likely than Boomers & Gen Z to think Bitcoin could 50X in price. Boomers & Gen Z expressed more doubt.



SES Effects

The Poor and Wealthy are more likely to answer “Yes, that’s plausible,” while Low Income and Middle Class are more likely to answer “I doubt it.”





Let's Zoom in on this!

Who is the most likely to believe Bitcoin can 50X?
Who is most likely to invest in Bitcoin?



Factor 1: SES

Factor 2



Wealthy



Gen X



Millennials

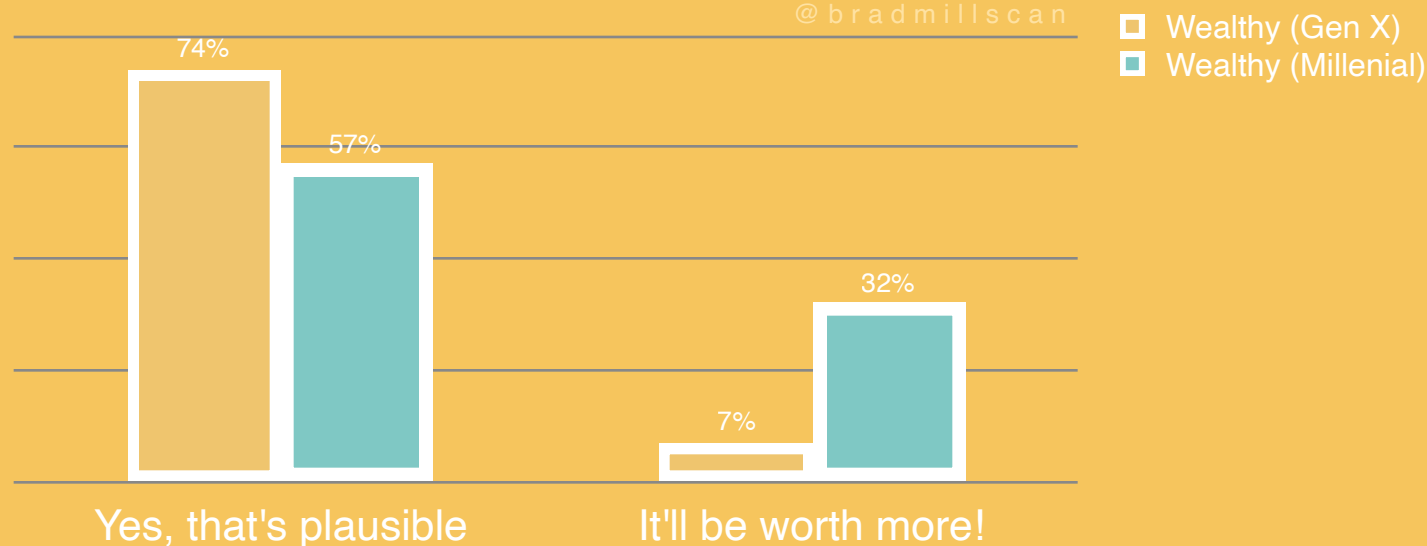




Conclusion

Do you think Bitcoin could increase in price 50X to be worth the same amount as gold, \$8 Trillion?

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While Gen X definitely believes that it is possible, Wealthy Millennials were the most confident about Bitcoin's potential.



Esther Vlessing's Takeaways: Bitcoin Investors VS. Non-Bitcoin Investors

Among those who initially chose to take the gift in Bitcoin (in Q1), was there a difference in financial literacy compared to those who didn't?



- Those who initially chose Bitcoin are likely to be Wealthier than those who didn't.
- That segment was significantly more likely to get Bitcoin-related questions correct.
 - 46% of them knew that Bitcoin is run by “Nobody/the users” compared to 33% of the non-Bitcoin cohort.
 - They were more likely to report that they “understand bitcoin well.” (40% vs. 14%)
 - They were more likely to report that they are “knowledgeable about Bitcoin.” (22% vs. 9%)
- There were NO significant differences between the Bitcoin cohort & non-Bitcoin cohort in other financial questions.
- Bitcoin cohort was more likely to believe its value could reach \$8 Trillion (68% vs. 53%).
- Bitcoin cohort were surprisingly more trusting of the banks (67% vs. 58% non-Bitcoin choosers)

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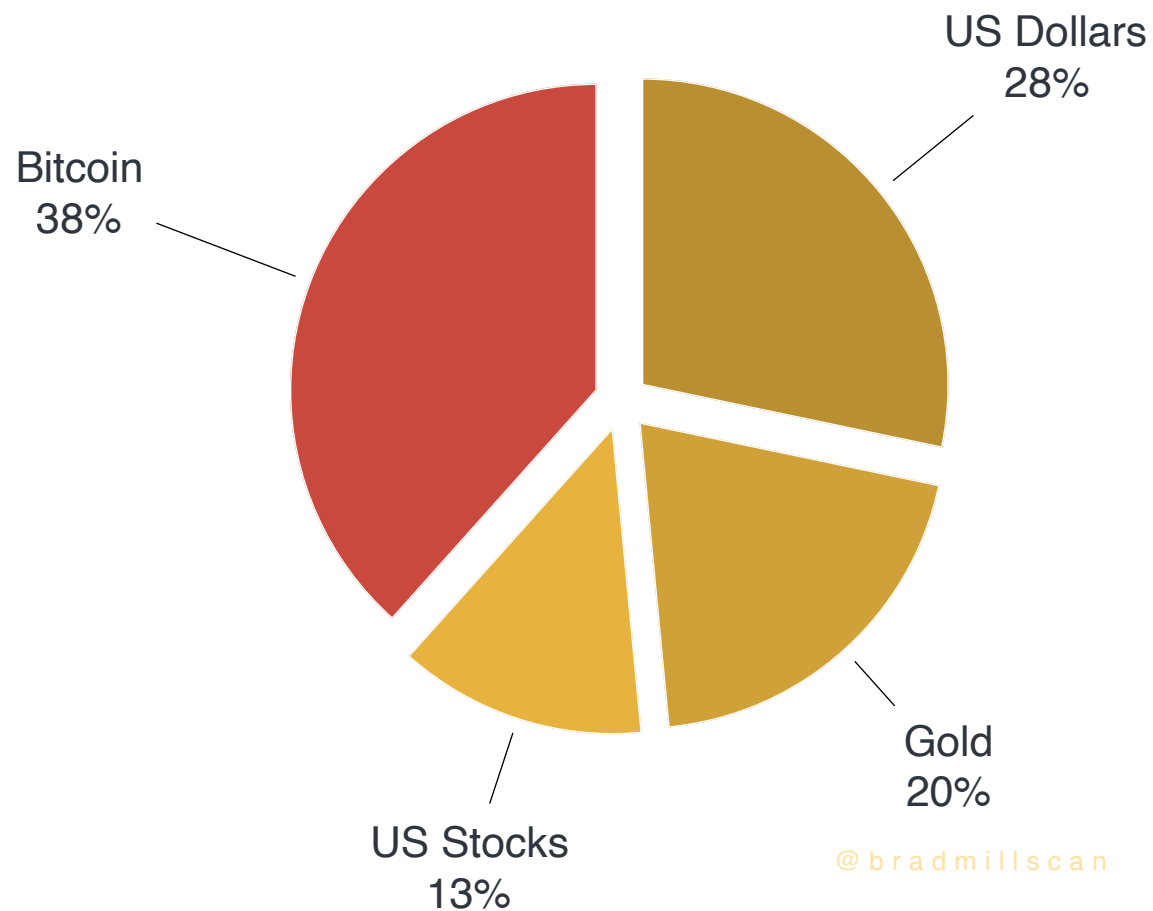
Final Question, Q17: In which form would you accept the gift?

Total Sample

At the end of the survey, a new total of 38.4% of the population would choose to invest in Bitcoin.

Gender Differences

Significantly more women chose Bitcoin at the end. It was nearly equal at 41% of men and 36% of women choosing Bitcoin after education.



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Q17: In which form would you accept the gift?



Generation Effects

1. Boomers

Boomers were still significantly less likely to invest in Bitcoin than other generations.

2. Boomers & Gen X

Significantly more likely to choose Gold as their investment of choice (35%) than other generations (17%) average.

SES Effects

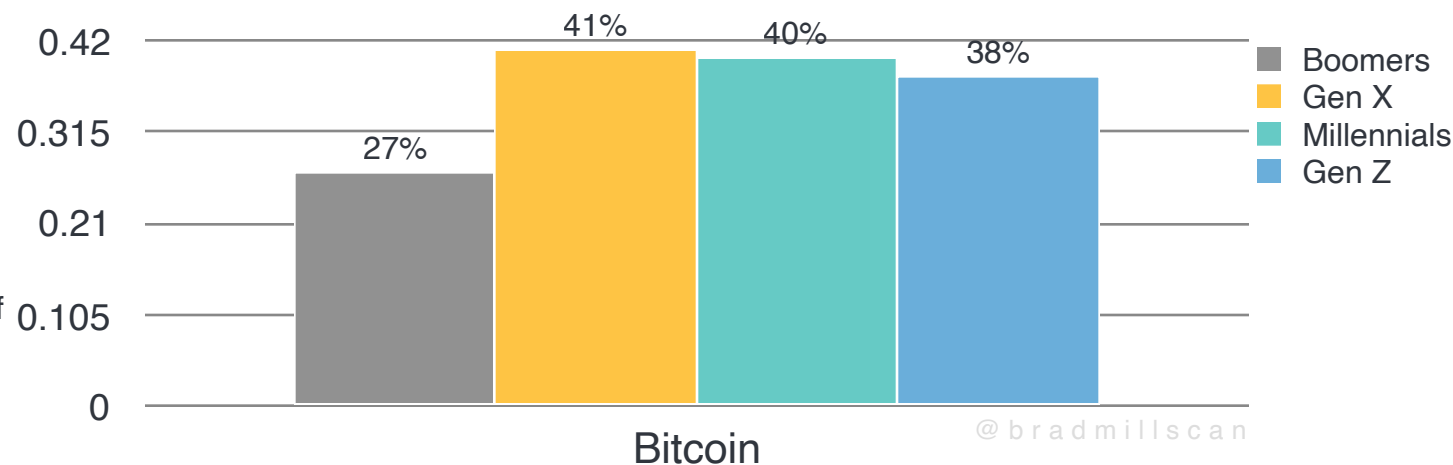
1. Wealthy & Middle Class

Significantly more likely than others to invest in Bitcoin at 46% and 41% respectively.

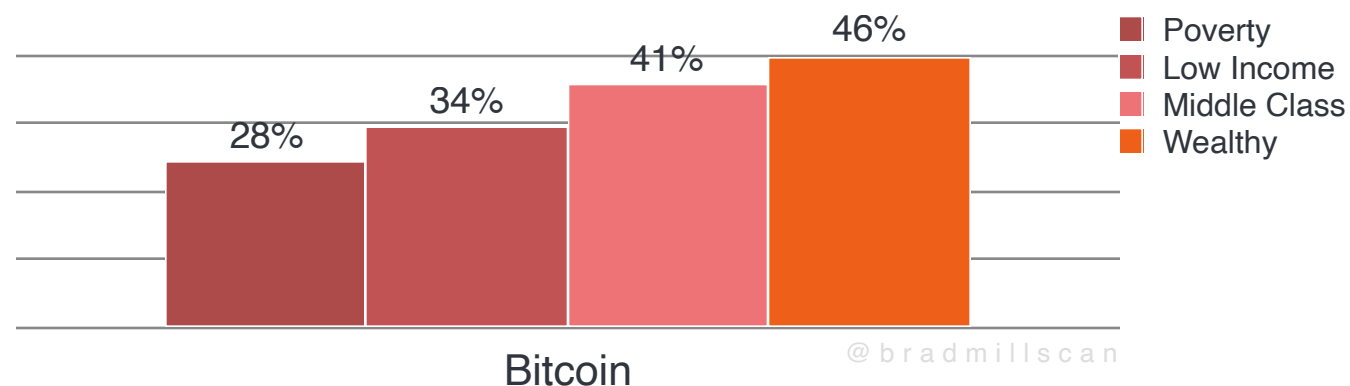
2. Low Income & Below Poverty Line

Significantly more likely to choose Gold than the wealthy.

Bitcoin as investment choice across Age Groups (Q17)



Bitcoin as investment choice by Socio-economic classes (Q17)



Hypothesis

×

×

01

Hypothesis 1: Gender Differences

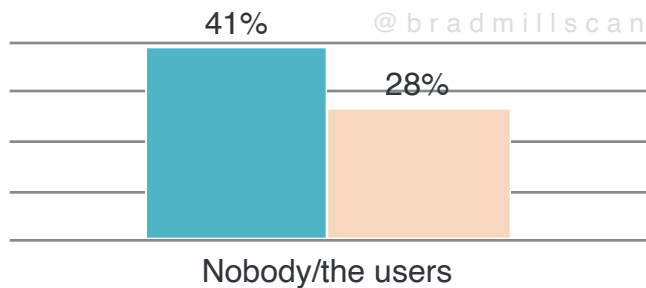
Gender Effects

We hypothesize there will be gender differences (male vs. female) throughout the survey.

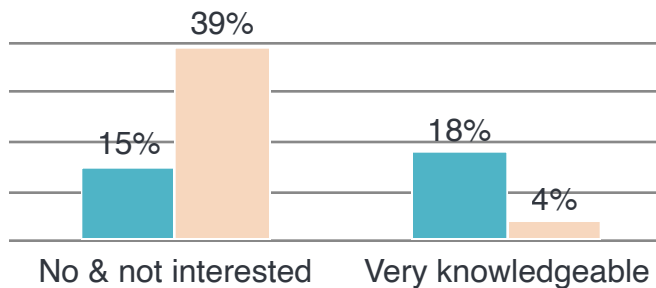
Conclusion

- 1) Men were more **knowledgeable, interested & confident about their knowledge** about Bitcoin than women.
- 2) Women expressed more knowledge about the US monetary system.
- 3) Across questions, differences emerged in areas of opinion. Women were more likely to select cautionary answers like “No Opinion”, “I doubt it”, while men were significantly more likely to give confident & positive statements.

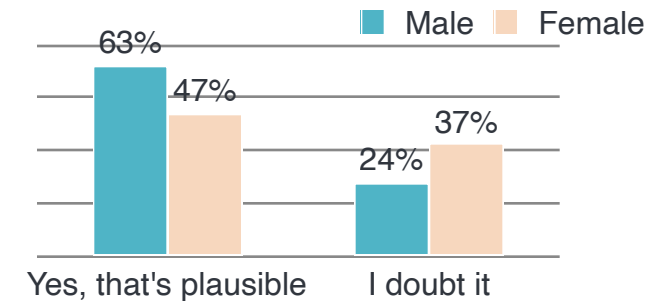
Without googling, who controls Bitcoin?



Do you consider yourself knowledgeable about what Bitcoin is?



Do you think it could ever increase in price 50X to be worth \$8 Trillion?



Hypothesis

02

Hypothesis 2: Demographics Differences

Generation Effects

There will be a difference amongst the generations. The two younger demographics, Millennials (1981-1994) and Gen Z (1995-2009) will **express significantly more interest** in investing in cryptocurrencies than either Gen X (1965-1981) or Baby Boomers (1946-1964).

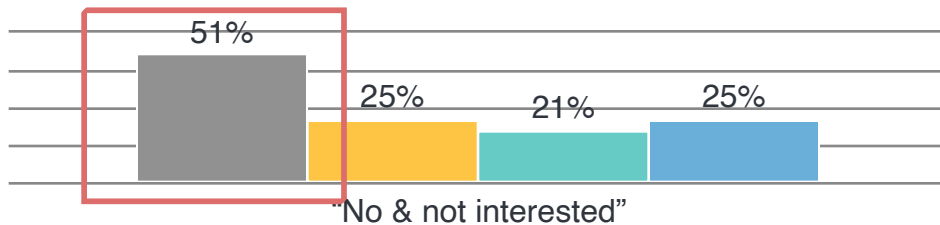
Conclusion

Gen X, Millennials & Gen Z were almost equally interested in Bitcoin as an investment.

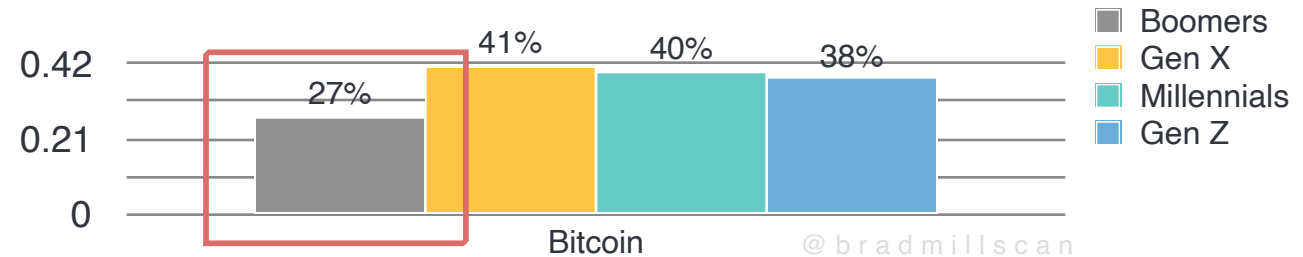
Baby Boomers are interested in Bitcoin! *Boomers appear stuck in their ways, expressing significantly less initial interest in bitcoin.*

Towards the end of the survey, they are the least interested in learning more about Bitcoin. However, Boomers had the largest delta between the beginning & the end of the survey, showing the highest increase in Bitcoin interest by percentage, across all generations.

Those who report "No & I'm not interested" in learning more about Bitcoin across age cohorts (Q12)



Bitcoin as investment choice by generation (Q17 - After Education)



Hypothesis

03

Hypothesis 3: Socio-economic Status

SES Effects

There will be a difference amongst different Socio-economic classes. Wealthier individuals with **express higher knowledge and interest.**

Conclusion

The Wealthier demographic **expresses more interest**, but they were **not more knowledgeable** about bitcoin or the US monetary system. (**Continued on next slide*).

ESTHER'S × INSIGHTS: SES

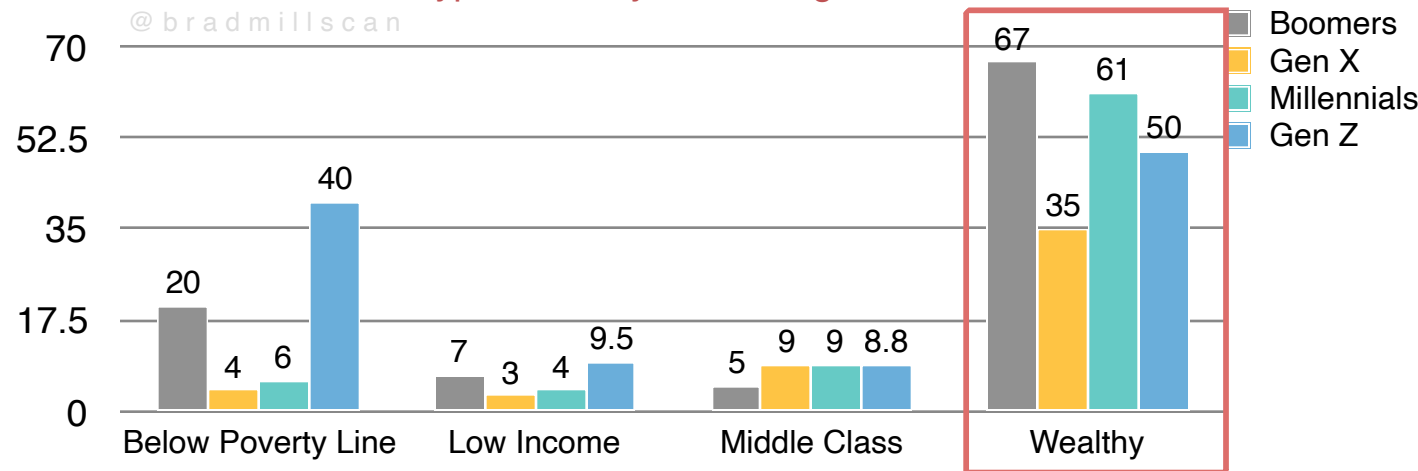
SES Effects

SES is the defining factor on Bitcoin investments.

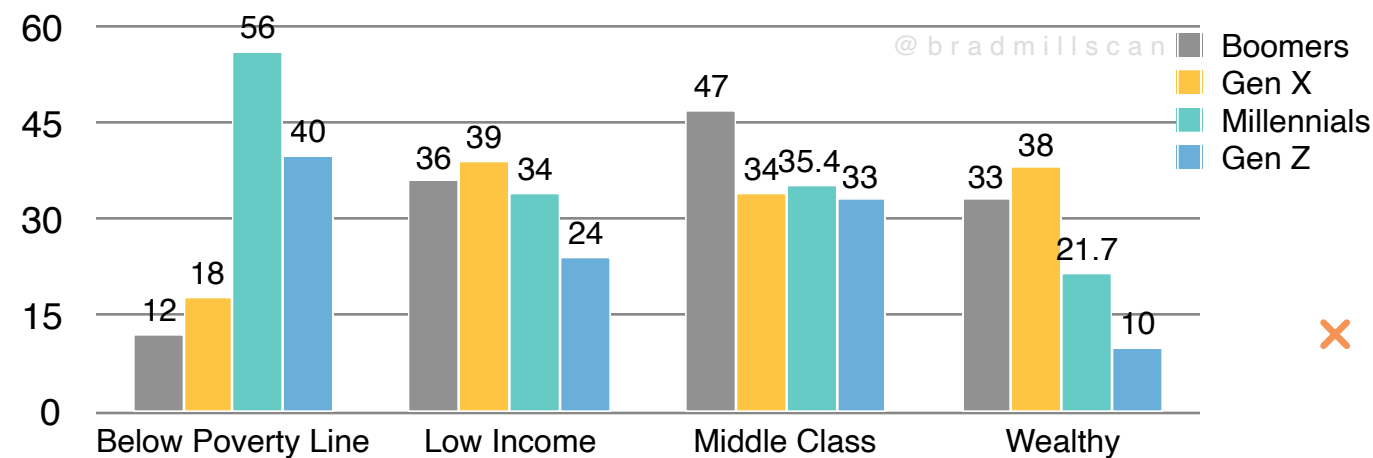
Wealthy individuals are more likely than any other social class to invest in Bitcoin. They are confident and are attracted to 'powerful' and 'empowering' statements. They are significantly more likely to say they are 'Very Knowledgeable' about Bitcoin and were overwhelmingly sure that the US Dollar 'Gained Purchasing power' in the last 100 years (58% vs. 18% of others.)

However, when examining whether they were ACTUALLY more knowledgeable about Bitcoin (on a basic bitcoin question) *they were not (second graph on right.)* In fact, they were often more wrong about most things. They were the least likely to say that US Dollars were backed by 'Nothing' & they were less likely than Low Income or Middle Class SES to give the right answer to the US National Debt question.

Those who report being "Very knowledgeable about bitcoin & cryptocurrency" across age cohorts



Percent of those responded the right answer of "Nobody/the users" when asked "Who controls Bitcoin?"





@bradmillsan



Windfall Game Conclusion

Although at first only 13% of participants would chose Bitcoin in the windfall scenario, 38% chose Bitcoin by the end.



Becoming more informed about the money creation process, the effects of inflation on the value of US Dollars & Bitcoin's performance as an investment vs Gold & Stocks shows a positive overall effect on the decision to invest in Bitcoin investment. There was a 33% overall increase of participants choosing Bitcoin in the windfall scenario at the end of the survey.

Being Wealthy is largely indicative of desire to invest in Bitcoin, with Gen X and Millennials most positive about Bitcoins future.





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Follow-up studies

The Windfall Game needs to be run internationally to compare how people in Africa, China, India, etc think about Bitcoin, money & investing vs Americans.



In follow-up studies, it would be good to understand which information was most effective in changing participants' minds.



There was a small percent of people who originally selected Bitcoin but then changed their mind to Stocks or Gold, it would be worth examining why.

We would also look at the barriers of those deciding not to invest in Bitcoin (62% of the population) to identify actionable ways to craft more relevant messaging and more effective education.





THANK YOU

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× Appendix - Question Numbers

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Q1) A wealthy person gifts you \$10,000. You get to choose in which form you'll accept the gift.

But there's a catch: You must keep the gift in the form that you choose for 10 years without touching it.

In which form would you accept the gift?

1. US Dollars
2. Gold
3. Bitcoin
4. US Stocks (S&P Index)



Q17) Given all of this information, let's say you are offered \$10,000. You get to choose in which form you'll accept the gift. You must keep the gift in the form that you choose for 10 years without touching it. In which form would you accept the gift?

1. US Dollars
2. Gold
3. Bitcoin
4. US Stocks (S&P Index)



Research Sample



SAMPLE

- Sample size (N) was 807
- Live in the USA
- Men and Women

The survey was in-market between February 7th and February 8th 2020.



EXCLUSIONS

- The following had to be true for inclusion in the sample:
 - Between the ages of 18-65
 - Could not be a market researcher



METHODOLOGY

Respondents were presented with a scenario where they had to choose where to invest a \$10,000 windfall. A total of 17 questions measured their knowledge about Bitcoin, US monetary system, national debt & investment preferences.

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