

# The Markets and Black Swan Theory

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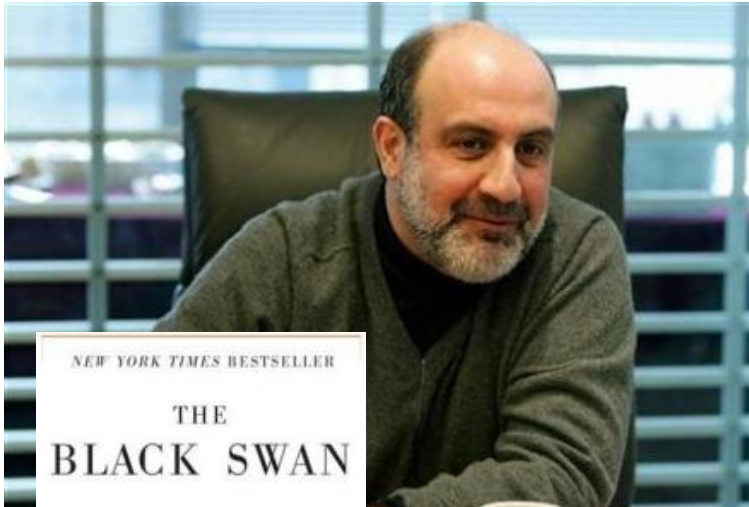
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# Presentation Overview

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# Introducing Nassim Nicholas Taleb



- Born in 1960 in Amioun, Lebanon.
- Has been a Professor, Wall Street Trader and Hedge Fund Manager.
- Author of The Black Swan, a New York Times Best Seller.
- Currently working with the IMF to indentify and mitigate tail risks in Financial Markets.

# Introducing Black Swan Theory



The theory was developed by Nassim Nicholas Taleb to explain:

*The disproportionate role of high-impact, hard to predict, and rare events that are beyond the realm of normal expectations in history, science, finance and technology.*



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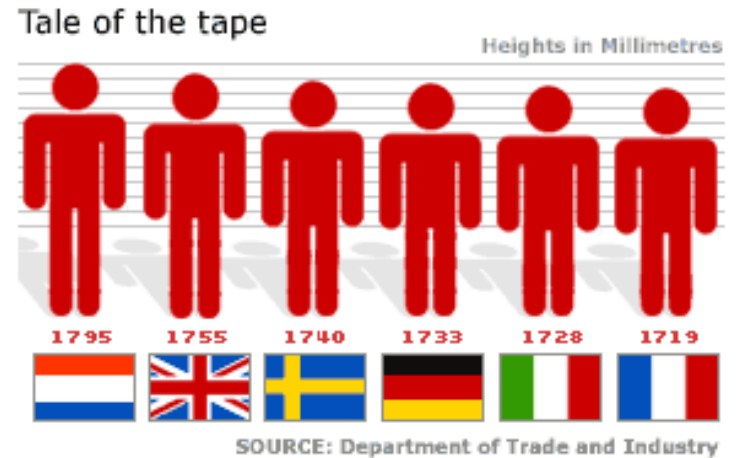


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# Mediocristan

- Round up everyone in this room and have them stand next to each other.
- Imagine you then add to our group there is the tallest person in the world.
- They will make up an extremely small part of the total %.



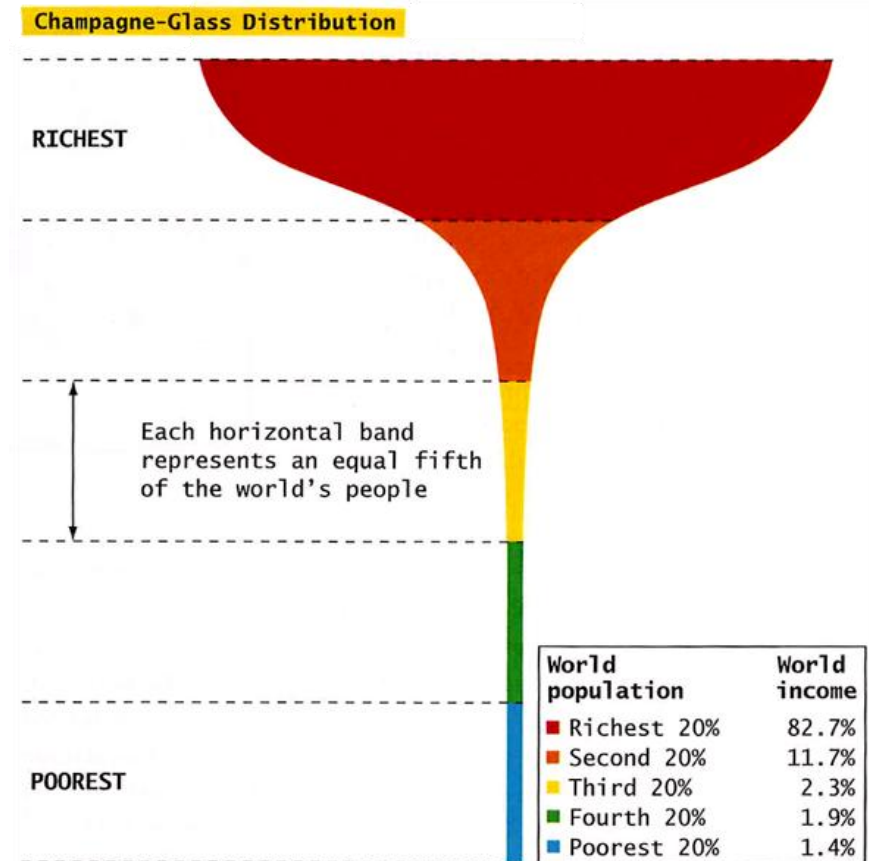
# Supreme Law of Mediocristan

*When your sample is large, **no single instance will significantly change** the aggregate of the total.*



# Extremistan

- Round up everyone in this room, add the richest person in the world.
- They will make up 99.9999% of the total wealth of the group.
- For someone's height to represent this share, they'd have to be 50,000x taller than the tallest person.



# Supreme Law of Extremistan

*Inequalities are such that **one single observation can disproportionately impact the aggregate, or the total.***





# Impacts on the Bell Curve

## The odds of being rich in Europe

### **FACTUAL DISTRIBUTION**

*People with a net worth*

Higher than €1 million: 1 in 63

Higher than €2 million: 1 in 125

Higher than €4 million: 1 in 250

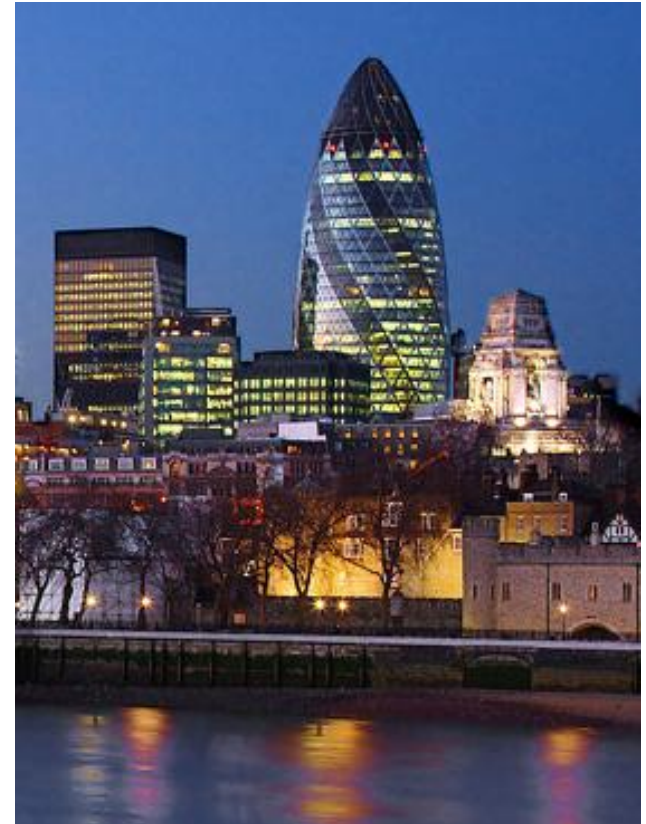
Higher than €8 million: 1 in 500

Higher than €16 million: 1 in 1,000

Higher than €32 million: 1 in 2,000

Higher than €320 million: 1 in 20,000

Higher than €640 million: 1 in 40,000



# Impacts on the Bell Curve

## The odds of being rich in Europe

### GAUSSIAN LAW DISTRIBUTION

*People with a net worth*

Higher than €1 million: 1 in 63

Higher than €2 million: 1 in 127,000

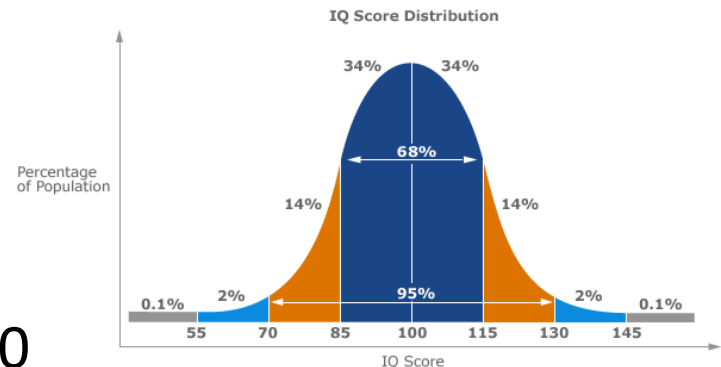
Higher than €3 million: 1 in 14,000,000,000

Higher than €4 million: 1 in 886,000,000,000,000,000

Higher than €8 million:

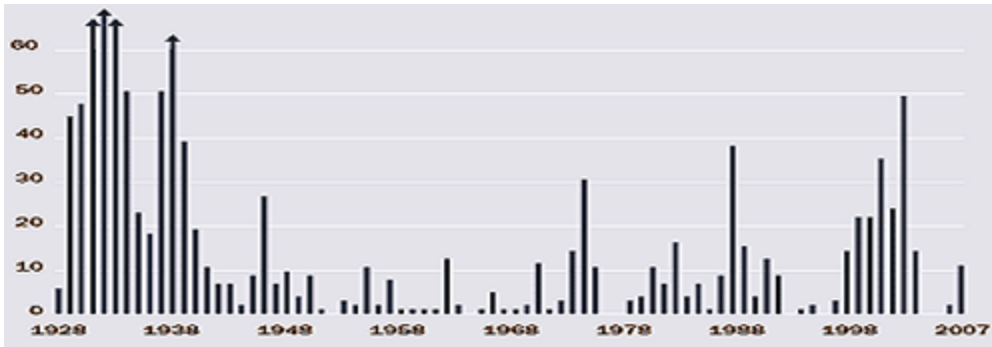
1 in 16,000,000,000,000,000,000,000,000,000,000,000,000,000,000

Higher than €16 million: 1 in . . . ***my computer isn't capable of handling the computation.***



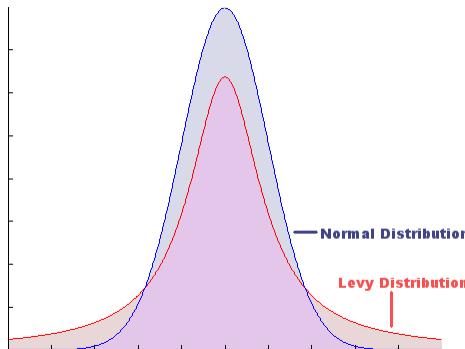
# Impacts on the Bell Curve

## Clearly the Bell Curve Doesn't Apply to Financial Markets



- Number of trading days in which the S&P 500's volatility was over 2% from January 1928 to October 2007.

Source: S&P 500, Charles Schwab



- The Financial Markets operate in **Extremistan**



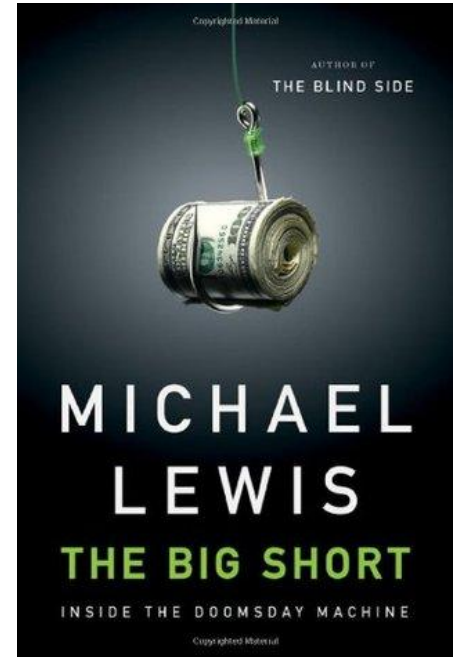
# Nassim's Performance

- Became Financially Independent after the 1987 crash.
- Made a multi-million dollar return from the crash in 2007
- Funds which he advises for, run by Universa, returned 65% to 115% in October of 2008 alone.
- Assets under management (AUM) at Universa in 2009 were \$300,000,000. Return since inception has been \$2,000,000,000.



# Other Hedge Funds Performance

- Founded in 2003 by then 30 year old James Mai and Charles Ledley with \$110,000 in capital.
- Strategy was to invest in companies worldwide which they believed were undervalued due to the inability of the market to account for sudden and unexpected change.
- Within 2 years they grew the \$110,000 to \$15,000,000.
- In 2010, \$200,000,000 to \$300,000,000.

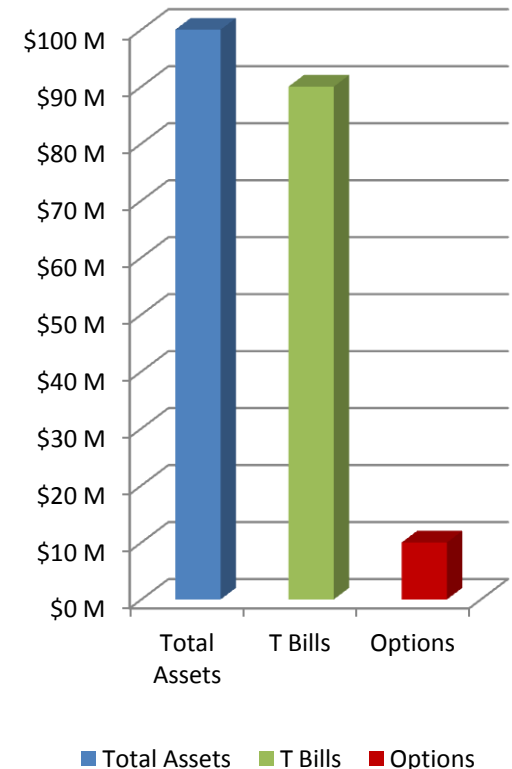


CORNWALL  
CAPITAL

# Mimicking Nassim

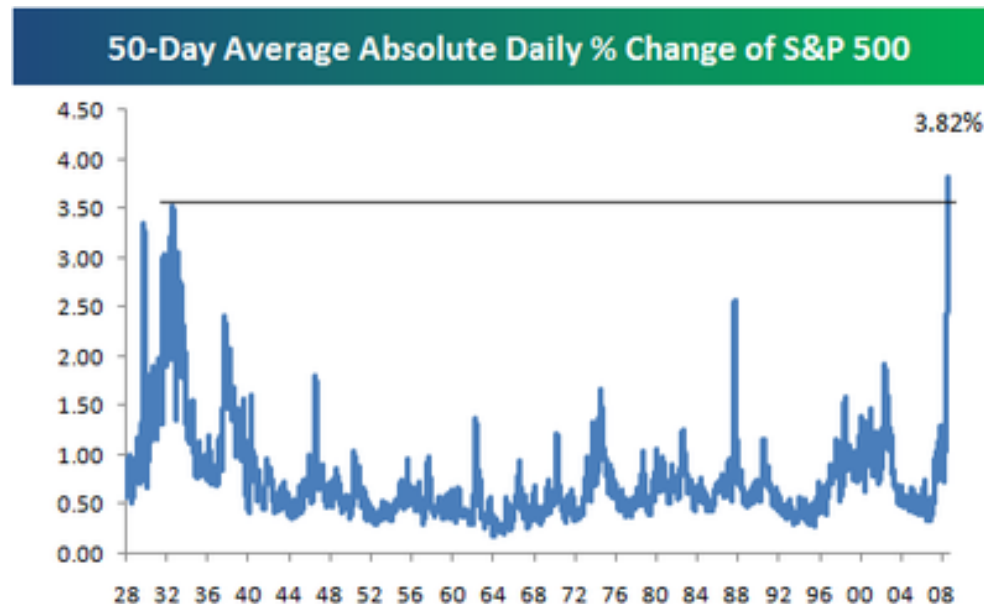
## Why isn't everyone doing this?

- Involves a massive amount of patience.
- Fund keeps more than 90% of assets in cash or cash equivalents, earning a small amount of interest or losing a small amount of money most months.
- Fund buys way out of the money calls and puts and requires a decline of 20% or more in a month to be valueable.



# Mimicking Nassim

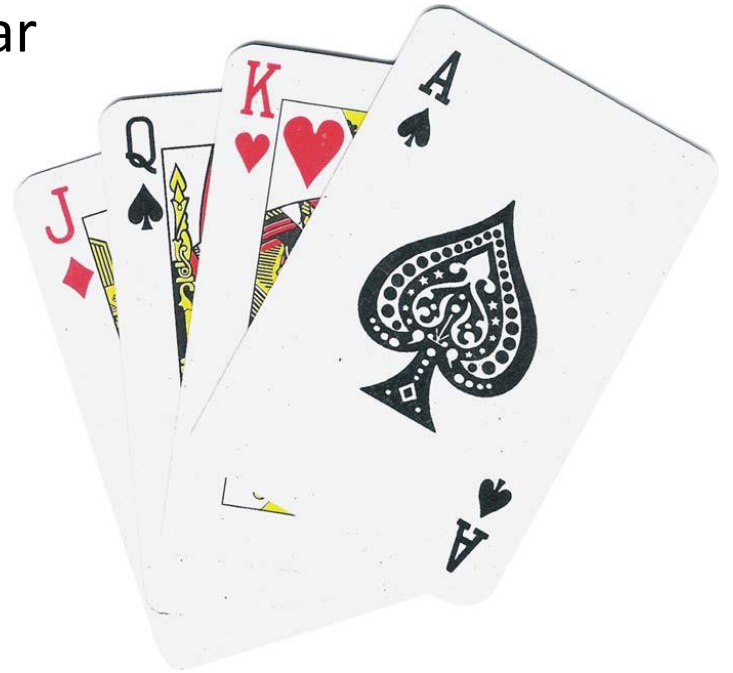
Why isn't everyone doing this?





# Takeaways

- When evaluating outcomes to a particular event, identify whether you are in Mediocristan or Extremistan.
- Remember it's not a matter of “if”, but a matter of “when” the next Financial catastrophe will happen.
- Nassim's solution: Rather than try to predict and prevent the next crisis, make society and portfolios “Black Swan Robust”.





# Takeaways

*Imagine a speck of dust next to a planet a billion times the size of the earth. The speck of dust represents the odds in favor of your being born; the huge planet would be the odds against it. So stop sweating the small stuff. Don't be like the ingrate who got a castle as a present and worried about the mildew in the bathroom. Stop looking the gift horse in the mouth—*

***remember that you are a Black Swan.***

**Thank You for your Time**

**Questions?**



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