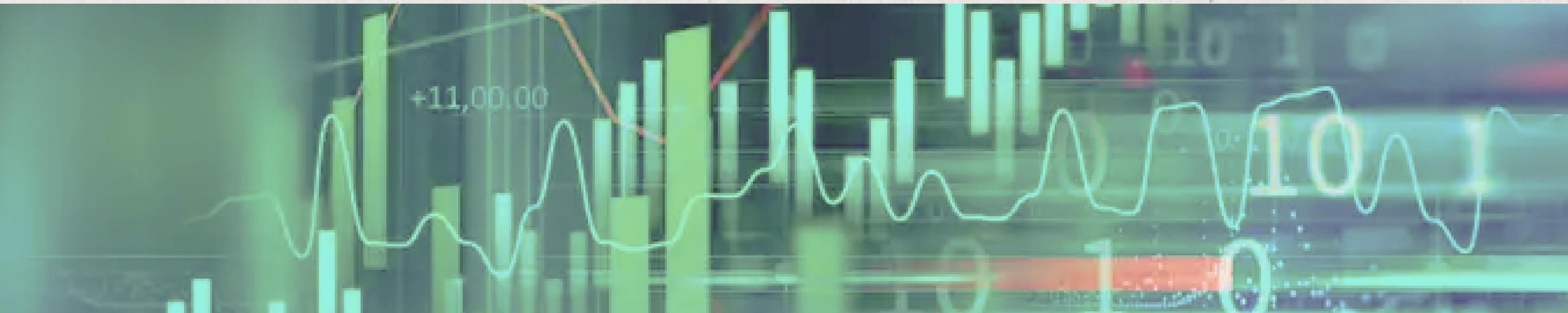
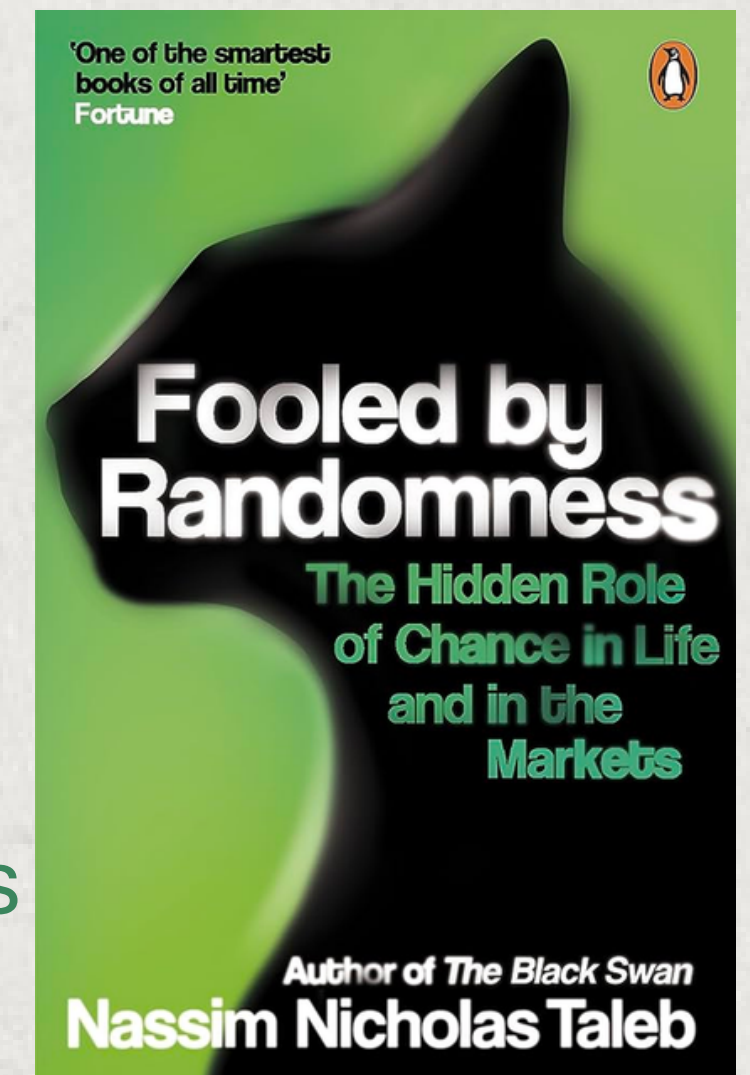


Presented by Dhruvi Punjani and Arhant Raj Modi

# Fooled by Randomness

The Hidden Role of Chance in Life and in the Markets



# Nassim Nicholas Taleb



Trader, practitioner of  
mathematical finance  
and hedge fund manager  
with over 50 years of  
experience

**Why should you take his  
advice?**

He is the famous author of  
the Black Swan

Net worth of 80-90Mil  
USD

Could it be that your perceptions of luck, skill, and success are merely illusions cloaked by the randomness of life's events?

Do skills and talent matter?

Is it merely Luck?



Is it all coincidence?

Success is predetermined?

Is life random?



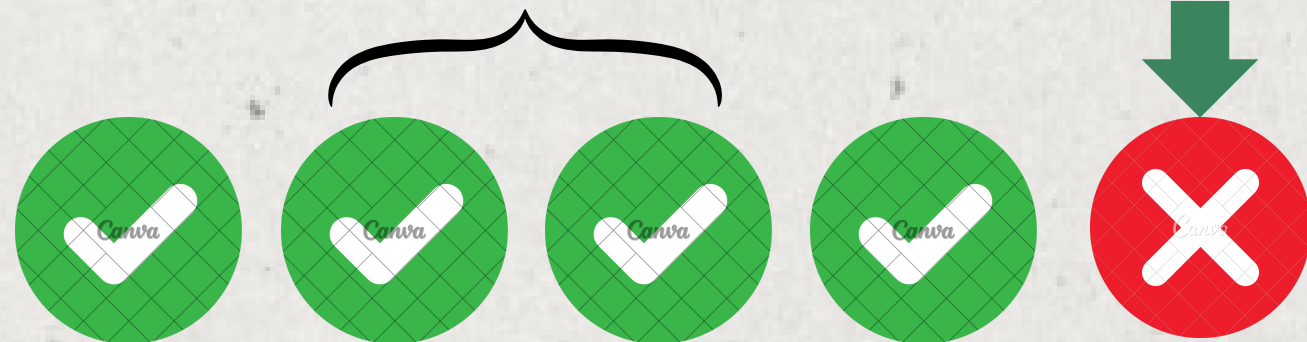
# Survivorship Bias

## Case 1



what we see

what we don't

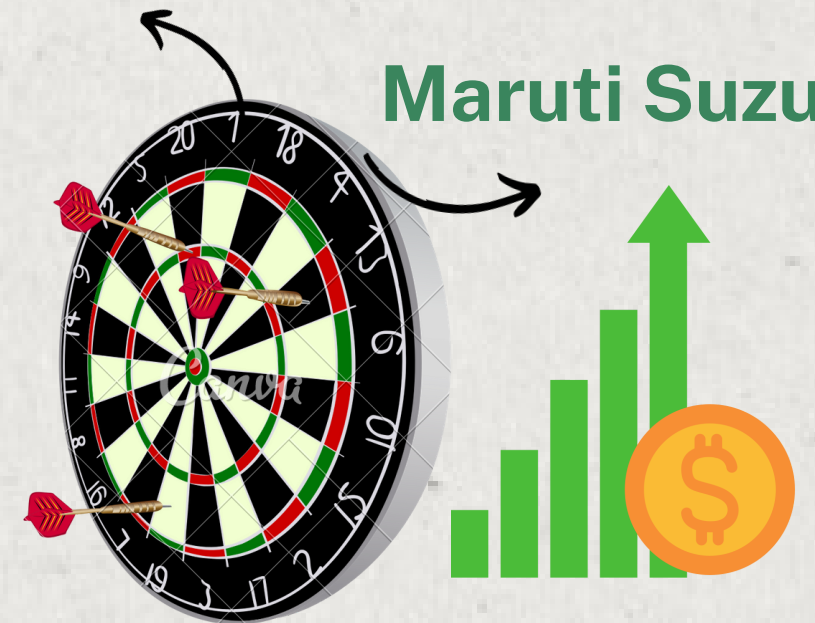


## Case 2



Reliance

Maruti Suzuki



# But WHAT IF....?

# Skewness Effect

Expectation > Probability

| Event | Probability | Outcome  | Expectation                   |
|-------|-------------|----------|-------------------------------|
| A     | 999/1000    | \$1      | $999/1000 \times 1 = \$0.999$ |
| B     | 1/1000      | -\$10000 | $1/1000 \times -1000 = \$-10$ |
|       |             | TOTAL    | $\$0.999 + \$-10 = \$-9.001$  |

Expectation=  
Probability\*Pay off

We want to maximise  
profit expectancy NOT  
profit probability

Here expectation for Event A is \$0.999 and expectation for Event B is -\$10. So, there is an expectation for a loss of \$9.001, close to \$9

It is seen that frequency or probability is irrelevant and needs to be judged in combination with the magnitude of outcome.

**90% chance of losing 10%**  
**10% chance of gaining 200%**

Would you take this risk?

**Dr. Taleb takes advantage of this skewness issue. He believes in:**



occasionally bleeding some but  
never experiencing a cut throat  
loss



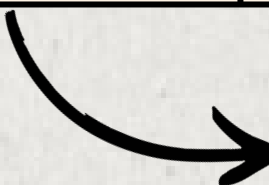

winning once but big time

# BULL AND BEAR ZOOLOGY

Dr. Nassim argues that “bullish” and “bearish” are often hollow words with no application in a world of randomness

| Event            | Probability | Outcome  | Expectation             |
|------------------|-------------|----------|-------------------------|
| Market goes UP   | 70%         | Up 1%    | $70/100 \times 1 = 0.7$ |
| Market goes DOWN | 30%         | Down 10% | $30/100 \times 10 = -3$ |
|                  |             | Result   | -2.3                    |

Here the expectation of the market going up is 0.7 and the expectation of the market going down is 3. Ergo, the total expectation of the market going down is 2.3



It is not how likely an event is to happen that should be the point, the point is always how much is made when it happens. Similarly, the frequency of profits is irrelevant, the magnitude of the outcome counts



# Black Swan Problem



This has never  
happened before

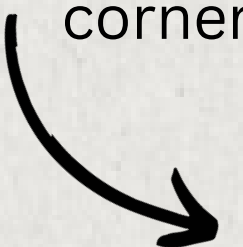


Will never  
happen

No amount of observation of  
white swans can allow the  
inference that there is no  
black swan, there can always  
be ONE!

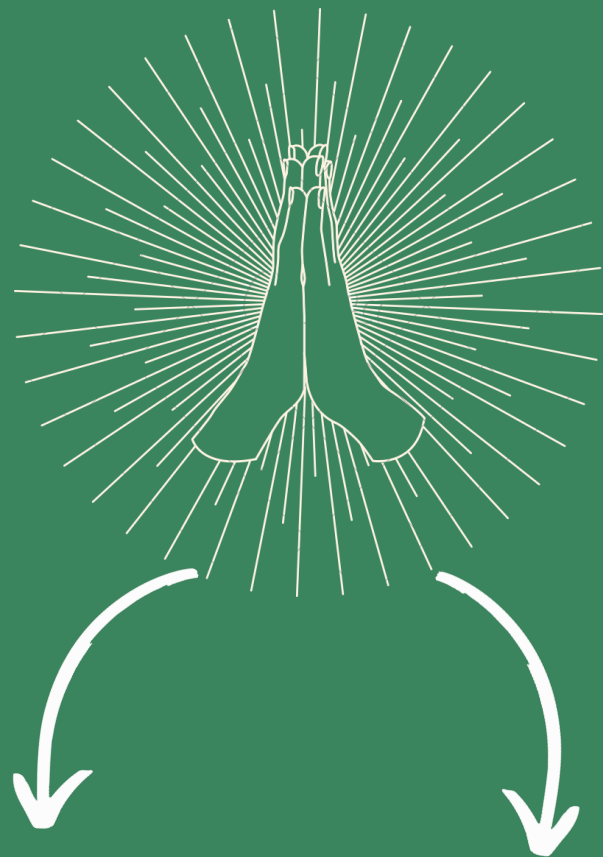


A black swan can just  
be lurking around the  
corner!





# Pascal's Wager



If you believe in god,  
and you the existence  
of a divine power is  
proved, you are to  
benefit from it

But if you believe in a  
god and the existence  
is denied, you are at  
no loss from that  
belief

Dr. Taleb advices investors  
to use the same principle of  
Pascal's wager:

- Get the benefit of a potential strategy that has worked in the past
- If it does not work, you will return to market average
- However, don't use historical data to determine your risk exposure

01.

Marrying  
your  
positions

02.

No plan for losses

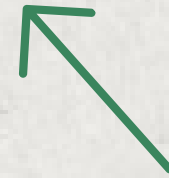
03.

Overestimating  
Accuracy

04.

Denial

## Traits of a Market Fool



Thank you  
very much!

