

Want to get rich quick in the market

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Andrew Stotz, PhD, CFA



Get real about stock market return

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Get real about stock market return

Part 1: Understand the role of luck

Part 2: Build focused, long-term thinking

Part 3: Determine your expected stock market return

Get real about stock market return

Part 1: Understand the role of luck

Part 2: Build focused, long-term thinking

Part 3: Determine your expected stock market return

Learning outcomes

- Learn the best way to think about the stock market
- Understand variation
- Open your mind to the role that luck plays in outcomes in life

Get real about stock market return

- ★ I have a message for you to remember for the rest of your life
 - But you may not like it
- ★ Are you ready?

YOU

won't

GET RICH

in the
stock market



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Get real about stock market return

- ★ Imagine you were going to a casino for the first time and you tell your friends,
- ★ “I’m going to get rich in that casino.”

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- ★ You are so confident that you ask your family and friends,
- ★ “Give me all the money you have – I’m going to use it to place bets at the casino and get us rich!”

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- ★ Is that the right mentality to have when you go to a casino?
- ★ Of course not!
- ★ You could lose all your money in the blink of an eye!

Get real about stock market return

- ★ To be successful in the stock market, you must approach it with the right expectations, just as you should a casino

The role of randomness in the stock market

- ★ Randomness plays a role in stock market outcomes
 - In anything governed by randomness there will always be winners and losers
- ★ But there is no way to guarantee that YOU will be that winner

There is randomness in the stock market

- ★ As with everyday life, randomness oftentimes plays a major role
- ★ Let's make sure we thoroughly understand randomness

Imagine a stadium filled with 10,000 people



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Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

14



Let's ask them to stand up to play a game



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Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

15



Then tell them the game is flipping coins



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

And that tails are bad, heads are good

Tails = bad

Heads = Good

Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

We explain the rules

- ★ The winners will be those who flipped heads the greatest number of times in a row
 - If anyone breaks their consecutive flipping, they are out of the game and must sit down

Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

We explain the rules

- ★ For example, assume someone flipped heads, then heads again, but then tails; they would be out of the game and would sit down

We explain the rules

- ★ The biggest losers will be those who flipped tails the greatest number of times in a row

We explain the rules

- ★ For example, if they flipped tails, then tails, but then heads; they would be out of the game and would sit down

We ask them to make their first flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

What should be the outcome?

- ★ About half of them should have flipped heads and half tails

Then we tell them

- ★ If you flipped tails move to the left side of the stadium
- ★ If you flipped heads move to the right side

There will be 5,000 on both sides



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

25

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What does the stadium look like now?

- ★ 5,000 tails flippers on the left, and
- ★ 5,000 heads flippers on the right

Then we ask them to make their second flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

What should be the outcome of the 2nd flip?

- ★ About half of the 5,000 head flippers will flip tails
 - Too bad, they are out of the game and must sit down

What should be the outcome of the 2nd flip?

- ★ This will leave 2,500 people who flipped heads twice in a row – consecutively
- ★ Results should be the same for tails

Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 2nd flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

30

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★ 2,500 on both sides

We ask those standing to make their 3rd flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

What should be the outcome of the 3rd flip?

- ★ About half of the 2,500 head flippers will flip tails
 - Too bad, they are out of the game and must sit down

What should be the outcome of the 3rd flip?

- ★ About half of the 2,500 tail flippers will flip heads
 - Too bad, they are out of the game and must sit down

What should be the outcome of the 3rd flip?

- ★ This leaves 1,250 people standing who flipped heads consecutively and the same for tail flippers

Here's the stadium after the 3rd flip

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★ 1,250 on both sides



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

We ask those standing to make their 4th flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

What should be the outcome of the 4th flip?

- ★ About half of the 1,250 head flippers will flip tails
 - Too bad, they are out of the game and must sit down

What should be the outcome of the 4th flip?

- ★ This leaves 625 people who flipped heads consecutively
- ★ Results should be the same for tail flippers

Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 4th flip



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 5th flip

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★ 313 on both sides



Steps 1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 6th flip

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★ 156 on both sides



Steps

1

2

3

4

5

6

7

8

9

10

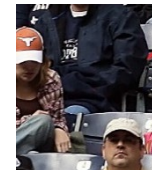
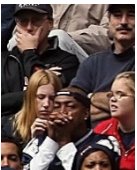
11

12

Here's the stadium after the 7th flip

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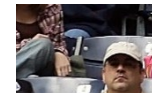
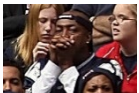
★ 78 on both sides



Steps

1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 8th flip



Steps

1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 9th flip

★ 20 on both sides



Steps

1 2 3 **4** 5 6 7 8 9 10 11 12

Here's the stadium after the 10th flip

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★ 10 on both sides



Steps

1 2 3 **4** 5 6 7 8 9 10 11 12

We now have 10 winners on the right side

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★ 10 on both sides



Steps

1 2 3 **4** 5 6 7 8 9 10 11 12

What part did random variation play in this?



★ What do you think?

How would the finalists answer this question?

★ “How did you do it?!”

Understanding random variation

- ★ What is most interesting to the human mind, the average outcome or the extreme outcome?

Understanding random variation

- ★ People tend to focus on the extreme outcomes because they are more interesting
- ★ But usually those extreme outcomes have no more meaning than the average outcomes

Randomness produces winners and losers

- ★ This exercise shows us that even in a game based completely on chance there will always be winners and losers
 - Even extreme winners and losers

Randomness produces winners and losers

- ★ We also acknowledge that this randomness is underlying much of the outcomes that happen in life
 - Of course, the role of luck in life is much harder to detect, but it is there

Randomness produces winners and losers

- ★ The challenge is to try to answer this question...

Answer this question

- ★ What role does randomness play in the outcomes in the stock market?

YOU

won't

GET RICH

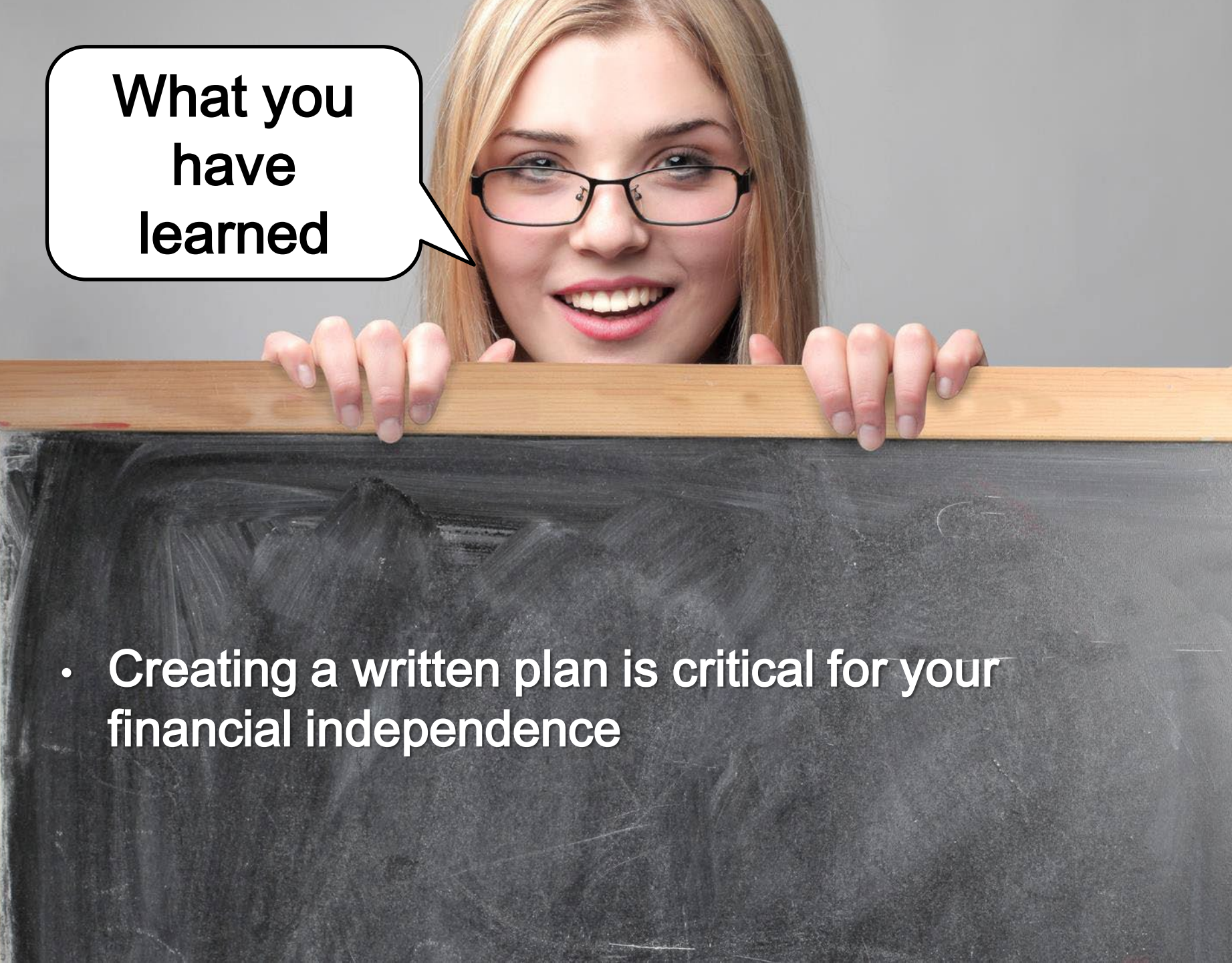
in the
stock market



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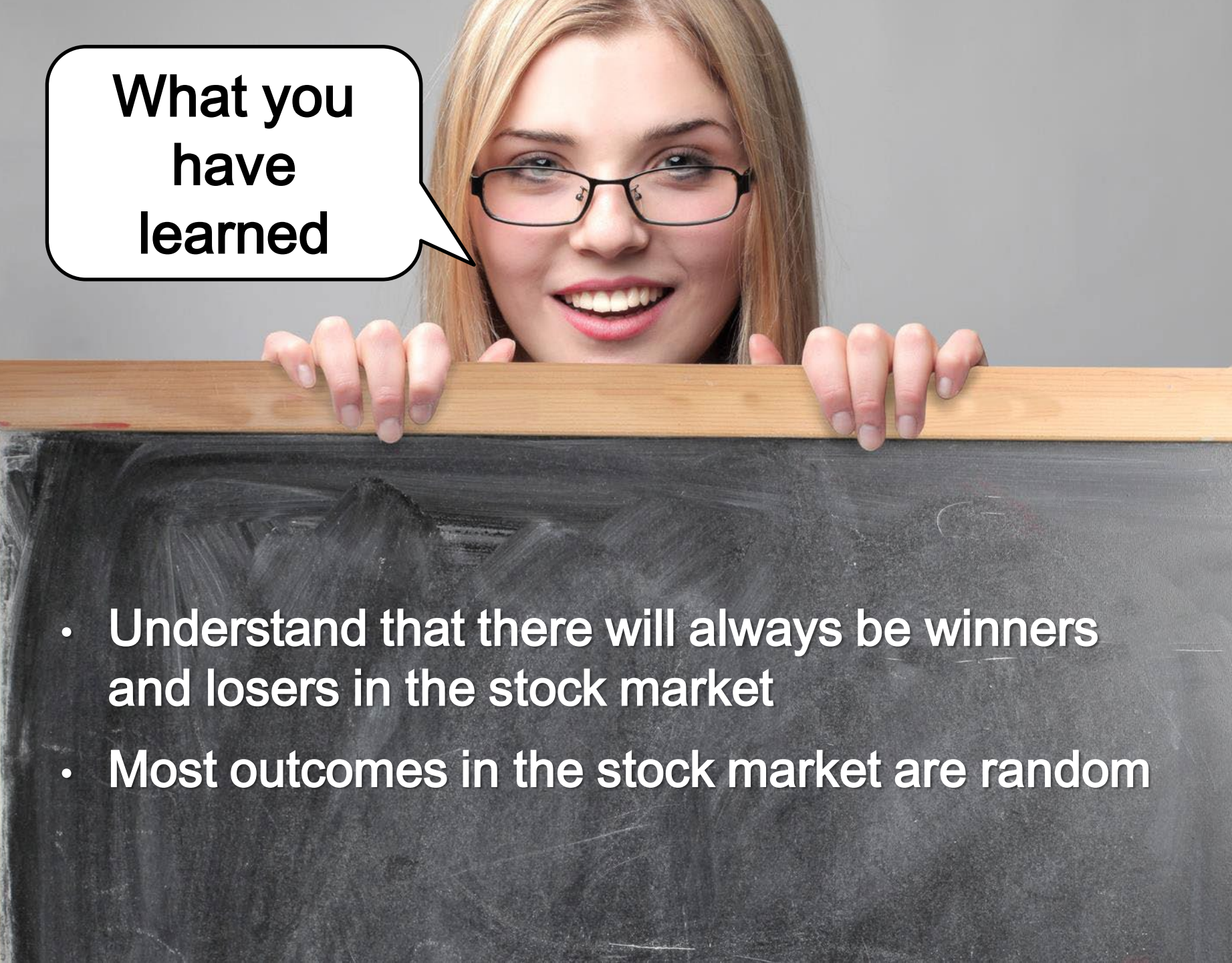


What you
have
learned

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- Don't start investing in the stock market with the mindset that you will get rich



What you
have
learned

- Understand that there will always be winners and losers in the stock market
- Most outcomes in the stock market are random