Ignore bonds in favor of stocks

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Own both stocks and bonds

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Own both stocks and bonds

Part 1: The diversification benefit of bonds

Part 2: Which bonds to own and what return to expect

Own both stocks and bonds

<u>Part 1: The diversification benefit of bonds</u>

Part 2: Which bonds to own and what return to expect

Learning outcomes

- See the risk reduction benefit of bonds
- Learn a simple and optimal mix of stocks and bonds

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Learning outcomes

- Make your allocation adjustments occasionally and pre-planned
- Learn the risk to bond prices if interest rates rise and how to protect against it

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Learning outcomes

- Understand the different bond options to consider
- Set your bond portfolio allocations

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What is a bond?

- When a government or a company borrows money from a bank it is called a loan
- When it borrows money from the public, it issues a bond

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What is a bond?

★ You give them money in exchange for a piece of paper, which is their word, or their “bond”, that they will pay you back

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What do you get in return?

- First, you get a regular interest payment (a "coupon" when referring to bonds)
- Next, when the bond expires, you give the borrower back the piece of paper and they return your money (the principal)

Example of a US state bond, issued in London

Coupon

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What is the benefit of owning bonds?

- Because bonds involve fewer risks than stocks, their prices bounce around a lot less
- In fact, at times their prices may even move in the opposite direction than the price of stocks

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What is the benefit of owning bonds?

- By holding bonds in your portfolio you benefit from both features

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Understanding price movements of bonds

- The bad news is, as you add bonds to your portfolio, because they pay you a lower rate of return, you reduce your long-term return on your total portfolio

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A small fall in return, a big fall in volatility

★ However, you will soon see that the small reduction in return is more than offset by a large reduction in volatility

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A small fall in return, a big fall in volatility

- The stability that bonds bring to a portfolio is vital to securing your financial future

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US bond and stock returns over 121 years

- ★ Over the past 121 years of stock market returns
  - 1933 had the highest gain at 53%
  - 1931 had the worst fall of 40%
- ★ Next let’s look at the returns in each year

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US bond and stock returns over 121 years

- The chart that follows shows 121 annual returns ranked into 10 groups, from the worst on the left (<-40%) to the best on the right (>40%)

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The stock market moved up and down a lot

- The chart will show a very wide distribution of possible returns, but also that in most years the stock market returned between 0% and 30%

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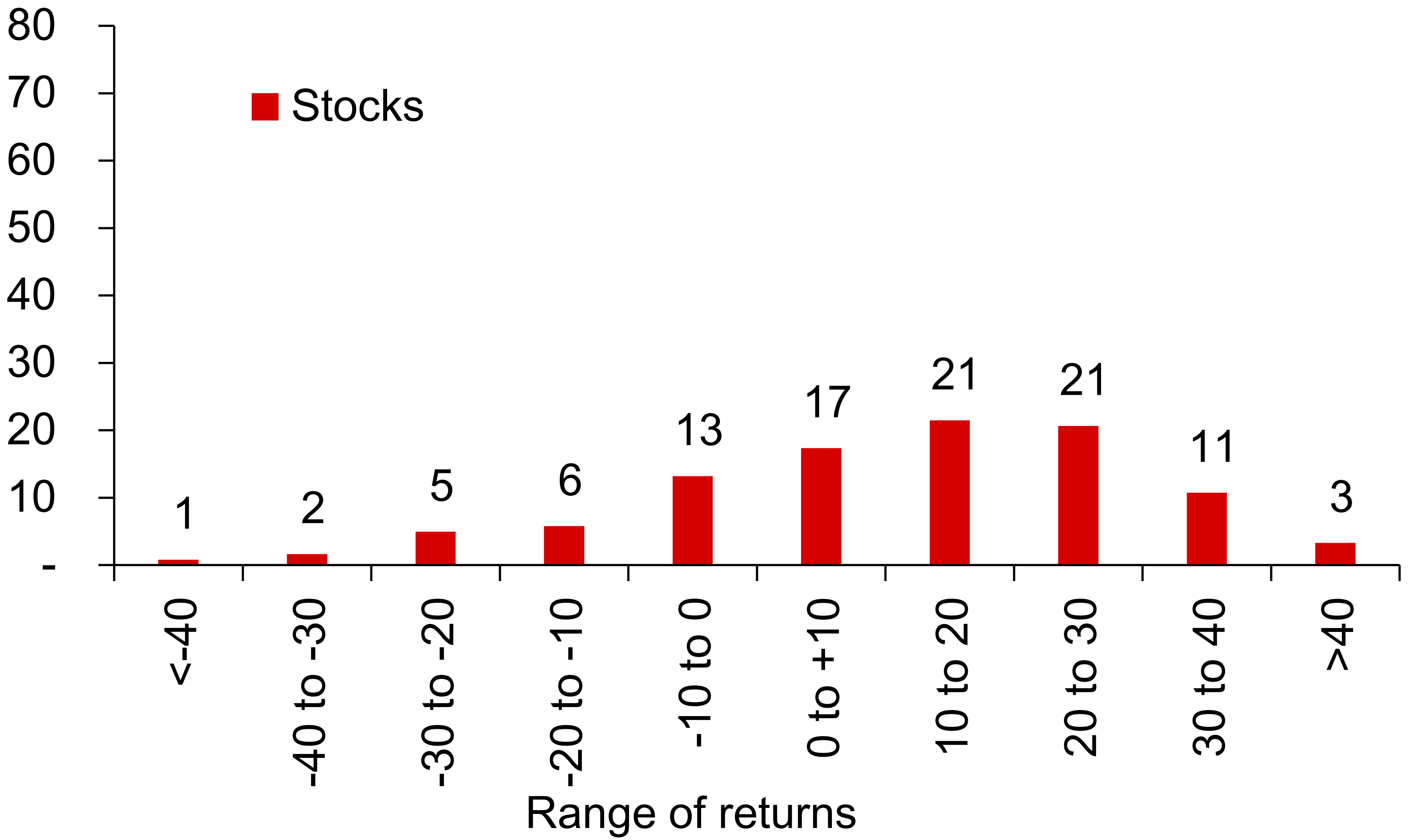
Stock market returns are in a wide range

(% of years that returns landed in each range since 1900)



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Bond returns fall in a narrower range

- In 69% of those 121 years bond returns were between zero and 10%
  - **The worst year was 1999 when the bond market was down 9.1%**

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Bond returns fall in a narrower range

- ★ The best year was 1982 when bonds were up 39.5%
- ★ Over the past 121 years there were only 14 years when bond returns were negative

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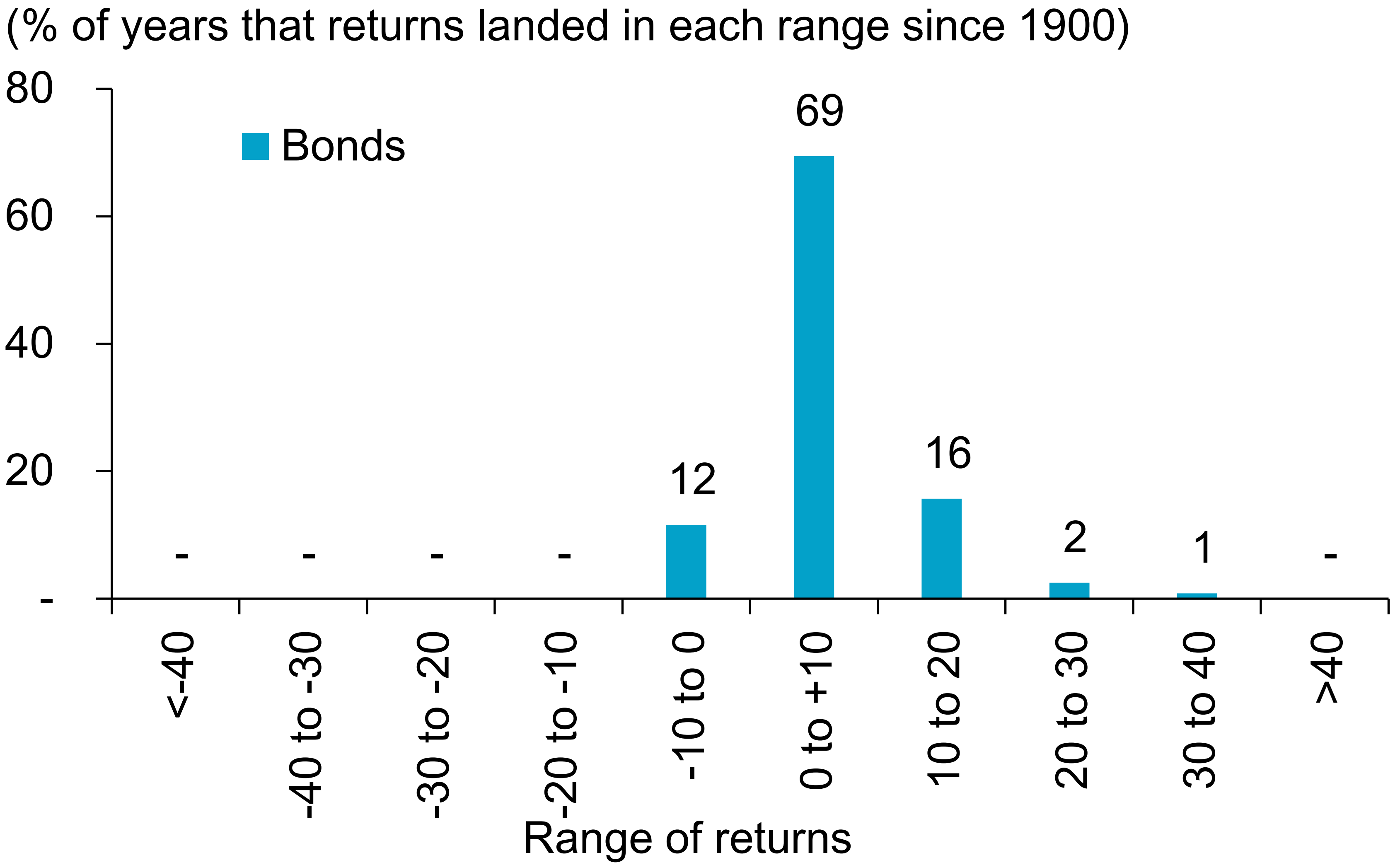
Bond returns fall in a narrower range



Stocks have higher volatility, bonds lower

- ★ Stocks had a higher average return of about 11% over the period, but much wider dispersion of returns

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Stocks have higher volatility, bonds lower

- ★ Bonds had a much lower average return of about 5% over the period, but much narrower dispersion of returns

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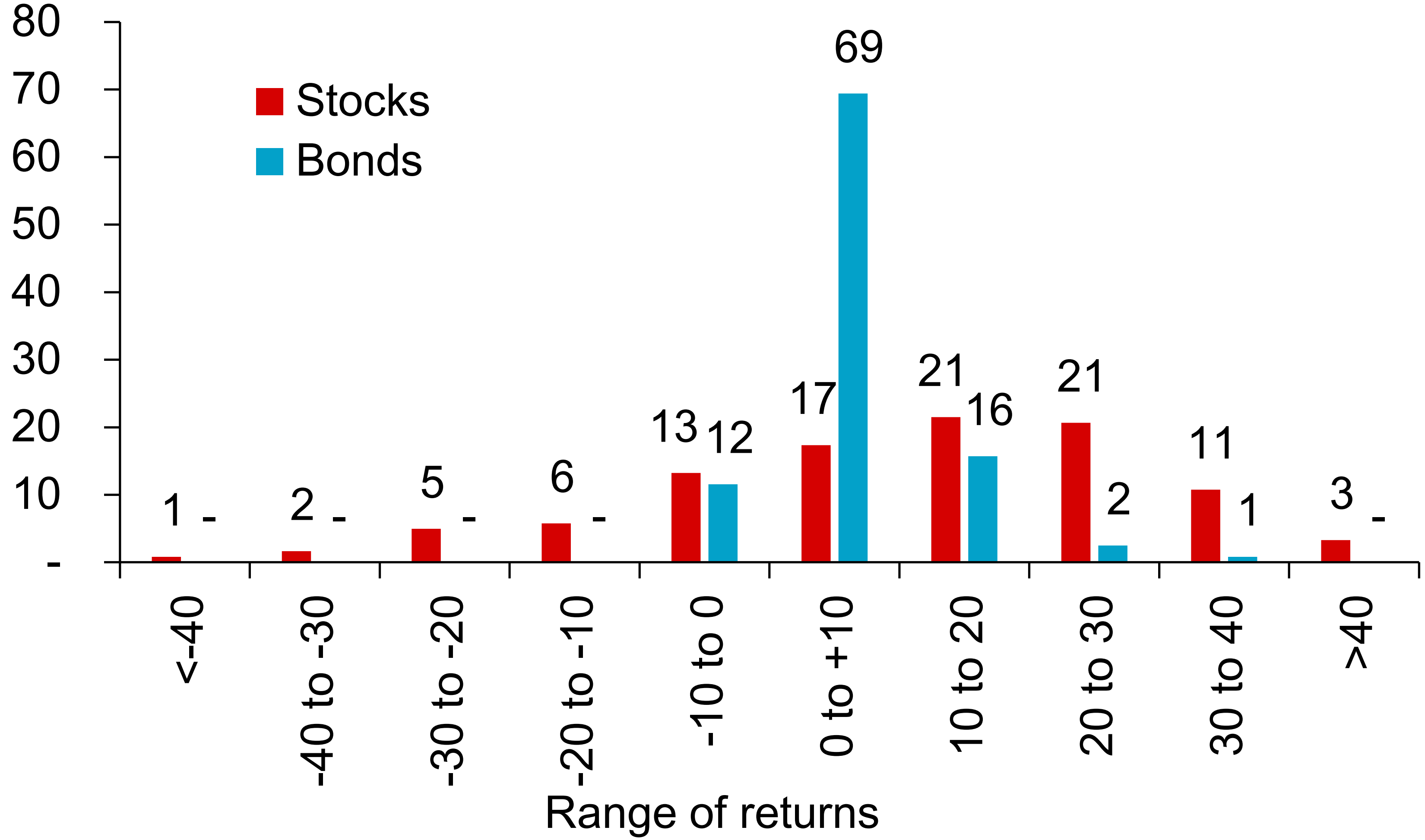
Dispersion of returns of stocks and bonds

(% of years that returns landed in each range since 1900)



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The real benefit of bonds

- The concept behind this next chart won Harry Markowitz the 1990 Nobel Prize in Economics

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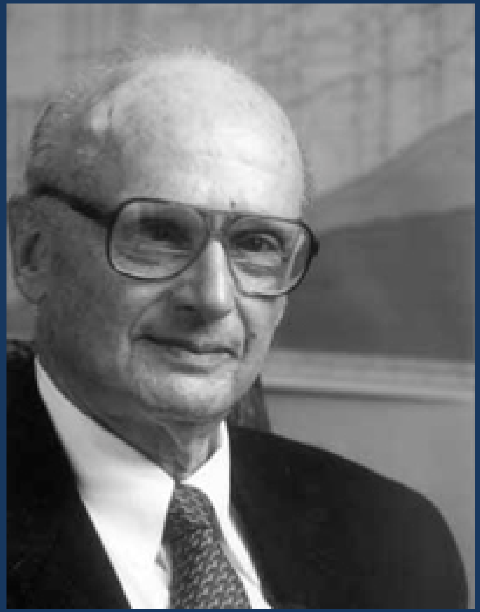

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The real benefit of bonds

★ The following chart shows that as you blend bonds into a stock portfolio, risk falls much faster than return

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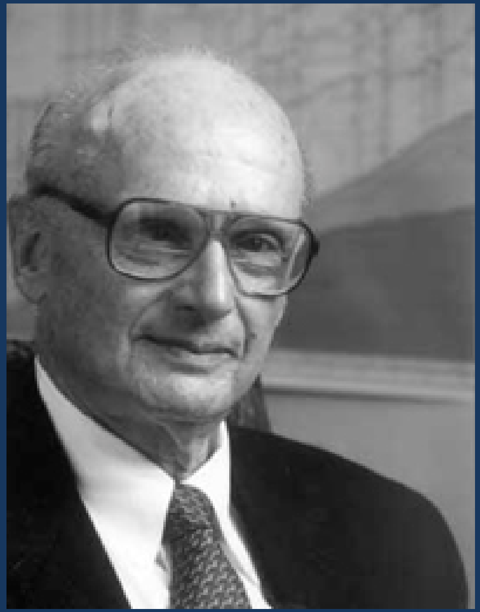

What we can learn from this

- When you add bonds to your portfolio, they reduce the return a bit
- But they reduce portfolio volatility much more

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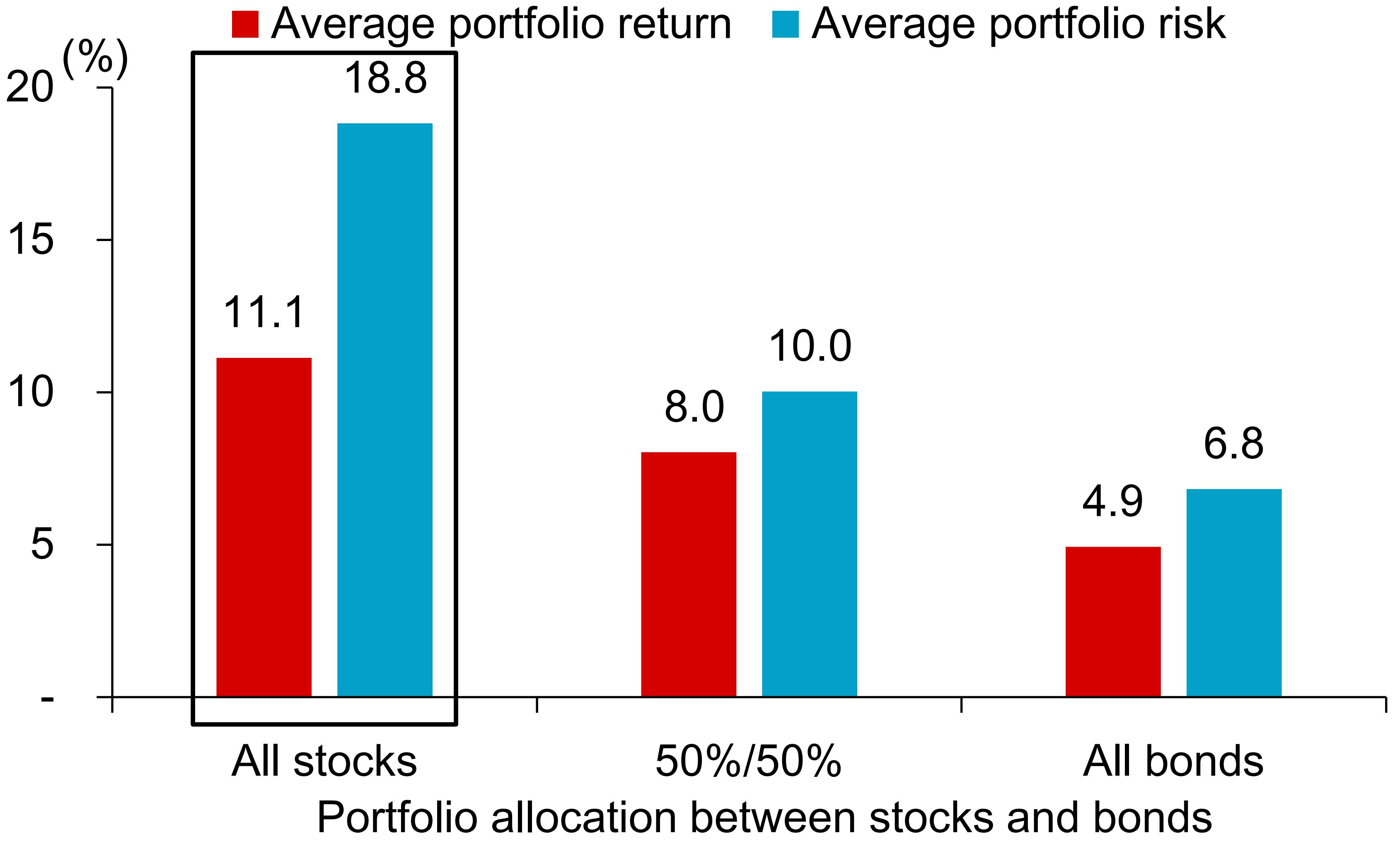
If you owned only stocks



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- ⋆ If your owned only stocks, your portfolio return would have been 11.1%
- ⋆ Your volatility would have been 18.8%

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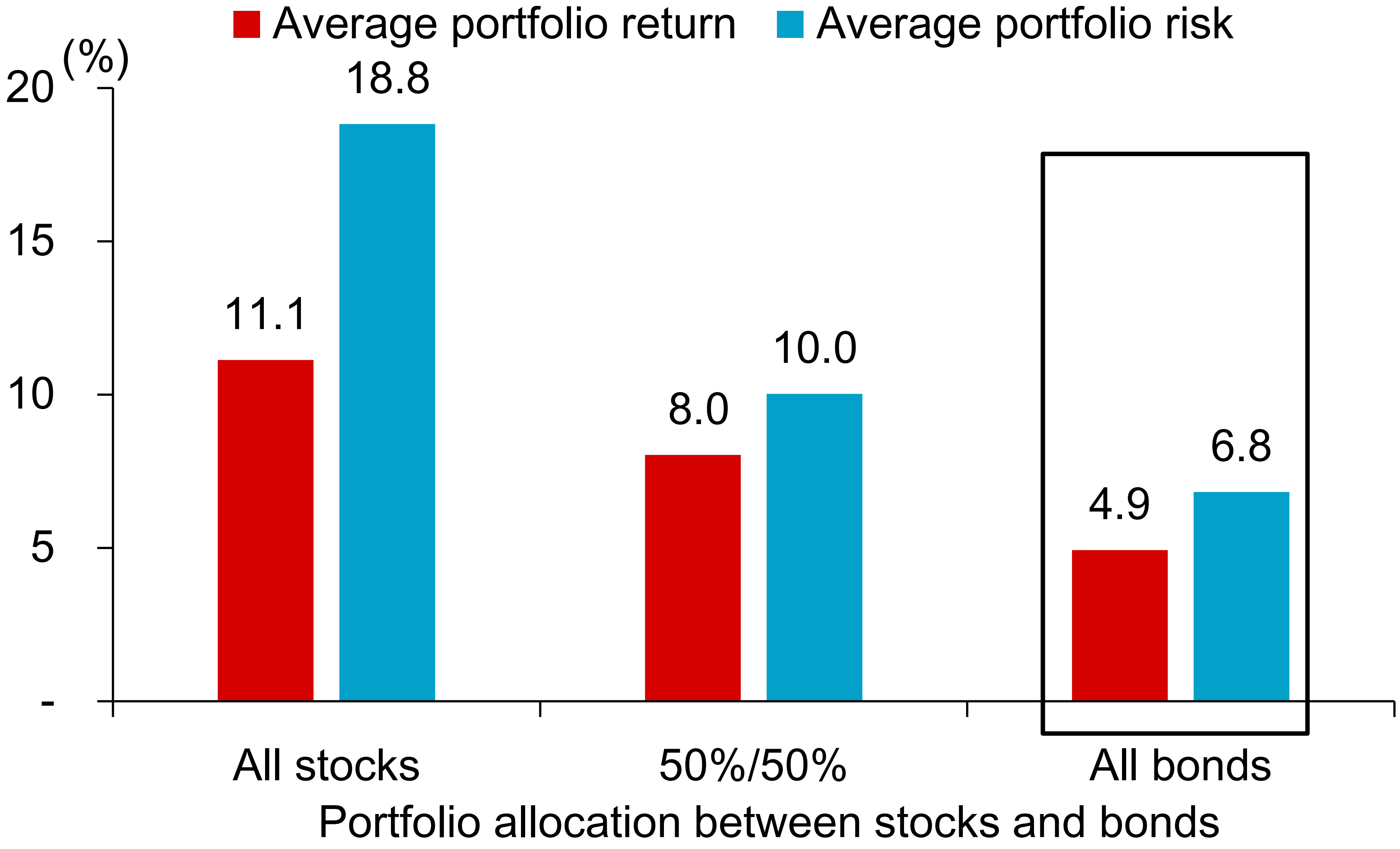
If you owned only bonds



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- ★ If your owned only bonds, your portfolio return would have been 4.9%
- ★ Your volatility would have been 6.8%

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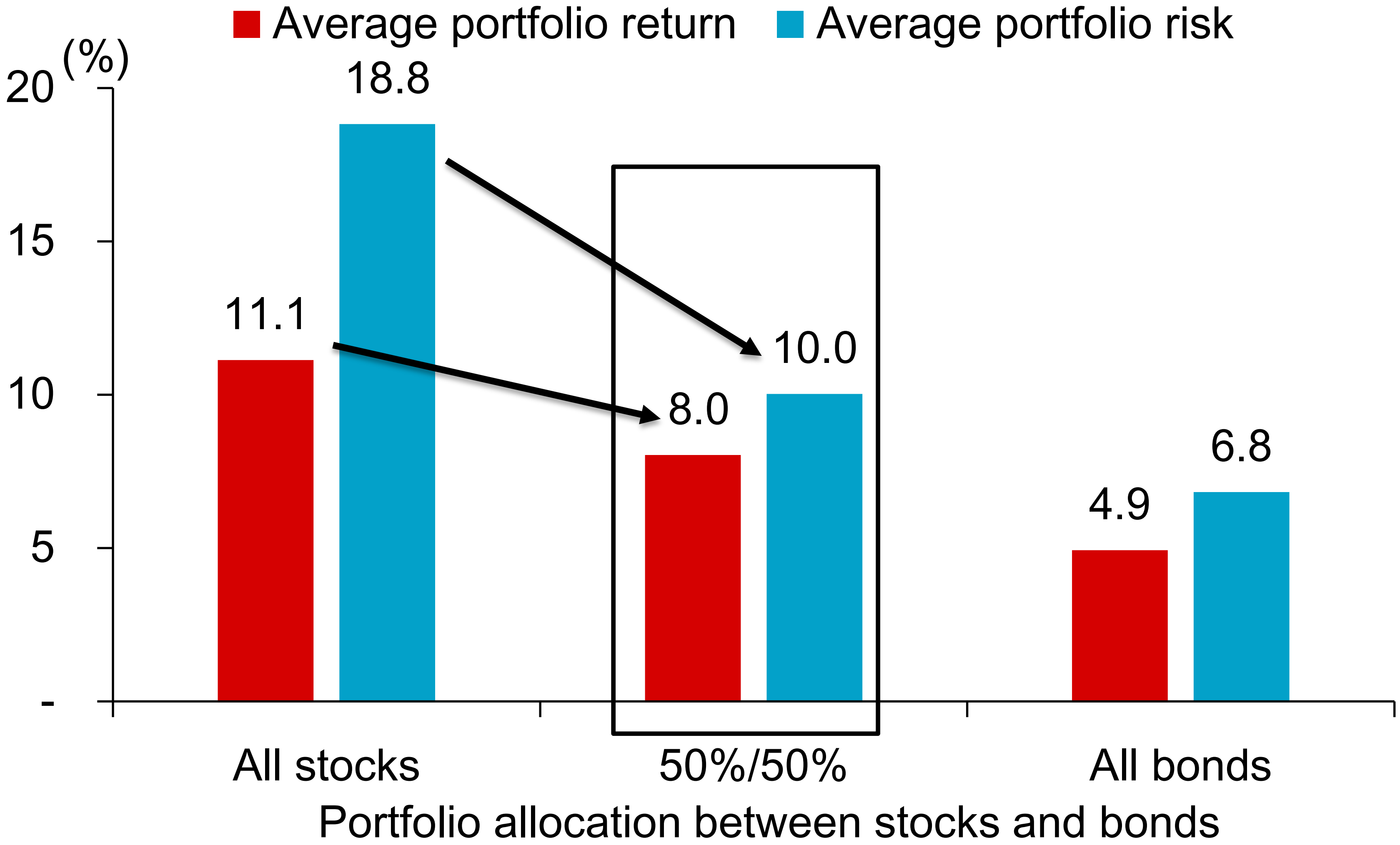
If you owned 50% stocks and 50% bond



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- ★ Your return would have fallen to 8.0% (about a 28% fall in return)
- ★ But your volatility would have fallen from 18.8% to 10%, nearly a 50% reduction in volatility

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Adding bonds reduces risk very quickly

- This shows that you can get a very significant benefit in risk reduction versus the reduction in return that you will suffer

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Adding bonds reduces risk very quickly

- ★ The lesson is that adding bonds to a portfolio reduces volatility very quickly

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Owning bonds is like having an airbag

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★ So if wearing a seatbelt means owning either
  - A diversified portfolio of 10 stocks (if you are interested, have time, and have knowledge!)
  - Or a mutual fund (preferably passive)

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Owning bonds is like having an airbag

- Then adding bonds to a stock portfolio is like adding an airbag to a car

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Own mainly stocks when you are young

- ★ As a rule, in the first half of your life, you should own mainly stocks
- ★ In the second half, you should own mainly bonds

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Adjust your stocks/bonds mix each decade

- This ratio of stocks to bonds is something you should only adjust at certain, predetermined times, which you can write into your financial plan

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Adjust your stocks/bonds mix each decade

★ All you really need to know is how much to invest in stocks versus bonds, and when to change the ratio

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110 minus your age = percent of stocks to own

- To get to this ratio, the first thing to do is set a target of how much of your money should be in stocks at different times in your life

110 minus your age = percent of stocks to own

- To do this, I recommend using this simple formula:
  - 110 – your age = percentage of your money that should be in stocks

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Adjust this only every decade

- Then, every new decade, adjust the percentage of stocks that you own
  - So, if you are 20 years old, 90% of your money should be in the stock market, with the other 10% in the bond market

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110 minus your age is equity allocation

110 minus age	Percent of Portfolio in	
	Stocks	Bonds
110 minus 20 =	90	10
110 minus 30 =	80	20
110 minus 40 =	70	30
110 minus 50 =	60	40
110 minus 60 =	50	50
110 minus 70 =	40	60
110 minus 80 =	30	70
110 minus 90 =	20	80
110 minus 100 =	10	90

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A seatbelt and airbag significantly reduce risk

★ Some finance books use 100 minus your age to get your target allocation in the stock market

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A seatbelt and airbag significantly reduce risk

- If you have your seatbelt on (diversified stock portfolio) and your airbag installed (bonds included with your stock portfolio), then

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A seatbelt and airbag significantly reduce risk

★ It is reasonable to hold more stocks (110 minus your age, rather than 100) in your portfolio to maximize the power of compounding

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A seatbelt and airbag significantly reduce risk

★ Ultimately, there is no perfect formula, but the key is striking a balance between risk and return

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Holding too many bonds raises shortfall risk

- ★ Adding bonds to your portfolio reduces the volatility of your portfolio

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Holding too many bonds raises shortfall risk

- Remember that if you add too many bonds, you increase your shortfall risk, which means you won't hit your long-term goal

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Stocks are your core investment

- ★ Stocks are the core of your long-term investment strategy
- ★ To reduce company-specific risk, you should own many stocks

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Stocks are your core investment

★ It's impossible to remove market risk over your lifetime

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Stocks are your core investment

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- But market risk is not as high when considered over the long-term because the stock market has always, eventually bounced back

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Change the way you think about it

- As you get older and increase your allocation to bonds, unfortunately, you will see lower and lower returns in your portfolio

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Change the way you think about it

- With both your seatbelt and airbag properly in place, you should now expect to earn about 5.5% return over your lifetime, not the 8% to 10% mentioned previously (remember that return was for stocks only)

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Average long-term portfolio return of 5.5%

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110 minus age	Percent of Portfolio in		Portfolio Return if Equity return=8% Bond return=3%
	Stocks	Bonds	
110 minus 20 =	90	10	7.5
110 minus 30 =	80	20	7.0
110 minus 40 =	70	30	6.5
110 minus 50 =	60	40	6.0
110 minus 60 =	50	50	5.5
110 minus 70 =	40	60	5.0
110 minus 80 =	30	70	4.5
110 minus 90 =	20	80	4.0
110 minus 100 =	10	90	3.5
Average			5.5

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Remember your returns are after fees

★ This return also does not yet consider fees and taxes

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Remember your returns are after fees

- If you are very careful with your investing, you might be able to reduce total fees and other costs over your lifetime to only about 1-2% per year

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Change the way you think about it

- This brings us back to the premise of this book
- An overall 5.5% lifetime portfolio return, minus about 1-2% in fees and other costs each year,

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Change the way you think about it

- ★ Does not match up to the “sexy”, exciting dream that many people have when they enter the stock market

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This is a simple and reasonable strategy

- However, once you have this portfolio in place, you will expose yourself to the best possible return you can get,

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This is a simple and reasonable strategy

- ★ balanced with the lowest possible risk
- ★ That you can implement yourself

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So how could you get rich in the stock market?

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- ★ Having set these variables, you are left to deal with the main way you can make yourself rich in the stock market

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So how could you get rich in the stock market?

- Contributing a lot of money early on and
- Letting it grow for as long as possible so that the power of compounding can work its magic

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Remember you must contribute regularly

- After setting your targeted mix between stocks and bonds according to your age, and
- allocating your funds to each,
- your main objective is to contribute regularly

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No savings, no investments, then no wealth!

★ You can set all the targets and make all the plans you want, but if you don't invest your savings regularly, all the financial knowledge you have gained from this book will be worthless

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Contribute to your investments every month

- I recommend contributing a portion of your income to your investments once a month

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Contribute to your investments every month

- This is because waiting until the end of the year to invest your extra cash will give you time to be tempted to spend it, and investing could start to seem like a chore

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Risk reducer #1: Own no less than 10 stocks

- Consider this like your seatbelt in a car

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Seatbelt reduces risk related to owning stocks

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Types of investment risks	Risk	Owning fewer stocks	Owning more stocks
Company-specific risk	One company's stock price falls	Increases	Decreases

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Seatbelt reduces risk related to owning stocks

Types of investment risks	Risk	Owning fewer stocks	Owning more stocks
Company-specific risk	One company's stock price falls	Increases	Decreases
Market risk	The whole market falls	No impact	No impact

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Airbag reduces portfolio risk by owning bonds

Types of investment risks	Risk	Owning fewer bonds	Owning more bonds
Volatility	Portfolio value swings widely	Increases	Decreases

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Airbag reduces portfolio risk by owning bonds

Types of investment risks	Risk	Owning fewer bonds	Owning more bonds
Volatility	Portfolio value swings widely	Increases	Decreases
Shortfall risk	Not enough money at retirement	Decreases	Increases

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- Though it will lower your returns, blending bonds into your portfolio will dramatically reduce risk

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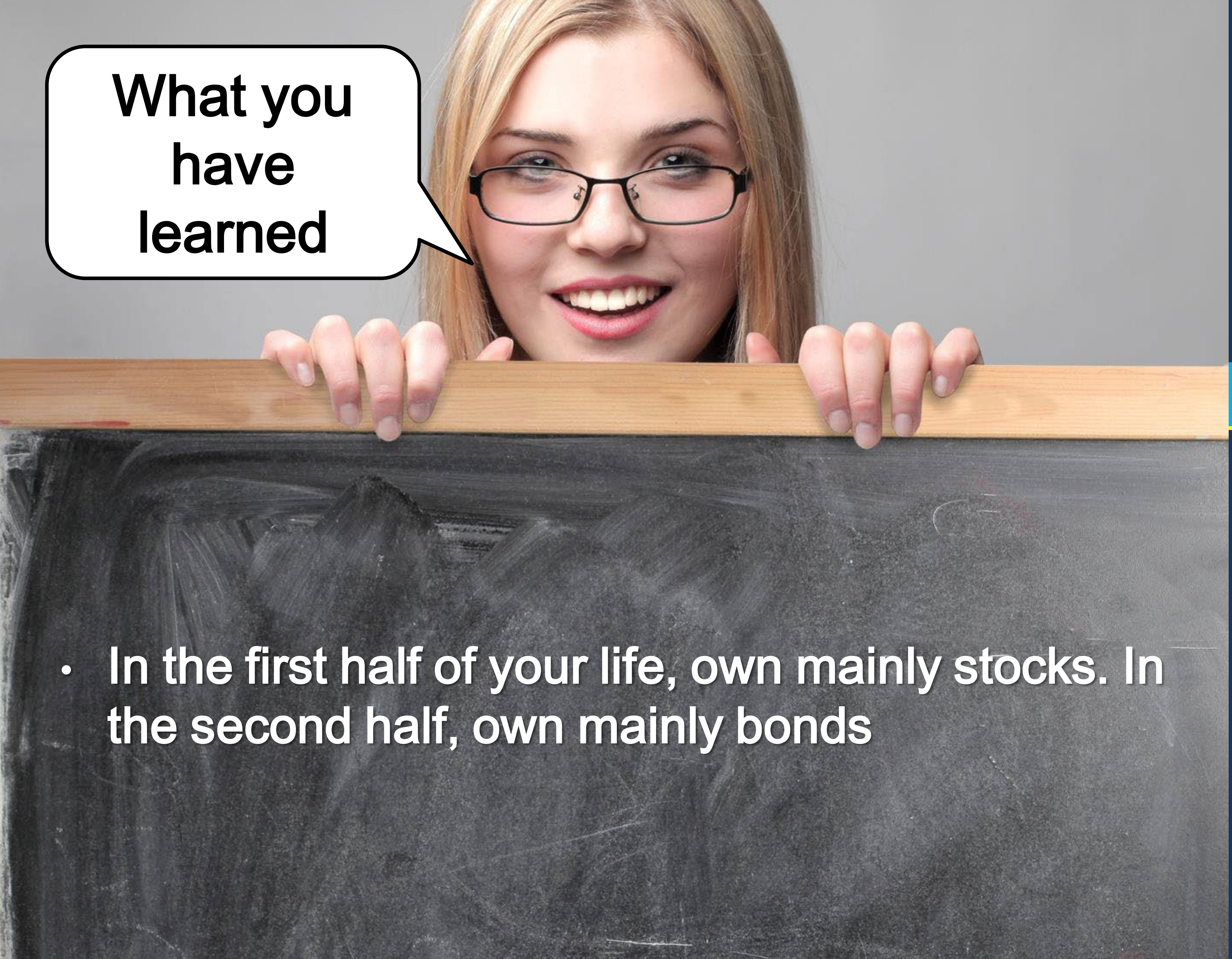

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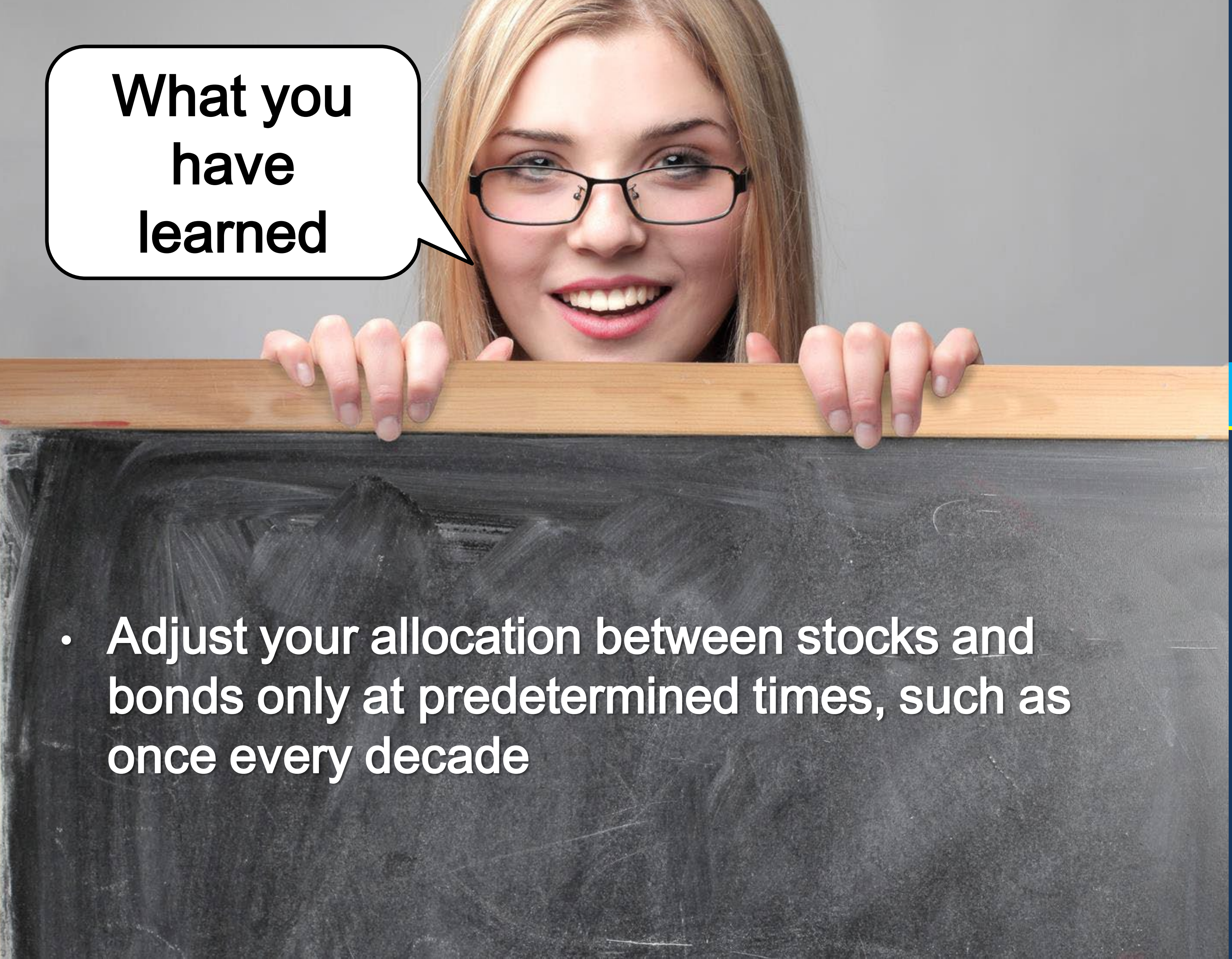

What you have learned

- Adjust your allocation between stocks and bonds only at predetermined times, such as once every decade

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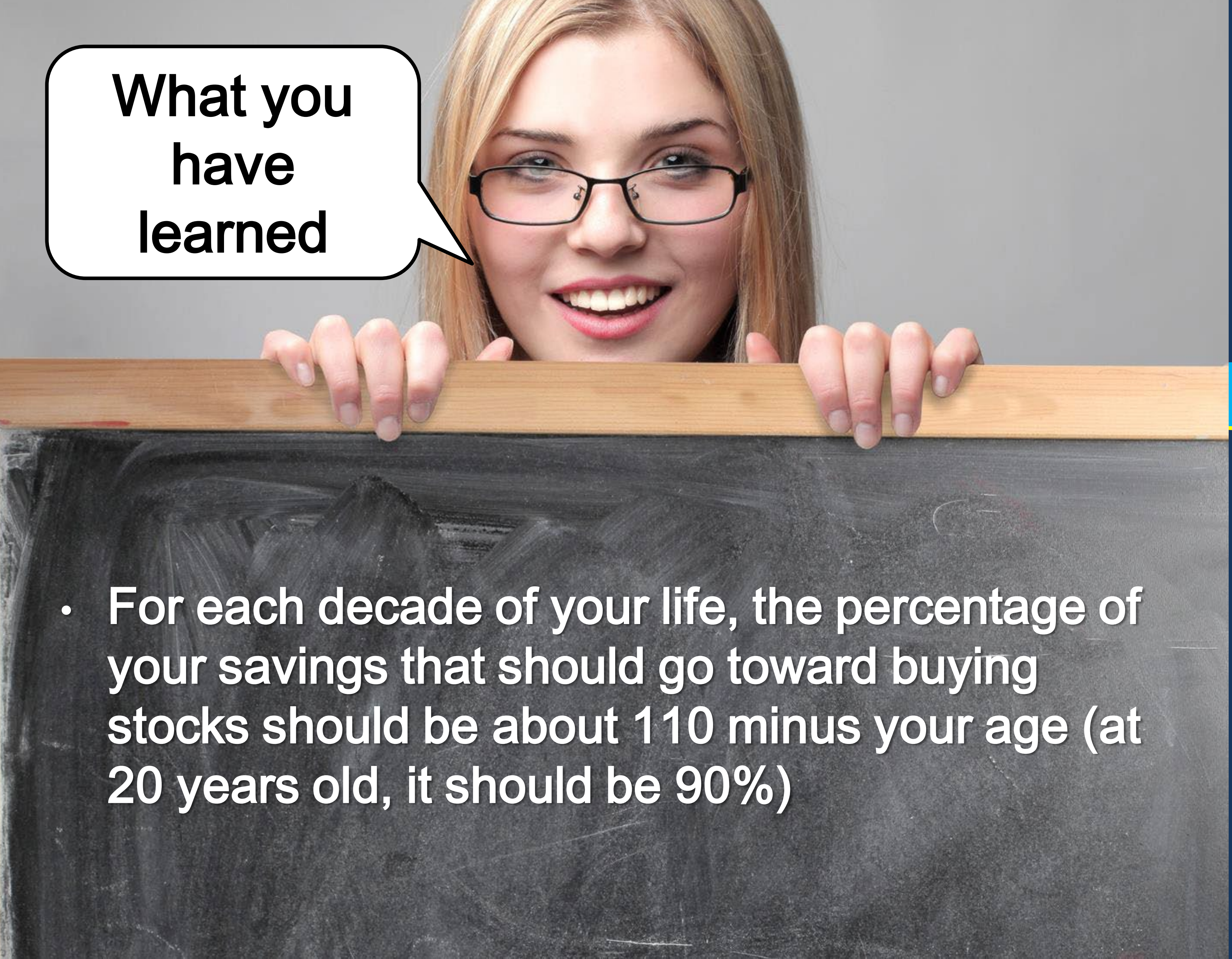

What you have learned

- For each decade of your life, the percentage of your savings that should go toward buying stocks should be about 110 minus your age (at 20 years old, it should be 90%)

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