

Principles of Finance last lecture

Brais Alvarez Pereira

The Efficient Market Hypothesis

Video

- Important theory saying that you cannot beat the market.
- Burton Malkiel and the Wall Street Dartboard competition.
- What do you think?

The Efficient Market Hypothesis

Video

- Important theory saying that you cannot beat the market.
- Burton Malkiel and the Wall Street Dartboard competition.
- What do you think?

The Efficient Market Hypothesis

Video

- Important theory saying that you cannot beat the market.
- Burton Malkiel and the Wall Street Dartboard competition.
- What do you think?

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF "be greedy when others are fearful and fearful when others are greedy".

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF "be greedy when others are fearful and fearful when others are greedy".

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF "be greedy when others are fearful and fearful when others are greedy".

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF "be greedy when others are fearful and fearful when others are greedy".

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF "be greedy when others are fearful and fearful when others are greedy".

In any case... you can always do worse than the market

Some -dangerous- behavioral biases I: cognitive biases

- We can't be unbiased, but we can mitigate our biases if we can identify them. Cognitive biases as a rule of thumb which may or may not be factual.
- Confirmation bias: more weight on opinions which agree with yours.
- Gambler's (& hot-hand) fallacy: you short the S&P 500 because it has closed to the upside five days in a row. Past events do not connect to future events.
- Status-Quo bias: Habits. Coming back to the same stocks and ETFs instead of researching new ideas.
- Negative bias: More weight on bad news than on good ones.
- Bandwagon effect: WF “be greedy when others are fearful and fearful when others are greedy”.

Some -dangerous- behavioral biases II

Emotional biases: basing choices on feelings instead of fact

- Loss-Aversion Bias: Do you have a stock in your portfolio that is down so much that you can't stomach the thought of selling? You don't want to admit the loss has gone from a computer screen to real money, and hold on in hopes that you will, one day, make it back to even. Show mine.
- Gain-Love Bias: the opposite of loss aversion, you have won \$4000 with your investment and you feel you want to "cash-in" that profit ⇒ selling too fast.
- Overconfidence bias: "I have an edge that you (and others) do not". Knowing some industry better, think you have found a pattern which others do not see... the market has made fools out of the most respected traders, it can do the same to you. Risks?
- Endowment bias: what we own is more valuable than what we do not. Remember that losing stock? There are others showing better health, but you still want to trust this one!

Some -dangerous- behavioral biases II

Emotional biases: basing choices on feelings instead of fact

- Loss-Aversion Bias: Do you have a stock in your portfolio that is down so much that you can't stomach the thought of selling? You don't want to admit the loss has gone from a computer screen to real money, and hold on in hopes that you will, one day, make it back to even. Show mine.
- Gain-Love Bias: the opposite of loss aversion, you have won \$4000 with your investment and you feel you want to "cash-in" that profit ⇒ selling too fast.
- Overconfidence bias: "I have an edge that you (and others) do not". Knowing some industry better, think you have found a pattern which others do not see... the market has made fools out of the most respected traders, it can do the same to you. Risks?
- Endowment bias: what we own is more valuable than what we do not. Remember that losing stock? There are others showing better health, but you still want to trust this one!

Some -dangerous- behavioral biases II

Emotional biases: basing choices on feelings instead of fact

- Loss-Aversion Bias: Do you have a stock in your portfolio that is down so much that you can't stomach the thought of selling? You don't want to admit the loss has gone from a computer screen to real money, and hold on in hopes that you will, one day, make it back to even. Show mine.
- Gain-Love Bias: the opposite of loss aversion, you have won \$4000 with your investment and you feel you want to "cash-in" that profit ⇒ selling too fast.
- Overconfidence bias: "I have an edge that you (and others) do not". Knowing some industry better, think you have found a pattern which others do not see... the market has made fools out of the most respected traders, it can do the same to you. Risks?
- Endowment bias: what we own is more valuable than what we do not. Remember that losing stock? There are others showing better health, but you still want to trust this one!

Some -dangerous- behavioral biases II

Emotional biases: basing choices on feelings instead of fact

- Loss-Aversion Bias: Do you have a stock in your portfolio that is down so much that you can't stomach the thought of selling? You don't want to admit the loss has gone from a computer screen to real money, and hold on in hopes that you will, one day, make it back to even. Show mine.
- Gain-Love Bias: the opposite of loss aversion, you have won \$4000 with your investment and you feel you want to "cash-in" that profit ⇒ selling too fast.
- Overconfidence bias: "I have an edge that you (and others) do not". Knowing some industry better, think you have found a pattern which others do not see... the market has made fools out of the most respected traders, it can do the same to you. Risks?
- Endowment bias: what we own is more valuable than what we do not. Remember that losing stock? There are others showing better health, but you still want to trust this one!

Take action

- No way to eliminate biases. In investing, taking steps to minimize those biases is how the pros make money. Some examples of actions which help:
- Spreadsheet to calculate the risk/reward of every trade or investment. Set your threshold and never deviate from the rule (eg selling if loss > 5%).
- When you put a trade on, set an upside target.
- Bottom line: in order to minimize biases, set objective trading rules and never deviate. Overriding your emotions is a difficult task!
⇒ Challenge!!

Take action

- No way to eliminate biases. In investing, taking steps to minimize those biases is how the pros make money. Some examples of actions which help:
- Spreadsheet to calculate the risk/reward of every trade or investment. Set your threshold and never deviate from the rule (eg selling if loss > 5%).
- When you put a trade on, set an upside target.
- Bottom line: in order to minimize biases, set objective trading rules and never deviate. Overriding your emotions is a difficult task!
⇒ Challenge!!

Take action

- No way to eliminate biases. In investing, taking steps to minimize those biases is how the pros make money. Some examples of actions which help:
- Spreadsheet to calculate the risk/reward of every trade or investment. Set your threshold and never deviate from the rule (eg selling if loss > 5%).
- When you put a trade on, set an upside target.
- Bottom line: in order to minimize biases, set objective trading rules and never deviate. Overriding your emotions is a difficult task!
⇒ Challenge!!

Take action

- No way to eliminate biases. In investing, taking steps to minimize those biases is how the pros make money. Some examples of actions which help:
- Spreadsheet to calculate the risk/reward of every trade or investment. Set your threshold and never deviate from the rule (eg selling if loss > 5%).
- When you put a trade on, set an upside target.
- Bottom line: in order to minimize biases, set objective trading rules and never deviate. Overriding your emotions is a difficult task!
⇒ Challenge!!

Some lessons from your trading experience I

There were many more, I just particularly liked these ones

- Do not buy when a stock is at its highest price for the week.
- Refrain from purchasing many common assets.
- Commodities have a limited window of being traded.
- Buying commodities before they expire.
- Set a maximum loss per day that you can afford both mentally and financially to withstand.

Some lessons from your trading experience I

There were many more, I just particularly liked these ones

- Do not buy when a stock is at its highest price for the week.
- Refrain from purchasing many common assets.
- Commodities have a limited window of being traded.
- Buying commodities before they expire.
- Set a maximum loss per day that you can afford both mentally and financially to withstand.

Some lessons from your trading experience I

There were many more, I just particularly liked these ones

- Do not buy when a stock is at its highest price for the week.
- Refrain from purchasing many common assets.
- Commodities have a limited window of being traded.
- Buying commodities before they expire.
- Set a maximum loss per day that you can afford both mentally and financially to withstand.

Some lessons from your trading experience I

There were many more, I just particularly liked these ones

- Do not buy when a stock is at its highest price for the week.
- Refrain from purchasing many common assets.
- Commodities have a limited window of being traded.
- Buying commodities before they expire.
- Set a maximum loss per day that you can afford both mentally and financially to withstand.

Some lessons from your trading experience I

There were many more, I just particularly liked these ones

- Do not buy when a stock is at its highest price for the week.
- Refrain from purchasing many common assets.
- Commodities have a limited window of being traded.
- Buying commodities before they expire.
- Set a maximum loss per day that you can afford both mentally and financially to withstand.

Some lessons from your trading experience II

- Invest in commodities (for example gold) when the economy is unstable.
- Do not invest in companies you think are cool: too much hype around them.
- Earnings season is a marathon, not a sprint.
- Be patient.
- Only short-sell when the intermediate term trend is down.

Some lessons from your trading experience II

- Invest in commodities (for example gold) when the economy is unstable.
- Do not invest in companies you think are cool: too much hype around them.
- Earnings season is a marathon, not a sprint.
- Be patient.
- Only short-sell when the intermediate term trend is down.

Some lessons from your trading experience II

- Invest in commodities (for example gold) when the economy is unstable.
- Do not invest in companies you think are cool: too much hype around them.
- Earnings season is a marathon, not a sprint.
- Be patient.
- Only short-sell when the intermediate term trend is down.

Some lessons from your trading experience II

- Invest in commodities (for example gold) when the economy is unstable.
- Do not invest in companies you think are cool: too much hype around them.
- Earnings season is a marathon, not a sprint.
- Be patient.
- Only short-sell when the intermediate term trend is down.

Some lessons from your trading experience II

- Invest in commodities (for example gold) when the economy is unstable.
- Do not invest in companies you think are cool: too much hype around them.
- Earnings season is a marathon, not a sprint.
- Be patient.
- Only short-sell when the intermediate term trend is down.

Some lessons from your trading experience III

- Place bets that you know you can cover.
- Wiser to invest in a boring index fund than to invest with people who try to beat the market.
- While research is beneficial to see the trends in a company, people can react to those trends and provide an opportunity.

Some lessons from your trading experience III

- Place bets that you know you can cover.
- Wiser to invest in a boring index fund than to invest with people who try to beat the market.
- While research is beneficial to see the trends in a company, people can react to those trends and provide an opportunity.

Some lessons from your trading experience III

- Place bets that you know you can cover.
- Wiser to invest in a boring index fund than to invest with people who try to beat the market.
- While research is beneficial to see the trends in a company, people can react to those trends and provide an opportunity.

What we have learnt

- The main concepts from finance: relative valuation, time value of money, NPV... in a perfect market environment.
- Understanding and applying these concepts and many important tools (eg. compounding, annuities) in practice. Mathematical exercises \Rightarrow quantitatively systematic and rigorous.
- Trading in the stock market, reflecting about its nature, components, its main mechanisms and difficulties.
- Applying simple models to the stock market and capital budgeting.

What we have learnt

- The main concepts from finance: relative valuation, time value of money, NPV... in a perfect market environment.
- Understanding and applying these concepts and many important tools (eg. compounding, annuities) in practice. Mathematical exercises \Rightarrow quantitatively systematic and rigorous.
- Trading in the stock market, reflecting about its nature, components, its main mechanisms and difficulties.
- Applying simple models to the stock market and capital budgeting.

What we have learnt

- The main concepts from finance: relative valuation, time value of money, NPV... in a perfect market environment.
- Understanding and applying these concepts and many important tools (eg. compounding, annuities) in practice. Mathematical exercises \Rightarrow quantitatively systematic and rigorous.
- Trading in the stock market, reflecting about its nature, components, its main mechanisms and difficulties.
- Applying simple models to the stock market and capital budgeting.

What we have learnt

- The main concepts from finance: relative valuation, time value of money, NPV... in a perfect market environment.
- Understanding and applying these concepts and many important tools (eg. compounding, annuities) in practice. Mathematical exercises \Rightarrow quantitatively systematic and rigorous.
- Trading in the stock market, reflecting about its nature, components, its main mechanisms and difficulties.
- Applying simple models to the stock market and capital budgeting.

Other important concepts and ideas

- Uncertainty and risk aversion. Portfolio optimization and CAPM.
- Imperfect markets (frictions):
 - ▶ Disagreements.
 - ▶ Non-competitive markets.
 - ▶ Transaction costs.
 - ▶ Taxes.
- And finally:
- THE REAL WORLD!!!

Other important concepts and ideas

- Uncertainty and risk aversion. Portfolio optimization and CAPM.
- Imperfect markets (frictions):
 - ▶ Disagreements.
 - ▶ Non-competitive markets.
 - ▶ Transaction costs.
 - ▶ Taxes.
- And finally:
- THE REAL WORLD!!!

Other important concepts and ideas

- Uncertainty and risk aversion. Portfolio optimization and CAPM.
- Imperfect markets (frictions):
 - ▶ Disagreements.
 - ▶ Non-competitive markets.
 - ▶ Transaction costs.
 - ▶ Taxes.
- And finally:
- THE REAL WORLD!!!

Other important concepts and ideas

- Uncertainty and risk aversion. Portfolio optimization and CAPM.
- Imperfect markets (frictions):
 - ▶ Disagreements.
 - ▶ Non-competitive markets.
 - ▶ Transaction costs.
 - ▶ Taxes.
- And finally:
- THE REAL WORLD!!!

Hope you feel your foundations are robust

