

Lecture 0 What is Economics

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Macroeconomics 201

December 14, 2025

The Road Ahead...

① What is Economics

② Understanding the Market

What Is Economics About?

- ▶ A subject about how people make choices to attain their goals, given scarce resources
 - ▶ e.g. study economics midterm or go to party tonight?
- ▶ Why an important subject
 - ▶ basic fact of life: we face trade-offs because we live in a world of scarcity
- ▶ Main references
 - ▶ HO: Hubbard & O'Brien, "*Macroeconomics*", 8th Edition (required)
 - ▶ BJ: Blanchard & Johnson, "*Macroeconomics*", 6th Edition (optional), see my lecture notes

Three Key Ideas

- ▶ People are rational
 - ▶ use all available information to make best decision possible
- ▶ People respond to economic incentives
 - ▶ e.g. few banks take costly security measures against not so costly robberies
- ▶ Optimal decisions are made at margin
 - ▶ optimality occurs when marginal cost (MC) equals marginal benefit (MB)

Three Fundamental Questions

- ▶ **What** goods and services to produce
 - ▶ opportunity cost: highest-valued alternative given up
 - ▶ e.g. funding for space exploration or cancer research
- ▶ **How** to produce goods and services
 - ▶ e.g. use more workers or more machines
- ▶ **Who** receive goods and services produced
 - ▶ e.g. people with higher incomes obtain more
 - ▶ changes in tax/welfare policy redistribute income

Economic Models

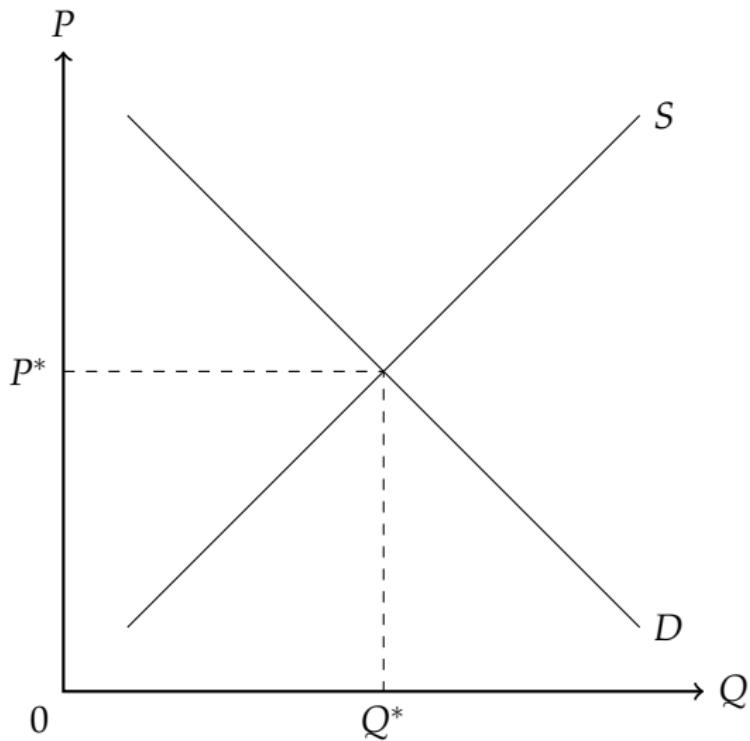
- ▶ What is a model
 - ▶ *probabilistic* characterization for what we observe
 - ▶ help guide our decision-making
- ▶ Steps to build economic models/theories
 - ▶ decide on assumptions/simplifications
 - ▶ formulate testable hypothesis
 - ▶ use data to test hypothesis
 - ▶ revise or retain model
- ▶ Micro models study individual choices; macro models study economy as a whole

The Road Ahead...

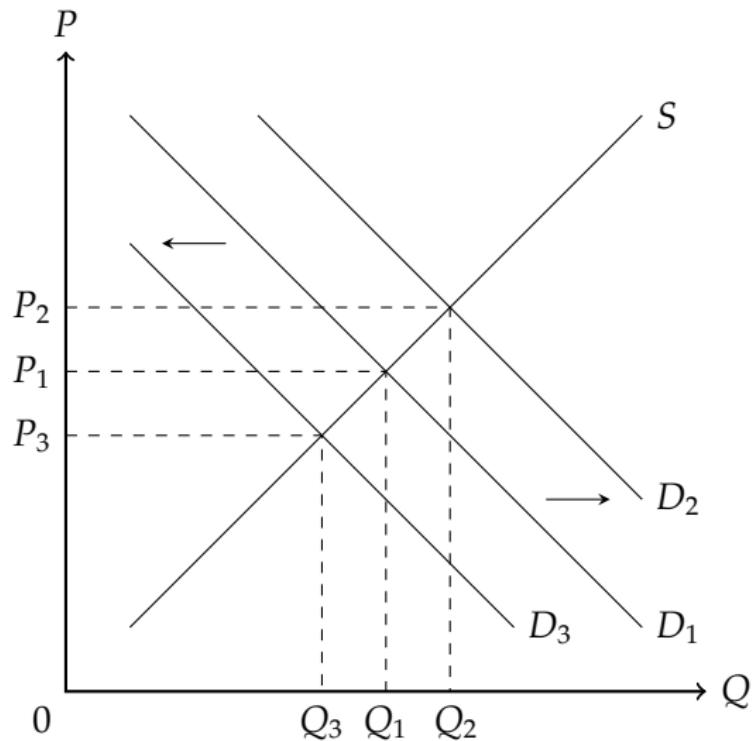
① What is Economics

② Understanding the Market

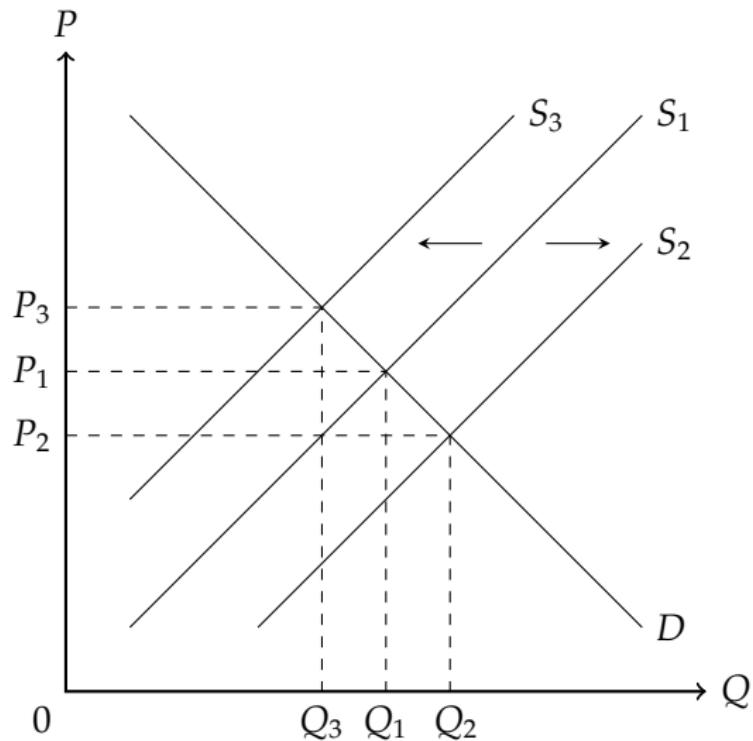
What Is Market?



Shifts in Demand



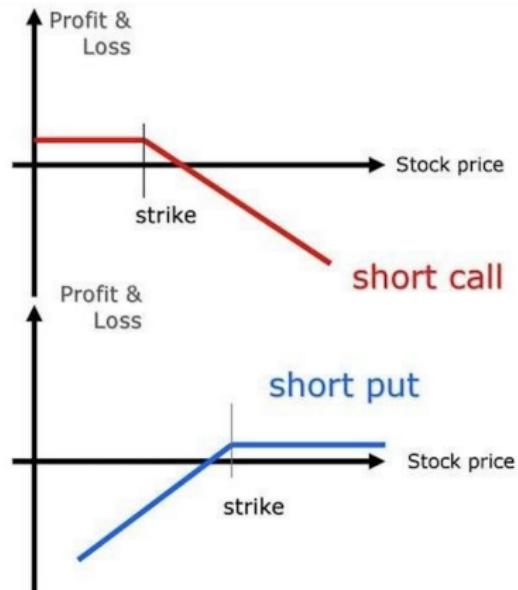
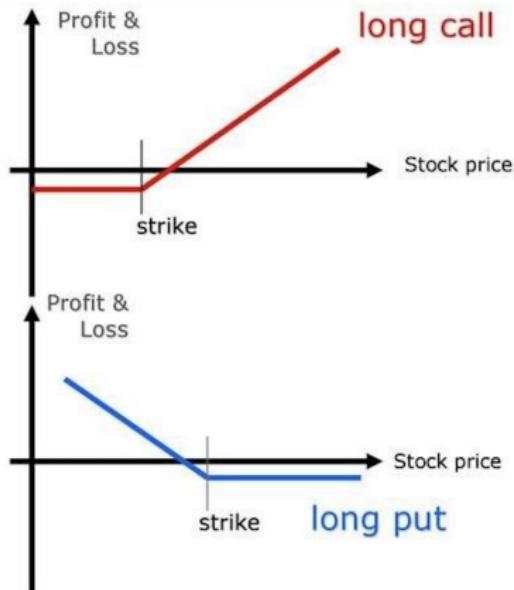
Shifts in Supply



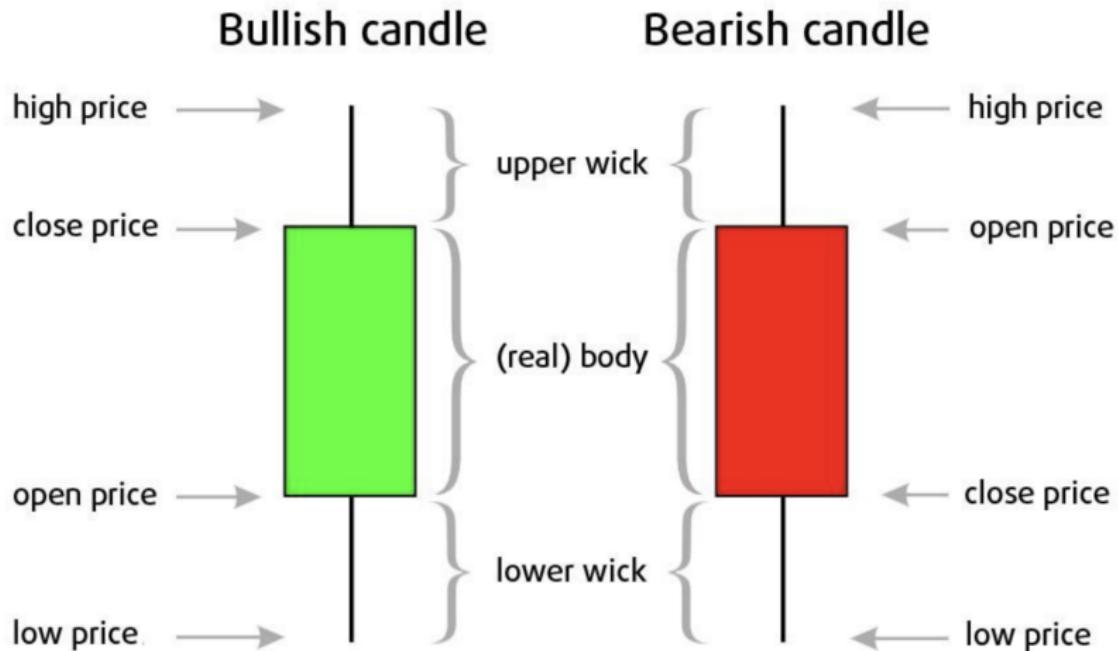
Bid-Ask Spread



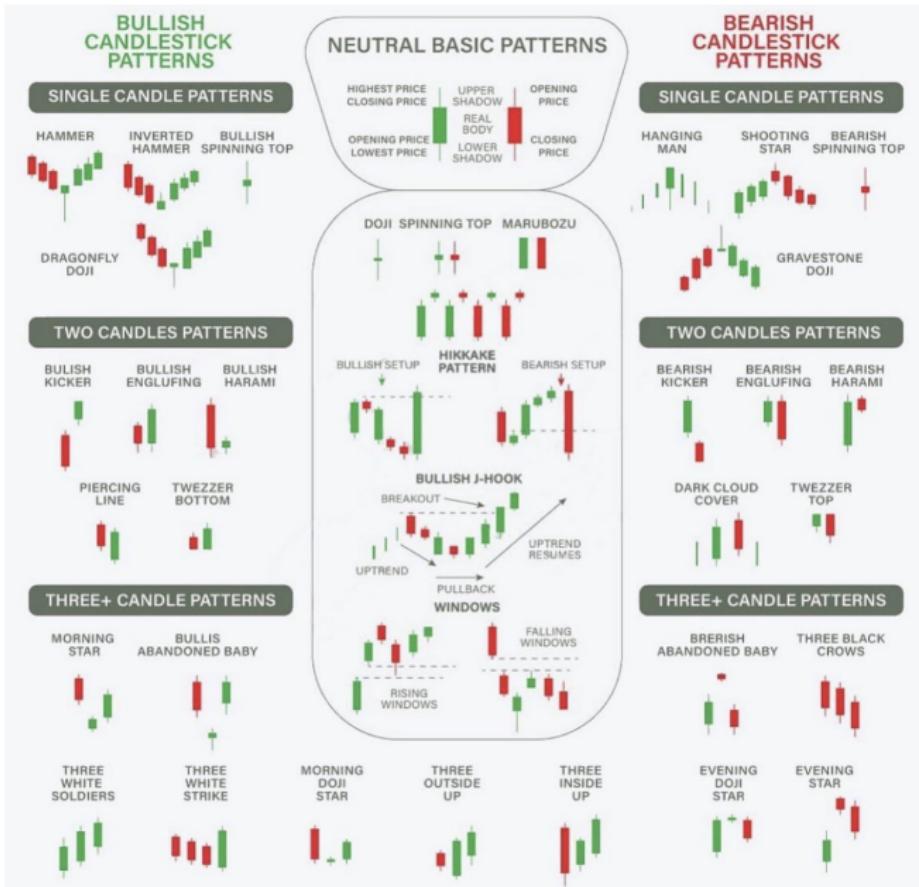
Options



Japanese Candlestick

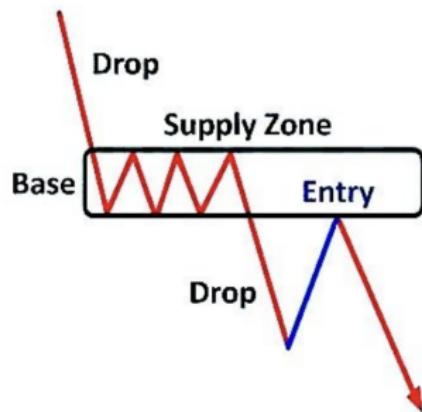


Candlestick Patterns

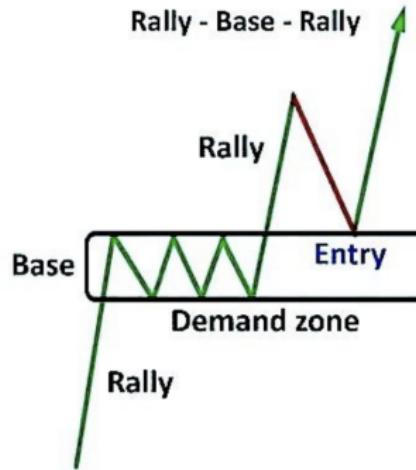


Supply & Demand Zones

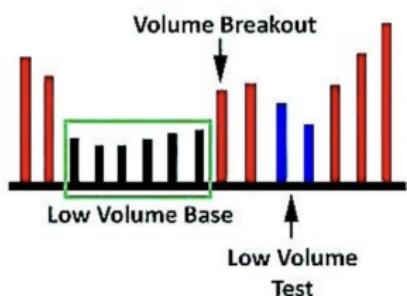
Drop - Base - Drop



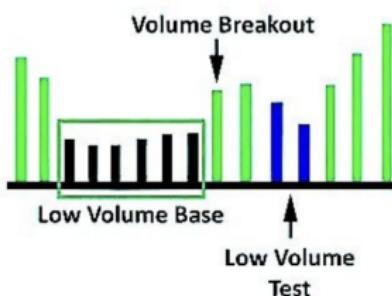
Rally - Base - Rally



Volume Breakout



Volume Breakout



/ES Weekly Chart



UNG Daily Chart



UNG Hourly Chart



Useful Tickers

- ▶ Stocks
 - ▶ S&P 500: SPX, /ES, /MES, SPY, UPRO
 - ▶ Nasdaq: NDX, /NQ, /MNQ, QQQ, TQQQ
 - ▶ Dow Jones: DJI, /YM, /MYM, DIA, UDOW
 - ▶ Russell: RUT, /RTY, /M2K, IWM, URTY
- ▶ Bonds: TNX, /TN, /10Y, TLT
- ▶ Commodities: gold (/GC, /MGC, GLD), crude oil (/CL, /MCL, USO)
- ▶ Currencies: forex (/6E, /M6E, /6J, /M6J, /6B, /M6B), crypto (/BTC, /MBT, GBTC)

Readings & Exercises

- ▶ Readings
 - ▶ HO: chapter 1
 - ▶ *Japanese Candlestick Charting Techniques*, by Steve Nison
 - ▶ *Reminiscences of a Stock Operator*, by Edwin Lefèvre & Roger Lowenstein
 - ▶ *Principles for Dealing with the Changing World Order: Why Nations Succeed or Fail*, by Ray Dalio
- ▶ Exercises
 - ▶ HO: problem 1.3, 1.4, 3.3