


Lecture 0: What is Economics

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Course: Macroeconomics 201

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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*", 9th 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)

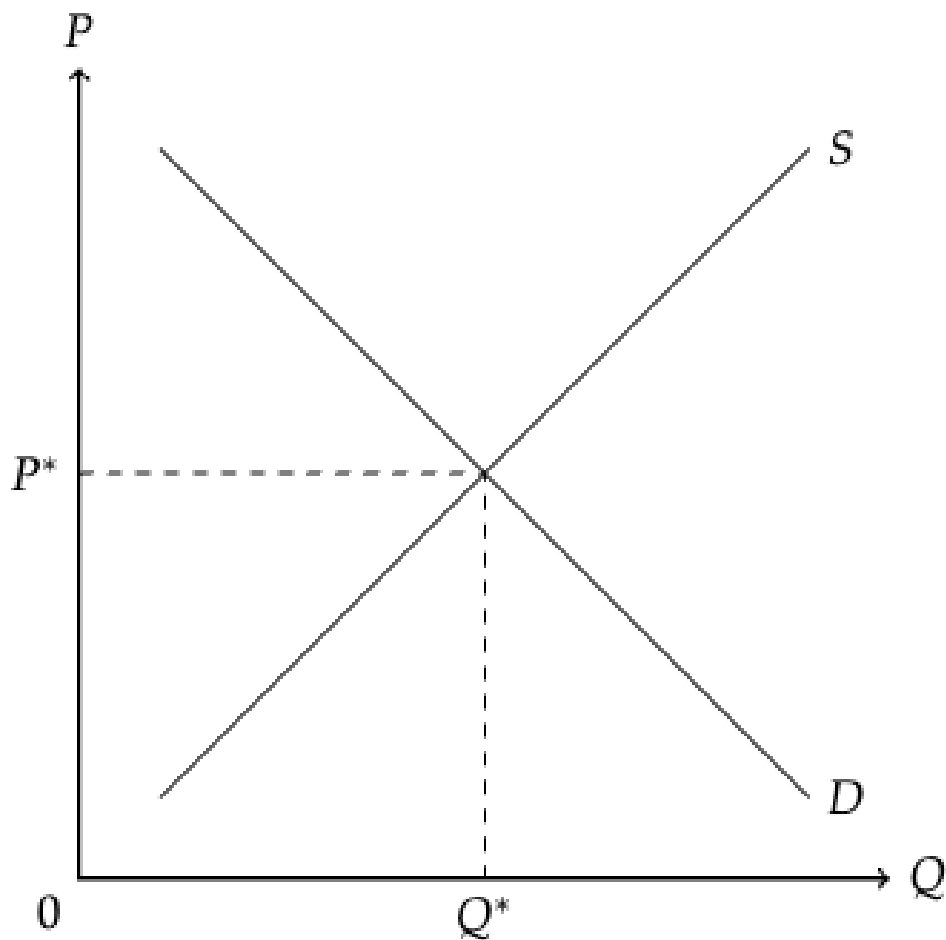
Three Fundamental Questions

- **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

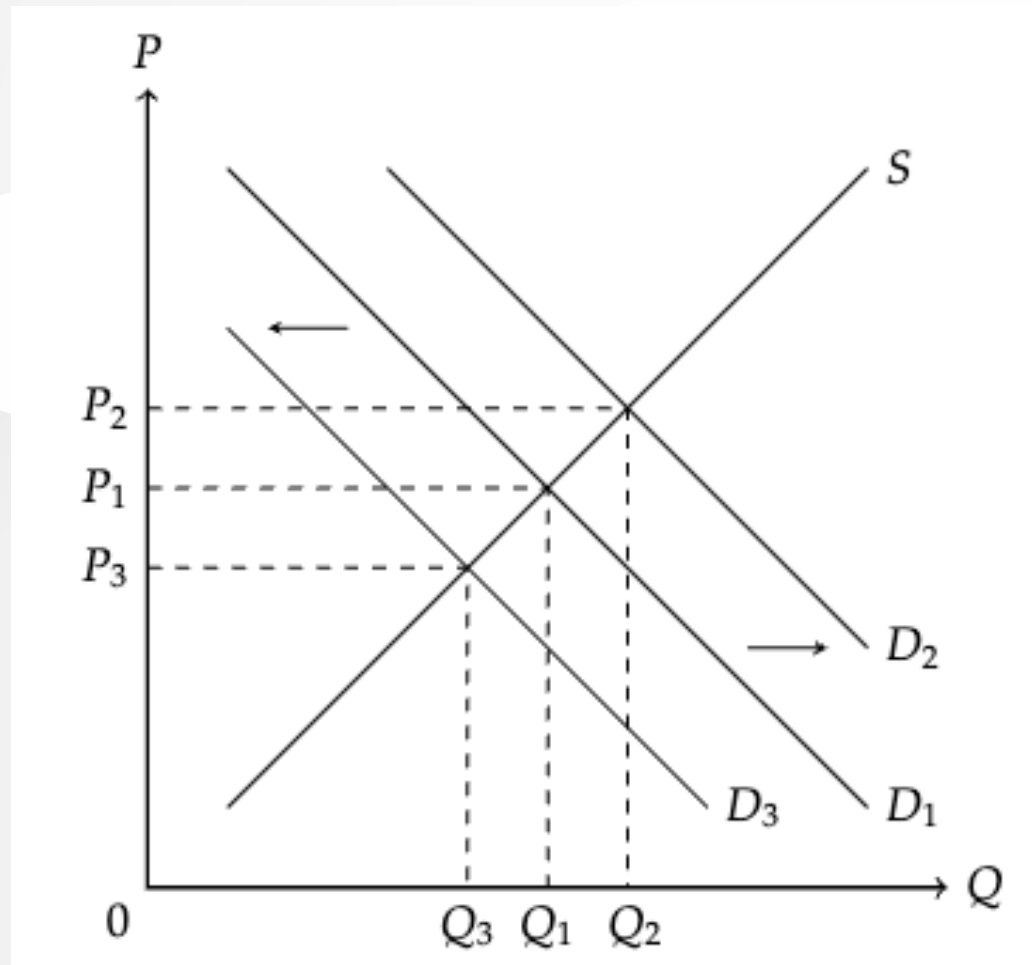
Economic Models

- 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

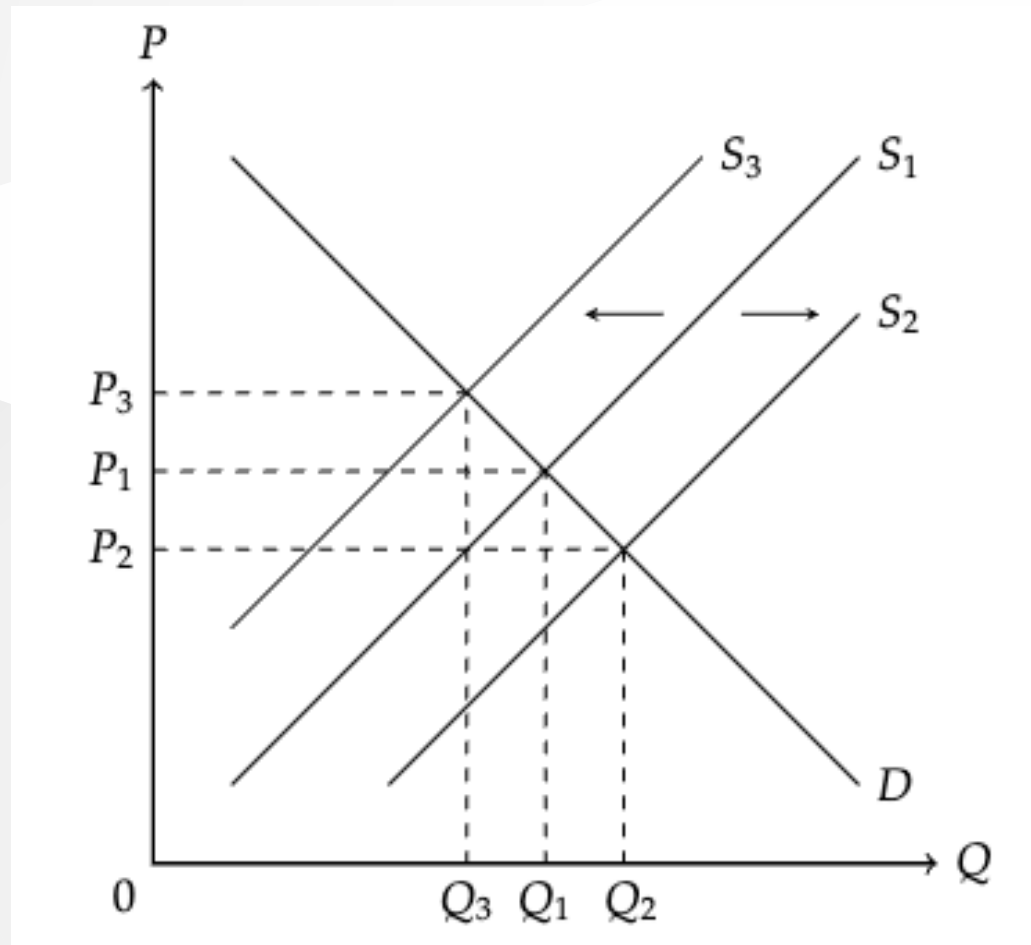
What Is Market?



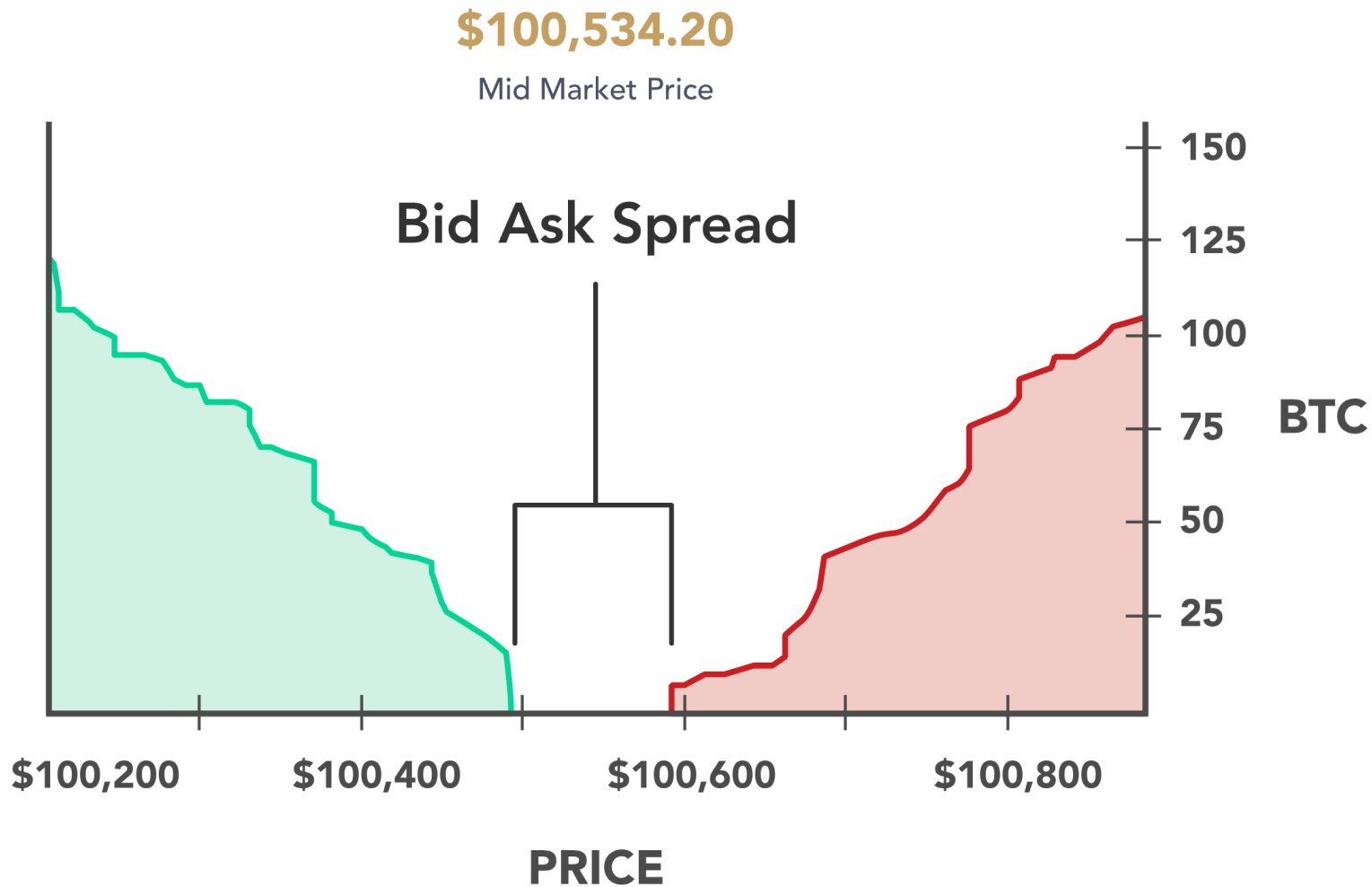
Shifts in Demand



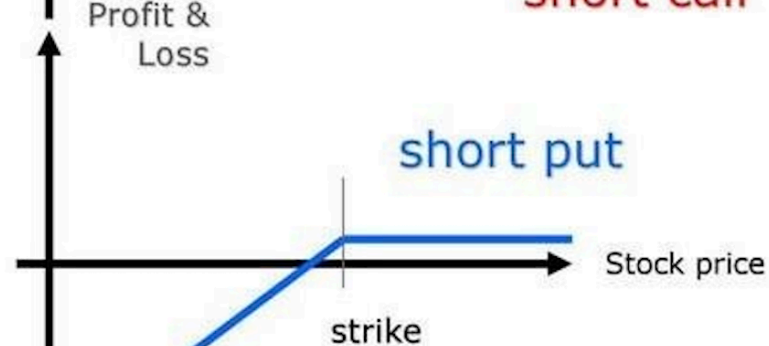
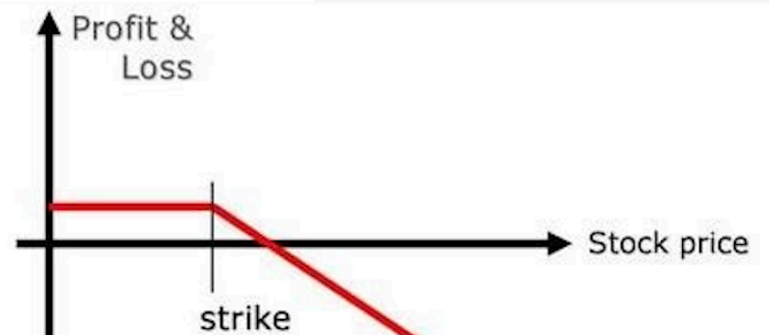
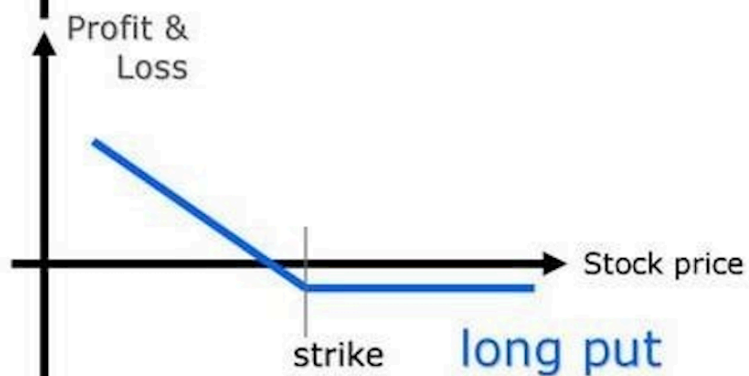
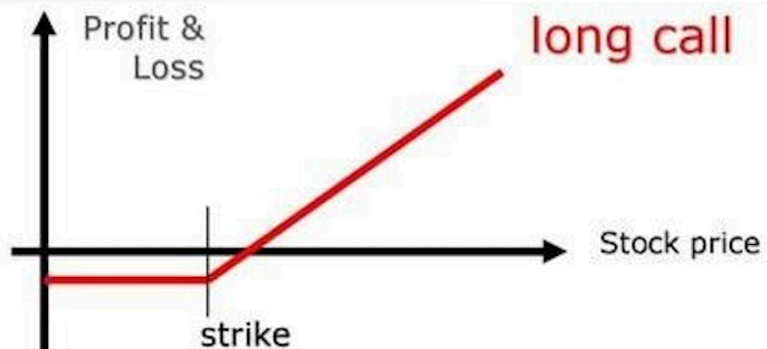
Shifts in Supply



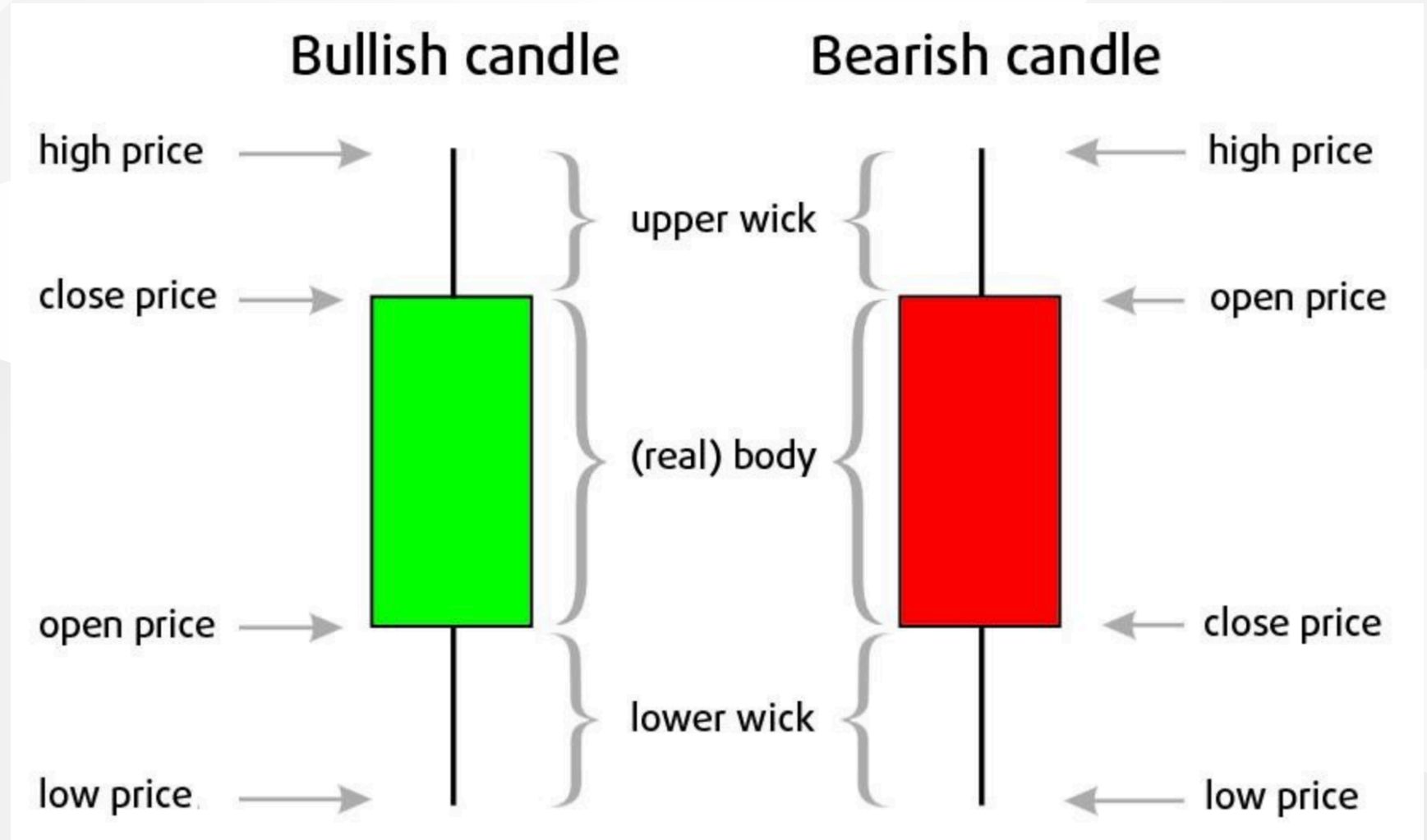
Bid-Ask Spread



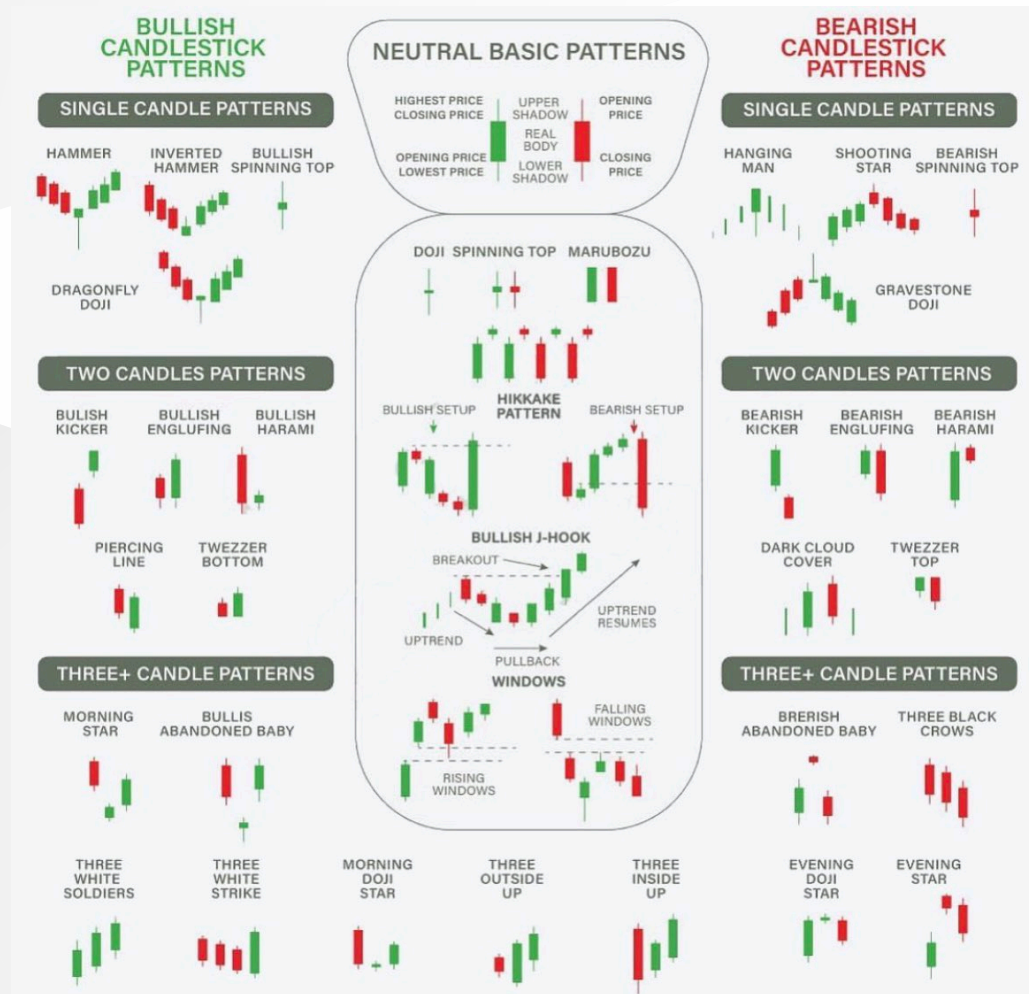
Options



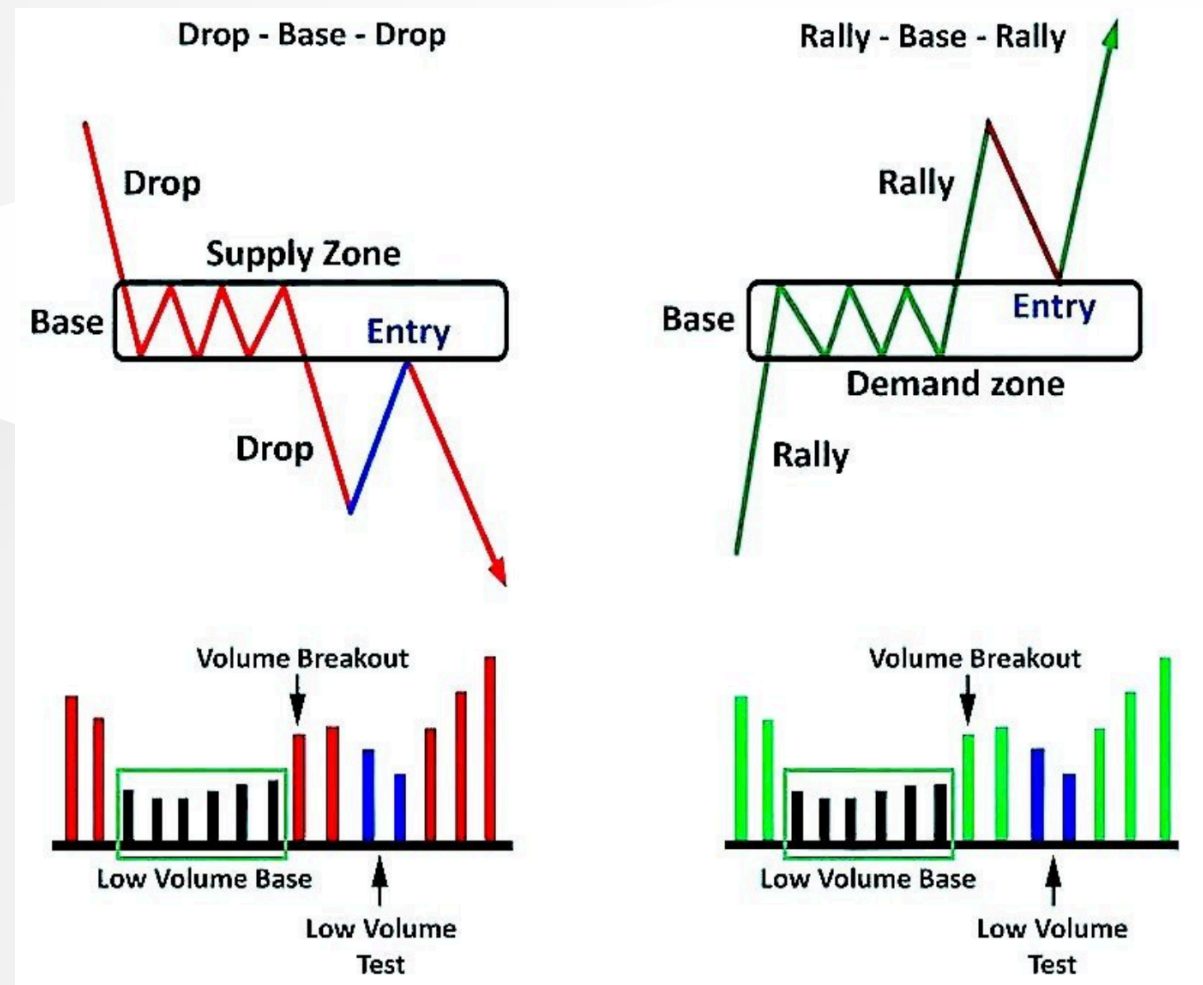
Japanese Candlestick



Candlestick Patterns



Supply & Demand Zones



/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