Stocks Exchanges

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A **stock exchange** is a marketplace where **stocks, bonds, and other securities** are bought and sold. It provides a **platform** for companies **to raise capital** by issuing shares to the public and for investors to **trade these shares**. Prices are determined by supply and demand.

Functions of Stock Exchanges

- Raising capital
- Providing liquidity
- Price discovery
- Fairness and transparency
- Centralized market

Way back then...

- Agriculture
 - \rightarrow surplus
 - → specialized craftsmen
 - → barter and trade
- Mostly 1 to 1

Very ancient times (2000 - 500 BC)

- Temples as central trading hubs in Mesopotamia
- Silver, gold, grain as money
- Standardized units:
 - Shekel base unit, ±8 g
 - Mina = 60 shekels
 - Talent = 60 minas
- Laws focused on weights, measurements and trade

Ancient times (500 BC - 400 AD)

- Agoras in Ancient Greece
- Athenian silver coins
 - Standardized money
- First government bonds
 - o Financing of temples, infrastructure and war
 - Tradeable



Less ancient times (4th - 14th century)

- Trade limited due to feudal system
- Guilds regulated quality of goods
- Large regional fairs and markets

Not really ancient times (12th - 16th century)

- Europe slowly moved to more interconnected market
 - despite feudal systems still mostly in place
 - Venice and other city states
- First banks
 - "Letters of credit"
 - Double entry bookkeeping (entry requires opposite entry)

Almost today (15th - 18th century)

- Rise of the global trade network
- Many market participants, large companies
- Commodities markets in ports
 - o Amsterdam, Lisbon, London
- Amsterdam Stock Exchange 1602
 - The Dutch East India Company
- London Coffee House 1698

Aaaalmost today (18th - 20th century)

- Industrialization
 - → centers of trade and production (London, Chicago)
- Idea of "Limited Liability"
 - → shareholders are not responsible for a company
- First economic shocks
 - → regulation of markets
- Bretton Woods and Global Economic Order
 - → IMF, World Bank, GATT

Stock exchanges

- ICE NYSE, AMEX, Arca, ...
- NASDAQ
- Shanghai
- Japan S.E.
- Euronext
- CBOE first to introduce standardized options to trade
- Seychelles S.E. smallest

How does exchange work today?

- Send an order to a broker.
- 2. Broker validates the order
 - a. Regulatory requirements
 - b. Financial requirements
- 3. Order goes to the exchange
- 4. Order is (hopefully) matched
- 5. Clearing and settlement
 - a. T+2 rule
 - b. Exchange calculates obligations to each participant
- 6. Done

Fun facts

- Stock exchanges are anonymous
 - o Counterexample: Brazil B3, Istanbul
- Anyone should be able to participate
 - Counterexample: Istanbul
- Anyone can trade anytime, bots are 24/7
 - Trading hours are in place
- "Ticker"
 - Comes from the sound of printing symbols and prices on paper

How to trade on an exchange

- 1. Are you a credit / financial institution?
- 2. Can you prove your company's reliability and qualifications?
- 3. Fill out paperwork with broker
- 4. Each trader usually needs to be approved by the exchange and/or broker
- 5. Connect to the exchange
- 6. Prove, that your system has safety checks in place
- 7. Pay fees
- Place collateral few millions of dollars