

Chapter 2: The Financial Market Environment

2.1 Financial Institutions

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Note:

Examples:

Note: The textbook has good detail about these

2.2 Financial Markets

A. Basic Ideas

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Important distinctions =>

1) debt vs. equity:

debt:

equity:

2) broker vs dealer markets:

broker:

dealer:

3) primary vs. secondary markets:

primary:

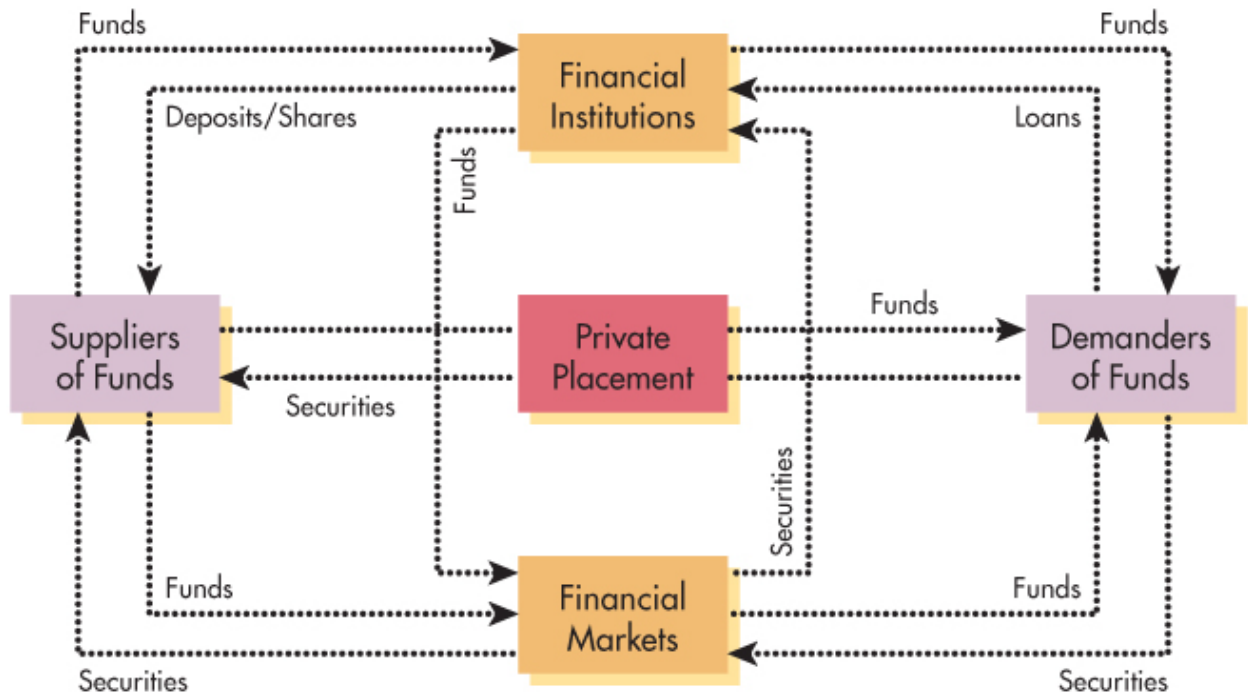
secondary:

4) money vs. capital markets

money:

capital:

Figure 2.1: Flow of Funds



B. Capital Markets

1. Bid and Ask Prices

Bid price:

Ask price:

$$\text{Bid-ask spread} = \text{ask price} - \text{bid price}$$

2. Types of orders:

Limit order:

Market order:

- => if buying, pay the ask price (the lowest price at which anyone is willing to sell)
- => if selling, receive the bid price (the highest price that anyone is willing to pay).

Ex. Look at prices for Apple on Yahoo Finance (when markets are open):

Notes on information in following links:

- 1) Yahoo summary page shows current bid and ask prices and number of shares available at each price
- 2) CBOE stock exchange shows range of bid and ask prices and number of shares at each price not just the best bid and ask price

Yahoo Finance Summary page: <http://finance.yahoo.com/quote/aapl>

CBOE stock exchange:

http://markets.cboe.com/us/equities/market_statistics/book/AAPL/

Q: What price will you pay if you submit a market order to buy 100 shares of Apple?

Q: What price will you receive if you submit a market order to sell 100 shares of Apple?

Q: What happens if submit limit order to buy/sell 100 shares of Apple?

Note: Cannot see how many outstanding limit orders away from best prices on Yahoo listing of NASDAQ markets.

C. The Efficient-Market Hypothesis:

- 1) Securities are typically in equilibrium, which means they are fairly priced and their expected returns equal their required returns
- 2) At any point in time, security prices fully reflect all information available about the firm and its securities, and these prices react swiftly to new information
- 3) Because stocks are fully and fairly priced, investors need not waste their time trying to find mispriced (undervalued or overvalued) securities

Note:

- 4) Behavioral finance argues that stock prices and prices of other securities can deviate from their true values for extended periods and that these deviations may lead to predictable patterns in stock prices

Note: Erik Davidson (FIN 5360 professor) is an expert in this area.

2.3 Regulation of financial institutions and markets

Goal:

=> excellent discussion in the text

Main types:

1) financial institutions:

=> Glass-Steagall (1933):

=> Graham-Leach-Bailey (1999):

2) financial markets:

=> Securities Act (1933):

=> Securities Exchange Act (1934):

2.4 The Securities Issuing Process

Main issues: private placements vs public offerings, role of investment banker (and underpricing)

A. Private Equity

=> equity capital raised with private placement directly to an investor or group of investors.

1. Angel investors:

2. Venture capital:

B. Initial Public Offering:

=>

Key: Lots of terminology and details in the textbook.

Investopedia: <https://www.investopedia.com/terms/i/ipo.asp>

Khan Academy: <https://www.khanacademy.org/economics-finance-domain/core-finance/stock-and-bonds/venture-capital-and-capital-markets/v/an-ipo>

Note: IPOs down around 36% this year: <https://stockanalysis.com/ipos/2023/>

Discussion of why: <https://finance.yahoo.com/news/heres-why-the-ipo-market-is-decelerating-in-2022-142322560.html>

C. The Role of the investment banker

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=> IB buys from the firm at a discount and then sells for the IPO price.

=> to assure sale of the stock, IPO price usually below true value

=> this leads to a typical jump in the stock price right after the IPO.

IPO Underpricing = $(\text{Market Price} - \text{Offer Price}) / (\text{Offer Price})$

Where: market price = closing price on first day of trading.

Ex. Kenvue had an IPO on 5/8/23. Kenvue is Johnson & Johnson's consumer-health spinoff. It issued 173,884,600 shares. The IPO price was \$22, the initial trade was for \$25.53 and it closed at \$26.90. J&J kept 1,716,160,000 shares (91% of the stock). The underwriter's spread was \$0.66 per share. Calculate: a) the total gross proceeds from the IPO, b) the total underwriter's discount, c) the underwriter's discount percent, d) the IPO's underpricing, e) the net proceeds from the IPO, f1) the market cap of IPO shares at first trade after IPO, f2) at end of the day of the IPO, and g) the value of all shares at the end of the day

a. Total gross proceeds = 3,825,461,200 =

b. Underwriter discount = 114,763,836 =

c. underwriting discount percent = .03 = $114,763,836 / 3,825,461,200$ =

d. Underpricing = .223 =

e. Net proceeds = 3,710,697,364 = $3,825,461,200 - 114,763,836$
 = $173,884,600 \times (22 - .66)$

f. Market cap of IPO shares:

1. at IPO: 4,539,273,838 =

2. at end of day of IPO: 4,677,495,750 =

g. Market cap of all shares at the end of the first day = 50,482,199,740
 =

Kenvue filing for IPO:

<https://www.sec.gov/Archives/edgar/data/1944048/000162828023015837/kenvue424b4.htm>

Kenvue Stock price since IPO:



Ex. Qualtrics had IPO on 1/28/21. It issued 51,695,568 class A shares at an IPO price was \$30. Initial trade was at \$41.85 and it closed at \$45.50.

Calculate: a) the total proceeds from the IPO, b) the underwriter's discount if it was 7%, c) the IPO's underpricing, d) market cap of IPO shares at first trade after IPO, at end of the day of the IPO.

Notes:

- 1) SAP kept all class B shares which get 10 votes per share while class A get 1 vote per share.
- 2) In a private placement, the firm also issued over 4% of the class A shares to Silver Lake Technology Management LLC for \$550 million and over 1% of the stock to founder and CEO Ryan Smith for \$120 million.
- 3) Qualtrics had planned an IPO 2 years earlier but was acquired by SAP instead.

a. total proceeds = 1,550,867,040 = 51,695,568 x 30

b. Underwriter discount = 108,560,693 = .07 x 1,550,867,040

c. Underpricing = .517 = (45.5 - 30)/30

d. Market cap of IPO shares:

at IPO: 2,163,459,521 = 51,695,568 x 41.85

at end of day of IPO: 2,352,148,344 = 51,695,568 x 45.50

Qualtrics S-1 filing for IPO:

<https://www.sec.gov/Archives/edgar/data/0001747748/000162828021000932/qualtrics-1a4.htm>

Qualtrics Stock price since IPO:



2.5 Financial Markets in Crisis

A. Financial Crisis of 2008

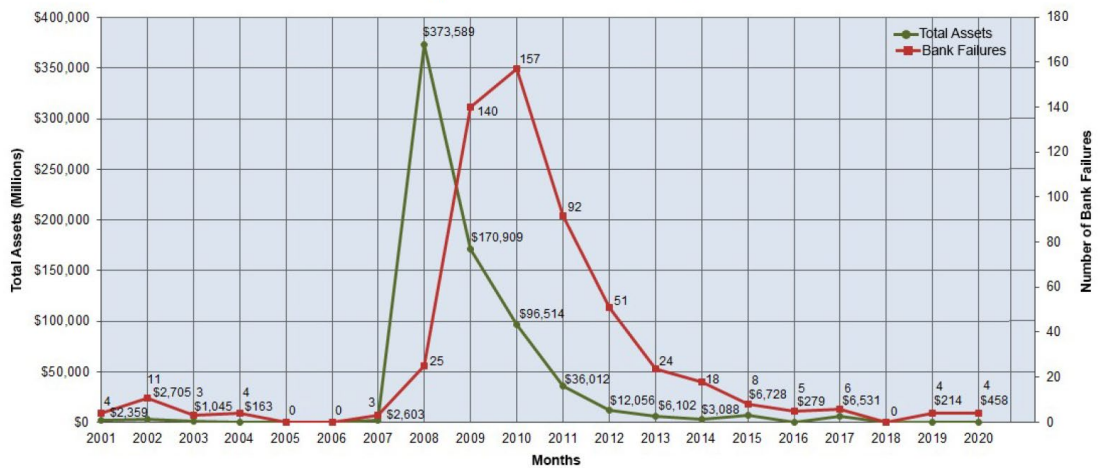
Synopsis: After years of stable growth in real estate prices, lenders lowered credit standards. This contributed to a housing price bubble that began to unravel after 2006. This in turn led to a banking crisis since banks had increased their investment in mortgage-backed securities which were defaulting.

Figure 2.5 House Prices Soar and Then Crash

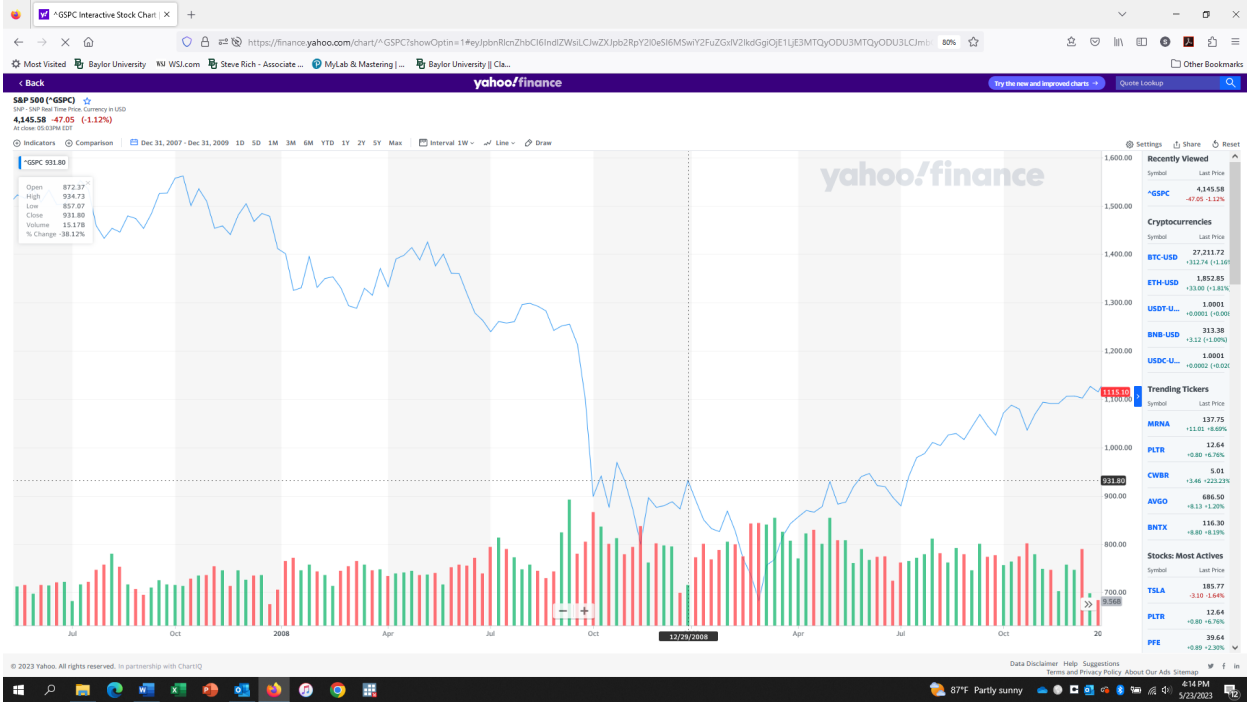


Bank Failures in Brief – Summary 2001 through 2021

There were 561 bank failures from 2001 through 2021. Please select the year buttons below for more information.



S&P500 levels during 2008 and 2009



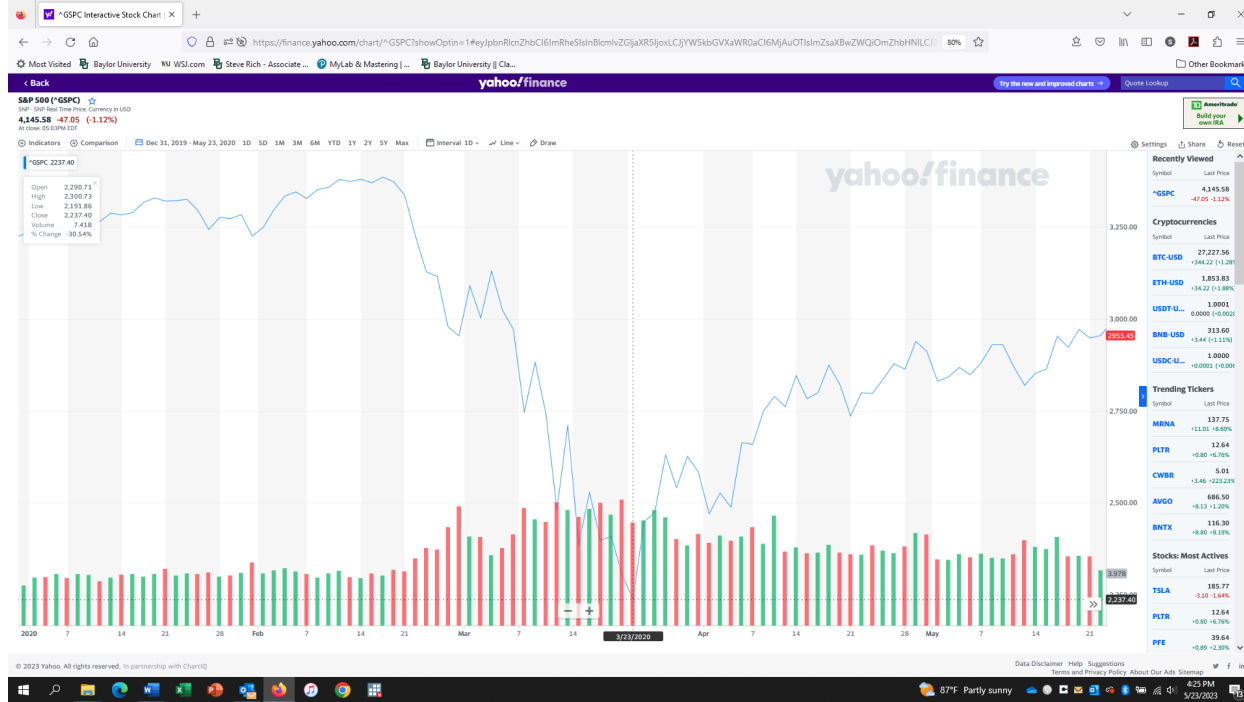
Note: Worst crisis of the financial system and economy since Great Depression, though faster loss of jobs in the early part of the Covid pandemic

<https://www.wsj.com/articles/unemployment-benefits-weekly-jobless-claims-coronavirus-05-07-2020-11588813872>

B. 2020 Pandemic

Chapter synopsis: First death in Wuhan on Jan. 11, 2020. First case in US on Jan 21, 2020. March 13, 2020, President Trump declares national emergency.

S&P500 levels during 2020



S&P500 levels between Dec 2007 and May 2023

p. 71 of textbook: “The Great Recession was followed by the longest economic expansion in U.S. history. As the economy boomed, so did the stock market”.

