

Introduction to the Financial System

Econ 457

Week 1-a

Outline

1. Introductions
2. Economics 457
3. Real v. Financial Assets
4. Sectors in the Financial System
5. Role of Markets

1. Introductions

John Bellows (me)

- Western Asset Management, 2012-2024
 - Portfolio Manager, Fixed Income Portfolios
 - Investment Strategy Committees, Responsible for Fed View
- US Department of Treasury, 2009-2011
- PhD in Economics, UC Berkeley, 2009

Quiz (not graded, do your best!)

1. Introductions



1



2



5



3



4

1. Introductions

Office Hours:

Location: KAP 308

Time: Thursdays, 2:00-3:15 pm

Additional office hours may be available, please send me an email with a request. I'll do my best to be accomodating.

Email policy: Best to talk to me during office hours or after class, especially for questions about class material or test preparation. I will do my best to respond to emails within 24 hours.

1. Introductions

Answers to the Quiz

1. Secretary of the Treasury:
2. Federal Reserve Chair:
3. Current Level of Fed Funds Rate:
4. Rate of 10-year UST notes since 2020:
5. S&P Year-to-date:
6. Annualized S&P gain since 2020:

2. Economics 457

Material Covered

Goals for the class:

- Develop some basic tools used in finance
- Apply these tools
- Appreciate some of the cool results in finance
- Understand why finance matters

My own experience includes academia, public policy, and also investing. The material in this class will touch on all of these at different points.

2. Economics 457

Material Covered

Subject	Weeks	Sub-topics
Intro	1 & 2	Measuring Returns, Distribution of Returns, Evaluating Returns
Portfolio Construction	3, 4, 5	Capital Allocation, Diversification, Index Model
Market Equilibrium	6 & 7	CAPM, Fama-French Factors
Fixed Income	8 & 9	Prices, Yields, Yield Curve, Duration and Convexity
Equity	10 & 11	Dividend Discount Models, Price-Earnings Ratios, Efficient Markets, Equity Risk Premium
Derivatives	12, 13, 14	Futures, Swaps, Options
Financial Crisis of 2008	15	Causes, What Happened, Aftermath

Note, this is subject to change throughout the semester.

2. Economics 457

Material Covered

Textbook: Bodie, Z., Kane, A., & Marcus, A. J. (2024). *Investments* (13th ed.). New York: McGraw-Hill/Irwin.

The textbook is very good and I will follow it closely, for the most part. It also has lots of practice problems, which are useful for exam preparation.

Lectures: Slides will be posted on Brightspace prior to each lecture. The slides will not be comprehensive, however, as I will undoubtedly say or discuss things in class that are not covered in the slides. I will also occasionally write on the chalkboard. I will do my best to record each lecture, but sometimes I forget, so please don't rely on that.

2. Economics 457

Resources

USC library access to financial news:
<https://libguides.usc.edu/bizinfo/news>

The screenshot shows the USC Libraries Research Guides website. The top navigation bar includes links for "USC Libraries", "Research Guides", "Business Articles & News", and "Ask Us / FAQS". The main content area is titled "Articles and News" and features a search bar. On the left, there's a sidebar with "Articles and News" highlighted in red, along with links for "Academic Journals", "Books and eBooks", "Streaming Video", "Online Learning Platforms", and "Citation Mapping Tools". Below this is a "Quick Access" section with "First Time Setup:" containing links to "New York Times", "Wall Street Journal", "Los Angeles Times", and "Bloomberg.com". A red circle highlights this "Quick Access" section. The main content area lists several databases: "ProQuest Business", "EBSCO Business Source Complete", "ABI/INFORM Collection", "Factiva", and "NewsBank Access Business News". Each entry provides a brief description of the database's content.

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Articles and News

Business News General News Peer-Reviewed Magazines Podcasts Blogs

• **ProQuest Business.**

ProQuest Business provides full text access to articles, reports and other resources in nine databases including ABI/Inform, the Wall Street Journal, New York Times, Los Angeles Times, Business Dissertations, Historical Annual Reports and more. An excellent starting point for business research.

• **EBSCO Business Source Complete.**

1,700 full-text, peer-reviewed journals. 1,600 business trade and general business publications. Includes case studies, investment research reports, industry reports, market research reports, TRADE JOURNALS, country reports, company profiles, SWOT analyses, and more.

• **ABI/INFORM Collection**

Features thousands of full-text journals, TRADE JOURNALS, dissertations, working papers, key business and economics periodicals such as The Economist and Sloan Management Review, country-and industry-focused reports, and major news sources like the Wall Street Journal.

• **Factiva**

Access to thousands of full-text business publications including newspapers, newswires, journals, magazines, and trade publications. Also includes company and financial information. Click the "Home" tab for "Trending" News and today's "Front Pages."

• **NewsBank Access Business News**

Full-text electronic editions of more than 350 business and law journals, local and regional business news weeklies, and other news sources across North America—many of which are

Home

Articles and News

Academic Journals

Books and eBooks

Streaming Video

Online Learning Platforms

Citation Mapping Tools

Quick Access

First Time Setup:

- [New York Times](#)
- [Wall Street Journal](#)
- [Los Angeles Times](#)
- [Bloomberg.com](#)

Login (Setup Complete):

- [New York Times](#)
- [Wall Street Journal](#)
- [Los Angeles Times](#)
- [Bloomberg.com](#)

USC University of Southern California

2. Economics 457

Grading

Table: Grades for Econ 457

Item	Percent of Total
Homework	25%
Mid-term 1	20%
Mid-term 2	20%
Final	35%

2. Economics 457

Grading

Homework

- Goal is to familiarize students with Microsoft Excel, while practicing concepts from class.
- 10 assignments. Best 8 will be counted. (Full points will be given on 2 for free)
- 2.5 points per assignment. 2 for turning it on time, 0.5 for getting it (mostly) correct.
- Posted and submitted on Brightspace.
- Posted on Fridays. Due at the start of class the following Thursday. (Brightspace timestamps submissions, late submissions will not be accepted.)
- If you'd like to do these in Python/Jupyter, please talk to me after class or in office hours.

3. Real v. Financial Assets

Definitions and Examples

Real Assets:

- *Definition:* An asset that can be used to produce goods or services
- *Examples:* Land, buildings, machine, patents, human capital

Financial Assets:

- *Definition:* Claims to the income created by real assets
- *Examples:* Stocks, bonds, derivatives
- *Important:* Financial Assets are always both somebody's asset AND somebody else's liability.

3. Real v. Financial Assets

Balance Sheets (examples)

Households:

Assets	Liabilities

3. Real v. Financial Assets

Balance Sheets (examples)

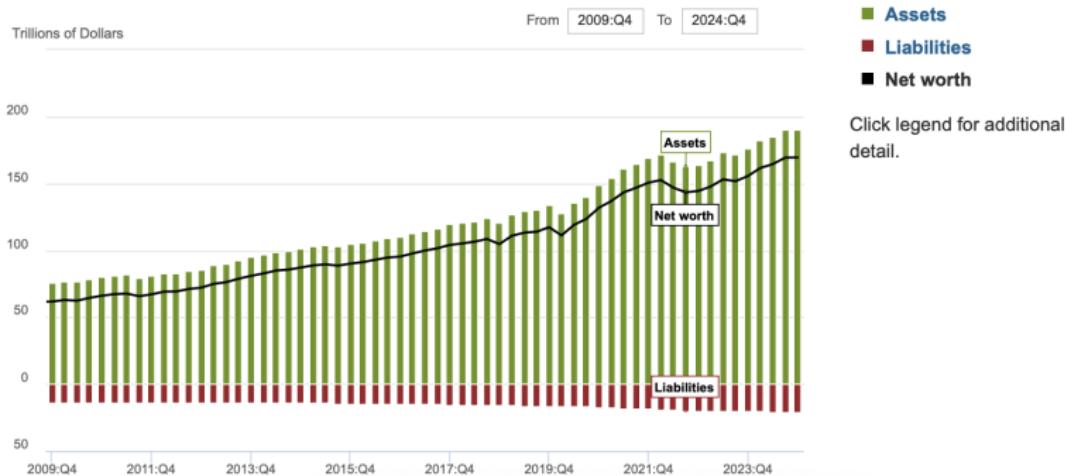
Non-financial Corporations:

Assets	Liabilities

4. Sectors of Financial System

Household Net Worth

Assets, Liabilities, and Net Worth

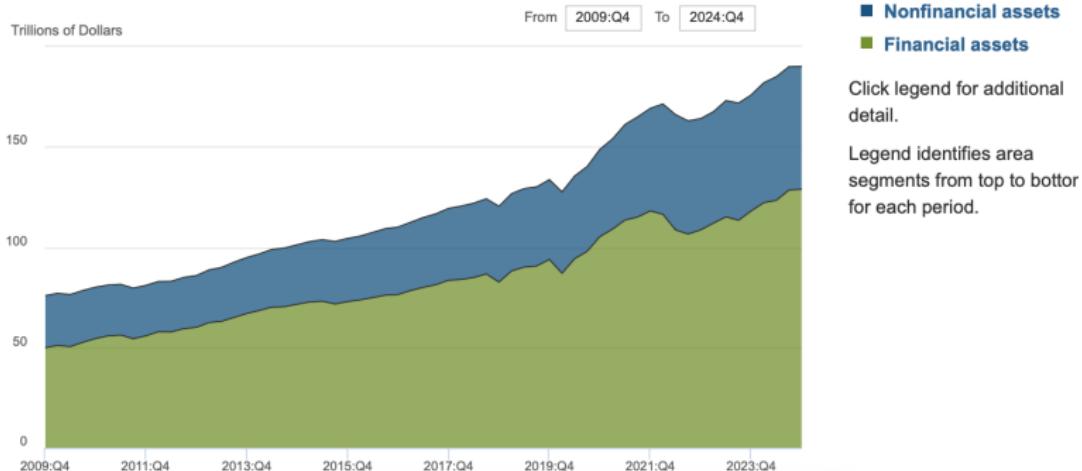


Source: Federal Reserve

4. Sectors of Financial System

Household Real v. Financial Assets

Financial and Nonfinancial Assets

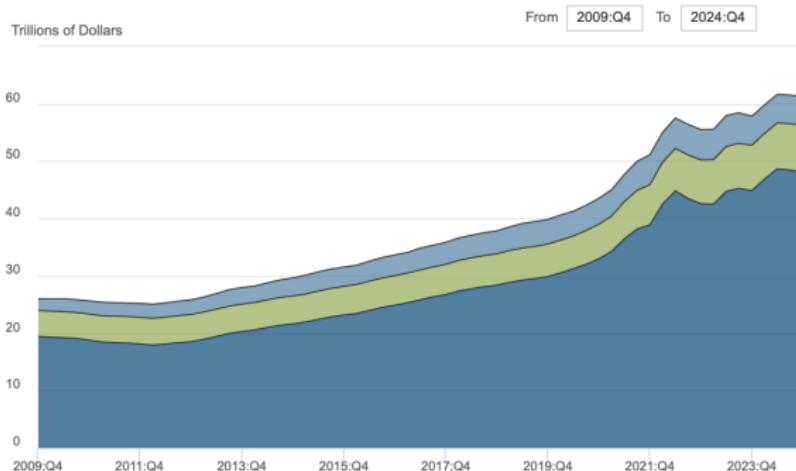


Source: Federal Reserve

4. Sectors of Financial System

Household Non-Financial Assets

Nonfinancial Assets



[Back to Assets](#)

- Nonprofits
- Consumer durables
- Real estate

Legend identifies area segments from top to bottom for each period.

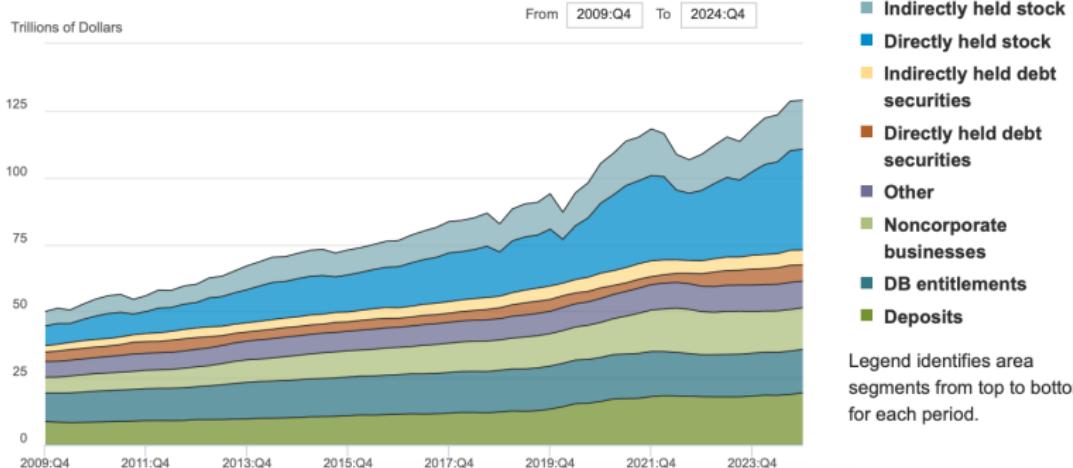
Source: Federal Reserve

4. Sectors of Financial System

Household Financial Assets

Financial Assets

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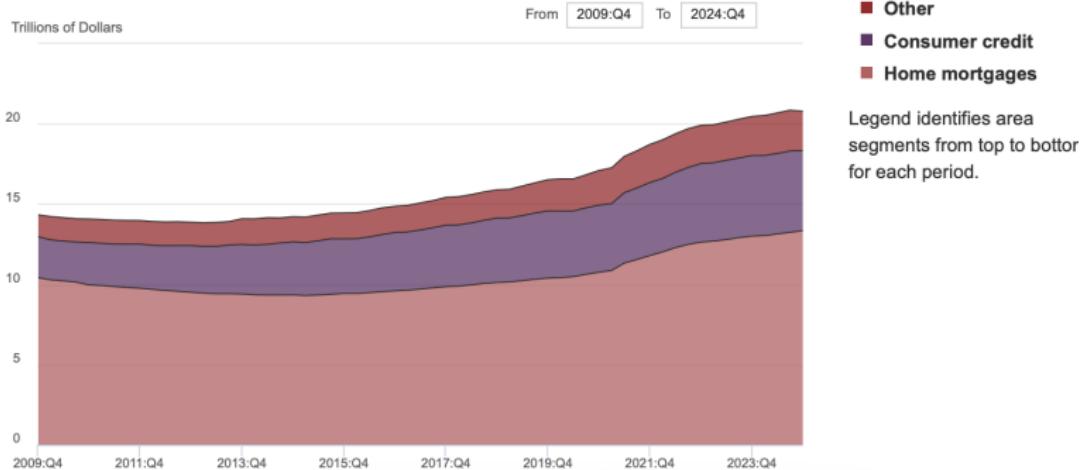


Source: Federal Reserve

4. Sectors of Financial System

Household Liabilities

Liabilities



Source: Federal Reserve

[Back to Household Balance Sheet](#)

- Other
- Consumer credit
- Home mortgages

4. Sectors of the Financial System

Example: Financing a student loan

Scenario 1: 529 Plans

Scenario 2: Student Loans

Key Point: financial assets always show up in two places. They are somebody's asset and somebody else's liability

5. Role of Markets

Some Observations About Markets

- Markets match buyers and sellers!
- Markets facilitate speculation
- Markets often require intermediaries
 - Reduce transaction costs (e.g. search costs)
 - Solve moral hazard and adverse selection problems
- Markets often require regulators
- Markets are innovative

5. Role of Markets

Financial Product Innovation

Examples:

- Financing college education: student loans
- Money Market Instruments: Money Market Mutual Funds, Eurodollars
- Mortgages: 30y fixed rate loans, NINJA loans
- Corporate Debt Financing: HY Bonds, Bank Loans, "Private Credit"
- Corporate Equity Financing: Private Equity (lots of flavors), Mutual Funds, ETFs