

# Basic information

- Course web site:  
[www.econ.ucsc.edu/faculty/elbaum](http://www.econ.ucsc.edu/faculty/elbaum)
- Bernard Elbaum, Economics Dept.,  
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email [LBAUM@ucsc.edu](mailto:LBAUM@ucsc.edu)
- Office hours, Tu Th 1-2

# Econ 80H: Introduction

- Why take this course?
  - Fear
  - Greed
  - Desire for knowledge requisite to financial decision-making and self-reliance
  - Self-reliance is much cheaper than paying others for advice and suffering losses from their conflicts of interest

# Some Advice

- Do course reading on time & come to class
- There is a large volume of course material
- Much new vocabulary
- Some basic statistics
- If you're familiar with the stock market, that's a big advantage
- If not, your mind may be buzzing soon

# How to learn the course material

- Seek multiple sources of reinforcement
- Do the reading
- Come to lecture
- Go to section
- Do homework exercises
- Read newspapers & magazines about finance

# Don't skimp

- My mother-in-law clips coupons
  - She saves a few dollars that way
  - If she paid more attention to her portfolio instead, she'd earn thousands more per year
- Buy the textbooks and read them
  - The returns to learning the material are huge
  - The book costs are paltry by comparison
  - If you have liquidity constraints, find a solution

# Further Advice

- Read as much as can about finance
- Benefit of reading additional media
  - The more you know, the more valuable your information is likely to be
  - It will help you in this course
  - It may help you get a job
  - It will help you understand the world
  - It will eventually help you make investment decisions worth far, far more than the cost of buying the media

# Read other media

- For example, I'll pass around a signup form for the Wall St. Journal which I'll fax in
- Or subscribe to *The Economist* magazine
  - I know high schoolers who read it weekly
  - 12-weeks for only \$19.95
  - 25-weeks for only \$39.90
  - 51-weeks for only \$77.00
  - Go to [www.economistacademic.com](http://www.economistacademic.com)
  - For instructor code, enter 4173
  - Best short source of international & financial news

## 2 Views of stock prices

- Psychological--crowd  
psychology/castles in the air
- Fundamentalist

# Why this course

- Gain understanding of financial markets that rule much of modern life--a worthy part of liberal arts education
- Prepare for a career in finance
  - Better advised if an econ major to take upper division courses 133 & 135
- This is rare course that helps you understand the world and also relates directly to your life
- No single course is likely to matter more to your financial well being than this one.

# Psychological View

- Leads to chartism and market timing approaches
- Try to predict market statistically based on past trading volumes and prices
- Published prediction schemes generally fail empirical tests

# Gains from saving

- Well considered frugality does pay
- Those who have saved and invested well in the US have reaped terrific gains
- If you invested \$2000 per year each year for 40 years, you wound up with nearly \$1 million
- Don't save on reading matter. But do save and invest once you start earning.

# Psychological View

- What about unpublished schemes?
- If you had a scheme that seemed to work, would you publish it?
- There is evidence that some statistical, technical trading rules worked in the past.
- Will the same rules work in the future?  
Would you bet your money on it?

# Fundamental View

- Market prices reflect genuine earnings capacity of company in the future
- Also reflect current company wealth--the value of assets owned by the company
- Fundamentalism must be true in long run

# Market Efficiency

- Efficiency says that stock price reflects available information about fundamentals
- Everyone agrees that market is fairly efficient in the long run
- But things are much less clear in the short run

# Market Efficiency

- The idea is that the market must be efficient or else there would be easy money sitting on the table for someone to just pick up
- Too many smart people are looking for easy money for there to be any around

# Market Efficiency

- Who would you rather trust to invest your money?
- Very highly paid and highly educated professionals who work as fund managers on Wall St. and wear expensive suits
- Or baboons throwing darts at the Wall Street Journal?

# Market Efficiency

- The evidence suggests that you're better off with the baboons
- The professionals don't like be compared unfavorably to bare-assed apes.
- But the comparison does not say that the apes are smarter
- It says there are too many smart professionals for anyone to beat the average

# Market Efficiency

- If it is hard to beat the average, the best advice is to ignore the professionals
- Don't pay hefty fees to the pros so they can try and fail to beat the market
- Instead pay low fees to an index fund which will get you the average, guaranteed.

# What is a stock?

- A share of ownership in a publicly held company that enjoys limited liability
- What does “publicly held” mean?
- What does “limited liability” mean?

# Publicly held

- Publicly held means that the company's shares are held by anyone in the investing public who buys them
- They are not held privately
- There is a market for them where shares can be bought

# Limited Liability

- Limited Liability means that shareowners are not liable for the company's debts
- The most you can lose as a stock purchaser is 100% of the amount that you invest in buying stock
- Limited liability companies are known as corporations

# Rights of stock ownership

- You technically have the right to vote on corporate issues at their annual meetings of shareholders.
- One share = one vote
- You have rights to receive dividends

# Dividends

- What are dividends?
- A dollar amount that a corporation pays per share
- Usually paid quarterly, though there can be special one-time dividends
- Companies generally maintain a given dividend level for years with infrequent cuts or increases

# Dividends

- Dividends are paid out of company profits or earnings
- Whatever companies don't pay out as dividends, they are free to reinvest in company operations
- As an alternative to paying dividends, companies can buy shares back from stockholders

# Stock returns

How do you earn returns on stock?

From dividends.

And from increases in stock price that represent what we call capital gains

# Stock price movements

Why does stock price go up or down?

In theory, stock price reflects the present value of the future dividends expected by investors

Dividends reflect profits

Profits reflect the business share of economic growth which is generated mainly by technological change, advancing education, & real investment

# Is the market efficient?

- Maybe not in the short run
- In 1987, stock price fell by 22.5% in one day
- In late 1990s there was a bubble in tech stocks which drove tech stock prices way above fundamental value
- So what should an investor do?

# Lessons from Financial Research

- Whether or not the market is efficient, it is hard to beat
- Index funds that deliver the market average pay higher risk-adjusted returns than 80% of actively managed mutual funds

# What is a mutual fund?

- A mutual fund collects money from investors which it then invests on their behalf in a portfolio of stocks
- Actively managed mutual funds pay professionals a lot of money to try to beat average market performance
- Passively managed funds just index; they buy stocks so as to get the average return

# Lessons from Financial Theory

- Passively managed funds charge lower fees
- They also incur much lower capital gains tax because they don't often sell stocks

# Lessons from Financial Theory

- Diversification allows you to incur less risk without sacrificing return
- So you should diversify, diversify, diversify
- Unless you really think you know something about a small class of stocks that the market doesn't
- Warren Buffet held only 10-20 stocks & became a billionaire

# Diversification

- Diversify across nations, size of firms, high and low risk investments, etc.

# Lessons from Financial Theory

- Which are better, stocks or bonds?
- What is a bond?

# What is a bond?

- A bond is a “debt instrument”
- It is a debt that is traded on publicly markets
- If you buy an IBM bond, you loan money to IBM and IBM promises to pay you regular interest plus the loan amount or principal at maturity

# Bonds versus stocks

- Over the short run, stocks are more volatile and hence more risky than bonds
- Insurance and pension companies must own lots of bonds because they need income streams they can match up against payment obligations

# Bonds versus stocks

- Over long run, stock have outperformed bonds over every period 15 years or longer for which we have records
- The exception is periods ending in 1929, the year of the stock market crash that began the Great Depression
- Even then, for 1909-29, stock and bond returns tied

# Bonds versus stocks

- There is no guarantee that stocks will continue to deliver long term performance so superior to bonds
- Many experts think the extra return or premium that stocks earn over bonds will be less in the future

# Bonds versus stocks

- Still, you want to own mainly stock when you're a young investor, bonds when you are retired and must live off the income

# Should you try to time the stock market?

- Evidence shows that trying to time the market does not pay
- Most gains in the market happen on a very few days
- If you avoid the market for fear of a fall, you're liable to miss the upside gains

# Real estate

- Which is a better investment: stocks or real estate?
- It depends on where you live.
- Real estate returns have been modest in the South or midwest.
- Real estate returns, leveraged by debt, have been sensational in California

# What does “leverage” mean?

- Debt leverages your returns, increasing positive or negative returns in absolute value
- Suppose you make a \$100,000 down payment on a \$500,000 house and borrow the balance of \$400,000
- If the house goes up (or down) 10% in value, you earn (or lose) 50% on your investment!

# Real estate versus stock

- Real estate is less liquid—it is harder and more costly to sell in order to obtain cash
- Real estate is also harder to diversify
- But if you know the local real estate market well, you may obtain an information advantage, for example, by buying into neighborhoods before they are upgraded

# Index funds versus alternatives

- Index funds are particularly advantageous when investing in taxable accounts
- Retirement or pension investments are typically tax sheltered
- Even pre-tax, index funds outperform most other funds, but the difference is not as marked

# Index funds versus alternatives

- There is evidence that actively managed funds can outperform the index for foreign stocks
- Or for so-called small caps—stocks of smaller companies

# What is a smaller company?

- Definitions vary
- Some consider a company to be small if its stock is worth less than \$1 billion
- Others set the limit at \$500 million
- Anything less than \$100 million is considered a microcap

# Buying stocks yourself

- Can offer lower tax consequences than entrusting money to a fund
- Allows you maximum control
- You can try to beat the market average on your own
- But then you must always ask yourself, what do you think you know that is not reflected already in stock market prices

# Lessons from Financial Research

- Research suggests that there may be excess returns from owning so-called “value stocks”
- What is a value stock?
- A stock that seems under-priced relative to fundamentals as measured by a number of indicators

# Value versus growth stocks

- Why might value stocks be better investments?
- Because the public has a prejudice in favor of good companies that have delivered strong profit performance
- The stock of good companies tends to be over-priced

# Other anomalies

- An anomaly is a departure from market efficiency that a savvy investor can exploit to earn excess risk-adjusted returns
- Small caps outperform
  - Especially in January! (At least in the past.)

# Bottom Line

- Save and start when young
  - \$2000 saved per year over 40 years at 10% = \$1 million
- Diversify
- Use index funds unless you think you really know something others are missing
- Buy stocks when young, bonds later
- Buy a house in CA if you can
- Diversify across small & large caps & abroad