

UIC Orientation

Example Investments Intro (Finance 310) and Advice for Success

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- Personal introduction
- Texts, reading, and Blackboard
- Office hours: When?

Introduction and Asset Classes

Course Objectives

- This course introduces
 - capital markets;
 - asset pricing;
 - risk modeling;
 - portfolio theory;
 - derivatives; and,
 - investment management.
- This course will be, unavoidably, quantitative in parts.
- An introductory statistics course is a key prerequisite.

- In general, we will cover two chapters per week.
- Material is similar to CFA preps, Wall Street orientations.
- Anyone here should understand the material with studying.
- *Uwaga!* Do NOT fall behind.
 - Each week builds on prior material.

Introduction

- An *investment* commits resources now for future benefit.
- Wealth creation derives from *real assets*.
 - Examples: land, buildings, commodities, knowledge, energy.
- *Financial assets* are claims on real assets or income.
- Focus on investments in financial/real assets, and money.
- Financial assets may be further decomposed:
 - Fixed-income: a promised stream of income;
 - Equity: an ownership stake with no promise of income.
 - Derivatives: contracts with payoffs based on asset prices.

Choosing where to invest involves a few concepts:

- *Asset allocation*: allocating investments among asset classes.
- *Security selection*: choosing instruments to invest in.

Two common ways to determine where to invest:

- *Top-down*: asset allocation, then security selection.
- *Bottom-up*: Security selection ignoring asset allocation.

Capital and asset markets serve multiple purposes:

- Prices convey information about expected value.
 - Decisions are made based on prices.
 - The importance of prices underlies Chicago Price Theory.
- Markets help individuals/companies time their consumption.
- Allow entities to shift unwanted risk to other (willing) entities.
- Facilitate separation of ownership and management.
 - Managers are charged with “maximizing shareholder value.”
 - *Agency problems*: possible conflicts of interest for managers.

A key assumption of these markets is trust.

- Financial statements, inventories, and prices must be honest.

Competitive Markets

- Market participants are always looking for easy profits.
- This leads us to believe markets are *competitive*:
 - *i.e.* There is “No Free Lunch with Vanishing Risk” (NFLVR).
- Competition underlies some key ideas (in order of boldness):
 - *Risk-return tradeoff/Modern Portfolio Theory (MPT)*:
Low-risk investments return less than high-risk investments.
 - *Arbitrage Pricing Theory (APT)*:
Economically equivalent instruments should be equally priced.
 - *Efficient Markets Hypothesis (EMH)*:
All prices include all information and thus are fair.
- Obviously, the EMH cannot strictly hold.
 - Securities analysis would cease; prices would stop being fair.

Market Participants

Who are these “market participants?”

- Non-financial companies: raise capital for plants/equipment;
- Individuals/households: save/invest cash;
- Governments and agencies: borrow for capital projects;
- Investment bankers: assist with raising capital;
- Financial intermediaries: match buyers, sellers, investments.

Investment bankers originate securities in the *primary market*.

Our focus is the *secondary market*, where securities are traded.

Throughout this course we will discuss recent trends:

- *Globalization:*
Greater investment abroad due to less regulation, internet.
- *Securitization:*
Pooling securities and shifting risks to create new securities.
- *Financial engineering:*
Use of complex quantitative analysis in all areas of finance.
- *Electronic markets and trading:*
Computers trading, making markets, matching buyers/sellers.
- *Correlation/dependence:*
How markets move together, especially in times of stress.

The Road Ahead

- We have been introduced to the field of investments.
- Next we will talk about various asset classes.
- Next week we will talk about how markets and trading work.
- Reading: Chapters 2 and 3 of text, WSJ/FT.

Meta Lecture: How This All Works

Most courses have a certain evolution across the semester:

- Handle administrative details
- Give an overview of the course (what is/isn't covered)²
- Set expectations (reading? difficulty? prison attack?)
- Dig into course details (most of the semester)
- Discuss broader issues/relation to other areas

Some of these are summarized in the syllabus.

²“So... when are we going to get to continuous time?”

Class Structure

Most courses also have a structure to each class:

- Recall what was talked about last time
- Segue into current topic
- Dig into current topic details
- Discuss problems/issues; relate to current events
- Foreshadow what will be covered next time

What if a class lacks some of these?

- Find them out for yourself, and
- Write them down.

- Some courses: reading is optional; others: crucial.
- Avoid videos, Wikipedia; a lot of what's online is wrong.³
- Claim: “Students nowadays don't read books.”
- Truth #1: Students who don't read fail much more often.
- Truth #2: Students who read tend to be at top of the class.
- Reading makes it easier for you to understand lecture.
- Reading also helps answer your questions. (even at 2 AM!)
- Text may be used in later courses; can review past material.

³Sometimes wrong in subtle ways. Especially true for topics **UIC BUSINESS** beyond high-school.

Attending Lecture

- Always attend lecture, even if you know the material.
- Attendance is a good habit to make, keeps you engaged.
- Students who earned F's: ALL skipped > 4 lectures.
- Students who earned A's: NONE skipped > 3 lectures.
- “This guy skipped the whole course, aced the final, got an A.”
- Nobody I know has had this happen with a student. Ever.
- Think of questions; if they don't get answered, ask.
- You will get asked questions; not bad once you get used to it.

- Print out slides before lecture (if available).
- Having slides does not mean you don't need to take notes.
- Write down major and minor topics headings (if no slides).
- Listen for topic changes: challenges, questions, segues.
- Write down explanations, analogies, answers to questions.
- If something doesn't make sense, ask a question.
- Taking a photo of the board? JUNK. Writing helps memory.

A good thing to do occasionally: step back.

- How does this fit in with the goal of the course?
- Why did we cover this topic after the last topic?
- Are we sure this is true? What if it isn't?
- How is this similar to other topics?
- How would this help me become a better _____?
- What do I now realize I don't know?
- What courses would fit well with/augment this course?

Life at a Research University

- Unlike DePaul, Loyola, and IIT: UIC is a research university.
- We answer questions nobody has answered (or answered well).
- We care a lot about asking good questions.
- Your professor may disagree with the textbook.
- Textbooks = old research = mostly right but needs correcting.
- You may cover topics not in the text.
- Key benefit: you see material before it is in textbooks.
- On the other hand: We assume you nail the basics.
- We like theory. The world changes; theory helps explain it.⁴
- You will meet people you disagree with. We like that.

⁴Also helps you guess how the world will change, position yourself for success.

- Unlike most research universities: UIC is young.
- East Campus: 1965; as a research university: 1982.
- University reputations take a long time to build.
- What you/others “know” about UIC probably no longer true.
- 11th young university WW; 50th: competitive federal grants.⁵
- How? We push *hard*. We innovate. We are impatient.
- You will see UIC get better every year; embrace that.
- Opportunity: Push for answers, lead, help make history.

⁵Young = under 50 years old, from THES; more grant \$s than Iowa, UofC some years.

General psychology to what I've been saying: Be Active.

- Choose courses that get the most value for you.
- Take advanced core courses. (learn to think; grad school)
- Prepare for class: read, work problems, print slides.
- Do homework and study for tests.
- Go to class (lectures, sections, labs).
- Ask questions if you don't understand.
- Talk to professors if reading+studying isn't working.
- Go to office hours, even if only to introduce yourself.
- Explore talks, students groups in your area of interest.
- Get an internship/pursue research opportunity.

How to Fail

- Take basic core courses. (Make grad school impossible?)
- Take easy courses. (You get hired for knowledge.)
- Take typical courses. (You'll look like everyone else.)
- Skip lectures. (You won't make it up on the final.)
- Fall behind. (Courses build on past lectures, courses.)
- Talk/text during class. (Your brain is not present.)
- Don't turn in homework. (You'll bomb that on the test.)
- Cheat. (Get a 0; drop a letter grade; get expelled?)
- Ignore internships, research possibilities, lab positions.
- Work too hard at part-time job. (A students get better jobs.)

Truth: C students work for A students within a few years.⁶
Each class costs you about \$100. Would you waste \$100?

⁶Sometimes sooner.

The Road Ahead

- We saw a brief introduction to the field of investments.
- We also talked about how to succeed at UIC.
- Next few months you'll get more info to help you succeed.
- Reading: NYT, Economist, SciAm, Tribune, etc. Start now.
- Stop floating on auto-pilot; take action — or expect failure.
- Only time society excuses wide exploration & learning.
- *Take what you want, and pay for it.* And be OK with that.