Econ 426: Advanced Finance: Measuring and Generating Alpha (Winter 2015)

This class centers around the concept of “Alpha”, or the risk-adjusted return of a firm. We will learn how to measure alpha, using quantitative tools such as regression analysis to adjust for systematic risk. Alpha is closely connected to the current and future profitability of firms, hence to understand Alpha we will next develop insights into financial statements, industry competition and core competencies of companies to relate measured Alpha to firm profitability. This type of analysis is at the heart of investment expertise of Venture Capital and Private Equity funds. We will discuss how these investors generate Alpha by applying both, industry/company analysis and modern finance tools together.

Instructor

Professor Mu-Jeung Yang

- Office: Savery 327
- Office hours: Thursdays, 1-2pm or by appointment
- Email: mjyang@uw.edu. Please start your subject line with [Econ 426]: doing so will ensure I read your emails first.

Class Meeting times

Tuesdays and Thursdays 3:30-5:20pm, MOR 225

Class website

The website for this class will be: http://faculty.washington.edu/mjyang/teaching/Econ426_W15/

Class Grading

- Problem sets: 10%
- Midterm: 40%
- Final project: 50%
Deadlines

- Tuesday, Feb 10th 2015: In-Class MIDTERM
- Thursday, March 19th 2015: submission deadline, FINAL project report

Problem Set Guidelines

- If you cannot attend the date at which problem sets are due, email me an electronic version of your solution, completely formatted and with your name on the problem set. If the printed version of the problem set does not contain your name, you will not get credit for the submission. Problem sets need to be here by the end of the lecture. Late problem sets cannot be accepted, since they all go together with a grader!

- You can work in groups but you need to submit individually.

- Solutions will be available in hard copy, to be picked up in class or at my office. There will not be electronic versions of the solution available, sorry.

Textbook


- Supplemental Reading for Financial Statements II, will come from Brealey, Myers and Allen (BMA) “Principles of Corporate Finance”, 10th ed.

- Supplemental Reading for topics 5., 6, and 7 are coming from: Grant, “Contemporary Strategy Analysis”, (7th ed. Wiley)
LECTURE OUTLINE

Intro: The Challenge of Active Investing

Part I: Measuring Alpha

1. Alpha Measurement I: Recap of CAPM, Regressions
   \textit{(BKM, Chapter 9)}

2. Alpha Measurement II: Arbitrage Pricing Theory and Empirics
   \textit{(BKM, Chapter 10, 13)}

Part II: Understanding the Sources of Alpha

3. Financial Statement Analysis I: Basics
   \textit{(BKM, Chapter 19)}

4. Financial Statement Analysis II: Capital Structure
   \textit{(BMA, Chapters 16-19)}

5. Market Efficiency and Competitive Advantage: Introduction
   \textit{(Grant, Chapter 1)}

6. Competition and Industry Analysis
   \textit{(Grant, Chapter 3)}

7. Core Competency Analysis
   \textit{(Grant, Chapter 5)}

Part III: Generating Alpha in Private Equity and Venture Capital

8. The Private Equity Cycle: Overview and Deal Sourcing
   \textit{(LLH, Chapter 2)}

9. Deal Evaluation: Qualitative and Quantitative Tools
   \textit{(LLH, Chapters 3, 4)}

10. Deal Structuring
    \textit{(LLH, Chapter 5)}

11. Deal Management
    \textit{(LLH, Chapter 6)}

12. Deal Exit and Distribution
    \textit{(LLH, Chapter 7)}
Academic Conduct

The economics profession depends on the maintenance of high professional and ethical standards among its members. Similarly the Department of Economics expects its students to maintain high standards of academic conduct. The University of Washington has a Student Conduct Code (WAC 478-120) available at http://apps.leg.wa.gov/WAC/default.aspx?cite=478-120

The Department of Economics has a policy on academic misconduct. Academic misconduct includes plagiarism, cheating on examinations or other individual projects or assignments, and the theft or alteration of other persons’ work for the purpose of gaining academic credit or of enhancing grades.

Plagiarism

Plagiarism is one of the most widespread and elusive kinds of cheating and is defined in the Academic Responsibility statement mentioned above as:

1. “Using another writer’s words without proper citation.”

2. “Using another writer’s ideas without proper citation.”

3. “Citing your source but reproducing the exact words of a printed source without quotation marks.”

4. “Borrowing the structure of another author’s phrases or sentences without crediting the author from whom it came.”

5. “Borrowing all or part of another student’s paper or using someone else’s outline to write your own paper.”

6. “Using a paper writing “service” or having a friend write the paper for you.”

Examination rules

Exam Absence Policy

1. If you are unable to make it to an exam period due to illness or another serious unexpected happening, do the following:

   (a) Contact your instructor the same day to notify him/her that you are not able to take the exam and why.

   (b) If you missed the exam for health reasons, you need to show as soon as possible to your instructor a valid medical note issued by a medical professional, on the original exam date. The instructor may check with the medical authorities writing the note to ascertain the veracity of your visit. There is no flexibility on this matter. The arrangement for making up the missing credits may vary from instructor to instructor (make-up exam etc.).
(c) If there was some other reason for missing the exam (car accident, meteor shower etc.) come and see your instructor to explain these reasons – you will need to show proper valid documentation. Not waking up or missing your bus/plane is not an acceptable excuse.

2. If you know that you are going to be away due to an university related activity (e.g. sport, debate), let your instructor know well in advance (preferably in the first week of the quarter) so that arrangements for make up can be made upon presentation of proper valid documentation.

Exam Taking Rules

1. Material allowed during a closed book exam.

   (a) All books, papers, notebooks etc. must be placed inside your bag (backpack etc.) and the bag must be securely and fully closed. If you do not have a bag, you must place all your material out of your reach (classroom window sill etc.)

   (b) Only keep writing tools and basic calculators (i.e. simple 4-functions calculators). Graphing calculators or calculators with memories will not be allowed. Sharing of calculators is not permitted.

   (c) Cellular phones must be turned off before entering the class and placed in your closed bag (not in your pocket). You are not allowed to use a cellular phone during an exam. Doing so will result in the termination of your exam time (your exam being taken from you at this point). Likewise i-pads or i-pods (or similar devices) are not allowed. The use of personal computers is not allowed during an exam.

   (d) Baseball caps with visors and any kinds of headgear hiding your eyes are not permitted.

2. Attendance and special accommodation

   (a) You are expected not to leave the room during the exam except in case of emergency. This includes restroom use; be sure to use the restroom before the beginning of the exam.

   (b) If you arrive late to an exam, you cannot expect to get extra time after the official end of the exam to make up for the missing time at the beginning.

   (c) If you have a documented disability, please show your instructor your documentation from the Office of Disability Resources for Students on the first day of class, so that your instructor can make all the necessary arrangements if you wish to take your exam in a separate place.

Academic honesty

1. Exams are individual work and cheating will not be tolerated. Students must not glance at their neighbors’ exams. Students must not change their answers after they have turned their exam in.
2. Check the student handbook for further information about cheating, plagiarism etc. Cheating of any kind may result in expulsion from the university. The Department of Economics will follow university policy in case of academic dishonesty. These rules complement/supplement the university rules, which are spelled out at http://www.washington.edu/uaa/advising/help/academichonesty.php

Academic integrity is the cornerstone of the Department’s rules for student conduct and evaluation of student learning. Students accused of academic misconduct will be referred directly to the Office of Community Standards and Student Conduct for disciplinary action pursuant to the Student Conduct Code and, if found guilty, will be subject to sanctions. Sanctions range from a disciplinary warning, to academic probation, to immediate dismissal for the Department and the University, depending on the seriousness of the misconduct. Dismissal can be, and has been, applied even for first offenses. Moreover, a grade of zero can be assigned by the instructor for the course.