

Stephen M. Ross School of Business
UNIVERSITY OF MICHIGAN

Capital Markets and Investment Strategy
FIN 608, Fall-B 2009

Last Updated: October 27, 2009

Logistics

Instructor: Prof. Lu Zhang

Office: R 4336

Phone: 734.615.4854 (office) and 585.267.6250 (cell, emergency only please)

Email: zhanglu@bus.umich.edu (my primary mode of communication)

Web: <http://webuser.bus.umich.edu/zhanglu/>

Class Time and Place:

- Section 001: MoWe 8:00am–10:20am, R 1220
- Section 002: MoWe 10:20am–12:40pm, R 1220

No class on 11/25 (We). 12 meetings in total (11/2, 11/4, 11/9, 11/11, 11/16, 11/18, 11/23, 11/30, 12/2, 12/7, 12/9, and 12/14). First class: 11/2, and Last class: 12/14. The meetings on 11/16 and 12/2 will be held in the Tozzi Finance Center.

Final Exam Time and Place:

- Section 001: 4pm–6pm, December 17, Thursday, R 1220
- Section 002: 1:30pm–3:30pm, December 18, Friday, R 1220

Office Hours: MoWe 2:30–4:00pm, R 4336

Course Objective

Our objective is to undertake a comprehensive study of theory, evidence, and practice relevant to investment management with an emphasis on equity. The course is applied in that various concepts and approaches are subjected to real-world data.

Prerequisites

Students are required to have completed an introductory finance course and basic probability and statistics. The field of investments is inherently quantitative. Basic statistics is required because these tools will be used in most lectures throughout the course. Familiarity with statistics should extend through multiple regression, covariance, and correlation.

Teaching Assistant

Our Teaching Assistant is Mr. Chen Xue, who is a senior doctoral student in Finance at the Ross School. Chen's email is xuechen@bus.umich.edu and he will grade the final exam. Please note that I will grade all the cases myself.

Course Materials

The required textbooks are Bodie, Kane, and Marcus, *Investments*, 8e, McGraw-Hill (BKM8e). BKM8e is the standard Investments textbook adopted by all the top 30 business schools. The 7e version of BKM is almost as expensive as BKM8e. But 6e is probably cheaper (if you can find it). You can use 6e for our course as well. There also will be a required course packet that contains all the cases. You should buy the packet from campus bookstores.

The following books are also useful (recommended only, not required): Malkiel, *A Random Walk Down Wall Street*; Krugman: *The Return of Depression Economics*; Tibman: *The Murder of Lehman Brothers: An Insider's Handbook to the Global Meltdown*; and Cohan: *House of Cards—A Tale of Hubris and Wretched Excess on Wall Street*.

The course Web site in CTools contains: (i) course announcements; (ii) lecture notes; and (iii) some required and all supplementary readings in pdf format. Lecture notes and case assignments will be posted about one week before their corresponding class meetings. Students are responsible for obtaining course materials such as lecture notes and assignments from the course Web site. The readings are selected to encourage questions and discussions about the points in class, and more importantly, to facilitate understanding of the course materials. It is strongly recommended to complete the required readings before the lectures. Required readings are mostly from the textbook with a few exceptions from important journal articles. Supplementary readings mostly come from practitioner-oriented journals such as the *Financial Analyst Journal* or the *Journal of Portfolio Management*. The resources directory in CTools contains all the supplementary readings.

Course Requirements and Grading

The course grade will be based on cases, assignments, a final exam, and class participation using the following weights:

Cases	50%
Participation	20%
Final exam	30%

The class participation grade is determined by the quality of your participation. I will count the following things as class participation:

- Making comments and asking questions instructive and helpful for the whole class.
- Direct feedback to help me do a better job of teaching. This includes constructive feedback on cases, lectures, and the textbook. I hand out Quick Feedback Forms at the end of each meeting to provide ample opportunities of communication.
- Copies of articles or materials that are helpful for the class.
- Professional etiquette.

It is entirely possible to earn negative participation points.

In particular, professional etiquette is counted toward the class participation grade. The purpose of etiquette rules is to ensure that no one interferes with the learning of others. However, I do understand that recruiting sometimes interfere with class. As such, I plan to start promptly and I expect you to be on time. If, because of some unusual circumstance you come in late, please enter as surreptitiously as possible. If it is necessary for you to leave early, please sit next to a door. Please ask someone to switch seats with you before class starts if this is necessary. You can leave the room briefly if it is an emergency: if you doubt whether it is an emergency, it's not. As a general rule, you cannot use other handheld communication devices in class. I allow the use of laptops for specific limited purposes such as note-taking. At no time are you permitted to perform any email related activities or e-texting in class. Doing so can lead to negative participation points.

I will assign the final grade according to the policy of the Ross School:

Low Pass	$\leq 5\%$
Pass	$\leq 25\%$
Good	$\leq 40\%$
Excellent	$\leq 35\%$

I will strictly adhere to this policy by ranking students based on their scores and applying the above percentile cutoff points.

Cases

There are five case presentations throughout the course. You can work on the cases in teams up to **four** members. Each team must work on **all** cases throughout the semester. For each case one team will present their work in class and handle questions. We will spend about 60 minutes on each case: 30 minutes on case presentation and 30 minutes on questions and answers. **I will assign on average higher case and participation grades to members of presenting teams** because they take a higher work load and because I want to encourage active leadership in class. **Please email me if your team would like to present a specific case.** Each team can present at most one case.

Unlike lectures, everyone must prepare ahead of time for a case session to be productive. **Your case and participation grade will depend a lot on your discussions in the case sessions.** Each group must turn in a written report before the presentation. I will grade your performance in a given case based on your write-up and case discussion in class. Please bring your name card to class at all time. The case presentations (and discussions) are meant to be oral exams. This means that I will not give you any suggestions on the cases unless you are in a presenting team. (I will of course answer clarification questions.) Presenting teams do not need to submit a case write-up, **but must send me their presentation slides by 4pm on the day prior to the case presentation.** I will do some minimum quality control and provide suggestions as I see fit to improve the case presentation.

Case write-ups (5–7 pages) must be submitted using the “Assignment” tool in the course Web site. Each group should submit a single copy of their work, clearly specifying the names of all contributing members. All team members will receive the same grade for each case. The case report should be a self-contained write-up of the results. Additional tables and figures can be included. The case assignment will be posted in the course Web site at least one week before each due date. Except for extreme circumstances such as medical emergency, I will not accept late assignments. **Each team will present one case and submit write-ups for all other cases.** I will grade all case write-ups and presentations myself.

Shapiro (1985, Hints for Case Teaching, *Harvard Business School Note*) says that it is necessary for each student to be committed to the 4P-principle of the student involvement in case discussions. *Preparation*: Students read and analyze the case. *Presence*: Students should be present in case discussions to learn and to add his or her unique thoughts and insights to the group discussion. *Promptness*: Students arrive to the class on time to avoid the disruption

of discussions. *Participation*: Students' learning is best facilitated by participation.

Final Exam

The final exam is closed book, but you are allowed to bring one crib sheet (front and back, 8.5 by 11 inches) to the final. You can use a calculator that can compute logs and raise numbers to arbitrary powers. However, laptop computers and calculators with word-processing features are not allowed to use during the exam. The final is a comprehensive exam covering all the material in the course. The final date will be determined by the Ross School, and I have no control over the specific date.

Academic Integrity

Personal integrity and professionalism are fundamental values of the Ross Business School community. This course will be conducted in strict conformity with the Academic Honor Code. The Code and related procedures can be found at

www.bus.umich.edu/Academics/Resources/communityvalues.htm

The site also contains comprehensive information on how to be sure that you have not plagiarized the work of others. Claimed ignorance of the Code and related information appearing on the site will be viewed as irrelevant should a violation take place. Non-Ross Business School students taking the course should also familiarize themselves with the Code as they will be subject to the Code as well while in this course.

Any content in an assignment you submit that is based on the work of others must be properly cited. This includes any information found on the Web. The Community Values Committee Web site contains detailed information regarding proper citations:

<http://www.bus.umich.edu/Academics/Resources/communityvalues.htm>

Failure to comply with these procedures is treated as an honor code violation.

To be more specific, the final exam is to be the work of the individual using only the material permitted during the exam. "Individual" means that you're only allowed to seek clarification from the instructor or the TA. Collaboration (such as sharing information) among students during the final exam is strictly prohibited. Concerning all other aspects of the course, including the team case assignments, you can discuss freely with your classmates, both within or outside your own team. But the work you ultimately turn in for your assignments must be that of your own team. For example, I will treat an assignment write-up with

at least 25% of the materials identical (verbatim) to those of other teams (or other published sources including the Internet) as an honor code violation.

Students with Disabilities

If you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of the course, the assignments, and the in-class activities may be modified to facilitate your participation and progress. As soon as you make the instructor aware of your needs, we can work with the Office of Services for Students with Disabilities to help us determine appropriate accommodations. I will treat information you provide as private and confidential.

Course Outline

Modules

I structure the entire course into three Modules. I reserve the right to adjust the course content and delivery method as the course unfolds to better serve the audience needs.

Module I. Investment Basics (Modern Portfolio Theory, The CAPM, and Multifactor Asset Pricing Models)

- Lecture notes on “Introduction,” “Capital Allocation: Combining Cash and One Risky Portfolio,” “Modern Portfolio Theory,” “The CAPM,” and “Multifactor Asset Pricing Models”
- Review of Basic Statistics, available on CTools/Resources; BKM8e, Chapters 6 and 7; BKM8e, Chapters 8 and 9; BKM8e, Chapters 10, 11, and 13
- HBS case 9-292-122: “Beta Management Company”

Module II. Investment Management and Investment Strategy

- Lecture notes on “Anomalies,” “Behavioral Finance,” “Hedge Funds,” and “A Better Three-Factor Model”
- BKM8e, Chapter 12 and 26
- Columbia CaseWorks ID#080317: “The Quant Meltdown August 2007”

Module III. The Big Picture: The Financial Crisis

Lecture notes “Credit Derivatives Basics”

HBS cases 9-309-001, 9-309-070, and 9-309-091: “The Tip of the Iceberg: JP Morgan Chase and Bear Stearns (A), (B1), and (B2),” Kellogg case KEL-402: “A Tale of Two Hedge Funds: Magnetar and Peloton,” and Stanford GSB case A-203: “AIG — Blame for the Bailout”

List of Cases and Tentative Dates of Discussion

The field of Investments has changed dramatically as a result of the recent financial crisis. I have strived to update the course to reflect the latest developments in practice. I have carefully chosen several cases that best represent the state-of-affairs in investment management as practiced today. All the cases are contained in the required case packet.

No.	Case	Due Date
1	HBS case 9-292-122: “Beta Management Company”	Wed, Nov 11
2	Columbia CaseWorks ID#080317: “The Quant Meltdown August 2007”	Mon, Nov 23
4	HBS cases 9-309-001, 9-309-070, and 9-309-091: “The Tip of the Iceberg: JP Morgan Chase and Bear Stearns (A), (B1), and (B2)”	Mon, Nov 30
3	Stanford GSB case A-203: “AIG — Blame for the Bailout”	Mon, Dec 7
5	Kellogg case KEL-402: “A Tale of Two Hedge Funds: Magnetar and Peloton”	Mon, Dec 14

Guest Lectures

To further enhance the real-life relevance of our collective learning experience, I have successfully arranged three prominent practitioners to come to Ann Arbor this fall to speak to us in class. Detailed information about the speakers and the logistics is as follows:

X. Frank Zhang, Yale School of Management and Allianz Global Investors Management Partners (11/23)

Dr. Zhang earned a PhD in Accounting from Chicago Booth in 2006. Since 2005 he has been an Assistant Professor of Accounting at Yale School of Management. In the past two years, he has been working as a Vice President Allianz Global Investors Management Partners, based in San Diego, California. Dr. Zhang plans to tell us how he applies cutting-edge capital markets research in accounting to investments practice.

Wesley Chan, Goldman Sachs Asset Management (12/7)

Dr. Chan is a Vice President in Quantitative Equities at Goldman Sachs Asset Management. He earned a PhD in Finance from MIT's Sloan School of Management in 2002. He has been working for Goldman Sachs since then. Dr. Chan plans to give us an overview of his GSAM group, in particular, its investment philosophy, product line, and operating process.

Robert C. Jones, Goldman Sachs Asset Management (12/9)

Mr. Jones, CFA, is a Managing Director and Chief Investment Officer of Global Quantitative Equity at Goldman Sachs Asset Management. Bob will share with us his latest thoughts about quantitative investment management in the aftermath of August 2007. Last but not least, Bob is a Michigan alum!

Workshops in the Tozzi Center

On November 16 (Mon) and December 2 (Wed), the class meetings will be held in the Tozzi Finance Center (E1410). The Center's Manager, Kai Petainen, will give the workshop "Barra: Portfolio Risk Management" on November 16 and the workshop "Intro to FactSet" on December 2. The goal of the workshops is to give you hands-on experience (and exposure) to popular software that has been extensively used by investment professionals in practice. Barra is a popular portfolio management tool that can be used to analyze sector and style risk in portfolios as well as to conduct portfolio optimization. FactSet is the premier equity research tool for quantitative equity managers and hedge funds. FactSet combines data from a number of databases and allows the data to be used in an easy-to-use format. Additional information on Barra and FactSet is available on [CTools/Resources/Tozzi](#).