

**Samuel Curtis Johnson Graduate School of Management
Cornell University**

NBA 5420: Investment and Portfolio Management¹
Spring 2017

Instructor: Prof. Matt Baron
Office: 401J Sage Hall
Email: baron@cornell.edu
Office hours: MW 3:30 – 4:30 pm

Class Time and Place:
- Section 001: MW 10:10 am -11:25 am, Sage B09
- Section 002: MW 1:25 pm - 2:40 pm, Sage B05
Final: Monday, May 22, 2017, 9 am – 11:30 am

Teaching Assistants:
Sam Hempel, sjh296@cornell.edu
Toby Im, ti75@cornell.edu

Office Hours: Tuesdays 5:00 – 6:00 pm, Sage 135
Office Hours: Thursdays 4:30 – 5:30 pm, Sage 135

Course overview

This course is about financial markets and investing. The course should be especially useful to students interested in careers in asset management (e.g. private wealth management, mutual funds, hedge funds), trading, and investment banking.

The first half of the course focuses on the tools of disciplined investing: portfolio construction and implementation, diversification, and arbitrage pricing. The first half also covers factor investing (value and momentum strategies), fixed income pricing, and performance evaluation of institutional investors such as pension funds, private equity, and hedge funds. We also study a variety of other topics, including IPO investing and various hedge fund strategies.

The second half studies investing in the global macroeconomy. What determines monetary policy and how does it affect financial markets? What are the risks and opportunities of investing in emerging markets? We then examine the interactions of the banking sector with financial markets, especially the role of credit and leverage, and the consequences of financial distress, including contagion, fire sales, and flight to safety. We then apply these lessons to international investing and study current issues in countries such as China and Brazil.

Enrollment

Johnson MBAs and MFEs have priority in enrollment. Non-Johnson graduate students can potentially take the course subject to space availability, but I cannot guarantee enrollment.

Johnson CMAM immersion MBAs and MFEs should take this course for a letter grade. Other students may take the course Pass / Fail (“S/U”). No auditing is allowed.

¹ I gratefully acknowledge the help of Andrew Karolyi, Maureen O’Hara, Gideon Saar, Scott Yonker, and various Princeton faculty who provided me their course materials. This course borrows elements from their classes.

Prerequisites

NCC 5060 (core finance) or an equivalent course

Course textbook and materials

We will use “The Essays of Warren Buffett: Lessons for Corporate America,” Fourth Edition, which you can buy on Amazon (approx. \$30). (Chapter numbers refer to the Fourth Edition; chapter numbers are very different in earlier versions.) These essays are by nature opinionated and should **not** be construed as the final say on matters; they are meant to stimulate class discussion and may present contrasting perspectives to those offered in lecture. As such, they will **not** be tested on exams, but I would still like you to read the assigned chapters in advance of each lecture.

For the first two weeks of class, we will use Chapters 10 and 11 from Berk and DeMarzo’s Corporate Finance textbook (third edition). You can buy a scanned PDF version of these chapters at http://www.study.net/r_mat.asp?crs_id=30103575 (\$45.67, price includes the five case studies below). A link to purchase is also available on Blackboard. I do not recommend buying the entire book from Amazon, since it is very expensive, but, if you already have it, you are welcome to use that too. Despite being from a corporate finance text, these are excellent, self-contained chapters on risk & return, portfolio optimization, and the CAPM.²

Finally, you will also need to purchase the five case studies by going to Study.net (link above).

All other readings will be posted on Blackboard. Lecture slides will be posted on Blackboard following each class. All required readings (except the Buffett essays), lecture slides, problem sets, guest speakers, and case studies are fair game for the exams.

Cases

The five case studies, which will be done as student presentations, will form an important part of the class. You will get into groups of 4-5 students, and each group will be assigned to present one of the five cases. There will be 2 or 3 groups presenting the same case on a given day, depending on class enrollment.³

You can choose your own groups and which case you want to present, and let me know by email by February 1. I will assign the remaining students, who I haven’t heard from by then, into groups. Students who volunteer to present the first case on February 27 will get 5 extra bonus points (out of 100).

² Some students like to keep around the following *optional* textbook for background reading: “Investments” (Zvi Bodie, Alex Kane, and Alan J. Marcus). Several copies of the Tenth Edition are on reserve in the Management Library.

³ Given current enrollment numbers, the morning class will have 3 groups per case and 5 students per group, and the afternoon class will have 2 groups per case and 4 students per group.

For presenters: Groups will prepare 20 minute presentations (morning class) or 30 minute presentations (afternoon class) with slides. Detailed presentation guidelines for each of the five cases are on Blackboard. Given that your presentation is an important part of your grade, I expect the presentation quality to be top-notch. I will facilitate discussion and often dig into particular issues for different presentations. Therefore, all presenters must know the case extremely well, be able to interact with the audience, and think through issues on their feet.

For audience members: Come to class having read the case, along with answers to the case assignment, which you'll turn in at the end of class. (If you're presenting that day, you do not need to do the case assignment.) During class, you should pretend you are the board of directors assessing the proposal being presented. Audience interaction during cases should be lively and will be an important part of your class participation grade.

The five cases are:

1. Investment Policy at New England Healthcare
2. Investment Policy at the Hewlett Foundation
3. AQR's Momentum Fund
4. Blackstone and the Sale of Citigroup's Loan Portfolio
5. Silver Lake and Private Equity in Brazil: Carnival or Calamity?

Grading

Problem sets and case study assignments 20%

Case study presentation 30%

Final exam 45%

Attendance and participation 5%

Classroom Expectations

1. Please bring your name card to each class.
2. Be punctual and ready for class. Please use the back door if you are late. Readings should be done prior to coming to class.
3. Put your phone away. It's distracting to me and other students.
4. The use of laptops and tablets is not permitted during class except when specifically noted.
5. No food is allowed in the tiered classrooms.

Office hours

My office hours will be on Mondays and Wednesdays, 3:30 – 4:30 pm, (starting January 30) in Sage 401J.

The TAs' office hours will be on Tuesdays, 5:00 – 6:00 pm, and Thursdays, 4:30 – 5:30 pm, (starting January 31) in Sage 135.

All questions about problem sets (and problem set grading) **must** be addressed to the TAs. I will not answer questions specifically about the problem sets during my office hours, though I am more than happy to talk about any other topic (for example, class material, case study presentations, career questions, or research).

Problem Sets

There will be five short problem sets, which will be posted on Blackboard and due on the Fridays indicated in the course outline below. Please submit them in paper form to the appropriate box labeled “NBA 5420: Investment & Portfolio Mgmt” in **Sage Hall Room 304** (faculty support) by 4pm on Friday. (Note this room is locked outside of normal business hours.)

You may discuss problems freely with classmates and work on them together, but the paper copy you turn in must be written up yourself. Late problem sets will receive zeroes, no exceptions.

Attendance and Participation

A small part of your grade will be based on participation and attendance. If you show up to almost all classes and participate normally, especially during cases and discussions of the readings, you will easily get full credit. Using your laptop or cell phone in class will lead to deductions. You will need to bring your name card to every class to get credit for attendance.

Final exam

The final exam will take place Monday, May 22, 9:00-11:30am. Only in rare circumstances (like a medical emergency that prevents a student from taking an exam, verified with a note from a doctor and/or dean) will I consider giving a makeup final exam.

The final exam will be comprehensive. The style and content of exam questions will closely mirror both problem set questions and quantitative questions discussed together in class; in addition, a few problems related to the readings and case studies will also appear on the exam.

The exams will be closed book but you can bring a calculator (but not on your smart phone or tablet) and one 8.5" x 11" sheet with your choice of material on both sides. Practice exams with answers will be posted in advance on Blackboard.

Guest speakers

1. Ethan Spencer, founder and Portfolio Manager of Eastern Point Capital Management
2. Rodolfo Martell, Managing Director, Portfolio Manager and Strategist at Quantitative Management Associates.

Academic Integrity

Students are expected to adhere to the Student Honor Code. The attempt of any student to present the work of another as his or her own, or to present any work dishonestly performed, or to pass any examination by improper means will be treated as a serious offense. Examples of academic dishonesty include, but are not limited to: cheating on an exam or claiming others work as your own. In addition, no mobile devices are allowed on exams. If I see a mobile device once the exam is passed out, it will be assumed that the mobile device is being used improperly and you will receive a zero on the exam.

Students with Disabilities

Students with disabilities who request help will be given accommodation with the assistance of the University Office of Disability Services. Please make sure to give me the appropriate documentation with the appropriate advance notice so that I can accommodate you.

Module 1: The tools of disciplined investing

Week 1

January 25 – Introduction. Why do we need financial markets? The three styles of investing: passive, factor, and speculative investing.

Required readings:

Berk and DeMarzo: Chapter 10 and 11

Week 2

January 30 – Passive investing I – Discounting present value. Risk and return.

February 1 – Passive investing II – Investing for the long-run. Diversification. Portfolio optimization.

Required readings:

Berk and DeMarzo: Chapter 10 and 11

Before Monday's class: Buffett II.A,B,F, III.A, IV.A

Before Wednesday's class: Wall Street Journal: "Is there a Case for Actively Managed Funds?"

Week 3

February 6 – Passive investing II – continued

February 8 – Passive investing III – Arbitrage pricing: commodities futures, swaps, and stock options. Put-call parity.

Required readings:

Before Monday's class:

Wall Street Journal: "How Much Stock Should You Have in Your Retirement Accounts"

Wall Street Journal: "Is Your Portfolio Too Diversified"

Before Wednesday's class:

New Yorker: "How Low Can Oil Go?"

Week 4

February 13 – Passive investing III – Arbitrage pricing, continued.

February 15 – Factor investing I – Time-varying discount rates. The Gordon growth model.

-- **Due on Friday, Feb. 17: Problem Set 1** on Portfolio Optimization, turn in by 4 PM to Sage 304

Required readings:

Before Wednesday's class:

New York Times: "Rising Anxiety That Stocks Are Overpriced"

New Yorker: "The Method in the Stock Market's Current Madness"

New Yorker: "Boom or Bubble"

Week 5

February 20 – No class. February break

February 22 – Factor investing II – CAPM and Factor models. Value and momentum. Cross-sectional predictability.

Required readings:

Before Wednesday's class: Buffett: II.D, E, VI.B

Week 6

February 27 – Case study: "Investment Policy at New England Healthcare"

-- **Due in class (for non-presenters): case study questions**

March 1 – No class.

Required readings:

Before Monday's class: Case study: "Investment Policy at New England Healthcare"

Module 2: Who beats the market?

Week 7

March 6 – Speculative investing – Who beats the market? Actively managed mutual funds, hedge funds, endowments, and pension funds? A review of the evidence.

March 8 – Guest speaker: Ethan Spencer

-- **Due on Friday, March 10: Problem Set 2** on Arbitrage Pricing and CAPM & Factor Models, turn in by 4 PM to Sage 304

Required readings:

Before Monday's class:

New York Times: “Big Insurers Send a Wake-Up Call to Hedge Fund Investors”

New York Times: “Hedge Fund Managers Work to Stanch Loss of Investors”

New York Times: “Hedge Funds Struggle With Steep Losses and High Expectations”

Before Wednesday's class: Eastern Point's Q4 2016 Letter to Investors (sent by email)

Week 8

March 13 – Speculative investing – Who beats the market, continued. Hedge fund strategies, including activist investing.

March 15 – NO CLASS. SNOW DAY.

Required readings:

Before Monday's class:

New Yorker: “Inside Tracks”

New Yorker: “When Shareholder Activism Goes Too Far”

Week 9

March 20 – Case study: “Investment Policy at the Hewlett Foundation”

-- **Due in class (for non-presenters): case study questions**

March 22 – Portfolio implementation and trading costs. Bid-ask spreads, price impact, and optimal trade execution. Practical advice for portfolio implementation.

-- **Due on Friday, March 24: Problem Set 3** on Performance Evaluation, turn in by 4 PM to Sage 304

Required readings:

Before Monday’s class:

Case study: “Investment Policy at the Hewlett Foundation”

Before Wednesday’s class:

New York Times: “Wealth Fund Cautions Against Costs Exacted by High-Speed Trading”

Bloomberg: “Norway Wealth Fund Outsmarts Flash Boys as Algorithms Abandoned”

Optional reading: Jones: “What do we know about high-frequency trading?”

Week 10

March 27 – Case study: “AQR’s Momentum Fund”

-- **Due in class (for non-presenters): case study questions**

March 29 – IPO and M&A investing

Required readings:

Before Monday’s class:

Case study: “AQR’s Momentum Fund”

Before Wednesday’s class:

Buffett II.C, V.A

New Yorker: “Should Time Warner Spin Off HBO?”

New Yorker: “The Case for Corporate Divorce”

April 3 & 5 – No class. Spring break.

Module 3: Investing and the Macroeconomy

Week 11

April 10 – Fixed income I – The term structure of interest rates, duration & convexity, the expectations hypothesis and fixed-income predictability.

April 12 – Fixed income II - Bonds and the Fed. Macro models of the interest rate and of monetary policy. The “natural” interest rate. Commercial and central bank balance sheets and bond pricing.

Required readings:

Before Monday’s class: Buffett III.B,C

Before Wednesday’s class:

New York Times: “A Prediction Market for Inflation”

New Yorker: “Shut Up, Savers!”

Week 12

April 17 – Fixed income II – continued.

April 19 – Credit cycles and investing

-- **Due on Friday, April 21: Problem Set 4** on Fixed Income, turn in by 4 PM to Sage 304

Required readings:

Before Monday’s class:

New York Times: “Contrarian’s View on Inflation Fears” and “Fed's 3 mandates”

Before Wednesday’s class: New Yorker: “The Real Problem with the Big Banks”

Week 13

April 24 – Case study: “Blackstone and the Sale of Citigroup’s Loan Portfolio”

-- **Due in class (for non-presenters): case study questions**

Required readings:

Before Monday’s class: Case study: “Blackstone and the Sale of Citigroup’s Loan Portfolio”

Module 4: Risks of International Investing

Week 13 (continued)

April 26 – International investing I – carry trades, currency crashes, uncovered interest rate parity, real exchange rates and terms of trade.

Required readings:

Before Wednesday's class:

New Yorker: “China Gambles with the Yuan”

Backus & Roubini: “Lectures in Macroeconomics: Chapters 7 & 8”

Week 14

May 1 – International investing II – Emerging market investing. Sovereign debt and “triple crises” (balance of payments, inflation and banking crises). Problems with fixed exchange rate regimes: the Gold Standard, Bretton Woods, Europe 1992, Mexico 1994, East Asia 1998, the ongoing Euro crisis.

May 3 – Guest speaker: Rodolfo Martell

Required readings:

Before Monday's class:

Krugman: “Currency Crises” and “Bahtulism: Who Poisoned Asia's Currency Markets?”

Moreno: “Models of Currency Speculation: Implications and East Asian Evidence”

Week 15

May 8 – International investing II, continued. Instructor feedback.

May 10 – Case study: “Silver Lake and Private Equity in Brazil: Carnival or Calamity?”

-- **Due in class (for non-presenters): case study questions**

-- **Due on Friday, May 12: Problem Set 5** on International Investing, turn in by 4 PM to Sage 304

Required readings:

Before Monday's class:

New York Times: “How Greece Could Escape the Euro”

Financial Times: “A bailout of Monte dei Paschi is not enough”

Before Wednesday's class: Case study: “Silver Lake and Private Equity in Brazil”