Samuel Curtis Johnson Graduate School of Management Cornell University

NBA 5980: Behavioral Finance¹ Spring 2017 (first-half)

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

Teaching Assistants: Sam Hempel, sjh296@cornell.edu Toby Im, ti75@cornell.edu Class Time and Place:

- Section 001: TTh 10:10 am -11:25 am, Sage B05
- Section 002: TTh 1:25 pm 2:40 pm, Sage B10

- In-class evaluation: Thursday, March 16, 2017

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

Course overview

Behavioral Finance studies financial market phenomena that occur when some market participants' decisions are not fully rational. This course introduces the conceptual framework of behavioral finance and investor psychology and then applies the framework to issues in stock market investing, real estate investing, and banking. Topics include: (1) investor psychological biases and irrational trading behavior; (2) limits of arbitrage and the risk of leveraged convergence trading; (3) predictability of stock market returns; (4) behavioral finance trading strategies (including value, momentum, size, earnings quality, corporate governance, and others); (5) stock market and real estate bubbles; and (6) credit booms and financial crises.

Enrollment

Johnson MBAs have priority in enrollment. Non-Johnson graduate students can potentially take the course subject to space availability, but I cannot guarantee enrollment. I would like to keep the class under 40 students to better facilitate discussion. Students may take the course Pass / Fail ("S/U"). No auditing is allowed.

Course textbook and materials

There are two required books, Robert Shiller's <u>Irrational Exuberance</u> (third edition, \$17 on Amazon) and Ludwig Chincarini's <u>The Crisis of Crowding</u> (free on Blackboard, since Cornell has an institutional subscription). You will also need to purchase <u>two case studies</u> (actually three, since the LTCM case is in two parts) by going to <u>http://www.study.net/r_mat.asp?crs_id=30103587</u> (\$14.61). The link for purchasing is also available on Blackboard. All other readings will be posted on Blackboard.

Lecture slides will be posted on Blackboard <u>following</u> each class. All required readings, lecture slides, problem sets, and case studies are fair game for the exam. None of the optional readings will be

¹ I gratefully acknowledge the help of Ming Huang, David Sraer, and various Princeton faculty who provided me their course materials. This course borrows elements from their classes.

tested on the exams, except to the extent they are covered in the lecture notes, but they are simply there for background reading or further exploration.

Grading

Problem sets 25% Case study pre-discussion questions 20% Attendance and participation 10% In-class evaluation 45%.

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 Wednesday, 3:30 - 4:30 pm, (starting January 30) in Sage 401J.

The TAs' office hours will be on Tuesdays, 4:30 - 5:00 pm, and Thursdays, 5:30 - 6:00 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 happy to talk about any other topic (for example, topics from class, career questions, or research).

Problem Sets

There will be two problem sets, which will be posted on Blackboard and due in class on the dates listed on the course schedule. Please submit them <u>in paper form</u>.

You may discuss problems freely with classmates and work on them together, but the copy you turn in must be written up yourself. Late problem sets will receive a zero, 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 evaluation

The final evaluation will take place in class on the last day, Thursday, March 16, 2017. 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 exam.

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 exam 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. Some sample questions with answers will be posted in advance on Blackboard for practice. There will be an optional review session a few days before the exam.

Cases

You will need to purchase the following cases. Please read the cases in advance of the class discussion and complete the pre-discussion assignment, which you can find on Blackboard. Bring your printed answers to class, where they will be collected after the case discussion.

- 1. Martingale Asset Management LP
- 2. Long-Term Capital Management (Cases A and C)

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: Investor psychology and market mispricing

Week 1

Thursday, January 26 – Introduction. The efficient markets hypothesis and its detractors.

Week 2

Tuesday, January 31 – The average investor is his own worst enemy. The underperformance of active management.

Thursday, February 2 – Investor cognitive biases. Under-reaction and over-reaction in markets.

Required readings:

Before Tuesday's class:

New York Times: "Wall Street's Annual Stock Forecasts: Bullish, and Often Wrong"

New York Times: "Hedge Fund Math: Heads We Win, Tails You Lose"

Barber and Odean: "The Courage of Misguided Convictions"

Forbes: "The Average Investor is His Own Worst Enemy"

Before Thursday's class:

Shiller: Chapters 9 and 10.

Optional readings: Barber and Odean: "Trading is Hazardous to Your Wealth" Hirshleifer: "Investor Psychology and Asset Pricing"

Week 3

Tuesday, February 7 - Limits of arbitrage. Short-sale constraints. Do firms exploit market mispricings?

Thursday, February 9 - Excess volatility, discount rates, and time-series predictability

Required readings:

Before Tuesday's class:

Lamont and Thaler: "The law of one price in financial markets"

New Yorker: "In Praise of Short Sellers"

New York Times: "The Loneliness of the Short-Seller"

Before Thursday's class:

Shiller: Chapter 11

Wall Street Journal: "The New Era of Low Stock Returns"

Optional reading: Shiller: "Do stock prices move too much to be justified by subsequent changes in dividends?"

Module 2: Trading strategies

Week 4

Tuesday, February 14 – Violations of CAPM. Cross-sectional predictability: value, momentum, quality.

--- Due in class: Problem Set 1 on Disagreement and the Stock Market

Thursday, February 16 – Case study: Martingale Asset Management LP (the low-volatility anomaly). Get student feedback on course.

--- Due in class: Case study pre-discussion questions

Required readings:

<u>Before Tuesday's class:</u> Chan and Lakonishok: "Value and Growth Investing" <u>Before Thursday's class:</u> Case study: Martingale Asset Management LP

Module 3: Speculation, Bubbles, and Crises

Week 5

Tuesday, February 21 – FEBRUARY BREAK. NO CLASS.

Thursday, February 23 – Credit booms and financial crises: causes and consequences.

Required readings:

Before Thursday's class:

Kindleberger: Excerpts from "Manias, Panics, and Crashes" Wall Street Journal: "Asset Bubbles From Stocks to Bonds to Iron Ore Threaten China"

Week 6

Tuesday, February 28 – Stock market and real estate bubbles. Theories of bubbles.

Thursday, March 2 - NO CLASS

Required readings:

Before Tuesday's class: Shiller: Chapters 1 through 3

Module 4: Hedge Fund Disasters

Week 7

Tuesday, March 7 – Stock market and real estate bubbles, continued

--- Due in class: Problem Set 2 on Trading Strategies

Thursday, March 9 – Leveraged convergence trading. Fixed income arb, swap spreads, betting on vol, margin calls, counterparty risk. Instructor evaluations.

Required readings:

Before Tuesday's class:

Wall Street Journal: "Is the Bond Market in a Bubble?"

New York Times: "The Housing Market Still Isn't Rational"

Before Thursday's class:

Chincarini: Chapters 4, 15, and 16

Week 8

Tuesday, March 14 – Case study: Long-Term Capital Management (Parts A and C)

--- Due in class: Case study pre-discussion questions

Thursday, March 16 – final evaluation

Required readings:

Before Tuesday's class: LTCM case study Chincarini: Chapters 5 and 6