## BUSFIN 4224 Behavioral Finance

Fall 2023

October 17, 2023 - December 5, 2023

#### **Professor:**

Justin Birru

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Office Hours: By Appointment

#### Class Time and Location:

BUSFIN 4224-0030 on TR 2:20pm-3:40pm Schoenbaum 315 BUSFIN 4224-0010 on TR 3:55pm-5:15pm Schoenbaum 215 BUSFIN 4224-0040 on TR 5:30pm-6:50pm Schoenbaum 315

## Description of the Course:

Over the past several decades, the field of finance has developed a successful paradigm based on the notions that investors and managers are generally rational and the prices of securities are generally "efficient." In recent years, however, anecdotal evidence as well as theoretical and empirical research has shown this paradigm to be insufficient to describe various features of actual financial markets. In this course we examine how the insights of behavioral finance complement the traditional paradigm and shed light on the behavior of asset prices, corporate finance, and various Wall Street institutions and practices.

The course is taught through lectures, case studies, and some selected research articles which I will make available. There is no required textbook, as there is not yet a suitable textbook available in this field. Grading is as follows:

50% Problem sets (2) and case write-up (1) 50% Final exam

For the problem sets and case write-up, teams of up to three (but no more than three) may hand in joint solutions. Assignments are due by 11:59pm on the denoted date, with a 10% penalty for each calendar day turned in late. Homework assignments will be submitted via Carmen by clicking on the "Assignments" tab.

The final exam can't be rescheduled except under cases of extreme hardship. In such a case you should notify me in advance of the date of the final exam. All grade appeals must be made within one week of the return of the assignment or exam. Grade appeals will not be permitted after this one week deadline has passed.

#### Carmen:

Carmen will be the site for all course materials. All information relevant to the course will be available there.

# Course Approach:

This is an upper-level elective. Much of the material will be conceptually challenging and will often build on what has been taught in the core courses. You should not take the course if you are not fully prepared to make an appropriate commitment.

## Standard of Integrity:

Students are expected to abide by the principles and standards set forth in The Ohio State University code of student conduct (studentaffairs.osu.edu/csc).

A reading list and tentative schedule are attached.

# Schedule

Class	Topic	Notes
1. Tuesday, Oct 17	I. Non-Behavioral Finance	
2. Thursday, Oct 19	I. Non-Behavioral Finance	
3. Tuesday, Oct 24	II. Some Motivating Evidence	
4. Thursday, Oct 26	II. Some Motivating Evidence	
5. Tuesday, Oct 31	III. Limits to Arbitrage	HW #1 Due
6. Thursday, Nov 2	III. Limits to Arbitrage	
7. Tuesday, Nov 7	III. Limits to Arbitrage	
8. Thursday, Nov 9	IV. Investor Behavior	
9. Tuesday, Nov 14	IV. Investor Behavior	Case Due
10. Thursday, Nov 16	IV. Investor Behavior	
11. Tuesday, Nov 21	No Class	
12. Tuesday, Nov 28	V. Behavioral Corporate Finance	
13. Thursday, Nov 30	V. Behavioral Corporate Finance	
14. Tuesday, Dec 5	V. Behavioral Corporate Finance	HW #2 Due
15. Friday, Dec 8	Final Exam	6PM Fontana Lab 1000

## Reading List

Required readings are marked with a (\*\*) below. For those articles marked (\*), I would suggest that you read the abstract and introduction, and at least skim the remainder of the article. When sitting down to read a paper on your own, try to take away the key intuition and results of the paper. Don't dwell on the details unless you have a particular interest in the topic. Please do make a special effort at the required readings, which are less technical, and at least skim the supplemental readings. I will discuss all or almost all of the articles below in class, at least briefly.

## Overview Survey Articles

\*Hirshleifer, David, 2015, Behavioral Finance, Annual Review of Financial Economics.

\*\*Thaler, Richard H., 1999, The End of Behavioral Finance, Perspectives.

Barberis, Nicholas, and Richard Thaler, 2003, A Survey of Behavioral Finance, *Handbook of Economics and Finance*.

\*Ritter, Jay R., 2003, Behavioral Finance, Pacific-Basin Finance Journal.

Shiller, Robert J., 2003, From Efficient Markets Theory to Behavioral Finance, *Journal of Economic Perspectives*.

## I. Non-Behavioral Finance

Early work found strong empirical support for the efficient markets hypothesis.

\*Fama, Eugene, Lawrence Fisher, Michael C. Jensen, and Richard R. Roll, 1969, The Adjustment of Stock Price to New Information, *International Economic Review*.

Fama, Eugene, 1970, Efficient Capital Markets: A Review of Theory and Empirical Work, *Journal of Finance*.

\*Fama, Eugene, 1991, Efficient Capital Markets: II, Journal of Finance.

#### II. Some Motivating Evidence: Anomalies

Over the past couple of decades a number of anomalies, or seeming deviations from market efficiency have been identified. These patterns in asset returns are not easy to reconcile with traditional asset-pricing models.

\*\*Lamont, Owen A., and Richard H. Thaler, 2003, Anomalies: The Law of One Price in Financial Markets, *Journal of Economic Perspectives*.

Bernard, Victor, 1992, Stock Price Reactions to Earnings Announcements. In: Thaler, R. (Ed.), Advances in Behavioral Finance.

Cutler, David M., James M. Poterba, and Lawrence H. Summers, 1989, What Moves Stock Prices, *Journal of Portfolio Management*.

De Bondt, Werner F.M., and Richard Thaler, 1985, Does the Stock Market Overreact? *Journal of Finance*.

\*Fama, Eugene, and Kenneth R. French, 1992, The Cross-Section of Expected Stock Returns, *Journal of Finance*.

Fama, Eugene, and Kenneth R. French, 1993, Common Risk Factors in the Returns on Stocks and Bonds, *Journal of Financial Economics*.

Hou, Kewei, 2007, Industry Information Diffusion and the Lead-lag Effect in Stock Returns, Review of Financial Studies.

Huberman, Gur, and Tomer Regev, 2001, Contagious Speculation and a Cure for Cancer: A Non-Event that Made Stock Prices Soar, *Journal of Finance*.

\*Jegadeesh, Narasimhan, and Sheridan Titman, 1993, Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency, *Journal of Finance*.

La Porta, Rafael, Josef Lakonishok, Andrei Shleifer, and Robert Vishny, 1997, Good News for Value Stocks: Further Evidence on Market Efficiency, *Journal of Finance*.

Lakonishok, Josef, and Seymour Smidt, 1988, Are Seasonal Anomalies Real? A Ninety-Year Perspective, *Review of Financial Studies*.

Moskowitz, Tobias J., and Mark Grinblatt, 1999, Do Industries Explain Momentum? *Journal of Finance.* 

\*Schwert, G. William, 2003, Anomalies and Market Efficiency, *Handbook of the Economics of Finance*.

Shiller, Robert J., 1981, Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends? *American Economic Review*.

## III. Limits to Arbitrage

Traditional finance predicts that when prices deviate from fundamental value, rational traders will quickly arbitrage away this mispricing, restoring prices to their fundamental values. However, recent theory and evidence suggests that there exist impediments limiting the ability of arbitrageurs to restore prices to fundamental value.

Brunnermeier, Markus K., and Stefan Nagel, 2004, Hedge Funds and the Technology Bubble, *Journal of Finance*.

Coval, Joshua, and Erik Stafford, 2007, Asset Fire Sales (and Purchases) in Equity Markets, *Journal of Financial Economics*.

D'Avolio, Gene, 2002, The Market for Borrowing Stock, Journal of Financial Economics.

Froot, Kenneth A., and Emile Dabora, 1999, How are Stock Prices Affected by Location of Trade? *Journal of Financial Economics*.

Hwang, Byoung-Hyoun, 2011, Country-Specific Sentiment and Security Prices, *Journal of Financial Economics*.

\*\*Lamont, Owen A., and Richard H. Thaler, 2003, Anomalies: The Law of One Price in Financial Markets, *Journal of Economic Perspectives*.

Lee, Charles M., Andrei Shleifer, and Richard H. Thaler, 1991, Investor Sentiment and the Closed-End Fund Puzzle, *Journal of Finance*.

Shleifer, Andre, and Robert W. Vishny, 1997, The Limits of Arbitrage, *Journal of Finance*.

Wurgler, Jeffrey, and Ekaterina Zhuravskaya, 2002, Does Arbitrage Flatten Demand Curves for Stocks? *Journal of Business*.

## IV. Investor Behavior

Behavioral finance argues that prices at times deviate from fundamental value due to the actions of investors who are not fully rational.

\*\*Kahneman, Daniel, and Mark Riepe, 1998, Aspects of Investor Psychology, *Journal of Portfolio Management*.

\*\*Kahneman, Daniel, and Amos Tversky, 1974, Judgment Under Uncertainty, Science.

\*Baker, Malcolm, and Jeffrey Wurgler, 2006, Investor Sentiment and the Cross-Section of Stock Returns, *Journal of Finance*.

Barber, Brad M., and Terrance Odean, 2000, Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors, *Journal of Finance*.

Barber, Brad M., and Terrance Odean, 2007, All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors, Review of Financial Studies.

Barber, Brad M., Terrance Odean, and Ning Zhu, 2009, Systematic Noise, *Journal of Financial Markets*.

Barberis, Nicholas, Andrei Shleifer, and Robert Vishny, 1998, A Model of Investor Sentiment, *Journal of Financial Economics*.

Barberis, Nicholas, Andrei Shleifer, and Jeffrey Wurgler, 2005, Comovement, *Journal of Financial Economics*.

Cohen, Lauren, and Andrea Frazzini, 2008, Economic Links and Predictable Returns, *Journal of Finance*.

Coval, Joshua D., and Tobias J. Moskowitz, 1999, Home Bias at Home: Local Equity Preference in Domestic Portfolios, *Journal of Finance*.

Daniel, Kent, David Hirshleifer, and Avanidhar Subrahmanyam, 1998, Investor Psychology and Security Market Under- and Overreactions, *Journal of Finance*.

Dellavigna, Stefano, and Joshua M. Pollet, 2009, Investor Inattention and Friday Earnings Announcements, *Journal of Finance*.

Green, T. Clifton, and Byoung-Hyoun Hwang, 2009, Price-Based Return Comovement, *Journal of Financial Economics*.

Grinblatt, Mark, and Bing Han, 2005, Prospect Theory, Mental Accounting, and Momentum, *Journal of Financial Economics*.

Hirshleifer, David, Sonya Seongyeon Lim, and Siew Hong Teoh, 2009, Driven to Distraction: Extraneous Events and Underreaction to Earnings News, *Journal of Finance*.

Odean, Terrance, 1998, Are Investors Reluctant to Realize Their Losses? *Journal of Finance*.

## V. Manager and Firm Behavior

The study of behavioral corporate finance takes one of two approaches. The rational managers approach examines how managers optimize corporate actions to take advantage of mispricing. The irrational managers approach examines how biases of managers can lead to actions that are less than optimal for the firm.

\*\*Baker, Malcolm, and Jeffrey Wurgler, 2012, Behavioral Corporate Finance: An Updated Survey, *Handbook of Economics and Finance Volume 2*.

\*Baker, Malcolm, and Jeffrey Wurgler, 2000, The Equity Share in New Issues and Aggregate Stock Returns, *Journal of Finance*.

Baker, Malcolm, and Jeffrey Wurgler, 2002, Market Timing and Capital Structure, *Journal of Finance*.

Baker, Malcolm, and Jeffrey Wurgler, 2004, A Catering Theory of Dividends, *Journal of Finance*.

Baker, Malcolm, Robin Greenwood, and Jeffrey Wurgler, 2003, The Maturity of Debt Issues and Predictable Variation in Bond Returns, *Journal of Financial Economics*.

Cooper, Michael J., Orlin Dimitrov, and P. Raghavendra Rau, 2001, A Rose.com by Any Other Name, *Journal of Finance*.

Graham, John R., and Campbell R. Harvey, 2001, The Theory and Practice of Corporate Finance: Evidence from the Field, *Journal of Financial Economics*.

Ikenberry, David, Josef Lakonishok, and Theo Vermaelen, 1995, Market Underreaction to Open Market Share Repurchases, *Journal of Financial Economics*.

Loughran, Timothy, and Jay R. Ritter, 1995, The New Issues Puzzle, *Journal of Finance*.

Malmendier, Ulrike, and Geoffrey Tate, 2008, Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction, *Journal of Financial Economics*.

Ritter, Jay R., 1991, The Long-Run Performance of Initial Public Offerings, *Journal of Finance* 

Ritter, Jay R., and Ivo Welch, 2002, A Review of IPO Activity, Pricing, and Allocations, *Journal of Finance* 

\*Shleifer, Andrei, and Robert Vishny, 2003, Stock Market Driven Acquisitions, *Journal of Financial Economics*.