

FINA 690E: Behavioral Finance - Spring 2005

Time: 14:30-17:50 Saturdays; Venue: Room 4219

Instructor: Prof. K.C. John Wei, Ph.D.

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Office Hours: Saturdays 13:30-14:30 and by appointment.

WebCT: All relevant materials and announcements will be uploaded to WebCT

Teaching Assistant: Mr. Yuanto Kusnadi (email: yuanto@ust.hk)

Prerequisite

FINA527 and FINA528 (or FINA521 and FINA522)

Required Textbooks:

James Montier, 2003, *Behavioral Finance: Insights into Irrational Minds and Markets*, John Wiley & Sons, Ltd.: New York

Suggested Readings

Barberis, Nicholas, and Richard Thaler, 2003, "A survey of behavior finance," in *Handbook of the Economics of Finance*, G. Constantinides, M. Harris, and R. Stulz (ed.), North-Holland, Amsterdam.

Students are urged to read chapters and/or readings before each class. Further readings will be assigned from time to time.

Objectives:

Traditional finance seeks to understand financial markets assuming that investors are "rational." Rationality means that investors can access to and have the ability to process information correctly and that competition between investors ensures that securities are correctly priced to reflect all available information. That is, the market is efficient. However, recent studies suggest that markets are not efficient and that investors are not fully rational. For example, particular trading strategies based on past information such as past returns and accounting information are able to outperform the markets. In addition, studies find that investors are committed to certain heuristic-based biases and frame dependent such as overconfidence, optimism, self-attribution, illusion of control, loss aversion, representativeness heuristic, anchoring, availability, ambiguity aversion, hindsight, flaming, etc. Behavioral biases combined with limits to arbitrage may result in securities not to be correctly priced.

Behavioral finance examines how individuals' attitudes and behavior affect their financial decisions and financial markets. In particular, behavioral finance uses psychological evidence to model investor behavior in order to get a better understanding of the financial market. In this course, we will emphasize the role of *heuristic-driven biases* and *frame dependent* on the market inefficiency and how to train yourself to be more objective, patient, humble, and disciplined so that you can become a more successful investor. Topics include: review of psychological foundations, imperfect markets and limited arbitrage, market anomalies, and trading strategies.

Teaching Format

The course will be consisted mainly of my lecture and your class discussions. A team-based project alone with a presentation in the class is required. Each team will be consisted of 4 students. I may also invite one outside speaker, if possible, from the financial industry to share his/her experience with you.

Assignments

There are one team-based project and the final. The final will count for 60%, and the team term project will count for 40%. The grade for the team-based term project will be determined by final proposal, your oral presentations and your written report.

The assignments for the course are summarized as follows:

Assignments	Weight
1. Written and oral presentation (team project)	40%
2. Final (individual)	60%
3. Active class participation	Possible upgrade for marginal case
Total	100%

The due day for the *tentative* proposal of the term project: April 16, 2005.

The due day for the *refined or final* proposal of the term project: April 23, 2005.

The due day for the *written* term project and the presentation: May 21, 2005.

Team-based Term Project Assignment

Each team needs to analyze an interesting case related to behavioral finance, to investigate an investment trading strategy, or to analyze an industry. I encourage you to search for topics related to Hong Kong, Macau or China. The formal written report is limited to 15 pages *excluding* references, tables, figures, and appendixes. **The report must be typed. The format is very important and will be counted for 10% of the report.** The specification of the format is as follows: A4 paper, double space with one-inch margin on all sides, a font of 12 Times New Roman. The formal written report must be submitted in hardcopy. In addition, an MS power point presentation document must also be submitted on the electronic form. A short presentation (about 5-10 minutes) for each team is also required.

Suggested topics for the term project:

1. *Gamble on firms gambling in Macau*: Since last year, several Hong Kong-listed companies announced that they would get into Macau's gambling business. Hong Kong investors, in particular retail investors, appeared to be very excited about these "gambling" concept stocks. The announced firms' stock prices could go up substantially and sometimes up more than 100% on the announcement day, especially for small, money-losing stocks. Please collect relevant data (accounting data, announced deals, stock prices) on those announced firms and analyze the value of the deals, the stock market reactions, the fundamental of the firms, etc. Also analyze and discuss whether the market reactions are rational, what heuristic biases investors have been committed, what the lessons investors can learn from, etc.
2. *Analyzing red-chip stocks' price behavior before, during and after bubbles during Hong Kong's handover in 1997*: Before Hong Kong's handover to Mainland China in 1997, individual as well as institutional investors were very excited about the prospects of Hong Kong and China after the handover. Due to investors' upbeat sentiment, Hong Kong stock markets continued to reach historical highs, especially for those red-chip stocks. During that period, red-chip stocks that announced the asset injections from the parent companies to the Hong Kong-listed companies normally increased substantially on the announcement date. Please collect the relevant data on those red-chip firms that announced asset injections and then analyze the investor sentiment and the stock price behavior before, during and after the bubble. Also analyze and discuss whether the market reactions were rational, what heuristic biases investors have been committed, what the lessons investors can learn from, etc.

3. ***Investigate the performance of trading strategies implemented on the Hong Kong markets:***
In this course, we have studied a number of trading strategies. However, most of the evidence is from the U.S. market. It may be interesting to replicate those strategies to a subset of Hong Kong stocks (such as Hang Seng component stocks). The strategies include (a) the 52-week high momentum investing, (b) the momentum strategy or contrarian strategy, (c) the value strategy, etc. Choose one of these strategies and investigate whether it works in Hong Kong.
4. ***Analyze Hong Kong-listed H-shares and red-chip companies in the petroleum-related industry:*** Since the end of SARS, the world oil prices have been hitting the historical high continuously, due to the robust economic recovery around the world. The demand for the oil and oil-related products has been very strong, especially from China and India. As a result, those firms in the oil-related industry, in particular H-shares and red-chips, have seen their earnings and stock prices hitting the historical high. Please analyze the fundamentals of those major oil-related companies to see which companies have good value for potential investors. Also analyze and discuss whether the market reactions were rational, what heuristic biases investors have been committed, what the lessons investors can learn from, etc.
5. ***Analyzing Hong Kong-listed H-shares and red-chip companies in the electricity industry:*** Due to the booming economy in China, the demand for electricity has been exceeding the supply. Economic theory suggests that these electricity companies in China should do well. However, since the price of coal has also increased substantially and since due to regulations the electricity companies cannot raise the price, the electricity companies (mainly H-shares) in the past year (i.e., 2004) have mixed results. Firms that had locked in the coal price early have seen double digit increases in earnings, while firms that did not lock in the coal price early have seen decreases in earnings in 2004. Some of the H-share stocks have seen their stock prices dropped more than 30% since they hit the historical highs in early 2004. Please analyze the fundamentals of those major electricity H-share companies to see which companies have good value for potential investors. Also analyze and discuss whether the market reactions were rational, what heuristic biases investors have been committed, what the lessons investors can learn from, etc.
6. ***Analyzing Hong Kong-listed H-shares and red-chip companies in the metal industry:*** The story is similar to the oil-related companies. Please analyze the fundamentals of those major metal-related companies (steel, copper, and aluminum) to see which companies have good value for potential investors. Also analyze and discuss whether the market reactions were rational, what heuristic biases investors have been committed, what the lessons investors can learn from, etc.
7. ***Others:*** You can propose your own topic. Please discuss with me before you start your project.

Course Outline: (Note: *The schedule is tentative and is subject to change. In addition, we may not be able to cover all the materials.*)

Week 1 (April 9, 2005): Why mispricing exists?

- 1) Efficient Market Hypothesis versus Behavioral Finance
- 2) Limits to Arbitrage

Related articles:

- Fama, E. (1998), “Market efficiency, long-term returns and behavioral finance,” *Journal of Financial Economics* 49:283–307.
- Shleifer, Andrei, and Robert Vishny, 1997, “The limits of arbitrage,” *Journal of Finance* 52, 35-55.
- Froot, K., and E. Dabora, 1999, “How are stock prices affected by the location of trade?” *Journal of Financial Economics* 53, 189-216.
- Owen A. Lamont and Richard H. Thaler (2004), “Can the market add and subtract? Mispricing in tech stock carve-outs,” *Journal of Political Economy* 111:227–268.

Week 2 (April 16, 2005): Psychological foundations

- 1) Heuristic-based biases (Biases of judgment)
- 2) Frame dependence and prospect theory (Errors of preference)
- 3) **Submit the tentative proposal for the term project: Including objective, motivation, sample firms, sample period, research methods, and expected results (1-2 pages)**

Related articles:

- Amos Tversky and Daniel Kahneman (1974), “Judgment under uncertainty: Heuristics and biases,” *Science* 185, 1124-1131.
- Daniel Kahneman and Amos Tversky (1979), “Prospect theory: An analysis of decision under risk,” *Econometrica* 47, 263-292.

Week 3 (April 23, 2005): Style Investment

- 1) Value/Growth and Small/Big
- 2) **Submit your refined or final proposal for the term project: (2-4 pages)**

Related articles:

- Fama, Eugene F. and Kenneth R. French, 1992, “The cross-section of expected stock returns,” *Journal of Finance* 47, 427-465.
- Piotroski, Joseph D., 2000, “Value investing: The use of historical financial statement information to separate winners from losers,” *Journal of Accounting Research* 38, 1-41.
- Ali, Ashiq, Lee-Seok Hwang, and Mark A. Trombley, 2003, “Arbitrage risk and the book-to-market anomaly,” *Journal of Financial Economics* 69, 355-373.
- Barberis, Nichole and Andrei Shleifer (2003), “Style investing,” *Journal of Financial Economics* 68, 161–199.
- Lewellen, Jonathan, 2002, “Momentum and autocorrelation in stock returns,” *Review of Financial Studies* 15, 533 – 563.
- Teo, Melvyn and Sung-Jun Woo, 2004, “Style effects in the cross-section of stock returns,” *Journal of Financial Economics* 74, 367-398.

Week 4 (April 30, 2004): Trading Strategies based on Overreaction and Underreaction

- 1) Overreaction versus Underreaction
- 2) Representativeness versus Anchoring and Adjustment
- 3) Momentum versus Contrarian

Related articles:

- Jegadeesh, Narasimhan and Sheridan Titman, 2001, “Profitability of momentum strategies: An evaluation of alternative explanations,” *Journal of Finance* .56, 699-720.
- Lee, Charles M.C. and Bhaskaran Swaminathan, 2000, “Price momentum and trading volume,” *Journal of Finance* 55, 2017-2069.

- Thomas George and Chuan-Yang Hwang, 2004, “The 52-week high and momentum investing,” *Journal of Finance* 59, 2145-2176.
- Moskowitz, T., and M. Grinblatt, 1999, “Do industries explain momentum?” *Journal of Finance* 54, 1249-1290.
- Andy C.W. Chui, Sheridan Titman, and K.C. John Wei, 2005, “Individualism and Momentum around the World,” Working Paper, HKUST.
- Chan, Wesley S, Richard Frankel, S.P. Kothari, 2005, “Testing behavioral finance theories using trends and consistency in financial performance,” *Journal of Accounting and Economics*, forthcoming.

Week 5 (May 7, 2005): Other Cross-Sectional Anomalies

- 1) Accounting-based anomalies
- 2) Investment-based anomalies
- 3) Other cross-sectional anomalies

Related articles:

- Sloan, Richard, 1996, “Do stock prices fully reflect information in accruals and cash flows about future earnings?” *Accounting Review* 71, 289-316.
- Titman, S., K.C.J. Wei, and F.X. Xie, 2004, “Capital investments and stock returns,” *Journal of Financial and Quantitative Analysis* 39, 677-700.
- K.C.J. Wei, and F.X. Xie, 2005, “Earnings management, corporate investments and stock returns,” Working paper, HKUST.
- Bernard, V., and J. Thomas (1989), “Post-earnings announcement drift: delayed price response or risk premium?” *Journal of Accounting Research* (Supplement), 1-36.
- Diether, Karl, Christopher Malloy, and Anna Scherbina, 2002, “Differences of opinion and the cross section of stock returns,” *Journal of Finance* 57, 2113-2141.
- Griffin, John and Michael Lemmon, 2002, “Book-to-market equity, distress risk, and stock returns,” *Journal of Finance* 57, 2317-2336.

Week 6 (May 14, 2005): Investor Sentiment, and Aggregate Stock Market Predictability

- 1) Investor Sentiment
- 2) Aggregate Stock Market Predictability

Related articles:

- Rashes, Michael S., 2001, “Massively confused investors making conspicuously ignorant choices (MCI–MCIC),” *Journal of Finance* 56, 1911-1927.
- Cooper, Michael J., Orlin Dimitrov, and P. Raghavendra Rau, 2001, “A rose.com by any other name,” *Journal of Finance* 56, 2371-2388.
- Hirshleifer, David and Tyler Shumway, 2003, “Good day sunshine: stock returns and the weather,” *Journal of Finance* 58, 1009-1032.
- Lee, C., A. Shleifer and R. Thaler (1991), “Investor sentiment and the closed-end fund puzzle,” *Journal of Finance* 46:75-110.
- Barber, Brad M., and Terrance Odean, 2000, Trading is hazardous to your wealth: The common stock investment performance of individual investors,” *Journal of Finance* 55, 773-806.
- Conrad, Jennifer, Bradford Cornell and Wayne R. Landsman, 2002, “When is bad news really bad news?” *Journal of Finance* 57, 2507-2532.

Week 7 (May 21, 2005): Technical Analysis

- 1) *Today is the due day for the written term project and presentation.*

Week 8 (May 28, 2005): Final Exam