

### **1. Course Format**

This course is designed to provide you with the exposure to behavioral finance and trading strategies. In the first two lectures, I will present an overview of behavioral biases that are related to finance. The behavioral biases related to finance include heuristic biases and frame dependence. The major heuristic biases include overconfidence, self-attribution, optimism, representativeness, anchoring and adjustment, conservatism, availability biases, and hindsight. Frame dependence includes loss aversion, ambiguity aversion, narrow framing, and mental accounts. Prospect theory, which is in contrast to expected utility theory, concerns itself with how decisions are actually made. It is based on the findings from experimental cognitive psychology. Prospect theory has two parts: a value function and a weighting function.

Students are required to present assigned papers and to participate in the discussions. In addition, each student is required to write a term paper. The term paper should be within the topics covered in this course. The term paper could be either a replication of a published empirical paper (subject to approval by the instructor) or an original research topic. If you choose the replication of a published empirical paper, you have to replicate most of the tables in the paper. If you choose to work on an original topic, while I don't expect you to finish all empirical work, you should collect the data and conduct some preliminary empirical analysis. Before you start the term paper (if is not a replication), you are required to write a proposal. I will provide with you a sample example. The final report is due by the very last final due date set by the University.

A power point presentation is required. After presentation, the power point presentation file needs to be handed in. In addition to present assigned papers, you are required to come up with some ideas for either extensions or new applications or new ideas from the papers either discussed by you or other students. I hope that we can generate a few good ideas from the class.

### **2. Grading Structure**

Presentations	40%
Participations and discussions	20%
Term Paper	40%

### **3. Textbook**

- **Required:** James Montier, 2003, *Behavioral Finance: Insights into Irrational Minds and Markets*, John Wiley & Sons, Ltd.: New York
- **Recommended:** Hersh Shefrin, 2005, *A Behavioral Approach to Asset Pricing*, Elsevier Academic Press: Massachusetts.

## **Schedule (Tentative and subjected to change)**

### **Week 1 (February 3, 2005): Overview and Limits to Arbitrage**

- 1) 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.
- 2) Fama, Eugene F., 1998, Market efficiency, long-term returns, and behavioral finance, *Journal of Financial Economics* 49, 283-306.
- 3) Kahneman, D., 2003, "Maps of bounded rationality: Psychology for behavioral economics," *American Economic Review* 93, 1449-1475.
- 4) Kahneman, Daniel, and Amos Tversky, 1979, Prospect theory: An analysis of decision under risk, *Econometrica* 47, 263-291.
- 5) Malkiel, Burton G., 2003, "The efficient market hypothesis and its critics," *Journal of Economic Perspective* 17, 59-82.
- 6) Shiller, Robert J., 2003, "From Efficient Markets Theory to Behavioral Finance," *Journal of Economic Perspective* 17, 83-104.

### **Week 2 (February 10, 2005): Chinese New Year (No Class)**

### **Week 3 (February 17, 2005): Heuristic-Driven Biases, Frame Dependence, and Prospect Theory**

- 1) Same as Week 1.

### **Week 4 (February 24, 2005): Limits of Arbitrage (Theory)**

- 1) Abreu, D., and M. Brunnermeier (2002), "Synchronization risk and delayed arbitrage," *Journal of Financial Economics* 66, 341-360.
- 2) DeLong, Bradford, Andrei Shleifer, Lawrence Summers, and Robert Waldman, 1990, "Noise trader risk in financial markets," *Journal of Political Economy* 98, 703-738. (\*\*\*)
- 3) DeLong, Bradford, Andrei Shleifer, Lawrence Summers, and Robert Waldman, 1991, "The survival of noise traders in financial markets," *Journal of Business* 64, 1-19.
- 4) Liu, Jun, and Francis Longstaff, "Losing money on arbitrage: Optimal dynamic portfolio choice in markets with arbitrage opportunities," *Review of Financial Studies* 17, 611-641. (\*\*\*)
- 5) Shleifer, Andrei, and Robert Vishny, 1997, "The limits of arbitrage," *Journal of Finance* 52, 35-55. (\*\*\*)

### **Week 5 (March 3, 2005): Limits of Arbitrage (Empirical)**

- 1) 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. (\*\*\*)
- 2) Baker, Malcolm and Serkan Sava-soglu, 2002, "Limited arbitrage in mergers and acquisitions," *Journal of Financial Economics* 64, 91-115.
- 3) Greenwood, Robin, 2005, "Short- and long-term demand curves for stocks: Theory and evidence on the dynamics of arbitrage," *Journal of Financial Economics*, forthcoming.
- 4) Mitchell, M., T. Pulvino and E. Stafford (2002), "Limited arbitrage in equity markets," *Journal of Finance* 57, 551-584. (\*\*\*)
- 5) Ofek, Eli and Matthew Richardson, 2002, "DotCom mania: The rise and fall of Internet stocks," *Journal of Finance* 58, 1113-1138.
- 6) Ofek, Eli, Matthew Richardson, and Robert F. Whitelaw, 2004, "Limited arbitrage and short sales restrictions: Evidence from the options markets," *Journal of Financial Economics* 74, 305-342.
- 7) 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 6 (March 10, 2005): Behavioral Models (Theory)**

- 1) Barberis, Nicholas, Andrei Shleifer, and Robert Vishny, 1998, A model of investor sentiment, *Journal of Financial Economics* 49, 307-343. (\*\*\*)
- 2) Daniel, Kent, David Hirshleifer, and A. Subrahmanyam, 1998, "Investor psychology and security market under- and overreactions," *Journal of Finance* 53, 1839-1985. (\*\*\*)
- 3) Daniel, Kent, David Hirshleifer, and A. Subrahmanyam, 2001, "Overconfidence, arbitrage, and

- equilibrium asset pricing,” *Journal of Finance* 56, 921-965.
- 4) Gervais, Simon, and Terrence Odean, 2001, “Learning to be overconfident,” *Review of Financial Studies* 14, 1-27.
  - 5) Hong, Harrison and Jeremy C. Stein, 1999, “A unified theory of underreaction, momentum trading and overreaction in asset markets,” *Journal of Finance* 54, 2143-2184. (\*\*\*)
  - 6) Scheinkman, Jose, and Wei Xiong, 2003, “Overconfidence and speculative bubbles,” *Journal of Political Economy* 111, 1183-1219. (\*\*\*)
  - 7) Stein, Jeremy C., 1996, “Rational capital budgeting in an irrational world,” *Journal of Business* 69, 429-455. (\*\*\*)

### **Week 7 (March 17, 2005): Behavioral Models (Empirical)**

#### **Empirical tests of behavioral models**

- 1) 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. (\*\*\*)
- 2) Conrad, Jennifer, Bradford Cornell and Wayne R. Landsman, 2002, “When Is bad news really bad news?” *Journal of Finance* 57, 2507-2532. (\*\*\*)
- 3) Malmendier, Ulrike, and Geoffrey Tate, 2005, “CEO overconfidence and corporate investment,” *Journal of Finance*, forthcoming. (\*\*\*)

#### **Trading behavior**

- 1) Barber, B., and T. Odean (2001), “Boys will be boys: gender, overconfidence, and common stock investment,” *Quarterly Journal of Economics* 116:261-292.
- 2) Barber, B., and T. Odean (2002a), “Online investors: do the slow die first?” *Review of Financial Studies* 15:455-487.
- 3) 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.
- 4) Elton, Edwin, Martin Gruber and Jeffrey A. Busse, 2004, “Are investors rational? Choices among index funds,” *Journal of Finance* 59, 261-288.

### **Week 8 (March 24, 2005): Investor Recognition Hypothesis**

#### **Theory**

- 1) Merton, R.C., 1987, “A simple model of capital market equilibrium with incomplete information,” *Journal of Finance* 42, 483-510.
- 2) Shapiro, Alexander, 2002, “The Investor recognition hypothesis in a general dynamic equilibrium: Theory and evidence,” *Review of Financial Studies* 15, 97-141.

#### **Empirical**

- 1) Chen, Honghui, Gregory Noronha, and Vijay Singal, 2004, “The price response to S&P 500 index additions and deletions: evidence of asymmetry and a new explanation,” *Journal of Finance* 59, 1901-1929. (\*\*\*)
- 2) Gervais, Somon, Ron Kaniel, and Dan H. Mingelgrin, 2001, “The high-volume premium,” *Journal of Finance* 56, 877-919. (\*\*\*)
- 3) Grullon, Gustavo, George Kanatas, and James P. Weston, 2004, Advertising, breadth of ownership, and liquidity, *Review of Financial Studies* 17, 439-461. (\*\*\*)
- 4) Andrew Ang, Robert J. Hodrick, Yuhang Xing, Xiaoyan Zhang, 2005, “The Cross-Section of Volatility and Expected Returns,” *Journal of Finance*, forthcoming. (\*\*\*)

### **Week 8 (March 31, 2005): Home Bias (Empirical)**

- 1) Coval, Joshua C. and T. Moskowitz, 1999, “Home bias at home: Local equity preference in domestic portfolios,” *Journal of Finance* 54, 2045-2073. (\*\*\*)
- 2) Coval, J., and T. Moskowitz (2001), “The geography of investment: informed trading and asset prices,” *Journal of Political Economy* 109, 811-841. (\*\*\*)
- 3) French, K., and J. Poterba, 1991, “Investor diversification and international equity markets”, *American Economic Review* 81, 222-226.
- 4) Grinblatt, M., and M. Keloharju (2001), “How distance, language, and culture influence

- stockholdings and trades,” *Journal of Finance* 56, 1053-1073. (\*\*\*)
- 5) Huberman, G. (2001), “Familiarity breeds investment,” *Review of Financial Studies* 14, 659-680.
  - 6) Ivkovic, Zoran, and Scott Weisbenner, 2005, “Local does local is: information content of the geography of individual investors’ common stock investments,” *Journal of Finance* 60, 267-306. (\*\*\*)
  - 7) Kang, J. and R. Stulz, 1997, “Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan,” *Journal of Financial Economics* 46, 3-28.

### **Week 9 (April 7, 2005): Style Investment**

#### **Theory**

- 1) Barberis, Nichole and Andrei Shleifer (2003), “Style investing,” *Journal of Financial Economics* 68, 161–199. (\*\*\*)

#### **Empirical**

- 1) Chan, Kalok, Allaudeen Hameed, and Sie Ting Lau, 2003, “What if trading location is different from business location? Evidence from the Jardine group,” *Journal of Finance* 58, 1221-1246. (\*\*\*)
- 2) Chan, Louis K.C., Hsui Lang Chen, Josef Lakonishok, 2002, “On mutual investment style,” *Review of Financial Studies* 15, 1407-1437. (\*\*\*)
- 3) Barberis, Nichole, Andrei. Shleifer and Jeffrey Wurgler, 2005, “Comovement,” *Journal of Financial Economics* 75, 283-317. (\*\*\*)
- 4) Froot, K., and E. Dabora, 1999, “How are stock prices affected by the location of trade?” *Journal of Financial Economics* 53, 189-216. (\*\*\*)
- 5) Teo, Melvyn and Sung-Jun Woo, 2004, “Style effects in the cross-section of stock returns,” *Journal of Financial Economics* 74, 367-398. (\*\*\*)

### **Week 10 (April 14, 2005): Applications of Prospect Theory**

#### **Theory**

- 1) Barberis, N., and M. Huang (2001), “Mental accounting, loss aversion and individual stock returns,” *Journal of Finance* 56, 1247-1292. (\*\*\*)
- 2) Barberis, Nicholas, Ming Huang, and Tano Santos, 2001, “Prospect theory and asset prices,” *Quarterly Journal of Economics* 116, 1-53. (\*\*\*)
- 3) Levy Haim, and Moshe Levy, 2004, “Prospect theory and mean-variance analysis,” *Review of Financial Studies* 17, 1015-1041. (\*\*\*)

### **Week 11 (April 21, 2005): Applications of Prospect Theory**

#### **Empirical**

- 1) Genesove, D., and C. Mayer (2001), “Loss aversion and seller behavior: evidence from the housing market,” *Quarterly Journal of Economics* 116, 1233–1260. (\*\*\*)
- 2) Ljungqvist, Alexander and William Wilhelm, 2004, “Does prospect theory explain IPO market behavior?” *Journal of Finance*, forthcoming. (\*\*\*)
- 3) Odean, Terrance, 1998, “Are investors reluctant to realize their losses,” *Journal of Finance* 53, 1775-1798. (\*\*\*)
- 4) Shefrin, H., and M. Statman (1985), “The disposition to sell winners too early and ride losers too long,” *Journal of Finance* 40, 777–790. (\*\*\*)
- 5) Shefrin, Hersh and Meir Statman, 1984, “Explaining investor preference for cash dividends,” *Journal of Financial Economics* 13, 253-282. (\*\*\*)

### **Week 12 (April 28, 2004): Sentiment and irrationality**

- 1) Baker, Malcolm, and Jeremy Stein, 2004, “Market liquidity as a sentiment indicator,” *Journal of Financial Markets* 7, 271-299.
- 2) Cooper, Michael J., Orlin Dimitrov, and P. Raghavendra Rau, 2001, “A rose.com by any other name,” *Journal of Finance* 56, 2371-2388. (\*\*\*)
- 3) Hirshleifer, David and Tyler Shumway, 2003, “Good day sunshine: stock returns and the weather,” *Journal of Finance* 58, 1009-1032. (\*\*\*)

- 4) Lee, C., A. Shleifer and R. Thaler (1991), "Investor sentiment and the closed-end fund puzzle," *Journal of Finance* 46:75-110.
- 5) Rashes, Michael S., 2001, "Massively confused investors making conspicuously ignorant choices (MCI-MCIC)," *Journal of Finance* 56, 1911-1927. (\*\*\*)
- 6) Rosen, Harvey S. and Stephen Wu, 2004, "Portfolio choice and health status," *Journal of Financial Economics* 72, 457-484. (\*\*\*)
- 7) Saunders, Edward M, Jr. 1993, "Stock prices and weather," *American Economic Review* 83, 1337-1345.
- 8) Trombley, Mark, 1997, "Stock prices and Wall Street weather: Additional evidence," *Quarterly Journal of Business and Economics* 36, 11-21.

### **Week 13 (May 5, 2005): Cross-Section of Expected Returns**

#### **Enhanced value strategies**

- 1) Billings, Bruce K. and Richard M. Morton, 2001, "Book-to-market components, future security returns, and errors in expected future earnings," *Journal of Accounting Research* 39, 197-219. (\*\*\*)
- 2) 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. (\*\*\*)

#### **Capital investment and stock returns**

- 3) 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. (\*\*\*)
- 4) Anderson, Christopher W., and Luis Garcia-Feijoo, 2005, "Empirical evidence on capital investment, growth options, and security returns," *Journal of Finance*, forthcoming. (\*\*\*)

### **Week 14 (May 12, 2005): Cross-Section of Expected Returns**

#### **Accounting-related strategies**

- 1) Dichev, Ilia D., 1998, "Is the risk of bankruptcy a systematic risk?" *Journal of Finance* 53, 1131-1147. (\*\*\*)
- 2) Diether, Karl, Christopher Malloy, and Anna Scherbina, 2002, "Differences of opinion and the cross section of stock returns," *Journal of Finance* 57, 2113-2141. (\*\*\*)
- 3) Griffin, John and Michael Lemmon, 2002, "Book-to-market equity, distress risk, and stock returns," *Journal of Finance* 57, 2317-2336. (\*\*\*)
- 4) Lamont, O., C. Polk, and J. Saa-Requejo, 2001, "Financial constraints and stock returns," *Review of Financial Studies* 14, 529-554. (\*\*\*)

#### **Institutional holdings**

- 5) Chen, Hsiu-Lang, Narasimhan Jegadeesh, and Russ Wermers, 2000, "The value of active mutual fund management: An examination of their stockholdings and trades of fund managers," *Journal of financial and Quantitative Analysis* 35, 343-368. (\*\*\*)
- 6) Chen, Joseph, Harrison Hong and Jeremy C. Stein, 2002, "Breadth of ownership and stock returns," *Journal of Financial Economics* 66, 171-205. (\*\*\*)

#### **Others**

- 1) Bernard, V., and J. Thomas (1989), "Post-earnings announcement drift: delayed price response or risk premium?" *Journal of Accounting Research* (Supplement), 1-36.
- 2) Bhandari, Laxmi, 1988, "Debt/equity ratio and expected common stock returns: Empirical evidence," *Journal of Finance* 43, 507-528.
- 3) Chan, Louis K.C., Yasushi Hamao and Josef Lakonishok, 1991, "Fundamentals and stock returns in Japan," *Journal of Finance* 46, 1739-1764.
- 4) Chan, Louis K.C., Josef Lakonishok, and Theodore Sougiannis, 2001, "The stock market valuation of research and development expenditures," *Journal of Finance* 56, 2431-2456.
- 5) Doukas, John, Chansog Kim, and Christos Pantzalis, 2002, "A test of the errors-in-expectations explanation of the value/glamour stock returns performance: Evidence from analysts' forecasts," *Journal of Finance* 57, 2143-2165.
- 6) Fama, E. and K. French, 1992, "The cross-section of expected stock returns," *Journal of Finance*

- 47, 427-465.
- 7) Fama, E. and K. French, 1993, "Common risk factors in the returns on stocks and bonds," *Journal of Financial Economics* 33, 3-56.
  - 8) Fama, E. and K. French, 1996, "Multifactor explanations of asset pricing anomalies," *Journal of Finance* 51, 55-84.
  - 9) Fama, Eugene F., and Kenneth R. French, 1998, "Value versus growth: The international evidence," *Journal of Finance* 53, 1975-1999.
  - 10) Gompers, P., and A. Metrick (2001), "Institutional investors and equity prices," *Quarterly Journal of Economics* 116:229-259.
  - 11) Ikenberry, D., J. Lakonishok and T. Vermaelen (1995), "Market underreaction to open market share repurchases," *Journal of Financial Economics* 39:181-208.
  - 12) Liew, J. and M. Vassalou, 2000, "Can book-to-market, size and momentum be risk factors that predict economic growth?" *Journal of Financial Economics* 57, 221-245.
  - 13) Loughran, T., and J. Ritter (1995), "The new issues puzzle," *Journal of Finance* 50:23-50.
  - 14) Sloan, Richard, 1996, "Do stock prices fully reflect information in accruals and cash flows about future earnings?" *Accounting Review* 71, 289-316.