

Syllabus [cmcd.economia@fgv.br]

Course: Behavioral Finance Professor:

# 2024 SECOND SEMESTER

## **OVERVIEW**

During a long period (from about 1950 to 1990), research in Financial Economics was based on the assumptions that (i) investors have rational beliefs (have perfect information and use Bayes' Rule), (ii) optimize Expected Utility, and (iii) there are no limits to arbitrage or any other market frictions (e.g., costs to obtain information). Jointly, these 3 assumptions may be called the "traditional paradigm." The traditional paradigm was very useful: it allowed researchers to develop logical, elegant and simple intuition on many complex issues related to the behavior of asset prices and the behavior investors.

However, in the early 1990s, solid empirical research began to show that the traditional paradigm was not able to explain many relevant empirical facts. This body of empirical work led researchers to study how the assumptions of the tradition paradigm could be modified in a scientifically solid way. This (still ongoing and very challenging) effort is called Behavioral Finance --- or, more generally, when dealing with decisions which are not directly related to finance, Behavioral Economics.

In a nutshell, Behavioral Finance studies whether investors (a) have preferences that are more complicated than the ones usually presented in the Micro 1 textbooks and/or optimize objects that are different from the Expected Utility, (b) consistently use less than fully rational beliefs, and (c) have cognitive limits that consistently show up in their investment decisions. If (a) is true, economic models should probably be adapted whenever necessary; in this case, Behavioral Finance may have a relevant "positive" role (note that (a) is not about the investor being "irrational", but simply about she having a different objective function than the one usually assumed in the traditional paradigm). If (b) and (c) are true, investors may display perverse behaviors in the financial market and consistently lose a lot of money (here we are talking about "irrationality"); moreover, under limits to arbitrage, aggregate asset prices can be significantly affected. Both consequences of (b) and (c) indicate that the Behavioral Finance field may also have a relevant "normative" role.

Importantly, Behavioral Finance continues to employ mainstream economic methods. As emphasized by Matthew Rabin, "[...] this research is not an alternative to the economic research program into which we were all socialized in graduate school, but the natural continuation of this research program." With that in mind, we will learn in this course about the empirical facts that challenge the traditional paradigm, namely,

- (a) the consistent perverse stock-picking performance of individuals,
- (b) the repeated mistakes made by individuals investors (the so-called behavioral biases),
- (c) clear examples of long-lasting mispricing,

(d) and possible limits to arbitrage which allow asset prices to be affected during significant periods by the behavior of "irrational" investors.

## **BIBLIOGRAPHY AND PROGRAM**

**Introductory Book**: "Trader ou investidor: aprenda a investir na bolsa sem cair nas armadilhas dos vieses comportamentais" (Bruno Giovannetti e Fernando Chague), Editora Intrínseca, 2023

# During 10 lectures I will present paper all papers listed here (in the last days, students will present their research projects):

## *Day 1*) *The perverse stock-picking performance of individual investors*

- 1. Odean (1999) "Do Investors Trade Too Much?" American Economic Review 89, 5, pp. 1279-1298
- 2. Grinblatt, and Keloharju (2000). "The investment behavior and performance of various investor types: A study of Finland's unique data set." Journal of Financial Economics, 55, 43-67
- 3. Barber, B. M., Lee, Y.-T., Liu, Y.-J., and Odean, T. (2008). Just How Much Do Individual Investors Lose by Trading? The Review of Financial Studies, 22(2):609–632

## Day 2) The repeated mistakes made by investors: Overconfidence and sensation seeking

1. Barber and Odean (2001). "Boys will be boys: Gender, overconfidence, and common stock investment." Quarterly Journal of Economics, 116, 261-292.

- 2. Grinblatt and Keloharju (2009). "Sensation seeking, overconfidence, and trading activity." Journal of Finance, 64, 549-578.
- Brown, Lu, Ray, and Teo (2018). "Sensation seeking and hedge-funds." Journal of Finance, 73, 2871-2914

#### Day 3) The repeated mistakes made by investors: Disposition effect and its effects

- 1. Odean (1998). "Are investors reluctant to realize their losses?" The Journal of Finance 53, 5, pp. 1775-1798.
- 2. Chang, Solomon and Westerfield (2016). "Looking for someone to blame: delegation, cognitive dissonance, and the disposition effect," Journal of Finance 71, 267-302.
- 3. Heimer (2016). "Peer Pressure: Social Interaction and the Disposition Effect," Review of Financial Studies
- 4. Gödker, K., Odean, T., and Smeets, P. (2024). "Disposed to be Overconfident." Working paper
- 5. Chague, Giovannetti, Guimaraes and Maciel (2024) "Counting Small Gains, Ignoring Large Pains", working paper

#### Day 4) The repeated mistakes made by investors: Familiarity

- 1. Goetzmann and Kumar (2008). "Equity portfolio diversification," Review of Finance, 12, 433–463.
- 2. Huberman (2001). "Familiarity Breeds Investment," Review of Financial Studies, 14, 659-680.
- 3. Chague, Giovannetti and Paiva (2024) "Familiarity Breeds Day Trade", working paper
- 4. Seasholes and Zhu (2010). "Individual investors and local bias," Journal of Finance, 65, 1987-2010
- 5. Døskeland and Hvide (2011). "Do individual investors have asymmetric information based on work experience?" Journal of Finance, 66, 1011-1041

#### Day 5) The repeated mistakes made by investors: Lottery-like, distressed, and low-priced stocks

- 1. Kumar (2009). "Who Gambles in the Stock Market?" Journal of Finance 64, 4 (2009), pp. 1889-1933
- 2. Birru and Wang (2016). "Nominal price illusion" Journal of Financial Economics

3. Chague, Giovannetti, and Guimarães (2024). "The Overpricing of Popular High-risk Stocks" R&R at Review of Asset Pricing Studies

## Day 6) The repeated mistakes made by investors: Salience

- 1. Barber and Odean (2008). "All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors," The Review of Financial Studies 21, 2 (2008), pp. 785-818
- Engelberg and Parsons (2011). "The causal impact of media in financial markets." Journal of Finance, 66, 67-97
- 3. Da, Engleberg, and Gao (2011). "In Search of Attention" Journal of Finance, 66, 1461-1499
- 4. Hartzmark (2015). "The Worst, the Best, Ignoring all the Rest: The Rank Effect and Trading Behavior," The Review of Financial Studies, Volume 28, Issue 4, 1 April 2015, Pages 1024-1059

# Day 7) Characteristics of investors with strong behavioral biases

- 1. Cronqvist and Siegel (2014). "The Genetics of Investment Biases," Journal of Financial Economics, 113, 215-234
- 2. Grinblatt, Mark, Matti Keloharju, and Juhani T. Linnainmaa (2012) "IQ, trading behavior, and performance," Journal of Financial Economics 104, 339–362
- 3. Cronqvist, Previtero, Siegel, and White (2016) "The fetal origins hypothesis in finance: Prenatal environment, the gender gap, and investor behavior," Review of Financial Studies 29, 739-786.
- 4. Birru, Chague, De-Losso and Giovannetti "Attention and biases: evidence from tax-inattentive investors", Management Science, 2024

# Day 8) Empirical evidence of prices not reflecting from fundamentals

- 1. Huberman and Regev (2001). "Contagious Speculation and a Cure for Cancer: A non-event that Made Stock Prices Soar," Journal of Finance, 56(1), p. 387-396
- 2. Lamont and Thaler (2003). "Can the Market Add and Subtract? Mispricing in Tech Stock Carve-Outs," Journal of Political Economy 111: 227-268.
- 3. Hartzmark and Solomon (2023). Marketwide predictable price pressure. Working paper.

4. Fedyk (2023). "Front Page News: The Effect of News Positioning on Financial Markets," forthcoming Journal of Finance

## Day 9) Are there limits to arbitrage?

- 1. Shleifer and Vishny (1997). "The Limits to Arbitrage", The Journal of Finance, 52, 35-55
- 2. Kolasinski, Reed, and Ringgenberg (2013). "A Multiple Lender Approach to Understanding Supply and Search in the Equity Lending Market", Journal of Finance
- 3. Chague, De-Losso, Genaro, and Giovannetti (2017). "Well-connected Short-sellers Pay Lower Fees: a Market-wide Analysis", Journal of Financial Economics, 123, 646-670.
- 4. Cereda, Chague, De-Losso, Genaro, and Giovannetti (2022). "Price Transparency in OTC Equity Lending Markets: Evidence from a Loan Fee Benchmark," Journal of Financial Economics

## Day 10) Effects of limits to arbitrage

- 1. Saffi and Sigurdsson (2011). "Price Efficiency and Short Selling". Review of Financial Studies.
- 2. Prado, Saffi, and Sturgess (2016). "Ownership Structure, Limits to Arbitrage and Stock Returns: Evidence from Equity Lending Markets". Review of Financial Studies.
- 3. Chu, Hirshleifer, and Ma (2020). "The Causal Effect of Limits to Arbitrage on Asset Pricing Anomalies," Journal of Finance, 75, 2631-2672.
- 4. Chague, Giovannetti, and Herskovic (2024) "Information leakage from short sellers" R&R at the Journal of Finance

Last Days: Students' projects

#### GRADING

- 50% from participation in lectures
- 50% project

#### **PROFESSOR – EMAIL**